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| Subject:  | Draft CEPT Brief on WRC-19 Agenda Item 7 |
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| Summary:  |
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| Proposal: |
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DRAFT CEPT BRIEF ON AGENDA ITEM 7

7 to consider possible changes, and other options, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, an advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks, in accordance with Resolution 86 (Rev.WRC-07) to facilitate rational, efficient, and economical use of radio frequencies and any associated orbits, including the geostationary‑satellite orbit.

# ISSUE

Resolution 86 (Rev. WRC-07) “Implementation of Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference”

resolves to invite future WRCs

1. to consider any proposals which deal with deficiencies and improvements in the advance publication, coordination, notification and recording procedures of the Radio Regulations for frequency assignments pertaining to space services which have either been identified by the Board and included in the Rules of Procedure or which have been identified by administrations or by the Radiocommunication Bureau, as appropriate;
2. to ensure that these procedures and the related appendices of the Radio Regulations reflect the latest technologies, as far as possible, and invites administrations to consider, in preparing for PP-10, appropriate action with regard to Resolution 86 (Rev. Marrakesh, 2002).

# Preliminary overall CEPT position

CEPT is studying possible improvements of the coordination and notification procedures for space services. CEPT supports retaining the current process of continuing evolution at successive WRCs of the regime governing space services. CEPT intends to develop specific positions susceptible to bring improvement to the regulatory process.

CEPT favours the review of any RR provision which can bring accurate solutions to specific detected inconsistencies and develop new improved provisions with emphasis on solving the most urgent issues, i.e. well characterized issues whose improvement is urgent and impacting.

CEPT also favours a stable and predictable regulatory framework for efficient and economical use of spectrum and orbit resources.

CEPT supports to include into consideration under WRC agenda item 7 only the issues considered by the relevant Working Parties prior to the second session of the CPM and included into the draft CPM Report, in order to give administrations and regional organizations sufficient time to draw up a position and develop regulatory texts.

## CEPT positions on specific issues underAgenda item 7

These may later be divided into two sub-categories for which CEPT is intending to submit ECPs or not

|  |  |  |  |
| --- | --- | --- | --- |
| Issue | Title | CEPT position | Annex |
| A | Bringing into use of frequency assignments to non-GSO satellite systems, and consideration of a milestone-based deployment approach for non-GSO FSS satellite systems in certain bands | CEPT supports that a solution to address this issue should follow the principles established by ITU-R WP 4A at its October 2017’s meeting ([Annex 7](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N07%21MSW-E.docx) of WP4A/519, Section 5).CEPT supports that the definition of the BIU of frequency assignments to non-GSO systems in accordance with the current practice as contained in then RoP adopted by the 73rd meeting of the RRB to be left unchanged from the current practice. This means that CEPT supports considering that the frequency assignments to a non-GSO system be brought into use with the deployment of one of its satellites in one of the notified orbital planes with the operational capability of transmitting or receiving those frequency assignments. Further consideration needs to be given on the most appropriate length of the period during which such satellite needs to operate in one of the notified orbital planes of the non-GSO system. At the same time, CEPT supports a milestone-based approach for the maintenance of the recording in the MIFR of assignments to non-GSO systems. The milestone-based approach should be associated with a minimum number of satellites to be deployed over time. In assessing milestone timelines and objectives, CEPT will seek a balance between the need to prevent spectrum warehousing, the proper functioning of coordination mechanisms and the operational requirements related to the deployment of a non-GSO satellite system. CEPT supports that any milestone-based approach should be limited to the frequencies and services listed in table 1 below.Table 1: List of Frequency bands where the milestone-based approach should apply

|  |  |
| --- | --- |
| Frequency band(s) |  Service(s) |
| [TBD] | Fixed-Satellite, Mobile-Satellite, Broadcasting-Satellite |

CEPT believes that the milestone-based proposal gives regulatory certainty to networks and systems and gives recognition that constellations of non-GSO satellites may generally take time to be fully deployed. CEPT supports the adoption of a unique method encompassing all types of constellations.CEPT supports two or three milestones to be applied to networks recorded in the MIFR. Recognizing that some constellations may deploy some satellites but may fail to meet the milestones, a provision is proposed to reduce the number of satellites recorded in the MIFR while preserving the rights for the already in-orbit satellites. The reduction of the characteristics of the constellation recorded in the MIFR should be based on the number of actual satellites launched.CEPT supports that those systems brought into use and notified, but not fully deployed before the end of WRC-19, will have the same regulatory certainty as that available to those systems which will be brought into use and notified after the end of WRC-19. CEPT supports a methodology that would ensure that at one point in time after WRC-19, the recorded frequency assignments and their associated characteristics must reflect the actual deployment of such systems. According to the milestones established, appropriate transitional measures should be considered in order to allow administrations to have sufficient time to adapt their current development and deployment schedules to meet milestones, as appropriate, after an appropriate date after WRC-19.CEPT will study further whether provisions should be developed so as to avoid that the same space station may be used to gain undue advantage in the deployment of the constellation by bringing into use multiple filings.CEPT supports the adoption of a new Resolution by WRC-19 based on the principles and methodology set out above to address Issue A of WRC-19 Agenda Item 7. | [1](#_ISSUE) |
| B | Application of coordination arc in the Ka-band, to determine coordination requirements between FSS and other satellite services |  CEPT supports to apply the coordination arc to both MSS primary and secondary frequency assignments without modifying the current conditions related to the category of allocation applicable to assignments to be taken into account in coordination. Coordination arc criteria would substitute the ΔT/T>6% criteria that currently applies, improving and making more efficient the coordination procedures, while keeping the possibility for Administrations to request ΔT/T criteria under No 9.41. | [2](#_ISSUE_B) |
| C | Issues for which consensus was achieved in ITU-R * C1: AR11 and AP30/30A/30B discrepancies
* C2: Frequency bands submitted under AP30B Article 6
* C3: AP30B MOD to Article 6 No. 6.10
* C4: AP30/30A single AP4 notice for List and Notification
* C5: MOD to No. 11.46 and six month resubmission
* C6: AP30B single AP4 notice for List and Notification
* C7: harmonization of AP30B with AP30 & 30A § 4.1.13 for R1 & 3 and § 4.2.17 for R2; re-introducing a regulatory option to capture obtaining agreements for a specific period
 |  CEPT supports the consensus achieved at ITU-R level. | [3](#_ISSUE_C) |
| D | Identification of those specific satellite networks and systems with which Coordination needs to be effected under RR Nos 9.11A, 9.12, 9.12A and 9.13 | СEPT proposes that the Bureau publish in the CR/D special section the “definitive lists” of those specific GSO networks or non-GSO systems, as appropriate, with which coordination under Nos 9.11A, 9.12, 9.12A or 9.13 needs to be effected, similarly to what is currently done under the provisions of No 9.36.2. CEPT supports adequate amendments to the Radio Regulations to implement the proposal above, as Method D2 in the draft CPM text.CEPT understands that, once the relevant software currently used by the Bureau will be amended as needed, such an approach would not significantly increase the daily workload of the Bureau for producing such lists. In fact, the Bureau carries out a similar analysis to produce the list of Administrations currently published in the BR IFIC under the provisions of No 9.36.1; the proposed changes would just modify the details published in the BR IFIC, together with simplifying the administrative burden currently born by many Administrations. | [4](#_ISSUE_D) |
| E | Harmonization of Appendix 30B with Appendices 30 and 30A | CEPT believes that any modifications of Appendix 30B should be based on the practical difficulties of applying existing Appendix 30B procedures faced by administrations or the Bureau. CEPT could support further modifications of Appendix 30B only in the case if such modifications will lead to simplifications of regulatory procedures while ensuring protection of existing networks.CEPT therefore doesn’t see general needs for harmonizing Appendix 30B with Appendices 30 and 30A as each of these appendices are having its own set of conditions and procedures established for two different satellite services for different purposes.CEPT opposes to limit the period of validity of frequency assignments to satellite network in Appendix 30B by 15 years, with the possibility of a single extension for another 15 years. CEPT notes that this will not facilitate entering new satellite networks into the Appendix 30B List the next 15 to 30 years. CEPT also fails to understand how a satellite operator could handle this restriction and at the same time operate in an efficient and economical manner within the Radio Regulations after having spent 15 or 30 years developing and established business at a given orbital location. Furthermore, these changes were introduced in Appendix 30 and 30A at WRC-2000 so to date it hasn’t been possible to analyse the effect of this measure. | [5](#_ISSUE_E) |
| F | Concerns with the lack of implementation of certain provisions of the Radio Regulations that can lead to difficulties during the process of entering an assignment into the RR Appendix 30B List  |  CEPT believes that any modifications of Appendix 30B should be based on the practical difficulties of applying existing Appendix 30B procedures faced by administrations or the Bureau. CEPT could support further modifications of Appendix 30B only in the case if such modifications will lead to simplifications of regulatory procedures while ensuring protection of existing networks.CEPT does not favour any of the two sub-proposals included in issue F. With regards to data item B.3.b.1 and its associated Note, CEPT opposes the proposed amendments to the Note as they may hinder efficient spectrum utilization and development of economically viable satellite networks when providing design objectives for all administrations, both newcomers and administrations already having satellite networks in the Appendix 30B List. CEPT also opposes the requirement of reducing the coverage area of a network to be aligned with its service area as it is not always technically possible.With regards to the sub-proposal to amend 2.6bis c) of Article 2, CEPT opposes converting provision 2.6bis into a provision to be examined by the Bureau, as provision 2.6bis currently offers general guiding principles for administrations, and not regulatory provisions to be examined by the Bureau. As such, these guidelines need to take into account the diversity of requirements of various countries, e.g. countries with large or geographically separated territories, countries with wide cultural or ethnic diversity or satellite networks serving more than one country (with the explicit agreement of those countries). Attempting to convert these general guidelines into provisions to be examined by the Bureau could also be in contradiction to the objectives of efficient spectrum utilization and developing satellite networks providing services in an economically viable manner. In addition, the proposed amendment doesn’t provide the Bureau with clear instructions on what action to be taken, if any, if the condition set in 2.6bis c) is not met. | [6](#_ISSUE_F) |
| G | Updating the reference situation for Region 1 and 3 networks under Appendices 30 and 30A when provisionally recorded assignments are converted into definitive recorded assignments | CEPT supports that when a network enters the List under § 4.1.18 of Appendix 30 or 30A, the reference situation of the interfered-with network shall only be updated if and when the Bureau is informed that the agreement has been obtained. CEPT suggests to modify § 4.1.18 to reflect this view, as Method A in the draft CPM text. | [7](#_ISSUE_G) |
| H | Modifications to RR Appendix 4 data elements to be provided for non-GSO satellite systems not subject to the procedures of Section II of RR Article 9 | CEPT supports to further study the impact of this proposal in detail before taking any action. In particular, CEPT will study the possibility to make mandatory the relevant information of item A.4.b for non-GSO satellite systems not subject to the procedures of Section II of RR Article 9, taking into account the flexibility that may be required for non-GSO satellites with short-duration missions and some satellites for scientific and/or experimental purposes. | [8](#_ISSUE_XX) |
| I | Additional RR Appendix 4 data items to be provided for non-geostationary satellite systems with multiple orbital planes | CEPT supports to further study the impact of this proposal in detail before taking any action. | [9](#_ISSUE_I) |
| J | Modification of Section 1, Annex 1 of RR Appendix 30, pfd limit | CEPT supports to further study the impact of this proposal in detail before taking any action. | [10](#_ISSUE_J) |
| K | Difficulties for Part B examinations under § 6.21 c) of RR Appendix 30B | CEPT supports that the examination under RR Appendix 30B § 6.21 c) is performed in two steps, if needed, to better reflect the actual situation and to enable newcomers to benefit from the reduction of satellite networks parameters and characteristics during the coordination process, and thus increase the efficiency of spectrum use, as Method A in the draft CPM text.CEPT believes that this method avoids over protection of earlier networks based on part A characteristics which could be obsolete and no longer valid due to changes during the coordination and entering into the List. This method would hence enable spectrum efficiency by addressing potential difficulties encountered by notifying administrations in the Part B examination to enter into the List with favourable findings.CEPT support the overall aim to facilitate entering new assignments into the RR Appendix 30B List and to facilitate coordination of networks for newcomers which the proposal in Issue K targets. | [11](#_ISSUE_K) |
| XX | Measures to facilitate entering new assignments into the RR Appendix 30B List | CEPT supports to revise and restructure the coordination triggers used in Appendix 30B to take into account technological advances and the development of the use of the geostationary orbit to facilitate access for newcomers by avoiding overprotection and unnecessary coordination requirements. CEPT believes that this new issue would help to alleviate the difficulties faced by administrations in attempting to enter assignments into the Appendix 30B List and to facilitate coordination of networks. CEPT also welcomes additional proposals which could help newcomers to enter into the Appendix 30B List. | [12](#_ISSUE_1) |

# Background

In response to Resolution 86 (Rev. Marrakesh, 2002), WRC-03 adopted Resolution 86, which resolved that the scope and criteria of Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference to be considered by future WRCs were as follows:

* to consider any proposals which deal with deficiencies in the advance publication, coordination and notification procedures of the Radio Regulations for space services which have either been identified by the Board and included in the Rules of Procedure or which have been identified by administrations or by the Radiocommunication Bureau, as appropriate;
* to consider any proposals which are intended to transform the content of the Rules of Procedure into a regulatory text;
* to ensure that these procedures, characteristics and appendices reflect the latest technologies, as far as possible;
* to consider any proposals intended to facilitate, in accordance with Article 44 of the Constitution, the rational, efficient and economical use of radio frequencies and the associated orbits including the geostationary orbit in accordance with resolves 2 of Resolution 80 (Rev.WRC‑2000) and resolves to request the 2003 and subsequent World Radiocommunication Conferences of Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference;
* to consider any changes to provisions of the Radio Regulations for space services that would result in the simplification of the procedures and the work of the Bureau and/or administrations;
* to consider any changes to the Radio Regulations that follow from decisions of a Plenipotentiary Conference on space matters.

WRC-07 considered proposals under the above scope and criteria and also modified Resolution 86 (WRC-03) itself so as to create a standing Agenda item for future WRCs.

WRC-12 amended the title of the Agenda item from the version in the WRC-12 Agenda in order to allow for options other than making changes and to clarify the overall goal of the Agenda item.

WRC-15 didn’t change Agenda item 7. But the ITU-R meeting conditions have changed since the last study period as the Special Committee has been suppressed and the WP 4A meetings have been prolonged. Furthermore, it is suggested that the 1st WP 4A meeting of 2018 preferably is the last meeting to consider identification of additional WRC-19 Agenda item 7 “Issues” and that the 2nd WP 4A meeting of 2018 is thereby dedicated to finalize and agree on the draft CPM text for all WRC-19 Agenda item 7 issues.

Regarding the draft Brief structure, the issues included in the CPM Report to WRC-19 under Agenda item 7 should be considered issue by issue in separate Annexes to this Brief. The numbering of issues should follow the CPM Report and before that is available they should follow the labelling made by WP 4A. In addition to the eleven issues currently identified by the ITU-R, CEPT has initiated another issue XX and it should be noted that other issues have been debated within the ITU-R that have not (yet) explicitly being categorised under Agenda item 7. CEPT should still be open to include them in this draft CEPT Brief as appropriate.

Regarding the conclusion of CPG19-1 that “The coordinator on Agenda item 7 is invited to suggest her coordination team as appropriate", no formal team has been initiated as of yet, even if support has already been provided by several Administrations.

# List of relevant documents

ITU-Documentation (Recommendations, Reports, other)

* WP4A/519 – Chairman’s Report of 4th WP 4A meeting, in particular Section 4.3

[Annex 32](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N32%21MSW-E.docx): Work plan, highlighting that it is preferred to consider identification of final additional WRC-19Agenda item 7 “Issues” at the 1st WP 4A meeting of 2018 and that the 2nd WP 4A meeting of 2018 is dedicated to finalize and agree on the draft CPM text for all WRC-19Agenda item 7 issues.

[Annex 7](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N07%21MSW-E.docx): WD towards Preliminary Draft New Report on issue A

[Annex 33](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N33%21MSW-E.docx): WD towards draft CPM text on issue A

[4C/275](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4C-C-0275): LS to WPs 4C, 5A, 7B and 7C on Issue A

[Annex 34](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N34%21MSW-E.docx): WD towards draft CPM text on issue B

[4C/238](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4C-C-0283): LS to WP 4C on Issue B

[Annex 35](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N35%21MSW-E.docx): WD towards draft CPM text on issue C

[Annex 36](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N36%21MSW-E.docx): WD towards draft CPM text on issue D

[Annex 37](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N37%21MSW-E.docx): WD towards draft CPM text on issue E

[Annex 38](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N38%21MSW-E.docx): WD towards draft CPM text on issue F

[Annex 39](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N39%21MSW-E.docx): WD towards draft CPM text on issue G

[Annex 40](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N40%21MSW-E.docx): WD towards draft CPM text on issue H

[Annex 41](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N41%21MSW-E.docx): WD towards draft CPM text on issue I

[4C/276](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4C-C-0276): LS to WPs 4C, 5A, 7B and 7C on Issues H and I

[Annex 42](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N42%21MSW-E.docx): WD towards draft CPM text on issue J

[Annex 43](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N43%21MSW-E.docx): WD towards draft CPM text on issue K

* [PTB(17)059](https://cept.org/Documents/cpg-pt-b/39680/ptb-17-059_wrc-19-agenda-items-7-91-92) – Russian PTB#5 input contribution: Proposals towards drawing up issues under certain agenda items of World Radiocommunication Conferences, Section 1 addressing agenda item 7
* [Annex 06](https://www.itu.int/dms_ties/itu-r/md/15/wp1b/c/R15-WP1B-C-0237%21N08%21MSW-E.docx) of WP1B/237 – WD towards draft CPM text on WRC-19 Agenda item 9.1, issue 9.1.7 – Res. 958 (WRC-15) Annex item 2
* [WP4A/538](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0538) – LS to WP4A from WP 1B on Issue F

CEPT and/or ECC Documentation (Decisions, Recommendations, Reports)

EU Documentation (Directives, Decisions, Recommendations, other), if applicable

# Actions to be taken

All are encouraged to review the issues under Agenda item 7 already being identified by ITU-R but also to consider other possible changes and options to advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks to facilitate rational, efficient, and economical use of radio frequencies and any associated orbits.

* Develop preliminary CEPT positions and eventually draft European Common Proposals (ECPs) for the WRC-19 issue by issue.

# Relevant information from outside CEPT (examples of these are below)

## European Union (date of proposal)

## Regional telecommunication organisations

APT (21 July 2017)

APT Members support consideration of possible improvements of the advance publication, coordination, notification and recording procedures of satellite networks subject to this Agenda Item in accordance with Resolution 86 (Rev. WRC-07), on the basis that activity under this agenda item is not used to make changes to allocations in Article 5 of the Radio Regulations and associated footnotes of that Article.

ATU (date of proposal)

Arab Group (date of proposal)

CITEL (1 December 2017)

The 30th meeting of CITEL Permanent Consultative Committee II (PCCII) addressed all items under Agenda Item 7. There are four stages for CITEL proposals: Preliminary View (PV), Preliminary Proposal (PP), Draft Inter-American Proposal (DIAP), and Inter-American Proposal (IAP). The outcome was Draft Inter-American Proposals (DIAP) for Issues C1, C5, D and G, a Preliminary Proposal (PP) for Issue E, Preliminary Views (PV) for Issues A, C3, C5, C6, D, E, G, H, and I, and no proposals or views for Issues B, C2, C4, C7 F, J and K.

RCC (14 April 2017)

The RCC Administrations consider it necessary further improvements in the notification, coordination and recording procedures for frequency assignments to satellite networks in different services in order to ensure equitable access of ITU Member States to orbital and frequency resource.

## International organisations

IATA (date of proposal)

ICAO (16 September 2016)

No impact on aeronautical services has been identified from WRC-19 Agenda items 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.15, 2, 3, 5, 6, 7, 9.1 (issue 9.1.1), 9.1 (issue 9.1.2), 9.1 (issue 9.1.5), 9.2 and 9.3 which are therefore not addressed in this position.

IMO (date of proposal)

NATO (20 December 2017)

NATO military assessment:

The issues currently being studied under this AI are of no immediate threat to NATO at this time; however, NATO will monitor the issues under study, develop NATO military Assessments and Positions for the issues of interest to NATO, and present a logical defence of its continued use of access and frequency bands covered by this AI should any proposed regulatory actions threaten NATO’s access to satellite resources.

NATO position:

No NATO Position at this stage, however NATO Nations are actively monitoring this issue to assess the potential impact on NATO military usage.

SFCG, ESA (13 September 2017)

SFCG supports possible changes to the Radio Regulations to improve the handling of the advance publication, coordination, notification and recording procedures for satellite networks. SFCG shall monitor the issues covered under this AI to ensure that any possible change will not adversely impact space science services.

WMO and EUMETNET (date of proposal)

## Regional organisations

Eurocontrol (date of proposal)

## OTHER INTERNATIONAL AND REGIONAL ORGANISATIONS

EBU (date of proposal)

GSMA (date of proposal)

CRAF (date of proposal)

1. Issue A: Bringing into use of frequency assignments to non-GSO satellite systems, and consideration of a milestone-based deployment approach for non-GSO FSS satellite systems in certain bands

# ISSU E A

Issue A considers the need to change the Radio Regulations related to bringing into use of frequency assignments for non-GSO systems subject to coordination under Section II of Article 9, including consideration of a milestone-based deployment approach for non-GSO FSS satellite systems in certain bands.

# Preliminary CEPT position

CEPT supports that a solution to address this issue should follow the principles established by ITU-R WP 4A at its October 2017’s meeting ([Annex 7](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N07%21MSW-E.docx) of WP4A/519, Section 5).

CEPT supports that the definition of the BIU of frequency assignments to non-GSO systems in accordance with the current practice as contained in then RoP adopted by the 73rd meeting of the RRB to be left unchanged from the current practice. This means that CEPT supports considering that the frequency assignments to a non-GSO system be brought into use with the deployment of one of its satellites in one of the notified orbital planes with the operational capability of transmitting or receiving those frequency assignments. Further consideration needs to be given on the most appropriate length of the period during which such satellite needs to operate in one of the notified orbital planes of the non-GSO system.

At the same time, CEPT supports a milestone-based approach for the maintenance of the recording in the MIFR of assignments to non-GSO systems. The milestone-based approach should be associated with a minimum number of satellites to be deployed over time. In assessing milestone timelines and objectives, CEPT will seek a balance between the need to prevent spectrum warehousing, the proper functioning of coordination mechanisms and the operational requirements related to the deployment of a non-GSO satellite system.

CEPT supports that any milestone-based approach should be limited to the frequencies and services listed in table 1 below.

Table 2: List of Frequency bands where the milestone-based approach should apply

|  |  |
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| Frequency band(s) |  Service(s) |
| [TBD] | Fixed-Satellite, Mobile-Satellite, Broadcasting-Satellite |

CEPT believes that the milestone-based proposal gives regulatory certainty to networks and systems and gives recognition that constellations of non-GSO satellites may generally take time to be fully deployed. CEPT supports the adoption of a unique method encompassing all types of constellations.

CEPT supports two or three milestones to be applied to networks recorded in the MIFR. Recognizing that some constellations may deploy some satellites but may fail to meet the milestones, a provision is proposed to reduce the number of satellites recorded in the MIFR while preserving the rights for the already in-orbit satellites. The reduction of the characteristics of the constellation recorded in the MIFR should be based on the number of actual satellites launched.

CEPT supports that those systems brought into use and notified, but not fully deployed before the end of WRC-19, will have the same regulatory certainty as that available to those systems which will be brought into use and notified after the end of WRC-19. CEPT supports a methodology that would ensure that at one point in time after WRC-19, the recorded frequency assignments and their associated characteristics must reflect the actual deployment of such systems. According to the milestones established, appropriate transitional measures should be considered in order to allow administrations to have sufficient time to adapt their current development and deployment schedules to meet milestones, as appropriate, after an appropriate date after WRC-19.

CEPT will study further whether provisions should be developed so as to avoid that the same space station may be used to gain undue advantage in the deployment of the constellation by bringing into use multiple filings.

CEPT supports the adoption of a new Resolution by WRC-19 based on the principles and methodology set out above to address Issue A of WRC-19 Agenda Item 7.

# Background

Currently, BIU of frequency assignments to a space station of a satellite network is regulated by the provisions of No 11.44. As a practice of the Bureau a frequency assignment to a non-GSO satellite system is considered as having been brought into use when a single satellite with the capability of transmitting or receiving that frequency assignment has been deployed on one of the notified orbital planes, irrespective of the number of satellites and orbital planes in the satellite system constellation. A continuous period of at least ninety days of operation of that satellite is considered necessary to confirm the BIU. The notifying administration shall so inform the Bureau within thirty days from the end of the ninety-day period.

A frequency assignment to a space station of a non-geostationary satellite system with a notified date of bringing into use more than 120 days prior to the date of receipt of the notification information shall also be considered as having been brought into use if the notifying administration confirms, when submitting the notification information for this assignment, that at least one space station with the capability of transmitting or receiving that frequency assignment has been deployed on one of the notified orbital planes of the non-geostationary satellite system and maintained for a continuous period of time from the notified date of bringing into use until the date of receipt of the notification information for this frequency assignment. The date of deployment of the first satellite at its intended orbit shall be within the seven-year time limit for bringing frequency assignments to a space station into use under No 11.44.

To avoid uncertainties with regards to this current practice by the Bureau before any WRC-19 decisions can be implemented, this was clarified in the Rules of Procedures on No 11.44 as amended at the 74th meeting of the Radio Regulations Board in October 2016. The Rules of Procedure which was adopted by the RRB concerns only FSS and MSS satellite networks.

The BR Director brought to the attention of the WRC-15 in his Report that the conference may wish to consider re-defining the notion of BIU for non-GSO satellite systems as this could lead to spectrum warehousing and resurgence of so-called “paper satellite networks”. He also noted that a possible approach could be, for example, a phased approach with milestones based on either one satellite or a percentage of the total number of satellites deployed at the end of the seven-year time limit (No 11.44) and the completion of the total deployment within a reasonable period after the BIU in either one or two steps (e.g. original date of bringing into use plus [3] years and [6] years). Failure to meet one of these milestones would, for example, result in cancellation of the frequency assignments for the milestone at the end of the seven-year time-limit, and adjustment of the notified information of the non-GSO system based on the actual number of satellites and orbit characteristics in operation at the end of the [3] years and [6] years milestone.

WRC-15 discussed the issue at its seventh plenary session and recognized a lack of specific provisions in the Radio Regulations but was not able to conclude on the issue. Hence, WRC-15 invited ITU-R to examine, under Agenda item 7, the possible development of regulatory provisions requiring additional milestones beyond those under Nos 11.25 and 11.44 with regards to non-GSO systems. This study may also consider the implications of the application of such milestones to non-GSO FSS/MSS systems brought into use after WRC-15.

The 1st meeting of WP 4A in April 2016 agreed to accept this topic as Issue A under Agenda item 7 and developed a WD towards draft CPM text. The 2nd meeting of WP 4A in September-October 2016 received several inputs contributions on issue A that were compiled in a Working Document towards a Preliminary Draft New Report (PDNR) on studies relating to the BIU of frequency assignments to non-GSO FSS satellite networks/systems, the idea being that if an agreed report on this topic can be developed then draft CPM text could be derived from the report. The 3rd meeting of WP 4A in May 2017 produced a revision to that Working Document and refined the description of the various “options” for addressing this issue. The Working Document back then contained six potential options addressing the issue but it was noted that there needed to be a strong focus on reducing the number of “methods” under this Issue, and the membership was encouraged to consider that point in preparing for the next meeting of WP 4A.

The 4th meeting of WP 4A in October 2017 further developed this Working Document towards a PDNR, clarifying that it contains the detailed analysis performed in support of the development of RR provisions addressing BIU of frequency assignments to non-GSO satellite systems as well as a number of milestone-based deployment approaches for the maintenance of the MIFR for frequency assignments to non-GSO satellites in specific bands and services. Contributions are invited to address the specific bands and services to which this milestone-based deployment process will apply. The Working Document towards a PDNR portrays two options for BIU for frequency assignments to non-GSO systems:

* Option A: A continuous period of at least ninety days in a notified orbital plane of a satellite with the operational capability of transmitting or receiving the frequency assignments, in accordance with the new RoP applicable to FSS and MSS as well as in the GSO case
* Option B: A continuous period of less than ninety days of deployment in a notified orbital plane of a satellite with the operational capability of transmitting or receiving the frequency assignments, noting that The 90 day duration may not be required for the non-GSO administration/operator to determine that a space station with operational capability has been deployed in the proper orbital plane

The structure of the document was changed clarifying the focus to be milestones for the maintenance of the recording in the MIFR after a successful BIU in accordance with RR No. 11.44. Hence the earlier Options 1, 4, and 5 are no longer included in the document. There have been no proposals to change the seven-year period within which frequency assignments to non-GSO systems must be BIU but four proposed “approaches” (A to D) are listed as example variations on the milestone-based approach for the further deployment thereafter, portraying different timings and percentages of satellites launched to meet the milestones captured (Table 2 in Section 7.5). These four approaches are based on the input contributions and the discussions that occurred during the meeting. A summary of such approaches is available here below:

* All approaches support the idea that a single satellite deployed on one of the notified orbital planes within seven years after a filing API’s date of receipt is enough to BIU a frequency assignment to a satellite system, as long as that satellite has the operational capability of transmitting or receiving that frequency assignment;
* All approaches are milestone-based. All approaches propose the adoption of three milestones following initial BIU, although the number of milestones still needs to be confirmed for approaches C and D;
* Approaches A, B and C support a “scaling up” approach through a so-called deployment factor. This means that if a milestone is missed, the administration still has the possibility to deploy a limited number of satellites (that can be much smaller than the original number filed for). Approach D states that the spectrum and orbital rights are reduced to the number of satellites and orbital planes that have been deployed at each milestone. Approach B proposes that, after the last milestone, if no information about further deployment is reported to the BR during the next 3 consecutive years, the total number of satellites indicated in the notification of the non-GSO system will be set to the maximum number of satellites ever reported.

Finally, the Working Document towards a PDNR lists seven guiding principles to be considered when developing options for the BIU of frequency assignments to large non-GSO satellites systems in order to focus the work on possible options for the milestone approach. These principles are to advance the efficient, rational and economical use of spectrum and orbital resource and improve the transparency of the deployment of non-GSO systems. Hence all the four options listed in Table 2 of Section 7.5 are designed to take into account the elements of the following principles:

1. The BIU process should be separate from any follow-up actions required to maintain the rights and protections for the recorded frequency assignments to non-GSO satellite system;

2. the successful completion of the BIU process for non-GSO satellite systems does not require the deployment of all satellites in the system by the end of the regulatory period;

3. appropriate time should be given to allow the completion of the deployment of non‑GSO satellites in constellations;

4. appropriate transitional measures should be considered for the non-GSO satellite systems brought into use prior to WRC-19;

5. the procedures adopted under Issue A should be applied to specific space services in specific frequency bands;

6. concurrently with the development of a milestone-based approach, methodologies should be developed for the implementation of RR Nos. 9.58/11.43A/11.43B relating to the regulatory treatment of the adjustments to the characteristics of frequency assignments to non-GSO satellite systems;

7. [the milestone-based approach should ensure that the total number of satellites that can be deployed is adjusted according to the progress made by each milestone.]

In addition to the Working Document towards a PDNR, the 4th meeting of WP 4A developed a Working Document towards draft CPM text but it was not reviewed during the meeting and contributions are invited to for the next WP 4A meeting in February 2018 that will focus on further developing this Working Document. Finally, a Liaison statement to Working Parties 4C, 5A, 7B and 7C for action was developed to receive their views on this issue and the Working Document towards a PDNR.

# List of relevant documents

ITU-Documentation (Recommendations, Reports, other)

* Section 3.2.2.4.4 of [WRC-15/4](http://www.itu.int/md/R15-WRC15-C-0004/en) (Add.2)(Rev.1) – Report of the BR Director to WRC-15

Section 3.21 of [WRC-15/504](http://www.itu.int/md/R15-WRC15-C-0504/en) – Minutes of the seventh Plenary meeting on the 20 November 2015

* [CCRR/57](http://www.itu.int/md/R00-CCRR-CIR-0057/en) – BR draft Rule of Procedure on No 11.44
* [Summary of decisions](http://www.itu.int/md/R16-RRB16.3-C-0011/en) by the 74th meeting of the RRB (17-21 October 2016) item 4.3
* [Approved minutes](https://www.itu.int/md/R17-RRB17.1-C-0009/en) of the 74th meeting of the RRB (17-21 October 2016) item 4.3
* [PTB(17)039](https://cept.org/Documents/cpg-pt-b/38061/ptb-17-039_principles-and-a-proposed-methodology-for-issue-a-of-ai-7) – UK PTB#4 input contribution
* [PTB(17)046](https://cept.org/Documents/cpg-pt-b/38079/ptb-17-046_draft-cept-brief-on-ai-7-issue-a) – Luxemburgish PTB#4 input contribution
* [Annex 7](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N07%21MSW-E.docx) of WP4A/519 – WD towards Preliminary Draft New Report in the Chairman’s Report of the 4th WP 4A meeting
* [Annex 33](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N33%21MSW-E.docx) of WP4A/519 – WD towards draft CPM text in the Chairman’s Report of the 4th WP 4A meeting
* [4C/275](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4C-C-0275) – Liaison statement to Working Parties 4C, 5A, 7B and 7C

CEPT and/or ECC Documentation (Decisions, Recommendations, Reports)

EU Documentation (Directives, Decisions, Recommendations, other), if applicable

# Actions to be taken

* Further develop the preliminary CEPT position and eventually a draft European Common Proposal (ECP).
* Encourage inputs supporting the milestone approach with respect to the operational and planned NGSO systems recently made public in order to confirm the milestone dates, objectives and consequences as defined in Background section. To review it for the next PTB meeting.
* Consider transitional measures for those non-GSO satellite systems brought into use before the end of WRC-19
* Consider whether the end of WRC-19 or the entry into force of the Final Acts of WRC-19 could be appropriate example dates to be taken into account in order to avoid the retroactive application of the methodology
* Define frequency bands and services to which the new non-GSO BIU regulatory framework shall be applicable.
* CEPT should take into account that some next-generation systems will initially deploy a low number of satellites to validate the design of a larger constellation and taking into account the need to de-orbit and replenish satellites while launching new spacecraft to complete constellations
* Support the preliminary CEPT position at WP4A with a view to minimising the number of options to be carried forward.

# Relevant information from outside CEPT (examples of these are below)

## European Union (date of proposal)

## Regional telecommunication organisations

APT (21 July 2017)

The APT Members support the ITU-R studies related to the regulatory provisions and procedures for bringing into use (BIU) of the frequency assignments of non-GSO FSS System(s).

ATU (15 September 2017)

* Encourage administrations to support, contribute and actively participate in the studies;
* Note that the milestone approach is the most favoured option at this stage;
* Note that studies are currently focusing on non-GSO FSS.
* Note that Report ITU-R SA.2348-0 identifies some of the regulatory challenges which this proposal for a simplified regulatory regime would seek to address in dealing with non-GSO small satellites with short duration missions.

Arab Group (20 April 2017)

* Initial support for explicit provisions of the Radio Regulations regarding the status of non-geostationary systems along the lines of the regulatory status of geostationary systems.
* Follow-up of the results of the studies of the options presented and the achievement of the following basic objectives:

To achieve the appropriate equivalence between optimal utilization and equitable access to spectrum and orbital resources for non-geostationary satellite networks and other satellite networks

Not to create opportunities for misuse of notification procedures for the operation of the geostationary constellation and without complicated regulatory procedures that are difficult to achieve or implemented.

* Consult with Bureau for consideration of the question of providing tools for querying and reporting on the operation of the non-geostationary satellite network for various options under consideration.
* Support the decision of the Radio Regulations Board regarding the designation of interim procedures for the development of satellite networks in the BIU service, but that such procedures should be modified in accordance with the results of the 2019 Conference.

CITEL (1 December 2017)

There are four stages for CITEL proposals: Preliminary View (PV), Preliminary Proposal (PP), Draft Inter-American Proposal (DIAP), and Inter-American Proposal (IAP). This is Issue is at the stage of PV. The PV was provided by CAN. It endorses the six principles for BIU that Canada submitted to the October 2017 meeting of WP4A, which were subsequently adopted by WP4A, along with a seventh principle:

Canada is of the view that the current seven-year period may not be enough to deploy a “mega” non-GSO constellation. In trying to address this issue, it is important to adopt a balanced approach, taking into account the financial, technological and planning challenges posed by the multiple launches required to deploy this type of constellation but also the need to prevent any abuse that may lead to spectrum reservation. In this context, a milestone approach appears to be an appropriate solution.

Canada is of the view that any options considered under Issue A reflect the following principles:

1. the BIU process should be separate from any milestones established to maintain the rights and protections for the recorded frequency assignments to non-GSO satellite system;

2. the successful completion of the BIU process for non-GSO satellite systems does not require the deployment of all satellites in the system by the end of the regulatory period;

3. appropriate time should be given to allow the completion of the deployment of non-GSO satellites in constellations;

4. appropriate transitional measures should be considered for the non-GSO satellite system’s BIU prior to WRC-19;

5. the procedures adopted under Issue A should be applied to specific services in specific bands;

6. concurrently with the development of a milestone-based approach, methodologies should be developed for the implementation of RR Nos. 9.58/11.43A/11.43B relating to the regulatory treatment of the adjustments to the characteristics of frequency assignments to non-GSO satellite systems.

RCC (14 September 2017)

The RCC Administrations consider various options for bringing into use of frequency assignments of FSS and MSS multiple-satellite non-GSO systems , which will be applied to specific frequency bands and establish requirements to phased bringing into use of frequency assignments of FSS non-GSO systems and MSS non-GSO systems, depending on their configuration. For non-GSO systems of other satellite services, the RCC Administrations also consider the inclusion of existing Rule of Procedure provisions on No. 11.44 into the Radio Regulations for the purpose of bringing into use frequency assignments of such non-GSO systems.

The RCC Administrations consider that the phased procedure for bringing into use of frequency assignments shall not be applied to frequency assignments of non-GSO systems/networks used for safety of human life.

## International organisations

IATA (date of proposal)

ICAO (date of proposal)

IMO (date of proposal)

SFCG (13 September 2017)

As long as Issue A involves only large non-GSO constellations or systems subject to coordination under Section II of Article 9 and is constrained to the FSS, it should not present a concern to SFCG.

WMO and EUMETNET (date of proposal)

## Regional organisations

ESA (date of proposal)

Eurocontrol (date of proposal)

## OTHER INTERNATIONAL AND REGIONAL ORGANISATIONS

EBU (date of proposal)

GSMA (date of proposal)

CRAF (date of proposal)

1. Issue B: Application of coordination arc in the Ka-band, to determine coordination requirements between FSS and other satellite services

# ISSUE B

Issue B addresses the possibility of introducing the coordination arc concept to determine the coordination requirements between mobile-satellite service (MSS) and fixed-satellite service (FSS) geostationary satellite networks and between MSS geostationary satellite networks, in the portions of the Ka band where both services, FSS and MSS, are allocated.

# Preliminary CEPT position

CEPT supports to apply the coordination arc to both MSS primary and secondary frequency assignments without modifying the current conditions related to the category of allocation applicable to assignments to be taken into account in coordination. Coordination arc criteria would substitute the ΔT/T>6% criteria that currently applies, improving and making more efficient the coordination procedures, while keeping the possibility for Administrations to request ΔT/T criteria under No 9.41.

# Background

The 1st meeting of WP 4A in April 2016 received an input contribution from Hispasat [WP4A/8](http://www.itu.int/md/R15-WP4A-C-0008/en), proposing the introduction of the coordination arc concept to determine the coordination requirements between mobile-satellite service (MSS) and fixed-satellite service (FSS) geostationary satellite networks and between MSS geostationary satellite networks, in the portions of the Ka band where both services, FSS and MSS, are allocated on a primary basis. This proposal was identified as OPTION A.

The 2nd meeting of WP 4A in October 2016 received another input contribution from Hispasat/Spain [WP4A/127](http://www.itu.int/md/R15-WP4A-C-0127/en), proposing the introduction of the coordination arc as trigger for coordination between FSS and MSS systems and MSS systems in the frequency bands 29.5-30 GHz (Earth-to-space)/19.7‑20.2 GHz (space-to-Earth), in all three ITU Regions. This contribution proposes to apply the coordination arc to services allocated on primary or secondary basis without modifying the current conditions related to the category of allocation applicable to assignments to be taken into account in coordination. This other proposal was identified as OPTION B.

In both options, Administrations can always request application of No 9.41 to include additional satellite networks that would be affected taking into account the ΔT/T > 6% criteria.

Both contributions study the characteristics of the earth station terminals used in the MSS and FSS in the Ka-band and conclude that they are quite similar. Taking into account that currently to determine if coordination is required when FSS vs FSS cases, coordination arc of 8º is applied in a successful and efficient way, Option A and Option B propose to apply the same criteria to the FSS vs MSS and MSS vs MSS cases, instead of ΔT/T > 6% criteria that currently applies. The discussions and work performed during the meetings and the details of Option A and Option B proposals are reflected in [Annex 22](https://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP4A-C-0196!N22!MSW-E) of [WP4A/196](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0196) Chairman’s report.

In view of both proposals considering to modify provisions of the Radio Regulations that directly affect the MSS, WP4A sent a liaison statement to WP4C inviting them to study the issue and provide its comments. This liaison is contained in [WP4C/113.](http://www.itu.int/md/R15-WP4C-C-0113/en)

At its February 2017 meeting PTB#3 received the Spanish contribution PTB(17)05 proposing CEPT to submit it to the next WP 4C meeting in April-May 2017 portraying to study this Issue under Agenda item 7 in WP 4C. The PTB#3 meeting unanimously agreed on the contribution to be submitted ITU-R WP 4C meeting in April-May 2017 by the Russian Federation. Based on this CEPT contribution, WP 4C considered the topic and developed a reply liaison statement to WP 4A informing that WP 4C will initiate a study on the application of the coordination arc and its associated scope and will inform WP 4A accordingly. WP 4C also expressed the opinion that it should be added as a “contributing” group for WRC-19 Agenda item 7 to this effect.

The 3rd meeting of WP 4A in May 2017 considered this reply liaison statement from WP 4C ([WP4A/357](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0357%21%21MSW-E.docx)) and identified this topic as new Issue B under Agenda item 7 in the Chairman’s report ([Annex 22](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0364%21N22%21MSW-E.docx) of 4A/364). WP 4A also supported the view of WP 4C that it should be added as a “contributing” group for Agenda item 7 and replied this back to WP 4C in a liaison statement ([WP4C/198](https://www.itu.int/dms_ties/itu-r/md/15/wp4c/c/R15-WP4C-C-0198%21%21MSW-E.docx)).

CEPT has preference for option B over option A, because option B provides homogeneity, in terms of the coordination trigger, in all the Ka band where MSS is allocated, applying only the coordination arc. However with option A the coordination trigger for MSS assignments will vary depending if the MSS frequency assignment is allocated in secondary status (DT/T will apply) or in primary status (coordination arc will). In addition, the fact that MSS is allocated in secondary status in Region 1 and 3 and in primary status in Region 2 in the frequency ranges 29.5 – 29.9 GHz and 19.7 – 20.1, complicates the application of option A, especially when considering global beams in these frequency bands.

At its August 2017 meeting PTB#4 received the Spanish contribution PTB(17)28 proposing CEPT to submit it to the next WP 4A and 4C meetings in October 2017 portraying clarifications on the implementation of Issue B including providing regulatory texts. The PTB#4 meeting unanimously agreed to submit the contribution to the WP 4A and 4C meetings by Spain and the Russian Federation, respectively.

The 4th meeting of WP 4A in October 2017 considered this CEPT input [4A/392](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0392) as well as a short reply liaison statement from WP 4C ([WP4A/514](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0514)), having considered the same input, just informing WP4A that WP4C received the same input contribution and is studying the matter. When discussing the issue during WP4A, it was clarified that the issue should preferably not consider particular treatment for primary or secondary allocations but rather introduce the coordination arc in the full bands 29.5-30 GHz (Earth-to-space) / 19.7-20.2 GHz (space-to-Earth) in all 3 Regions, i.e. what has earlier been described as Option B of Issue B. In addition to CEPT, this was explicitly supported by Iran and Canada while no-one expressed any support to retain Option A. Hence it was determined that the option known previously as Option A, that proposed different coordination criteria taking into account the status of the services, is not considered a valid option. As a result, the meeting decided to develop a Working Document towards preliminary draft CPM text ([Annex 34](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N34%21MSW-E.docx) to Doc. 4A/519) containing two Methods to satisfy the issue without any options:

* Method B1 proposes “No Change” to the RR
* Method B2 proposes to modify the technical conditions for coordination in RR Table 5-1 based on the CEPT input

WP4A also sent a liaison statement to WP 4C ([WP4C/238](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4C-C-0283)) informing WP4C of WP4A’s conclusion that when considering the introduction of the coordination arc as criteria to determine whether coordination is required, the considerations must be done irrespectively of the status of the services (primary or secondary).

# List of relevant documents

ITU-Documentation (Recommendations, Reports, other)

[WP4A/8](http://www.itu.int/md/R15-WP4A-C-0008/en): Contribution proposing the introduction of the coordination arc concept to determine the coordination requirements between mobile-satellite service (MSS) and fixed-satellite service (FSS) geostationary satellite networks and between MSS geostationary satellite networks, in the portions of the Ka band where both services, FSS and MSS, are allocated on a primary basis.

[WP4A/127](http://www.itu.int/md/R15-WP4A-C-0127/en): Contribution proposing the introduction of the coordination arc as trigger for coordination between FSS and MSS systems and MSS systems in the frequency bands 29.5-30 GHz (Earth-to-space)/19.7‑20.2 GHz (space-to-Earth), in all three ITU Regions, without considering whether the services are allocated on primary or secondary basis.

[WP4C/113](http://www.itu.int/md/R15-WP4C-C-0113/en): Liaison from WP4A to WP4C inviting to study the issue and provide its comments.

[WP4С/148](https://www.itu.int/dms_ties/itu-r/md/15/wp4c/c/R15-WP4C-C-0148%21%21MSW-E.docx): CEPT input to WP4C suggesting a Liaison Statement responding to WP 4A agreeing to study the issue under Agenda item 7

[WP4A/357](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0357%21%21MSW-E.docx): Liaison from WP4C to WP4A agreeing to study the issue under Agenda item 7

[Annex 22](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0364%21N22%21MSW-E.docx) of WP4A/364: Chairman’s report reflecting the work and discussions related to this Issue categorised under Agenda item 7 and the details of Option A and Option B proposals

[WP4C/198](https://www.itu.int/dms_ties/itu-r/md/15/wp4c/c/R15-WP4C-C-0198%21%21MSW-E.docx): Liaison from WP4A to WP4C supporting the view of WP 4C that it should be added as a “contributing” group for Agenda item 7

Corrigendum 2 to Addendum 1 of Administrative Circular CA/226: Preparation of the draft CPM Report to WRC-19 confirming WP 4C as a “contributing” group for Agenda item 7

[WP4A/392](file:///C%3A%5CUsers%5Camarklu%5CDesktop%5CDesktop%5CITU%5C2017%20ITU%5CCEPT%5CPTB%235%20Dec%20meeting%5CAI%207%5CDraft%20inputs%5CPTB%2817%29053%20Annex%20IV-04_Draft%20CEPT%20Brief%20on%20AI%207_2017-11-04.docx): CEPT input to WP4A and 4C offering clarifications on implementation and regulatory text

[WP4A/514](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0514): Liaison statement from WP4C to WP4A

[Annex 34](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N34%21MSW-E.docx) of WP4A/519 – WD towards draft CPM text in the Chairman’s Report of the 4th WP 4A meeting

[WP4C/238](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4C-C-0283) – Liaison statement from WP4A to WP4C

CEPT and/or ECC Documentation (Decisions, Recommendations, Reports)

EU Documentation (Directives, Decisions, Recommendations, other), if applicable

# Actions to be taken

Further develop the preliminary CEPT position and eventually a draft European Common Proposal (ECP)

At the next CPG-5 meeting, encourage CEPT administrations attending WP 4C to progress the matter and express support for the preliminary CEPT position

Reduce the background description of this issue after having been approved by CPG-5 and the issue have been considered by the next WP4C meeting

Consider the introduction of coordination arc between FSS (Earth-to-space) satellite networks in the frequency band 27 – 27.5 GHz, allocated to Region 2 and 3 (No FSS allocation in Region 1)

# Relevant information from outside CEPT (examples of these are below)

## European Union (date of proposal)

## Regional telecommunication organisations

APT (21 July 2017)

APT Members supports the ITU-R studies on the possibility of introducing the coordination arc concept to determine coordination requirements between the GSO FSS and GSO MSS satellite networks and between GSO MSS satellite networks in the portions of the Ka-band where both services are allocated on primary basis, while keeping the possibility for administrations to apply ΔT/T criteria under No. 9.41, provided that the results of the studies does not impact the operations of satellite networks in particular those used for safety of life aspects. Moreover, the studies should indicate that use of such concept (coordination arc) would deliver similar results if ΔT/T were used.

ATU (15 September 2017)

Support the studies and to urge African administrations to contribute and actively participate in the studies.

Arab Group (date of proposal)

CITEL (1 December 2017)

There are four stages for CITEL proposals: Preliminary View (PV), Preliminary Proposal (PP), Draft Inter-American Proposal (DIAP), and Inter-American Proposal (IAP). So far no PV has been developed for this Issue.

RCC (14 September 2017)

The RCC Administrations consider that applying the coordination arc criterion would improve coordination procedure and increase its efficiency.

The RCC Administrations support the study on the possibility of implementing the coordination arc mechanism in Ka-band to identify the need in the coordination between geostationary satellite networks in the mobile-satellite service (MSS) and the fixed-satellite service (FSS), as well as between MSS geostationary satellite networks, while maintaining the possibility to apply the RR No. 9.41.

## International organisations

IATA (date of proposal)

ICAO (date of proposal)

IMO (date of proposal)

SFCG ( 13 September 2017)

Issues B, C and E through G do not concern SFCG as they pertain to the FSS and BSS Plans.

WMO and EUMETNET (date of proposal)

## Regional organisations

ESA (date of proposal)

Eurocontrol (date of proposal)

## OTHER INTERNATIONAL AND REGIONAL ORGANISATIONS

EBU (date of proposal)

GSMA (date of proposal)

CRAF (date of proposal)

1. Issue C: Issues for which consensus was achieved in ITU-R

# ISSUE C

Issue C is a collection of several different topics that are viewed as being straightforward and for which consensus was achieved within ITU-R. The seven issues address inconsistencies in regulatory provisions, clarify and improve certain existing practices, or increase transparency in the regulatory process.

# Preliminary CEPT position

CEPT supports the consensus achieved at ITU-R level.

# Background

At the 3rd meeting of WP 4A in May 2017 it was recognized that the previous Issue C was a straightforward topic, and that several other topics that had been raised in the context of Agenda item 7 that were also considered straightforward. The meeting therefore decided to group these straightforward topics, for which consensus was easily reached and for which a single “method” was identified, as sub-topics under Issue C. Issue C is currently a collection of seven different topics that are considered to offer simple, straightforward improvements to the RR captured in a Working Document towards preliminary draft CPM text ([Annex 35](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N35%21MSW-E.docx) to Doc. 4A/519).

* Issue C1 considers the discrepancy between the wordings in paragraph 8.13 of Article 8 of Appendix 30B and No. 11.43A of Article 11. The difference consists in that No. 11.43A deals with a modification of an assignment that “has been recorded and confirmed as having been brought into use”, whilst the Appendix 30B’s provision refers to an assignment that “has been notified and confirmed as having been brought into use”. This is a relevant difference, as an assignment could have been notified but not yet recorded for a number of different reasons. Issue C1 therefore proposes replacing the word “notified” with “recorded” in § 8.13 of Appendix 30B.
* Issue C2: RR Appendix 30B consists of two sub-bands of 250 MHz each (10.70-10.95 GHz and 11.2-11.45 GHz). Submission from administrations when applying Article 6 of RR Appendix 30B for additional use usually covers both sub-bands of 250 MHz but while successfully applying Article 6 for the two sub‑bands, may when applying Article 8 only bring into use one sub-band. There is no provision in Appendix 30B prohibiting, strictly speaking, to allow Administrations to submit an application for one of the sub-bands in an explicit submission under RR Appendix 30B. However, there is no specific provision authorizing that application when submitting RR Appendix 4 for either one of the two sub-bands. Hence, Issue C2 was proposing to add a paragraph 6.1bis to this effect.

At the 3rd WP 4A meeting, the BR confirmed no difficulty to perform processing for sub-bands noting that this will not necessarily be the spirit of the Plan since an Appendix 30B allotment comprises of the entire band. At the 4th WP 4A meeting, inputs from Iran (4A/[426](https://www.itu.int/md/R15-WP4A-C-0426/en)) and China (4A/[453](https://www.itu.int/md/R15-WP4A-C-0453/en)) provided further modifications to the draft CPM text and BR clarified that modifications to the BR software would be necessary and questioned whether it would be efficient to use only part of the Appendix 30B spectrum. As a result of the meeting discussions, the regulatory solution was amended with RR provision 6.17bis in order to clarify that the regulatory amendments proposed within the scope of the issue does not apply to the conversion of allotment into assignment but is only addressing the case of additional use.

* Issue C3: Pursuant to application of paragraph 6.6 of Article 6 of RR Appendix 30B, agreements may be reached or not. Without such an agreement from a country, its territory will be excluded from service area of the proposed new network when the notifying administration will request to include the network in the List. The other characteristics of the network, including the coverage, can be kept without modification. Issue C3 is proposing to amend paragraph 6.15bis clarifying that § 6.13 to 6.15 of Appendix 30B, where the notifying administration may request the BR to assist with sending reminders to other Administrations, do not apply to the agreement requested under § 6.6 of Appendix 30B.

At the 3rd WP 4A meeting, BR confirmed this understanding but Canada questioned the need for amending RR as Administrations could still seek the assistance of the BR under No.13.1. At the 4th WP 4A meeting, inputs from Canada (4A/416) and Iran (4A/427) provided different possible regulatory amendments to clarify that the BR assistance under Nos. 6.13 to 6.15 could not be sought for agreement requested under No. 6.6 resulting in the WD section 3/7/3.3.3 Summary and analysis of the results of ITU-R studies mentioning that the “was analysed and does not seem to be problematic although not essential” in the Working Document towards preliminary draft CPM text.

* Issue C4: Normally, at the end of the coordination process for Regions 1 and 3 under Article 4 of RR Appendices 30 and 30A and when a network is about to be implemented, systems are submitted for entry into the List under § 4.1.12 and for Notification under §§ 5.1.1 and 5.1.2, respectively at the same time with both provisions referring to actions following the completion of the coordination process and both required to implement the network. It would therefore reduce the workload of both Administrations and the BR if one physical submission could be treated as, and examined in respect of both these provisions. In respect of RR Appendix 30A, it would seem that this would be in particular of value for notification of receiving space stations and typical earth stations while specific earth stations probably in many cases would be subject to separate notices as the requirements change with time. Furthermore, RR Appendix 4 information required for submission under § 4.1.12 and § 5.1.1/5.1.2 seem to be identical for entry into the List and notification. At the 3rd WP 4A meeting, BR confirmed that it is already possible to request such treatment but Issue C4 is proposing to amend paragraph 4.1.12bis clarifying this option.
* Issue C5: Pursuant to RR No. 11.46, the BR allows notifying Administrations six months to resubmit their notified frequency assignments which were returned due to an unfavourable finding with respect to RR Nos. 11.32, 11.32A or 11.33. Any receivable notification resubmitted beyond these six months is considered as a new notification with a new date of receipt and would be subject to cost recovery fees. However, neither RR No. 11.46 nor any other RR provision currently requires the BR to send a reminder to the notifying Administration during the six month period. Issue C5 is proposing to add such a reminder thru a footnote to No. 11.46 ensuring that frequency assignments that are in use are properly recorded in the Master Register.
* Issue C6: Normally, at the end of the coordination process under Article 6 of RR Appendix 30B and when a network is about to be implemented, systems are submitted for entry into the List under § 6.17 and for Notification under § 8.1 at the same time with both provisions referring to actions following the completion of the coordination process and both required to implement the network. Enabling, as an option, administrations to submit one notice and request in a letter to the BR to be treated both in respect of entry into the List and Notification would simplify the processing and reduce the workload of the BR and Administrations. Since this is not possible under the current provisions of RR Appendix 30B this issue C6 is proposing to modify § 6.17 and several Footnotes to Tables A, B, C and D in Annex 2 of Appendix 4 to allow one submission to be treated in respect of both provisions and to modify RR Appendix 4 to enable this. If one submission is to be treated both in respect of entry into the RR Appendix 30B List (under § 6.17) and Notification, it is important that the Bureau has the required information as specified by RR Appendix 4 for both types of submission.

The 3rd WP 4A meeting output ([Annex 36](https://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP4A-C-0364!N36!MSW-E) of WP4A/364) also notes that it should be double checked if decisions by earlier WRCs has made changes that introduce other differences between § 6.17 submissions and § 8.1 submissions. At the 4th WP 4A meeting, an Asiasat input contribution ([4A/420](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0420)) clarified the requirement for the notifying administration to provide the date of bringing into use and type of emission to be used for the notification in its cover letter if submitting only one notice. BR commented that misunderstandings may arise and that it would be burdensome to include information from the cover letters of administrations into the database. As a result of the meeting discussions, the revised proposal entails modifications to the current SpaceCap software. Then BR however expressed that if such software modifications to convert a § 6.17 notice to a § 8.1 notice is implemented there is no need for any modification to the RR and this issue may no longer exist which was included in section 3/7/3.3.6 Summary and Analysis of the results of ITU-R studies for Issue C6 in the Working Document towards preliminary draft CPM text ([Annex 35](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N35%21MSW-E.docx) to Doc. 4A/519)

* Issue C7: Earlier AI 7 Issue E considered three specific amendments to Appendix 30B for Regions 1 and 3 stemming from harmonization with APs 30 & 30A, in which the third, E3, proposed to harmonize AP 30B with AP30 & 30A § 4.1.13 for Regions 1 and 3 and § 4.2.17 for Region 2, respectively, i.e. re-introducing a regulatory option to capture obtaining agreements for a specific period. CEPT has established at preliminary CEPT position supporting the development of appropriate regulatory text for introducing in Appendix 30B the concept of time-limited agreements in Regions 1 and 3.

At the 4th WP 4A meeting, Iran submitted yet another input contribution on Issue E ([4A/428](file:///C%3A%5CUsers%5Camarklu%5CDesktop%5CDesktop%5CITU%5C2017%20ITU%5CWP%204A%5CWP4A%20October%20meeting%5CSES%5CDraft%20report%5CDraft%20Issues%20B-G.docx)) which third proposal was used when drafting this new issue C7, as the single proposed method to satisfy the issue by adding RR No. 6.15bis to Appendix 30B seemed to be easily agreed upon.

# List of relevant documents

ITU-Documentation (Recommendations, Reports, other)

* [Annex 35](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N35%21MSW-E.docx) of WP4A/519 – WD towards preliminary draft CPM text in the Chairman’s Report of 4 WP 4A meeting

CEPT and/or ECC Documentation (Decisions, Recommendations, Reports)

EU Documentation (Directives, Decisions, Recommendations, other), if applicable

# Actions to be taken

* Further develop the preliminary CEPT position and eventually a draft European Common Proposal (ECP)
* For Issues C2 and C6, follow up on the implementation aspect of requested software modifications, in particular noting that Issue C6 may be removed if this software aspect is addressed
* Carefully revise the WP 4A#5 input contributions suggesting to be allocated to AI 7 Issue C

# Relevant information from outside CEPT (examples of these are below)

## European Union (date of proposal)

## Regional telecommunication organisations

APT (21 July 2017)

* On Issue C1: APT members support a single method to address this issue by aligning the text of paragraph 8.13 of Article 8 of RR Appendix 30B with that of RR No. 11.43A of RR Article 11 while ensuring that this alignment should not impact on any other regulatory practice at present.
* On Issue C2: APT members support a single method which can allow Administration to submit an application for one of the blocks/sub-bands in 10-11 GHz frequency range in an explicit submission of one of the blocks/sub-bands under RR Appendix 30B.
* On Issue C3: APT members support a single method as described in Annex 36 to Document 4A/364-E
* On Issue C4: APT Members support studies conducted by ITU-R WP4A for creating single AP4 notice for List and Notification assignment while taking due account simplifying the processing Appendix 4 information required for submission under § 4.1.12, § 5.1.1 and § 5.1.2, and reducing the workload of the Bureau and administrations.
* On Issue C5: APT Members support to study on a single method addressing the lack of a reminder when Bureau allows notifying administrations six months to resubmit their frequency assignments under RR No. 11.46.
* On Issue C6: APT members support a single method as described in Annex 36 to Document 4A/364-E. APT members is of the view that one notice and request in a letter to the Bureau for entry into the List under §6.17 and for notification under §8.1 of RR Appendix 30B could reduce workload of both administration and the Bureau

ATU (15 September 2017)

Support the WP4A proposal of treatment of non-contentious issues: the collection of several different topics that are viewed as being straightforward and for which consensus was readily achieved within ITU-R study groups into Issue C in order to enable the efficient work of WRC-19 and preparation thereof.

Arab Group (20 April 2017)

* On Issue C1: Follow-up studies under this issue.

CITEL (1 December 2017)

There are four stages for CITEL proposals: Preliminary View (PV), Preliminary Proposal (PP), Draft Inter-American Proposal (DIAP), and Inter-American Proposal (IAP).

* On Issue C1: This is at the stage of DIAP, supported by B and CAN. The DIAP is to align the text of §8.13 of Article 8 in Appendix 30B with that of No. 11.43A. The only change is to replace the word “notified” with “recorded”.
* On Issue C2: There is so far no PV on this Issue.
* On Issue C3: This is at the stage of PV. The PV was provided by CAN. Currently there is no specific provision in Appendix 30B to seek assistance of the BR when there is lack of response to a request under §6.6 of Appendix 30B. Canada notes that assistance may be sought under No. 13.1 and therefore is of the view there is no need to modify§6.10 in Article 6 of Appendix 30B.
* On Issue C4: There is no PV on this Issue.
* On Issue C5: This is at the stage of DIAP, supported by B and CAN. Currently, for any return of notice as a result of an unfavourable finding under No. 11.32, 11.32A or No. 11.33, the notifying administration has six months to resubmit its notice without a change to the date of the original submission of the notice, however, there is no reminder sent by the Bureau during the six-month period. This DIAP supports the BR sending a reminder after four months.
* On Issue C6: This is at the stage of PV. The PV is supported by B and CAN. These administrations support allowing notifying administrations to submit simultaneously the Appendix 4 data elements for the purposes of entering the frequency assignments in the List (§6.17) and recording these frequency assignments (§8.1).
* On Issue C7: There is no PV on this Issue.

RCC (14 September 2017)

* On Issue C1: The RCC Administrations consider that the existing discrepancy between provisions of Articles in Appendices 30, 30А and 30В and the terminology of Article 11 provisions do not lead to complications when applying the relevant provisions of the Radio Regulations.
* On Issue C2: The RCC Administrations do not oppose to the proposal on possible notification of frequency assignments blocks with bandwidth of 250 MHz each for additional systems in Ku-band within Appendix 30B.
* On Issue C3: The RCC Administrations consider the proposal on modification of Article 6, § 6.10 of Appendix 30B, taking into account Rules of Procedure on § 6.6 of Appendix 30B, under which the absence of response from an administration could not be deemed that the administration has implicitly agreed on including its territory into network service area.
* On Issue C4: The RCC Administrations support the proposal on submitting and processing a single notice for a new assignment to be included into the List under § 4.1.12 and recorded under §§ 5.1.1 and 5.1.2 for the networks in the RR Appendices 30/30А in Regions 1 and 3.
* On Issue C5: The RCC Administrations support the proposal that Radiocommunication Bureau should timely notify the administration on expiration of the 6-month deadline after the unfavorable finding was sent under RR No. 11.37 or No. 11.38.
* On Issue C6: The RCC Administrations do not oppose to the proposal that for satellite networks in the RR Appendix 30B administrations would submit a single notice for a new assignment to be included into the List and recorded.
* On Issue C7: With regard to the harmonization of the Appendix 30B with § 4.1.13 of the Appendices 30 and 30A for Regions 1 and 3 and § 4.2.17 for Region 2, the RCC Administrations consider that existing provisions of the Radio Regulations allow Administrations establishing agreements for the specific period of time with the affected Administrations.

## International organisations

IATA (date of proposal)

ICAO (date of proposal)

IMO (date of proposal)

SFCG ( 13 September 2017)

Issues B, C and E through G do not concern SFCG as they pertain to the FSS and BSS Plans.

WMO and EUMETNET (date of proposal)

## Regional organisations

ESA (date of proposal)

Eurocontrol (date of proposal)

## OTHER INTERNATIONAL AND REGIONAL ORGANISATIONS

EBU (date of proposal)

GSMA (date of proposal)

CRAF (date of proposal)

1. ISSUE D: Identification of those specific satellite networks and systems with which coordination needs to be effected under RR Nos 9.11A, 9.12, 9.12A and 9.13

# ISSUE D

Issue D addresses the proposal that the Bureau publishes in the CR/D special section the “definitive lists” of those specific GSO networks or non-GSO systems, as appropriate, with which coordination under Nos 9.11A, 9.12, 9.12A and 9.13 needs to be effected, similarly to what is currently done under the provisions of No 9.36.2.

# Preliminary CEPT position

СEPT proposes that the Bureau publish in the CR/D special section the “definitive lists” of those specific GSO networks or non-GSO systems, as appropriate, with which coordination under Nos 9.11A, 9.12, 9.12A or 9.13 needs to be effected, similarly to what is currently done under the provisions of No 9.36.2. CEPT supports adequate amendments to the Radio Regulations to implement this proposal, as Method D2 in the draft CPM text.

CEPT understands that, once the relevant software currently used by the Bureau will be amended as needed, such an approach would not significantly increase the daily workload of the Bureau for producing such lists. In fact, the Bureau carries out a similar analysis to produce the list of Administrations currently published in the BR IFIC under the provisions of No 9.36.1; the proposed changes would just modify the details published in the BR IFIC, together with simplifying the administrative burden currently born by many Administrations.

# Background

No 9.36.2 significantly decreased the administrative workload related to the identification of the satellite networks, systems and earth stations, as applicable, with which coordination needs to be effected under Nos 9.7, 9.7A and 9.7B.

However, for the cases of coordination under Nos 9.11A, 9.12, 9.12A and 9.13, the relevant Special Section of the BR IFIC includes only a list of Administrations rather than a list of specific GSO networks or non-GSO systems, as appropriate, for which those Administrations are responsible.

In order to address this issue, the Bureau could include in the CR/C special sections the list of potentially affected administrations as well as lists of their potentially affected satellite networks and systems for coordination cases related to Nos 9.11A, 9.12, 9.12A and 9.13. The potentially affected administrations would then comment under Nos 9.51 or 9.52, as appropriate, according to the same current process but would identify in their comments (and in the SpaceCom database) the affected satellite networks or systems on the basis of the lists published in the CR/C. The Bureau would then compile and publish these comments in a CR/D special section according to No 9.53A. The process would therefore be similar to the current one but it would offer two main advantages: firstly, the comments under Nos 9.51 or 9.52, as appropriate, would be much simpler to be made as they would entail a check of a pre-compiled list published in the CR/C special section; secondly, the CR/D special section would contain a “definitive list” of satellite systems instead of a simple list of administrations.

It should be noted that the identification of the potentially affected satellite networks or systems would not require any additional tools since the coordination trigger for Nos 9.12, 9.12A and 9.13 in Appendix 5 is based on a simple frequency overlap.

This issue was initiated at the first CPG PTB meeting in June 2016 by France and UK, also suggesting to submit it as a CEPT input contribution to the 2nd WP 4A meeting in September-October 2016 which was agreed within the framework of CEPT CPG PTB and submitted to WP 4A. At the meeting several administrations, including Canada, supported the CEPT idea for BR to publish more granular information but Iran opposed for the list of networks and systems to published in the DR/D as anything else than for information. The BR also confirmed that, once the current relevant software is amended as needed, to publish more detailed information will not significantly increase their daily workload.

At its February 2017 meeting PTB#3 received the United Kingdom contribution PTB(17)08 proposing CEPT to submit it to the next WP 4A meeting. The contribution proposed amendments to the Working Document towards preliminary draft CPM text and the PTB#3 meeting unanimously agreed for the contribution to be submitted to WP 4A by the United Kingdom ([4A/232](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0232%21%21MSW-E.docx)).

The 3rd meeting of WP 4A in May 2017 considered the CEPT contribution together with a Canadian contribution ([4A/309](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0309%21%21MSW-E.docx)). The two differences between the contributions were a) whether the published list should be for information only, and b) whether it would be appropriate to include RR No. 9.21 in the scope of the issue. As a result, the meeting decided into merge the two input contributions in a Working Document towards preliminary draft CPM text ([Annex 37](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0364%21N37%21MSW-E.docx) to Doc. 4A/364) containing three Methods to satisfy the issue:

* Method D1 proposes “No Change” to the RR
* Method D2 is based on the CEPT proposal to modify RR No. 9.36.1 in order for BR to publish a pre-compiled list of satellite networks and/or systems potentially affected for information in the CR/C Special Section, as well as modifying RR Nos. 9.52C and 9.53A in order for BR to publish a definitive list of satellite networks and/or systems to be considered when effecting coordination to be included in the CR/D Special Section
* Method D3 is the same as Method D2 for RR No. 9.36.1 but proposes “No Change” for the rest of RR Article 9 in order to have the list of satellite networks or systems potentially affected for information only, even at CR/D stage

At its August 2017 meeting PTB#4 received the United Kingdom contribution PTB(17)42 proposing CEPT to submit it to the next WP 4A meeting. The contribution proposed further amendments to the Working Document towards preliminary draft CPM text and was again unanimous agreed by PTB#4 to submit to WP 4A by the United Kingdom ([4A/439](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0439)).

The 4th meeting of WP 4A in October 2017 considered the CEPT contribution together with a very similar Canadian contribution ([4A/415](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0415)) and the meeting concluded to not include RR No. 9.21 in the scope of the issue and further established the three methods above in a Working Document towards preliminary draft CPM text ([Annex 36](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N36%21MSW-E.docx) to Doc. 4A/519).

# List of relevant documents

ITU-Documentation (Recommendations, Reports, other)

* [Annex 36](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N36%21MSW-E.docx) to Doc. 4A/519 – WD towards preliminary draft CPM text in the Chairman’s Report of the 4th WP 4A meeting

CEPT and/or ECC Documentation (Decisions, Recommendations, Reports)

EU Documentation (Directives, Decisions, Recommendations, other), if applicable

# Actions to be taken

Further develop the preliminary CEPT position if needed

Develop a draft European Common Proposal (ECP)

# Relevant information from outside CEPT (examples of these are below)

## European Union (date of proposal)

## Regional telecommunication organisations

APT (21 July 2017)

APT Members support the study on identification of those specific satellite networks and systems with which coordination needs to be effected under Nos. 9.12, 9.12A and 9.13.

ATU (15 September 2017)

Support the proposal which seek to have the BR provide more information for satellite coordination: this information would help administrations when undertaking coordination by the provision of more coordination information the before.

Arab Group (20 April 2017)

* Follow-up studies under this issue.
* Support No change to the Radio Regulations as the amendments proposed of the CR/C and CR/D Special Sections could be implemented without further amendments to the Radio Regulations.
* Initial endorsement of method D1, taking into account the facilitation of the operative provisions of the Radio Regulations.

CITEL (1 December 2017)

There are four stages for CITEL proposals: Preliminary View (PV), Preliminary Proposal (PP), Draft Inter-American Proposal (DIAP), and Inter-American Proposal (IAP).

This Issue is at the stage of DIAP, supported by B and CAN. The DIAP supports that in the case of coordination under RR Nos. 9.12, 9.12A and 9.13, the Bureau should publish a definitive list of the potentially affected satellite networks. The DIAP also provides associated draft regulatory text to affect this, in the form of modifications to No. 9.36.1, No. 9.52C, and No. 9.53A.

RCC (14 September 2017)

The RCC Administrations support the identification of specific GSO or non-GSO satellite networks which need coordination only according to RR Nos. 9.11А, 9.12, 9.12А or 9.13 as well as modification of relevant RR provisions.

The RCC Administrations oppose identification of specific GSO or non-GSO satellite networks which need coordination under RR No. 9.21.

## International organisations

IATA (date of proposal)

ICAO (date of proposal)

IMO (date of proposal)

SFCG (13 September 2017)

Issue D relates to publication of a list of potentially affected networks at the time of coordination which may be useful for SFCG members.

WMO and EUMETNET (date of proposal)

## Regional organisations

ESA (date of proposal)

Eurocontrol (date of proposal)

## OTHER INTERNATIONAL AND REGIONAL ORGANISATIONS

EBU (date of proposal)

GSMA (date of proposal)

CRAF (date of proposal)

1. Issue E: Harmonization of RR Appendix 30B with RR Appendices 30 and 30A

# ISSUE E

Issue E considers a specific amendment to Appendix 30B stemming from harmonization with Appendices 30 and 30A; harmonization of Appendix 30B with § 4.1.24 of Appendices 30 and 30A for Regions 1 and 3 by introducing the same time validity limitation of 15 years that can be renewed once for further 15 years, as was decided when WRC-2000 revised Appendices 30 and 30A.

# Preliminary CEPT position

CEPT believes that any modifications of Appendix 30B should be based on the practical difficulties of applying existing Appendix 30B procedures faced by administrations or the Bureau. CEPT could support further modifications of Appendix 30B only in the case if such modifications will lead to simplifications of regulatory procedures while ensuring protection of existing networks.

CEPT therefore doesn’t see general needs for harmonizing Appendix 30B with Appendices 30 and 30A as each of these appendices are having its own set of conditions and procedures established for two different satellite services for different purposes.

CEPT opposes to limit the period of validity of frequency assignments to satellite network in Appendix 30B by 15 years, with the possibility of a single extension for another 15 years. CEPT notes that this will not facilitate entering new satellite networks into the Appendix 30B List the next 15 to 30 years. CEPT also fails to understand how a satellite operator could handle this restriction and at the same time operate in an efficient and economical manner within the Radio Regulations after having spent 15 or 30 years developing and established business at a given orbital location. Furthermore, these changes were introduced in Appendix 30 and 30A at WRC-2000 so to date it hasn’t been possible to analyse the effect of this measure.

# Background

The 2nd meeting of WP 4A in September-October 2016 received an Iranian input contribution [WP4A/125](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0125) portraying several proposals harmonizing Appendix 30B with Appendices 30 and 30A as well as enhancing certain regulatory provisions of Appendix 30B. The WP 4A meeting agreed to divide the many proposals in two issues under Agenda item 7, issue E and (the later suppressed) issue F, where issue E consisted in three specific proposals harmonizing Appendix 30B in Regions 1 and 3 with Appendices 30 and 30A. The issue was introduced in the context of several WRCs making certain harmonisations between Appendices 30, 30A and 30B and Articles 9 and 11, as well as Resolution 2 (WRC-03) on “Equitable use, by all countries, with equal rights, of the geostationary-satellite and other satellite orbits and of frequency bands for space radiocommunication services”

The 3rd meeting of WP 4A in May 2017 revised the issue based on many comments raised in the meeting and two input contributions from US ([WP4A/278](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0278)) and Canada ([WP4A/313](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0313)). Several Editor’s notes were added to the document:

* The US input document to the meeting highlights that there is no linkage seen between RR Appendix 30/30A which was created for BSS and RR Appendix 30B for FSS, each of these appendices having its own set of conditions and procedures. Consequently, the document concluded that there is no need for harmonization amongst those plans, established for two different satellite services for different purposes.
* On proposal E1 concerns from several administrations were raised. One of the concerns was essentially, if this proposal is implemented, what will a satellite operator do after having spent 15 or 30 years developing an established business at a given orbital location?
* On proposal E1, the US input document raises the applicability of § 4.1.24 of Appendices 30 and 30A to Region 2 stating that this provision is limited to satellite networks serving Regions 1 and 3 only and that there is no such provision in RR Appendix 30/30A for networks serving Region 2. Therefore, any changes proposed to RR Appendix 30B should not be applicable to Region 2.

In addition, CEPT suggested also including that “views were expressed that any modifications of Appendix 30B should be based on the practical difficulties of applying existing Appendix 30B procedures faced by administrations or the Bureau, and that modifications of Appendix 30B would only be supported in the case if such modifications will lead to simplifications of regulatory procedures while ensuring protection of existing networks” but it was not accepted by the last Plenary of the 3rd WP 4A meeting.

At the 4th meeting of WP 4A in October 2017 it was recognized that it is preferable to have well characterized, specific issues under AI 7 and it was decided to divide the earlier Issue E into three separate issues, i.e. one issue for each of the three new RR Appendix 30B Article 6 provisions proposed. Issue E as captured in a Working Document towards preliminary draft CPM text ([Annex 37](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N37%21MSW-E.docx) to Doc. 4A/519) therefore only consist in one regulatory proposal, earlier labelled E1, based on text pasted from an Iranian input contribution on Issue E ([WP4A/428](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0428)) with only one method proposed to satisfy the issue. In order to balance the descriptive texts in the Working Documents, the same Editor’s Notes relevant for Issue E above are again listed, including emphasizing that there is disagreement on the need for harmonization between RR Appendices 30/30A and RR Appendix 30B.

# List of relevant documents

ITU-Documentation (Recommendations, Reports, other)

* [WP4A/278](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0278) – US input contribution to the 3rd WP 4A meeting
* [WP4A/428](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0428) – Iranian input contribution to the 4th WP 4A meeting on Issue E
* [Annex 37](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N37%21MSW-E.docx) of WP4A/519 – WD towards draft CPM text in the Chairman’s Report of 4thWP 4A meeting

CEPT and/or ECC Documentation (Decisions, Recommendations, Reports)

EU Documentation (Directives, Decisions, Recommendations, other), if applicable

# Actions to be taken

* Further develop the preliminary CEPT position and eventually a draft European Common Proposal (ECP) if needed
* Make sure to revise the title of the issue appropriately

# Relevant information from outside CEPT (examples of these are below)

## European Union (date of proposal)

## Regional telecommunication organisations

APT (21 July 2017)

APT members generally support to study required harmonization of RR Appendix 30B with RR Appendices 30 and 30A.

APT members support to split this issue into three separate issues under WRC-19 Agenda Item 7.

ATU (15 September 2017)

Support studies to facilitate developing countries to have better access to satellite resources provided in Appendix 30A and 30B.

Arab Group (20 April 2017)

* Follow-up studies under this issue.
* To study the implications of proposals to align Appendix 30B with Appendices 30/30A and to take appropriate decision later meeting.

CITEL (1 December 2017)

There are four stages for CITEL proposals: Preliminary View (PV), Preliminary Proposal (PP), Draft Inter-American Proposal (DIAP), and Inter-American Proposal (IAP). This is Issue is at the stage of PP.

The PP was provided by USA. The PP is NOC with the explanation that there is no linkage between RR AP30/30A, which was created for the broadcasting-satellite service, and RR AP30B, which was created for the fixed-satellite service. Each of these appendices have its own set of conditions and procedures. Consequently, there is no need for harmonization amongst those plans. Those plans were established for two different satellite services for different purposes.

RCC (14 September 2017)

The RCC Administrations consider that the issue of harmonization of Appendix 30В and Appendices 30/30А should be studied based on the practical difficulties of Administrations applying existing procedures of the Appendix 30В revised by WRC-07.

The RCC Administrations consider that any modification of the Appendix 30В shall not result in the complication of the regulatory procedures and shall ensure protection of existing networks.

The RCC Administrations do not support the proposal to limit the period of validity of frequency assignments to satellite network by 15 years in the Appendix 30B with the possibility of single extension for another 15 years (harmonization of Appendix 30В with § 4.1.24 of Appendices 30 and 30A for Regions 1 and 3).

The RCC Administrations do not support the proposal to include provisions in the Appendix 30В related to the modification of the coordination procedure between the Administration which proposes inclusion of its new assignment in the List, and the Administration which has already included several assignments in the List (inclusion in the Appendix 30B of the provisions similar to § 4.1.25 of the Appendices 30 and 30A for Regions 1 and 3).

With regard to the harmonization of the Appendix 30B with § 4.1.13 of the Appendices 30 and 30A for Regions 1 and 3 and § 4.2.17 for Region 2, the RCC Administrations consider that existing provisions of the Radio Regulations allow Administrations establishing agreements for the specific period of time with the affected Administrations.

## International organisations

IATA (date of proposal)

ICAO (date of proposal)

IMO (date of proposal)

SFCG ( 13 September 2017)

Issues B, C and E through G do not concern SFCG as they pertain to the FSS and BSS Plans.

WMO and EUMETNET (date of proposal)

## Regional organisations

ESA (date of proposal)

Eurocontrol (date of proposal)

## OTHER INTERNATIONAL AND REGIONAL ORGANISATIONS

EBU (date of proposal)

GSMA (date of proposal)

CRAF (date of proposal)

1. ISSUE F: Concerns with the lack of implementation of certain provisions of the Radio Regulations that can lead to difficulties during the process of entering an assignment into the RR Appendix 30B List

# ISSUE F

Issue F consists in two specific sub-proposals to Appendix 30B:

* The first sub-proposal suggests modifying the Note to the data item B.3.b.1 of RR Appendix 4 in order to duly apply the objectives of that Note when applying it for Appendix 30B
* The second proposal suggests amending 2.6bis of Article 2 of Appendix 30B with a 2.6bis c) in order to meet the objectives of the provisions 2.6bis a) and b) both in spirit and in wording.

# Preliminary CEPT position

CEPT believes that any modifications of Appendix 30B should be based on the practical difficulties of applying existing Appendix 30B procedures faced by administrations or the Bureau. CEPT could support further modifications of Appendix 30B only in the case if such modifications will lead to simplifications of regulatory procedures while ensuring protection of existing networks.

CEPT does not favour any of the two sub-proposals included in issue F. With regards to data item B.3.b.1 and its associated Note, CEPT opposes the proposed amendments to the Note as they may hinder efficient spectrum utilization and development of economically viable satellite networks when providing design objectives for all administrations, both newcomers and administrations already having satellite networks in the Appendix 30B List. CEPT also opposes the requirement of reducing the coverage area of a network to be aligned with its service area as it is not always technically possible.

With regards to the sub-proposal to amend 2.6bis c) of Article 2, CEPT opposes converting provision 2.6bis into a provision to be examined by the Bureau, as provision 2.6bis currently offers general guiding principles for administrations, and not regulatory provisions to be examined by the Bureau. As such, these guidelines need to take into account the diversity of requirements of various countries, e.g. countries with large or geographically separated territories, countries with wide cultural or ethnic diversity or satellite networks serving more than one country (with the explicit agreement of those countries). Attempting to convert these general guidelines into provisions to be examined by the Bureau could also be in contradiction to the objectives of efficient spectrum utilization and developing satellite networks providing services in an economically viable manner. In addition, the proposed amendment doesn’t provide the Bureau with clear instructions on what action to be taken, if any, if the condition set in 2.6bis c) is not met.

# Background

At the 3rd WP 4A meeting in May 2017, the topic of the previous Issue F was transformed into a new topic based on input document [WP4A/302](https://www.itu.int/md/R15-WP4A-C-0302/en) submitted by Iran, raising concerns with the implications of the current lack of implementation of certain provisions of the Radio Regulations, specifically Appendix 4 data element B.3.b.1 and Appendix 30B Article 2 No. 2.6bis b):

Considering the large number of Appendix 30B additional systems submitted since 1 November 2012 ([4A/405](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0405)) many of these networks include steerable beams that cover the entire visible Earth while the service area of these networks is considerably less than the visible Earth. Therefore, Iran is of the view that many satellite networks being submitted under Appendix 30B are not respecting the above provisions, and the result of this situation is that Appendix 30B submissions from other administrations become harder to implement, as they will find their satellite networks placed behind the large number Appendix 30B submissions previously received by the Bureau. It was therefore proposed to introduce a special procedure in Appendix 30B in order to alleviate this problem at the 3rd WP 4A meeting in May 2017 noting that there was an overlap between this Issue F and part of the content of the earlier Issue E which would have to be addressed at some point.

The 4th meeting of WP 4A in October 2017 considered two Iranian input contributions ([4A/429](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0429) and [4A/430](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0430)) aiming to limit additional use of Appendix 30B by aligning the coverage area with the service area thru two sub-proposals. Both proposals were met with concerns raised in the meeting and the meeting concluded to stand open with regards to the details and regulatory texts proposed, while keeping the general goal to provide room for Appendix 30B newcomers, i.e. the same overall goal as in Issue E. Both sub-proposals offering regulatory texts that were compiled into a Working Document towards draft CPM text ([Annex 38](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N38%21MSW-E.docx) to Doc. 4A/519) offering only one method on each sub-proposal fully based on the input contributions but including several Editor’s notes capturing the many concerns raised in the meeting.

* In order to align coverage areas of satellite networks with their objectives service area, it is proposed to make substantial modifications to Appendix 4 data element B.3.b.1, including targeting Appendix 30B specifically. It was noted that the Appendix 4 data element B.3.b.1 currently applies to all bands and not only Appendix 30B, and questioned if the proposed changes will have any meaning as there will still be no examination by the BR based on it. Some raised concerns that it is not technically possible to align coverage areas with service areas, which CEPT ensured to also capture in an Editor’s note in addition to softening the Iranian proposed regulatory text. It was concluded in CEPT that the proposal actually reduces the scope of B.3.b.1 while still not making it mandatory with the proposed wording that administrations “shall endeavour, to the as maximum extent, align coverage area of their satellite networks with their objectives service area”.
* In order to meet the objectives of the provisions 2.6bis a) and b) of Article 2 of Appendix 30B, it is proposed to add a 2.6bis c) portraying that the BR should continuously examine and ensure this “both in word and in sprit”. Again, a lot of concerns and opposition were raised both on the intent and implementation of this sub-proposal, including questioning how the BR is to implement this proposal. A detailed Editor’s note capturing most cautionary comments was added and contributions are invited for the next WP 4A.

The WP 1B meeting in November 2017 created a Working Document towards draft CPM text (Annex 06 to Document 1B/237) on WRC-19 Agenda item 9.1, issue 9.1.7 based on the Annex item 2 of Resolution 958 (WRC-15) which is examining whether there is a need for possible additional measures in order to limit uplink transmissions of terminals to those authorized terminals in accordance with RR No 18.1, and possible methods that will assist administrations in managing the unauthorized operation of earth station terminals deployed within its territory, as a tool to guide their national spectrum management programme, in accordance with ITU‑R  Resolution 64 (RA‑15). This draft CPM text contains an Option 3 that was initiated during the WP 1B meeting proposing ‘to strengthen the current procedures and to limit Global beams service areas, unless explicit agreement is obtained from administrations, the territory of which is intended to be included in the service area and that country would no longer be receiving the signal by the satellite’. Administrations proposing this option are of the opinion that the issue of limiting the global beam may involve adjustment of coverage area to service area which is currently under consideration under AI 7 Issue F.WP 1B has therefore sent a Liaison Statement to WP 4A (4A/538) inviting WP 4A to comment this issue.

# List of relevant documents

ITU-Documentation (Recommendations, Reports, other)

* Annex [38](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP4A-C-0364!N38!MSW-E) of WP4A/364– WD towards draft CPM text in the Chairman’s Report of the 3rd WP 4A meeting
* [Annex 38](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N38%21MSW-E.docx) of WP4A/519 – WD towards draft CPM text in the Chairman’s Report of 4th WP 4A meeting
* [Annex 06](https://www.itu.int/dms_ties/itu-r/md/15/wp1b/c/R15-WP1B-C-0237%21N08%21MSW-E.docx) of WP1B/237 – WD towards draft CPM text on WRC-19 Agenda item 9.1, issue 9.1.7 – Res. 958 (WRC-15) Annex item 2
* [4A/538](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0538) – LS to WP4A from WP 1B on Issue F

CEPT and/or ECC Documentation (Decisions, Recommendations, Reports)

EU Documentation (Directives, Decisions, Recommendations, other), if applicable

# Actions to be taken

* Further develop the preliminary CEPT position on both proposals and eventually a draft European Common Proposal (ECP) if needed

# Relevant information from outside CEPT (examples of these are below)

## European Union (date of proposal)

## Regional telecommunication organisations

APT (21 July 2017)

APT members support further study to address the relevant concerns with the lack of implementation of certain provisions of the Radio Regulations that can lead to difficulties during the process of entering an assignment into the RR Appendix 30B List.

ATU (15 September 2017)

Support studies to facilitate developing countries to have better access to satellite resources provided in Appendix 30A and 30B.

Arab Group (20 April 2017)

* Follow-up studies under this issue.
* Further Studies to assess the implications of the proposals submitted is needed.
* Arab states to consider the draft contribution to next WP4A meeting, urging further studies with respect to regional subsystems and special procedures.

CITEL (1 December 2017)

There are four stages for CITEL proposals: Preliminary View (PV), Preliminary Proposal (PP), Draft Inter-American Proposal (DIAP), and Inter-American Proposal (IAP). So far no PV has been developed for this Issue.

RCC (14 September 2017)

The RCC Administrations do not support the proposal to include provisions in the Appendix 30В related to the modification of the coordination procedure between the Administration which proposes inclusion of its new assignment in the List, and the Administration which has already included several assignments in the List (inclusion in the Appendix 30B of the provisions similar to § 4.1.25 of the Appendices 30 and 30A for Regions 1 and 3).

## International organisations

IATA (date of proposal)

ICAO (date of proposal)

IMO (date of proposal)

SFCG (13 September 2017)

Issues B, C and E through G do not concern SFCG as they pertain to the FSS and BSS Plans.

WMO and EUMETNET (date of proposal)

## Regional organisations

ESA (date of proposal)

Eurocontrol (date of proposal)

## OTHER INTERNATIONAL AND REGIONAL ORGANISATIONS

EBU (date of proposal)

GSMA (date of proposal)

CRAF (date of proposal)

1. Issue G: updating the reference situation for region 1 and 3 networks under Appendices 30 and 30A when provisionally recorded assignments are converted into definitive recorded assignments

# ISSUE G

Issue G considers conditions to change provisional recording to definitive and update the reference situation for networks under Appendices 30 and 30A.

# Preliminary CEPT position

CEPT supports that when a network enters the List under § 4.1.18 of Appendix 30 or 30A, the reference situation of the interfered-with network shall only be updated if and when the Bureau is informed that the agreement has been obtained. CEPT suggests to modify § 4.1.18 to reflect this view, as Method A in the draft CPM text.

# Background

§§ 4.1.18-20 of Appendix 30 to the Radio Regulations describes the requirements and conditions for recording in the Region 1 and 3 List of a network with outstanding coordination requirements. Similar provisions are found in respect of Region 2 in §§ 4.2.21A-21D. The same provisions are also contained in Appendix 30A.

§ 4.1.18 prescribes that, in the case of recording in the List with outstanding coordination requirements, this recording shall be provisional, but that the entry shall be changed from provisional to definitive recording in the List if the Bureau is informed that the new assignment in the Regions 1 and 3 List has been in use, together with the assignment which was the basis for the disagreement, for at least four months without any complaint of harmful interference being made.

In Appendix 30B, the corresponding provisions (§§ 6.25-6.29) are worded different in respect of the change from provisional to definitive recording, saying that the entry in the List shall be changed from provisional to definitive only if the Bureau is informed that all required agreements have been obtained.

The wording of § 4.1.18 is similar to that previously used in No 11.41. However, it is noted that this was deleted by WRC-12. More importantly is the principle difference between the unplanned and planned bands in that while the unplanned bands just have single-entry protection criteria, the planned bands have a reference situation which takes into account the aggregation of interference from all other networks upon which the protection criteria are based (a relative degradation of the reference situation e.g. 0.45 dB or 0.25 dB).

In entering a network provisionally into the List, the reference situation of “victim” networks with which coordination is not completed is not updated. In respect of Appendix 30B, the reference situation is updated when changing the recording from provisional to definitive, i.e. after agreement is reached.

In Appendices 30 and 30A, the reference situation of the “victim” network is updated when changing the recording from provisional to definitive, i.e. after four months without complaints about harmful interference. There may be many reasons why harmful interference does not occur during the first four months of operation, e.g. during this period, the “victim” network may not operate with its most sensitive characteristics (use of larger antennas, modulation/coding that is more robust, e.i.r.p.s higher than the minimum values, …) or the interfering network may not operate with its most interfering characteristics (lower EIRPs, transponders with no customers, steerable beams pointing in another direction, …..).

However, at the end of this four-month period, the reference situation of the “victim” network will be updated to incorporate the full interference from the network to which it has not given its agreement. This could severely affect the reference situation of the “victim” network and other later filings could impose significantly more interference upon the “victim” network before exceeding the relative degradation which triggers coordination. As a result, even though not having given its agreement, the “victim” network may find itself with reduced protection due to a network to which it has not given its agreement.

In preparations for WRC-15 it was too late to have this issue raised and captured in the CPM report. In discussions in CEPT, CEPT proposed that this issue could be resolved through an RRB decision. Following this advice, this issue was brought to the attention of RRB-70 meeting in October 2015 [RRB-70/10](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-RRB15.3-C-0010), requesting that a Rule of Procedure be prepared to outline the desired practice to be followed by the Bureau. RRB-70 however was of the view that such a RoP would consist in a change of the Radio Regulations and therefore was outside the authority of the RRB.

Following this decision, a late contribution [WRC15/169](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WRC15-C-0169) on this issue was submitted to WRC-15. Since this proposal was made directly to the Conference with no previous studies, WRC-15 decided that “….it was felt that further study of this issue is required if this current practice is to be changed. ITU-R is therefore invited to study this issue under the standing Agenda item 7 with the aim of finding an appropriate regulatory and technical solution to this issue.”

Therefore, this issue was raised again at the first CPG PTB meeting in this study period in June 2016 suggesting regulatory changes, and also suggesting submitting it as a CEPT input contribution to the 2nd WP 4A meeting in September-October 2016 agreed within the framework of CEPT CPG PTB. However, the Administration of Russia was not in a position to join such a contribution. Hence, ECO collected supporting administrations and several administrations notified ECO that they wanted to co-sign such a multi-country contribution: Germany, Spain, France, Luxembourg, Norway and Sweden.

The 2nd meeting of WP 4A in September-October 2016 received this multi-country contribution [4A/183](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0183) and briefly discussed the issue with support raised from Iran, Israel and several European Administrations while the Administration of Russia raised opposition. The WP 4A meeting agreed to establish this issue as a new issue G under AI 7 captured in a Working Document annexed to the Chairman’s Report still needing re-formatting into CPM text.

At its February 2017 meeting PTB received the Norwegian contribution PTB(17)14 portraying the same proposal in the draft CPM format suggesting one method to satisfy the agenda item (Method A), proposing to submit it to WP 4A as a CEPT contribution. However, unanimous agreement was not reached this time either as the Russian Federation expressed difficulties with the proposed contribution. The Netherlands also had a different opinion on the matter and wanted to review it further and informed the meeting of their intent to submit a document on this issue suggesting an alternative method to the next WP 4A meeting. PTB therefore agreed to bring this contribution to the CPG19-3 meeting in March 2017 for further discussion and endorsement. At CPG19-3, it was decided to submit it to WP 4A while the Russian Federation made the following statement: “The Russian Federation could not support the preliminary CEPT position on the Issue G of the AI 7 as the proposed changes to update the reference situation of the "victim" network based on the bilateral agreement could lead to the degradation of environment for the third parties networks or even to regulatory uncertainties regarding already coordinated networks. Furthermore based on the same reason the Russian Federation could not support a CEPT contribution to ITU-R WP 4A proposing draft CPM text on WRC-19 AI 7 Issue G and reserve its right to present different view on this issue at ITU-R WP 4A.” The Netherlands expressed no objection to submit the proposed document to WP4A but informed the CPG meeting that it will address elements of the aforementioned document and will submit alternative options to solve issue G to the next WP4A meeting.

The 3rd meeting of WP 4A in May 2017 received five contributions on Issue G, including the CEPT input contribution 4A/243 submitted by Norway. The other four contributions were a Japanese document stating the Japanese position, a Dutch contribution proposing a different method to solve the issue, a US document suggesting No Change to 4.2.21A, i.e. in Region 2, and one contribution from Bulgaria including some opposition to the preliminary CEPT position and the proposed method from CEPT. The CEPT Coordinator therefore called for a coordination meeting on behalf of CPG to discuss the diverging views between CEPT and Bulgaria in an attempt to amend the preliminary CEPT position to reach further agreement within CEPT. The CEPT Coordinator informed the coordination meeting attendees of the preliminary CEPT position and the general CPG working methods to be followed by administrations. Nevertheless, it was concluded that an agreement was not possible to reach prior to the WP 4A meeting discussions of the issue.

The 4rd meeting of WP 4A in October 2017 received three contributions on this issue from Norway, Bulgaria and Japan containing partially conflicting proposed revisions to the draft CPM text. Little time was allocated to discuss the issue and the WP 4A output Working Document towards preliminary draft CPM text consists of a compilation of the three input contributions and a No Change option to satisfy the issue:

* Method A is the CEPT proposal to modify § 4.1.18 of Appendices 30 and 30A using the wording of § 6.25 of RR Appendix 30B in order to update the reference situation of the interfered-with network only if and when the Bureau is informed that an agreement has been obtained, as proposed by CEPT
* Method B is comprised by two options; either to establish operational clarifications during the four months trial period as specified in a Resolution yet to be drafted or amendments of the equivalent protection margin, as earlier proposed by the Netherlands
* Method C proposes to modify § 4.1.18 and § 4.1.18bis of Appendices 30 and 30A. The method includes several proposed modifications to § 4.1.18; to provide the coordination correspondence, for both assignments to operate with the notified parameters values, and to include the new network to in the Regions 1 and 3 List if the EPM degradation is less than 2 dB (subject to further studies). The proposed modifications to § 4.1.18bis portrays which further actions the notifying administration of the new network shall undertake, including measurements sent to the Bureau as specified in a new Resolution yet to be drafted. This method is supported by Bulgaria.
* Method D proposes “No Change” to the RR

The Working Document has clear references to each input contribution and includes a number of Editor’s notes and comments in italics raising different views expressed and the meeting decided to continue the discussion at the next WP 4A meeting. The meeting also decided to clarify that all the proposed changes are only relevant for Regions 1 and 3 by amending the title of Issue G.

At the PTB meeting of December 2017 the Netherlands informed the meeting that it would withdraw its input document from the WP4A meeting of May 2017. This document contained ideas on a way forward, how the reference situation can be updated in such a way that existing but also new networks will be protected.
The Netherlands explained at this PTB meeting that it had decided to no longer further develop this proposal. The Netherlands explained that they are still of the opinion that some elements of their proposal could be useful for a solution. Nevertheless, due to limited interest and support, the Netherlands has decided that it is not useful to spent more time and effort to their initial proposal and therefore will no longer make any effort with regard to this topic. Despite the Netherlands is not fully in favour of the current proposal, the Netherlands will from now on support the CEPT position.

# List of relevant documents

ITU-Documentation (Recommendations, Reports, other)

* Document [RRB 70/10](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-RRB15.3-C-0010) – Norwegian input to RRB
* Document [WRC15/169](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WRC15-C-0169) – Norwegian input to WRC-15
* Section 3.14 of [WRC-15/504](http://www.itu.int/md/R15-WRC15-C-0504/en) – Minutes of the seventh Plenary meeting on the 20 November 2015
* Document [4A/243](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0243) – CEPT input to the 3rd WP 4A[Annex 39](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N39%21MSW-E.docx) of WP4A/519 – Working Document towards draft CPM text in the Chairman’s Report of the 4th WP 4A meeting

CEPT and/or ECC Documentation (Decisions, Recommendations, Reports)

EU Documentation (Directives, Decisions, Recommendations, other), if applicable

# Actions to be taken

* Develop a draft European Common Proposal (ECP)

# Relevant information from outside CEPT (examples of these are below)

## European Union (date of proposal)

## Regional telecommunication organisations

APT (21 July 2017)

APT Members support study conducted by ITU-R WP 4A for modifying No. 4.1.18 of RR Appendices 30 and 30A where taking due account the implication to the assignments that are already in the Regions 1 and 3 List while updating the reference situation.

ATU (15 September 2017)

Support studies. It was noted that the current 4 month could be inadequate to ensure the any level of protection of existing and incoming networks. A solution which involves agreement between existing and incoming networks is preferred.

Arab Group (20 April 2017)

* Follow-up studies under this issue.
* Study the implications of the proposals submitted.
* Consider the possibility of modifying (extend - reduce - delete) the period of time of provisional recording towards definitive recording, which allows operators to ensure that the utilizing frequency assignments.

CITEL (1 December 2017)

There are four stages for CITEL proposals: Preliminary View (PV), Preliminary Proposal (PP), Draft Inter-American Proposal (DIAP), and Inter-American Proposal (IAP).

This is Issue is at the stage of DIAP, supported by B and USA. The DIAP is NOC with the explanation that there are notable differences between the application of the procedures § 4.2.21A for the Region 2 BSS and feeder-link Plans and the application of § 4.1.18 for the Regions 1 and 3 List, therefore NOC is needed for Region 2. For example, for Regions 1 and 3, § 4.1.18 may be applied to Regions 1 and 3 List assignments or pending List modifications or terrestrial or FSS assignments, while in Region 2, § 4.2.21A is applied in a much more limited fashion, solely to terrestrial or FSS or unplanned BSS assignments.

RCC (14 September 2017)

The RCC Administrations consider it unreasonable to modify No. 4.1.18 of RR Appendices 30 and 30A, where the reference situation of the victim satellite network would be updated only after the agreement between the Administration notifying the network and the Administration notifying interfering new network.

## International organisations

IATA (date of proposal)

ICAO (date of proposal)

IMO (date of proposal)

SFCG (13 September 2017)

Issues B, C and E through G do not concern SFCG as they pertain to the FSS and BSS Plans.

WMO and EUMETNET (date of proposal)

## Regional organisations

ESA (date of proposal)

Eurocontrol (date of proposal)

## OTHER INTERNATIONAL AND REGIONAL ORGANISATIONS

EBU (date of proposal)

GSMA (date of proposal)

CRAF (date of proposal)

1. ISSUE H: Modifications to RR Appendix 4 data elements to be provided for NON-GSO satellite SYSTEMS not subject to the procedures of Section II of RR Article 9

# ISSUE H

Issue H addresses the requirement to provide additional Appendix 4 data elements to enhance the capability of administrations to model non-GSO satellite orbits based on the information provided in the API publications for satellite system not subject to coordination.

# Preliminary CEPT position

CEPT supports to further study the impact of this proposal in detail before taking any action. In particular, CEPT will study the possibility to make mandatory the relevant information of item A.4.b for non-GSO satellite systems not subject to the procedures of Section II of RR Article 9, taking into account the flexibility that may be required for non-GSO satellites with short-duration missions and some satellites for scientific and/or experimental purposes.

# Background

The 3rd meeting of WP 4A in May 2017 received a Canadian input contribution WP4A/308 proposing Administrations to provide BR additional Appendix 4 data elements for non-GSO systems not subject to coordination in order for such non-GSO systems to be more precisely modelled in terms of the constellation configurations and orbital planes.

Under the current RR Appendix 4, the following data elements are required for this specific case:

1. Item A.4.b.4.a, the angle of inclination of the orbital plane with respect to the Earth’s equatorial Plane;
2. Item A.4.b.4.c, the period;
3. Item A.4.b.4.d, the altitude, in kilometers, of the apogee of the space station, and
4. Item A.4.b.4.e, the altitude, in kilometers, of the perigee of the space station.

It was demonstrated in meeting output Annex [28](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP4A-C-0364!N28!MSW-E) of WP4A/364 that it is not possible to describe a unique orbit or satellite trajectory based only on these four data elements. Hence it was agreed to initiate a new issue H under Agenda item 7 based on the proposal in order to:

* Examine whether the current RR Appendix 4 data elements relating to the orbits are sufficient to model NGSO satellite networks/systems, and
* Propose potential modifications to RR Appendix 4, as appropriate.

The 4th meeting of WP 4A in October 2017 considered another Canadian input document ([4A/414](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0414)) related to what was previously labelled as Issue H. Upon a request from CEPT, the meeting decided to split this into two separate issues, now labelled Issue H and Issue I. The meeting advanced the development of two separate Working Documents towards draft CPM texts on these issues and sent a Liaison Statement to WPs 4C, 5A, 7B and 7C for action in order to receive their views on these issues and the referenced Working Documents.

Issue H is therefore limited to addressing the requirement to provide additional Appendix 4 data elements to enhance the capability of administrations to model non-GSO satellite orbits based on the information provided in the API publications for satellite system not subject to coordination. WP 4A concluded that in order to assess the impact of the limited information on the ability to model properly NGSO satellite orbit, there is a need to consider the different type of orbits case by case. Only one method to satisfy the issue has been identified, proposing to include the following new items in RR Appendix 4 for APIs:

* (New) Item A.4.b.1.a.1: for a “constellation”, the angular separation between two consecutive ascending nodes measured from the centre of the Earth;
* (New) Item A.4.b.4.b.1: for a “constellation”, the angular separation between two consecutive satellites in the same orbital planes measured from the centre of the Earth;
* (New) Item A.4.b.4.g: for an Elliptical Orbit (i.e. the value given for (existing) item A.4.b.4.d is different from the one given for item A.4.b.4.c), the angular separation between the ascending node and the perigee measured in the orbital plane, in the direction of the motion. (Note: The proposed new item is identical to the existing item A.4.b.5.c.)
* Item A.4.b.4.b.2: for a “constellation”, the angular separation between two satellites in two adjacent planes measured from the centre of the Earth in the ascending direction;

No regulatory and procedural considerations have been proposed yet.

It should be noted that the RAAN and argument of perigee are orbital elements which are required to assess the compatibility between NGSO systems. Currently, to run simulations in relation to a new API, this information has systematically to be requested from the administration filing the new satellite. Its availability in the API would avoid this additional step.

# List of relevant documents

ITU-Documentation (Recommendations, Reports, other)

* [Annex 40](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N40%21MSW-E.docx) of WP4A/519 – WD towards draft CPM text in the Chairman’s Report of the 4th WP 4A meeting
* [4C/276](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4C-C-0276) Liaison Statement to WPs 4C, 5A , 7B and 7C from the 4th WP 4A meeting

CEPT and/or ECC Documentation (Decisions, Recommendations, Reports)

EU Documentation (Directives, Decisions, Recommendations, other), if applicable

# Actions to be taken

* Based on the Liaisons Statements received by WP 4A from WP 4C, 5A and 7B, CEPT will consider whether or not to limit the issue to certain services - no such LS was received yet
* Further develop the preliminary CEPT position and eventually draft European Common Proposals (ECP) if needed
* Assess how to take short-duration missions satellites into particular consideration in this issue
* Seek further clarification of the proposed new data elements

# Relevant information from outside CEPT (examples of these are below)

## European Union (date of proposal)

## Regional telecommunication organisations

APT (21 July 2017)

APT Members support the study to determine whether additional RR Appendix 4 data elements are required to enhance the capability of administrations to model non-GSO satellite systems based on the information provided in the API and CR/C publication for non-GSO system.

ATU (15 September 2017)

Support studies considering the potential benefit of this issue to developing countries.

Arab Group (date of proposal)

CITEL (1 December 2017)

There are four stages for CITEL proposals: Preliminary View (PV), Preliminary Proposal (PP), Draft Inter-American Proposal (DIAP), and Inter-American Proposal (IAP). This is Issue is at the stage of PV. The PV was provided by CAN. It supports the addition of the following data elements in Appendix 4 for frequency assignments to non-GSO satellite service not subject to section II of Article 9:

-For elliptical orbit, the argument of the perigee;

-For constellation, the angular separation between two consecutive ascending nodes, the angular separation between two consecutive satellites in the same orbital plane, both angles measured from the centre of the Earth, and the angular separation between two satellites in two adjacent planes measured from the centre of the Earth in the ascending direction.

RCC (14 September 2017)

The RCC Administrations support the inclusion of additional data elements of the RR Appendix 4 during notification of non-GSO systems.

The RCC Administrations are studying the list of additional data elements to enhance administration opportunities for modelling NGSO systems at the phases of advance publication and coordination.

## International organisations

IATA (date of proposal)

ICAO (date of proposal)

IMO (date of proposal)

SFCG ( 13 September 2017)

For this issue SFCG supports the initiative to introduce additional orbital data in the NGSO API describing an non-GSO satellite when submitting an API and/or CR/C package. The current proposal is to add into the Appendix 4 tables for API information the right angle of ascending node (RAAN) and argument of perigee. This would allow the proper modelling of the orbit of new satellite network filings and may also be of use to SFCG members.

WMO and EUMETNET (date of proposal)

## Regional organisations

ESA (date of proposal)

Eurocontrol (date of proposal)

## OTHER INTERNATIONAL AND REGIONAL ORGANISATIONS

EBU (date of proposal)

GSMA (date of proposal)

CRAF (date of proposal)

1. ISSUE I: Additional RR Appendix 4 data items to be provided for non-geostationary satellite systems with multiple orbital planes

# ISSUE I

Issue I addresses the requirement to provide additional Appendix 4 data elements to enhance the capability of administrations to model non-GSO satellite networks or systems based on the information provided in the API and CR/C publications, as applicable.

# Preliminary CEPT position

CEPT supports to further study the impact of this proposal in detail before taking any action.

# Background

WRC-15 took a decision related to the Rules o Procedures on the Receivability of forms of notice which the BR Director used to prepare a RoP to address this issue. It was subsequently approved by the RRB and contained in the latest version of the RoP as an asterisk note to the title, as follows:

“For the submission of a request for coordination under No. 9.30 related to a non-GSO satellite network or system, the notice will be receivable only in the cases described below:

1. satellite systems with one (or more than one) set(s) of orbital characteristics and inclination value(s) with all frequency assignments to be operated simultaneously; and,
2. satellite systems with more than one set of orbital characteristics and inclination values with, however, a clear indication that the different sub-sets of orbital characteristics would be mutually exclusive; in other terms, frequency assignments to the satellite system would be operated on one of the sub-sets of orbital parameters to be determined at the notification and recording stage of the satellite system at the latest.”

This RoP relates to this issue of configurations within a single non-GSO notice and how the notice should be treated, either as one “constellation” operating its frequency assignments simultaneously or multiple “constellations” operating its frequency assignments separately.

The 3rd meeting of WP 4A in May 2017 received a Canadian input contribution ([4A/308](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0308)) proposing Administrations to provide BR additional Appendix 4 data elements for non-GSO systems not subject to coordination in order for such non-GSO systems to be more precisely modelled in terms of the constellation configurations and orbital planes.

Under the current RR Appendix 4, four data elements are required for this specific case but it was demonstrated in meeting output Annex [28](http://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WP4A-C-0364!N28!MSW-E) of WP4A/364 that it is not possible to describe a unique orbit or satellite trajectory based only on these four data elements. Hence it was agreed to initiate a new issue H under Agenda item 7 based on the proposal in order to:

* Examine whether the current RR Appendix 4 data elements relating to the orbits are sufficient to model NGSO satellite networks/systems, and
* Propose potential modifications to RR Appendix 4, as appropriate.

The 4th meeting of WP 4A in October 2017 considered another Canadian input document ([4A/414](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0414)) further developing what was previously labelled Issue H. However, upon a request from CEPT the meeting decided to split this into two separate issues, now labelled Issue H and Issue I. The meeting therefore advanced the development of two separate Working Documents towards draft CPM texts on these issues and sent a Liaison Statement to WPs 4C, 5A, 7B and 7C for action in order to receive their views on these issues and the referenced Working Documents.

The modelling of the orbit of satellites in non-GSO systems requires significantly more information than a GSO satellite network. Recent analysis performed on AIs and CR/Cs for non-GSO satellite networks or systems as published in BR IFICs have shown that there may be a need for additional information in order to properly model the satellite orbits. As under the current Appendix 4, frequency assignments can be linked to multiple orbital planes in a single API or CR/C as appropriate. Therefore, the challenge for potentially affected administrations are to be able to determine if the API or CR/C is describing a single NGSO system, or describing a multiple potential configuration of a single NGSO system to be implemented. Ultimately, the implementation plan has to be communicated to the Bureau so currently the Bureau is seeking this information from the notifying administration by letters after the receipt of an API or a CR/C filing containing multiple orbital planes. Hence, one potential improvement avoiding unnecessary correspondence may be to instead provide the relevant information in the initial submission to the Bureau.

Only one method to satisfy the issue has been identified, proposing to include two new items in RR Appendix 4 to be required in the API or CR/C as appropriate regarding the treatment of the multiple orbital planes:

* Number of configurations for the NGSO satellite systems when the filing contains more than one orbital planes
* Identification of all the orbital planes for each configuration if the number of configurations are more than one

No regulatory and procedural considerations have been proposed yet.

# List of relevant documents

ITU-Documentation (Recommendations, Reports, other)

* [Annex 41](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N41%21MSW-E.docx) of WP4A/519 – WD towards draft CPM text in the Chairman’s Report of the 4th WP 4A meeting
* [4C/276](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4C-C-0276) - Liaison Statement to WPs 4C, 5A , 7B and 7C from the 4th WP 4A meeting

CEPT and/or ECC Documentation (Decisions, Recommendations, Reports)

EU Documentation (Directives, Decisions, Recommendations, other), if applicable

# Actions to be taken

* Based on the Liaisons Statements received by WP 4A from WP 4C, 5A and 7B, CEPT will consider whether or not to limit the issue to certain services - no such LS was received yet
* Consider if the addition of these Appendix 4 data elements would supersede the RoP or if the addition of these data elements are separate from the RoP
* Further develop the preliminary CEPT position and eventually draft European Common Proposals (ECP) if needed

# Relevant information from outside CEPT (examples of these are below)

## European Union (date of proposal)

## Regional telecommunication organisations

APT (21 July 2017)

APT Members support the study to determine whether additional RR Appendix 4 data elements are required to enhance the capability of administrations to model non-GSO satellite systems based on the information provided in the API and CR/C publication for non-GSO system.

ATU (date of proposal)

Arab Group (date of proposal)

CITEL (1 December 2017)

There are four stages for CITEL proposals: Preliminary View (PV), Preliminary Proposal (PP), Draft Inter-American Proposal (DIAP), and Inter-American Proposal (IAP). This is Issue is at the stage of PV. The PV was provided by CAN. It supports the addition of the addition of the following data elements in Appendix 4 for frequency assignments to non-GSO satellite systems with multiple planes and multiple satellites:

* number of configurations for the non-GSO satellite systems described in the API or the CR/C as appropriate;
* identification of orbital planes associated with each configuration identified above.

RCC (date of proposal)

## International organisations

IATA (date of proposal)

ICAO (date of proposal)

IMO (date of proposal)

SFCG (date of proposal)

WMO and EUMETNET (date of proposal)

## Regional organisations

ESA (date of proposal)

Eurocontrol (date of proposal)

## OTHER INTERNATIONAL AND REGIONAL ORGANISATIONS

EBU (date of proposal)

GSMA (date of proposal)

CRAF (date of proposal)

1. ISSUE J: Modification of Section 1, Annex 1 of RR AP30, pfd limit

# ISSUE J

Issue J is considering § 5.2.1d) of RR Appendix 30, specifying the limit of −103.6 dB(W/(m2 · 27 MHz)), could be exceeded under some conditions and thereby enabling new broadcasting satellite services like UHDTV to be provided.

# Preliminary CEPT position

CEPT supports to further study the impact of this proposal in detail before taking any action.

# Background

The 4th meeting of WP 4A in October 2017 received a Japanese input contribution (4A/398) which further developed their initial proposal presented at the 3rd meeting of WP 4A in May 2017 proposing that § 5.2.1 d) of RR Appendix 30, specifying the limit of −103.6 dB(W/(m2 · 27 MHz)), could be exceeded under some conditions and thereby enabling new broadcasting satellite services like UHDTV to be provided. The input added conditions that:

* the pfd exceedance from -103.6 dB(W/(m2 · 27 MHz)) is only allowed for the notifying administration over its national territory and is not applicable to networks submitted by an international satellite organization or an administration that acts on behalf of a group of named administrations.
* to ensure the protection of services in adjacent bands, the frequency assignment should not overlap with the Regions 1 and 3 guardbands

BR clarified that the pfd levels will not be checked over sea areas so unfavourable findings will only be given if -103.6 dB(W/(m2 · 27 MHz)) is exceeded over the landmass of neighbouring countries. With these improvements, the 4th meeting of WP 4A agreed for the Japanese proposal to become a new issue under AI 7. The WD towards draft CPM text is annexed to the Chairman’s Report ([Annex 42](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N42%21MSW-E.docx) of 4A/519) and consists only of this one method.

# List of relevant documents

ITU-Documentation (Recommendations, Reports, other)

* [Annex 42](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N42%21MSW-E.docx) of WP4A/519 – WD towards draft CPM text in the Chairman’s Report of the 4th WP 4A meeting

CEPT and/or ECC Documentation (Decisions, Recommendations, Reports)

EU Documentation (Directives, Decisions, Recommendations, other), if applicable

# Actions to be taken

* Further develop the preliminary CEPT position and eventually draft European Common Proposals (ECP) if needed

# Relevant information from outside CEPT (examples of these are below)

## European Union (date of proposal)

## Regional telecommunication organisations

APT (date of proposal)

ATU (date of proposal)

Arab Group (date of proposal)

CITEL (date of proposal)

RCC (date of proposal)

## International organisations

IATA (date of proposal)

ICAO (date of proposal)

IMO (date of proposal)

SFCG (date of proposal)

WMO and EUMETNET (date of proposal)

## Regional organisations

ESA (date of proposal)

Eurocontrol (date of proposal)

## OTHER INTERNATIONAL AND REGIONAL ORGANISATIONS

EBU (date of proposal)

GSMA (date of proposal)

CRAF (date of proposal)

1. ISSUE K: Difficulties for Part B examinations under § 6.21 c) of RR Appendix 30B

# ISSUE K

Issue K is addressing difficulties in Part B examinations for Part B submissions by proposing that the examination under RR Appendix 30B § 6.21 c) is to be performed in two steps, if needed, to better reflect the actual situation and thus increase the efficiency of spectrum use.

# Preliminary CEPT position

CEPT supports that the examination under RR Appendix 30B § 6.21 c) is performed in two steps, if needed, to better reflect the actual situation and to enable newcomers to benefit from the reduction of satellite networks parameters and characteristics during the coordination process, and thus increase the efficiency of spectrum use, as Method A in the draft CPM text.

CEPT believes that this method avoids over protection of earlier networks based on part A characteristics which could be obsolete and no longer valid due to changes during the coordination and entering into the List. This method would hence enable spectrum efficiency by addressing potential difficulties encountered by notifying administrations in the Part B examination to enter into the List with favourable findings.

CEPT support the overall aim to facilitate entering new assignments into the RR Appendix 30B List and to facilitate coordination of networks for newcomers which the proposal in Issue K targets.

# Background

CEPT has addressed the issue which service area of affected networks submitted under RR Appendix 30B should be taken into account during the process of entering a new assignment into the Appendix 30B List: intended or definitive (PTB(17)04). This contribution proposes to clarify current Radio Regulations by the introduction of the new Rule of procedure to allow take into account latest, recorded to the List service area of affected assignments in order to better reflect the actual situation and thus increase the efficiency of spectrum use.

Such a CEPT contribution was submitted by Belarus ([4A/241](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0241%21%21MSW-E.docx)) to the 3rd meeting of WP 4A in May 2017. The consideration of this issue was there combined with a discussion of an input contribution from Saudi Arabia, Bahrain, Djibouti, Egypt, Oman (Doc. [4A/322](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0322%21%21MSW-E.docx)) on the same topic of Appendix 30B Part B examination. However, this document proposed to use the Part B characteristics for the §6.21 c) of the Appendix 30B examination, if this has been submitted. The Bureau confirmed in the meeting that this could lead to uncertainties in the coordination process. Hence, this document was transferred to a Working Document attached to the WP 4A Chairman’s report ([Annex 25](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0364%21N25%21MSW-E.docx) to Doc. 4A/364) calling for further studies while the WP 4A meeting supported the CEPT contribution and agreed to produce a Note to the BR Director based on the CEPT input ([Annex 45](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0364%21N45%21MSW-E.docx) to Doc. 4A/364) requesting the Director to consider this issue with a view to addressing the concerns raised but there was no need to establish it as an AI 7 issue. However, the 4th meeting of WP 4A in October 2017 received two inputs from the BR ([4A/406](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0406) and [4A/407](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0407)) which explained the difficulties associated with both of these two proposals including that they would require modification to the BR software and increase the complexity and processing time.

The 4th meeting of WP 4A also received an input from AsiaSat ([4A/421](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WP4A-C-0421)) addressing these difficulties by proposing that the examination be performed in two steps. First with the Part A characteristics under RR Appendix 30B § 6.21 c) like the current practice, and if this examination of Part B of a submitted network is favourable, the senior network is considered as not being affected like today and no further examination will be conducted. But if unfavourable finding is received, then the BR will perform the second examination with regards to the Part B characteristics of the senior network and if this further examination gives favourable findings, the senior network is considered as not being affected in examination under § 6.21 c) and would give favourable findings to the submitted network.

This method avoids over protection of earlier networks based on its Part A characteristics which could be obsolete and no longer valid and would hence enable spectrum efficiency by addressing potential difficulties encountered by notifying administration in the Part B examination to enter into the List with favourable findings.

BR noted that this method introducing a second examination would increase its workload but AsiaSat provided clarifications that this increase in workload should not be dramatic. The meeting agreed for the Asiasat proposal to become a new issue under AI 7. The WD towards draft CPM text is annexed to the Chairman’s Report ([Annex 43](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N43%21MSW-E.docx) of 4A/519) and consists only of this one method.

# List of relevant documents

ITU-Documentation (Recommendations, Reports, other)

* [Annex 43](https://www.itu.int/dms_ties/itu-r/md/15/wp4a/c/R15-WP4A-C-0519%21N43%21MSW-E.docx) of WP4A/519 – WD towards draft CPM text in the Chairman’s Report of the 4th WP 4A meeting

CEPT and/or ECC Documentation (Decisions, Recommendations, Reports)

EU Documentation (Directives, Decisions, Recommendations, other), if applicable

# Actions to be taken

* Further develop the preliminary CEPT position and eventually draft European Common Proposals (ECP) if needed

# Relevant information from outside CEPT (examples of these are below)

## European Union (date of proposal)

## Regional telecommunication organisations

APT (date of proposal)

ATU (date of proposal)

Arab Group (date of proposal)

CITEL (date of proposal)

RCC (date of proposal)

## International organisations

IATA (date of proposal)

ICAO (date of proposal)

IMO (date of proposal)

SFCG (date of proposal)

WMO and EUMETNET (date of proposal)

## Regional organisations

ESA (date of proposal)

Eurocontrol (date of proposal)

## OTHER INTERNATIONAL AND REGIONAL ORGANISATIONS

EBU (date of proposal)

GSMA (date of proposal)

CRAF (date of proposal)

1. ISSUE XX: Measures to facilitate entering new assignments into the RR Appendix 30B List

# ISSUE XX

This issue proposes to revise and restructure the coordination triggers used in Appendix 30B to take into account technological advances and the development of the use of the geostationary orbit to facilitate access for newcomers by avoiding overprotection and unnecessary coordination requirements.

# Preliminary CEPT position

CEPT supports to revise and restructure the coordination triggers used in Appendix 30B to take into account technological advances and the development of the use of the geostationary orbit to facilitate access for newcomers by avoiding overprotection and unnecessary coordination requirements. CEPT looks forward to further discussing the details of this proposal including discussing alternative implementation possibilities within the scope of Agenda item 7. CEPT believes that this new issue would help to alleviate the difficulties faced by administrations in attempting to enter assignments into the Appendix 30B List and to facilitate coordination of networks. CEPT also welcomes additional proposals which could help newcomers to enter into the Appendix 30B List.

# Background

At the October 2017 meeting of Working Party 4A, concerns were raised on the difficulties encountered by newcomers trying to get into the Appendix 30B List, e.g. through conversion of national allotments with modified parameters. CEPT shares these concerns and has identified an alternative measure to facilitate entering new satellite networks into the Appendix 30B List.

For this reason, CEPT has previously made proposals which have subsequently been developed into Issue K whereby newcomers to get their network into the List can benefit from the reduction of the service area and technical parameters. In addition to Issue K, CEPT has identified another measure to facilitate entering new satellite networks into the Appendix 30B List as contained in this proposed new Issue XX under WRC-19 Agenda Item 7. In this issue, CEPT proposes to revise and restructure the coordination triggers used in Appendix 30B to take into account technological advances and the development of the use of the geostationary orbit to facilitate access for newcomers by avoiding overprotection and unnecessary coordination requirements.

CPG19-5 in January 2018 agreed to submit an input contribution to the WP 4A in February introducing this new issue XX proposing to further discuss the details of it and establish this issue as a new issue within the scope of Agenda item 7.

# List of relevant documents

ITU-Documentation (Recommendations, Reports, other)

CEPT and/or ECC Documentation (Decisions, Recommendations, Reports)

EU Documentation (Directives, Decisions, Recommendations, other), if applicable

# Actions to be taken

* Further develop the preliminary CEPT position and eventually draft European Common Proposals (ECP) if needed

# Relevant information from outside CEPT (examples of these are below)

## European Union (date of proposal)

## Regional telecommunication organisations

APT (date of proposal)

ATU (date of proposal)

Arab Group (date of proposal)

CITEL (date of proposal)

RCC (date of proposal)

## International organisations

IATA (date of proposal)

ICAO (date of proposal)

IMO (date of proposal)

SFCG (date of proposal)

WMO and EUMETNET (date of proposal)

## Regional organisations

ESA (date of proposal)

Eurocontrol (date of proposal)

## OTHER INTERNATIONAL AND REGIONAL ORGANISATIONS

EBU (date of proposal)

GSMA (date of proposal)

CRAF (date of proposal)