



PLENARY MEETING

**Addendum 8 to
Document 6228(Add.22)-
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African Common Proposals

PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda item 7(F)

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

7(F) Topic F - Excluding uplink service area in RR Appendix **30A** for Regions 1 and 3 and RR Appendix **30B**

Introduction and proposals

As indicated in the Executive summary of the CPM23 Report, except Method F1 proposing NOC to the Radio Regulations, all remaining Methods F2, F3 and F4 propose to add a new provision to Article 4 of RR Appendix **30A** to allow an administration to request at any time the exclusion of its territory from the feeder-link service area of a satellite network of other administrations. Therefore, it is understood that there is a consensus on that new provision.

During the discussion of ITU-R Working Party 4A, there was also a general acceptance to introduce a definition of the feeder-link/uplink coverage area in Appendix **30A** and Appendix **30B**.

Method F3 proposes to allow administrations to relocate feeder-link/uplink test-points as long as the relocation does not create more interference. This is considered as reasonable noting the same opportunity exists in the downlink of Appendix **30** and Appendix **30B**.

In view of the above and in order to address the remaining difference between Method F2 and Method F3 concerning acceptance of interference, it is proposed to consider Method F4, specifically, the proposed modification to Section 4 of Annex 1 to Appendix **30A** of Method F4 with the following modifications, which will apply to both Appendix **30A** and Appendix **30B**.

a) A network subject to Topic F shall be identified as follows:

1. Its service area shall be limited to the national territory in case the notifying administration acting on its own behalf or to the national territories of the administrations participating in that network;
 2. Coverage area shall be the smallest area which encompasses the service area;
 3. The notifying administration shall explicitly request the Bureau to treat the submission as subject to Topic F of WRC-23;
- b) Instead of the submitted uplink coverage area, alternative uplink coverage area of an incumbent network shall be used in the Bureau's examination of a network subject to Topic F. Such alternative uplink coverage area shall be derived based on uplink test-points associated with uplink service area of that incumbent network. Specifically, for each uplink service area of that incumbent network, a corresponding uplink coverage area will be created based on the test-points associated with that uplink service area. A minimum ellipse will be generated per each uplink test-point and the combination of all these minimum ellipses converted to a shaped beam is the corresponding uplink coverage to be used by the Bureau in its uplink technical examination;
- c) For Appendix **30A**, the incumbent network referred to in b) above is an Article 4 Additional use network in Regions 1 and 3;
- d) For Appendix **30B**, the incumbent network referred to in b) above is an Article 6 Additional system network submitted under § 6.1 of Article 6 of Appendix 30B and not subject to Resolution **170 (WRC-19)** or a conversion of an allotment into an assignment with modification outside the envelope of the allotment and not subject to Resolution **170 (WRC-19)**.
- e) Once a network subject to Topic F enters in the List, the reference situation of an incumbent referred to in c) above for Appendix **30A** and d) above for Appendix **30B** and with which coordination has been completed or not required based on the alternative uplink coverage area will not be updated.
- f) For the examination by the Bureau of the network subject to Topic F against an incumbent network referred to in d) above for Appendix **30B**, downlink and uplink will be examined separately. The single-entry C/I criteria and pfd criteria contained in Appendix 1 to Attachment 1 to Resolution **170 (WRC-19)** or any future update of that Resolution shall be used by the Bureau instead of Annex 4 to Appendix **30B**.
- g) Should an affected network referred to in c) or d) above enter in the List, then the Bureau shall review the status of the network subject to Topic F in the List accordingly by applying the principles referred to in b) above and footnote *9bis* of Article 4 of RR Appendix **30A** or footnote *7bis* to Appendix **30B**, as appropriate.

In view of the above, the relevant modifications/additions to Appendix **30A** and Appendix **30B** are proposed as follows for the consideration of WRC-23.

APPENDIX 30A (REV.WRC-19)*

Provisions and associated Plans and List¹ for feeder links for the broadcasting-satellite service (11.7-12.5 GHz in Region 1, 12.2-12.7 GHz in Region 2 and 11.7-12.2 GHz in Region 3) in the frequency bands 14.5-14.8 GHz² and 17.3-18.1 GHz in Regions 1 and 3, and 17.3-17.8 GHz in Region 2 (WRC-03)

ARTICLE 4 (REV.WRC-19)

Procedures for modifications to the Region 2 feeder-link Plan or for additional uses in Regions 1 and 3

4.1 Provisions applicable to Regions 1 and 3

ADD AFCP/6228A22A8/1

4.1.10e An administration may at any time during or after the above-mentioned four-month period inform the Bureau about its objection to being included in the service area of any assignment, even if this assignment has been entered in the List. The Bureau shall then inform the administration responsible for the assignment and exclude the territory and test points^{WW} that are within the territory of the objecting administration from the service area. The Bureau shall update the reference situation without reviewing the previous examinations. (WRC-23)

ADD AFCP/6228A22A8/2

4.1.30 Upon receipt of the request from the responsible administration, for examination of a proposed new or modified assignment to the feeder-link List with:

- a service area limited to the national territory of an administration or to the national territories of a group of named administrations responsible for that assignment and;

* The expression “frequency assignment to a space station”, wherever it appears in this Appendix, shall be understood to refer to a frequency assignment associated with a given orbital position. (WRC-03)

¹ The Regions 1 and 3 feeder-link List of additional uses is annexed to the Master International Frequency Register (see Resolution **542 (WRC-2000)****). (WRC-03)

** *Note by the Secretariat:* This Resolution was abrogated by WRC-03.

² This use of the band 14.5-14.8 GHz is reserved for countries outside Europe.

Note by the Secretariat: Reference to an Article with the number in roman is referring to an Article in this Appendix.

^{WW} The administration responsible for the assignment may request to relocate the uplink test points from the excluded territory to a new location within the remaining part of its service area provided that the relocation shall not cause more interference. (WRC-23)

- a coverage area that shall be the smallest area which encompasses the associated service area,

against an assignment referred to in § 4.1.1 b), the Bureau shall generate alternative feeder-link coverage area of the latter assignment based on the feeder-link test-points associated with the feeder-link service area of that latter assignment, using the relevant BR software applications. A minimum ellipse with the reference antenna patterns used for replanning at WRC-97 of Section 3.7.3 of Annex 3 to this Appendix will be generated per each feeder-link test-point and the combination of all these minimum ellipses converted to a shaped beam is the alternative feeder-link coverage area. The Bureau shall use this alternative feeder-link coverage area instead of the submitted one in its technical examination. (WRC-23)

Reasons: to implement principles a), b) and c) above.

ADD AFCP/6228A22A8/3

4.1.31 When an assignment subject to § 4.1.30 enters in the List, the Bureau shall not update the reference situation of the latter assignment referred to in § 4.1.30 if the latter assignment is still affected based on its submitted feeder-link coverage area. (WRC-23)

Reasons: to implement principle e) above.

ADD AFCP/6228A22A8/4

4.1.32 Should the latter assignment referred to in § 4.1.30 that was the basis of the disagreement enter in the List, the Bureau shall review the status of the assignment subject to § 4.1.30 in the List by applying the principles referred to in § 4.1.30 and footnote *9bis* of Article 4 of this Appendix. (WRC-23)

Reasons: to implement principle g) above.

ANNEX 3

Technical data used in establishing the provisions and associated Plans and Regions 1 and 3 feeder-link List, which should be used for their application³⁶ (Rev.WRC-03)

1 Definitions

ADD AFCP/6228A22A8/5

1.2bis Feeder-link coverage area

The area on the surface of the Earth delineated by a contour of a constant given value of relative receiving space station antenna gain which would permit the wanted quality of reception in the absence of interference.

³⁶ In revising this Annex at WRC-97 and at WRC-2000, no changes were made to the technical data applicable to the Region 2 feeder-link Plan. However, for all three Regions it should be noted that some of the parameters of networks proposed as modifications to the Region 2 feeder-link Plan and the Regions 1 and 3 feeder-link Lists may differ from the technical data presented herein. (WRC-2000)

NOTE 1 – The coverage area must be the smallest area which encompasses the service area. See also § 4.1.10e to this Appendix.

APPENDIX 30B (REV.WRC-19)

Provisions and associated Plan for the fixed-satellite service in the frequency bands 4 500-4 800 MHz, 6 725-7 025 MHz, 10.70-10.95 GHz, 11.20-11.45 GHz and 12.75-13.25 GHz

ARTICLE 6 (REV.WRC-19)

Procedures for the conversion of an allotment into an assignment, for the introduction of an additional system or for the modification of an assignment in the List^{1, 2, 2bis} (WRC-19)

MOD AFCP/6228A22A8/6

6.16 An administration may at any time during or after the above-mentioned four-month period inform the Bureau about its objection to being included in the service area of any assignment, even if this assignment has been entered in the List. The Bureau shall then inform the administration responsible for the assignment and exclude the territory and test points [MOD.6bis](#) that are within the territory of the objecting administration from the service area. The Bureau shall update the reference situation without reviewing the previous examinations. (WRC-~~4923~~)

¹ If the payments are not received in accordance with the provisions of Council Decision 482, as amended, on the implementation of cost recovery for satellite network filings, the Bureau shall cancel the publication specified in § 6.7 and/or 6.23 and the corresponding entries in the List under § 6.23 and/or 6.25, as appropriate, and reinstate any allotments back into the Plan after informing the administration concerned. The Bureau shall inform all administrations of such action and that the network specified in the publication in question no longer has to be taken into consideration by the Bureau and other administrations. The Bureau shall send a reminder to the notifying administration not later than two months prior to the deadline for the payment in accordance with the above-mentioned Council Decision 482, unless the payment has already been received. See also Resolution **905 (WRC-07)***.

* *Note by the Secretariat:* This Resolution was abrogated by WRC-12.

² Resolution **49 (Rev.WRC-15)** applies. (WRC-15)

2bis Resolution **170 (WRC-19)** applies. (WRC-19)

6bis The administration responsible for the assignment may request to relocate the [downlink](#) test points from the excluded territory to a new location within the remaining part of its service area. [Uplink test points relocation shall not cause more interference.](#) (WRC-~~4923~~)

ADD AFCP/6228A22A8/7

6.37 Upon receipt of the request from the responsible administration, for examination of a proposed new or modified assignment to the List with:

- a service area limited to the national territory of an administration or to the national territories of a group of named administrations responsible for that assignment and the;
- a coverage area that shall be the smallest area which encompasses the associated service area

against an assignment submitted under § 6.1 for additional system and not subject to Resolution **170 (WRC-19)** or a conversion of an allotment into an assignment with modification outside the envelope of the allotment and not subject to Resolution **170 (WRC-19)**, the Bureau shall generate alternative uplink coverage area of the latter assignment based on the uplink test-points associated with the uplink service area of that latter assignment, using the relevant BR software applications. A minimum ellipse with the reference antenna pattern contained in Section 1.7.2 of Annex 1 to this Appendix will be generated per each uplink test-point and the combination of all these minimum ellipses converted to a shaped beam is the alternative uplink coverage area. The Bureau shall use this alternative feeder-link coverage area instead of the submitted one in its technical examination. (WRC-23)

Reasons: to implement principles a), b) and d) above.

ADD AFCP/6228A22A8/8

6.38 In its examination referred to in § 6.37, the Bureau shall apply single-entry carrier-to-interference and the power flux-density criteria contained in Appendix 1 to Attachment 1 to the most recent version of Resolution **170 (WRC-19)** instead of Annex 4 to Appendix **30B**. (WRC-23)

Reasons: to implement principle f) above.

ADD AFCP/6228A22A8/9

6.39 When an assignment subject to § 6.37 enters in the List, the Bureau shall not update the reference situation of the latter assignment referred to in § 6.37 if the latter assignment is still affected based on its submitted uplink coverage area. (WRC-23)

Reasons: to implement principle e) above.

ADD AFCP/6228A22A8/10

6.40 Should the latter assignment referred to in § 6.37 that was the basis of the unfavourable finding enter in the List, the Bureau shall review the status of the assignment subject to § 6.37 in the List by applying the principles referred to in § 6.37, § 6.38 and footnote *7bis* of Article 6 of this Appendix. (WRC-23)

Reasons: to implement principle g) above.

ANNEX 1 (WRC-03)

**Parameters used in characterizing the fixed-satellite service
allotment Plan** (WRC-07)

Section A (SUP - WRC-07)

1 Basic technical characteristics

ADD AFCP/6228A22A8/11

1.9 Coverage area

For downlink, The area on the surface of the Earth delineated by a contour of a constant given value of power flux-density which would permit the wanted quality of reception in the absence of interference

For uplink, the area on the surface of the Earth delineated by a contour of a constant given value of relative receiving space station antenna gain which would permit the wanted quality of reception in the absence of interference.

NOTE 1 – The coverage area must be the smallest area which encompasses the service area. See also § 6.16 to this Appendix.