

United States of America

DRAFT PROPOSAL FOR THE WORK OF THE CONFERENCE

Agenda Item 1.10: to review the regulatory procedures and associated technical criteria of Appendix 30B without any action on the allotments, the existing systems or the assignments in the List of Appendix 30B.

Background Information:

As stated in § 1.1 of Appendix 30B the objective of the Plan “is to guarantee in practice, for all countries, equitable access to the geostationary-satellite orbit in the frequency bands of the fixed-satellite service (FSS) covered by this Appendix”. While the plan has been in force for some 18 years, little use has been made of the precious spectrum (1600 MHz) regulated by this appendix, particularly as compared to the other bands allocated globally to the FSS. Moreover, numerous administrations have complained that the technical parameters and procedures are outdated, difficult to apply, and exceedingly time-consuming. For these reasons, administrations agreed to include consideration of this matter on the agenda for WRC-07. Several ITU-R preparatory meetings (including WP-4A and the Special Committee) as well as regional bodies have been studying the related issues for several years.

Taking the foregoing into consideration, the United States considers that the conditions for the use the Appendix 30B frequencies can be improved and optimized for ITU Member States that want to implement their allotments as well as for Administrations that want to use capacity (orbit/spectrum resources) beyond that in the Plan. While some studies are continuing, and we expect to continue to participate in the collaborative activities in the regional bodies, we offer a number of proposals below to facilitate fulfilment of the aspirations of *all* administrations. We may expect to augment these proposals when further information becomes available in the preparatory activities leading to the WRC.

Some key points of these proposals are discussed in greater detail, below.

Processing of Submissions

One of the great concerns expressed by administrations is the lengthy process involved in the conversion of allotments into assignments. While the current *sequential* processing of submissions does allow for an accurate consideration of the effect of each submission, the time taken for this process is prohibitively long. It has been estimated that under the current sequential approach the BR is able to process about 8 Appendix 30B submissions (with the possibility of simultaneous submissions from the same administration this number can be slightly increased). On the other hand, on 24 April 2006 there were 98 of those submissions in the BR queue. This corresponds to a backlog of at least 5 years which is very large, especially when compared to the 8-year limit for bringing Appendix 30B frequency assignments into use. Preparatory discussions have highlighted the merits and disadvantages resulting of the two approaches: 1) Continuation of Sequential Processing and 2) Non-Sequential Processing of assignment applications.

With sequential processing, the reference situation is updated only after the new submission enters the List and no other submission will be examined until the fate of each one of the previous submissions has been decided, either by including the associated network in the List or

by removing it from the queue. As a result, no submission will be examined based on a certain reference situation and later enter the List when this reference situation has changed.

A non-sequential processing of submissions¹ offers the possibility of a greatly simplified and expedited conversion of allotments into assignments (with or without modifications) and will also reduce the time for processing other submissions. It does not prevent the occurrence of a situation in which a submission is examined under a certain reference situation and enters the List after satisfying the requirements resulting from this examination when the reference situation has already changed. In our view the marginal inaccuracy that may result from this kind of processing will be far outweighed by the benefits of a non-sequential processing.

It is also important to note that non-sequential processing means that a proposed assignment B may enter the List before an assignment A received by the BR at an earlier date. However, if the later assignment B affects A (i.e. does not meet the Appendix 30B protection criteria), definitive registration of B cannot occur until A gives its agreement or B changes its parameters so that protection of A is ensured in accordance with the Appendix 30B criteria.

If we consider a submission under Article 6 that is not the conversion of an allotment into an assignment without any change to the characteristics of the allotment, it becomes clear that a non-sequential processing is more flexible and can potentially lead to a more efficient use of orbit/spectrum resources. Under sequential processing an Article 6 submission (different from conversion of an allotment without any change) that enters the List and expires after the 8-year regulatory period without being brought into use can prevent many other submissions from staying in the queue. Under non-sequential processing, Article 6 submissions could stay in the queue and eventually enter the List through a coordination agreement or after the expiration of the assignments that were blocking their access. As a consequence of proposing a non-sequential processing of submissions the concept of pre-determined arc (PDA) currently included in the Appendix 30B procedures has to be eliminated since it only fits in a sequential processing approach. It may be argued that elimination of the PDA concept removes some flexibility in the sense that an Article 6 submission cannot change orbital locations associated with allotments or assignments in the queue. However, this feature has also some severe drawbacks, such as undesirable and/or unexpected changes of orbital locations which also generate uncertainty for those administrations that have proposed assignments in the queue or are planning to propose the conversion of an allotment. This uncertainty is even more damaging because of the large backlog of submissions discussed above. Such large backlog gives administrations very little time to adapt to an ever changing environment.

For the reasons discussed above, a new text for Article 6 similar to that appearing in Annex 2 of the output of the WP-SC December 2005 meeting is proposed here.

Existing Systems

Existing systems are associated with FSS satellite networks that had already been submitted to the ITU BR when the Plan was developed. By now, the frequency assignments in these networks have either been brought into use and become assignments in the List or have been cancelled. Therefore there seems to be a consensus that the so called Part B of the Plan is not required any more.

¹ For instance as considered in Annex 2 of Doc. 4A/277 (output from the Working Party of the Special Committee, WP-SC, December 2005 meeting, on WRC-07 Agenda Item 1.10) or as currently contained in the procedures of Appendices 30 and 30A of the Radio Regulations.

However, current § 9.2 states that all the frequency assignments associated with existing systems would have to cease operation 20 years after the entry into force of the Plan, i.e. 16 March 2010. In this respect, the output of the SC-WP December 2005 meeting recognizes that “it would be neither appropriate nor practical to abruptly discontinue on this date the operation of all “existing systems” in the List, in particular those in which either the uplink or downlink stands from an additional use or other networks in unplanned bands”.

The proposal presented below treats existing systems as suggested in Annex 2 of the output of the SC-WP December meeting. By not distinguishing assignments in the List that are associated with existing systems from those that stem from allotments or from subregional systems, the concept of existing systems can be eliminated and continuity of their operation can be ensured.

Subregional Systems and Additional Uses

Subregional systems were introduced in the procedures of Appendix 30B in order to allow neighboring countries to combine their allotments into a system with regional coverage. For this reason, the submission of subregional systems in the current regulations contemplates the possibility of suspending allotments of the Member States participating in the system. However, up to now the submissions for subregional systems have never included requests for suspension or partial suspension of allotments. Therefore, subregional systems have actually been implemented as additional uses in the sense that they will coexist with allotments and assignments in the same way additional uses do.

Given all the above, there is no reason for the distinction between these two types of use of Appendix 30B frequencies and in the proposals below these two categories are merged into one category, referred to as “additional uses”.

Currently, the main distinctions between the two categories are : (i) subregional systems can explore the PDA concept and additional uses cannot ; (ii) frequency assignments of subregional systems have an unlimited period of validity while those of additional uses are limited to 15-year period of validity. In the proposals below the distinction with respect to the application of the PDA is not relevant since this concept is being eliminated while the period of validity of frequency assignments of the new category of additional uses would not be limited.

Multinational Service Areas

Currently, § 2.6 of Appendix 30B limits the service area associated with additional uses to the national territory of the administration submitting the additional use “unless otherwise agreed”. The Rule of Procedure of § 2.6 states that additional uses may have multinational service areas if agreement from other administrations included in the service area are obtained. It is being proposed here that assignments resulting from modifications of allotments or submitted as additional uses can have multinational service areas. It is noted that if an administration A has its territory included in the service area of an additional use proposed by another administration:

- (i) Any allotments or assignments of Administration A are protected because a submission requesting the use of Appendix 30B frequencies for an additional use has to be compatible with allotments, assignments in the List and assignments for which complete information has been received by the BR;
- (ii) Terrestrial systems in the territory of administration A are protected by the power-flux density limits of Article 21 of the Radio Regulations;
- (iii) Any emission from the territory of administration A intended for reception at the space station under consideration has to be authorized by this administration and

the provision of service through the deployment of receive earth stations in the territory of administration A can only occur with its approval.

APPENDIX 30B (Rev. WRC-2000)²

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

USA/ /01 NOC Article 1 and 2.1

ARTICLE 1

Objective of the provisions and associated Plan

1.1 The objective of the procedures prescribed in this Appendix is to guarantee in practice, for all countries, equitable access to the geostationary-satellite orbit in the frequency bands of the fixed-satellite service covered by this Appendix.

1.2 The procedures prescribed in this Appendix shall in no way prevent the implementation of assignments in conformity with Part A of the Plan.

ARTICLE 2

Definitions

2.1 *Conference:* World Administrative Radio Conference on the Use of the Geostationary-Satellite Orbit and the Planning of Space Services Utilizing It, First Session, Geneva, 1985; Second Session, Geneva, 1988.

Reasons: The United States supports the objectives stated in Article 1 and the definition in 2.1.

USA/ /02 MOD 2.2

2.2 *Plan:* The Plan for the fixed-satellite service in the frequency bands contained in this Appendix, ~~consisting of two parts:~~

~~a) Part A, containing the national allotments;~~

~~b) Part B, containing the networks of existing systems.~~

Reasons: Existing systems are associated with FSS satellite networks that had already been submitted to the ITU BR when the Plan was developed. By now, the frequency assignments in

² Editorial Note: For the convenience of the reader, the proposal presented here includes in most cases text proposed for no change (NOC) as well as text proposed for suppression (SUP).

these networks have either been brought into use and become assignments in the List or have been cancelled. Therefore there is no need for keeping the concept of Part B of the Plan.

USA/ /03 MOD 2.3

2.3 *Allotment:* For the purpose of this Appendix, an allotment comprises:

- a nominal orbital position;
- a bandwidth of 800 MHz (up-link and down-link) in the frequency bands listed in Article 3 of this Appendix;
- a service area for national coverage;
- ~~– generalized parameters as defined in Annex 1 to this Appendix;~~
- ~~– a predetermined arc (PDA).~~

Reasons: The generalized parameters are not considered to be necessary since examination of the compatibility of any proposed assignment with allotments in the Plan or assignments in the List can be conducted without calculating such parameters. As discussed and justified in connection with Article 6 below, a non-sequential processing of submissions is being proposed here and such approach is not compatible with retention of the PDA concept.

USA/ /04 SUP 2.4

~~2.4 *Existing systems:* Those satellite systems, in the frequency bands covered by this Appendix:~~

- ~~a) which are recorded in the Master International Frequency Register (MIFR); or~~
- ~~b) for which the coordination procedure has been initiated; or~~
- ~~c) for which the information relating to advance publication was received by the Radiocommunication Bureau before 8 August 1985, and which in all cases are listed in Part B of the Plan.~~

Reasons: As noted in connection with USA/ /02 MOD, existing systems are either assignments in the List or have been cancelled. As discussed with respect to No. 9.2 below, assignments in the List that are associated with existing systems should not be distinguished from any other assignments in the List and, as a consequence, there is no need to define existing systems.

USA/ /05 SUP 2.5

~~2.5 *Subregional systems:* For the purpose of the application of the provisions of this Appendix, a subregional system is a satellite system created by agreement among neighbouring countries Member States of the ITU or their authorized telecommunications operating agencies and intended to provide domestic or subregional services within the geographical areas of the countries concerned.~~

USA/ /06 MOD 2.6

2.6 *Additional use:* For the application of the provisions of this Appendix, additional uses shall ~~be those of an administration;~~ be those associated with submissions for use of Appendix 30B frequencies that do not involve the conversion of an allotment into an assignment with or without modifications to the characteristics of the allotment. Therefore, additional uses correspond to the use of capacity (orbit/spectrum resources) beyond that in the Plan. Submissions for additional uses may also be made by a number of administrations with one among them designated as the notifying administration.

- ~~a) which has a requirement whose characteristics differ from those used in the preparation of Part A of the Plan; any such requirement shall be limited to the national coverage, taking into account technical constraints, of the administration concerned, unless otherwise agreed. Additionally, such requirement can be met only if the allotment of the interested administration, or part of this allotment, has been converted into an assignment, or if the requirement cannot be met by the conversion of the allotment into an assignment;~~
- ~~b) which requires the use of all or part of its national allotment that has been suspended in accordance with § 6.54 of Article 6;~~
- ~~c) which intends to participate in a subregional system using the procedures of Section III of Article 6, instead of using the procedures of Section II thereof.~~

Reasons: The concepts of subregional systems and additional uses have been introduced in the Appendix 30B Plan with different motivations. In particular, subregional systems intended to allow neighboring countries to combine their allotments into a system with regional coverage. For that reason, the possibility of suspending allotments was associated with subregional systems. However, up to now the submissions for subregional systems have never included requests for suspension or partial suspension of allotments in application of and such submissions have been implemented in a way that does not affect allotments in the Plan or assignments in the List. Therefore, subregional systems have actually been implemented as “additional uses” in the sense that they will coexist with allotments and assignments as additional uses do. In view of the above, it is proposed to eliminate the category of subregional systems and to have a simplified definition for ‘additional uses’, capable of accommodating requirements being currently met by the two existing categories.

USA/ /07 NOC Articles 3 and 4

ARTICLE 3

Frequency bands

3.1 The provisions of this Appendix shall apply to the fixed-satellite service in the frequency bands between:

- 4 500 and 4 800 MHz (space-to-Earth);
- 6 725 and 7 025 MHz (Earth-to-space);
- 10.70 and 10.95 GHz (space-to-Earth);
- 11.20 and 11.45 GHz (space-to-Earth);
- 12.75 and 13.25 GHz (Earth-to-space).

ARTICLE 4

Execution of the provisions and associated Plan

4.1 The Member States of the Union shall adopt, for their fixed-satellite service stations operating in the frequency bands referred to in this Appendix, the characteristics consistent with those specified in the Plan and its associated provisions.

4.2 The Member States of the Union shall not change the characteristics, or bring into use assignments to fixed-satellite service stations, or stations in the other services to which these frequency bands are allocated, except as provided for in the Radio Regulations and the appropriate Articles and Annexes of this Appendix.

Reasons: Articles 3 and 4 need not be changed.

ARTICLE 5 (WRC-03)

The Plan and the associated List of assignments

USA/ /08 MOD 5.1

5.1 The Plan consists of:

- ~~a) Part A containing the allotments;~~
- ~~b) Part B containing the networks of existing systems.~~

Reasons: As discussed above there is no need to retain the concepts of Part A and Part B because all frequency assignments associated with existing systems have either been included in the List as assignments or have been cancelled.

USA/ /09 MOD 5.2

5.2 A List of assignments ~~as described in § 5.5~~ will be associated with the Plan and will contain:

(i) assignments resulting from the conversion of allotments (with or without modifications to the characteristics of the allotments in the Plan);

(ii) assignments resulting from submissions for additional uses.

Reasons: This is a consequence of the elimination of Part B and of the merger of the categories “subregional systems” and “additional uses”. In view of that, instead of describing the assignments in a separate provision (§ 5.5 in the current Appendix 30B), the description was also included in 5.2.

USA/ /10 SUP 5.3 and 5.4

~~5.3 The predetermined arc (PDA) is a segment of the geostationary satellite orbit (GSO) about a nominal orbital position intended to provide flexibility in the Plan.~~

~~a) The size of the PDA depends on the stage of development of the satellite system:~~

- ~~— for a system in the *pre design stage*, the PDA is the fixed portion of the GSO defined by the intersection between a segment of $\pm 10^\circ$ about the nominal orbital position established at the Conference and the corresponding service arc. After twenty years from the date of entry into force of this Appendix, the PDA for a system in the pre-design stage is the fixed portion of the GSO defined by the intersection between a segment of $\pm 20^\circ$ about the nominal orbital position established at the Conference and the corresponding service arc, provided that the minimum elevation angle after the application of this procedure is not less than 20° or than the value indicated for each climatic zone in Annex 1 to this Appendix, whichever is larger, for all allotments affected;~~

— for a system in the *design stage*, the PDA is the fixed portion of the GSO defined by the intersection between a segment of $\pm 5^\circ$ about the nominal orbital position as may be modified by the application of this Appendix and the PDA defined for the pre-design stage;

— for a system in the *operational stage*, the PDA will be considered as being zero.

b) The stage of development to be associated with allotments in Part A and assignments in the List derived from allotments in Part A, with existing systems in Part B, with subregional systems or additional uses, is given in Table 1.

e) An administration will not be considered to be affected if the nominal orbital position associated with its allotment in the Plan or with its assignments in the List is moved within the corresponding PDA while keeping an aggregate $C/I \geq 26$ dB. WRC 03 decided that for submissions received as from 5 July 2003 the value $C/I \geq 23$ dB shall be applied. (WRC 03)

TABLE 1

Stage of development	Part A allotments, subregional systems or additional uses	Part B
Pre-design	Part A allotments	—
Design	Assignments for which the Bureau has received complete information under § 6.2 of Section I or § 6.43 of Section II of Article 6	Networks for which the Bureau has received complete information to start the application of Section I of Article 9
Operational	Assignments for which the Bureau has received complete information under § 6.58 of Section III of Article 6 or for notification under Article 8	Networks for which the Bureau has received complete information, in order to start the application of Section II of Article 9 or for notification under Article 11

5.4 — The PDA concept may be applied only:

— to provide an allotment to a new Member State of the ITU;

— in the process of conversion of an allotment into an assignment;

— to accommodate a subregional system;

— to resolve incompatibilities with existing systems (except for the implementation of additional uses);

— to resolve incompatibilities with the assignments in the List (except for the implementation of additional uses).

Reasons: §5.3 and §5.4 are being suppressed because, as discussed and justified in connection with Article 6 below, a non-sequential processing of submissions is being proposed here and such approach is not compatible with retention of the PDA concept.

USA/ /11 SUP 5.5

~~5.5 — The List of Assignments to be associated with the Plan will contain:~~

- ~~a) assignments derived from allotments in Part A of the Plan;~~
- ~~b) assignments relating to existing systems in Part B of the Plan;~~
- ~~c) assignments resulting from the introduction of subregional systems;~~
- ~~d) assignments relating to additional uses.~~

USA/ /12 SUP 5.6

~~5.6 — Whenever a new assignment is entered in this List, the Bureau shall inform administrations in its International Frequency Information Circular (BR IFIC), indicating the characteristics of the assignment concerned.~~

Reasons: § 5.5 is being suppressed because description of the assignments in the List was incorporated in § 5.2. § 5.6 is being suppressed because its content is being included in Article 6.

ARTICLE 6 (Rev.WRC-03)

Procedures for implementation of the Plan and regulation of the fixed-satellite service in the planned bands (WRC-03)

USA/ /13 SUP Article 6

Reasons: Given the simplifications introduced in the previous Articles, namely elimination of Part B and merger of the categories “subregional systems” and “additional uses”, Article 6 can be significantly shortened. In this respect, it became easier to suppress the current Article 6 and to propose a completely new text.

USA/ /14 ADD Article 6

ARTICLE 6 (Rev.WRC-03)

Procedures for implementation of the Plan and regulation of the fixed-satellite service in the planned bands (WRC-03)

- 6.1 When an administration intends to
- convert an allotment into an assignment (with or without modifications to the allotment in the Plan),
 - introduce an additional use or
 - modify the characteristics of assignments in the List,

it shall, not earlier than eight years and not later than two years before the planned date of bringing the assignment into use, send to the Bureau the information specified in Appendix 4³.

- 6.2. Submission of an additional use can also be made by a group of named administrations in which case one among these administrations (notifying administration) will be designated to act on their behalf in the application of the provisions of this Appendix.
- 6.3. If the information received by the Bureau under §6.1 is found to be incomplete, the Bureau shall immediately seek from the administration concerned any clarification required and information not provided.
- 6.4. Upon receipt of a complete (Appendix 4) notice relating to the proposed assignment, the Bureau shall examine each notice as to its conformity with the Table of Frequency Allocations and the other provisions⁴ of these Regulations, except those provisions relating to conformity with the fixed-satellite service Plan.
- 6.5. When the examination of all or parts of the notice with respect to § 6.4 leads to an unfavourable finding, the relevant part of the notice shall be returned to the notifying administration with an indication of the appropriate action.
- 6.6. When the examination of all or parts of the notice with respect to § 6.3 leads to a favourable finding, the Bureau shall use the method of Annex 4, with respect to the relevant part of the notice to determine administrations whose
 - allotments in the Plan;
 - assignments which appear in the List;
 - assignments for which the Bureau has previously received complete information in accordance with this Article;are considered as being affected.
- 6.7. The Bureau shall publish, in a Special Section of its International Frequency Information Circular (BR IFIC), the complete information received under § 6.1, together with the names of the affected administrations and the corresponding allotments in the Plan, assignments in the List and/or assignments for which the Bureau has previously received complete information in accordance with this Article. The Bureau shall immediately send the results of its examination to the administration proposing the assignment.

³ 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, 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 Council Decision 482 unless the payment has already been received (see also Resolution **87 (WRC-03)**). (WRC-03)

⁴ The “other provisions” shall be identified and included in the Rules of Procedure.

- 6.8. The Bureau shall send a telegram/fax to the administrations listed in the Special Section of the BR IFIC drawing their attention to the information it contains and shall send them the results of its examination.
- 6.9. Comments from administrations on the information published pursuant to § 6.7 shall be sent to the administration proposing the assignment with a copy to the Bureau.
- 6.10. An administration which considers that it should have been identified in the publication referred to under § 6.7 above shall, within four months of the date of publication of its relevant BR IFIC, and identifying the affected allotment, assignment or proposed assignment, request the Bureau to include its name in the publication. The Bureau shall study this information on the basis of Annex 4 and shall inform both this administration and the administration proposing the assignment of its conclusions. Should the Bureau agree to the administration's request, it shall publish an addendum to the publication under § 6.7.
- 6.11. An administration that has not notified its comments either to the administration seeking agreement or to the Bureau within a period of four months following the date of its BR IFIC referred to in § 6.7 shall be deemed to have agreed to the proposed assignment.
- 6.12. Thirty days prior to the expiry of the same four-month period, the Bureau shall dispatch a reminder telegram or fax to an administration which has not made its comments under § 6.9, bringing the matter to its attention.
- 6.13. After expiry of the deadline for comments in respect of the proposed assignment, the Bureau shall, according to its records, publish a Special Section indicating the list of administrations whose agreements are required for completion of the Article 6 procedure.
- 6.14. If no comments have been received on the expiry of the four-month period specified in § 6.10 and 6.11, or if agreement has been reached with the administrations which have made comments and with which agreement is necessary, the administration proposing the new or modified assignment may request the Bureau to have the assignment entered into the List, indicating the final characteristics of the frequency assignment together with the names of the administrations with which agreement has been reached. For this purpose, it shall send to the Bureau the information specified in Appendix 4. In submitting the notice, the administration may request the Bureau to examine the notice simultaneously under § 6.16 (entry into the List) and § 8.8, 8.9 (notification).
- 6.15. If the information received by the Bureau under § 6.14 is found to be incomplete, the Bureau shall immediately seek from the administration concerned any clarification required and information not provided⁵.
- 6.16. Upon receipt of a complete (Appendix 4) notice relating to the proposed assignment under § 6.14, the Bureau shall determine whether the this Appendix 4 submission is identical to the initial notice. If this is the case, the submission under § 6.14 will be

⁵ 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, 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 Council Decision 482 unless the payment has already been received (see also Resolution **87 (WRC-03)**).

treated as specified in § 6.20. However, if, in seeking agreement, an administration modifies its initial notice, the Bureau shall conduct the examination described in § 6.17 through § 6.19.

- 6.17. The Bureau shall examine the Appendix 4 information received under § 6.14 with respect to its conformity to the Table of Frequency Allocations and the other provisions⁶ of these Regulations, except those provisions relating to conformity with the fixed-satellite service Plan.
- 6.18. When the examination of all or parts of the § 6.14 submission with respect to § 6.17 leads to an unfavourable finding, the relevant part of the notice shall be returned to the notifying administration with an indication of the appropriate action.
- 6.19. When the examination of all or parts of the modifications with respect to § 6.17 leads to a favourable finding, the Bureau shall use the method of Annex 4 with respect to the relevant part of the notice to identify administrations for which agreement has not been already obtained whose
- allotments in the Plan;
 - assignments which appear in the List;
 - assignments for which the Bureau has previously received complete information in accordance with this Article;
- are considered as being affected by the notice submitted under § 6.14⁷.
- 6.20. In the event of a favourable finding with regard to compatibility under § 6.19, the Bureau shall enter the proposed assignment in the List and publish in a Special Section to its BR IFIC the information received under § 6.14 together with the names of any administrations identified under § 6.13 and § 6.19 with which the provisions of this Article have been successfully applied. The administration proposing the assignment may then notify the assignment in accordance with Article 8.
- 6.21. When the examination under § 6.19 leads to an unfavourable finding, the Bureau shall publish in a Special Section of its BR IFIC the information received under § 6.14 together with the names of any administrations with which the provisions of this Article have been successfully applied as well as the administrations with which they have not.
- 6.22. After addressing the remaining coordination requirements identified under § 6.21, the administration proposing the new or modified assignment may request the Bureau to have the assignment entered into the List, indicating the final characteristics of the frequency assignment together with the names of the administrations with which agreement has been reached. For this purpose, it shall send to the Bureau the information specified in Appendix 4. In submitting the notice, the administration may request the Bureau to examine the notice simultaneously for entry into the List and for notification (§ 8.8, 8.9).

⁶ The “other provisions” shall be identified and included in the Rules of Procedure.

⁷ The allotments in the Plan, assignments in the List and assignments with complete information previously submitted are those that had been identified as such at the date of receipt of the initial submission under § 6.1 of the assignment under examination, i.e. examination under § 6.19 is conducted with respect to the same reference situation previously used for the examination under § 6.1.

- 6.23. The Bureau will then conduct the examination specified in § 6.15 and § 6.16 (comparing the Appendix 4 submission under examination with that previously submitted under § 6.14 or § 6.22). If necessary, examination under § 6.17 through § 6.19 is then conducted.
- 6.24. After a notice is published under § 6.21, should the notifying administration resubmit the notice and insist upon its reconsideration, the Bureau shall enter the assignments provisionally in the List with an indication of those administrations whose assignments were the basis of the unfavourable finding⁸. The entry shall be changed from provisional to definitive recording in the List only if the Bureau is informed that the new assignment has been in use, together with the assignments which were the basis for the unfavourable finding, for at least four months without any complaint of harmful interference being made or if the assignments which were the basis for the unfavourable finding are cancelled.
- 6.25. When an assignment is entered provisionally in the List under the provisions of § 6.24, the Bureau shall not update the reference situation for the Plan and the List until the recording is changed to definitive in accordance with § 6.24.
- 6.26. Should harmful interference be caused by an assignment included in the List under § 6.24 to any assignment in the List which was the basis of the disagreement, the administration using the frequency assignment included in the List under § 6.24 shall, upon receipt of advice thereof, immediately eliminate this harmful interference.
- 6.27. When a frequency assignment included in the List is no longer required, the notifying administration shall immediately inform the Bureau.
- 6.28. The date of bringing into use of a frequency assignment may be extended by the notifying administration up to no more than eight years from the date of receipt by the Bureau of the complete Appendix 4 information under § 6.1.
- 6.29. Any frequency assignment that
- is no longer required, as per information provided by the notifying administration to the BR in accordance with § 6.27; or
 - has not been brought into use within the period specified in § 6.28
- shall be canceled by the BR.
- 6.30. Assignments canceled under § 6.29 that result from the conversion of an allotment (with or without modifications to the characteristics of the allotment) shall be transferred back to the Plan without any changes to the technical parameters or orbital location that they had in the List in the case of a definitive recording and shall be transferred back to the Plan with the characteristics of the original allotment in the case of a provisional entry in the List.
- 6.31. After taking the action described in § 6.29, the BR shall update the reference situation of all allotments in the Plan and assignments in the List, as appropriate.

⁸ The entry shall be definitive in the case of a frequency assignment to a receiving station, under the condition that the notifying administration has undertaken that no complaint will be made in respect of any harmful interference which may be caused to that assignment by the assignment which was the basis for the unfavourable finding.

- 6.32. The procedure of this Article may be applied by the administration of a new ITU Member State in order to include a new assignment in the List over its national territory. The next World Radiocommunication Conference may then be requested to consider the inclusion in the Plan of a new allotment over the national territory of the new Member State with the characteristics of its assignment that has entered the List after successful completion of the procedure described here.
- 6.33. Should the assignments mentioned in § 6.32 over the national territory of the administration not be brought into use within the regulatory time-limit specified in § 6.28, they would be retained in the List until the end of the World Radiocommunication Conference immediately following the successful completion of the procedure referred to in § 6.32, and thereafter they shall be removed from the List.
- 6.34. An administration may, at any stage in the procedure described in this Article, or before applying it, request the assistance of the Bureau.

Reasons: The changes proposed in Article 6 incorporate the key points discussed in the Background Information section. In particular, for the reasons discussed therein the proposed Article 6 is consistent with a non-sequential processing of submissions with no distinction made between the current categories of “subregional systems” and “additional uses”.

§ 6.1 through § 6.23 define how submissions for use of Appendix 30B frequencies are to be processed. This procedure is considered to be appropriate and is similar to that currently used in Appendices 30 and 30A.

§ 6.24 through § 6.26 open the possibility of provisional entry in the List. It is important that this flexibility be introduced to prevent that assignments that may never be brought into use unduly block the implementation of assignments that would otherwise be implemented. In § 6.24 through § 6.26, provisional entry in the List has been limited to the cases in which the assignments that were the basis for the unfavourable finding be additional uses in the List or submitted notices for additional uses. By doing this, it is ensured that provisional entries in the List may be incompatible with allotments or assignments resulting from the conversion of allotments. This approach provides a reasonable balance between the interests of ITU Member States that want to implement their allotments and those of Administrations that want to use capacity (orbit/spectrum resources) beyond that in the Plan.

§ 6.29 through § 6.31 address the cancellation of assignments. In particular, § 6.30 proposes that in the case of assignments resulting from the conversion of allotments, cancelled assignments will be transferred to the Plan in a way that does not disrupt the current reference situation.

§ 6.32 § 6.33 propose that, similarly to the treatment given in Appendix 30 and 30A for Regions 1 and 3, new ITU Member States can use the provisions of Article 6 to have allotments (with national coverage) included in the Plan.

USA/ /15 SUP Article 7

ARTICLE 7

Procedure for the addition of a new allotment to the Plan for a new Member State of the Union

~~7.1 The administration of a country which has joined the Union as a new Member State shall obtain a national allotment in Part A of the Plan by the following procedure.~~

~~7.2 The administration shall submit its request for an allotment to the Bureau, with the following information:~~

- ~~a) the geographical coordinates of not more than 10 test points for determining the minimal ellipse to cover its national territory;~~
- ~~b) the height above sea level of each of its test points and the rain zone or zones;~~
- ~~c) any special requirement, other than a fixed orbital position, which is to be taken into account to the extent practicable.~~

~~7.3 Upon receipt of the complete information (mentioned in § 7.2 above), the Bureau shall find an appropriate orbital position, if necessary using the PDA concept, and shall enter the national allotment of the new Member State of the Union in Part A of the Plan.~~

~~7.4 For this purpose the Bureau shall consult, and if necessary seek the agreement of, any administrations that may be affected.~~

ARTICLE 8 (WRC-03)

Procedure for notification and recording in the Master Register of assignments in the planned bands for the fixed-satellite service

USA/ /16 NOC 8.1

8.1 Any assignment for which the relevant procedure of Article 6 has been successfully applied shall be notified to the Bureau using the relevant characteristics listed in Appendix 4, not earlier than three years before the assignments are brought into use. (WRC-03)

Reasons: Current text is appropriate.

USA/ /17 MOD 8.2

8.2 If the first notice referred to in § 8.1, [§ 6.14](#) and [§ 6.22](#) has not been received by the Bureau within the eight-year period mentioned in § 6.1; ~~and 6.286.38 or 6.57~~ of Article 6, ~~as appropriate~~, the assignments in the List shall no longer be taken into account by the Bureau and administrations. The Bureau shall then act as if the assignment in the List has not been brought into use in conformity with ~~§ 6.291, 6.38 or 6.57~~ of Article 6, as appropriate. The Bureau shall inform the notifying administration, three months in advance of the end of the eight-year period, of the actions it intends to take. (WRC-03)

Reasons: Changes are consequential of those introduced in Article 6.

USA/ /18 NOC 8.3

8.3 Notices not containing those characteristics specified in Appendix 4 as mandatory or required shall be returned with comments to help the notifying administration to complete and resubmit them, unless the information not provided is immediately forthcoming in response to an inquiry by the Bureau. (WRC-03)

Reasons: Current text is appropriate.

USA/ /19 SUP 8.4

~~8.4 Upon reception by the Bureau of a complete notice under § 8.1, a PDA of zero degrees (operational stage) shall be associated with this assignment. (WRC-03)~~

Reasons: Suppression is consequential of the elimination of the PDA concept proposed in USA/ /03 MOD.

USA/ /20 NOC 8.5 to 8.12

8.5 Complete notices shall be marked by the Bureau with their date of receipt and shall be examined in the date order of their receipt. Following receipt of a complete notice the Bureau shall, within not more than two months, publish its contents, with any diagrams and maps and the date of receipt, in the BR IFIC, which shall constitute the acknowledgement to the notifying administration of receipt of its notice. When the Bureau is not in a position to comply with the time-limit referred to above, it shall periodically so inform the administrations, giving the reasons therefor. (WRC-03)

8.6 The Bureau shall not postpone the formulation of a finding on a complete notice unless it lacks sufficient data to reach a conclusion thereon. (WRC-03)

8.7 Each notice shall be examined: (WRC-03)

8.8 a) with respect to its conformity with the Table of Frequency Allocations and the other provisions⁴ of these Regulations, except those provisions relating to conformity with the fixed-satellite service Plan which are the subject of the following subparagraph; (WRC-03)

8.9 b) with respect to its conformity with the fixed-satellite service Plan and the associated provisions. (WRC-03)

8.10 When the examination with respect to § 8.8 leads to a favourable finding, the assignment shall be examined further with respect to § 8.9; otherwise the notice shall be returned with an indication of the appropriate action. (WRC-03)

8.11 When the examination with respect to § 8.9 leads to a favourable finding, the assignment shall be recorded in the Master Register. When the finding is unfavourable, the

⁴ The “other provisions” shall be identified and included in the Rules of Procedure. (WRC-03)

notice shall be returned to the notifying administration, with an indication of the appropriate action. (WRC-03)

8.12 In every case when a new assignment is recorded in the Master Register it shall, in accordance with the provisions of Article 8, include an indication of the finding reflecting the status of the assignment. This information shall also be published in the BR IFIC. (WRC-03)

Reasons: Current text is appropriate.

USA/ /21 MOD 8.13

8.13 A notice of a change in the characteristics of an assignment already recorded, as specified in Appendix 4, shall be examined by the Bureau under § 8.8, and 8.9 as appropriate. Any changes to the characteristics of an assignment, that has been notified and confirmed as having been brought into use, shall be brought into use within eight years from the date of the notification of the modification. Any changes to the characteristics of an assignment that has been notified but not yet brought into use shall be brought into use within the period provided for in § 6.1 ~~and 6.28, 6.29, 6.38 or 6.57~~ of Article 6, ~~as appropriate~~. (WRC-03)

Reasons: Changes are consequential of those introduced in Article 6.

USA/ /22 NOC 8.14 to 8.19

8.14 In the case of a change in the characteristics of an assignment which is in conformity with § 8.8, should the Bureau reach a favourable finding with respect to § 8.9, the amended assignment shall retain the original date of entry in the Master Register. The date of receipt by the Bureau of the notice relating to the change shall be entered in the Master Register. (WRC-03)

8.15 In applying the provisions of this Article, any resubmitted notice which is received by the Bureau more than six months after the date on which the original notice was returned by the Bureau shall be considered to be a new notice. (WRC-03)

8.16 All frequency assignments notified in advance of their being brought into use shall be entered provisionally in the Master Register. Any frequency assignment provisionally recorded under this provision shall be brought into use by the date specified in the notice. Within thirty days of such an assignment being brought into use, the notifying administration shall so inform the Bureau. If the Bureau does not receive that confirmation within the above period, after sending a reminder, it shall cancel the entry. The Bureau shall, however, inform the administration concerned before taking such action. (WRC-03)

8.17 Where the use of a recorded assignment to a space station is suspended for a period not exceeding eighteen months, the notifying administration shall, as soon as possible, inform the Bureau of the date on which such use was suspended and the date on which the assignment is to be brought back into regular use. This latter date shall not exceed two years from the date of suspension. (WRC-03)

8.18 No provision of this Appendix shall be considered as modifying the requirements of Article 9 relating to coordination between earth stations in the fixed-satellite service and stations of terrestrial services sharing the planned bands on an equal primary basis. (WRC-03)

8.19 Notification of assignments to a specific earth station using assignments included in the List shall be effected applying the provisions of Article 11. (WRC-03)

Reasons: Current text is appropriate.

ARTICLE 9

General provisions

USA/ /23 MOD 9.1

9.1 ~~Part A of t~~The Plan is limited to national systems providing a domestic service. Administrations may, however, in accordance with the provisions of ~~Section II~~ of Article 6, ~~use all or part of~~ modify their allotments or propose additional uses to provide multi-national services~~form a subregional system.~~

Reasons: Changes are consequential of those introduced in Article 6.

USA/ /24 SUP 9.2

~~9.2 The existing systems listed in Part B of the Plan may continue in operation for a maximum period of 20 years from the date of entry into force of this Appendix.~~

Reasons: Existing systems are associated with FSS satellite networks that had already been submitted to the ITU BR when the Plan was developed. By now, the frequency assignments in these networks have either been brought into use and become assignments in the List or have been cancelled.

Current § 9.2 means that all these frequency assignments would have to cease operation (or operate under No. 4.4 of the Radio Regulations) after 16 March 2010. Operation under No. 4.4 is not a realistic option, at least as Appendix 30B frequencies are more widely used. Moreover, requiring that operational satellite networks with large number of users cease abruptly their operation is unreasonable.

By suppressing § 9.2, frequency assignments of existing systems that have been brought into use just remain in the List similarly to the way in which frequency assignments associated with subregional systems are currently treated.

ARTICLE 10

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 GHz⁵

USA/ /25 MOD A.1

A.1 COLUMN HEADINGS ~~OF PART A~~ OF THE PLAN

Reasons: Change is consequential to the changes proposed in USA/ /02 MOD (elimination of Part B).

USA/ /26 NOC A.2

A.2 TEXT FOR SYMBOLS IN REMARKS COLUMN OF THE PLAN

Tables with Allotments.

Reasons: No need to change section A2 or the tables containing the allotments.

USA/ /27 SUP Part B

~~B COLUMN HEADINGS OF PART B OF THE PLAN~~

~~Table with Existing Systems.~~

Reasons: Consequential to the treatment proposed for existing systems (see USA/ /04 SUP and USA/ /23 MOD).

USA/ /28 NOC Article 11

ARTICLE 11

Period of validity of the provisions and associated Plan

11.1 These provisions and associated Plan have been prepared in order to guarantee in practice for all countries equitable access to the GSO and the frequency bands contained in Article 3, to meet the requirements of the fixed-satellite service for a period of at least 20 years from the date of entry into force of this Appendix.

11.2 These provisions and associated Plan shall, in any event, remain in force until their revision by a competent world administrative radio conference, convened in accordance with the relevant provisions of the Convention in force.

Reasons: Current text is appropriate.

⁵ The Plan has been prepared with a view to assuring for each allotment an aggregate *C/I* ratio of at least 26 dB.

ANNEX 1 (WRC-03)

Parameters used in characterizing the fixed-satellite service Plan

Section A – Technical data used in establishing the Allotment Plan and the associated provisions

[**Note 1:** Discussions on the technical parameters used in connection with the Allotment Plan are being held in ITU-R Working Party 4A. The United States of America is following these discussions but does not have a proposal on this matter at this point in time.]

USA/ /29 SUP Section B

~~Section B—Generalized parameters used for determining when the assignments of a proposed satellite network are in conformity with the Plan~~

Reasons: This suppression is consequential of the proposed elimination of the generalized parameters (see USA/ /03 MOD above).

USA/ /30 NOC Annex 2

ANNEX 2 (WRC-03)

Basic data to be furnished in notices relating to stations in the fixed-satellite service entering the design stage using frequency bands of the Plan

These data are listed in Appendix 4.

Reasons: Current text is appropriate.

USA/ /31 SUP Annexes 3A and 3B

~~ANNEX 3A~~

~~Criteria for determining when proposed assignments are considered as being in conformity with the Plan~~

~~In this method, the generalized parameters are calculated (see Annex 1, Section B), and the results are compared with the corresponding reference set:~~

- ~~— If the calculated *A*, *B*, *C* and *D* values are less than or equal to the relevant reference set, then the use of the assignment is considered to be in conformity with the Plan.~~
- ~~— If the calculated values of *A* or *C* are greater than the relevant reference set, the use of the assignment is considered not to be in conformity with the Plan.~~
- ~~— If the calculated values of *B* or *D* are greater than the relevant reference set, the assignment is protected only to the level of the relevant reference set.~~

~~ANNEX 3B~~

~~Macrosegmentation concept~~

~~In this method, an administration shall not be required to coordinate if, in addition to meeting the conditions of Annex 3A, the proposed frequency assignments are ordered in such a way that the upper 60% of each allotment band is used for high density carriers and the lower 40% for low density carriers.~~

~~For the purposes of this annex, the term “high density carriers” shall be used for those carriers whose ratio of power spectral density peak (averaged over the worst 4 kHz) to average (defined over the necessary bandwidth of the modulated carrier) is greater than 5 dB; and the term “low density carriers” shall be used for those for which this ratio is less than 5 dB.~~

Reasons: Suppression of Annexes 3A and 3B is consequential of the proposed elimination of the generalized parameters (see USA/ /03 MOD and USA/ /29 SUP above). The concept of segregating "high density carriers" from "low density carriers" is still maintained in Annex 6, item 2.

ANNEX 4 (WRC-03)

Limits for determining whether an allotment or an assignment made in accordance with the provisions of Appendix 30B is considered to be affected

APPENDIX 1 TO ANNEX 4

Method for determination of the single-entry and aggregate carrier-to-interference ratio averaged over the necessary bandwidth of the modulated carrier

[**Note 2:** Discussions on the protection criteria to be used in connection with the Plan are being held in ITU-R Working Party 4A. The United States of America is following these discussions but does not have a proposal on this matter at this point in time.]

~~ANNEX 5~~ (WRC 03)

Application of the PDA (predetermined area) concept

~~1~~ ——— The following method will be used in the application of the PDA concept, which is based on the criteria set out in § 1.1 below.

~~1.1~~ ——— For the purposes of this Annex, an administration will be considered as being affected by another administration if, at its nominal orbital position within the predetermined area, the calculated single entry C/I is less than or equal to 30 dB (WRC 03 decided that for the examination of submissions received as from 5 July 2003 the value 27 dB (instead of 30 dB) shall be applied), or the calculated value, based on the Plan, due to that other administration (whichever is lower), at any test point within the service area of the interfered with satellite network. The single entry C/I is calculated by the method in Appendix 1 to Annex 4.

Even if the single entry C/I is above 30 dB (WRC 03 decided that for the examination of submissions received as from 5 July 2003 the value 27 dB (instead of 30 dB) shall be applied), or the calculated value, based on the Plan, due to that other administration (whichever is lower), an administration shall be considered as being affected if the overall aggregate C/I , calculated by the method in Appendix 1 to Annex 4, falls below 26 dB⁹ (WRC 03 decided that for the examination of submissions received as from 5 July 2003 the value 23 dB (instead of 26 dB) shall be applied), or the value for the assignment (whichever is lower).—(WRC 03)

⁹—For allotments with an aggregate C/I less than 26 dB (WRC 03 decided that for the examination of submissions received as from 5 July 2003 the value 23 dB (instead of 26 dB) shall be applied), the calculated C/I based on the Plan will be used. However, if through the use of the PDA Concept, this value is improved in the latter application of this procedure, the improved value will be used until it reaches 26 dB (WRC 03 decided that for the examination of submissions received as from 5 July 2003 the value 23 dB (instead of 26 dB) shall be applied).—(WRC 03)

~~1.2 The PDA Concept shall be applied in the following steps:~~

- ~~a) the order of all satellites and also the position of satellites in the “design” or “operational” stages shall be fixed so as to minimize the impact on these systems. Next, the nominal positions of “pre design” systems shall be adjusted so as to compensate for the degraded C/I. The adjustments of nominal positions shall be limited to the range of their respective predetermined arcs;~~
- ~~b) if compatibility is not obtained through § 1.2 a), the ordering of allotments of satellites in the “pre design” stage shall be subject to change within their predetermined arcs, as defined in Article 5;~~
- ~~c) if the C/I objectives are not achieved, the affected administration may at this stage opt to select other measures than repositioning, as described in § 1.2 d) below;~~
- ~~d) if compatibility is not achieved under § 1.2 b), and if the measures of § 1.2 c) are unsuccessful, the allotment(s)/assignment(s) subject to repositioning shall include the systems in the “design” stage, for their predetermined arc as defined in Article 5.~~

~~1.3 Administrations for which the criteria of § 1.1 are not met shall be identified for the purposes of this Annex.~~

Reasons: This suppression is consequential of the proposed elimination of the PDA concept (see USA/ /10 SUP above).

USA/ /31 NOC Annex 6

ANNEX 6 (WRC-03)

Technical means which may be used to avoid incompatibilities between systems in the fixed-satellite service at their implementation stage

- 1 Improved frequency modulated TV carrier dispersal techniques with up to 4-5 MHz peak-to-peak deviation.
- 2 Frequency separation between signals with high peak spectral density and narrow-band signals (bandwidth segmentation).
- 3 The use of transmitting and receiving antennas with special beams providing minimum gain in the direction to neighbouring satellites.
- 4 Shaped beams for transmitting satellite antennas.
- 5 Transmission (modulation) and reception techniques allowing for the C/I ratios less than 26 dB (WRC-03 decided that for the examination of submissions received as from 5 July 2003 the value 23 dB (instead of 26 dB) shall be applied). (WRC-03)

Reasons: Current text is appropriate.