|  |  |  |  |
| --- | --- | --- | --- |
| A close up of a sign  Description automatically generated | **World Radiocommunication Conference (WRC-23) Dubai, 20 November - 15 December 2023** | |  |
|  | |  | |
|  | |  | |
| PLENARY MEETING | | **Document 185-E** | |
|  | | **30 October 2023** | |
|  | | **Original: English** | |
|  | | | |
| Rwanda (Republic of)/South Africa (Republic of) | | | |
| PROPOSAL 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**

Background

Reference Conferences and associated Resolutions:

1 Resolution **2 (Rev.WRC-03)**

2 WARC Orb-85 and WARC Orb-88

3 WRC-2000, WRC-03, WRC-07, WRC-12 and WRC-15

Being conscious of Resolution **2 (Rev.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” in its *considering*, *taking into account* and *resolves* 1 stipulates that:

*Quote*

considering

*that all countries have equal rights in the use of both the radio frequencies allocated to various space radiocommunication services and the geostationary-satellite orbit and other satellite orbits for these services,*

taking into account

*that the radio-frequency spectrum and the geostationary-satellite orbit and other satellite orbits are limited natural resources and should be most effectively and economically used,*

resolves

*1 that the registration with the Radiocommunication Bureau of frequency assignments for space radiocommunication services and their use do not provide any permanent priority for any individual country or groups of countries and do not create an obstacle to the establishment of space systems by other countries;*

*2 that, accordingly, a country or a group of countries having registered with the Bureau frequencies for their space radiocommunication services need to take all practicable measures to facilitate the use of new space systems by other countries or groups of countries, in particular those of developing countries and least developed countries, so desiring;*

*3 that* resolves *1 and 2 of this Resolution shall be taken into account by the administrations and the Bureau.*

*Unquote*

Having taken into account the above references and citation, it is proposed to enhance certain regulatory provisions of RR Appendix **30B**.

Radio Regulations Edition 2004 contained the following paragraph under Article **2** of RR Appendix **30B**

*Quote*

*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.*

*2.6 Additional use: For the application of the provisions of this Appendix, additional uses shall be those of an 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.*

*Unquote*

As well, Radio Regulations Edition 2004 contained 3 different sections in Article **6** as follows:

*Quote*

*Section I – Procedure for conversion of an allotment into an assignment*

*Section IA – Procedure for conversion of an allotment into an assignment that is not in conformity with Part A of the Plan or that does not comply with Annex 3B*

*Section 1B Procedure for recording in the List of the existing systems contained in Part B of the Plan (this Subsection does no longer exist)*

*Section II – Procedure for the introduction of a subregional system*

*Section III – Supplementary provisions applicable to additional uses in the planned bands*

*Unquote*

WRC‑07 suppressed Section 1B and merged the remaining sections conversion. This put the administrations intending to convert their allotments into assignments, with or without changes, in some disadvantage status to the extent that the conversion of allotments into assignments with changes which are beyond the initial allotments characteristics but still covering/serving the national territories of the responsible/submitting administrations since they need to protect those additional systems/uses the service areas of which are in most of the cases extended beyond their national territory and to a greater extent having global beams. Radio Regulations Edition 2004 did not result with such disadvantages conditions stipulated in § 2.5 and § 2.6 of that edition as well as the very restrictive application of additional use as reproduced below were disappeared.

For those reasons, there were some conditions associated with Section II (Subregional Systems) and Section III (Additional Use) in Article 6 which are briefly described below in a much summarized manner:

*Quote*

*Section II Procedure for the introduction of a subregional system*

*6.38 When a group of administrations intends to bring into use a subregional system it shall select one or more orbital positions for the system, preferably from the national allotments concerned, and send details of the assignment of the proposed network to the Bureau.*

*Unquote*

The objectives of Section II were enabling administrations to share their technical, financial resources to establish subregional system with either a single or multiple beams to cover their territories in cases in which procuring a separate satellite to cover their individual countries was not economically viable.

By merging this section and waiving the conditions associated thereto, the whole objective of the Plan was removed, partially disregarded or considerably disregarded.

Similarly, Section III was associated with some strict conditions:

*Quote*

*Section III – Supplementary provisions applicable to additional uses in the planned bands*

* 1. *These bands are used for the fixed-satellite service Plan and their use in accordance with this Section should be avoided if possible. Administrations are urged to use other available bands.*
  2. *An administration, or one acting on behalf of a group of administrations, may apply the procedure of this Section for an additional use as defined in Article****2****, provided that the proposed assignments have a maximum period of validity of 15 years and will not, except if agreed to by the administrations affected, require any displacement of the orbital position of an allotment in Part A of the Plan or the orbital position of an assignment in the List, nor be incompatible with.*

*Unquote*

This means that any submission covering a territory outside the national territory of a given administration, in terms of subregional system or additional use must be within the geographical areas of the countries concerned, i.e. there is no legal justification for a system being submitted on behalf of certain countries but having a global beam. Unfortunately, this *important provision was suppressed by WRC-07 as it did not include the reference* to subregional system while the essence and objectives of subregional system were merged into additional system use.

By merging this section with section II and putting it at the same level of conversion of allotments into assignments the very limited application of this section was removed and its application was overly expanded.

Looking to the submissions received as of the end of WRC‑07 reveals that this Appendix is being used exactly as non-planned bands with fully as warehousing of orbital positions and spectrum resources. The statistics provided by the Bureau under Resolution **170 (WRC‑19)** to Working Party 4A (WP 4A) during this study cycle indicate that there are 464 Article **6** submissions compared to 9 networks of additional use before WRC-07. The current average orbital occupancy is 0.6 degrees. In other words, every 0.6 degrees, there is a submission of additional systems.

An administration which decides to convert its national allotment into assignments in an economically viable manner very often needs to modify the initial characteristics of its national allotments, taking into account the latest available development and advancement in technology. In so doing, a) when the request for conversion is submitted, the application would be queued at the end of the last submission received before it and b) once its turn to be processed is reached, due to the nature of those additional systems/uses it would be extremely difficult, if not totally impossible, to succeed coordination within the regulatory deadline.

It is also to be noted that the number of submissions made by some administrations as contained in the Space Network List (the exact and formal statistics of which are being provided by the Bureau) is large. The majority of these additional systems/uses having relatively small service area compared with global coverage which they have submitted and recognizing that such global coverage beam may not be realistic and may be difficult to implement within the regulatory time-limit under RR Appendix **30B**. These submissions having global coverage produce high level of field strength over the territory of other administrations/countries which are outside their service area and thus creating serious difficulties such as considerably reducing the reference situation of submissions from other administration received under § 6.1 of Article 6 of RR Appendix **30B** with service areas which are limited to national territories. Moreover, the number of submissions mentioned above are drastically complicating coordination of FSS systems already submitted or planned to be submitted by other administrations, in particular those aimed at converting their allotments into assignments with changes which are not within the envelop of the initial allotments of latter countries.

In addition, the use of high gain receiving space station antenna of additional systems/uses with global coverage beams makes those additional systems/uses very susceptible to interference from any subsequent applications in such a way that the uplink of subsequent submissions for conversion of allotments into assignments with changes beyond the initial characteristics, the service area of which are restricted to national territory, would cause interference to those additional systems/uses mentioned above (those having global coverage beams). A case study “Uplink Interference” submitted to WP 4A during this study cycle demonstrates serious obstacles that additional systems with the coverage area extended well beyond the service area poses to the system with service area limited to national territories.

Conscious of the fact that the use of additional system in RR Appendix **30B** before WRC‑07 was restricted by meeting certain specific conditions which were essential to preserve the integrity of RR Appendix **30B** as planned in 1988 which were totally removed by WRC‑07.

In addition, WRC-07 merged Section II of Article 6 of RR Appendix **30B** (subregional systems), with its specific conditions of use, with Section III of Article **6** of RR Appendix **30B**, with its specific restriction, into one single category of submission labelled as additional system/use without almost any restrictions.

Taking also into account that, data item B.3.b.1 of RR Appendix **4** in its note stipulates that:

*Quote*

*Taking due account of applicable technical restrictions and allowing some reasonable degree of flexibility for satellite operations, administrations should, to the extent practicable, align the areas the satellite steerable beams could cover with the service area of their networks with due regard to their service objectives,*

*Unquote*

Consequently administrations’ submissions should align the areas the satellite steerable beams could cover with the service area of their networks with due regard to their service objectives in order to enable all countries, in particular, developing and least developed countries, to exercise their legitimate rights to implement their allotments in converting them into assignments with some changes beyond the initial characteristics of their allotments while still aimed at providing infrastructure telecommunications service to its national territory without being faced with any difficulties as is enshrined in the objectives of WARC Orb-88 Conference.

Summary and analysis

In reviewing the large number of RR AP**30B** additional systems submitted since 1 November 2012 (see Document [4A/720](https://www.itu.int/md/R19-WP4A-C-0720/en)), it can be seen that many of these networks include steerable beams that cover the entire visible Earth, but the service area of these networks is considerably less than the visible Earth. This can create difficulties for later filed RR AP**30B** networks to be implemented.

In addition, RR AP**30B** Article 2 No. 2.6*bis b)* reads:

2.6*bis* when submitting additional system(s), administrations shall fully comply with the requirements stipulated in Article 44 of the ITU Constitution. In particular, these administrations shall limit the number of orbital positions and associated spectrum so that:

*a)* the orbital/spectrum natural resources are used rationally, efficiently and economically; *and*

*b)* the use of multiple orbital locations to cover the same service area is avoided.     (WRC-07)

Again, in reviewing the large number of RR AP**30B** additional systems submitted since 1 November 2012 it can be seen that there are cases of administrations submitting multiple RR AP**30B** additional systems with overlapping service areas. This again can create difficulties for later filed RR AP**30B** networks to be implemented.

Proposed solution of the matter

In light of the above and further taking into account the following points:

– WRC-07 replaced the sequential treatment with parallel treatment and removed all previous restrictions to additional systems. This change led to proliferation of submissions of additional systems with global coverage;

– WRC-07 was a particularly busy conference where experts did not find sufficient time to thoroughly evaluate all the consequences arising from the amendments made to RR Appendix **30B**. As a result, paragraphs 2.6*bis* *a)* and 2.6*bis* *b)* had been added to address this oversight, but unfortunately, these additions have not been implemented by membership at all. In addition, without further details and instructions on how to implement these paragraphs, the Bureau was not able to implement them.

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 2     (REV.WRC‑07)

Definitions

MOD RRW/AFS/185/1

2.5 *Subregional systems*: For the purpose of the application of the provisions of this Appendix, a subregional system could be 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 those countries only.     (WRC-23)

MOD RRW/AFS/185/2

2.6*bis* When submitting additional system(s), administrations shall fully comply with the requirements stipulated in Article 44 of the ITU Constitution. In particular, these administrations shall limit the number of orbital positions and associated spectrum so that:

*a)* the orbital/spectrum natural resources are used rationally, efficiently and economically; *and*

*b)* the use of multiple orbital locations to cover the same service area is strictly prohibited;

*c)* the Bureau shall strictly apply the above subparagraphs *a)* and *b)*.     (WRC‑23)

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 List1, 2, 2*bis*     (WRC‑19)

ADD RRW/AFS/185/3

6.37 No assignment in the List shall have a period of operation exceeding 15 years, counted from the date of bringing into use, or 1 January 2009, whichever is later. Upon request by the responsible administration received by the Bureau at the latest three years before the expiry of this period, this period may be extended by up to 15 years, on condition that all the characteristics of the assignment remain unchanged.     (WRC‑23)

ADD RRW/AFS/185/4

6.38 Where an administration already having included in the List two assignments (not including those systems notified on behalf of a group of named administrations and included in the List by WRC‑07) proposes to include in the List a new assignment, it shall apply the following course of actions in respect of another administration which has no assignment in the List which proposes to include in the List a new assignment:

*a)* if the agreement of the former administration is required following the application of this Article by the latter administration, in order to protect the new assignment proposed by the former administration from interference caused by the assignment proposed by the latter administration, both administrations shall make every possible effort to resolve the difficulties by means of mutually acceptable adjustments to their networks;

*b)* in case of continuing disagreement:

i) in the downlink, the former administration shall not claim protection from the latter administration over the overlapping service area of the two new assignments;

ii) in the uplink, the former administration shall not claim protection from the latter administration with transmitting earth station located in non-overlapping service area of the two new assignments.     (WRC‑23)

ATTACHMENT 1

Statistic of RR Appendix 30B notices received by the Bureau (since 2009;   
period 2012‑2022 (Q2 + July and August) at the Quarter basis)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Request for conversion without change of initial allotment (national service area) | Request for conversion with changes within the envelop of initial allotment (national service area) | Request for conversion with changes outside the envelop of initial allotment (national service area) | Request for conversion with changes outside the envelop of initial allotment (supra national service area) | Request for additional use (national service area) | Request for additional use (supra national service area and global coverage\*) |
| 2009 | 0 | 0 | 0 | **1**  (USA) | **3**  (1 (IND);  2 (RUS)) | **17**  (1 (ARS/ARB);  1 (CYP); 5 (G);  1 (ISR);  5 (LUX);  1 (PNG); 1 (S);  2 (TUR)) |
| 2010 | **1**  (BLR) | 0 | 0 | 0 | **2**  (1 (MEX);  1 (VTN)) | **33**  (2 (ARS/ARB);  1 (BLR);  2 (CYP); 8 (F);  3 (ISR);  1 (KAZ);  1 (LUX);  1 (MCO);  2 (PNG);  8 (RUS/IK);  4 (UAE)) |
| 2011 | **2**  (1 (MEX);  1 (SDN)) | 0 | 0 | 0 | **4**  (RUS) | **38**  (1 (ARS/ARB);  1 (BGD);  1 (BLR);  1 (CHN); 8 (F);  6 (E); 1 (G);  5 (ISR);  4 (HOL);  1 (MLA);  1 (PNG);  1 (QAT);  6 (RUS/IK);  1 (UAE)) |
| 1st Quarter  (Jan. – March) 2012 | 0 | 0 | 0 | 0 | 0 | **11**  (6 (CHN);  2 (LUX); 3 (S)) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Request for conversion without change of initial allotment (national service area) | Request for conversion with changes within the envelop of initial allotment (national service area) | Request for conversion with changes outside the envelop of initial allotment (national service area) | Request for conversion with changes outside the envelop of initial allotment (supra national service area) | Request for additional use (national service area) | Request for additional use (supra national service area and global coverage\*) |
| 2nd Quarter  (Apr. – June) 2012 | 0 | 0 | 0 | 0 | **3**  (2 (MEX);  1 (RUS)) | 9  (2 (ARS/ARB);  1 (CHN); 1 (F);  1 (G); 2 (PNG);  2 (RUS/IK)) |
| 3rd Quarter  (July – Sept.) 2012 | **1**  (BGD) | 0 | 0 | 0 | 0 | **5**  (1 (B);  1 (BGD); 1 (F);  1 (IRN);  1 (MCO)) |
| 4th Quarter  (Oct. – Dec.) 2012 | 0 | 0 | **2** (B) | 0 | 2 (B) | **18**  (1 (ALG);  1 (ARM);  2 (ARS/ARB);  1 (B); 2 (CHN);  2 (F);  1 (HNG);  3 (HOL);  1 (ISR);  1 (NOR);  2 (PNG);  1 (QAT)) |
| 1st Quarter  (Jan. – March) 2013 | **1**  (MNE) | 0 | 0 | 0 | 0 | **11**  (1 (F); 2 (G);  3 (HOL);  1 (MLA);  2 (QAT);  1 (RUS/IK);  1 (S)) |
| 2nd Quarter  (Apr. – June) 2013 | 0 | 0 | 0 | 0 | **4**  (IND) | **16**  (1 (ARS/ARB);  1 (BLR);  1 (E); 8 (F);  1 (G); 1 (LAO);  1 (NCG);  2 (PNG)) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Request for conversion without change of initial allotment (national service area) | Request for conversion with changes within the envelop of initial allotment (national service area) | Request for conversion with changes outside the envelop of initial allotment (national service area) | Request for conversion with changes outside the envelop of initial allotment (supra national service area) | Request for additional use (national service area) | Request for additional use (supra national service area and global coverage\*) |
| 3rd Quarter  (July – Sept.) 2013 | **1**  (MNG) | 0 | 0 | 0 | 0 | **11**  (2 (F); 2 (G);  2 (HOL);  1 (LAO);  1 (PNG); 1 (S);  1 (UAE);  1 (VTN)) |
| 4th Quarter  (Oct. – Dec.) 2013 | 0 | 0 | 0 | 0 | 0 | **6**  (2 (HOL);  1 (IRQ);  1 (PNG);  2 (UAE)) |
| 1st Quarter  (Jan. – March) 2014 | 0 | 0 | 0 | 0 | 0 | **18**  (1 (B);  2 (CHN); 4 (F);  3 (HOL); 2 (J);  1 (MCO);  5 (PNG)) |
| 2nd Quarter  (Apr. – June) 2014 | **1**  (BUL) | 0 | 0 | 0 | **2**  (1 (CHN);  1 (RUS)) | **12**  (1 (BUL); 2 (D);  2 (E); 2 (F);  2 (PNG);  3 (RUS)) |
| 3rd Quarter  (July – Sept.) 2014 | 0 | 0 | 0 | 0 | **7**  (6 (CHN);  1 (IND)) | **7**  (1 (ARS/ARB);  1 (D); 1 (E);  1 (G); 1 (PNG);  2 (RUS)) |
| 4th Quarter  (Oct. – Dec.) 2014 | 0 | 0 | 0 | 0 | 0 | **13**  (1 (BLR);  1 (CYP); 2 (E);  2 (F); 3 (G);  1 (HOL);  1 (PNG); 1 (S);  1 (USA)) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Request for conversion without change of initial allotment (national service area) | Request for conversion with changes within the envelop of initial allotment (national service area) | Request for conversion with changes outside the envelop of initial allotment (national service area) | Request for conversion with changes outside the envelop of initial allotment (supra national service area) | Request for additional use (national service area) | Request for additional use (supra national service area and global coverage\*) |
| 1st Quarter  (Jan. – March) 2015 | 0 | 0 | 0 | 0 | 0 | **18**  (1 (F); 1 (G);  11 (IND); 2 (J);  1 (KAZ);  1 (QAT);  1 (RUS)) |
| 2nd Quarter  (Apr. – June) 2015 | 0 | 0 | **1**  (CAN) | 0 | **1**  (MLA) | **12**  (1 (CAN); 1 (E);  1 (F); 1 (HNG);  1 (ISR);  1 (MLA);  4 (PNG);  2 (RUS/IK)) |
| 3rd Quarter  (July – Sept.) 2015 | 0 | 0 | 0 | 0 | 0 | **11**  (1 (CYP); 1 (G);  2 (PNG);  2 (QAT);  5 (RUS/IK)) |
| 4th Quarter  (Oct. – Dec.) 2015 | 0 | 0 | 0 | 0 | 0 | **15**  (1 (E); 1 (F);  1 (GRC);  1 (HOL);  1 (INS);  2 (ISR);  1 (PAK);  6 (UAE);  1 (USA)) |
| 1st Quarter  (Jan. – March) 2016 | 0 | **1**  (IRN) | 0 | 0 | 0 | **10**  (1 (ETH); 1 (F);  2 (IND);  1 (IRN);  1 (LUX);  1 (QAT); 1 (S);  1 (TUR);  1 (USA)) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Request for conversion without change of initial allotment (national service area) | Request for conversion with changes within the envelop of initial allotment (national service area) | Request for conversion with changes outside the envelop of initial allotment (national service area) | Request for conversion with changes outside the envelop of initial allotment (supra national service area) | Request for additional use (national service area) | Request for additional use (supra national service area and global coverage\*) |
| 2nd Quarter  (Apr. – June) 2016 | 0 | 0 | 0 | 0 | 0 | **13**  (1 (CHN); 1 (E);  5 (F); 3 (HOL);  1 (KAZ);  1 (PNG);  1 (RUS/IK)) |
| 3rd Quarter  (July – Sept.) 2016 | 0 | 0 | 0 | 0 | 0 | **11**  (2 (E); 2 (J);  4 (UAE);  2 (RUS/IK);  1 (USA)) |
| 4th Quarter  (Oct. – Dec.) 2016 | 0 | 0 | 0 | 0 | **1**  (CHN) | **13**  (2 (D); 4 (F);  4 (HOL);  1 (LUX);  1 (QAT);  1 (RUS)) |
| 1st Quarter  (Jan.-March) 2017 | 0 | 0 | 0 | 0 | 0 | **17**  (1 (D); 10 (F);  3 (G); 3 (ISR)) |
| 2nd Quarter (Apr. – June) 2017 | 0 | 0 | 0 | 0 | **4**  (1 (IND);  3 (INS)) | **17**  (1 (CAN);  16 (F)) |
| 3rd Quarter  (July – Sept.) 2017 | 0 | **1**  (BOL) | 0 | 0 | 0 | **8**  (1 (BGD);  2 (F); 1 (NCG);  2 (QAT);  2 (RUS/IK)) |
| 4th Quarter  (Oct. – Dec.) 2017 | 0 | 0 | 0 | 0 | 0 | **17**  (2 (E); 8 (F);  5 (HOL);  1 (INS);  1 (IRN)) |
| 1st Quarter  (Jan. – March) 2018 | 0 | 0 | 0 | 0 | 0 | **7**  (1 (CBG);  2 (E); 2 (F);  1 (ISR);  1 (MCO)) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Request for conversion without change of initial allotment (national service area) | Request for conversion with changes within the envelop of initial allotment (national service area) | Request for conversion with changes outside the envelop of initial allotment (national service area) | Request for conversion with changes outside the envelop of initial allotment (supra national service area) | Request for additional use (national service area) | Request for additional use (supra national service area and global coverage\*) |
| 2nd Quarter  (Apr. – June) 2018 | 0 | 0 | 0 | 0 | **6**  (5 (IND;  1 (RUS)) | **13**  (1 (E); 11 (F);  1 (USA)) |
| 3rd Quarter  (July – Sept.) 2018 | 0 | 0 | 0 | 0 | 0 | **6**  (3 (E); 1 (HOL);  1 (QAT);  1 (UAE)) |
| 4th Quarter  (Oct. – Dec.) 2018 | 0 | 0 | 0 | 0 | 0 | **4**  (1 (E); 1 (HOL);  1 (IND);  1 (INS)) |
| 1st Quarter (Jan. – March) 2019 | **1**  (ROU) | 0 | 0 | 0 | 0 | **2**  (1 (E); 1 (F)) |
| 2nd Quarter (Apr. – June) 2019 | 0 | **1**  (NPL) | 0 | 0 | 0 | **2**  (1 (F); 1 (TUR)) |
| 3rd Quarter  (July – Sept.) 2019 | 0 | 0 | 0 | 0 | **1**  (NPL) | **3**  (2 (CHN);  1 (E)) |
| 4th Quarter  (Oct. – Dec.) 2019 | 0 | 0 | 0 | 0 | 0 | **16**  (2 (D); 1 (E);  1 (HOL);  2 (IRN);  2 (PNG); 8 (S)) |
| 1st Quarter (Jan. – March) 2020 | **1 \*\*)**  (SRB) | 0 | 0 | 0 | **2**  (IND) | **9**  (5 (CHN); 3 (F);  1 (MLA)) |
| 2nd Quarter  (Apr. – June) 2020 | **6 \*\*)**  (MKD; BIH; MDA; SSD;  GEO; HRV) | **1**  (PAK) | 0 | 0 | 0 | **5**  (1 (CHN); 1 (E);  1 (F); 1 (ISR);  1 (LUX)) |
| 3rd Quarter (July – Sept.) 2020 | 0 | 0 | 0 | 0 | 0 | **11**  (1 (D); F (10)) |
| 4th Quarter (Oct. – Dec.) 2020 | 0 | **1**  (KOR) | 0 | 0 | **1**  (KOR) | **2**  (1 (CHN);  1 (VEN)) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Request for conversion without change of initial allotment (national service area) | Request for conversion with changes within the envelop of initial allotment (national service area) | Request for conversion with changes outside the envelop of initial allotment (national service area) | Request for conversion with changes outside the envelop of initial allotment (supra national service area) | Request for additional use (national service area) | Request for additional use (supra national service area and global coverage\*) |
| 1st Quarter  (Jan. – March) 2021 | 0 | 0 | 0 | 0 | 0 | **9**  (4 (F); 3 (J);  1 (HOL);  1 (UAE)) |
| 2nd Quarter  (Apr. – June) 2021 | 0 | 0 | 0 | 0 | 0 | **12**  (1 (E); 5 (F);  1 (G); 1 (ISR);  1 (MLA);  1 (QAT);  1 (USA);  1 (UAE)) |
| 3rd Quarter  (July – Sept.) 2021 | 0 | 0 | 0 | 0 | **1**  (VEN) | **7**  (2 (AUS); 1 (D);  1 (F); 1 (IND);  2 (S)) |
| 4th Quarter  (Oct. – Dec.) 2021 | 0 | 0 | 0 | **1**  (I) | **1**  (KOR) | **7**  (1 (CYP); 3 (D);  1 (F); 1 (G);  1 (HOL)) |
| 1st Quarter  (Jan – March)  2022 | 0 | 0 | 0 | 0 | 0 | **3**  (2 (F); 1 (PAK)) |
| 2nd Quarter  (Apr. – June) 2022 | 0 | 0 | 0 | 0 | 0 | 5  (2 (F); 2 (E); 1 (USA)) |
| 3rd Quarter  (July + Aug.)  2022 | 0 | 0 | 0 | 0 | 0 | **1**  (1 (B)) |

\* Notices for Additional use with service area and coverage beyond the national territory of notifying administration.

\*\* Notices under Art.7 of Appendix **30B** (request from a new Member State for a new allotment in the Plan).

ATTACHMENT 2

Number of RR Appendix 30B submissions that have been received by the Radiocommunication Bureau (2009‑2022/(Q2 + July and August))

Number of new submissions

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Request for conversion without change of initial allotment (national service area) | Request for conversion with changes within the envelope of initial allotment (national service area) | Request for conversion with changes outside the envelope of initial allotment (national service area) | Request for conversion with changes outside the envelope of initial allotment (supra national service area) | Request for additional use (national service area) | Request for additional use (with supranational service area and global coverage) | Total |
| ALG |  |  |  |  |  | 1 | 1 |
| ARM |  |  |  |  |  | 1 | 1 |
| ARS/ARB |  |  |  |  |  | 10 | 10 |
| AUS |  |  |  |  |  | 2 | 2 |
| B |  |  | 2 |  | 2 | 4 | 8 |
| BGD | 1 |  |  |  |  | 3 | 4 |
| BIH | 1 |  |  |  |  |  | 1 |
| BLR | 1 |  |  |  |  | 4 | 5 |
| BOL |  | 1 |  |  |  |  | 1 |
| BUL | 1 |  |  |  |  | 1 | 2 |
| CAN |  |  | 1 |  |  | 2 | 3 |
| CBG |  |  |  |  |  | 1 | 1 |
| CHN |  |  |  |  | 8 | 22 | 30 |
| CYP |  |  |  |  |  | 6 | 6 |
| D |  |  |  |  |  | 13 | 13 |
| E |  |  |  |  |  | 33 | 33 |
| ETH |  |  |  |  |  | 1 | 1 |
| F |  |  |  |  |  | 132 | 132 |
| G |  |  |  |  |  | 23 | 23 |
| GEO | 1 |  |  |  |  |  | 1 |
| GRC |  |  |  |  |  | 1 | 1 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Request for conversion without change of initial allotment (national service area) | Request for conversion with changes within the envelope of initial allotment (national service area) | Request for conversion with changes outside the envelope of initial allotment (national service area) | Request for conversion with changes outside the envelope of initial allotment (supra national service area) | Request for additional use (national service area) | Request for additional use (with supra national service area and global coverage) | Total |
| HNG |  |  |  |  |  | 2 | 2 |
| HOL |  |  |  |  |  | 36 | 36 |
| HRV | 1 |  |  |  |  |  | 1 |
| I |  |  |  | 1 |  |  | 1 |
| IND |  |  |  |  | 14 | 15 | 29 |
| INS |  |  |  |  | 3 | 3 | 6 |
| IRN |  | 1 |  |  |  | 5 | 6 |
| IRQ |  |  |  |  |  | 1 | 1 |
| ISR |  |  |  |  |  | 19 | 19 |
| J |  |  |  |  |  | 9 | 9 |
| KAZ |  |  |  |  |  | 3 | 3 |
| KOR |  | 1 |  |  | 2 |  | 3 |
| LAO |  |  |  |  |  | 2 | 2 |
| LUX |  |  |  |  |  | 11 | 11 |
| MCO |  |  |  |  |  | 4 | 4 |
| MDA | 1 |  |  |  |  |  | 1 |
| MEX | 1 |  |  |  | 3 |  | 4 |
| MKD | 1 |  |  |  |  |  | 1 |
| MLA |  |  |  |  | 1 | 5 | 6 |
| MNE | 1 |  |  |  |  |  | 1 |
| MNG | 1 |  |  |  |  |  | 1 |
| NCG |  |  |  |  |  | 2 | 2 |
| NOR |  |  |  |  |  | 1 | 1 |
| NPL |  | 1 |  |  | 1 |  | 2 |
| PAK |  | 1 |  |  |  | 2 | 3 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Request for conversion without change of initial allotment (national service area) | Request for conversion with changes within the envelope of initial allotment (national service area) | Request for conversion with changes outside the envelope of initial allotment (national service area) | Request for conversion with changes outside the envelope of initial allotment (supra national service area) | Request for additional use (national service area) | Request for additional use (with supra national service area and global coverage) | Total |
| PNG |  |  |  |  |  | 30 | 30 |
| QAT |  |  |  |  |  | 13 | 13 |
| ROU | 1 |  |  |  |  |  | 1 |
| RUS |  |  |  |  | 9 | 7 | 16 |
| RUS/IK |  |  |  |  |  | 29 | 29 |
| S |  |  |  |  |  | 18 | 18 |
| SDN | 1 |  |  |  |  |  | 1 |
| SRB | 1 |  |  |  |  |  | 1 |
| SSD | 1 |  |  |  |  |  | 1 |
| TUR |  |  |  |  |  | 4 | 4 |
| UAE |  |  |  |  |  | 21 | 21 |
| USA |  |  |  | 1 |  | 7 | 8 |
| VEN |  |  |  |  | 1 | 1 | 2 |
| VTN |  |  |  |  | 1 | 1 | 2 |
| **Total:** | **15** | **5** | **3** | **2** | **45** | **511** | **581** |

ATTACHMENT 3

Number of RR Appendix 30B networks that have been supressed (2009‑2022/Q2 + July and August)

Number of suppressions

|  | 2009-2022\* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022\* |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ALG | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| ARM | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
| ARS/ARB | 13 |  |  |  |  |  | 3 | 1 | 1 | 1 | 2 | 3 | 1 | 1 |  |
| B | 4 |  |  |  |  |  |  |  |  |  |  |  | 1 | 3 |  |
| BGD | 3 |  |  |  |  |  |  |  |  |  |  |  | 1 | 2 |  |
| BLR | 3 |  |  |  |  |  |  |  |  |  | 1 |  | 1 | 1 |  |
| BUL | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| CAN | 2 |  |  |  |  |  | 1 | 1 |  |  |  |  |  |  |  |
| CHN | 23 |  |  |  |  |  | 15 |  |  |  |  | 1 | 4 | 1 | 2 |
| E | 8 |  |  |  |  |  |  |  |  |  |  | 5 |  | 1 | 2 |
| D | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| F | 29 |  |  |  |  |  | 2 | 1 |  |  | 6 | 5 | 1 | 9 | 35 |
| F/EUT | 38 | 15 | 3 | 16 | 2 | 1 |  |  | 1 |  |  |  |  |  |  |
| G | 11 |  |  |  | 1 |  |  | 6 |  | 1 |  | 1 |  | 2 |  |
| HOL | 19 |  |  |  |  |  |  |  | 3 |  |  | 3 | 1 | 7 | 5 |
| IND | 10 |  |  | 1 |  |  |  | 6 | 1 |  |  |  |  | 2 |  |
| IRN | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
| IRQ | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| ISR | 8 |  |  |  |  |  |  |  |  |  | 2 | 4 | 1 | 1 |  |
| J | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| KOR | 10 |  |  |  |  | 10 |  |  |  |  |  |  |  |  |  |
| LAO | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| LBY | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| LUX | 27 |  |  | 1 |  | 4 | 13 |  | 2 | 5 | 1 |  | 1 |  |  |
| MCO | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| MEX | 2 |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |
| MLA | 2 |  |  |  |  |  |  |  | 1 |  |  |  |  | 1 |  |
| MNG | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| NCG | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
| NOR | 2 |  |  |  |  |  | 1 | 1 |  |  |  |  |  |  |  |
| PNG | 20 |  |  | 3 |  |  |  |  |  | 1 | 1 | 1 | 3 | 3 | 8 |
| QAT | 3 |  |  |  |  |  |  |  |  |  |  |  | 1 | 2 |  |
| QAT/ARB | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
| RUS | 18 |  |  | 2 | 1 | 1 | 5 | 1 | 2 |  |  | 1 | 1 |  | 4 |
| RUS/IK | 15 |  |  |  |  |  |  |  |  |  | 6 | 6 | 1 | 2 |  |
| S | 8 |  |  |  |  |  | 2 |  | 1 |  | 1 |  | 2 | 2 |  |
| SDN | 1 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |
| TUR | 2 |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |
| UAE | 6 |  |  |  |  |  |  |  |  |  | 1 | 3 |  | 2 |  |
| USA | 3 |  |  |  |  | 1 |  | 1 |  |  |  |  |  | 1 |  |
| VTN | 3 |  |  |  | 1 |  |  |  |  |  | 1 |  |  | 1 |  |
| **Total** | **307** | **15** | **3** | **24** | **5** | **19** | **42** | **18** | **12** | **8** | **24** | **34** | **25** | **49** | **29** |

\* In 2022, the statistics stop at 31 August.

ATTACHMENT 4

List of RR Appendix 30B networks that have been supressed during 2018-2022 (Q2 + July and August)

| ntc\_id | adm | ntwk\_org | sat\_name | long\_nom | d\_rcv | ssn\_ref | ssn\_no | wic\_no of SUP | d\_wic\_of SUP |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 112559046 | ALG |  | ALGFSAT-33.5W | −33.5 | 29.11.2012 | AP30B/A6A | 258 | 2937 | 12.01.2021 |
| 112559037 | ARM |  | ARMSAT-30B-71.4E | 71.4 | 18.10.2012 | AP30B/A6A | 247 | 2935 | 08.12.2020 |
| 113559028 | ARS | ARB | ARABSAT-AXB39E | 39 | 19.06.2013 | AP30B/A6A | 289 | 2864 | 20.02.2018 |
| 110559019 | ARS | ARB | ARABSAT-AXB14W | −14 | 03.07.2010 | AP30B/A6A | 150 | 2878 | 04.09.2018 |
| 110559038 | ARS | ARB | ARABSAT-AXB34.5E | 34.5 | 29.12.2010 | AP30B/A6A | 169 | 2890 | 05.03.2019 |
| 107559005 | ARS | ARB | ARABSAT-AXB44.5E | 44.5 | 02.03.2014 | AP30B/A6B | 80 | 2890 | 05.03.2019 |
| 111559008 | ARS | ARB | ARABSAT-AXB34.25E | 34.25 | 31.01.2011 | AP30B/A6A | 177 | 2891 | 19.03.2019 |
| 112559057 | ARS | ARB | ARABSAT-AXB26E\_C | 26 | 22.05.2012 | AP30B/A6A | 303 | 2923 | 23.06.2020 |
| 112559054 | ARS | ARB | ARABSAT-AXB34E | 34 | 26.12.2012 | AP30B/A6A | 265 | 2939 | 09.02.2021 |
| 112559042 | B |  | B-SAT-3M | −56.5 | 13.11.2012 | AP30B/A6A | 252 | 2936 | 22.12.2020 |
| 112559044 | B |  | B-SAT-3K | −69.45 | 18.12.2015 | AP30B/A6B | 103 | 2937 | 12.01.2021 |
| 112559055 | B |  | B 00022 | −56.5 | 10.02.2017 | AP30B/A6B | 113 | 2937 | 12.01.2021 |
| 112559056 | B |  | B 00011 | −65 | 10.02.2017 | AP30B/A6B | 114 | 2937 | 12.01.2021 |
| 111559046 | BGD |  | BANGSAT-30B-69E | 69 | 29.12.2011 | AP30B/A6A | 213 | 2914 | 18.02.2020 |
| 112559030 | BGD |  | BANGSAT-30B-133E-A | 133 | 26.07.2012 | AP30B/A6A | 240 | 2942 | 23.03.2021 |
| 112559031 | BGD |  | BANGSAT-30B-133E-B | 133 | 29.07.2012 | AP30B/A6A | 241 | 2942 | 23.03.2021 |
| 110559004 | BLR |  | BTS-1-30B | 64.4 | 01.03.2010 | AP30B/A6A | 135 | 2868 | 17.04.2018 |
| 111559043 | BLR |  | BLR-SAT-FSS-64.4E | 64.4 | 12.12.2011 | AP30B/A6A | 210 | 2912 | 21.01.2020 |
| 113559019 | BLR |  | BLR-SAT-FSS-64.4E | 64.4 | 03.05.2013 | AP30B/A6A | 282 | 2947 | 01.06.2021 |
| 111559005 | CHN |  | CHINASAT-FSS-51.5E | 51.5 | 27.01.2011 | AP30B/A6A | 174 | 2891 | 19.03.2019 |
| 112559003 | CHN |  | CHINASAT-30B-87.5E | 87.5 | 19.01.2012 | AP30B/A6A | 216 | 2915 | 03.03.2020 |
| 112559006 | CHN |  | CHINASAT-30B-125E | 125 | 19.01.2012 | AP30B/A6A | 219 | 2915 | 03.03.2020 |
| 112559012 | CHN |  | ITS-30B-13.5 | 13.5 | 03.04.2012 | AP30B/A6A | 225 | 2920 | 12.05.2020 |
| 112559033 | CHN |  | CHINASAT-30B-8.5W | −8.5 | 12.10.2012 | AP30B/A6A | 244 | 2934 | 24.11.2020 |
| 112559004 | CHN |  | CHINASAT-30B-110.5E | 110.5 | 19.01.2012 | AP30B/A6A | 217 | 2951 | 27.07.2021 |
| 114559018 | CHN |  | ASIASAT-30B-C3 | 105.5 | 14.03.2014 | AP30B/A6A | 334 | 2969 | 19.04.2022 |
| 114559019 | CHN |  | ASIASAT-30B-E3 | 100.5 | 14.03.2014 | AP30B/A6A | 335 | 2969 | 19.04.2022 |
| 114559032 | D |  | EUROPESTAR FSS-45E | 45 | 04.06.2014 | AP30B/A6A | 347 | 2975 | 12.07.2022 |
| 111559024 | E |  | HISPASAT-7A | −36 | 14.07.2011 | AP30B/A6A | 192 | 2903 | 03.09.2019 |
| 111559031 | E |  | HISPASAT-6A | −26 | 27.09.2011 | AP30B/A6A | 199 | 2908 | 12.11.2019 |
| 111559032 | E |  | HISPASAT-8A | −97.5 | 27.09.2011 | AP30B/A6A | 200 | 2908 | 12.11.2019 |
| 111559034 | E |  | HISPASAT-5A | −47.5 | 06.10.2011 | AP30B/A6A | 202 | 2909 | 26.11.2019 |
| 111559036 | E |  | HISPASAT-9A | −74 | 10.10.2011 | AP30B/A6A | 203 | 2909 | 26.11.2019 |
| 113559024 | E |  | HISPASAT-11A | 45 | 13.05.2013 | AP30B/A6A | 285 | 2948 | 15.06.2021 |
| 114559022 | E |  | HISPASAT-23A | −30 | 02.04.2014 | AP30B/A6A | 337 | 2970 | 03.05.2022 |
| 114559028 | E |  | HISPASAT-24A | −74 | 21.05.2014 | AP30B/A6A | 343 | 2974 | 28.06.2022 |
| 110559007 | F |  | DUNIA-2-FSS-PLAN | 8 | 15.04.2010 | AP30B/A6A | 138 | 2872 | 12.06.2018 |
| 110559008 | F |  | F-SAT-E-30B-88.5E | 88.5 | 06.05.2010 | AP30B/A6A | 139 | 2873 | 26.06.2018 |
| 110559009 | F |  | F-SAT-E-30B-86E | 86 | 07.05.2010 | AP30B/A6A | 140 | 2873 | 26.06.2018 |
| 110559010 | F |  | F-SAT-E-30B-83.5E | 83.5 | 10.05.2010 | AP30B/A6A | 141 | 2874 | 10.07.2018 |
| 110559011 | F |  | F-SAT-E-30B-80.5E | 80.5 | 11.05.2010 | AP30B/A6A | 142 | 2874 | 10.07.2018 |
| 110559012 | F |  | F-SAT-E-30B-73.5E | 73.5 | 12.05.2010 | AP30B/A6A | 143 | 2874 | 10.07.2018 |
| 110559033 | F |  | F-SAT-E-30B-53E | 53 | 09.12.2010 | AP30B/A6A | 164 | 2888 | 05.02.2019 |
| 111559013 | F |  | MM FSS 10.25W | −10.25 | 08.04.2011 | AP30B/A6A | 182 | 2897 | 11.06.2019 |
| 111559014 | F |  | MM FSS 55.2W | −55.2 | 12.04.2011 | AP30B/A6A | 183 | 2897 | 11.06.2019 |
| 111559018 | F |  | ASAT FSS W092 | −92 | 20.06.2011 | AP30B/A6A | 186 | 2901 | 06.08.2019 |
| 111559019 | F |  | ASAT FSS W094 | −94 | 20.06.2011 | AP30B/A6A | 187 | 2901 | 06.08.2019 |
| 112559029 | F |  | ASAT FSS W090 | −90 | 26.07.2012 | AP30B/A6A | 239 | 2929 | 15.09.2020 |
| 113559010 | F |  | F-SAT-E-30B-115.9W | −115.9 | 26.03.2013 | AP30B/A6A | 274 | 2944 | 20.04.2021 |
| 113559015 | F |  | CD-SAT FSS 105.2E | 105.2 | 15.04.2013 | AP30B/A6A | 279 | 2946 | 18.05.2021 |
| 113559025 | F |  | CD-SAT 105.2E REV | 105.2 | 31.05.2013 | AP30B/A6A | 286 | 2949 | 29.06.2021 |
| 113559033 | F |  | F-SAT-E-30B-110E | 110 | 28.06.2013 | AP30B/A6A | 294 | 2950 | 13.07.2021 |
| 113559034 | F |  | F-SAT-E-30B-84W | −84 | 28.06.2013 | AP30B/A6A | 295 | 2950 | 13.07.2021 |
| 113559031 | F |  | F-SAT-E-30B-120W | −120 | 21.06.2013 | AP30B/A6A | 292 | 2951 | 27.07.2021 |
| 113559032 | F |  | F-SAT-E-30B-25.5E | 25.5 | 26.06.2013 | AP30B/A6A | 293 | 2951 | 27.07.2021 |
| 113559039 | F |  | F-SAT-E-30B-88W | −88 | 26.07.2013 | AP30B/A6A | 299 | 2955 | 21.09.2021 |
| 113559040 | F |  | CD-SAT FSS 123.1W | −123.1 | 01.08.2013 | AP30B/A6A | 300 | 2955 | 21.09.2021 |
| 114559011 | F |  | LH-SAT FSS W094 | −94 | 12.02.2014 | AP30B/A6A | 328 | 2967 | 22.03.2022 |
| 114559012 | F |  | LH-SAT FSS W102 | −102 | 12.02.2014 | AP30B/A6A | 329 | 2967 | 22.03.2022 |
| 114559014 | F |  | LH-SAT FSS W092 | −92 | 12.02.2014 | AP30B/A6A | 330 | 2967 | 22.03.2022 |
| 114559021 | F |  | LH-SAT FSS 2.4W | −2.4 | 28.03.2014 | AP30B/A6A | 336 | 2970 | 03.05.2022 |
| 114559030 | F |  | LH-SAT FSS 151.5E | 151.5 | 26.05.2014 | AP30B/A6A | 345 | 2974 | 28.06.2022 |
| 111559040 | G |  | IOMSAT-45W | −45 | 11.11.2011 | AP30B/A6A | 207 | 2895 | 14.05.2019 |
| 113559007 | G |  | IOMSAT-63W-B | −63 | 11.03.2013 | AP30B/A6A | 272 | 2943 | 06.04.2021 |
| 113559041 | G |  | UKFSS-34.5W | −34.5 | 05.08.2013 | AP30B/A6A | 301 | 2955 | 21.09.2021 |
| 111559002 | HOL |  | NSS-FSS 130E | 130 | 14.01.2011 | AP30B/A6A | 171 | 2891 | 19.03.2019 |
| 111559003 | HOL |  | NSS-FSS 142E | 142 | 14.01.2011 | AP30B/A6A | 172 | 2891 | 19.03.2019 |
| 111559037 | HOL |  | NSS-FSS-G2 40.5W | −40.5 | 10.10.2011 | AP30B/A6A | 204 | 2909 | 26.11.2019 |
| 112559035 | HOL |  | NSS-FSS 105W | −105 | 12.10.2012 | AP30B/A6A | 246 | 2934 | 24.11.2020 |
| 112559048 | HOL |  | NSS-FSS 37.5W | −37.5 | 10.12.2012 | AP30B/A6A | 260 | 2938 | 26.01.2021 |
| 112559049 | HOL |  | NSS-FSS 47.5W | −47.5 | 10.12.2012 | AP30B/A6A | 261 | 2938 | 26.01.2021 |
| 113559003 | HOL |  | NSS-FSS 77W | −77 | 12.02.2013 | AP30B/A6A | 268 | 2942 | 23.03.2021 |
| 113559004 | HOL |  | NSS-FSS-G2 22W | −22 | 15.02.2013 | AP30B/A6A | 269 | 2942 | 23.03.2021 |
| 113559005 | HOL |  | NSS-FSS-G2 57E | 57 | 15.02.2013 | AP30B/A6A | 270 | 2942 | 23.03.2021 |
| 113559037 | HOL |  | NSS-FSS-G2-108.2E | 108.2 | 23.07.2013 | AP30B/A6A | 297 | 2955 | 21.09.2021 |
| 113559038 | HOL |  | NSS-FSS-G2 77W | −77 | 25.07.2013 | AP30B/A6A | 298 | 2955 | 21.09.2021 |
| 113559052 | HOL |  | NSS-FSS-G2 37.5W | −37.5 | 19.11.2013 | AP30B/A6A | 314 | 2962 | 11.01.2022 |
| 113559053 | HOL |  | NSS-FSS-G2 47.5W | −47.5 | 19.11.2013 | AP30B/A6A | 315 | 2962 | 11.01.2022 |
| 114559004 | HOL |  | NSS-FSS 148E | 148 | 20.01.2014 | AP30B/A6A | 321 | 2965 | 22.02.2022 |
| 114559005 | HOL |  | NSS-FSS 135W | −135 | 20.01.2014 | AP30B/A6A | 322 | 2965 | 22.02.2022 |
| 114559006 | HOL |  | NSS-FSS 177W | −177 | 20.01.2014 | AP30B/A6A | 323 | 2965 | 22.02.2022 |
| 113559021 | IND |  | INSAT-EXC(83E) | 83 | 06.05.2013 | AP30B/A6A | 284 | 2947 | 01.06.2021 |
| 109559006 | IND |  | INSAT-EXK82.5E | 82.5 | 30.03.2009 | AP30B/A6A | 120 | 2954 | 07.09.2021 |
| 112559027 | IRN |  | IRN-30B-34E | 34 | 08.07.2012 | AP30B/A6A | 237 | 2926 | 04.08.2020 |
| 113559049 | IRQ |  | IRAQSAT1-30B | 65.45 | 01.10.2013 | AP30B/A6A | 311 | 2958 | 02.11.2021 |
| 110559017 | ISR |  | AMS-30B-17E | 17 | 08.06.2010 | AP30B/A6A | 148 | 2877 | 21.08.2018 |
| 110559021 | ISR |  | AMS-30B-C-65E | 65 | 12.08.2010 | AP30B/A6A | 152 | 2881 | 16.10.2018 |
| 111559009 | ISR |  | AMS-30B-23E | 23 | 28.02.2011 | AP30B/A6A | 178 | 2893 | 16.04.2019 |
| 111559022 | ISR |  | AMS-30B-26W | −26 | 29.06.2011 | AP30B/A6A | 190 | 2902 | 20.08.2019 |
| 111559038 | ISR |  | AMS-30B-33W | −33 | 27.10.2011 | AP30B/A6A | 205 | 2910 | 10.12.2019 |
| 111559039 | ISR |  | AMS-30B-43E | 43 | 31.10.2011 | AP30B/A6A | 206 | 2910 | 10.12.2019 |
| 111559045 | ISR |  | AMS-30B-82.5E | 82.5 | 20.12.2011 | AP30B/A6A | 212 | 2913 | 04.02.2020 |
| 112559051 | ISR |  | AMS-30B-137E | 137 | 13.12.2012 | AP30B/A6A | 262 | 2938 | 26.01.2021 |
| 114559002 | J |  | NFP-SAT-82E | 82 | 07.01.2014 | AP30B/A6A | 319 | 2965 | 22.02.2022 |
| 114559003 | J |  | NFP-SAT-128E | 128 | 07.01.2014 | AP30B/A6A | 320 | 2965 | 22.02.2022 |
| 113559044 | LAO |  | LSTAR-126E-30B | 126 | 22.08.2013 | AP30B/A6A | 317 | 2955 | 21.09.2021 |
| 110559030 | LUX |  | LUX-30B-G5-7W | −7 | 24.09.2010 | AP30B/A6A | 161 | 2883 | 13.11.2018 |
| 112559011 | LUX |  | LUX-30B-G5-52.2E | 52.2 | 28.03.2012 | AP30B/A6A | 224 | 2920 | 12.05.2020 |
| 112559015 | MEX |  | MEXSAT 109.2 AP30B | −109.2 | 21.05.2012 | AP30B/A6A | 228 | 2923 | 23.06.2020 |
| 112559016 | MEX |  | MEXSAT 116.8 AP30B | −116.8 | 21.05.2012 | AP30B/A6A | 229 | 2923 | 23.06.2020 |
| 113559008 | MLA |  | MEASAT-83.7E-FSS | 83.7 | 12.03.2013 | AP30B/A6A | 273 | 2944 | 20.04.2021 |
| 113559046 | MNG |  | SANSAR-1 | 113.6 | 17.09.2013 | AP30B/A6A | 308 | 2957 | 19.10.2021 |
| 113559017 | NCG |  | NICASAT-1-30B | −84.4 | 19.04.2013 | AP30B/A6A | 316 | 2946 | 18.05.2021 |
| 110559022 | PNG |  | AFRISAT 3W-PC | −3 | 17.08.2010 | AP30B/A6A | 153 | 2881 | 16.10.2018 |
| 111559017 | PNG |  | PACIFISAT-1-PKU | 75 | 20.06.2011 | AP30B/A6A | 185 | 2901 | 06.08.2019 |
| 112559014 | PNG |  | NEW DAWN FSS-1 | −50 | 20.04.2012 | AP30B/A6A | 227 | 2921 | 26.05.2020 |
| 112559020 | PNG |  | NEW DAWN FSS-2 | 60 | 06.06.2012 | AP30B/A6A | 233 | 2924 | 07.07.2020 |
| 112559041 | PNG |  | NEW DAWN FSS-4 | 64 | 08.11.2012 | AP30B/A6A | 251 | 2936 | 22.12.2020 |
| 113559026 | PNG |  | NEW DAWN FSS-6 | 157 | 17.06.2013 | AP30B/A6A | 287 | 2951 | 27.07.2021 |
| 113559029 | PNG |  | NEW DAWN FSS-5 | 166 | 20.06.2013 | AP30B/A6A | 290 | 2951 | 27.07.2021 |
| 113559048 | PNG |  | PACIFISAT-PFSS-159E | 159 | 26.09.2013 | AP30B/A6A | 310 | 2958 | 02.11.2021 |
| 114559007 | PNG |  | NEW DAWN FSS-5 | 166 | 28.01.2014 | AP30B/A6A | 324 | 2966 | 08.03.2022 |
| 114559008 | PNG |  | NEW DAWN FSS-6 | 157 | 28.01.2014 | AP30B/A6A | 325 | 2966 | 08.03.2022 |
| 114559009 | PNG |  | NEW DAWN FSS-7 | 169 | 28.01.2014 | AP30B/A6A | 326 | 2966 | 08.03.2022 |
| 114559015 | PNG |  | PACIFISAT-FSS-176.1E | 176.1 | 18.02.2014 | AP30B/A6A | 331 | 2967 | 22.03.2022 |
| 114559016 | PNG |  | PACIFISAT-PFSS-75E | 75 | 20.02.2014 | AP30B/A6A | 332 | 2967 | 22.03.2022 |
| 114559023 | PNG |  | RAGGIANA AP30B-1 | −113 | 23.04.2014 | AP30B/A6A | 338 | 2972 | 31.05.2022 |
| 114559024 | PNG |  | RAGGIANA AP30B-2 | −115 | 23.04.2014 | AP30B/A6A | 339 | 2972 | 31.05.2022 |
| 114559037 | PNG |  | NEW DAWN FSS-7 | 169 | 02.07.2014 | AP30B/A6A | 352 | 2978 | 23.08.2022 |
| 111559042 | QAT |  | QATARSAT-30B-0.9E | 0.9 | 11.12.2011 | AP30B/A6A | 209 | 2912 | 21.01.2020 |
| 112559058 | QAT | ARB | ESHAILSAT-26E-3 | 26 | 22.05.2012 | AP30B/A6A | 304 | 2923 | 23.06.2020 |
| 113559011 | QAT |  | QATARSAT-30B-14.5E | 14.5 | 27.03.2013 | AP30B/A6A | 275 | 2944 | 20.04.2021 |
| 113559012 | QAT |  | QATARSAT-30B-135.5E | 135.5 | 27.03.2013 | AP30B/A6A | 276 | 2944 | 20.04.2021 |
| 110559014 | RUS | IK | INTERSPUTNIK-47.5W-F | −47.5 | 26.05.2010 | AP30B/A6A | 145 | 2875 | 24.07.2018 |
| 110559016 | RUS | IK | INTERSPUTNIK-78E-F | 78 | 26.05.2010 | AP30B/A6A | 147 | 2875 | 24.07.2018 |
| 110559026 | RUS | IK | INTERSPUTNIK-67.3E-F | 67.3 | 21.09.2010 | AP30B/A6A | 157 | 2883 | 13.11.2018 |
| 110559027 | RUS | IK | INTERSPUTNIK-67.8E-F | 67.8 | 21.09.2010 | AP30B/A6A | 158 | 2883 | 13.11.2018 |
| 110559028 | RUS | IK | INTERSPUTNIK-26W-F | −26 | 21.09.2010 | AP30B/A6A | 159 | 2883 | 13.11.2018 |
| 110559029 | RUS | IK | INTERSPUTNIK-62.5E-F | 62.5 | 21.09.2010 | AP30B/A6A | 160 | 2883 | 13.11.2018 |
| 111559007 | RUS | IK | INTERSPUTNIK-164E-F | 164 | 27.01.2011 | AP30B/A6A | 176 | 2891 | 19.03.2019 |
| 111559006 | RUS | IK | INTERSPUTNIK-156E-F | 156 | 07.02.2017 | AP30B/A6B | 112 | 2891 | 19.03.2019 |
| 111559023 | RUS | IK | INTERSPUTNIK-52.5W-F | −52.5 | 08.07.2011 | AP30B/A6A | 191 | 2903 | 03.09.2019 |
| 111559025 | RUS |  | EXPRESS-P 146.5 | 146.5 | 15.08.2011 | AP30B/A6A | 193 | 2905 | 01.10.2019 |
| 111559027 | RUS | IK | INTERSPUTNIK-87W-F | −87 | 16.08.2011 | AP30B/A6A | 195 | 2905 | 01.10.2019 |
| 111559028 | RUS | IK | INTERSPUTNIK-97.8W-F | −97.8 | 16.08.2011 | AP30B/A6A | 196 | 2905 | 01.10.2019 |
| 111559029 | RUS | IK | INTERSPUTNIK-113W-F | −113 | 16.08.2011 | AP30B/A6A | 197 | 2905 | 01.10.2019 |
| 112559013 | RUS |  | EXPRESS-P\_KU 146.5 | 146.5 | 04.04.2012 | AP30B/A6A | 226 | 2920 | 12.05.2020 |
| 112559025 | RUS | IK | INTERSPUTNIK-103E-F | 103 | 29.06.2012 | AP30B/A6A | 236 | 2926 | 04.08.2020 |
| 113559006 | RUS | IK | INTERSPUTNIK-159E-F | 159 | 06.03.2013 | AP30B/A6A | 271 | 2943 | 06.04.2021 |
| 112559024 | RUS | IK | INTERSPUTNIK-98E-F | 98 | 29.06.2012 | AP30B/A6A | 235 | 2957 | 19.10.2021 |
| 114559026 | RUS |  | YAMAL-FSS-81.75E | 81.75 | 15.05.2014 | AP30B/A6A | 341 | 2973 | 14.06.2022 |
| 114559029 | RUS |  | YAMAL-FSS-49E | 49 | 26.05.2014 | AP30B/A6A | 344 | 2974 | 28.06.2022 |
| 114559033 | RUS |  | GT-SAT-30B-76.5E | 76.5 | 17.06.2014 | AP30B/A6A | 348 | 2977 | 09.08.2022 |
| 114559034 | RUS |  | GT-SAT-30B-93E | 93 | 17.06.2014 | AP30B/A6A | 349 | 2977 | 09.08.2022 |
| 109559018 | S |  | SIRIUS-30B-13W | −13 | 18.12.2009 | AP30B/A6A | 131 | 2863 | 06.02.2018 |
| 112559008 | S |  | OHO-30B-67.1W | −67.1 | 03.02.2012 | AP30B/A6A | 221 | 2916 | 17.03.2020 |
| 112559009 | S |  | OHO-30B-177E | 177 | 14.03.2012 | AP30B/A6A | 222 | 2919 | 28.04.2020 |
| 113559002 | S |  | OHO-30B-86E | 86 | 31.01.2013 | AP30B/A6A | 267 | 2941 | 09.03.2021 |
| 113559035 | S |  | OHO-30B-95W | −95 | 03.07.2013 | AP30B/A6A | 296 | 2952 | 10.08.2021 |
| 111559012 | SDN |  | SUDANSATFSS-1 | 23.55 | 16.03.2011 | AP30B/A6B | 57 | 2897 | 11.06.2019 |
| 109559019 | TUR |  | TURKSAT-31E-FSS | 31 | 24.12.2009 | AP30B/A6A | 132 | 2864 | 20.02.2018 |
| 109559020 | TUR |  | TURKSAT-50E-FSS | 50 | 24.12.2009 | AP30B/A6A | 133 | 2864 | 20.02.2018 |
| 110559031 | UAE |  | YAHSAT-FSS-60E | 60 | 04.10.2010 | AP30B/A6A | 162 | 2884 | 27.11.2018 |
| 110559036 | UAE |  | YAHSAT-FSS-45W | −45 | 27.12.2010 | AP30B/A6A | 167 | 2890 | 05.03.2019 |
| 110559037 | UAE |  | YAHSAT-FSS-28W | −28 | 27.12.2010 | AP30B/A6A | 168 | 2890 | 05.03.2019 |
| 111559004 | UAE |  | YAHSAT-FSS-55W | −55 | 18.01.2011 | AP30B/A6A | 173 | 2891 | 19.03.2019 |
| 113559047 | UAE |  | YAHSAT-FSS-20W | −20 | 25.09.2013 | AP30B/A6A | 309 | 2958 | 02.11.2021 |
| 113559050 | UAE |  | YAHSAT-FSS-47.5E | 47.5 | 02.10.2013 | AP30B/A6A | 312 | 2958 | 02.11.2021 |
| 96559005 | USA |  | USASAT 26G | −58 | 27.03.1996 | AP30B/A6B | 143 | 2943 | 06.04.2021 |
| 110559002 | VTN |  | VINASAT-FSS-131E-IV | 131.8 | 12.01.2010 | AP30B/A6A | 134 | 2865 | 06.03.2018 |
| 113559045 | VTN |  | VINASAT-30B-132E | 131.8 | 12.09.2013 | AP30B/A6A | 307 | 2957 | 19.10.2021 |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_