|  |  |
| --- | --- |
| **World Radiocommunication Conference (WRC-19)Sharm el-Sheikh, Egypt, 28 October – 22 November 2019** |  |
|  |  |
|  |  |
| **PLENARY MEETING** | **Addendum 22 toDocument 28-E** |
| **27 September 2019** |
| **Original: Chinese** |
| China (People's Republic of) |
|  |
| SUBMISSION in accordance with No. 14.6 of the Radio Regulations REGARDING THE DECISION OF THE 81ST MEETING OF THE RADIO REGULATIONS BOARD concerning the cancellation of some of the frequency assignments to the ASIASAT-AK, ASIASAT-AK1 and ASIASAT-AKX satellite networks (To be discussed under Agenda Item 9.2) |
|  |

# 1 Background

At the 81st RRB meeting, the Radio Regulations Board (“the Board” or “RRB”) considered a document from the Radiocommunication Bureau (“the Bureau”) addressing the validity of some C- and Ku-band assignments to the Chinese satellite networks ASIASAT-AK, ASIASAT-AK1 and ASIASAT-AKX.

This came as a result of China notifying and bringing into use in the Ka-band of another satellite network (ASIASAT-AAA) in conjunction with the launch of a new satellite, AsiaSat 9, after which the Bureau, on their own accord launched an investigation of the use of ALL other Chinese satellite networks in this orbit location for ALL frequency bands over the last three years even though no changes to their use of regulatory situation were notified to the Bureau. This is understood to be a new practice adopted by the Bureau.

It was well documented and recognized by the Bureau and the Board that the questioned assignments to ASIASAT-AK, ASIASAT-AK1 and ASIASAT-AKX had been registered in the MIFR for a long time, were in use BEFORE the Bureau started the investigation on 8 November 2017 under RR No. **13.6** and continued to be in regular operation. The facts that all coordination requirements of the frequency assignments had been completed and that no complaints had been received from other Administrations regarding coordination, operation, interference or validity of these assignments were also noted.

Despite this, it was decided to suppress the questioned assignments to ASIASAT-AK, ASIASAT-AK1 and ASIASAT-AKX on the grounds that the frequency assignments were not in use for more than 21 months’ period prior to the launch of AsiaSat 9 (the cancellation would not become effective until the last day of WRC-19).

The cancellation of the questioned assignments deviates from the long established principles which have been made known to Administrations over the years, last in Circular Letters (e.g. CR/436 in Sep 2018) and in the RRB Report to WRC-15 (which was subsequently approved by WRC-15) and also departs from previous decisions made for similar cases (precedence). While recognizing that individual cases considered vary and that they each needs to be considered on their own merit, the underlying principles and practices in considering cases should be consistent.

The decision regarding the questioned assignments is addressed in the Director’s Report ([CRM19/4](https://www.itu.int/md/R16-WRC19-C-0004/en), Add 3 Section 6.2) and will be discussed under agenda item 9.2. This submission provides additional information and explains why this Administration respectfully requests WRC-19 to **retain** the questioned assignments to ASIASAT-AK, ASIASAT-AK1 and ASIASAT-AKX in the MIFR.

# 2 Need for a decision on the principles to be applied in respect of RR No. 13.6

The case of the assignments to ASIASAT-AK, ASIASAT-AK1 and ASIASAT-AKX is not unique. Quite on the contrary, with the new approach of the Bureau to investigate three years back in time all assignments of all satellite networks in all frequency bands of an Administration for an orbit location whenever a new submission (e.g. Notification or Resolution 49) for any frequency band in that orbit location is received by the Bureau from that Administration, many such cases should be expected in the future.

It may also be noted that in the RRB Report to WRC-19 under Resolution **80 (Rev.WRC-07)** (see [WRC-19 Doc. 15](https://www.itu.int/md/R16-WRC19-C-0015/en), Section 4.7), the case of the ASIASAT-AK, ASIASAT-AK1 and ASIASAT-AKX assignments as well as another case raised under RR No. **13.6** are addressed in a general manner. In the Section concerned, RRB invites WRC-19 to consider whether guidance should be provided to the Board for its consideration of addressing the issues and concerns noted above.

Furthermore, in the Director’s Report ([CRM19/4](https://www.itu.int/md/R16-WRC19-C-0004/en), Add 3 Section 6.2), the attention to the ASIASAT-AK, ASIASAT-AK1 and ASIASAT-AKX assignments as well as those of yet another case is drawn.

Advice on the principles for when the Bureau should raise cases under RR No. **13.6**, on what basis and also on how RRB should address these is therefore sought in these documents.

In considering guidelines for the application of RR No. **13.6**, questions to be addressed by WRC-19 might include:

• When receiving submissions by an Administration for one network in one frequency band, should the Bureau initiate investigations in respect of other already recorded satellite networks, including other frequency bands of that Administration in the same orbit location?

• If looking backward, is the three year backward looking investigation period used by the Bureau appropriate?

• Should the Board look at the situation when the case is considered, the situation at the time of initiation of RR No. **13.6** or backwards in time?

• If looking backward, is 21 months backwards an appropriate period?

• How to ensure that the MIFR capture actual operational satellites?

• Should new principles for application of RR No. **13.6** by the Bureau and/or RRB be applied to cases raised before such principles have been published and made known to Administrations?

# 3 Transparency and predictability in ITU decision-making is important for Administrations to understand and plan the maintenance of their spectrum orbit resources

To enable Administrations to understand and plan the maintenance and development of their spectrum orbit resources, it is fundamental that principles for treatment by ITU of submissions are:

• made known to Administrations beforehand in a **transparent manner** (e.g. through the Radio Regulations, minutes of WRCs, Rules of Procedures or ITU Circular Letters);

**• applied consistently** in respect of cases falling in the same category until new principles are announced and made known to Administrations.

Use of, and access to, orbit spectrum resources is of great importance to Administrations and satellite procurement is a big investment, too. Administrations and their associated satellite operators develop projects and make decisions on actions in respect of maintenance and development of spectrum orbit resources based on the announced practices and principles at that time. Application of new practices or principles of ITU which have not been announced or been made known to Administrations would create uncertainty and could put Administrations in a difficult situation.

Any changes to the practices or principles of ITU therefore should be announced and made known to Administrations before they are applied such that Administrations can take them into account in their planning and when making decisions on their satellite projects and maintenance of their spectrum resources.

The cancellation of the questioned assignments differs from the announced principles and practices and deviates from decisions on precedent cases falling into the same category:

• It is less than a year since the last circular letter addressing application of RR No. **13.6**, CR/436, was made available to Administrations, which outlines and repeats the long established principles in relation to the application of RR No. **13.6**.

• In RRB’s report to WRC-15, the last WRC as of July 2019, which was subsequently approved by WRC-15, the same principles are also outlined.

• Since WRC-15, there have been no changes to the RR, RoPs or any rules concerning the application of RR No. **13.6**.

• In line with decisions for cases falling in the same category over the last several years, the questioned assignments to ASIASAT-AK, ASIASAT-AK1 and ASIASAT-AKX should be retained in the MIFR.

If applying different principles from those announced and practiced in previous cases, this would place this Administration in a difficult situation and would also prevent this Administration from making the right decisions in respect of maintenance of its spectrum orbit resources.

# 4 Cancellation of the questioned assignments would differ from the long established principles for the application of RR No. 13.6

Up until the 81st RRB meeting, when receiving cases under RR No. **13.6**, the same principles had consistently been applied to all cases. These have been to consider the situation at the time of application of RR No. **13.6** and avoid looking at the situation as it may have existed in the past. Examples of statements confirming these principles are given in the excerpts below from the minutes of the 78th RRB meeting which took place in July 2018 and from RRB’s Report to WRC-15 under Resolution **80 (Rev.WRC-07)**. In adopting the RRB Report, WRC-15 also confirmed these principles. In the sections below, their relevance for the ASIASAT-AK, ASIASAT-AK1, ASIASAT-AKX case is also discussed.

|  |  |
| --- | --- |
| Source  | Excerpt  |
| Circular Letter CR/436 dated 26 September 2018, Minutes of the 78th meeting of the Radio Regulations Board | “5.4 **Mr Strelets** recalled his earlier, general comments on the application of No. 13.6. In the case now under consideration, it would appear that **at the time of application of No.13.6 a satellite had been using all the notified assignments to the network**; **there had therefore been no grounds for carrying out a study under No. 13.6.** Such application had been retroactive, and had caused the administration concerned considerable difficulty by obliging it to provide evidence of the satellite’s use some three years previously. **The Bureau’s request for cancellation should therefore be rejected.** In general, when the Bureau received requests from administrations to investigate networks under No. 13.6, it should not do so if all appeared to be in order when the request was received. Assignments qualified for investigation under the provision only if they had not been brought into use, were no longer in use, or continued to be in use but not in accordance with the notified required characteristics as specified in Appendix 4. To investigate whether assignments had been in use at a point in time prior to the investigation constituted retroactive application of the Radio Regulations and was inadmissible. Consideration should be given to ensuring that those basic considerations guided the Bureau in its approach to the application of No. 13.6, particularly since the Bureau and administrations were already overburdened by work.5.5 The **Chairman** said that Mr Strelets’ general comments would be borne in mind when the Board discussed the application of No. 13.6 in general terms.” |

Circular Letter CR/436 (26 Sep 2018, made available just late last year) confirms the following two long-standing principles in relation to the application of RR No. **13.6**:

***Principle 1:* At the time of application of RR No. 13.6, if a satellite has been using all the notified assignments to the network, there are therefore no grounds for carrying out an investigation under No. 13.6. Such an application is retroactive. The Bureau’s request for cancellation should therefore be rejected.**

– At the time of application of RR No. **13.6** (Nov 2017), AsiaSat 9 was already using all the notified assignments to the networks (and continues to use them as of today).

***Principle 2:* Assignments are qualified for investigation under RR No. 13.6 only if they have not been brought into use, are no longer in use, or continue to be in use but not in accordance with the notified characteristics.**

It has been demonstrated that the questioned assignments:

– Had been brought into use 18-21 years before.

– Were in use by AsiaSat 9 in accordance with the notified required characteristics at the time of initiation by the Bureau of the investigation under RR No. **13.6**.

– Continue to be in use by AsiaSat 9 as of today in accordance with the notified required characteristics.

The principles outlined in CR/436 in Sep 2018 have been consistently applied to cases in the past and the same principles were well documented in WRC-15, through the RRB’s Report to WRC-15 under Resolution **80 (Rev.WRC-07)**.

|  |  |
| --- | --- |
| Source  | Excerpt from the source |
| Document 14 of WRC-15, Report by RRB to WRC-15 under Resolution **80 (Rev.WRC-07)** | Quoted from Section 4.1 of the document“In practice, it is difficult to apply RR No. **13.6** retroactively to circumstances that may have existed in the distant past. **The RRB avoids questioning the historical application of the Radio Regulations** and takes a case-by-case approach **focused on current use**. The situation becomes complex and urgent when there are two operational satellites and harmful interference is taking place or imminent.” |

The report by RRB to WRC-15 again confirms the long established principle:

***Principle*: RRB avoids questioning the historical application and focus on current use**

– The use of all questioned assignments at the time of the initiation of the investigation under RR No. **13.6** was clearly demonstrated by the AsiaSat 9 satellite which continues to operate these assignments today from this location. Evidence for this operation has been provided and has been accepted by both the Bureau and RRB.

The grounds for the cancellation of the assignments – namely “the frequency assignments were not in use for more than 21 months’ period prior to the launch of AsiaSat 9” - would seem to question the historical application and not focus on current use.

# 5 Cancelling assignments that are in operation would be a dangerous practice with wide-ranging consequences

In practice, all established orbit locations by all Administrations consist of series of filings submitted over several years as the satellite fleet, applications and requirements have changed, brought into use in accordance with the practices and requirements at that time.

If the practice applied in respect of the assignments to ASIASAT-AK, ASIASAT-AK1 and ASIASAT-AKX was to be established as the new practice, applied equally to all cases, whenever a new assignment in one frequency band is brought into use;

- the earlier bringing into use of all assignments in any frequency band of all filings of that Administration at this orbit location will be examined;

- applying current criteria and practices for bringing into use, not those at the time when the assignments were actually brought into use;

- requesting evidence for spectrum usage which was not requested or produced at that time and from satellites that are no longer in these locations, possibly even de-orbited;

- without consideration of actual use at the time of investigation;

- without consideration of the fact that MIFR would not reflect actual operational satellites and the difficulties this would create for Administrations trying to find space to introduce new satellite networks;

- provides no help in the efforts by ITU to remove unused assignments from MIFR;

- give incentive to Administrations NOT to record new assignments in MIFR even though actual usage may have changed.

A new practice as outlined above, if applied in an equal manner to all notices of all Administrations, would negatively affect filings at many orbit locations for many Administrations and put them in a difficult situation, render MIFR unable to reflect actual satellite usage, provide no help to remove unused assignments from MIFR and complicate access to spectrum orbit resources for newcomers.

# 6 The operation was never suspended

It is noted that the point was made that “the frequency assignments were not in use for more than a 21 months’ period prior to the launch of ASIASAT 9”. The reference to 21 months is understood to refer to the maximum suspension period for an assignment in the case of failure to notify the Bureau about the suspension. This is not relevant to the case of the ASIASAT-AK, -AK1 and –AKX because:

1) The slot 122E has never been left vacant since ASIASAT-G (Gorizont) arrived at 122E in 1997. AsiaSat 4 left 122E in late 2017 AFTER AsiaSat 9 went into regular operation at 122E. Discussions on suspension therefore are not relevant.

2) Any consideration of prior use of the assignments consequently would be questioning the historical application of the Radio Regulations which, according to the published principles of the Board, should be avoided.

3) In consideration of previous similar cases in line with these principles, the Board’s decisions were to retain the assignments when they have been demonstrated to be in use at the time of investigation without any consideration of usage in the past.

As the orbit location has never been vacated since it’s onset of operation in 1997 and since it has been demonstrated that, at the time of application of RR No. **13.6**, the AsiaSat 9 satellite was already using all the notified assignments to the network and they still continue to be in use in accordance with the notified characteristics, this Administration understands that, in accordance with the published principles for handling such cases and in line with previous decisions on similar cases, the assignments in question to the ASIASAT-AK, -AK1 and –AKX satellite networks should meet all the requirement to be retained.

# 7 Frequency bands not notified in later satellite networks

When Administrations make their decisions on development and maintenance of their spectrum orbit resources, they do so in good faith to the announced principles and practices by ITU as made known to them. If different principles or practices from those announced and made known to Administrations were to be applied by ITU, this could prevent Administrations from making the right decisions in respect of maintenance of their spectrum orbit resources.

The issue of the assignments to ASIASAT-AK, ASIASAT-AK1 and ASIASAT-AKX was raised when this Administration, due to the launch of the AsiaSat 9 satellite which was the first satellite to carry Ka-band in this location, notified the Ka-band portion of the ASIASAT-AAA satellite network. Earlier submissions had been made for Ka-band, but since up till the launch of AsiaSat 9, there had been no Ka-band satellite in this location, this Administration did not notify or declare Ka-band had been brought into use in these and they subsequently expired and were suppressed.

The CRC of ASIASAT-AAA contains also assignments in several other frequency bands, including in the assignments which were questioned by the Bureau. However, since these frequency bands were already covered by assignments in satellite networks already recorded in the MIFR, this Administration chose not to notify these assignments yet another time.

The AsiaSat 9 satellite was built as the replacement satellite for 122° E which is the location for all the ASIASAT satellite networks in question. This satellite, which was in orbit before the initiation of the investigation under RR No. **13.6** and is intended to remain in this location for many years to come, has demonstrated that it carries all the assignments questioned by the Bureau.

When this Administration notified the ASIASAT-AAA satellite network, this was in good faith that in accordance with the published principles of ITU, there would be no need to notify assignments overlapping with assignments already recorded in the MIFR. The ASIASAT-AAA satellite network has now passed its regulatory period for notification and bringing into use and all those assignments not notified and brought into use have expired. Should the assignments to ASIASAT-AK, ASIASAT-AK1 and ASIASAT-AKX in question, in contravention to previous ITU practices, be suppressed, this would mean that this Administration will not only lose the assignments in these satellite networks, but also would be deprived of the opportunity to notify the overlapping assignments in the ASIASAT-AAA satellite network.

# 8 The good standing of the questioned assignments in the MIFR

**a) ASIASAT-AK, ASIASAT-AK1 and ASIASAT-AKX have been recorded in the MIFR for more than 15 years under No. 11.2 with ALL COORDINATION COMPLETED**

 In the coordination and recording in the MIFR of the questioned assignments to ASIASAT-AK, AK1 and -AKX, compliance with all the requirements of the Radio Regulations and the practices at that time was fully observed. This includes adherence to all relevant requirements in respect of bringing into use of the assignments. Furthermore, we would like to emphasize that in entering these assignments in the MIFR, ALL required coordination with ALL affected Administrations was completed and NO provisional recording under RR No. **11.41** (i.e. no operation on non-interference basis with outstanding coordination) was used.

 This Administration has made significant efforts in completing all the required coordination for ASIASAT-AK, AK1 and ASIASAT-AKX and has these three networks recorded in the MIFR with no outstanding coordination requirements. In addition to completing all the coordination with networks that have priority, this Administration has also completed coordination with the key networks that are junior to ASIASAT-AK, -AK1 and -AKX. This represents **more than 25 years of efforts** and is a clear demonstration of observance of the intent of and the requirements of the Radio Regulations and respect for the rights of other Administrations and the integrity of other satellite networks.

**b) No complaints or questions have been raised by other Administrations in respect of these assignments**

 This Administration notes that in general, questioning of bringing into use of assignments normally is raised by other affected Administrations, often when there are issues in respect of interference or coordination. To the best of knowledge of this Administration, no questions have been raised by any other Administration regarding the validity of the recording in the MIFR of these filings nor have any difficulties been indicated in respect of coordination or interference with these. This probably is a result of the diligent compliance with the intent and requirements of the Radio Regulations and respect for the integrity of other satellite networks, both senior and junior.

**c) Location has been in continuous use since late 1997**

 The 122° E slot has been continuously in use since late 1997 when AsiaSat-G (Gorizont) arrived at 122° E. Since then, the slot has never been left vacant. The table below shows the timeline of the satellites located at 122° E since 1997. It demonstrates the serious commitment undertaken by China in developing the 122° E slot over a period of several decades.

|  |  |
| --- | --- |
| **Date** | **Event** |
| 29.10.97 | AsiaSat-G (Gorizont) arrives at 122°E |
| 01.01.98 | AsiaSat-G brought into regular operation |
| June 99 | AsiaSat-1 brought into regular operation |
| June 99 | AsiaSat-G leaves 122°E |
| Oct 00 | AsiaSat-Z1 (Optus) brought into regular use |
| May 01 | AsiaSat-Z1 leaves 122°E |
| 24.02.03 | AsiaSat-1 de-orbited |
| 11.04.03 | AsiaSat-4 launched |
| 27.04.03 | AsiaSat-4 enters into regular operation |
| 28.09.17 | AsiaSat-9 launched |
| 09.10.17 | AsiaSat-9 enters into regular operation |
| Nov 17 | AsiaSat-4 leaves 122°E |

**d) AsiaSat 9 planning was started in 2012 (~7 years from now) and has been operating at 122° E since 2017 immediately after its delayed launch and will continue to operate at 122° E**

 The AsiaSat 9 has been specifically designed and built for 122° E. The planning of the satellite was started in 2012 (~ seven years from now) with the Request for Proposal issued in April 2013, it has been announced since 2013 that AsiaSat 9 will be located at 122° E to replace AsiaSat 4 and was contracted to be launched in 2016.

 There was a series of delays in the manufacturing of AsiaSat 9 which were followed by a large scale launch delay: In early 2017, as widely and publicly reported, Proton announced a large scale recall of the second and third stage engines which effectively put a halt to all scheduled launches. This is unprecedented in the launcher history and was completely unforeseeable and beyond the control of this Administration, AsiaSat, SSL (the satellite manufacturer) and ILS (the launch service provider).

 After being informed about the large scale delay, every effort was made to minimize the delay and to get AsiaSat 9 launched as early as possible. Due to these efforts, it was possible to get AsiaSat 9 successfully launched on 28 September 2017 and the satellite arrived 122° E on 9 October 2017. Since then, the satellite has been continuously operating and will also continue to operate at 122° E.

**e) Similar to other networks in the MIFR, the bringing into use of the ASIASAT-AK, ASIASAT-AK1 and ASIASAT-AKX filings has been in compliance with the requirements of the Radio Regulations and fully observing the practices at that time**

 When bringing into use the ASIASAT-AK, AK1 and ASIASAT-AKX satellite networks, this Administration has done so in compliance with the requirements of the Radio Regulations and fully observed the practices at that time. The questioned assignments to ASIASAT-AK, AK1 and ASIASAT-AKX were recorded legitimately in the MIFR on 01.10.1999, 04.12.2000 and 19.08.2004 respectively and up till the query from the Bureau on 08.11.2017, 13-18 years later, the validity of these recordings have never been questioned nor have any difficulties stemming from these assignments ever been reported.

**f) Cancelling the questioned assignments to ASIASAT-AK, ASIASAT-AK1 and ASIASAT-AKX would adversely impact the existing services provided by the AsiaSat 9 satellite**

 AsiaSat 9 is currently utilizing the assignments in question to provide services. Some of these are of critical importance, including but not limited to those provided to government, maritime, banking and finance, oil and gas industries’ communication networks. AsiaSat 9 is also used to provide high-speed broadband networks in a developing country which connect hundreds of remote sites across that country. Also noting that since this Administration in good faith refrained from notifying the overlapping assignments in the ASIASAT-AAA satellite networks and these subsequently have expired, cancelling the questioned assignments would adversely impact China and the critical services currently provided by AsiaSat 9.

**g) Regulatory implications**

i. **The questioned assignments to ASIASAT-AK, AK1 and ASIASAT-AKX were fully operational before the query under No. 13.6 by the Bureau in November 2017**

 As demonstrated by the provided evidence for AsiaSat 9, the questioned assignments to ASIASAT-AK, -AK1 and ASIASAT-AKX were fully operational before the query under RR No. **13.6** started in November 2017. AsiaSat 9 has been in operation since 2017 and will remain in operation for many years to come.

ii. **New practices in applying the Radio Regulations should not be applied retroactively**

 It is a long established principle that new practices in applying the Radio Regulations should be published and made known to Administrations beforehand and should not be applied retroactively to cases raised before the new practices have been published. When the ASIASAT-AK, AK1, -AKX case was considered, no new principles or practices from those reflected in CR/436 and in RRB’s Report to WRC-15 had been announced. .

iii. **Create a mismatch in the MIFR is in contradiction with the intent of RR No. 13.6**

 RR No. **13.6** is under “Article 13, Section II − Maintenance of the Master Register and of World Plans by the Bureau” of the Radio Regulations. The intent of RR No. **13.6** is to ensure that the Master Register reflects the actual use.

 Cancelling the questioned assignments which have been proven to be already in use and will continue to be in use would create a mismatch between the actual use and the MIFR, which would seem to be in contradiction to the intent of RR No. **13.6**.

 If the assignments in the MIFR are cancelled, the satellite will still remain in orbit. However, no assignments in the MIFR would then describe the actual operation. When real, in orbit, operational satellites are not reflected in MIFR, this would create difficulties for other Administrations when applying Articles 9 and 11-- coordination and notification procedures -- to plan for their own new networks. This would be in contradiction with the intent of RR No. **13.6**.

# 9 Request to WRC-19 to maintain the questioned assignments in the MIFR

It has been demonstrated that the ASIASAT-AK, -AK1 and -AKX assignments which were brought into use 18-21 years ago are fully operational as of today. Moreover, these networks have completed all the required frequency coordination and have been entered into the MIFR with no outstanding coordination requirements. In the 18-21 years since being brought into use, no complaints or questions have been raised by any other Administrations in respect of these assignments.

This Administration kindly requests WRC-19 to consider the points raised above and , instruct the Bureau to maintain the questioned assignments to ASIASAT-AK, -AK1 and -AKX in the MIFR.

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