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| **Agenda item: ADM 1** | **Document C23/19-E** |
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| Report by the Secretary-General |
| STUDY ON THE APPROPRIATENESS OF COUNCIL DECISION 482 TO RECOVER COSTS ASSOCIATED WITH THE PROCESSING OF SATELLITE NETWORK FILINGS |
| **Purpose**This document studies the appropriateness of ITU Council Decision 482 (C01, last amended C20) to recover costs associated with the processing of satellite network filings. **Actions required by the Council**The Council is invited: 1 **to consider the study** presented in [Annex 1](#Annex1) of this report on the extent to which the implementation of Council Decision 482 (C01, last amended C20) recovers the costs associated with the processing of satellite network filings; 2 **to create a Council expert group on Decision 482** (draft terms of reference are provided in [Annex 2](#Annex2)).**Relevant links with the Strategic Plan**Thematic priority: spectrum use for space and terrestrial services.Product and service offerings: allocation and management of resources.**Financial implications**Up to CHF 22 778 000.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**References**[*Resolution 91 (Rev. Guadalajara, 2010)*](https://www.itu.int/en/council/Documents/basic-texts/RES-091-E.pdf) *of the Plenipotentiary Conference;* [*Council Decision 482 (C01, last amended C20)*](https://www.itu.int/md/S20-CL-C-0070/en)*;* [*C22/16*](https://www.itu.int/md/S22-CL-C-0016/en)*,* [*C23/16*](https://www.itu.int/md/S23-CL-C-0016/en) |

**1 Background**

1.1 The current structure of Decision 482 (C01, last amended C20) was essentially decided by the ITU Council at its 2005 session, on the basis of [Document C05/29](https://www.itu.int/md/S05-CL-C-0029/en), on cost recovery for the processing of satellite network filings, which is referenced in *considering* *ebis)* of the Decision.

1.2 At its 2017 session, the Council instructed the Radiocommunication Bureau to submit a study on the technical issues arising in connection with the processing of complex non-geostationary satellite (non-GSO) systems. As a consequence, at its 2018 and 2019 sessions, the Council revised Decision 482 in order to address the issues related to non-GSO systems that were described in the Bureau’s study.

1.3 The virtual consultation of Councillors in June 2020 concluded that consultation by correspondence of Council Member States should be organized for the approval of the draft amended Decision 482, which contained modifications that were either consequential to decisions taken by the World Radiocommunication Conference (Sharm el-Sheikh, 2019) or were required to address a specific case of satellite network filings not covered by the Decision. As a result of this consultation, Council Member States approved the amended Decision 482, as contained in Annex 4 to Circular [DM-20/1011](https://www.itu.int/md/S20-DM-CIR-01011/en) of 3 August 2020, which entered into force on 1 September 2020.

1.4 At the 2022 session of the Council, it was indicated that the Radiocommunication Bureau, together with the General Secretariat, would assess whether further revisions to Decision 482 should be considered in order to ensure that costs associated with the processing of satellite network filings be appropriately recovered. This assessment is contained in [Annex 1](#Annex1) to this document.

**2 Conclusions of the 2023 session of the Radiocommunication Advisory Group**

2.1 The issue of the appropriateness of the current version of Council Decision 482 to recover costs associated with the processing of satellite network filings was also discussed by the Radiocommunication Advisory Group (RAG). Item 5 of the summary of conclusions of the 30th meeting of RAG indicates:

“*The RAG took note of the information from the Director of the BR about the issues related to the processing of satellite fillings, including the difficulty to treat filings with thousands of satellites without necessary time required to further developing BR software tools. RAG agreed that the BR lacks sufficient dedicated resources needed to continually update and modernize BR software applications used for satellite and terrestrial filings. The RAG also discussed the outcome from Council 2022 with regard to the review of Cost Recovery Methodology and the potential creation of a fund for software development by the Bureau.*

*The RAG advised the Director to request Council 2023 to reactivate the Expert Group addressing Council Decision 482 (modified 2020) so that it can commence its work towards making a recommendation to Council 2024 on the increased costs incurred by the BR from those filings whose size and/or complexity, as well as resubmission of the same system, are such that the current methodology does not accurately capture their costs.*”

**3 Conclusion**

 The Council is invited:

3.1 **to consider the study** presented in [Annex 1](#Annex1) of this report on the extent to which the implementation of Council Decision 482 (C01, last amended C20) recovers the costs associated with the processing of satellite network filings;

3.2 **to create a Council expert group on Decision 482** (draft terms of reference are presented in [Annex 2](#Annex2)).

Annex 1

Study on the extent to which the implementation of Council Decision 482 (C01, last amended C20) recovers the costs associated with the processing of satellite network filings

**1. The full costs of the processing of satellite network filings**

At the 2022 session of the ITU Council, it was indicated that a study would be undertaken to assess whether further revisions to Decision 482 should be considered in order to ensure that costs associated with the processing of satellite network filings be appropriately recovered. In carrying out this study, the Radiocommunication Bureau has identified activities it conducts in the processing of each satellite network filing which are not taken into account by Council Decision 482 (C01, last amended C20) and for which cost recovery is therefore not applied. These activities are presented in sections 2 to 3 of this report.

**2. Activities related to the processing of satellite network filings not currently covered by Decision 482**

2.1 Submissions not leading to publications

In *decides* 2f) to 2m) and 9 of Decision 482 (C01, last amended C20), it is indicated that the fee for processing the filing “is payable after receipt of the notice” or that the invoice is issued “upon receipt of the filing”. Noting that, in *decides* 2a) to 2e), reference is made to “date of receipt” and “publication of the notice”, the implementation practice of *decides* 2f) to 2m) has been not to charge any fee for satellite network filings that are not receivable by the Radiocommunication Bureau, thus identifying the actual receipt of the notice with its regulatory receivability. In accordance with the Rule of Procedure on the receivability of forms of notice, there are five cases when a notice should be considered “not receivable”:

1. Under § 3.2 of the Rule, if the notifying administration submits incorrect information.
2. Under § 3.3 of the Rule, if mandatory information required by Appendix **4** of the Radio Regulations is missing in the submission.
3. Under § 3.8 of the Rule, if no reply is received within 30 days from the date of the Bureau’s request for clarification.
4. Under footnote (\*) to the title of the Rule, if conditions for the set of orbital characteristics in the request for coordination related to a non-geostationary satellite (non-GSO) network or system are not met.
5. Under § 4 of the Rule, if various other conditions are not met.

In the second case, the Bureau’s review could be limited to an initial validation, but all other cases require the Bureau to conduct a completeness review of the whole satellite network, sometimes including the previously received and published notice(s), in full. Moreover, these cases could potentially be used by administrations in order to “withdraw” their submission after the period of 15 days allowed by *decides* 10 of Decision 482. In order to recover the costs of determining the completeness and correctness of filings, requesting complete information and ensuring fair treatment of all filings after this initial period of 15 days, studies should be undertaken with the view that satellite network filings deemed “not receivable” owing to a lack of response to the Bureau’s request for clarification should also be subject to cost-recovery charges calculated in accordance with the fee schedule based on units and category of the submitted filing.

**3. Activities related to the processing of satellite filings that are currently free of charge under Decision 482**

3.1 Modifications which do not result in a further technical or regulatory examination: as indicated in *decides* 3 of Decision 482 (C01, last amended C20), there is “no charge for modifications which do not result in further technical or regulatory examination by the Radiocommunication Bureau”. The nature and extent of work required by the Bureau have not substantially changed since 2005; thus, the fee exemption should continue to apply. However, the Council needs to be aware that these activities are funded in the regular budget of the Bureau and are not subject to cost recovery.

3.2 Free filing: as provided for by *decides* 4 of Decision 482, “each Member State shall be entitled to the publication of special sections or parts of the BR IFIC (space services) for one satellite network filing each year without the charges”. Document C23/16 provides the financial value of the free filings for the years 2021 and 2022. A review should be conducted to assess whether certain limitations should not be put on filings eligible to benefit from the exemption of charges, such as limiting eligibility in the planned services to filings having a national service area or excluding non-GSO filings with multiple configurations and/or those subject to epfd limits, which require a substantial amount of Radiocommunication Bureau resources.

3.3 Submissions exempt from any charges: pursuant to *decides* 11 of Decision 482, the following submissions are exempt from any charges.

3.3.1 Publication of special sections or parts of the BR IFIC (space services) for the amateur-satellite service

This is linked to the nature of the amateur-satellite service being “carried out by amateurs, that is, by duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest” (see Nos. **1.56** and **1.57** of the Radio Regulations). The Radiocommunication Bureau has, however, received some satellite networks operating in this service where the operating agency could be considered a commercial operator. This practice could lead to unfair regulatory advantages, but it also deprives the Union of cost-recovery fees. Consequently, while the principle of exemption should continue to apply to filings in the amateur-satellite service, Member States should be reminded of the conditions of eligibility stated in Nos. **1.56** and **1.57** of the Radio Regulations.

3.3.2 Notification for the recording of frequency assignments to earth stations

The reason for exemption from the cost-recovery scheme set forth in Decision 482 is the potential interest from all Member States, including those not having their own satellites, to record frequency assignments to earth stations. However, in recent years, only 15 or fewer administrations have submitted notifications for earth stations per year. Moreover, in 2021 and 2022, more than 400 notifications were received, which means that the Radiocommunication Bureau work mainly benefits only a few administrations. Studies should therefore be carried out to determine whether specific fees should be paid when more than a given number (to be determined) of notifications for earth stations are submitted by the same administration.

3.3.3 Conversion of an allotment into an assignment in accordance with the procedure of former Section I of Article 6 of Appendix **30B**

Exemption is linked to the fact that each ITU Member State has the right to such an allotment and therefore the right to use it by converting it into assignments. As such, the conversion should remain exempt from charges as long as it remains within the envelope of the national allotment. The Radio Regulations Board has, however, raised in its report to the 2023 world radiocommunication conference (WRC-23) on Resolution **80 (Rev.WRC-07)** that some simplifications of the conversion procedure could be considered to ease the regulatory workload of administrations and the Radiocommunication Bureau. The Council is also invited **to draw the attention of WRC-23** to the financial benefits for the Union of reducing the workload of the Bureau by simplifying regulatory aspects of the conversion procedure in Appendix **30B**.

3.3.4 Addition of a new allotment to the plan for a new Member State of the Union in accordance with the procedure of Article 7 of Appendix **30B**

This exemption is also linked to a fundamental right of each Member State arising from Article 44 of the ITU Constitution. As such, it should remain exempt from charges.

**4. Financial value of the fees contained in Annex to Decision 482**

The fees contained in the Annex to Decision 482 (C01, last amended C20) were established by the Council in 2005. For filings in categories P4 and P5, the cost-recovery fees decreased following the revision of Appendix **30B** of the Radio Regulations by WRC-07. All other fees contained in the Annex to Decision 482 have remained unchanged.

**5. Regulatory mechanisms currently included in Decision 482 that have substantially changed since 2005**

5.1 Processing resubmissions of notifications is included in the cost of notification categories N1 to N3, as indicated by the Note for these categories in the Annex to Decision 482 (C01, last amended C20). However, current resubmissions generally require more work than was initially foreseen in 2005 because of the additional information contained in these resubmissions, rendering new examinations necessary. Some submissions, though, in response to the formulation of findings by the Radiocommunication Bureau, such as requests for the recording of an assignment for information purposes under No. **8.4** of the Radio Regulations, do not require substantial processing and could be exempted from fees. The cost recovery of resubmissions would therefore benefit from a more in-depth study in order to align actual costs with those recovered.

5.2 Fees for notification also include “the application of Resolutions 4 and 49, Nos. 11.32A (see footnote a), 11.41, 11.47, 11.49, Subsection IID of Article 9, Sections 1 and 2 of Article 13, Article 14”. Consequently, the application of these procedures is not charged separately. Since 2005, WRCs have significantly increased the number of provisions associated with the maintenance of recorded assignments in the Master International Frequency Register. While their application could continue to be charged together with the notification, a review of the costs of these additional provisions should be conducted.

**6. Fee categories to be reviewed**

6.1 The technological advances introduced in recent years, especially in the manufacturing and operation of non-GSO constellations, have rendered non-GSO system filings more complex in terms of orbital configurations, associated beams and carriers. Their processing, both in terms of completeness and accuracy of regulatory and technical examinations, has consequently become more resource intensive. When the Council started to address this issue at its 2019 session, it decided on a ceiling of 75 000 units. Since 1 July 2019, the Radiocommunication Bureau has, however, received five non-GSO filings having more than 75 000 units. Moreover, the formula to compute units for non-GSO systems does not take into account the number of different orbital altitudes, number of satellites, number of earth stations, or other characteristics affecting examination workload. These aspects should therefore be further studied.

6.2 Filings for satellite systems not subject to coordination have also evolved considerably since 2005, when only a few, well-prepared filings containing a small number of frequency assignments were submitted every year. Non-GSO filings not subject to coordination have not only grown in number but now may contain a large set of frequency assignments covering almost all possible frequency bands allocated to space services. Moreover, the quality of the filings received is lower than before, when they were mainly prepared by experienced satellite operators. For these cases, studies should be conducted to consider the introduction of units in categories A1 and N4, with a different fee being charged depending on the number of units.

6.3 Non-GSO systems subject to epfd limits continue to require significant additional resources not only to compute epfd curves but also to prepare data and analyse results. Furthermore, the increasing number and complexity of non-GSO systems subject to epfd limits result in the need for almost continuous updating of the ITU-R epfd validation methodology contained in Recommendation ITU-R S.1503, which entails changes in processing and examination. All these aspects require the development and frequent updating of specific software. Consequently, the possible introduction of a special additional fee for recovering the costs of epfd examination of coordination requests and notifications should be studied.

6.4 Since 2005, WRCs have also introduced a number of modifications to the Space Plans (for example, the possibility of a second examination for processing of Part B submissions or additional activities related to the maintenance of the planned frequency assignments, in a manner similar to that described in section 6.2). The consequences of these modifications on the schedule of fees should also be studied.

**7. What works well in Council Decision 482 and should not be changed**

7.1 The overall framework set by Decision 482 (C01, last amended C20) and the schedule of processing charges are well understood by notifying administrations and satellite operators because the fee categories follow the types of submission defined in the Radio Regulations.

7.2 Since 2005, fees are entirely predictable at the time of submission because they are calculated *a priori* according to the Annex to Decision 482.

7.3 These two factors have contributed to an invoice payment rate within six months of greater than 99.5 per cent, with an even better overall invoice payment rate within the time-frame permitted by the Rules of Procedure.

7.4 While these features do not lead to an entirely accurate and complete cost recovery, they remain fundamental to a functional process and should therefore not be changed.

**8.** **Assistance and capacity-building activities related to satellite network filings**

8.1 Assistance provided by the Radiocommunication Bureau to the ITU membership in the preparation of filings or capacity-building activities to disseminate information on regulatory procedures and Bureau space databases and software are currently, and should remain, not subject to specific fees when requested or pursued. However, a Council expert group could study whether satellite network filing fees could also be used to offset ITU’s costs in helping all countries, especially developing ones, to make use of satellites in promoting universal connectivity and sustainable digital transformation, including the development of digital or software tools for that purpose.

**9. Lack of dedicated resources for Bureau software modernization**

9.1 The 2023 session of RAG concluded that the Radiocommunication Bureau lacked sufficient dedicated resources needed to continually update and modernize the Bureau software applications used for satellite and terrestrial filings. Modernized software would also directly benefit administrations since it is provided free of charge to all ITU members. A Council expert group could also be tasked with studying possible mechanisms to address this lack of resources.

Annex 2

Draft terms of reference for a Council expert group on Decision 482

The terms of reference of the Council Expert Group on Decision 482 are as follows:

1. The Council Expert Group on Decision 482 shall review the various issues listed in Annex 1 to Document C23/19, taking into account contributions submitted to its meetings.

2. It shall prepare a report containing recommendations for the possible revision of Decision 482 for submission to the 2024 session of the ITU Council for action.

3. It shall be open to all ITU Member States and Sector Members and work in the English language. It should hold physical meetings in conjunction with those of ITU-R Working Party 4A or Council working groups, when possible.

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