|  |  |
| --- | --- |
|  | **Document C25/INF/3-E** |
| **16 May 2025** |
| **Original: English** |
|  |  |
| Report by the Secretary-General |
| REPORTS CALLED BY RESOLUTION 218 (BUCHAREST, 2022) |
| **Purpose**As indicated in Document [C25/36](https://www.itu.int/md/S25-CL-C-0036/en), this document contains the three detailed reports requested in Resolution 218 (Bucharest, 2022) of the Plenipotentiary Conference on the ITU’s implementation of the “Space2030” Agenda.**Action required by the Council**These reports are transmitted to the Council for **information**.**Relevant link(s) with the Strategic Plan**Thematic priority – Spectrum use for space and terrestrial services.**Financial implications**Within the allocated budget 2024-2025.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**References**[*Resolution 218*](https://www.itu.int/en/council/Documents/basic-texts-2023/RES-218-E.pdf) *(Bucharest, 2022) of the Plenipotentiary Conference; Council Documents*[*C23/58*](https://www.itu.int/md/S23-CL-C-0058/en) *and*[*C24/36*](https://www.itu.int/md/S24-CL-C-0036/en) |

Status of the Plans governed by Appendices 30, 30A and 30B
to the Radio Regulations

Introduction

Resolution 218 “ITU's role in the implementation of the ''Space2030'' Agenda: space as a driver of sustainable development, and its follow-up and review process” instructs the Secretary-General and the Directors of the Bureaux “to provide annually to the ITU Council a comprehensive report on the status of the plans governed by Appendices **30**, **30A** and **30B** to the Radio Regulations, highlighting the situation of developing countries and any challenges related to the implementation of those plans, such as the evolution of reference situations of the various frequency assignments and allotments, including any difficulties and problems encountered by BR in the implementation of these plans and problems reported to BR by administrations” (see *instructs* 2).

This report summarizes the status of the Space Plans as of 4 March 2025 and provides information on other related issues. It is divided into two parts: Part I reports on the broadcasting-satellite service and associated feeder-link Plans in Appendices **30** and **30A.** Part II reports on the status of the fixed-satellite service Plan in Appendix **30B**.

Part I – Broadcasting-satellite service and associated feeder-link Plans
in Appendices 30 and 30A of the Radio Regulations

# 1 Status of the Plans governed by Appendices 30 and 30A in Regions 1 and 3

## 1.1 Overview

The Plan of Appendix **30** in Regions 1 and 3 is a Plan for the Broadcasting-satellite service (BSS) in the frequency bands 11.7 -12.2 GHz in Region 3 and 11.7-12.5 GHz in Region 1. The Plan of Appendix **30A** in Regions 1 and 3 is a Plan for BSS feeder-links in the frequency bands 17.3‑18.1 GHz in Regions 1 and 3 and 14.5-14.8 GHz for countries outside Europe.

WRC-2000 successfully completed a replanning of the Appendices **30** and **30A** Plans in Regions 1 and 3. Since then, more and more assignments for additional uses have entered the Lists of these Appendices by relying on increased application of “implicit agreement”. As a result, the reference situations (EPM – equivalent protection margin) of most Regions 1 and 3 Plan assignments have been degrading over time.

WRC-19 adopted Resolution **559 (WRC-19)** to provide some Administrations of Regions 1 and 3 with the possibility to submit new frequency assignments to replace their degraded national frequency assignments in the Appendices **30** and **30A** Plans. A total of 45 eligible Administrations sent their requests under Resolution **559 (WRC-19)** and 41 Administrations have successfully entered their new assignments in the Lists of Appendices **30** and **30A** andsubsequently submitted their requests for inclusion in the Plans to WRC-23.

WRC-23 acceded to the requests of the above-mentioned 41 Administrations. As a result, the corresponding 40 degraded national frequency assignments in the Plans of Appendices **30** and **30A** have been replaced with frequency assignments stemming from the application of Resolution **559** with improved reference situations. The Administration of South Sudan has also obtained its new entry in the Plans of Appendices **30** and **30A**.

WRC-23 also modified Appendices **30** and **30A** provisions in Regions 1 and 3 so that any degradation to the reference situation of Regions 1 and 3 Plan assignments beyond the allowable tolerance shall be subject to an explicit agreement from the potentially affected administrations.

## 1.2 Reference situation of the planned national assignments

Tables 1 and 2 below indicate the changes in the reference situation of the Regions 1 and 3 Plan assignments as established by WRC-2000 and at the time of BR IFIC 3041 of 4 March 2025. The 41 new Regions 1 and 3 Plan assignments described in section 1.1 above are also included in these Tables (see Notes 1 and 2). The changes are reflected in the range of the minimum and maximum values of EPM per Administration.

Table 1

Change in EPM values for assignments in the Regions 1 and 3 BSS Plan (downlink)

[*See Table 1 here*](https://www.itu.int/en/council/Documents/2025/Table_1-EPM_DL_March_2025.pdf)

Table 2

Change in EPM values for assignments in the Regions 1 and 3 BSS feeder-link Plan

*[See Table 2 here](https://www.itu.int/en/council/Documents/2025/Table_2-EPM_FL_March_2025.pdf)*

## 1.3 Implementation of Resolution 559 (WRC-19)

As mentioned in section 1.1 above, 41 out of the 45 eligible Administrations have successfully applied Resolution **559 (WRC-19)** and obtained new Regions 1 and 3 Plan assignments at WRC‑23. Table 3 below indicates the maximum and minimum EPM values of the 4 remaining requests submitted under Resolution **559 (WRC-19)**. The Bureau has reviewed their coordination requirements based on WRC-23’s decisions and informed these Administrations accordingly. The Radiocommunication Bureau continues to assist these Administrations so that they can obtain new Regions 1 and 3 Plan assignments at WRC-27.

Table 3

Range of EPM values of the 4 remaining requests submitted
under Resolution 559 (WRC-19)

| Administration | Orbital position (° E) | Down-link | Feeder-link |
| --- | --- | --- | --- |
| Minimum EPM (dB) | Maximum EPM (dB) | Minimum EPM (dB) | Maximum EPM (dB) |
| AFG | 10 | 4.137 | 7.477 | 0.095 | 5.013 |
| GNE | −42 | 1.188 | 6.783 | 13.794 | 18.476 |
| MLT | −37.5 | 2.798 | 4.39 | 5.221 | 5.583 |
| SEY | 45.2 | −6.054 | 1.325 | 20.719 | 22.525 |

## 1.4 Summary of the situation in Regions 1 and 3 Lists of additional uses

Additional uses in Regions 1 and 3 in Appendices **30** and **30A** are:

– use of assignments with characteristics different from those appearing in the Plans and which are capable of causing more interference than the corresponding entries in the Plans;

– use of assignments in addition to those appearing in the Plans.

Various Administrations have applied Article 4 procedures of Appendices **30** and **30A** for additional uses in Regions 1 and 3. Tables 4 and 5 below summarize the number of networks for additional uses that have been included in the Lists of Appendices **30** and **30A** as of 4 March 2025 (BR IFIC 3041).

Table 4

Number of networks of additional uses included in the List of Appendix 30

| Administration(Organization) | Number of networks | Administration(Organization) | Number of networks |
| --- | --- | --- | --- |
| ALG | 1 | IRN | 1 |
| ARS/ARB | 5 | ISR | 1 |
| AUS | 1 | J | 9 |
| BDG | 1 | KOR | 2 |
| BUL | 2 | LUX | 14 |
| CHN | 6 | MCO | 3 |
| CYP | 1 | MLA | 1 |
| D | 1 | NOR | 5 |
| E | 4 | PAK | 1 |
| EGY | 3 | PNG | 8 |
| F | 5 | RUS | 5 |
| F/EUT | 8 | RUS/IK | 4 |
| G | 6 | S | 6 |
| GRC | 1 | TUR | 2 |
| HOL | 8 | UAE | 4 |
| I | 1 | USA | 5 |

Table 5

Number of networks of additional uses included in the List of Appendix 30A

| Administration(Organization) | Number of networks | Administration(Organization) | Number of networks |
| --- | --- | --- | --- |
| ALG | 1 | IRN | 1 |
| ARS/ARB | 7 | J | 7 |
| AUS | 1 | KOR | 2 |
| BDG | 1 | LUX | 12 |
| BUL | 1 | MCO | 3 |
| CHN | 3 | MLA | 1 |
| CYP | 1 | NOR | 3 |
| D | 1 | PAK | 1 |
| E | 3 | PNG | 4 |
| EGY | 3 | RUS | 4 |
| F | 5 | RUS/IK | 4 |
| F/EUT | 8 | S | 4 |
| G | 1 | TUR | 3 |
| GRC | 1 | UAE | 4 |
| HOL | 8 | USA | 2 |
| I | 1 |  |  |

## 1.5 Administrations not having national assignments in the Plans

In Regions 1 and 3, only the Administration of Montenegro (MNE) does not have assignments in the Appendices **30** and **30A** Plans.

With the assistance of the Bureau, the Administration of Montenegro has initiated the procedure of Article 4 of Appendices **30** and **30A** with a view to obtaining new frequency assignments in the Lists of additional uses over its national territory at the orbital position of 21.7° W. Subsequently, the Administration of Montenegro will be able to apply § 4.1.26 of Article 4 to request the following Conference to include its assignments in the Appendices **30** and **30A** Plans. In accordance with the decision of WRC-23, the Administration of Montenegro can apply all measures endorsed by WRC-23 relating to Resolution **559 (WRC-19)** to its request for new Regions 1 and 3 Plan assignments.

# 2 Status of the plans governed by Appendices 30 and 30A in Region 2

## 2.1 Overview

The Plan of Appendix **30** in Region 2 is a Plan for the BSS (downlink) in the frequency band 12.2‑12.7 GHz in Region 2, together with modifications resulting from the successful application of the procedures of Article 4 of that Appendix. The Plan of Appendix **30A** in Region 2 is a Plan for BSS feeder-links in the frequency band 17.3‑17.8 GHz in Region 2.

The Plans in Region 2 do not use the concepts of additional use and List. However, Region 2 Administrations can apply the procedures of Article 4 of Appendices **30** and **30A** to include a new assignment in the Region 2 Plans, even at different orbital positions and/or with wider coverage and service areas than the national territory of the requesting administration.

All Region 2 Administrations have at least one entry in the Region 2 Plans.

The reference situation of an assignment in the Region 2 Plans is represented by the OEPM (overall equivalent protection margin), which combines EPM values in both downlink and feeder uplink.

## 2.2 Reference situation of the planned national assignments

Table 6 below indicates the reference situation, in terms of the minimum and maximum values of OEPM, of the Region 2 Plans assignments based on the data in BR IFIC 3041 of 4 March 2025.

Table 6

Reference situation for assignments in the Region 2 Plans

[*See Table 6 here*](https://www.itu.int/en/council/Documents/2025/Table_6-OEPM_R2_March_2025.pdf)

Part II – Plan for the fixed-satellite service in Appendix 30B

# 1 Overview

The fixed-satellite service (FSS) Plan in Appendix **30B** is an allotment Plan. It was adopted by the World Administrative Radio Conference 1988 (WARC Orb-88) in the frequency bands 4 500-4 800 MHz (space-to-Earth), 6 725-7 025 MHz (Earth-to-space), 10.70-10.95 GHz (space-to-Earth), 11.20-11.45 GHz (space-to-Earth) and 12.75-13.25 GHz (Earth-to-space).

Each national allotment in the Plan comprises:

– a nominal orbital position,

– a bandwidth of 800 MHz (uplink and downlink),

– a service area limited to the national territory of an administration.

World Radiocommunication Conference 2007 (WRC-07) made major modifications to the procedures and updated some technical criteria of Appendix 30B.

World Radiocommunication Conference 2019 (WRC-19) made some further modifications to the regulatory provisions and technical criteria of Appendix **30B** and introduced Resolution **170 (Rev.WRC-23)** with a view to enhancing the equitable access to these frequency bands. At the time of writing this report, the Radiocommunication Bureau has not received any request under this Resolution.

WRC-23 introduced significant changes to the concept of implicit agreement in order to ensure more protection to the reference situation of allotments in Appendix **30B** Plan. In addition, WRC-23 approved Resolution **126** **(WRC-23)** which provides the possibility for administrations to restore degraded reference situations of their allotments. Two administrations have already applied this Resolution and successfully restored their reference situation.

# 2 Reference situation of the planned national allotments

The reference situation of the national allotments in the Plan of Appendix **30B** is represented by the aggregate *C*/*I* value at each test point.

Tables 7 and 8 below show the reference situation of the national allotments as in BR IFIC 3041 of 4 March 2025. As the reference situation values of most allotments are not degraded much compared with the 21 dB criterion set forth in Appendix **30B**, only the minimum aggregate *C*/*I* value is shown for each allotment.

Table 7

Reference situation of the national allotments in the FSS Plan
(4 500-4 800 MHz and 6 725-7 025 MHz bands)

[*See Table 7 here*](https://www.itu.int/en/council/Documents/2025/Table_7-Reference_situation_6_4_GHz.pdf)

Table 8

Reference situation of the national allotments in the FSS Plan
(10.70-10.95 GHz, 11.20-11.45 GHz and 12.75-13.25 GHz bands)

[*See Table 8 here*](https://www.itu.int/en/council/Documents/2025/Table_8-Reference_situation_12-13_10-11_GHz.pdf)

# 3 Summary of the situation of additional systems in the List

Table 9 below summarizes the number of networks in the List of Appendix **30B**. They are stemming from the conversion of an allotment, “existing” systems (see Resolution **148 (Rev.WRC-15)**) or additional systems. The numbers are based on the data of BR IFIC 3041 of 4 March 2025.

Table 9

Number of networks included in the List of Appendix 30B

[*See Table 9 here*](https://www.itu.int/en/council/Documents/2025/Table_9-Networks_in_the_List.pdf)

# 4 Administrations not having a national allotment in the Plan

A number of Administrations do not have an allotment in the Appendix **30B** Plan or assignments in the List, essentially because they joined the Union after 1988. Article 7 of Appendix **30B** provides ways for those new Member States to request for national allotments. WRC-23 approved specific measures to facilitate a new ITU Member State to overcome difficulties in application of that Article in order to obtain a national allotment.

At the time of writing this report, there are seven (7) Administrations, which do not have an allotment in the Appendix **30B** Plan: Eritrea, Estonia, Latvia, Saint Lucia, Tajikistan, Timor-Leste (Dem. Rep. of), and Turkmenistan. Furthermore, the State of Palestine[[1]](#footnote-1) does not have an allotment in the Appendix **30B** Plan whereas it has planned frequency assignments in the Appendices **30** and **30A** Plans. Following the advice of the Radio Regulations Board, WRC-23 instructed the Bureau to contact these seven administrations and the State of Palestine with a view to identifying orbital resources, should they wish to initiate the process under Article 7 of Appendix **30B**.

In addition, in the Appendix **30B** Plan, the allotment XCQ00000 is a common allotment of the Federated States of Micronesia and the Republic of Palau. Following Palau's official recognition as a new Member State of the ITU, the two concerned Administrations, together with the United States of America (the notifying administration for XCQ00000), should take a decision on the status of this allotment.

# 5 Difficulties to operate a modern FSS system with the parameters of Appendix 30B

In spite of the fact that WRC-07 revised the basic technical characteristics of the FSS Plan allotments based on the technology then available, some of these technical parameters have become obsolete.

In particular, the Plan assumes that earth stations with an antenna diameter of 5.5 m in the 6/4 GHz bands and of 2.7 m in the 12-13/10-11 GHz bands would be used. Such large antennas are not corresponding to the widely used VSAT stations and could not meet the demand for many emerging satellite applications.

Annex 2

Role of ITU in the implementation of the “Space2030” Agenda

# 1 Introduction

The [“Space2030” Agenda](https://www.unoosa.org/oosa/oosadoc/data/resolutions/2021/general_assembly_76th_session/ares763.html) is a “forward-looking strategy for reaffirming and strengthening the contribution of space activities and space tools to the achievement of global agendas[[2]](#footnote-2), addressing long-term sustainable development concerns of humankind” (see § 6 of the Agenda).

The “Space2030” Agenda comprises a set of objectives and actions that UN Member States have agreed to pursue.

The implementation of the “Space2030” Agenda by Member States is facilitated by the establishment of partnerships as well as support from a number of international and regional mechanisms, programmes, projects and platforms described in section II of Part B of the Agenda. ITU is cooperating with, or contributing to, a number of these entities or programmes as described in the Council document on the collaboration with the United Nations system (see Document [C25/55](https://www.itu.int/md/S25-CL-C-0055/en)).

# 2 Structure of the “Space2030” Agenda

The four overarching objectives of the Agenda are “structured around the four pillars of space economy, space society, space accessibility and space diplomacy. Those four pillars are complementary and mutually reinforcing” (see § 19 of the Agenda):

– Overarching objective 1: Enhance space-derived economic benefits and strengthen the role of the space sector as a major driver of sustainable development (this part contains 8 specific objectives).

– Overarching objective 2: Harness the potential of space to solve everyday challenges and leverage space-related innovation to improve the quality of life (this part contains 8 objectives).

– Overarching objective 3: Improve access to space for all and ensure that all countries can benefit socioeconomically from space science and technology applications and space-based data, information and products, thereby supporting the achievement of the Sustainable Development Goals (this part contains 10 objectives and is highlighted in *resolves* 1 of Resolution 218 (Bucharest, 2022)).

– Overarching objective 4: Build partnerships and strengthen international cooperation in the peaceful uses of outer space and in the global governance of outer space activities (this part contains 10 objectives and is mentioned in *recalling c)* of Resolution 218 (Bucharest, 2022)).

# 3 Contribution of ITU Thematic Priorities in the Implementation of the “Space2030” Agenda

The ITU activities related to space are supporting most of the 36 objectives of the “Space2030” Agenda through the five thematic priorities described in section 2.6 of Annex 1 to the Strategic Plan for the Union for 2024-2027 contained in Resolution 71 (Rev. Bucharest, 2022).

## 3.1 Thematic Priority 1 – Spectrum use for space and terrestrial services

In the context of space services, this thematic priority aims at improving the use of the spectrum/orbit resources by radiocommunication services, while coordinating efforts to prevent and resolve harmful interference between space and earth stations of ITU Member States, therefore ensuring an interference-controlled environment for operating space systems reliant on the use of radio frequencies.

In 2024, under this thematic priority, most actions were related to “Space2030” agenda objectives 1.5 “Enable space activities for all, based on international law, by promoting an international framework that facilitates equal access to space for all, including non-spacefaring nations, and encourages safety and innovation” and 3.6 “Promote and support the use of space technologies to enhance worldwide access to data and broadband technologies, giving special attention to developing countries and areas with less-developed infrastructure”:

– ITU assisted a number of Member States to complete the regulatory process of coordination and notification of satellite networks so that they can successfully start operations.

– ITU assisted Administrations and Satellite Operators to resolve cases of harmful interference that were preventing normal operations.

– ITU organized the [World Radiocommunication Seminar](https://www.itu.int/wrs-24/) in December 2024. Each World Radiocommunication Seminar deals with the use of the radio-frequency spectrum and, for space services, the associated satellite orbits, and with the application of the provisions of the ITU Radio Regulations. Updated databases and software required for the implementation of WRC-23 decisions that entered into force on 1 January 2025 was presented and hands-on exercises were proposed to the participants.

In relation with “Space2030” agenda objective 3.3 “Promote exploration beyond low Earth orbit, as the scientific, technological, economic and inspirational contributions of those missions will benefit humanity”, [studies](https://www.itu.int/en/ITU-R/study-groups/rcpm/Pages/wrc-27-studies.aspx) have progressed in 2024 concerning WRC-27 agenda item 1.15 on the consideration of studies on frequency-related matters, including possible new or modified space research service (space-to-space) allocations, for future development of communications on the lunar surface and between lunar orbit and the lunar surface, in accordance with Resolution **680 (WRC-23)**.

Similarly, in relation with “Space2030” agenda objective 3.8 “Increase awareness of the risks of adverse space weather and mitigate those risks, in order to ensure increased global resilience against space weather effects, and improve the international coordination of space weather-related activities, including outreach, communication and capacity-building, as well as the establishment of an international mechanism to promote increased high-level coordination in relation to space weather and increased global resilience against space weather effects”, [studies](https://www.itu.int/en/ITU-R/study-groups/rcpm/Pages/wrc-27-studies.aspx) have been initiated on WRC-27 agenda item 1.17 on the consideration of regulatory provisions for receive-only space weather sensors and their protection in the Radio Regulations, taking into account the results of ITU Radiocommunication Sector studies, in accordance with Resolution **682 (WRC-23)**.

In relation with “Space2030” agenda objective 4.5 “Ensure the long-term sustainability of outer space activities and the preservation of the outer space environment for peaceful uses, including through the implementation on a voluntary basis of the adopted preamble and the guidelines for the long-term sustainability of outer space activities and the sharing of experiences in implementing the guidelines, and address new challenges, risks and threats posed to the long-term sustainability of outer space activities”, work on [Resolution ITU-R 74](https://www.itu.int/pub/R-RES-R.74) “Activities related to the sustainable use of radio-frequency spectrum and associated satellite-orbit resources used by space services” has started in ITU-R Working Party 4A with the development of an [ITU-R Handbook on best practices for the sustainable use of frequencies and associated non-GSO orbits by space radiocommunication services](https://www.itu.int/md/R23-WP4A-C-0343/en). ITU also organized the first edition of the [Space Sustainability Forum](https://www.itu.int/ssf/), which concluded with [a set of proposed actions](https://www.itu.int/en/ITU-R/space/SSF2024Presentations/SSF%202024%20Summary%20Report%20for%20RRB.pdf/) that could support the achievement of the “Space2030” agenda objective 4.5.

## 3.2 Thematic Priority 2 – International telecommunication numbering resources

This thematic priority is supporting the access of satellite communication systems, that are inherently international, to the indispensable [international telecommunication numbering resources](https://www.itu.int/en/itu-t/inr/pages/default.aspx), on which they rely to deliver international communication services.

Beyond geostationary satellites, there has been an expansion in numbering assignments to services offered via Low Earth Orbit (LEO) Satellites in recent years. Access to satellite connectivity is instrumental in enabling communication services in maritime and aerial domains, as well as remote and geographically dispersed areas not covered by land mobile networks. This ensures that these domains and areas remain connected, underscoring the vital importance of numbering resources in the seamless delivery of international telecommunication services across diverse platforms and environments.

## 3.3 Thematic Priority 3 – Inclusive and secure telecommunication/ICT infrastructure and services

In the context of the Agenda, this thematic priority aims at providing enhanced connectivity and access for all to fixed and mobile broadband services through the use of satellite communication systems when they are best suited to deliver such services in an inclusive, secure and resilient manner.

The convergence of terrestrial fixed and mobile networks and satellite systems raises the need to consider various requirements for user equipment, network capabilities, and applications. These are necessary steps towards providing full access to enhanced connectivity and innovative use cases and services.

ITU is particularly involved in the UN Initiative on [Early Warnings for All (EW4All),](http://earlywarningsforall.org/) and in line with PP Resolution 136 ([Rev. Bucharest, 2022](https://www.itu.int/en/council/Documents/basic-texts-2023/RES-136-E.pdf))[[3]](#footnote-3) and WTDC Resolution 34 ([Rev. Kigali, 2022](https://www.itu.int/dms_pub/itu-d/opb/tdc/D-TDC-WTDC-2022-PDF-E.pdf))[[4]](#footnote-4), has increased its support to countries in implementing early warning systems (EWS). Launched 2022, and spearheaded by WMO and the United Nations Office for Disaster Risk Reduction (UNDRR), this new climate adaptation initiative, stipulates that by 2027, every person in the world should be protected by an early warning system. ITU is leading the “[Warning Dissemination and Communication](https://www.itu.int/en/ITU-D/Emergency-Telecommunications/Pages/Early-Warnings-for-All-Initiative.aspx)“ pillar (3) of the EW4All initiative to look at last-mile connectivity and to ensure that warnings reach the people at risk in time to take action.

To achieve this critical climate adaptation initiative, ITU promotes a multi-channel approach to ensure that countries employ a wide range of communication channels and both traditional and cutting-edge technologies to disseminate alerts, including radio and television, mobile networks and satellites. To leverage the great spread of mobile networks, services and handsets but also advances in emerging alerting services via satellite systems, ITU is working closely with ITU’s public and private sector members, including the mobile and satellite industry, as well as academia and civil society, to build on existing solutions and explore innovative approaches to bridge the last mile. ITU also promotes the use of the [common alerting protocol (CAP)](https://www.itu.int/en/ITU-D/Emergency-Telecommunications/Pages/Common-Alerting-Protocol-and-Call-to-Action.aspx) to ensure that warning messages are sent in a harmonized format, and can be understood by populations at risk, and actionable.

In September 2024, an [ATU-ITU Joint Workshop on EW4All](https://www.itu.int/en/ITU-D/Emergency-Telecommunications/Pages/ITU-ATU-Early-Warning-for-All-Initiative-%28Pillar-3%29-Webinar-for-Africa-Region.aspx) raised awareness about the EW4All initiative among ATU members, and provide an in-depth understanding of Pillar 3 objectives and ITU work. The workshop was also aiming at equipping participants with the knowledge and tools necessary to implement effective early warning systems within their respective countries and provide them with a detailed understanding of the role of telecommunication/ICT stakeholders in EW4All.

The ITU work for this initiative is related to “Space2030” agenda objectives 2.3 “Strengthen the use of integrated space applications to facilitate the observation of the climate and the assessment of disaster risks, improve early warning disaster systems and provide data for the indicators used to track progress in the implementation of the 2030 Agenda for Sustainable Development, the Sendai Framework and commitments by States parties to the Paris Agreement” and 2.5 “Promote the use of space-based technologies in all phases of the disaster management cycle, applicable to both natural and man-made disasters, including prevention, mitigation, preparedness, response, recovery, reconstruction and rehabilitation; monitor and assess elements such as exposure, hazards, disaster risk and damage in different regions of the world; and promote the sharing of disaster monitoring data.”

## 3.4 Thematic Priority 4 – Digital applications

Under this thematic priority, the enhanced adoption and use of telecommunication/ICT applications made possible by an increased deployment of space-based networks and services needed for such applications is planned to deliver an improved capacity for Member States to leverage innovation and entrepreneurship for sustainable development in line with the objectives set forth in the Overarching objective 1 of the Agenda.

## 3.5 Thematic Priority 5 – Enabling environment

Policy and regulatory environments designed under this thematic priority by taking into account the specificities of space technologies should ensure that the advantages of these technologies are available to Member States when relevant, thereby increasing the number of policy options for delivering universal connectivity and implementing a sustainable digital transformation.

Activities under this thematic priority are specifically related to “Space2030” agenda objectives 3.4 “Enhance capacity-building, education and training in space science and applications, in particular for developing countries” and 4.3 “Strengthen capacity-building and technical assistance, including that provided by the Office for Outer Space Affairs, for Member States, in particular in the field of international space law and policy”:

– ITU Academy continued to deliver the ITU Spectrum Management Training Programme (SMTP) in collaboration with AFRALTI, an ITU Academy Training Centre. The SMTP is a comprehensive programme, designed for Member States and Sector Members, offering high-level training in all aspects of spectrum management, featuring both basic and advanced levels covering a wide range of topics from legal frameworks to technical specializations.

– ITU continued to provide in-person and remote trainings for administrations having specific requests.

– ITU staff actively participated in various seminars and workshops, including those organized by UNOOSA and the European Space Agency (ESA), to provide capacity building to Member States in the area of ITU frequency registration procedures for small satellites.

Annex 3

UN Inter-Agency Meetings on Outer Space Activities (UN-Space)

The UN Inter-Agency meetings on Outer Space Activities started in the mid-1970s before being referred to as “UN-Space” by the General Assembly Resolution 68/75a of December 2013.

UN-Space is a mechanism to promote collaboration, synergy, exchange of information and coordination of plans and programmes of United Nations entities (departments, offices, funds, programmes and specialized agencies) in the implementation of activities involving the use of space technology and its applications.

The Office for Outer Space Affairs leads UN-Space and acts as its secretariat. Thirty-five United Nations entities are participating (<https://www.unoosa.org/oosa/en/ourwork/un-space/po.html>).

At its [67th session](https://www.unoosa.org/oosa/en/ourwork/copuos/2024/index.html) in June 2024, the Committee on the Peaceful Uses of Outer Space (COPUOS) continued to encourage entities of the UN system to participate, as appropriate, in the coordination efforts of UN-Space.

The [43rd session of UN-Space](https://www.unoosa.org/oosa/en/ourwork/un-space/iam/43rd-session.html) was held on 31 October 2024 at UN New York in partnership with the Capacity Development and Operational Training Service [CDOTS](https://un-two-zero.network/contents/cdots-campus/) of the Department of Operational Support. During the meeting UN entities reported on their advancements in ensuring the sustainable use of space. The entities focussed on three topics:

1 The Role of UN in Space Traffic Management and Coordination: The entities recognised the necessity for enhanced transparency and coordination in sharing data pertaining to space traffic, and that UN entities has a unique role to play.

2 The importance of Satellite Imagery for UN Programmes and Missions: The UNOOSA presented the UN Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER). It was proposed to resume the UNOOSA initiative to establish of a unified approach for the procurement of satellite imagery to support UN operations.

3 New allocation of radio frequency spectrum to International Mobile Telecommunications (IMT) in frequency bands already allocated to satellite services: The ITU presented information about agenda item 1.7 of the World Radiocommunication Conference 2027, which deals with the possible identification for IMT systems of some frequency bands currently used by Earth observation and meteorological satellites. UN entities such as the World Meteorological Organization (WMO) explained their involvement in the current ITU-R studies.

The UN-Space will report to the UN Secretary-General on the coordination of space-related activities within the UN system. This report will be also submitted to the COPUOS session in June 2025.

To summarise thematic activities carried out by UN entities, UN-Space produces, on biennial basis, [special reports](https://www.unoosa.org/oosa/en/ourwork/un-space/reports_publications.html) for submission to the COPUOS. ITU contributes to these special reports on initiatives and applications for space-related inter-agency cooperation.

The last report was released in 2024 on the topic of “[Space debris](https://www.unoosa.org/res/oosadoc/data/documents/2024/aac_105/aac_1051317_0_html/AC105_1317E.pdf)“. Ten UN entities had contributed emphasizing the need for a multifaceted approach to address the challenges posed by space debris. That approach should involve not only technical but also regulatory, policy, legal and cooperative measures.

In the Chapter K about Radio frequency spectrum and associated satellite orbit resources, the enabling role of ITU in facilitating access to outer space activities in an increasingly congested space environment is reminded as a contribution to the global response to the challenges caused by space debris. While such objects may not actively transmit signals, the associated risks include physical collisions or signal disruption, especially if the objects deviate from their orbital locations as recorded by ITU.

The ITU-R Recommendation entitled “Environmental protection of the geostationary satellite orbit” (ITU-R S.1003.2), the PP-22 Resolution on the sustainability of the radio frequency spectrum and associated satellite orbit resources used by space services (Resolution 219, Bucharest, 2022), the RA-23 Resolution on activities related to the sustainable use of radio frequency spectrum and associated satellite orbit resources used by space services (RA-23 Resolution ITU-R 74, Dubai, 2023), the World Radiocommunication Conference (WRC-23, Dubai, 2023) decisions are also recalled among the ITU contributions to the sustainability of space activities.

In the report, the importance of ITU maintaining good coordination with the COPUOS and with UNOOSA in order to advance the long-term sustainability of outer space is stressed.

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

1. See Resolution 99 (Rev. Antalya, 2006) of the Plenipotentiary Conference. [↑](#footnote-ref-1)
2. The 2030 Agenda for Sustainable Development, the Sendai Framework for Disaster Risk Reduction 2015-2030 and the Paris Agreement. [↑](#footnote-ref-2)
3. PP Resolution 136 (Rev. Bucharest, 2022): The use of telecommunications/information and communication technologies for humanitarian assistance and for monitoring and management in emergency and disaster situations, including health-related emergencies, for early warning, prevention, mitigation, and relief, available at: <https://www.itu.int/en/council/Documents/basic-texts-2023/RES-136-E.pdf>. [↑](#footnote-ref-3)
4. WTDC Resolution 34 (Rev. Kigali, 2022): The role of telecommunications/information and communication technology in disaster preparedness, early warning, rescue, mitigation, relief and response, available at <https://www.itu.int/dms_pub/itu-d/opb/tdc/D-TDC-WTDC-2022-PDF-E.pdf>. [↑](#footnote-ref-4)