

14 February 2022

English only

**Committee on the Peaceful
Uses of Outer Space**
Scientific and Technical Subcommittee
Fifty-ninth session
Vienna, 7-18 February 2022

**Report of the International Telecommunication Union (ITU)
on the use of the geostationary orbit (GSO) and other orbits**

Note by the Secretariat

I. Introduction

1. At its forty-fifth session, in 2008, the Scientific and Technical Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space (see A/AC.105/911, para. 184) invited the International Telecommunication Union to make a report concerning its contribution to the peaceful uses of outer space, including the use of the geostationary satellite orbit (GSO) and other orbits. At its fifty-eighth session, in 2021, the Subcommittee invited ITU to continue to submit reports to it (A/AC.105/1240, para. 259).

2. In response to that invitation the Secretariat has received the ITU Radiocommunication Bureau (BR) 2021 Annual Space Services Report to the STSC 2022 session on the use of the geostationary-satellite orbit (GSO) and other orbits. This 2021 version of the report contains more information on non-geostationary satellite (non GSO) orbits types filed with the ITU, such as: ranges of orbit altitudes, ranges of number of satellites filed, and orbit reference body. In accordance with the information provided by the ITU, the Report is available, in six languages of the Union in PDF or CSV format (Annex 1 only), and may be downloaded from the following BR webpage at:

<https://www.itu.int/en/ITU-R/space/snl/Pages/reportSTS.aspx>





26 January 2022

**ITU Radiocommunication Bureau (BR)
2021 Annual Space Services Report to the STSC 2022 Session
on the use of the Geostationary-Satellite Orbit (GSO) and other orbits**

In the **report of the 46th session of the Scientific and Technical Subcommittee (STSC) of the COPUOS, § 184** the subcommittee invited ITU to make further reports concerning its contribution to the peaceful uses of outer space, including the use of the geostationary-satellite orbit (GSO) and other orbits.

Accordingly, please find attached:

ANNEX 1A - List of geostationary space networks for which information has been communicated to the ITU Radiocommunication Bureau **up to 31.12.2021** in application of the provisions of Article **9** (Advance Publication Information - A or Coordination Request - C) and/or Article **11** (Notification - N) of the Radio Regulations.

ANNEX 1B - List of non-geostationary space networks for which information has been communicated to the ITU Radiocommunication Bureau **up to 31.12.2021** in application of the provisions of Article **9** (Advance Publication Information - A or Coordination Request - C) and/or Article **11** (Notification - N) of the Radio Regulations.

ANNEX 2 - Appendices **30 & 30A** of the Radio Regulations - List of geostationary-satellite networks in the Broadcasting-Satellite Service (BSS) and its associated feeder links communicated and published in application of the provisions of Article 4 of Appendices **30** and **30A**.

ANNEX 3 – Appendix **30B** of the Radio Regulations - List of geostationary-satellite networks in the Fixed-Satellite Service (FSS) communicated and published in application of the provisions of Articles 6 and 7 of Appendix **30B**.

ANNEX 4 – Statistics.

ANNEX 5 - Description of the columns in the list.

The **BR Annual Space Services Report to the STSC 2022 Session on the use of the Geostationary-Satellite Orbit (GSO) and other orbits** is available in six languages of the Union in PDF or CSV format (Annexes 1A-1B only) and may be downloaded from the BR webpage at: <http://www.itu.int/ITU-R/space/snl/report/>

For more information about the *status* of any network in the list, please see – **Space Networks List** (SNL) online at: <http://www.itu.int/ITU-R/space/snl/>

For more information about the *description* of the space services database and related Parts and Special Sections, please see the **Space Preface** at: <http://www.itu.int/ITU-R/go/space-preface/en>

Annexes : 5

Annex 4

STATISTICS

**TABLE 4.1: SATELLITE FILINGS (NETWORK) AND REGULATORY STATUS
(IN APPLICATION OF THE PROVISIONS OF ARTICLE 9 AND/OR ARTICLE 11 OF THE RADIO REGULATIONS)**

(A = Network in API stage, C = Network in coordination stage,
N = Network in notification stage)

Year	Networks		A	C	N
2021	GSO	3419	19	2031	1369
	Non-GSO	1638	724	269	645
	TOTAL	5057	743	2300	2014
2020	GSO	3404	19	2055	1330
	Non-GSO	1405	610	217	578
	TOTAL	4809	629	2272	1908
2019	GSO	3298	15	2038	1245
	Non-GSO	1144	479	147	518
	TOTAL	4442	494	2185	1763
2018	GSO	3371	N/A ¹	2152	1215
	Non-GSO	1066	448	132	486
	TOTAL	4437	452	2284	1701
2017	GSO	3292	N/A ¹	2148	1136
	Non-GSO	890	376	89	425
	TOTAL	4182	384	2237	1561
2016	GSO	4971	1841	2020	1110
	Non-GSO	766	311	56	399
	TOTAL	5737	2152	2076	1509
2015	GSO	5656	2782	1773	1101
	Non-GSO	696	272	43	381
	TOTAL	6352	3054	1816	1482
2014	GSO	4641	1902	1654	1085
	Non-GSO	611	190	42	379
	TOTAL	5252	2092	1696	1464
2013	GSO	4017	1520	1418	1079
	Non-GSO	566	157	41	368
	TOTAL	4583	1677	1459	1447
2012	GSO	3993	1688	1264	1041
	Non-GSO	545	155	37	353
	TOTAL	4538	1843	1301	1394
2011	GSO	3371	1162	1188	1021
	Non-GSO	509	132	37	340
	TOTAL	3880	1294	1225	1361

¹ Following a decision by the World Radiocommunication Conference of 2015 (WRC-15), API have ceased to apply to satellite networks or systems subject to coordination procedure under Section II of Article 9 from 1st January 2017. The number of filings shown from 2017 will therefore be only related to API on satellite networks or systems not subject to coordination procedure under Section II of Article 9.

Year	Networks		A	C	N
2010	GSO	3133	966	1115	1052
	Non-GSO	495	139	36	320
	TOTAL	3628	1105	1151	1372
2009	GSO	3166	1043	1109	1014
	Non-GSO	520	186	36	298
	TOTAL	3686	1229	1145	1312
2008	GSO	3126	1017	1249	860
	Non-GSO	438	115	35	288
	TOTAL	3564	1132	1284	1148