

WRC-27 Agenda Item 1.7 India preparations

17 March 2026

Sendil Kumar , PhD

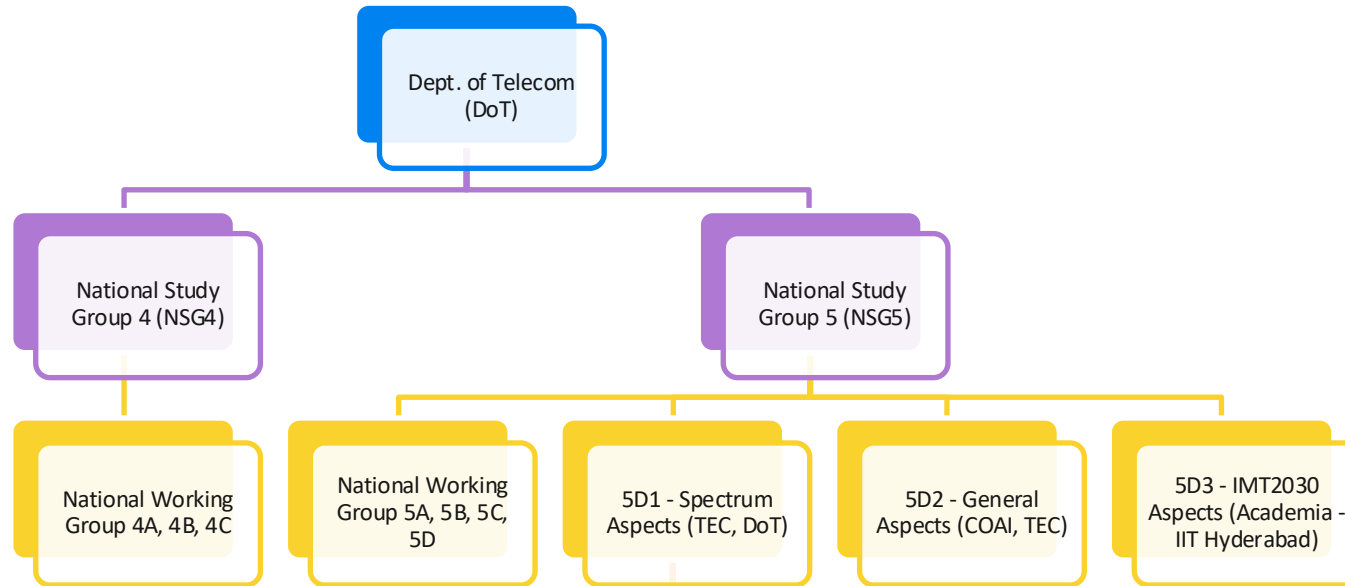
Group Function - Standards & Industry Initiatives

WRC-27: AIs



Fixed, Mobile and Radiolocation issues	Mobile Satellite issues	Science issues	Fixed Satellite and broadcasting satellite	General issues
<p data-bbox="71 386 435 476">1.7 IMT identification (RES 256)</p> <p data-bbox="71 565 453 648">1.8 Radiolocation >230 GHz</p> <p data-bbox="71 751 341 786">1.9 Appendix 26</p> <p data-bbox="71 875 479 1058">1.10 FS and mobile protection @71- 76 GHz and 81-86 GHz from FSS, MSS, BSS</p>	<p data-bbox="570 386 907 422">1.11 Space-to-space</p> <p data-bbox="570 529 919 626">1.12 MSS low data rate NGSO</p> <p data-bbox="570 729 843 832">1.13 MSS D2D (RES253)</p> <p data-bbox="570 865 868 962">1.14 MSS 2 GHz (RES254)</p>	<p data-bbox="1044 379 1370 415">1.15 SRS allocations</p> <p data-bbox="1044 501 1370 536">1.16 RAS protection</p> <p data-bbox="1044 629 1370 718">1.17 Space weather sensors</p> <p data-bbox="1044 815 1462 903">1.18 EESS protection > 81 GHz</p> <p data-bbox="1044 993 1454 1146">1.19 EESS 4 200-4 400 MHz and 8 400-8 500 MHz, (RES 674)</p>	<p data-bbox="1544 394 1819 429">1.1 ESIM 50 GHz</p> <p data-bbox="1544 529 1844 565">1.2 FSS UL 14 GHz</p> <p data-bbox="1544 665 1849 746">1.3 Gateway earth stations 51 GHz</p> <p data-bbox="1544 851 1798 886">1.4 FSS 17 GHz</p> <p data-bbox="1544 979 1900 1061">1.5 unauthorized FSS, MSS</p> <p data-bbox="1544 1165 1895 1246">1.6 FSS 37, 42, 47, 50 GHz</p> <p data-bbox="1544 1350 1798 1386">7 Resolution 86</p>	<p data-bbox="2023 394 2423 475">2 incorporation by ref in RR</p> <p data-bbox="2023 579 2308 615">4 editorial review</p> <p data-bbox="2023 715 2359 751">8 deletion footnotes</p> <p data-bbox="2023 843 2308 879">10 AI for WRC-31</p>

National Structure



Submission for DoT approval from NSG5

Consensus at WG level, submitting to NSG5

5GIF
IAFI
5G India Forum

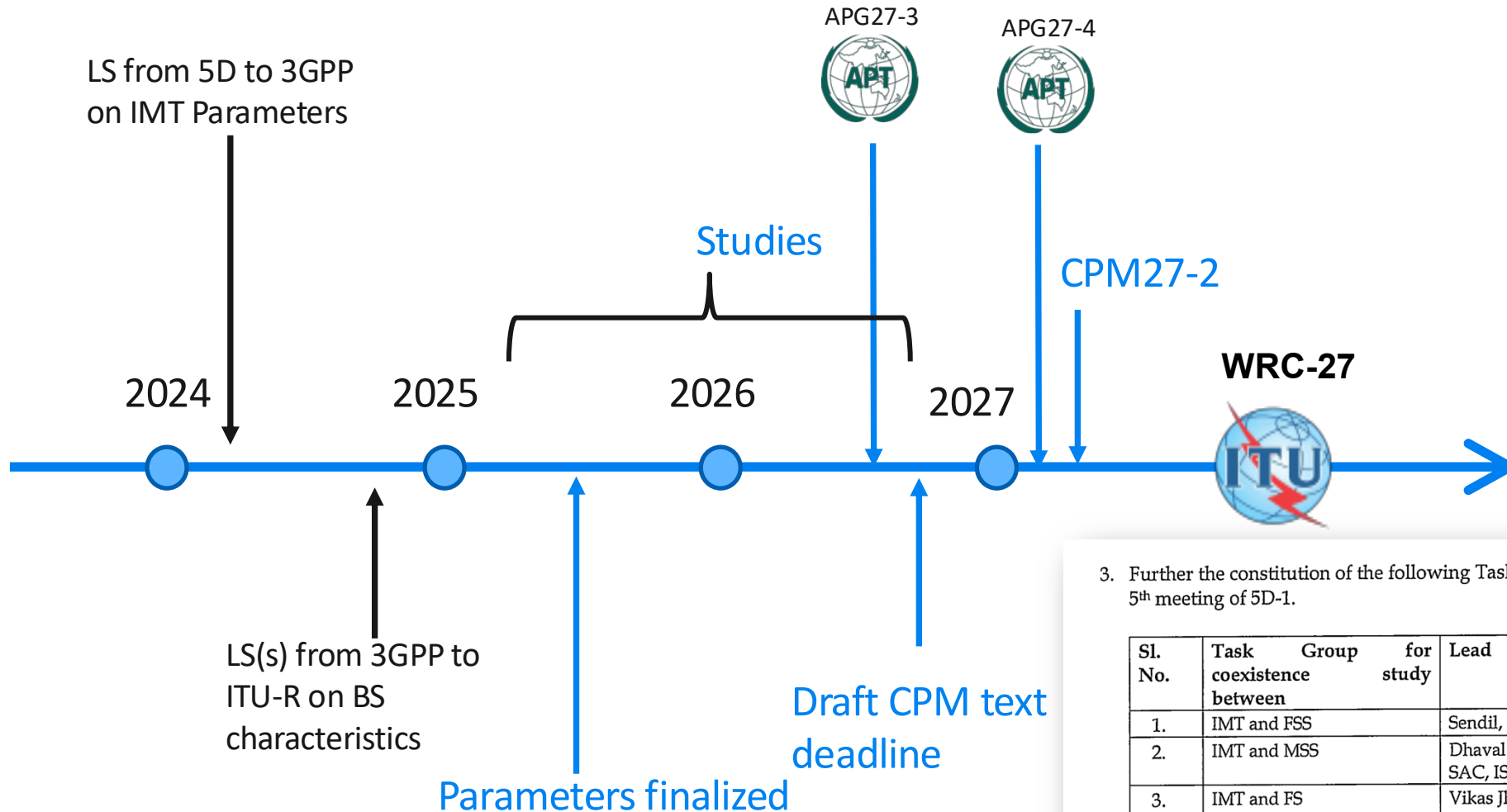
Individual Companies

TG1 (FSS-IMT) - Ericsson+ISRO
TG2 (MSS-IMT) - Qualcomm+ISRO
TG3 (FS-IMT) - Defense, Ericsson
TG4 (EESS-IMT) - Samsung+ISRO

Govt. Stakeholders
GSM A
GSOA
GSA
ISRO

TG level – flexibility before submitting to WG levels
Focused only on Technical contributions

Timeline in ITU towards WRC-27

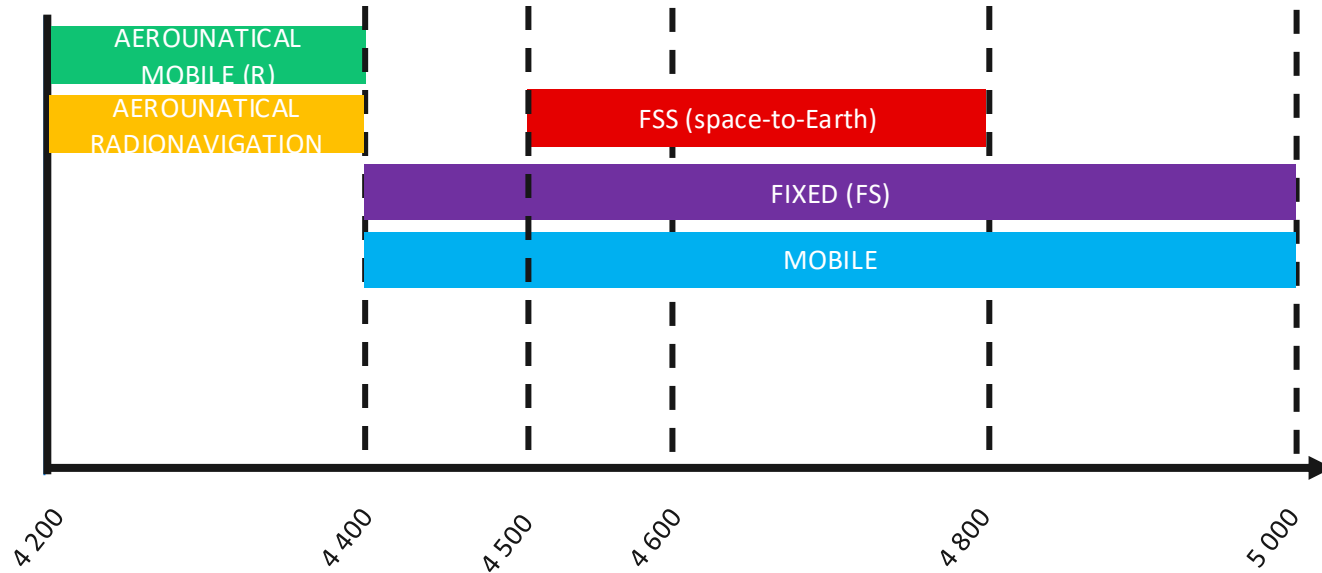


3. Further the constitution of the following Task Groups was also agreed upon during the 5th meeting of 5D-1.

Sl. No.	Task Group for study	Lead	Co-lead
1.	IMT and FSS	Sendil, Ericsson	Saket Buch ,SAC, ISRO
2.	IMT and MSS	Dhaval Upadhyay, SAC, ISRO	Punit, Qualcomm
3.	IMT and FS	Vikas Jhakad, JCES Bhoomika Gaur, TEC	Sendil, Ericsson
4.	IMT and EESS	Diwakar, Samsung	Himanshu Kumar, ISRO Headquarters

WRC-27 : Preparing for new study cycle

4 400-4 800 MHz



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1.	IMT and FSS	Sendil, Ericsson	Saket Buch ,SAC, ISRO
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National Activity

TG#1 : FSS usage (AP30B)

TG#2 : NA

TG#3 : IMT and FS

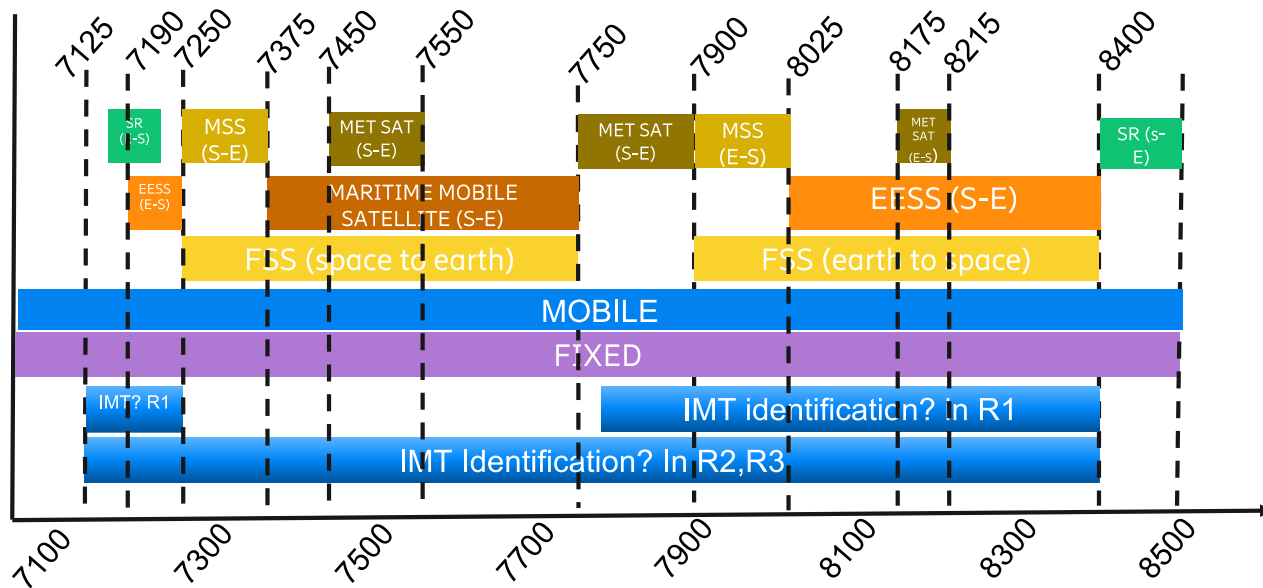
TG#4 : NA

Discussion:

- Migration plans for AP30B, To be made available by 2030
- Fixed link usages
- **Revision of Exclusion zones around Altimeter (3.5GHz 5G Macro)**
- Altimeter replacement, retrofitting etc.,

WRC-27 : Preparing for new study cycle

7 125-8 400 MHz



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National Activity

- TG#1 : FSS
- TG#2 : MSS
- TG#3 : IMT and FS
- TG#4 : METSAT,EESS

Discussion:

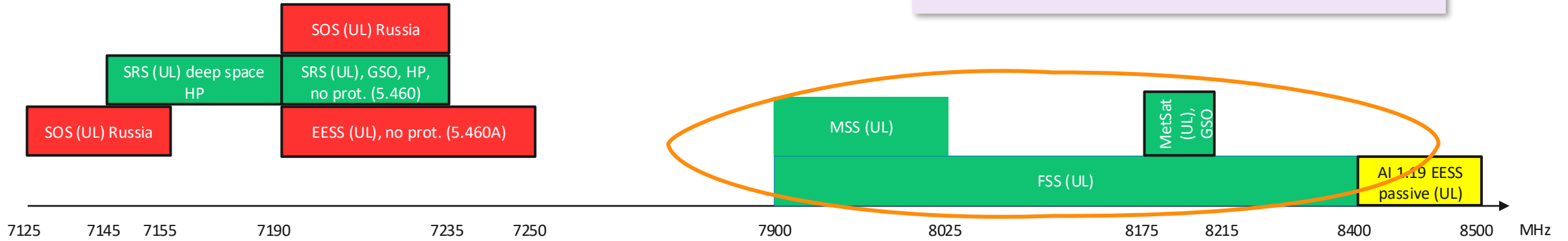
- Regional Identification : GSO, NGSO services
- EESS 8025-8400 time-bound tracking narrow beams (Earth-stations)

7/8 GHz Perspective

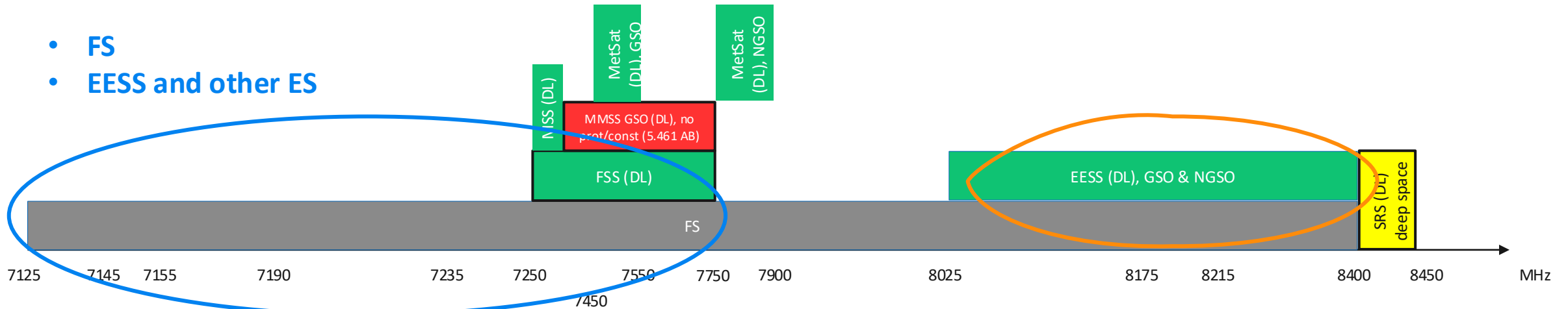
Studies & Plans

- 5GIF : EESS DL, FS , FSS-UL (GSO)
- Non-GSO FSS, MSS UL

Space receivers



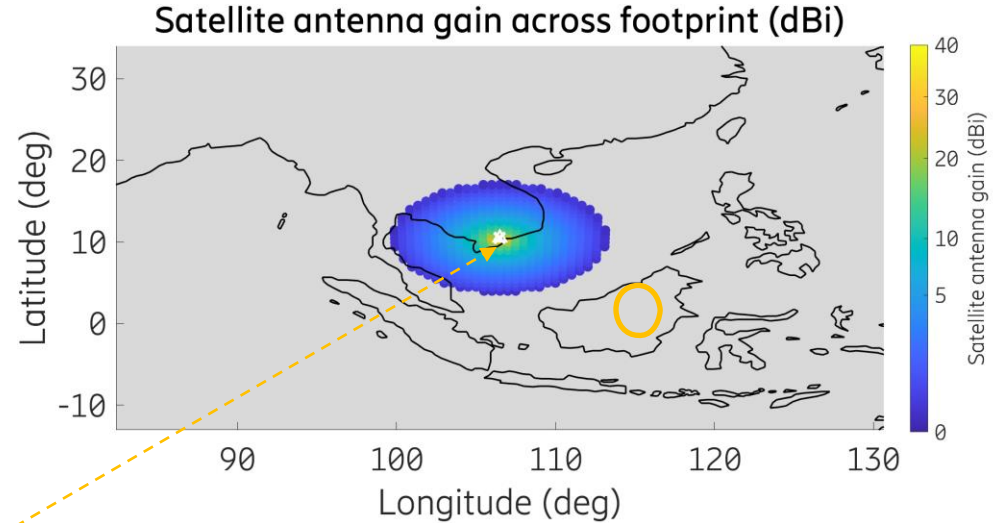
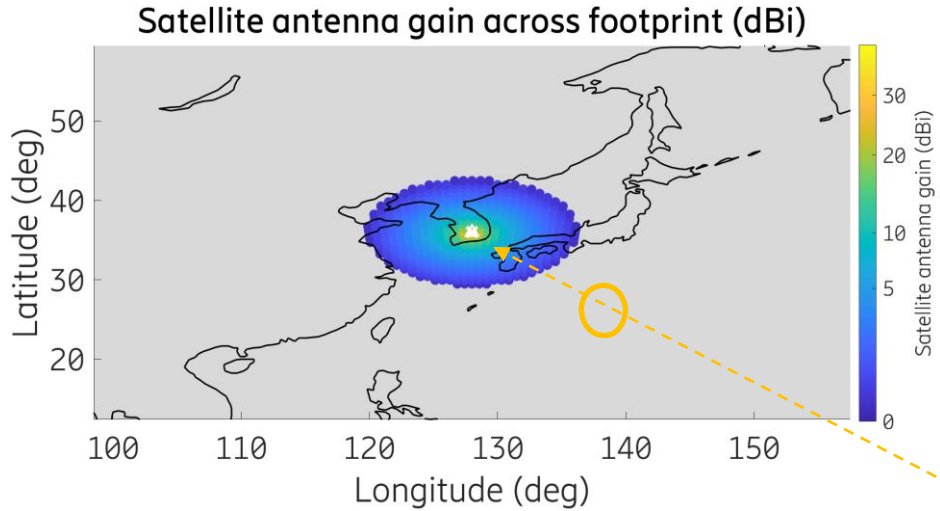
Terrestrial receivers



- FS
- EESS and other ES

Adjacent band services

MSS and FSS (NGSO) : Earth-to-space

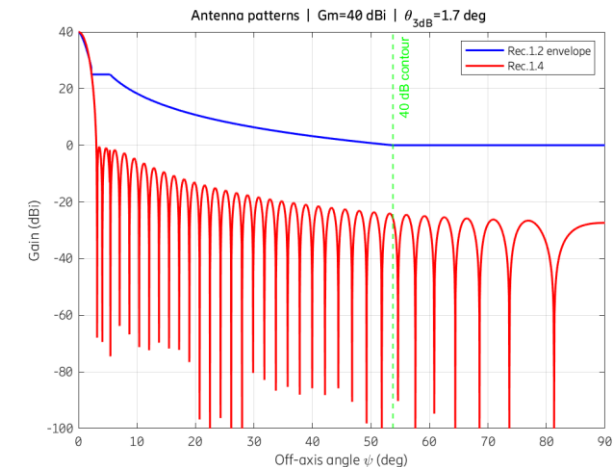


Significant proportion is from IMT BS in main beam(early sidelobe)

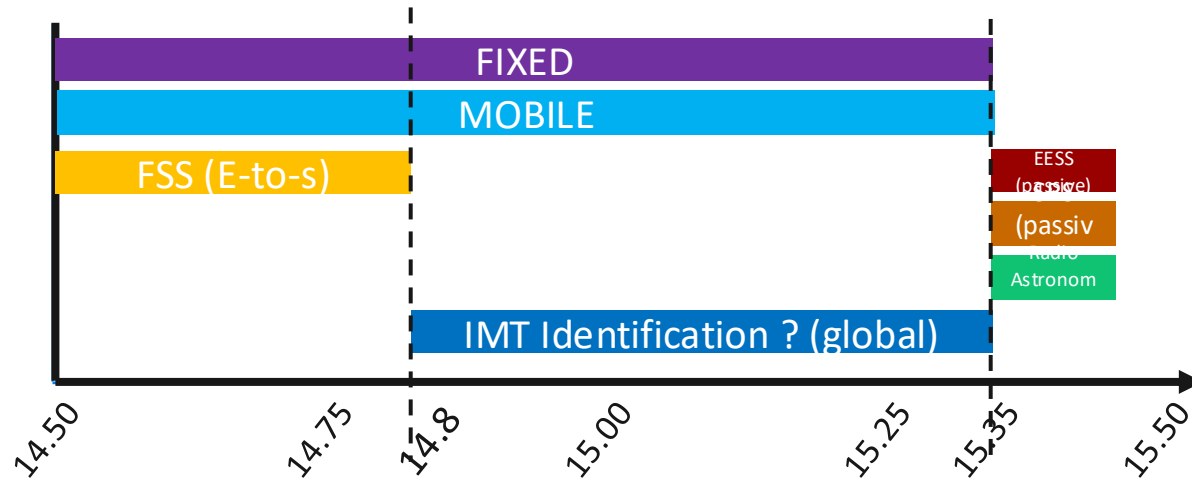
- NGSO, parameters were provided by some administrations to WP4A/4C but no systems operational to our knowledge.
- No defined GSO/NGSO coordination mechanisms. –
- Compared to GSO, reduced propagation losses means sufficient C/I.

MSS-DL, FSS NGSO (space-to-Earth)

- Compared to GSO, reduced propagation losses means sufficient C/I
- No defined GSO/NGSO coordination



WRC-27 : Preparing for new study cycle 14.8-15.35 GHz



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- Used MW links by TSPs

Action Plans : 6G Leadership



- Being more vocal in APT regional meetings
- India to take "6G" leadership through bilateral meetings APT countries
- Moving towards CPM
 - Find resolutions on specific co-existence in 7/8 GHz band
 - Help build consensus in APG view

