

## Description of EPFD validation and results of examination

### Input parameters

#### Mask link data

Mask Id.	Direction	Minimum frequency, MHz	Maximum frequency, MHz	Linked orbits id
1	↔	17800	18400	All
2	↑	27500	30000	All
3	↓	17800	18600	1, 3, 5, 7, 9, 11, 13, 15
4	↓	17800	18600	1 - 16
5	↓	19700	20200	1, 3, 5, 7, 9, 11, 13, 15
6	↓	19700	20200	1 - 16
7	↔	10700	12750	All
8	↑	12750	14500	All
9	↓	10700	12750	1, 3, 5, 7, 9, 11, 13, 15
10	↓	10700	12750	1 - 16

#### Common SNS Data

##### Common

A.4.b.7.d.1 Exclusion zone type	A.4.b.7.d.1 Exclusion zone size, degrees
Y - topocentric angle (earth based)	15

##### Orbits

Apogee/Perigee/Inclination	A.4.b.6.d Uses station keeping	A.4.b.6.e Uses specific precession
8425/8425/46	No keeping	Default
8465/8465/45.5		
8505/8505/44.9		
8545/8545/44.4		
8435/8435/45.9		
8475/8475/45.3		
8515/8515/44.8		
8555/8555/44.3		
8445/8445/45.7		
8485/8485/45.2		
8525/8525/44.7		
8565/8565/44.1		
8455/8455/45.6		
8495/8495/45.1		
8535/8535/44.5		
8575/8575/44		

##### Uplink 27.5-30 GHz

A.4.b.7.b Earth station density (1/km <sup>2</sup> )	A.4.b.7.c Average distance (km)	A.4.b.7.a number of satellites receiving simultaneously
6.74E-07	1217	100

##### Uplink 12.75-14.5 GHz

A.4.b.7.b Earth station density (1/km <sup>2</sup> )	A.4.b.7.c Average distance (km)	A.4.b.7.a number of satellites receiving simultaneously
6.25E-06	400	1

##### Downlink

A.4.b.6.a Number of satellites transmitting to any latitude within corresponding range		
From latitude	To latitude	Number
-90	90	1

**Results**

<i>B1A</i> <i>Beam designation</i>	<i>B2</i> <i>Emi-Rcp</i>	<i>BR7a</i> <i>Group id./</i> <i>Target Group id.</i>	<i>GHz</i>	<i>Orbital planes id. no.</i>	<i>Mask ID</i>	<i>Article 22 Limit</i>	<i>Result</i>	<i>Article 22 examination</i>
MR1	R	317855307 / 117679590 317855308 / 117679591 317855309 / 117679592 317855310 / 117679593 317855311 / 117679594	12.75-14.5	1 - 16	8	TABLE 22-2	Pass	Favorable
MR11	R	317855312 / 117679605 317855313 / 117679606 317855314 / 117679607 317855315 / 117679608 317855316 / 117679609	27.5-30	1 - 16		TABLE 22-2	Pass	Favorable
MR11	R	317855317 / 117679622	29.5-30	1 - 16		TABLE 22-2	Pass	Favorable
MR12	R	317855323 / 117679610 317855324 / 117679611 317855325 / 117679612 317855326 / 117679613 317855327 / 117679614	27.5-30	1 - 16		TABLE 22-2	Pass	Favorable
MR13	R	317855333 / 117679615 317855334 / 117679616 317855335 / 117679617 317855336 / 117679618 317855337 / 117679619	27.5-30	1 - 16		TABLE 22-2	Pass	Favorable
MR2	R	317855343 / 117679595 317855344 / 117679596 317855345 / 117679597 317855346 / 117679598 317855347 / 117679599	12.75-14.5	1 - 16	8	TABLE 22-2	Pass	Favorable
MR3	R	317855348 / 117679600 317855349 / 117679601 317855350 / 117679602 317855351 / 117679603 317855352 / 117679604	12.75-14.5	1 - 16	8	TABLE 22-2	Pass	Favorable
MT1	E	317855172 / 117679545 317855173 / 117679546 317855174 / 117679547 317855175 / 117679548 317855176 / 117679549	10.7-11.7	1 - 16	7, 9, 10	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
MT1	E	317855177 / 117679560 317855178 / 117679561 317855179 / 117679562 317855180 / 117679563 317855181 / 117679564 317855186 / 117688039 317855191 / 117688044 317855196 / 117688049 317855201 / 117688054 317855206 / 117688059	11.7-12.2	1 - 16	9, 10	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D	Pass Pass Pass Pass	Favorable
MT1	E	317855182 / 117688035 317855187 / 117688040 317855192 / 117688045 317855197 / 117688050 317855202 / 117688055	12.45-12.75	1 - 16	7, 9, 10	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D TABLE 22-3	Pass Pass Pass Pass Pass	Favorable
MT1	E	317855183 / 117688036 317855184 / 117688037 317855188 / 117688041 317855189 / 117688042 317855193 / 117688046 317855194 / 117688047 317855198 / 117688051 317855199 / 117688052 317855203 / 117688056 317855204 / 117688057	12.2-12.45	1 - 16	9, 10	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D	Pass Pass Pass Pass	Favorable
MT1	E	317855185 / 117688038 317855190 / 117688043 317855195 / 117688048 317855200 / 117688053 317855205 / 117688058	12.45-12.7	1 - 16	7, 9, 10	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D TABLE 22-3	Pass Pass Pass Pass Pass	Favorable

MT11	E	317855207 / 117679575 317855208 / 117679576 317855209 / 117679577 317855210 / 117679578 317855211 / 117679579	17.7-20.2	1 - 16		TABLE 22-1B TABLE 22-3 TABLE 22-1C	Pass Pass Pass	Favorable
MT12	E	317855217 / 117679580 317855218 / 117679581 317855219 / 117679582 317855220 / 117679583 317855221 / 117679584	17.7-20.2	1 - 16		TABLE 22-1B TABLE 22-3 TABLE 22-1C	Pass Pass Pass	Favorable
MT13	E	317855227 / 117679585 317855228 / 117679586 317855229 / 117679587 317855230 / 117679588 317855231 / 117679589	17.7-20.2	1 - 16		TABLE 22-1B TABLE 22-3 TABLE 22-1C	Pass Pass Pass	Favorable
MT2	E	317855237 / 117679550 317855238 / 117679551 317855239 / 117679552 317855240 / 117679553 317855241 / 117679554	10.7-11.7	1 - 16	7, 9, 10	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
MT2	E	317855242 / 117679565 317855243 / 117679566 317855244 / 117679567 317855245 / 117679568 317855246 / 117679569 317855252 / 117688065 317855253 / 117688066 317855254 / 117688067 317855255 / 117688068 317855256 / 117688069	11.7-12.2	1 - 16	9, 10	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D	Pass Pass Pass Pass	Favorable
MT2	E	317855247 / 117688060 317855248 / 117688061 317855249 / 117688062 317855250 / 117688063 317855251 / 117688064	12.45- 12.75	1 - 16	7, 9, 10	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D TABLE 22-3	Pass Pass Pass Pass Pass	Favorable
MT2	E	317855257 / 117688070 317855258 / 117688071 317855259 / 117688072 317855260 / 117688073 317855261 / 117688074 317855262 / 117688075 317855263 / 117688076 317855264 / 117688077 317855265 / 117688078 317855266 / 117688079	12.2-12.45	1 - 16	9, 10	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D	Pass Pass Pass Pass	Favorable
MT2	E	317855267 / 117688080 317855268 / 117688081 317855269 / 117688082 317855270 / 117688083 317855271 / 117688084	12.45-12.7	1 - 16	7, 9, 10	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D TABLE 22-3	Pass Pass Pass Pass Pass	Favorable
MT3	E	317855272 / 117679555 317855273 / 117679556 317855274 / 117679557 317855275 / 117679558 317855276 / 117679559	10.7-11.7	1 - 16	7, 9, 10	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
MT3	E	317855277 / 117679570 317855278 / 117679571 317855279 / 117679572 317855280 / 117679573 317855281 / 117679574 317855287 / 117688091 317855288 / 117688092 317855289 / 117688093 317855290 / 117688094 317855291 / 117688095	11.7-12.2	1 - 16	9, 10	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D	Pass Pass Pass Pass	Favorable
MT3	E	317855282 / 117688085 317855283 / 117688086 317855284 / 117688087 317855285 / 117688088 317855286 / 117688089	12.45- 12.75	1 - 16	7, 9, 10	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D TABLE 22-3	Pass Pass Pass Pass Pass	Favorable
MT3	E	317855292 / 117688096 317855293 / 117688097 317855294 / 117688098	12.2-12.45	1 - 16	9, 10	RR 22.5C4 RR 22.5C8	Pass Pass	Favorable

		317855295 / 117688099 317855296 / 117688100 317855297 / 117688102 317855298 / 117688103 317855299 / 117688104 317855300 / 117688105 317855301 / 117688106				TABLE 22-1A TABLE 22-1D	Pass Pass	
MT3	E	317855302 / 117688107 317855303 / 117688108 317855304 / 117688109 317855305 / 117688110 317855306 / 117688111	12.45-12.7	1 - 16	7, 9, 10	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D TABLE 22-3	Pass Pass Pass Pass Pass	Favorable

Notes:

1. Findings are promulgated as favorable when all applicable limits in Article 22 are met for given group of frequency assignments in all applicable scenarios.
2. The Result column can be either Pass or Fail (see Rec. ITU-R S.1503-2). N/A (Non Applicable) refers to the case when an applicable Article 22 limit is not examined in the current scenario.
3. Qualified Favorable is established due to continuous application of Resolution 85 (WRC-03) on request by the notifying administration.