

Description of EPFD validation and results of examination

Input parameters

Mask link data

Mask Id.	Direction	Minimum frequency, MHz	Maximum frequency, MHz	Linked orbit IDs / Satellite IDs
1	↓	17800	18600	All
2	↓	19700	20200	All
3	↔	17800	18400	All
41	↑	27500	28500	All
42	↑	29500	30000	All
43	↑	28500	28600	All

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)	18

Orbits

Apogee/Perigee/Inclination	A.4.b.6.d Uses station keeping	A.4.b.6.e Uses specific precession
590/590/33	No keeping	Default

Uplink 27.5-28.5 GHz, 29.5-30 GHz

A.4.b.7.b Earth station density (1/km ²)	A.4.b.7.c Average distance (km)	A.4.b.7.a number of satellites receiving simultaneously
4.44E-05	150	4

Uplink 28.5-28.6 GHz

A.4.b.7.b Earth station density (1/km ²)	A.4.b.7.c Average distance (km)	A.4.b.7.a number of satellites receiving simultaneously
0.00019	73	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

Group table

Beam(s)	Direction	Minimum frequency, MHz	Maximum frequency, MHz	A.4.b.7.cbis Minimum elevation angle
RUA1, RUA2, RUA3, RUA4	R	28350	30000	empty
RGA1, RGA2, RGP1, RGP2	R	27500	30000	empty
RAR	R	27500	28050	empty
TUA1, TUA2, TUA3, TUA4	E	17800	18600	empty
TGA1, TGA2, TGP1, TGP2	E	17800	20200	empty

Results

B1A Beam designation	B2 Emi-Rcp	BR7a Group id./ Target Group id.	GHz	Orbital planes id. no.	Mask ID	Article 22 Limit	Result	Article 22 Examination
TGA1	E	319840681 / 119677222 319840682 / 119677223 319840683 / 119677224 319840684 / 119677225 319840685 / 119677226	17.8-18.3	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TGA1	E	319840686 / 119677270 319840687 / 119677271	18.3-18.6	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable

		319840688 / 119677272 319840689 / 119677273 319840690 / 119677274						
TGA2	E	319840696 / 119677227 319840697 / 119677228 319840698 / 119677229 319840699 / 119677230 319840700 / 119677231	17.8-18.3	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TGA2	E	319840701 / 119677275 319840702 / 119677276 319840703 / 119677277 319840704 / 119677278 319840705 / 119677279	18.3-18.6	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TGP1	E	319840711 / 119677232 319840712 / 119677233 319840713 / 119677234 319840714 / 119677235 319840715 / 119677236	17.8-18.3	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TGP1	E	319840716 / 119677280 319840717 / 119677281 319840718 / 119677282 319840719 / 119677283 319840720 / 119677284	18.3-18.6	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TGP2	E	319840726 / 119677237 319840727 / 119677238 319840728 / 119677239 319840729 / 119677240 319840730 / 119677241	17.8-18.3	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TGP2	E	319840731 / 119677285 319840732 / 119677286 319840733 / 119677287 319840734 / 119677288 319840735 / 119677289	18.3-18.6	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TUA1	E	319840741 / 119677242 319840742 / 119677243 319840743 / 119677244 319840744 / 119677245 319840745 / 119677246 319840746 / 119677247 319840747 / 119677248	17.8-18.3	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TUA1	E	319840748 / 119677290 319840749 / 119677291 319840750 / 119677292 319840751 / 119677293 319840752 / 119677294 319840753 / 119677295 319840754 / 119677296	18.3-18.6	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TUA2	E	319840755 / 119677249 319840756 / 119677250 319840757 / 119677251 319840758 / 119677252 319840759 / 119677253 319840760 / 119677254 319840761 / 119677255	17.8-18.3	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TUA2	E	319840762 / 119677297 319840763 / 119677298 319840764 / 119677299 319840765 / 119677300 319840766 / 119677301 319840767 / 119677302 319840768 / 119677303	18.3-18.6	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TUA3	E	319840769 / 119677256 319840770 / 119677257 319840771 / 119677258 319840772 / 119677259 319840773 / 119677260 319840774 / 119677261 319840775 / 119677262	17.8-18.3	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TUA3	E	319840776 / 119677304 319840777 / 119677305 319840778 / 119677306 319840779 / 119677307 319840780 / 119677308	18.3-18.6	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable

		319840781 / 119677309 319840782 / 119677310						
TUA4	E	319840783 / 119677263 319840784 / 119677264 319840785 / 119677265 319840786 / 119677266 319840787 / 119677267 319840788 / 119677268 319840789 / 119677269	17.8-18.3	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TUA4	E	319840790 / 119677311 319840791 / 119677312 319840792 / 119677313 319840793 / 119677314 319840794 / 119677315 319840795 / 119677316 319840796 / 119677317	18.3-18.6	1 - 28	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable

<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>
TGA1	E	319840691 / 119677454 319840692 / 119677455 319840693 / 119677456 319840694 / 119677457 319840695 / 119677458	19.7-20.2	1 - 28	2	TABLE 22-1C	Pass	Favorable
TGA2	E	319840706 / 119677459 319840707 / 119677460 319840708 / 119677461 319840709 / 119677462 319840710 / 119677463	19.7-20.2	1 - 28	2	TABLE 22-1C	Pass	Favorable
TGP1	E	319840721 / 119677464 319840722 / 119677465 319840723 / 119677466 319840724 / 119677467 319840725 / 119677468	19.7-20.2	1 - 28	2	TABLE 22-1C	Pass	Favorable
TGP2	E	319840736 / 119677469 319840737 / 119677470 319840738 / 119677471 319840739 / 119677472 319840740 / 119677473	19.7-20.2	1 - 28	2	TABLE 22-1C	Pass	Favorable

<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>
RAR	R	319840797 / 119677728 319840798 / 119677729	27.5-28.05	1 - 28	41	TABLE 22-2	Pass	Favorable
RGA1	R	319840799 / 119677476 319840800 / 119677477 319840801 / 119677478 319840802 / 119677479 319840803 / 119677480	27.5-28.35	1 - 28	41	TABLE 22-2	Pass	Favorable
RGA1	R	319840804 / 119677496 319840805 / 119677497 319840806 / 119677498 319840807 / 119677499 319840808 / 119677500	28.35-28.5	1 - 28	41	TABLE 22-2	Pass	Favorable
RGA1	R	319840814 / 119677680 319840815 / 119677681 319840816 / 119677682 319840817 / 119677683 319840818 / 119677684	29.5-30	1 - 28	42	TABLE 22-2	Pass	Favorable
RGA2	R	319840819 / 119677481 319840820 / 119677482 319840821 / 119677483 319840822 / 119677484 319840823 / 119677485	27.5-28.35	1 - 28	41	TABLE 22-2	Pass	Favorable
RGA2	R	319840824 / 119677501 319840825 / 119677502 319840826 / 119677503 319840827 / 119677504 319840828 / 119677505	28.35-28.5	1 - 28	41	TABLE 22-2	Pass	Favorable

RG2	R	319840834 / 119677685 319840835 / 119677686 319840836 / 119677687 319840837 / 119677688 319840838 / 119677689	29.5-30	1 - 28	42	TABLE 22-2	Pass	Favorable
RGP1	R	319840839 / 119677486 319840840 / 119677487 319840841 / 119677488 319840842 / 119677489 319840843 / 119677490	27.5-28.35	1 - 28	41	TABLE 22-2	Pass	Favorable
RGP1	R	319840844 / 119677506 319840845 / 119677507 319840846 / 119677508 319840847 / 119677509 319840848 / 119677510	28.35-28.5	1 - 28	41	TABLE 22-2	Pass	Favorable
RGP1	R	319840854 / 119677690 319840855 / 119677691 319840856 / 119677692 319840857 / 119677693 319840858 / 119677694	29.5-30	1 - 28	42	TABLE 22-2	Pass	Favorable
RGP2	R	319840859 / 119677491 319840860 / 119677492 319840861 / 119677493 319840862 / 119677494 319840863 / 119677495	27.5-28.35	1 - 28	41	TABLE 22-2	Pass	Favorable
RGP2	R	319840864 / 119677511 319840865 / 119677512 319840866 / 119677513 319840867 / 119677514 319840868 / 119677515	28.35-28.5	1 - 28	41	TABLE 22-2	Pass	Favorable
RGP2	R	319840874 / 119677695 319840875 / 119677696 319840876 / 119677697 319840877 / 119677698 319840878 / 119677699	29.5-30	1 - 28	42	TABLE 22-2	Pass	Favorable
RUA1	R	319840879 / 119677516 319840880 / 119677517 319840881 / 119677518 319840882 / 119677519 319840883 / 119677520 319840884 / 119677521 319840885 / 119677522	28.35-28.5	1 - 28	41	TABLE 22-2	Pass	Favorable
RUA1	R	319840893 / 119677700 319840894 / 119677701 319840895 / 119677702 319840896 / 119677703 319840897 / 119677704 319840898 / 119677705 319840899 / 119677706	29.5-30	1 - 28	42	TABLE 22-2	Pass	Favorable
RUA2	R	319840900 / 119677523 319840901 / 119677524 319840902 / 119677525 319840903 / 119677526 319840904 / 119677527 319840905 / 119677528 319840906 / 119677529	28.35-28.5	1 - 28	41	TABLE 22-2	Pass	Favorable
RUA2	R	319840914 / 119677707 319840915 / 119677708 319840916 / 119677709 319840917 / 119677710 319840918 / 119677711 319840919 / 119677712 319840920 / 119677713	29.5-30	1 - 28	42	TABLE 22-2	Pass	Favorable
RUA3	R	319840921 / 119677530 319840922 / 119677531 319840923 / 119677532 319840924 / 119677533 319840925 / 119677534 319840926 / 119677535 319840927 / 119677536	28.35-28.5	1 - 28	41	TABLE 22-2	Pass	Favorable
RUA3	R	319840935 / 119677714 319840936 / 119677715 319840937 / 119677716	29.5-30	1 - 28	42	TABLE 22-2	Pass	Favorable

		319840938 / 119677717 319840939 / 119677718 319840940 / 119677719 319840941 / 119677720						
RUA4	R	319840942 / 119677537 319840943 / 119677538 319840944 / 119677539 319840945 / 119677540 319840946 / 119677541 319840947 / 119677542 319840948 / 119677543	28.35-28.5	1 - 28	41	TABLE 22-2	Pass	Favorable
RUA4	R	319840956 / 119677721 319840957 / 119677722 319840958 / 119677723 319840959 / 119677724 319840960 / 119677725 319840961 / 119677726 319840962 / 119677727	29.5-30	1 - 28	42	TABLE 22-2	Pass	Favorable

<i>B1A</i>	<i>B2</i>	<i>BR7a</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>
<i>Beam designation</i>	<i>Emi-Rcp</i>	<i>Group id./ Target Group id.</i>						
RGA1	R	319840809 / 119677544 319840810 / 119677545 319840811 / 119677546 319840812 / 119677547 319840813 / 119677548	28.5-28.6	1 - 28	43	TABLE 22-2	Pass	Favorable
RGA2	R	319840829 / 119677549 319840830 / 119677550 319840831 / 119677551 319840832 / 119677552 319840833 / 119677553	28.5-28.6	1 - 28	43	TABLE 22-2	Pass	Favorable
RGP1	R	319840849 / 119677554 319840850 / 119677555 319840851 / 119677556 319840852 / 119677557 319840853 / 119677558	28.5-28.6	1 - 28	43	TABLE 22-2	Pass	Favorable
RGP2	R	319840869 / 119677559 319840870 / 119677560 319840871 / 119677561 319840872 / 119677562 319840873 / 119677563	28.5-28.6	1 - 28	43	TABLE 22-2	Pass	Favorable
RUA1	R	319840886 / 119677564 319840887 / 119677565 319840888 / 119677566 319840889 / 119677567 319840890 / 119677568 319840891 / 119677569 319840892 / 119677570	28.5-28.6	1 - 28	43	TABLE 22-2	Pass	Favorable
RUA2	R	319840907 / 119677571 319840908 / 119677572 319840909 / 119677573 319840910 / 119677574 319840911 / 119677575 319840912 / 119677576 319840913 / 119677577	28.5-28.6	1 - 28	43	TABLE 22-2	Pass	Favorable
RUA3	R	319840928 / 119677578 319840929 / 119677579 319840930 / 119677580 319840931 / 119677581 319840932 / 119677582 319840933 / 119677583 319840934 / 119677584	28.5-28.6	1 - 28	43	TABLE 22-2	Pass	Favorable
RUA4	R	319840949 / 119677585 319840950 / 119677586 319840951 / 119677587 319840952 / 119677588 319840953 / 119677589 319840954 / 119677590 319840955 / 119677591	28.5-28.6	1 - 28	43	TABLE 22-2	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.