

## 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	↓	10700	12750	All
2	↔	10700	12750	All
3	↑	14000	14500	All
4	↓	17800	18600	All
5	↓	19700	20200	All
6	↔	17800	18400	All
7	↑	27500	30000	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)	8

##### Orbits

Apogee/Perigee/Inclination	A.4.b.6.d Uses station keeping	A.4.b.6.e Uses specific precession
13000/13000/90	No keeping	Default

##### Uplink

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
2.5E-07	2000	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
RUKU1, RUKU2, RUKU3	R	14000	14500	47
FUKA1, FUKA2	R	27500	30000	15
RDKA1, RDKA2	E	17800	20200	15
FDKU1, FDKU2, FDKU3	E	10800	12700	47

### Results Ku band

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
RUKU1	R	320765937 / 120741656 320765938 / 120741688 320765939 / 120741689	14-14.5	1 - 6	3	TABLE 22-2	Pass	Favorable
RUKU2	R	320765940 / 120741690 320765941 / 120741691 320765942 / 120741692	14-14.5	1 - 6	3	TABLE 22-2	Pass	Favorable
RUKU3	R	320765943 / 120741698 320765944 / 120741699 320765945 / 120741700	14-14.5	1 - 6	3	TABLE 22-2	Pass	Favorable
FDKU1	E	320765856 / 120741653 320765857 / 120741680 320765858 / 120741681	10.8-11.4	1 - 6	1, 2	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
FDKU1	E	320765859 / 120741707 320765863 / 120741719 320765867 / 120741723	10.9-11.2	1 - 6	1, 2	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable

FDKU1	E	320765860 / 120741708 320765864 / 120741720 320765868 / 120741724	11.4-11.7	1 - 6	1, 2	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
FDKU1	E	320765861 / 120741709 320765865 / 120741721 320765869 / 120741725	11.7-12.2	1 - 6	1	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D	Pass Pass Pass Pass	Favorable
FDKU1	E	320765862 / 120741710 320765866 / 120741722 320765870 / 120741726	12.2-12.7	1 - 6	1, 2	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D TABLE 22-3	Pass Pass Pass Pass Pass	Favorable
FDKU2	E	320765871 / 120741682 320765872 / 120741683 320765873 / 120741684	10.8-11.4	1 - 6	1, 2	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
FDKU2	E	320765874 / 120741727 320765878 / 120741731 320765882 / 120741735	10.9-11.2	1 - 6	1, 2	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
FDKU2	E	320765875 / 120741728 320765879 / 120741732 320765883 / 120741736	11.4-11.7	1 - 6	1, 2	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
FDKU2	E	320765876 / 120741729 320765880 / 120741733 320765884 / 120741737	11.7-12.2	1 - 6	1	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D	Pass Pass Pass Pass	Favorable
FDKU2	E	320765877 / 120741730 320765881 / 120741734 320765885 / 120741738	12.2-12.7	1 - 6	1, 2	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D TABLE 22-3	Pass Pass Pass Pass Pass	Favorable
FDKU3	E	320765886 / 120741685 320765887 / 120741686 320765888 / 120741687	10.8-11.4	1 - 6	1, 2	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
FDKU3	E	320765889 / 120741739 320765893 / 120741743 320765897 / 120741747	10.9-11.2	1 - 6	1, 2	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
FDKU3	E	320765890 / 120741740 320765894 / 120741744 320765898 / 120741748	11.4-11.7	1 - 6	1, 2	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
FDKU3	E	320765891 / 120741741 320765895 / 120741745 320765899 / 120741749	11.7-12.2	1 - 6	1	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D	Pass Pass Pass Pass	Favorable
FDKU3	E	320765892 / 120741742 320765896 / 120741746 320765900 / 120741750	12.2-12.7	1 - 6	1, 2	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D TABLE 22-3	Pass Pass Pass Pass Pass	Favorable

## Results Ka band

<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>						
FUKA1	R	320765919 / 120741654 320765920 / 120741693 320765921 / 120741694	27.5-28.5	1 - 6		TABLE 22-2	Pass	Favorable
FUKA1	R	320765922 / 120741711 320765924 / 120741751 320765926 / 120741753	28.5-29.5	1 - 6		TABLE 22-2	Pass	Favorable
FUKA1	R	320765923 / 120741712 320765925 / 120741752 320765927 / 120741754	29.5-30	1 - 6		TABLE 22-2	Pass	Favorable
FUKA2	R	320765928 / 120741695 320765929 / 120741696 320765930 / 120741697	27.5-28.5	1 - 6		TABLE 22-2	Pass	Favorable
FUKA2	R	320765931 / 120741755 320765933 / 120741757 320765935 / 120741759	28.5-29.5	1 - 6		TABLE 22-2	Pass	Favorable

FUKA2	R	320765932 / 120741756 320765934 / 120741758 320765936 / 120741760	29.5-30	1 - 6		TABLE 22-2	Pass	Favorable
RDKA1	E	320765901 / 120741655 320765902 / 120741657 320765903 / 120741658	19.7-20.2	1 - 6		TABLE 22-1C	Pass	Favorable
RDKA1	E	320765904 / 120741662 320765905 / 120741663 320765906 / 120741664	17.8-18.1	1 - 6		TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
RDKA1	E	320765907 / 120741713 320765908 / 120741714 320765909 / 120741715	18.1-18.6	1 - 6		TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
RDKA2	E	320765910 / 120741668 320765911 / 120741669 320765912 / 120741670	19.7-20.2	1 - 6		TABLE 22-1C	Pass	Favorable
RDKA2	E	320765913 / 120741674 320765914 / 120741675 320765915 / 120741676	17.8-18.1	1 - 6		TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
RDKA2	E	320765916 / 120741716 320765917 / 120741717 320765918 / 120741718	18.1-18.6	1 - 6		TABLE 22-1B TABLE 22-3	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.