

## Description of EPFD validation and results of examination

Downlink examination of frequency ranges 17.8 – 18.6 GHz and 19.7 – 20.2 GHz.

Inter-satellite examination of frequency ranges 17.8 – 18.4 GHz.

Uplink examination of frequency ranges 27.5 – 28.6 GHz and 29.5-30 GHz.

### Scenario 1. "Tundra" Orbit

<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>
KAU1	R	317796631 / 113724117 317796632 / 113724118 317796633 / 113724119 317796634 / 113724120 317796635 / 113724121	28	1 - 3	5 - 7, 9, 11	TABLE 22-2	Pass	FAVORABLE
KAU1	R	317796637 / 113726184 317796639 / 113726186 317796641 / 113726188 317796643 / 113726190 317796645 / 113726192	29	1 - 3	5 - 7, 9, 11	TABLE 22-2	Pass	FAVORABLE
KAU2	R	317796646 / 113724127 317796647 / 113724128 317796648 / 113724129 317796649 / 113724130 317796650 / 113724131	28	1 - 3	5 - 7, 9, 11	TABLE 22-2	Pass	FAVORABLE
KAU2	R	317796651 / 113724157 317796653 / 113726204 317796655 / 113726206 317796657 / 113726208 317796659 / 113726210 317796661 / 113726212	29	1 - 3	5 - 7, 9, 11	TABLE 22-2	Pass	FAVORABLE
KAULEO	R	317796662 / 115630131 317796663 / 115630132 317796664 / 115630133 317796665 / 115630134	28	1 - 3	5 - 7, 9, 11	TABLE 22-2	Pass	FAVORABLE
KAUS	R	317796670 / 113724122 317796671 / 113724123 317796672 / 113724124 317796673 / 113724125 317796674 / 113724126	28	1 - 3	5 - 7, 9, 11	TABLE 22-2	Pass	FAVORABLE
KAUS	R	317796676 / 113726194 317796678 / 113726196 317796680 / 113726198 317796682 / 113726200 317796684 / 113726202	29	1 - 3	5 - 7, 9, 11	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>						
KAUST	R	317796685 / 115630107 317796686 / 115630108 317796687 / 115630109 317796688 / 115630110 317796689 / 115630111	28	1 - 3	5 - 7, 9, 11	TABLE 22-2	Pass	FAVORABLE
KAUST	R	317796690 / 115630112 317796692 / 115630114 317796694 / 115630116 317796696 / 115630118 317796698 / 115630120 317796700 / 115630122	29	1 - 3	5 - 7, 9, 11	TABLE 22-2	Pass	FAVORABLE
KAD1	E	317796514 / 113724091 317796518 / 113724095 317796520 / 113733817 317796521 / 113733818 317796522 / 113733819 317796523 / 113733820	19	1 - 3	5 - 7, 9, 11	TABLE 22-1C	Pass	FAVORABLE
KAD1	E	317796515 / 113724092 317796516 / 113724093 317796517 / 113724094 317796519 / 113724152	20	1 - 3	5 - 7, 9, 11	TABLE 22-1C	Pass	FAVORABLE
KAD2	E	317796533 / 113724099 317796534 / 113724100 317796535 / 113724101 317796536 / 113724102 317796537 / 113724103 317796538 / 113724154 317796539 / 113724155 317796540 / 113724156	19	1 - 3	5 - 7, 9, 11	TABLE 22-1C	Pass	FAVORABLE
KAD3	E	317796544 / 113724104 317796545 / 113724105 317796546 / 113724106 317796547 / 113724107 317796548 / 113724108	17	1 - 3	5 - 7, 9, 11	TABLE 22-3 TABLE 22-1B	Pass Pass	FAVORABLE
KAD3	E	317796549 / 113726157 317796551 / 113726159 317796553 / 113726161 317796555 / 113726163 317796557 / 113726165	18	1 - 3	5 - 7, 9, 11	TABLE 22-3 TABLE 22-1B	Pass Pass	FAVORABLE
KAD4	E	317796559 / 113724112 317796560 / 113724113 317796561 / 113724114 317796562 / 113724115 317796563 / 113724116	17	1 - 3	5 - 7, 9, 11	TABLE 22-3 TABLE 22-1B	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>
KAD4	E	317796564 / 113726173 317796566 / 113726175 317796568 / 113726177 317796570 / 113726179 317796572 / 113726181	18	1 - 3	5 - 7, 9, 11	TABLE 22-3 TABLE 22-1B	Pass Pass	FAVORABLE
KADLEO	E	317796574 / 115630127 317796575 / 115630128 317796576 / 115630129 317796577 / 115630130	19	1 - 3	5 - 7, 9, 11	TABLE 22-3 TABLE 22-1B TABLE 22-1C	Pass Pass Pass	FAVORABLE
KADSA	E	317796582 / 113724096 317796583 / 113724097	20	1 - 3	5 - 7, 9, 11	TABLE 22-1C	Pass	FAVORABLE
KADSA	E	317796584 / 113724098 317796585 / 113724153 317796586 / 113733821 317796587 / 113733822	19	1 - 3	5 - 7, 9, 11	TABLE 22-1C	Pass	FAVORABLE
KADSB	E	317796592 / 113724109 317796593 / 113724110 317796594 / 113724111	17	1 - 3	5 - 7, 9, 11	TABLE 22-3 TABLE 22-1B	Pass Pass	FAVORABLE
KADSB	E	317796595 / 113726167 317796597 / 113726169 317796599 / 113726171	18	1 - 3	5 - 7, 9, 11	TABLE 22-3 TABLE 22-1B	Pass Pass	FAVORABLE
KADST	E	317796601 / 115630123 317796602 / 115630124 317796603 / 115630125 317796604 / 115630126	19	1 - 3	5 - 7, 9, 11	TABLE 22-3 TABLE 22-1B TABLE 22-1C	Pass Pass Pass	FAVORABLE

### Scenario 2. "Inclined" Orbit

<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>Finding</i>
KAU1	R	317796631 / 113724117 317796632 / 113724118 317796633 / 113724119 317796634 / 113724120 317796635 / 113724121	28	4 - 8	1, 3, 5 - 7	TABLE 22-2	Pass	FAVORABLE
KAU1	R	317796637 / 113726184 317796639 / 113726186 317796641 / 113726188 317796643 / 113726190 317796645 / 113726192	29	4 - 8	1, 3, 5 - 7	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>Finding</i>
<i>Beam designation</i>	<i>Emi-Rcp</i>	<i>Group id./ Target Group id.</i>						
KAU2	R	317796646 / 113724127 317796647 / 113724128 317796648 / 113724129 317796649 / 113724130 317796650 / 113724131	28	4 - 8	1, 3, 5 - 7	TABLE 22-2	Pass	FAVORABLE
KAU2	R	317796651 / 113724157 317796653 / 113726204 317796655 / 113726206 317796657 / 113726208 317796659 / 113726210 317796661 / 113726212	29	4 - 8	1, 3, 5 - 7	TABLE 22-2	Pass	FAVORABLE
KAULEO	R	317796662 / 115630131 317796663 / 115630132 317796664 / 115630133 317796665 / 115630134	28	4 - 8	1, 3, 5 - 7	TABLE 22-2	Pass	FAVORABLE
KAUS	R	317796670 / 113724122 317796671 / 113724123 317796672 / 113724124 317796673 / 113724125 317796674 / 113724126	28	4 - 8	1, 3, 5 - 7	TABLE 22-2	Pass	FAVORABLE
KAUS	R	317796676 / 113726194 317796678 / 113726196 317796680 / 113726198 317796682 / 113726200 317796684 / 113726202	29	4 - 8	1, 3, 5 - 7	TABLE 22-2	Pass	FAVORABLE
KAUST	R	317796685 / 115630107 317796686 / 115630108 317796687 / 115630109 317796688 / 115630110 317796689 / 115630111	28	4 - 8	1, 3, 5 - 7	TABLE 22-2	Pass	FAVORABLE
KAUST	R	317796690 / 115630112 317796692 / 115630114 317796694 / 115630116 317796696 / 115630118 317796698 / 115630120 317796700 / 115630122	29	4 - 8	1, 3, 5 - 7	TABLE 22-2	Pass	FAVORABLE
KAD1	E	317796514 / 113724091 317796518 / 113724095 317796520 / 113733817 317796521 / 113733818 317796522 / 113733819 317796523 / 113733820	19	4 - 8	1, 3, 5 - 7	TABLE 22-1C	Pass	FAVORABLE
KAD1	E	317796515 / 113724092 317796516 / 113724093 317796517 / 113724094 317796519 / 113724152	20	4 - 8	1, 3, 5 - 7	TABLE 22-1C	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>Finding</i>
<i>Beam designation</i>	<i>Emi-Rcp</i>	<i>Group id./ Target Group id.</i>						
KAD2	E	317796533 / 113724099 317796534 / 113724100 317796535 / 113724101 317796536 / 113724102 317796537 / 113724103 317796538 / 113724154 317796539 / 113724155 317796540 / 113724156	19	4 - 8	1, 3, 5 - 7	TABLE 22-1C	Pass	FAVORABLE
KAD3	E	317796544 / 113724104 317796545 / 113724105 317796546 / 113724106 317796547 / 113724107 317796548 / 113724108	17	4 - 8	1, 3, 5 - 7	TABLE 22-3 TABLE 22-1B	Pass Pass	FAVORABLE
KAD3	E	317796549 / 113726157 317796551 / 113726159 317796553 / 113726161 317796555 / 113726163 317796557 / 113726165	18	4 - 8	1, 3, 5 - 7	TABLE 22-3 TABLE 22-1B	Pass Pass	FAVORABLE
KAD4	E	317796559 / 113724112 317796560 / 113724113 317796561 / 113724114 317796562 / 113724115 317796563 / 113724116	17	4 - 8	1, 3, 5 - 7	TABLE 22-3 TABLE 22-1B	Pass Pass	FAVORABLE
KAD4	E	317796564 / 113726173 317796566 / 113726175 317796568 / 113726177 317796570 / 113726179 317796572 / 113726181	18	4 - 8	1, 3, 5 - 7	TABLE 22-3 TABLE 22-1B	Pass Pass	FAVORABLE
KADLEO	E	317796574 / 115630127 317796575 / 115630128 317796576 / 115630129 317796577 / 115630130	19	4 - 8	1, 3, 5 - 7	TABLE 22-3 TABLE 22-1B TABLE 22-1C	Pass Pass Pass	FAVORABLE
KADSA	E	317796582 / 113724096 317796583 / 113724097	20	4 - 8	1, 3, 5 - 7	TABLE 22-1C	Pass	FAVORABLE
KADSA	E	317796584 / 113724098 317796585 / 113724153 317796586 / 113733821 317796587 / 113733822	19	4 - 8	1, 3, 5 - 7	TABLE 22-1C	Pass	FAVORABLE
KADSB	E	317796592 / 113724109 317796593 / 113724110 317796594 / 113724111	17	4 - 8	1, 3, 5 - 7	TABLE 22-3 TABLE 22-1B	Pass Pass	FAVORABLE
KADSB	E	317796595 / 113726167 317796597 / 113726169 317796599 / 113726171	18	4 - 8	1, 3, 5 - 7	TABLE 22-3 TABLE 22-1B	Pass 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>Finding</i>
<i>Beam designation</i>	<i>Emi- Rcp</i>	<i>Group id./ Target Group id.</i>						
KADST	E	317796601 / 115630123 317796602 / 115630124 317796603 / 115630125 317796604 / 115630126	19	4 - 8	1, 3, 5 - 7	TABLE 22-3 TABLE 22-1B TABLE 22-1C	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.