

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
3	↔	17800	18400	All
41	↑	27500	28500	All
42	↑	29500	30000	All
2	↓	19700	20200	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
630/630/51.9	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
0.0001	100	1

Downlink 17.8-18.6 GHz

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

Downlink 19.7-20.2 GHz

A.4.b.6.a Number of satellites transmitting to any latitude within corresponding range		
From latitude	To latitude	Number
-90	-10	4
-10	10	1
10	90	4

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

<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	319840399 / 119675918 319840400 / 119675919 319840401 / 119675920 319840402 / 119675921 319840403 / 119675922	17.8-18.3	1 - 34	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TGA1	E	319840404 / 119675966 319840405 / 119675967 319840406 / 119675968 319840407 / 119675969 319840408 / 119675970	18.3-18.6	1 - 34	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TGA2	E	319840414 / 119675923 319840415 / 119675924 319840416 / 119675925 319840417 / 119675926 319840418 / 119675927	17.8-18.3	1 - 34	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TGA2	E	319840419 / 119675971 319840420 / 119675972 319840421 / 119675973 319840422 / 119675974 319840423 / 119675975	18.3-18.6	1 - 34	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TGP1	E	319840429 / 119675928 319840430 / 119675929 319840431 / 119675930 319840432 / 119675931 319840433 / 119675932	17.8-18.3	1 - 34	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TGP1	E	319840434 / 119675976 319840435 / 119675977 319840436 / 119675978 319840437 / 119675979 319840438 / 119675980	18.3-18.6	1 - 34	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TGP2	E	319840444 / 119675933 319840445 / 119675934 319840446 / 119675935 319840447 / 119675936 319840448 / 119675937	17.8-18.3	1 - 34	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TGP2	E	319840449 / 119675981 319840450 / 119675982 319840451 / 119675983 319840452 / 119675984 319840453 / 119675985	18.3-18.6	1 - 34	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TUA1	E	319840459 / 119675938 319840460 / 119675939 319840461 / 119675940 319840462 / 119675941 319840463 / 119675942 319840464 / 119675943 319840465 / 119675944	17.8-18.3	1 - 34	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TUA1	E	319840466 / 119675986 319840467 / 119675987 319840468 / 119675988 319840469 / 119675989 319840470 / 119675990 319840471 / 119675991 319840472 / 119675992	18.3-18.6	1 - 34	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TUA2	E	319840473 / 119675945 319840474 / 119675946 319840475 / 119675947 319840476 / 119675948 319840477 / 119675949 319840478 / 119675950 319840479 / 119675951	17.8-18.3	1 - 34	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TUA2	E	319840480 / 119675993 319840481 / 119675994 319840482 / 119675995 319840483 / 119675996 319840484 / 119675997 319840485 / 119675998 319840486 / 119675999	18.3-18.6	1 - 34	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable

TUA3	E	319840487 / 119675952 319840488 / 119675953 319840489 / 119675954 319840490 / 119675955 319840491 / 119675956 319840492 / 119675957 319840493 / 119675958	17.8-18.3	1 - 34	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TUA3	E	319840494 / 119676000 319840495 / 119676001 319840496 / 119676002 319840497 / 119676003 319840498 / 119676004 319840499 / 119676005 319840500 / 119676006	18.3-18.6	1 - 34	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TUA4	E	319840501 / 119675959 319840502 / 119675960 319840503 / 119675961 319840504 / 119675962 319840505 / 119675963 319840506 / 119675964 319840507 / 119675965	17.8-18.3	1 - 34	1, 3	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
TUA4	E	319840508 / 119676007 319840509 / 119676008 319840510 / 119676009 319840511 / 119676010 319840512 / 119676011 319840513 / 119676012 319840514 / 119676013	18.3-18.6	1 - 34	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./ 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	319840409 / 119676150 319840410 / 119676151 319840411 / 119676152 319840412 / 119676153 319840413 / 119676154	19.7-20.2	1 - 34	2	TABLE 22-1C	Pass	Favorable
TGA2	E	319840424 / 119676155 319840425 / 119676156 319840426 / 119676157 319840427 / 119676158 319840428 / 119676159	19.7-20.2	1 - 34	2	TABLE 22-1C	Pass	Favorable
TGP1	E	319840439 / 119676160 319840440 / 119676161 319840441 / 119676162 319840442 / 119676163 319840443 / 119676164	19.7-20.2	1 - 34	2	TABLE 22-1C	Pass	Favorable
TGP2	E	319840454 / 119676165 319840455 / 119676166 319840456 / 119676167 319840457 / 119676168 319840458 / 119676169	19.7-20.2	1 - 34	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./ 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	319840515 / 119676424 319840516 / 119676425	27.5-28.05	1 - 34	41	TABLE 22-2	Pass	Favorable
RGA1	R	319840517 / 119676172 319840518 / 119676173 319840519 / 119676174 319840520 / 119676175 319840521 / 119676176	27.5-28.35	1 - 34	41	TABLE 22-2	Pass	Favorable
RGA1	R	319840522 / 119676192 319840523 / 119676193 319840524 / 119676194 319840525 / 119676195 319840526 / 119676196	28.35-28.5	1 - 34	41	TABLE 22-2	Pass	Favorable
RGA1	R	319840532 / 119676376 319840533 / 119676377	29.5-30	1 - 34	42	TABLE 22-2	Pass	Favorable

		319840534 / 119676378 319840535 / 119676379 319840536 / 119676380						
RGA2	R	319840537 / 119676177 319840538 / 119676178 319840539 / 119676179 319840540 / 119676180 319840541 / 119676181	27.5-28.35	1 - 34	41	TABLE 22-2	Pass	Favorable
RGA2	R	319840542 / 119676197 319840543 / 119676198 319840544 / 119676199 319840545 / 119676200 319840546 / 119676201	28.35-28.5	1 - 34	41	TABLE 22-2	Pass	Favorable
RGA2	R	319840552 / 119676381 319840553 / 119676382 319840554 / 119676383 319840555 / 119676384 319840556 / 119676385	29.5-30	1 - 34	42	TABLE 22-2	Pass	Favorable
RGP1	R	319840557 / 119676182 319840558 / 119676183 319840559 / 119676184 319840560 / 119676185 319840561 / 119676186	27.5-28.35	1 - 34	41	TABLE 22-2	Pass	Favorable
RGP1	R	319840562 / 119676202 319840563 / 119676203 319840564 / 119676204 319840565 / 119676205 319840566 / 119676206	28.35-28.5	1 - 34	41	TABLE 22-2	Pass	Favorable
RGP1	R	319840572 / 119676386 319840573 / 119676387 319840574 / 119676388 319840575 / 119676389 319840576 / 119676390	29.5-30	1 - 34	42	TABLE 22-2	Pass	Favorable
RGP2	R	319840577 / 119676187 319840578 / 119676188 319840579 / 119676189 319840580 / 119676190 319840581 / 119676191	27.5-28.35	1 - 34	41	TABLE 22-2	Pass	Favorable
RGP2	R	319840582 / 119676207 319840583 / 119676208 319840584 / 119676209 319840585 / 119676210 319840586 / 119676211	28.35-28.5	1 - 34	41	TABLE 22-2	Pass	Favorable
RGP2	R	319840592 / 119676391 319840593 / 119676392 319840594 / 119676393 319840595 / 119676394 319840596 / 119676395	29.5-30	1 - 34	42	TABLE 22-2	Pass	Favorable
RUA1	R	319840597 / 119676212 319840598 / 119676213 319840599 / 119676214 319840600 / 119676215 319840601 / 119676216 319840602 / 119676217 319840603 / 119676218	28.35-28.5	1 - 34	41	TABLE 22-2	Pass	Favorable
RUA1	R	319840611 / 119676396 319840612 / 119676397 319840613 / 119676398 319840614 / 119676399 319840615 / 119676400 319840616 / 119676401 319840617 / 119676402	29.5-30	1 - 34	42	TABLE 22-2	Pass	Favorable
RUA2	R	319840618 / 119676219 319840619 / 119676220 319840620 / 119676221 319840621 / 119676222 319840622 / 119676223 319840623 / 119676224 319840624 / 119676225	28.35-28.5	1 - 34	41	TABLE 22-2	Pass	Favorable
RUA2	R	319840632 / 119676403 319840633 / 119676404 319840634 / 119676405 319840635 / 119676406	29.5-30	1 - 34	42	TABLE 22-2	Pass	Favorable

		319840636 / 119676407 319840637 / 119676408 319840638 / 119676409						
RUA3	R	319840639 / 119676226 319840640 / 119676227 319840641 / 119676228 319840642 / 119676229 319840643 / 119676230 319840644 / 119676231 319840645 / 119676232	28.35-28.5	1 - 34	41	TABLE 22-2	Pass	Favorable
RUA3	R	319840653 / 119676410 319840654 / 119676411 319840655 / 119676412 319840656 / 119676413 319840657 / 119676414 319840658 / 119676415 319840659 / 119676416	29.5-30	1 - 34	42	TABLE 22-2	Pass	Favorable
RUA4	R	319840660 / 119676233 319840661 / 119676234 319840662 / 119676235 319840663 / 119676236 319840664 / 119676237 319840665 / 119676238 319840666 / 119676239	28.35-28.5	1 - 34	41	TABLE 22-2	Pass	Favorable
RUA4	R	319840674 / 119676417 319840675 / 119676418 319840676 / 119676419 319840677 / 119676420 319840678 / 119676421 319840679 / 119676422 319840680 / 119676423	29.5-30	1 - 34	42	TABLE 22-2	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>
RGA1	R	319840527 / 119676240 319840528 / 119676241 319840529 / 119676242 319840530 / 119676243 319840531 / 119676244	28.5-28.6	1 - 34	43	TABLE 22-2	Pass	Favorable
RGA2	R	319840547 / 119676245 319840548 / 119676246 319840549 / 119676247 319840550 / 119676248 319840551 / 119676249	28.5-28.6	1 - 34	43	TABLE 22-2	Pass	Favorable
RGP1	R	319840567 / 119676250 319840568 / 119676251 319840569 / 119676252 319840570 / 119676253 319840571 / 119676254	28.5-28.6	1 - 34	43	TABLE 22-2	Pass	Favorable
RGP2	R	319840587 / 119676255 319840588 / 119676256 319840589 / 119676257 319840590 / 119676258 319840591 / 119676259	28.5-28.6	1 - 34	43	TABLE 22-2	Pass	Favorable
RUA1	R	319840604 / 119676260 319840605 / 119676261 319840606 / 119676262 319840607 / 119676263 319840608 / 119676264 319840609 / 119676265 319840610 / 119676266	28.5-28.6	1 - 34	43	TABLE 22-2	Pass	Favorable
RUA2	R	319840625 / 119676267 319840626 / 119676268 319840627 / 119676269 319840628 / 119676270 319840629 / 119676271 319840630 / 119676272 319840631 / 119676273	28.5-28.6	1 - 34	43	TABLE 22-2	Pass	Favorable
RUA3	R	319840646 / 119676274 319840647 / 119676275	28.5-28.6	1 - 34	43	TABLE 22-2	Pass	Favorable

		319840648 / 119676276 319840649 / 119676277 319840650 / 119676278 319840651 / 119676279 319840652 / 119676280						
RUA4	R	319840667 / 119676281 319840668 / 119676282 319840669 / 119676283 319840670 / 119676284 319840671 / 119676285 319840672 / 119676286 319840673 / 119676287	28.5-28.6	1 - 34	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.