

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
2	↑	17300	17700	All
3	↔	17800	18400	All
4	↑	27500	30000	All
5401	↓	17800	18600	12 - 83 (sat IDs: All)
5402	↓	19700	20200	12 - 83 (sat IDs: All)
5601	↓	17800	18600	84 - 93 (sat IDs: All)
5602	↓	19700	20200	84 - 93 (sat IDs: All)
5701	↓	17800	18600	94 - 129 (sat IDs: All)
5702	↓	19700	20200	94 - 129 (sat IDs: 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
540/540/53.2 560/560/97.6 570/570/70	No keeping	Default

Uplink

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
1E-05	316	8

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	8

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	90	1

Group table

Beam(s)	Direction	Minimum frequency, MHz	Maximum frequency, MHz	A.4.b.7.cbis Minimum elevation angle
UE283Z, UE299Z, UE319Z, UE344Z, UE379Z, UE423Z	R	29500	30000	5
UC283Z, UC299Z, UC319Z, UC344Z, UC379Z, UC423Z	R	27500	28600	5
UA379Z, UA423Z, UB379Z, UB423Z	R	17300	17700	5
UE283Y, UE299Y, UE319Y, UE344Y, UE379Y, UE423Y	R	29500	30000	25
UC283Y, UC299Y, UC319Y, UC344Y, UC379Y, UC423Y	R	27500	28600	25
UA379Y, UA423Y, UB379Y, UB423Y	R	17300	17700	25
UE283, UE299, UE319, UE344, UE379, UE423	R	29500	30000	40
UC283, UC299, UC319, UC344, UC379, UC423	R	27500	28600	40
UA379, UA423, UB379, UB423	R	17300	17700	40

DD283Z, DD299Z, DD319Z, DD344Z, DD379Z, DA423Z	E	19700	20200	5
DA283Z, DA299Z, DA319Z, DA344Z, DA379Z, DA423Z	E	17700	18600	5
DD283Y, DD299Y, DD319Y, DD344Y, DD379Y, DA423Y	E	19700	20200	25
DA283Y, DA299Y, DA319Y, DA344Y, DA379Y, DA423Y	E	17700	18600	25
DD283, DD299, DD319, DD344, DD379, DD423	E	19700	20200	40
DA283Z, DA2833, DA2992, DA2993, DA3192, DA3193, DA3442, DA3443, DA3792, DA3793, DA4232, DA4233	E	17700	18600	40

Results

<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>						
UA379Y	R	321678925 321678926 321678927 321679829 321679830 321679831 321679832	17.3-17.7	12 - 129		TABLE 22-2	Pass	Favorable
UA379Z	R	321678928 321678929 321678930 321679833 321679834 321679835 321679836	17.3-17.7	84 - 129		TABLE 22-2	Pass	Favorable
UA423Y	R	321678931 321678932 321678933 321679837 321679838 321679839 321679840	17.3-17.7	12 - 129		TABLE 22-2	Pass	Favorable
UA423Z	R	321678934 321678935 321678936 321679841 321679842 321679843 321679844	17.3-17.7	84 - 129		TABLE 22-2	Pass	Favorable
UB379Y	R	321678937 321678938 321678939 321679845 321679846 321679847 321679848	17.3-17.7	12 - 129		TABLE 22-2	Pass	Favorable
UB379Z	R	321678940 321678941 321678942 321679849 321679850 321679851 321679852	17.3-17.7	84 - 129		TABLE 22-2	Pass	Favorable
UB423Y	R	321678943 321678944 321678945 321679853 321679854 321679855 321679856	17.3-17.7	12 - 129		TABLE 22-2	Pass	Favorable

UB423Z	R	321678946 321678947 321678948 321679857 321679858 321679859 321679860	17.3-17.7	84 - 129		TABLE 22-2	Pass	Favorable
UC283Y	R	321678949 321678950 321678951 321678952 321678953 321678954 321678955 321679861 321679862 321679863 321679864	27.5-28.6	12 - 129		TABLE 22-2	Pass	Favorable
UC283Z	R	321678956 321678957 321678958 321678959 321678960 321678961 321678962 321679865 321679866 321679867 321679868	27.5-28.6	84 - 129		TABLE 22-2	Pass	Favorable
UC299Y	R	321678963 321678964 321678965 321678966 321678967 321678968 321678969 321679869 321679870 321679871 321679872	27.5-28.6	12 - 129		TABLE 22-2	Pass	Favorable
UC299Z	R	321678970 321678971 321678972 321678973 321678974 321678975 321678976 321679873 321679874 321679875 321679876	27.5-28.6	84 - 129		TABLE 22-2	Pass	Favorable
UC319Y	R	321678977 321678978 321678979 321678980 321678981 321678982 321678983 321679877 321679878 321679879 321679880	27.5-28.6	12 - 129		TABLE 22-2	Pass	Favorable
UC319Z	R	321678984 321678985 321678986 321678987 321678988 321678989 321678990 321679881 321679882 321679883 321679884	27.5-28.6	84 - 129		TABLE 22-2	Pass	Favorable

UC344Y	R	321678991 321678992 321678993 321678994 321678995 321678996 321678997 321679885 321679886 321679887 321679888	27.5-28.6	12 - 129		TABLE 22-2	Pass	Favorable
UC344Z	R	321678998 321678999 321679000 321679001 321679002 321679003 321679004 321679889 321679890 321679891 321679892	27.5-28.6	84 - 129		TABLE 22-2	Pass	Favorable
UC379Y	R	321679005 321679006 321679007 321679008 321679009 321679010 321679011 321679893 321679894 321679895 321679896	27.5-28.6	12 - 129		TABLE 22-2	Pass	Favorable
UC379Z	R	321679012 321679013 321679014 321679015 321679016 321679017 321679018 321679897 321679898 321679899 321679900	27.5-28.6	84 - 129		TABLE 22-2	Pass	Favorable
UC423Y	R	321679019 321679020 321679021 321679022 321679023 321679024 321679025 321679901 321679902 321679903 321679904	27.5-28.6	12 - 129		TABLE 22-2	Pass	Favorable
UC423Z	R	321679026 321679027 321679028 321679029 321679030 321679031 321679032 321679905 321679906 321679907 321679908	27.5-28.6	84 - 129		TABLE 22-2	Pass	Favorable
UE283Y	R	321679117 321679118 321679119 321679120 321679121 321679122 321679123	29.5-30	12 - 129		TABLE 22-2	Pass	Favorable

		321679957 321679958 321679959 321679960						
UE283Z	R	321679124 321679125 321679126 321679127 321679128 321679129 321679130 321679961 321679962 321679963 321679964	29.5-30	84 - 129		TABLE 22-2	Pass	Favorable
UE299Y	R	321679131 321679132 321679133 321679134 321679135 321679136 321679137 321679965 321679966 321679967 321679968	29.5-30	12 - 129		TABLE 22-2	Pass	Favorable
UE299Z	R	321679142 321679143 321679144 321679145 321679146 321679147 321679148 321679969 321679970 321679971 321679972	29.5-30	84 - 129		TABLE 22-2	Pass	Favorable
UE319Y	R	321679153 321679154 321679155 321679156 321679157 321679158 321679159 321679973 321679974 321679975 321679976	29.5-30	12 - 129		TABLE 22-2	Pass	Favorable
UE319Z	R	321679160 321679161 321679162 321679163 321679164 321679165 321679166 321679977 321679978 321679979 321679980	29.5-30	84 - 129		TABLE 22-2	Pass	Favorable
UE344Y	R	321679167 321679168 321679169 321679170 321679171 321679172 321679173 321679981 321679982 321679983 321679984	29.5-30	12 - 129		TABLE 22-2	Pass	Favorable
UE344Z	R	321679174 321679175 321679176	29.5-30	84 - 129		TABLE 22-2	Pass	Favorable

		321679177 321679178 321679179 321679180 321679985 321679986 321679987 321679988						
UE379Y	R	321679181 321679182 321679183 321679184 321679185 321679186 321679187 321679989 321679990 321679991 321679992	29.5-30	12 - 129		TABLE 22-2	Pass	Favorable
UE379Z	R	321679192 321679193 321679194 321679195 321679196 321679197 321679198 321679993 321679994 321679995 321679996	29.5-30	84 - 129		TABLE 22-2	Pass	Favorable
UE423Y	R	321679203 321679204 321679205 321679206 321679207 321679208 321679209 321679997 321679998 321679999 321680000	29.5-30	12 - 129		TABLE 22-2	Pass	Favorable
UE423Z	R	321679210 321679211 321679212 321679213 321679214 321679215 321679216 321680001 321680002 321680003 321680004	29.5-30	84 - 129		TABLE 22-2	Pass	Favorable
DA283Y	E	321679225 321679226 321679227 321679228 321679229 321679230 321679231 321680021 321680025 321680029 321680033	17.95-18.2	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA283Y	E	321679232 321679233 321679234 321679235 321679236 321679237 321679238 321679239 321679240 321679241	17.7-17.95	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable

		321679242 321679243 321679244 321679245 321680022 321680023 321680026 321680027 321680030 321680031 321680034 321680035						
DA283Y	E	321679246 321679247 321679248 321679249 321679250 321679251 321679252 321680024 321680028 321680032 321680036	18.2-18.6	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA283Z	E	321679253 321679254 321679255 321679256 321679257 321679258 321679259 321680037 321680041 321680045 321680049	17.95-18.2	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA283Z	E	321679260 321679261 321679262 321679263 321679264 321679265 321679266 321679267 321679268 321679269 321679270 321679271 321679272 321679273 321680038 321680039 321680042 321680043 321680046 321680047 321680050 321680051	17.7-17.95	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA283Z	E	321679274 321679275 321679276 321679277 321679278 321679279 321679280 321680040 321680044 321680048 321680052	18.2-18.6	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA299Y	E	321679281 321679282 321679283 321679284 321679285 321679286	17.95-18.2	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable

		321679287 321680053 321680057 321680061 321680065						
DA299Y	E	321679288 321679289 321679290 321679291 321679292 321679293 321679294 321679295 321679296 321679297 321679298 321679299 321679300 321679301 321680054 321680055 321680058 321680059 321680062 321680063 321680066 321680067	17.7-17.95	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA299Y	E	321679302 321679303 321679304 321679305 321679306 321679307 321679308 321680056 321680060 321680064 321680068	18.2-18.6	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA299Z	E	321679309 321679310 321679311 321679312 321679313 321679314 321679315 321680069 321680073 321680077 321680081	17.95-18.2	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA299Z	E	321679316 321679317 321679318 321679319 321679320 321679321 321679322 321679323 321679324 321679325 321679326 321679327 321679328 321679329 321680070 321680071 321680074 321680075 321680078 321680079 321680082 321680083	17.7-17.95	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable

DA299Z	E	321679330 321679331 321679332 321679333 321679334 321679335 321679336 321680072 321680076 321680080 321680084	18.2-18.6	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA319Y	E	321679337 321679338 321679339 321679340 321679341 321679342 321679343 321680085 321680089 321680093 321680097	17.95-18.2	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA319Y	E	321679344 321679345 321679346 321679347 321679348 321679349 321679350 321679351 321679352 321679353 321679354 321679355 321679356 321679357 321680086 321680087 321680090 321680091 321680094 321680095 321680098 321680099	17.7-17.95	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA319Y	E	321679358 321679359 321679360 321679361 321679362 321679363 321679364 321680088 321680092 321680096 321680100	18.2-18.6	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA319Z	E	321679365 321679366 321679367 321679368 321679369 321679370 321679371 321680101 321680105 321680109 321680113	17.95-18.2	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA319Z	E	321679372 321679373 321679374 321679375 321679376 321679377 321679378	17.7-17.95	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable

		321679379 321679380 321679381 321679382 321679383 321679384 321679385 321680102 321680103 321680106 321680107 321680110 321680111 321680114 321680115						
DA319Z	E	321679386 321679387 321679388 321679389 321679390 321679391 321679392 321680104 321680108 321680112 321680116	18.2-18.6	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA344Y	E	321679393 321679394 321679395 321679396 321679397 321679398 321679399 321680117 321680121 321680125 321680129	17.95-18.2	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA344Y	E	321679400 321679401 321679402 321679403 321679404 321679405 321679406 321679407 321679408 321679409 321679410 321679411 321679412 321679413 321680118 321680119 321680122 321680123 321680126 321680127 321680130 321680131	17.7-17.95	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA344Y	E	321679414 321679415 321679416 321679417 321679418 321679419 321679420 321680120 321680124 321680128 321680132	18.2-18.6	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA344Z	E	321679421 321679422 321679423	17.95-18.2	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable

		321679424 321679425 321679426 321679427 321680133 321680137 321680141 321680145						
DA344Z	E	321679428 321679429 321679430 321679431 321679432 321679433 321679434 321679435 321679436 321679437 321679438 321679439 321679440 321679441 321680134 321680135 321680138 321680139 321680142 321680143 321680146 321680147	17.7-17.95	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA344Z	E	321679442 321679443 321679444 321679445 321679446 321679447 321679448 321680136 321680140 321680144 321680148	18.2-18.6	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA379Y	E	321679449 321679450 321679451 321679452 321679453 321679454 321679455 321680149 321680153 321680157 321680161	17.95-18.2	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA379Y	E	321679456 321679457 321679458 321679459 321679460 321679461 321679462 321679463 321679464 321679465 321679466 321679467 321679468 321679469 321680150 321680151 321680154 321680155 321680158 321680159	17.7-17.95	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable

		321680162 321680163						
DA379Y	E	321679470 321679471 321679472 321679473 321679474 321679475 321679476 321680152 321680156 321680160 321680164	18.2-18.6	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA379Z	E	321679477 321679478 321679479 321679480 321679481 321679482 321679483 321680165 321680169 321680173 321680177	17.95-18.2	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA379Z	E	321679484 321679485 321679486 321679487 321679488 321679489 321679490 321679491 321679492 321679493 321679494 321679495 321679496 321679497 321680166 321680167 321680170 321680171 321680174 321680175 321680178 321680179	17.7-17.95	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA379Z	E	321679498 321679499 321679500 321679501 321679502 321679503 321679504 321680168 321680172 321680176 321680180	18.2-18.6	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA423Y	E	321679505 321679506 321679507 321679508 321679509 321679510 321679511 321680181 321680185 321680189 321680193	17.95-18.2	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA423Y	E	321679512 321679513 321679514 321679515 321679516	17.7-17.95	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable

		321679517 321679518 321679519 321679520 321679521 321679522 321679523 321679524 321679525 321680182 321680183 321680186 321680187 321680190 321680191 321680194 321680195						
DA423Y	E	321679526 321679527 321679528 321679529 321679530 321679531 321679532 321680184 321680188 321680192 321680196	18.2-18.6	12 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA423Z	E	321679533 321679534 321679535 321679536 321679537 321679538 321679539 321680197 321680201 321680205 321680209	17.95-18.2	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA423Z	E	321679540 321679541 321679542 321679543 321679544 321679545 321679546 321679547 321679548 321679549 321679550 321679551 321679552 321679553 321680198 321680199 321680202 321680203 321680206 321680207 321680210 321680211	17.7-17.95	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable
DA423Z	E	321679554 321679555 321679556 321679557 321679558 321679559 321679560 321680200 321680204 321680208 321680212	18.2-18.6	84 - 129	3, 5401, 5601, 5701	TABLE 22-1B TABLE 22-3	Pass Pass	Favorable

DD283Y	E	321679729 321679730 321679731 321679732 321679733 321679734 321679735 321680309 321680310 321680311 321680312	19.7-20.2	12 - 129		TABLE 22-1C	Pass	Favorable
DD283Z	E	321679736 321679737 321679738 321679739 321679740 321679741 321679742 321680313 321680314 321680315 321680316	19.7-20.2	84 - 129		TABLE 22-1C	Pass	Favorable
DD299Y	E	321679743 321679744 321679745 321679746 321679747 321679748 321679749 321680317 321680318 321680319 321680320	19.7-20.2	12 - 129		TABLE 22-1C	Pass	Favorable
DD299Z	E	321679754 321679755 321679756 321679757 321679758 321679759 321679760 321680321 321680322 321680323 321680324	19.7-20.2	84 - 129		TABLE 22-1C	Pass	Favorable
DD319Y	E	321679765 321679766 321679767 321679768 321679769 321679770 321679771 321680325 321680326 321680327 321680328	19.7-20.2	12 - 129		TABLE 22-1C	Pass	Favorable
DD319Z	E	321679772 321679773 321679774 321679775 321679776 321679777 321679778 321680329 321680330 321680331 321680332	19.7-20.2	84 - 129		TABLE 22-1C	Pass	Favorable
DD344Y	E	321679779 321679780 321679781 321679782 321679783 321679784 321679785	19.7-20.2	12 - 129		TABLE 22-1C	Pass	Favorable

		321680333 321680334 321680335 321680336						
DD344Z	E	321679786 321679787 321679788 321679789 321679790 321679791 321679792 321680337 321680338 321680339 321680340	19.7-20.2	84 - 129		TABLE 22-1C	Pass	Favorable
DD379Y	E	321679793 321679794 321679795 321679796 321679797 321679798 321679799 321680341 321680342 321680343 321680344	19.7-20.2	12 - 129		TABLE 22-1C	Pass	Favorable
DD379Z	E	321679804 321679805 321679806 321679807 321679808 321679809 321679810 321680345 321680346 321680347 321680348	19.7-20.2	84 - 129		TABLE 22-1C	Pass	Favorable
DD423Y	E	321679815 321679816 321679817 321679818 321679819 321679820 321679821 321680349 321680350 321680351 321680352	19.7-20.2	12 - 129		TABLE 22-1C	Pass	Favorable
DD423Z	E	321679822 321679823 321679824 321679825 321679826 321679827 321679828 321680353 321680354 321680355 321680356	19.7-20.2	84 - 129		TABLE 22-1C	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.