

## Description of EPFD validation and results of examination

### Scenario Ku-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>						
URA	R	317856168 / 116806018 317856169 / 116806019 317856170 / 116806020 317856171 / 116806021 317856172 / 116806022	12.75-13.25	1 - 18	2	TABLE 22-2	Pass	Favorable
URA	R	317856173 / 116806107 317856174 / 116806108 317856175 / 116806109 317856176 / 116806110	14-14.5	1 - 18	2	TABLE 22-2	Pass	Favorable
URA	R	317856177 / 116806111	13.75-14.5	1 - 18	2	TABLE 22-2	Pass	Favorable
URB	R	317856178 / 116806023 317856179 / 116806024 317856180 / 116806025 317856181 / 116806026 317856182 / 116806027	12.75-13.25	1 - 18	2	TABLE 22-2	Pass	Favorable
URB	R	317856183 / 116806112 317856184 / 116806113 317856185 / 116806114 317856186 / 116806115	14-14.5	1 - 18	2	TABLE 22-2	Pass	Favorable
URB	R	317856187 / 116806116	13.75-14.5	1 - 18	2	TABLE 22-2	Pass	Favorable
URC	R	317856188 / 116806028 317856189 / 116806029 317856190 / 116806030 317856191 / 116806031 317856192 / 116806032	12.75-13.25	1 - 18	2	TABLE 22-2	Pass	Favorable
URC	R	317856193 / 116806117 317856194 / 116806118 317856195 / 116806119 317856196 / 116806120	14-14.5	1 - 18	2	TABLE 22-2	Pass	Favorable
URC	R	317856197 / 116806121	13.75-14.5	1 - 18	2	TABLE 22-2	Pass	Favorable
UTA	E	317855978 / 116806033 317855980 / 116806035 317855982 / 116806037 317855984 / 116806039 317855986 / 116806041	10.7-11.45	1 - 18	1, 3 - 10	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
UTA	E	317855979 / 116806034 317855981 / 116806036 317855983 / 116806038 317855985 / 116806040 317855987 / 116806042 317856003 / 116829706 317856004 / 116829707 317856005 / 116829708 317856006 / 116829709 317856007 / 116829710	11.7-12.2	1 - 18	3 - 10	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D	Pass Pass Pass Pass	Favorable
UTA	E	317855988 / 116806122 317855991 / 116806125 317855994 / 116806128 317855997 / 116806131 317856000 / 116806134	10.95-11.2	1 - 18	1, 3 - 10	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
UTA	E	317855989 / 116806123 317855992 / 116806126 317855995 / 116806129 317855998 / 116806132 317856001 / 116806135	11.45-11.7	1 - 18	1, 3 - 10	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
UTA	E	317855990 / 116806124 317855993 / 116806127 317855996 / 116806130 317855999 / 116806133 317856002 / 116806136	12.2-12.45	1 - 18	3 - 10	RR 22.5C8 TABLE 22-1D RR 22.5C4 TABLE 22-1A	Pass Pass Pass Pass	Favorable
UTA	E	317856008 / 116829712 317856010 / 116829715 317856013 / 116829719	12.2-12.7	1 - 18	1, 3 - 10	RR 22.5C8 TABLE 22-1D RR 22.5C4	Pass Pass Pass	Favorable

		317856015 / 116829722 317856017 / 116829737				TABLE 22-1A TABLE 22-3	Pass Pass	
UTA	E	317856009 / 116829713 317856011 / 116829716 317856012 / 116829718 317856014 / 116829721 317856016 / 116829736	12.5-12.75	1 - 18	1, 3 - 10	RR 22.5C8 TABLE 22-1D RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass Pass Pass	Favorable
UTA	E	317856018 / 116830109 317856019 / 116830110 317856020 / 116830111 317856021 / 116830112 317856022 / 116830113 317856023 / 116830124 317856024 / 116830125 317856025 / 116830126 317856026 / 116830127 317856027 / 116830128	12.45-12.7	1 - 18	1, 3 - 10	RR 22.5C8 TABLE 22-1D RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass Pass Pass	Favorable
UTB	E	317856028 / 116806043 317856030 / 116806045 317856032 / 116806047 317856034 / 116806049 317856036 / 116806051	10.7-11.45	1 - 18	1, 3 - 10	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
UTB	E	317856029 / 116806044 317856031 / 116806046 317856033 / 116806048 317856035 / 116806050 317856037 / 116806052 317856053 / 116829738 317856054 / 116829739 317856055 / 116829740 317856056 / 116829741 317856057 / 116829742	11.7-12.2	1 - 18	3 - 10	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D	Pass Pass Pass Pass	Favorable
UTB	E	317856038 / 116806137 317856041 / 116806140 317856044 / 116806143 317856047 / 116806146 317856050 / 116806149	10.95-11.2	1 - 18	1, 3 - 10	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
UTB	E	317856039 / 116806138 317856042 / 116806141 317856045 / 116806144 317856048 / 116806147 317856051 / 116806150	11.45-11.7	1 - 18	1, 3 - 10	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
UTB	E	317856040 / 116806139 317856043 / 116806142 317856046 / 116806145 317856049 / 116806148 317856052 / 116806151	12.2-12.45	1 - 18	3 - 10	RR 22.5C8 TABLE 22-1D RR 22.5C4 TABLE 22-1A	Pass Pass Pass Pass	Favorable
UTB	E	317856058 / 116829744 317856060 / 116829747 317856062 / 116829750 317856064 / 116829753 317856066 / 116829756	12.5-12.75	1 - 18	1, 3 - 10	RR 22.5C8 TABLE 22-1D RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass Pass Pass	Favorable
UTB	E	317856059 / 116829745 317856061 / 116829748 317856063 / 116829751 317856065 / 116829754 317856067 / 116829757	12.2-12.7	1 - 18	1, 3 - 10	RR 22.5C8 TABLE 22-1D RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass Pass Pass	Favorable
UTB	E	317856068 / 116830114 317856069 / 116830115 317856070 / 116830116 317856071 / 116830117 317856072 / 116830118 317856073 / 116830129 317856074 / 116830130 317856075 / 116830131 317856076 / 116830132 317856077 / 116830133	12.45-12.7	1 - 18	1, 3 - 10	RR 22.5C8 TABLE 22-1D RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass Pass Pass	Favorable
UTC	E	317856078 / 116806053 317856080 / 116806055 317856082 / 116806057 317856084 / 116806059 317856086 / 116806061	10.7-11.45	1 - 18	1, 3 - 10	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable

UTC	E	317856079 / 116806054 317856081 / 116806056 317856083 / 116806058 317856085 / 116806060 317856087 / 116806062 317856103 / 116829758 317856104 / 116829759 317856105 / 116829760 317856106 / 116829761 317856107 / 116829762	11.7-12.2	1 - 18	3 - 10	RR 22.5C4 RR 22.5C8 TABLE 22-1A TABLE 22-1D	Pass Pass Pass Pass	Favorable
UTC	E	317856088 / 116806152 317856091 / 116806155 317856094 / 116806158 317856097 / 116806161 317856100 / 116806164	10.95-11.2	1 - 18	1, 3 - 10	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
UTC	E	317856089 / 116806153 317856092 / 116806156 317856095 / 116806159 317856098 / 116806162 317856101 / 116806165	11.45-11.7	1 - 18	1, 3 - 10	RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass	Favorable
UTC	E	317856090 / 116806154 317856093 / 116806157 317856096 / 116806160 317856099 / 116806163 317856102 / 116806166	12.2-12.45	1 - 18	3 - 10	RR 22.5C8 TABLE 22-1D RR 22.5C4 TABLE 22-1A	Pass Pass Pass Pass	Favorable
UTC	E	317856108 / 116829764 317856110 / 116829767 317856112 / 116829770 317856114 / 116829773 317856116 / 116829776	12.5-12.75	1 - 18	1, 3 - 10	RR 22.5C8 TABLE 22-1D RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass Pass Pass	Favorable
UTC	E	317856109 / 116829765 317856111 / 116829768 317856113 / 116829771 317856115 / 116829774 317856117 / 116829777	12.2-12.7	1 - 18	1, 3 - 10	RR 22.5C8 TABLE 22-1D RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass Pass Pass	Favorable
UTC	E	317856118 / 116830119 317856119 / 116830120 317856120 / 116830121 317856121 / 116830122 317856122 / 116830123 317856123 / 116830134 317856124 / 116830135 317856125 / 116830136 317856126 / 116830137 317856127 / 116830138	12.45-12.7	1 - 18	1, 3 - 10	RR 22.5C8 TABLE 22-1D RR 22.5C4 TABLE 22-1A TABLE 22-3	Pass Pass Pass Pass Pass Pass	Favorable

**Scenario Ka-band Service links**

<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>
GRA	R	317856128 / 116806063 317856129 / 116806064 317856130 / 116806065 317856131 / 116806066 317856132 / 116806067	27.5-28.6	1 - 18	2	TABLE 22-2	Pass	Favorable
GRA	R	317856133 / 116806168 317856134 / 116806170 317856135 / 116806172 317856136 / 116806174 317856137 / 116806176	29.5-30	1 - 18	2	TABLE 22-2	Pass	Favorable
GRB	R	317856138 / 116806068 317856139 / 116806069 317856140 / 116806070 317856141 / 116806071 317856142 / 116806072	27.5-28.6	1 - 18	2	TABLE 22-2	Pass	Favorable
GRB	R	317856143 / 116806178 317856144 / 116806180 317856145 / 116806182 317856146 / 116806184 317856147 / 116806186	29.5-30	1 - 18	2	TABLE 22-2	Pass	Favorable

GRC	R	317856148 / 116806073 317856149 / 116806074 317856150 / 116806075 317856151 / 116806076 317856152 / 116806077	27.5-28.6	1 - 18	2	TABLE 22-2	Pass	Favorable
GRC	R	317856153 / 116806188 317856154 / 116806190 317856155 / 116806192 317856156 / 116806194 317856157 / 116806196	29.5-30	1 - 18	2	TABLE 22-2	Pass	Favorable
GRD	R	317856158 / 116806078 317856159 / 116806079 317856160 / 116806080 317856161 / 116806081 317856162 / 116806082	27.5-28.6	1 - 18	2	TABLE 22-2	Pass	Favorable
GRD	R	317856163 / 116806198 317856164 / 116806200 317856165 / 116806202 317856166 / 116806204 317856167 / 116806206	29.5-30	1 - 18	2	TABLE 22-2	Pass	Favorable
GTA	E	317855898 / 116806083 317855899 / 116806084 317855900 / 116806085 317855901 / 116806086 317855902 / 116806087	17.7-17.95	1 - 18	1, 3	TABLE 22-3 TABLE 22-1B	Pass Pass	Favorable
GTA	E	317855903 / 116806207 317855906 / 116806211 317855909 / 116806215 317855912 / 116806219 317855915 / 116806223	17.8-18.3	1 - 18	1, 3	TABLE 22-3 TABLE 22-1B	Pass Pass	Favorable
GTA	E	317855904 / 116806208 317855907 / 116806212 317855910 / 116806216 317855913 / 116806220 317855916 / 116806224	18.3-18.6	1 - 18	1, 3	TABLE 22-3 TABLE 22-1B	Pass Pass	Favorable
GTA	E	317855905 / 116806210 317855908 / 116806214 317855911 / 116806218 317855914 / 116806222 317855917 / 116806226	19.7-20.2	1 - 18		TABLE 22-1C	N/A	N/A
GTB	E	317855918 / 116806088 317855919 / 116806089 317855920 / 116806090 317855921 / 116806091 317855922 / 116806092	17.7-17.95	1 - 18	1, 3	TABLE 22-3 TABLE 22-1B	Pass Pass	Favorable
GTB	E	317855923 / 116806227 317855926 / 116806231 317855929 / 116806235 317855932 / 116806239 317855935 / 116806243	17.8-18.3	1 - 18	1, 3	TABLE 22-3 TABLE 22-1B	Pass Pass	Favorable
GTB	E	317855924 / 116806228 317855927 / 116806232 317855930 / 116806236 317855933 / 116806240 317855936 / 116806244	18.3-18.6	1 - 18	1, 3	TABLE 22-3 TABLE 22-1B	Pass Pass	Favorable
GTB	E	317855925 / 116806230 317855928 / 116806234 317855931 / 116806238 317855934 / 116806242 317855937 / 116806246	19.7-20.2	1 - 18		TABLE 22-1C	N/A	N/A
GTC	E	317855938 / 116806093 317855939 / 116806094 317855940 / 116806095 317855941 / 116806096 317855942 / 116806097	17.7-17.95	1 - 18	1, 3	TABLE 22-3 TABLE 22-1B	Pass Pass	Favorable
GTC	E	317855943 / 116806247 317855946 / 116806251 317855949 / 116806255 317855952 / 116806259 317855955 / 116806263	17.8-18.3	1 - 18	1, 3	TABLE 22-3 TABLE 22-1B	Pass Pass	Favorable
GTC	E	317855944 / 116806248 317855947 / 116806252 317855950 / 116806256	18.3-18.6	1 - 18	1, 3	TABLE 22-3 TABLE 22-1B	Pass Pass	Favorable

		317855953 / 116806260 317855956 / 116806264						
GTC	E	317855945 / 116806250 317855948 / 116806254 317855951 / 116806258 317855954 / 116806262 317855957 / 116806266	19.7-20.2	1 - 18		TABLE 22-1C	N/A	N/A
GTD	E	317855958 / 116806098 317855959 / 116806099 317855960 / 116806100 317855961 / 116806101 317855962 / 116806102	17.7-17.95	1 - 18	1, 3	TABLE 22-3 TABLE 22-1B	Pass Pass	Favorable
GTD	E	317855963 / 116806267 317855966 / 116806271 317855969 / 116806275 317855972 / 116806279 317855975 / 116806283	17.8-18.3	1 - 18	1, 3	TABLE 22-3 TABLE 22-1B	Pass Pass	Favorable
GTD	E	317855964 / 116806268 317855967 / 116806272 317855970 / 116806276 317855973 / 116806280 317855976 / 116806284	18.3-18.6	1 - 18	1, 3	TABLE 22-3 TABLE 22-1B	Pass Pass	Favorable
GTD	E	317855965 / 116806270 317855968 / 116806274 317855971 / 116806278 317855974 / 116806282 317855977 / 116806286	19.7-20.2	1 - 18		TABLE 22-1C	N/A	N/A

**Scenario Ka-band TT&C Links**

<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>
GRA	R	317856128 / 116806063 317856129 / 116806064 317856130 / 116806065 317856131 / 116806066 317856132 / 116806067	27.5-28.6	1 - 18	2	TABLE 22-2	Pass	Favorable
GRA	R	317856133 / 116806168 317856134 / 116806170 317856135 / 116806172 317856136 / 116806174 317856137 / 116806176	29.5-30	1 - 18	2	TABLE 22-2	Pass	Favorable
GRB	R	317856138 / 116806068 317856139 / 116806069 317856140 / 116806070 317856141 / 116806071 317856142 / 116806072	27.5-28.6	1 - 18	2	TABLE 22-2	Pass	Favorable
GRB	R	317856143 / 116806178 317856144 / 116806180 317856145 / 116806182 317856146 / 116806184 317856147 / 116806186	29.5-30	1 - 18	2	TABLE 22-2	Pass	Favorable
GRC	R	317856148 / 116806073 317856149 / 116806074 317856150 / 116806075 317856151 / 116806076 317856152 / 116806077	27.5-28.6	1 - 18	2	TABLE 22-2	Pass	Favorable
GRC	R	317856153 / 116806188 317856154 / 116806190 317856155 / 116806192 317856156 / 116806194 317856157 / 116806196	29.5-30	1 - 18	2	TABLE 22-2	Pass	Favorable
GRD	R	317856158 / 116806078 317856159 / 116806079 317856160 / 116806080 317856161 / 116806081 317856162 / 116806082	27.5-28.6	1 - 18	2	TABLE 22-2	Pass	Favorable
GRD	R	317856163 / 116806198 317856164 / 116806200 317856165 / 116806202	29.5-30	1 - 18	2	TABLE 22-2	Pass	Favorable

		317856166 / 116806204 317856167 / 116806206						
GTA	E	317855898 / 116806083 317855899 / 116806084 317855900 / 116806085 317855901 / 116806086 317855902 / 116806087	17.7-17.95	1 - 18		TABLE 22-3 TABLE 22-1B	N/A N/A	N/A
GTA	E	317855903 / 116806207 317855906 / 116806211 317855909 / 116806215 317855912 / 116806219 317855915 / 116806223	17.8-18.3	1 - 18		TABLE 22-3 TABLE 22-1B	N/A N/A	N/A
GTA	E	317855904 / 116806208 317855907 / 116806212 317855910 / 116806216 317855913 / 116806220 317855916 / 116806224	18.3-18.6	1 - 18		TABLE 22-3 TABLE 22-1B	N/A N/A	N/A
GTA	E	317855905 / 116806210 317855908 / 116806214 317855911 / 116806218 317855914 / 116806222 317855917 / 116806226	19.7-20.2	1 - 18	3, 11	TABLE 22-1C	Pass	Favorable
GTB	E	317855918 / 116806088 317855919 / 116806089 317855920 / 116806090 317855921 / 116806091 317855922 / 116806092	17.7-17.95	1 - 18		TABLE 22-3 TABLE 22-1B	N/A N/A	N/A
GTB	E	317855923 / 116806227 317855926 / 116806231 317855929 / 116806235 317855932 / 116806239 317855935 / 116806243	17.8-18.3	1 - 18		TABLE 22-3 TABLE 22-1B	N/A N/A	N/A
GTB	E	317855924 / 116806228 317855927 / 116806232 317855930 / 116806236 317855933 / 116806240 317855936 / 116806244	18.3-18.6	1 - 18		TABLE 22-3 TABLE 22-1B	N/A N/A	N/A
GTB	E	317855925 / 116806230 317855928 / 116806234 317855931 / 116806238 317855934 / 116806242 317855937 / 116806246	19.7-20.2	1 - 18	3, 11	TABLE 22-1C	Pass	Favorable
GTC	E	317855938 / 116806093 317855939 / 116806094 317855940 / 116806095 317855941 / 116806096 317855942 / 116806097	17.7-17.95	1 - 18		TABLE 22-3 TABLE 22-1B	N/A N/A	N/A
GTC	E	317855943 / 116806247 317855946 / 116806251 317855949 / 116806255 317855952 / 116806259 317855955 / 116806263	17.8-18.3	1 - 18		TABLE 22-3 TABLE 22-1B	N/A N/A	N/A
GTC	E	317855944 / 116806248 317855947 / 116806252 317855950 / 116806256 317855953 / 116806260 317855956 / 116806264	18.3-18.6	1 - 18		TABLE 22-3 TABLE 22-1B	N/A N/A	N/A
GTC	E	317855945 / 116806250 317855948 / 116806254 317855951 / 116806258 317855954 / 116806262 317855957 / 116806266	19.7-20.2	1 - 18	3, 11	TABLE 22-1C	Pass	Favorable
GTD	E	317855958 / 116806098 317855959 / 116806099 317855960 / 116806100 317855961 / 116806101 317855962 / 116806102	17.7-17.95	1 - 18		TABLE 22-3 TABLE 22-1B	N/A N/A	N/A
GTD	E	317855963 / 116806267 317855966 / 116806271 317855969 / 116806275 317855972 / 116806279 317855975 / 116806283	17.8-18.3	1 - 18		TABLE 22-3 TABLE 22-1B	N/A N/A	N/A

GTD	E	317855964 / 116806268 317855967 / 116806272 317855970 / 116806276 317855973 / 116806280 317855976 / 116806284	18.3-18.6	1 - 18		TABLE 22-3 TABLE 22-1B	N/A N/A	N/A
GTD	E	317855965 / 116806270 317855968 / 116806274 317855971 / 116806278 317855974 / 116806282 317855977 / 116806286	19.7-20.2	1 - 18	3, 11	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.