

Response to Question 24: Service and Gateway Links

Karousel Service Links									
Band (GHz)	Sub Band (GHz)	Link	FSS Non-Federal U.S. Allocation for NGSO	Other U.S. Allocations *	Band (GHz)	Sub Band (GHz)	Link	FSS Non-Federal U.S. Allocation for NGSO	Other U.S. Allocations *
10.7-12.7	10.7-11.7	Downlink	Primary (space-to-Earth) [gateway only]	FIXED, FSS (space-to-Earth)	14.0-14.5	14.0-14.2	Uplink	Primary (Earth-to-space)	FSS (Earth-to-space), mss (Earth-to-space), Space research
	11.7-12.2		Primary (space-to-Earth)	FSS (space-to-Earth)		14.0-14.4		Primary (Earth-to-space)	FSS (Earth-to-space), mss (Earth-to-space)
	12.2-12.7		Primary (space-to-Earth) [per 5.487A]	BSS, FIXED		14.4-14.47		Primary (Earth-to-space)	FSS (Earth-to-space), mss (Earth-to-space), Fixed, Mobile
17.8-19.3	17.8-18.3		none (per the FCC Ka band plan)	FIXED, FSS (space-to-Earth)		14.47-14.5		Primary (Earth-to-space) [with limitations]	FSS (Earth-to-space), mss (Earth-to-space), Fixed, Mobile
	18.3-18.6		none (per the FCC Ka band plan)	FSS (space-to-Earth)					
	18.6-18.8		none (per the FCC Ka band plan)	FSS (space-to-Earth), Earth Exploration Satellite (passive), Space Research (passive)					
	18.8-19.3		Primary (space-to-Earth)	FSS (space-to-Earth)					
19.7-20.2	19.7-20.2		none (per the FCC Ka band plan)	MSS (space-to-Earth), FSS (space-to-Earth)					

Karousel Gateway Links									
Band (GHz)	Sub Band (GHz)	Link	FSS Non-Federal U.S. Allocation for NGSO	Other U.S. Allocations *	Band (GHz)	Sub Band (GHz)	Link	FSS Non-Federal U.S. Allocation for NGSO	Other U.S. Allocations *
19.7-20.2	19.7-20.2	Downlink	none (per the FCC Ka band plan)	MSS (space-to-Earth), FSS (space-to-Earth)	14.0-14.5	14.0-14.2	Uplink	Primary (Earth-to-space)	FSS (Earth-to-space), mss (Earth-to-space), Space research
						14.0-14.4		Primary (Earth-to-space)	FSS (Earth-to-space), mss (Earth-to-space)
						14.4-14.47		Primary (Earth-to-space)	FSS (Earth-to-space), mss (Earth-to-space), Fixed, Mobile
						14.47-14.5		Primary (Earth-to-space) [with limitations]	FSS (Earth-to-space), mss (Earth-to-space), Fixed, Mobile
					27.5-30.0	27.5-28.35		Secondary (Earth-to-space) [per §25.202, note 7]	FIXED, MOBILE, FSS (Earth-to-space)
						28.35-28.6		Secondary (Earth-to-space) [per §25.202, note 2]	FIXED, MOBILE, FSS (Earth-to-space)
						28.6-29.1		Primary (Earth-to-space) [per §25.202, note 3]	FIXED, MOBILE, FSS (Earth-to-space)
						29.1-29.25		Secondary (Earth-to-space) [per §25.202, note 4]	FIXED, MOBILE, FSS (Earth-to-space)
						29.25-29.5		Secondary (Earth-to-space) [per §25.202, note 5]	FIXED, MOBILE, FSS (Earth-to-space)
						29.5-30.0		Secondary (Earth-to-space) [per §25.202, note 2]	MSS (Earth-to-space), FSS (Earth-to-space) [GSO]

*** Key:**

Red Font	Federal
Green Font	Non-Federal
Black Font	Federal and Non-Federal
UPPER CASE	Primary allocation
Lower Case	Secondary allocation