

Spectrum Inventory Table

1996.10.16 [rev. 1996.10.18]

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
137 – 137.025 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 599B US318 US319 US320 599A	Little LEO	IB pt 25				MSS1; L(2)/A(5)	NGSO	G	137 – 137.025 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 599B US318 US319 US20 599A	1
137.025 – 137.175 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Mobile-Satellite (space-to-Earth) 599B US318 US319 US320 599A	Little LEO	IB pt 25				MSS1; L(2)/A(5)	NGSO	G	137.025 – 137.175 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Mobile-Satellite (space-to-Earth) 599B US318 US319 US320 599A	3
137.175 – 137.825 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 599B US318 US319 US320 599A	Little LEO	IB pt 25				MSS1; L(2)/A(5)	NGSO	G	137.175 – 137.825 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 599B US318 US319 US320 599A	966
137.825 – 138 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Mobile-Satellite (space-to-Earth) US318 US319 US320 599A	Little LEO	IB pt 25				MSS1; L(2)/A(5)	NGSO	G	137.825 – 138 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Mobile-Satellite (space-to-Earth) US318 US319 US320 599A	7

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
138 – 143.6					plm: 4				138 – 143.6 FIXED MOBILE G30	11,771
143.6 – 143.65									143.6 – 143.65 FIXED MOBILE G30	
143.65 – 144.0									143.65 – 144.0 FIXED MOBILE US10 G30	
144 – 146 AMATEUR 510 AMATEUR-SATELLITE	Amateur Radio "2 meters"	WTB pt 97	V/D/Image 2-way transmission BW based on need analog/digital	USA OmniDir					144 – 146	
146 – 148 AMATEUR	Amateur Radio "2 meters"	WTB pt 97	V/D/Image 2-way transmission BW based on need analog/digital	USA OmniDir					146 – 148	
148 – 149.9 MOBILE-SATELLITE (Earth-to-space) 599A US319 US320 US323 US325 605 US10	Little LEO	IB pt 25			plm: 2,517	MSS1; L(3)/A(5)	NGSO	G	148 – 149.9 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) 599A US319 US320 US323 US325 605 US10 G30	5640
149.9 – 150.5 RADIONAVIGATION-SATELLITE 220 MOBILE-SATELLITE (Earth-to-space) 599A US319 US322	Little LEO	IB pt 25				MSS1; A(5)	NGSO	G	149.9 – 150.5 RADIONAVIGATION-SATELLITE MOBILE-SATELLITE (Earth-to-space) 599A US319 US322	55
150.5 – 150.8 US216					plm: 511				150.05 – 150.8 FIXED MOBILE US216 G30	1683
150.8 – 152 FIXED LAND MOBILE NG51 NG112 NG124	Private Land Mobile	WTB pt 90	V/D 2-way 20 kHz channels analog/digital	P-R P-MP	plm: 135,017				150.8 – 152	

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
152 – 152.255 FIXED LAND MOBILE US216	CMRS; CCP; IMTS; RR-C; BETRS	WTB pt 22	V/D; base fixed; 1 & 2- way; 7, 20 kHz channels; paired with 158 MHz	S; C; P-R; PTP; OMNI; P- MP; (EA proposed)	clm:: 6,123 plm: 1,174				152 – 152.255 US216	
152.255 – 152.495 FIXED LAND MOBILE NG124	Private Land Mobile	WTB pt 90	V/D 2-way 20 kHz channels analog/digital	P-R; P- MP	plm: 16,535				152.255 – 152.495	
152.495 – 152.855 FIXED LAND MOBILE NG4	CMRS; CCP; IMTS; RR-C; BETRS	WTB pt 22	V/D; base fixed; 1 & 2- way; 7, 20 kHz channels; paired with 158 MHz	S; C; P-R; PTP; OMNI; P- MP; (EA proposed)	plm: 16 clm:: 6,425				152.495 – 152.855	
152.855 – 154 LAND MOBILE NG4 NG12	Private Land Mobile Auxilliary Broadcasting ENG	WTB pt 90 MMB Pt74	V/D 2-way 20 kHz channels analog/digital V 2-way 20 kHz channels analog	P-R P-MP MP-P; P- MP; P-R	plm: 78,993				152.855 – 154	
154 – 156.2475 FIXED LAND MOBILE 613 NG112 NG117 NG124 NG148	Private Land Mobile	WTB pt 90	V/D 2-way 20 kHz channels analog/digital	P-R P-MP	c&g: 381 clm: 7 plm: 253,833				154 – 156.2475 613	
156.2475 – 156.7625 MARITIME MOBILE 613 613A US77 US108 US266 NG117	Maritime	WTB pt 80	V/D 1 or 2-way 0.3 - 20 kHz channels analog/digital	P-R MP-MP (shared)	c&g: 15,483 plm: 198				156.2475 – 156.7625 613 613A US77 US108 US266	
156.7625 – 156.8375 MARITIME MOBILE 613 US107 US266 NG117	Maritime	WTB pt 80	V/D 1 or 2-way 0.3 - 20 kHz channels analog/digital	P-R MP-MP (shared)	c&g: 8,666 plm: 1				156.7625 – 156.8375 613 US107 US266 NG117	
156.8375 – 157.0375 MARITIME MOBILE 613 US77 US266 NG117	Maritime	WTB pt 80	V/D 1 or 2-way 0.3 - 20 kHz channels analog/digital	P-R MP-MP (shared)	c&g: 2,831 plm: 78				156.8375 – 157.0375 613 US77 US266	

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
157.0375 – 157.1875 613 US214 US266					c&g: 126 plm: 29				157.0375 – 157.1875 MARITIME MOBILE 613 US214 US266 G109	3304
157.1875 – 157.45 LAND MOBILE MARITIME MOBILE 613 US223 US266 NG111 NG154	Public Coast	WTB pt 80	V/D 1 or 2-way 0.3 - 20 kHz channels analog/digital	P-R P-MP	c&g: 67 clm: 65 plm: 139				157.1875 – 157.45 613 US223 US266	
157.45 – 157.755 FIXED LAND MOBILE US266 NG111 NG124	Private Land Mobile	WTB pt 90	V/D 2-way 20 kHz channels analog/digital	P-R P-MP	clm: 1 plm: 19,142				157.45 – 157.755 US266	
157.755 – 158.115 FIXED LAND MOBILE	CMRS; CCP; IMTS; RR-C; BETRS	WTB pt 22	V/D; base fixed mobile; 2-way; 11, 20 kHz channels; paired with 152 MHz	S; C; R-P; MR-P; PTP; P- MP; (EA proposed)	clm: 2,436 plm: 9				157.755 – 158.115	
158.115 – 161.575 FIXED LAND MOBILE 613 NG6 NG28 NG70 NG112 NG124 NG148	CMRS; CCP; IMTS; RR-C; BETRS Private Land Mobile	WTB pt 22 WTB pt 90	V/D; base fixed mobile; 2-way; 7, 20 kHz channels; paired with 152 MHz V/D 2-way 20 kHz channels analog/digital	P-R; P- MP; (EA proposed) P-R P-MP	clm: 2,312 c&g: 2 plm: 103,291				158.115 – 161.575 613	
161.575 – 161.625 MARITIME MOBILE 613 US77 NG6 NG17					c&g: 34 plm: 34				161.575 – 161.625 613 US77	
161.625 – 161.775 LAND MOBILE 613 NG8	Broadcast Auxiliary ENG	MMB pt 74	V 2-way 20 kHz channels analog	P-R; MP- P; P-MP	plm: 9,676				161.625 – 161.775 613	
161.775 – 162.0125 LAND MOBILE MARITIME MOBILE 613 US266 NG8	Public Coast	WTB pt 80	V/D 2-way, 0.30 - 20 kHz channels analog/digital	P-R P-MP	c&g: 351 clm: 65 plm: 98				161.775 – 162.0125 613A US266	

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
162.0125 – 173.2 613 US8 US11 US13 US216 US223 US300 US312	Private Land Mobile Auxiliary Broadcasting ENG	WTB pt 90 MMB Pt 74	V/D 2-way 20 kHz channels analog/digital V 2-way 20 kHz channels analog	S P-R C MP-P; MP-P; P-R	c&g: 1 plm: 12,314				162.0125 – 173.2 FIXED MOBILE 613A US8 US11 US13 US216 US223 US300 US312 G5	60,904
173.2 – 173.4 FIXED Land Mobile NG124	Private Land Mobile	WTB pt 90	V/D 2-way 20 kHz channels analog/digital	S P-R C	plm: 18,717				173.2 – 173.4	
173.4 – 174									173.4 – 174 FIXED MOBILE G5	1538
174 – 216 BROADCASTING NG115 NG128 NG149	Television (Channel 7-13) Low Power TV/Translators	MMB pt 73 MMB pt 74	VDO; NTSC; 6 MHz channels; analog	P-MP; P-R P-MP	c&g: 4 plm: 845				174 – 216	
216 – 220 MARITIME MOBILE Aeronautical Mobile Fixed Land Mobile US210 US229 US274 US317 NG152	AMTS Amateur Radio Private Land Mobile	WTB pt 80 WTB pt 97 WTB pt 90	V/D 2-way; 25 kHz; analog/digital V/D/image, 1 or 2-way, BW base on need analog/digital V/D 2-way 4 kHz channels analog/digital	SEAS OR MS RIVER MP-MP USA OmniDir S P-R C	c&g: 135 plm: 38,418				216 – 220 MARITIME MOBILE Aeronautical Mobile Fixed Land Mobile Radiolocation 627 US210 US229 US274 US317 G2	536
220 – 222 FIXED LAND MOBILE US335 US336	Private Land Mobile	WTB pt 90	V/D 2-way 20 kHz channels analog/digital	P-R MST P-MP					220 – 222 FIXED LAND MOBILE Radiolocation 627 G2 US335 US336	29
222 – 225 AMATEUR	Amateur Radio	WTB pt 97	V/D/image, 1 or 2-way BW based on need analog/digital		c&g: 88 plm: 2				222 – 225 Radiolocation 627 G2	

Non-Government						Government				
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
225 – 267 S5.111 S5.199 S5.256									225 – 267 FIXED MOBILE S5.111 S5.199 S5.256 G27 G100	10650
267 – 272									267 – 272 FIXED MOBILE G27 G100	964
272 – 273									272 – 273 FIXED MOBILE G27 G100	109
273 – 312									273 – 312 FIXED MOBILE G27 G100	6656
312 – 315									312 – 315 FIXED MOBILE G27 G100	280
315 – 322									315 – 322 FIXED MOBILE G27 G100	1421
322 – 328.6									322 – 328.6 FIXED MOBILE 149 G27	682
328.6 – 335.4 AERONAUTICAL RADIONAVIGATION 258	Instrument Landing System	WTB pt 87	D; 1-way analog	Airports; OmniDir	c&g: 332				328.6 – 335.4 AERONAUTICAL RADIONAVIGATION 258	1087

Non-Government							Government			
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
335.4 – 387					c&g: 60 plm: 371				335.4 – 387 FIXED MOBILE G27 G100	6405
387 – 390									387 – 390 FIXED MOBILE G27 G100	372
390 – 399.9									390 – 399.9 FIXED MOBILE G27 G100	945
399.9 – 400.05 RADIONAVIGATION- SATELLITE 260 MOBILE-SATELLITE (Earth- to-space) US319 US326	Little LEO	IB pt 25				MSS1; A(5)	NGSO	G	399.9 – 400.05 RADIONAVIGATION- SATELLITE 260 MOBILE-SATELLITE (Earth-to-space) US319 US326	81
400.05 – 400.15 STANDARD FREQUENCY AND TIME SIGNAL- SATELLITE (400.1 MHz) 261									400.05 – 400.15 STANDARD FREQUENCY AND TIME SIGNAL- SATELLITE (400.1 MHz) 261	73
400.15 – 401 METEOROLOGICAL AIDS (radiosonde) US70 METEOROLOGICAL-SAT- ELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 209 US319 US320 US324 SPACE RESEARCH (space-to-Earth) 263 Space Operation (space-to-Earth) 264	Little LEO	IB pt 25				MSS1; L(2)/A(5)	NGSO	G	400.15 – 401 METEOROLOGICAL AIDS (radiosonde) US70 METEOROLOGICAL-SAT- ELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 209 US319 US320 US324 SPACE RESEARCH (space-to-Earth) 263 Space Operation (space-to-Earth) 264	86

Non-Government							Government			
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
401 – 402 METEOROLOGICAL AIDS (Radiosonde) US70 SPACE OPERATION (space-to-Earth) Earth Exploration-Satellite (Earth-to-space) Meteorological-Satellite (Earth-to-space)	Remote Sensing (TT&C)	IB pt 25				SR1 MSS	NGSO	G	401 – 402 METEOROLOGICAL AIDS (Radiosonde) US70 SPACE OPERATION (space-to-Earth) Earth Exploration-Satellite (Earth-to-space) Meteorological-Satellite (Earth-to-space)	10374
402 – 403 METEOROLOGICAL AIDS (radiosonde) US70 Earth Exploration-Satellite (Earth-to-space) Meteorological-Satellite (Earth-to-space)	Remote Sensing (TT&C)	IB pt 25					NGSO	G	402 – 403 METEOROLOGICAL AIDS (radiosonde) US70 Earth Exploration-Satellite (Earth-to-space) Meteorological-Satellite (Earth-to-space)	54
403 – 406 METEOROLOGICAL AIDS (radiosonde) US70 G6									403 – 406 METEOROLOGICAL AIDS (radiosonde) US70	115
406 – 406.1 MOBILE-SATELLITE (Earth-to-space) 648 650									406 – 406.1 MOBILE-SATELLITE (Earth-to-space) 648 650	10
406.1 – 410 RADIO ASTRONOMY US74 US13 US117									406.1 – 410 FIXED MOBILE RADIO ASTRONOMY US74 US13 US117 G5 G6	6773
410 – 420 US13									410 – 420 FIXED MOBILE Space Research (space-to-space) S5.269 US13 G5	17772
420 – 430 Amateur US7 US217 US228 US230 NG135	Radiolocation Amateur Radio	WTB pt 90 WTB pt 97	BW based on need V/D 2-way BW based on need analog/digital	P-R; P-MP USA; OmniDir	plm: 1,816				420 – 430 RADIOLOCATION US217 US228 US7 US230 G2 G8	

Non-Government						Government				
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
430 – 440 Amateur US7 S5.282 US217 US228	Radiolocation Amateur Radio	WTB pt 90 WTB pt 97	BW based on need V/D 2-way BW based on need analog/digital	P-R; P- MP USA OmniDir				430 – 440 RADIOLOCATION US217 US228 S5.282 US7 G2 G8		
440 – 450 Amateur S5.286 US7 US217 US228	Radiolocation Amateur Radio	WTB pt 90 WTB pt 97	BW based on need V/D 2-way BW based on need analog/digital	P-R;P-MP USA OmniDir				440 – 450 RADIOLOCATION US217 US228 S5.286 US7 G2 G8		
450 – 451 LAND MOBILE S5.286	Auxiliary Broadcasting ENG	MMB pt 74	V 2-way 20 kHz channels analog	MP-P; P- MP; P-R	clm: 31 plm: 12,227			450 – 451 S5.286		
451 – 454 LAND MOBILE NG112 NG124	Private Land Mobile	WTB pt 90	V/D; 2-way 20 kHz channels analog/digital	P-R; P- MP	clm: 11,764 plm: 81,720			451 – 454		
454 – 455 FIXED LAND MOBILE NG12 NG112 NG148	CMRS; CCP; IMTS; RR-C; BETRS; AC- CA	WTB pt 22	V/D/I; 1 & 2- way base fixed mobile; 39, 20 kHz channels paired with 454 MHz	S; C; PTP; P-MP; P- R; (EA proposed)	plm: 313			454 – 455		
455 – 456 LAND MOBILE	Auxiliary Broadcasting ENG	MMB pt 74	V; 2-way 20 kHz channels analog	MP-P; P- MP; P-R	plm: 7,348			455 – 456		
456 – 459 FIXED LAND MOBILE 287 288 NG112 NG124	Private Land Mobile	WTB pt 90	V/D 2-way 20 kHz channels analog/digital	S; C; PTP; P-MP; P- R; (EA proposed)	c&g: 1 plm: 71,848			456 – 459 287 288		
459 – 460 FIXED LAND MOBILE NG12 NG112 NG148	CMRS; CCP; IMTS; RR-C; BETRS; AC- CA	WTB pt 22	V/D/I; 1 & 2- way base fixed mobile; 39, 20 kHz channels paired with 454 MHz	R-P; MP- P; PTP; P- MP; Omni; (EA proposed)	clm: 786 plm: 214			459 – 460		

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
460 – 462.5375 FIXED LAND MOBILE 289 US201 US209 NG124	Private Land Mobile	WTB pt 90	V/D 2-way 20 kHz channels analog/digital	P-R P-MP	plm: 169,129				460 – 462.5375 Meteorological-Satellite (space-to-Earth) 289 US201 US209	
462.5375 – 462.7375 LAND MOBILE 289 US201	Private Land Mobile General Mobile Radio Service Family Radio Service	WTB pt 90 95	V/D 2-way 20 kHz channels analog/digital	P-R P-MP	plm: 40,648				462.5375 – 462.7375 Meteorological-Satellite (space-to-Earth) 289 US201	
462.7375 – 467.5375 FIXED LAND MOBILE 287 289 US201 US209 US216	Private Land Mobile	WTB pt 90	V/D 2-way 20 kHz channels analog/digital	S P-R P-MP	plm: 413,391				462.7375 – 467.5375 Meteorological-Satellite (space-to-Earth) 287 289 US201 US209 US216	
467.5375 – 467.7375 LAND MOBILE 287 289 US201	General Mobile Radio	WTB pt 95			plm: 24,131				467.5375 – 467.7375 Meteorological-Satellite (space-to-Earth) 287 289 US201	
467.7375 – 470 FIXED LAND MOBILE 288 289 US201 US216	Private Land Mobile	WTB pt 90	V/D 2-way 20 kHz channels analog/digital	P-R MP-MP P-MP	c&g: 1 plm: 222,279				467.7375 – 470 Meteorological-Satellite (space-to-Earth) 288 289 US201 US216	

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
470 – 512 BROADCASTING FIXED LAND MOBILE NG66 NG114 NG127 NG128 NG149	TV Channels 14-20	MMB Pt 73	VDO; NTSC; 6 MHz channels	P-MP;P-R	clm: 430 plm: 41,705				470 – 512	
	LPTV/TV Translator	MMB Pt 74		P-R;P-MP						
	Fixed (state of HI plus 10 other BMES)	WTB pt 22	V/D/I; 2-way; control; fixed; repeater;	P-MP; PTP						
	ORTS	WTB pt 22	approx 100 paired 20 kHz channels	P-R;P-MP; PTP						
	Broadcast Auxilliary ENG	MMB pt 74	V/VDO	PTP; P-R						
Private Land Mobile	WTB pt 90	V/D; 2-way 20 kHz channels; analog/digital	P-R; P-MP							
512 – 608 BROADCASTING NG128 NG149	TV Channels 21-36	MMB Pt 73	VDO; NTSC; 6 MHz channels	P-MP; P-R	clm: 28 plm: 73				512 – 608	
	TV LPTV/TV Translator	MMB Pt 74	V/VDO							
	Broadcast Auxiliary	MMB pt 73		PTP; P-R						
608 – 614 RADIO ASTRONOMY US74 US246	(Formerly used as TV Channel 37)								608 – 614 RADIO ASTRONOMY US74 US246	2
614 – 806 BROADCASTING NG30 NG43 NG128 NG149	TV Channels 37-69	MMB pt 73		P-MP P-R					614 – 806	
	LPTV/ TV Translator	MMB pt 74								
806 – 821 FIXED LAND MOBILE NG30 NG31 NG43 NG63	BETRS – rural subscriber channels	WTB pt 22	V/D/I; 2-way	S; PTP	plm: 170,891				806 – 821	
	Private Land Mobile	WTB pt 90	V/D 2-way 20 kHz channels analog/digital	P-R; S; C						
821 – 824 LAND MOBILE NG30 NG43 NG63	Private Land Mobile (Public Safety)	WTB pt 90	V/D 2-way 20 kHz channels analog/digital	P-R; S; C	plm: 8,804				821 – 824	

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
824 – 849 FIXED LAND MOBILE NG30 NG43 NG63 NG151	CMRS; CELL	WTB pt 22	V/D/I; 2-way; 874, 40 kHz channels	MSA/RS A P-MP	cel: 29,153 (not all existing in data base)				824 – 849	
849 – 851 AERONAUTICAL MOBILE NG30 NG63	CMRS; AG-CA	WTB pt 22	V/D/I; 2-way; 350, 6 kHz channels	USA	plm: 6				849 – 851	
851 – 862 FIXED LAND MOBILE NG30 NG31 NG63	Private Land Mobile	WTB pt 90	V/D 2-way 20 kHz channels analog/digital	P-R; S; C	plm: 429,095 clm: 5				851 – 862	
862 – 866 FIXED LAND MOBILE NG30 NG31 NG63	BETRS – Central Office Private Land Mobile	WTB pt 22 WTB pt 90	V/D/I; 2-way V/D 2-way 20 kHz channels analog/digital	S; PTP; PM-P; C P-R; S; C					862 – 866	
866 – 869 LAND MOBILE NG30 NG63	Private Land Mobile (Public Safety)	WTB pt 90	V/D 2-way 20 kHz channels analog/digital	P-R; S; C	plm: 15,450 clm: 7				866 – 869	
869 – 890 FIXED LAND MOBILE NG30 NG63 NG116 NG151	CMRS; CELL	WTB pt 22	V/D/I; 2-way	S; C; PTP; P-MP	12				869 – 890	
890 – 894 FIXED LAND MOBILE US116 US268 NG151	CMRS; CELL	WTB pt 22	V/D/I; 2-way	S; C; PTP; P-MP					890 – 894 US116 US268 G2	
894 – 896 AERONAUTICAL MOBILE US116 US268	CMRS; AG-CA Airborne Mobile Station Channels	WTB p 22	V/D/I; 2-way; 360, 6 kHz channels	USA (nation wide)					894 – 896 US116 US268 G2	

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
896 – 901 FIXED LAND MOBILE US116 US268	Private Land Mobile	WTB pt 90	V/D 2-way 13.6 kHz channels analog/digital	P-R S MTA C	plm: 46,655				896 – 901 US116 US268 G2	
901 – 902 FIXED MOBILE US116 US268	Narrowband PCS 2-way Paging MO	WTB pt 24	V/D/I; 1 & 2- way	USA Regional MTA BTA					901 – 902 US116 US268 G2	
902 – 928 150 US215 US218 US267 US275	Location & Monitoring Service Amateur Radio unlicensed	WTB pt 90 WTB pt 97 OET pt 15	D; 2-way; BW based on need V/D/image 2- way 2 or 12 MHz channels analog/digital	S MTA; C USA OmniDir	plm: 58,022				902 – 928 RADIOLOCATION 150 US215 US218 US267 US275 G11 G59	490
928 – 929 FIXED US116 US215 US268 NG120	MAS CONTROL	WTB pt 22 & 101	Data; 1 or 2- way transmission; 12.5 & 25 kHz channels; Analog/digital	P-R S & P-R	plm: 7,568 clm: 358				928 – 929 US116 US215 US268 G2	
929 – 930 FIXED LAND MOBILE US116 US215 US268 NG120	Private Paging	WTB pt 90	V/D 1-way 20 kHz channels analog/digital	P-R P-MP	plm: 81,269				929 – 930 US116 US215 US268 G2	
930 – 931 FIXED MOBILE US116 US215 US268 NG120	Narrowband PCS	WTB pt 24	V/D/I; 1 & 2- way	USA Regional MTA BTA	0				930 – 931 US116 US215 US268 G2	
931 – 932 FIXED LAND MOBILE US116 US215 US268 NG120	CMRS; CCP	WTB pt 22	V/D; 40, 20 kHz channels	S; C; P-R; (MTA proposed)	clm: 31,959				931 – 932 US116 US215 US268 G2	

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
932 – 935 FIXED US215 US268 NG120	MAS 932 - 932.5+ Fixed Microwave 932.5 - 935	WTB pt 22 WTB pt 101	Data; 1 or 2-way transmission; 12.5 & 25 kHz channels; analog/digital V/D; 1 or 2 way transmission; 12.5, 25, 50 kHz channels; analog/digital	P-R (EA proposed) PTP S	310				932 – 935 FIXED US215 US268 G2	684
935 – 940 FIXED LAND MOBILE US116 US215 US268 NG120	Private Land Mobile	WTB pt 90	V/D 2-way 13.6 kHz channels analog/digital	P-R MTA	plm: 80,798				935 – 940 US116 US215 US268 G2	
940 – 941 FIXED MOBILE US116 US268 NG120	Narrowband PCS	WTB pt 24	V/D/I; 1 & 2-way	USA Regional MTA BTA	2				940 – 941 US116 US268 G2	
941 – 942 FIXED US268 NG120	MAS +941 -941.5 Fixed Microwave 941.5 -944	WTB pt 101 WTB pt 101	Data; 1 or w-way transmission; 12.5, 25 kHz channels; Analog/digital V/D; 1 or 2-way transmission; 12.5, 25, 50 kHz channels; Analog/digital	P-R (EA proposed) PTP S	415				941 – 942 FIXED US268 G2	157
942 – 944 FIXED US301 US302 NG120	Fixed Microwave	WTB pt 101	V/D 1 or 2-way 12.5, 25 & 50 kHz channels	S PTP					942 – 944 FIXED US301 US302	527
944 – 947 FIXED NG120	Fixed Microwave Auxiliary Broadcasting STL	WTB pt 101 MMB pt 74	V/D 1 or 2-way 12.5, 25 & 50 kHz channels V 2-way 20 kHz channels analog	S PTP PTP; S	ils: 3167				944 – 960	

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
947 – 952 FIXED NG120	Fixed Microwave Auxiliary Broadcasting STL	WTB pt 101 MMB Pt 74	V/D 1 or 2-way 12.5, 25 & 50 kHz channels V 2-way 20 kHz channels analog	S PTP PTP	ils: 7579				944 – 960	
952.0 – 953.0 FIXED NG120	MAS	WTB pt 22 & 101	Data; 1 or 2-way transmission; 12.5, 25 kHz channels; analog/digital	P-R (EA proposed)	ils: 7,414 clm: 8				944 – 960	
953 – 960 FIXED NG120	Fixed Microwave 953 - 965 MAS 956-957 959-960	WTB Pt 101 WTB pt 22 & 101	V/D; 1 or 2-way transmission; 12.5, 25, 50 kHz channels; Analog/digital Data; 1 or 2-way transmission; 12.5, 25 kHz channels; Analog/digital	PTP S P-R (EA proposed)	ils: 7,508 clm: 521				944 – 960	
960 – 1215 AERONAUTICAL RADIONAVIGATION US224 328	Navigational Aids	WTB pt 87	D; 1-way; analog	USA MP-MP (shared)	c&g: 705				960 – 1215 AERONAUTICAL RADIONAVIGATION US224 328	3421
1215 – 1240 333					c&g: 11				1215 – 1240 RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) 333 G56	189
1240 – 1260 Amateur 333 334	Amateur Radio	WTB pt 97	V/D 2-way BW based on need analog/digital	USA OmniDir					1240 – 1260 RADIOLOCATION 333 334 G56	

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
1260 – 1300 Amateur 282 333 334									1260 – 1300 RADIOLOCATION 282 333 334 G56	
1300 – 1350 AERONAUTICAL RADIO- NAVIGATION 337 149	RADAR	WTB pt 87	D; analog	USA OmniDir (shared)					1300 – 1350 AERONAUTICAL RADIO- NAVIGATION 337 Radioloca- tion 149 G2	383
1350 – 1400 149 334 339 US311									1350 – 1400 FIXED MOBILE RADIOLOCATION 149 334 339 US311 G2 G27 G114	178
1400 – 1427 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) 341 US246									1400 – 1427 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) 341 US246	5
1427 – 1429 SPACE OPERATION (Earth-to-space) Fixed (telemetry) Land Mobile (telemetry and telecommand) 341	Private Land Mobile	WTB pt 90	V/D 2-way BW based on need analog/digital	S P-R C					1427 – 1429 SPACE OPERATION (Earth-to-space) FIXED MOBILE except aeronautical mobile 341 G30	20
1429 – 1435 Land Mobile (telemetry and telecommand) Fixed (telemetry) 341	Private Land Mobile	WTB pt 90	V/D 2-way BW based on need analog/digital	S P-R C					1429 – 1435 FIXED MOBILE 341 G30	
1435 – 1452 MOBILE (aeronautical telemetry) 341 US78									1435 – 1452 MOBILE (aeronautical telemetry) 341 US78	598

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
1452 – 1492 MOBILE (aeronautical telemetry)									1452 – 1492 MOBILE (aeronautical telemetry)	275
341 US78									341 US78	
1492 – 1525 MOBILE (aeronautical telemetry)									1492 – 1525 MOBILE (aeronautical telemetry)	180
341 US78									341 US78	
1525 – 1530 MOBILE-SATELLITE (space-to-Earth) Mobile (aeronautical telemetry)	"Lower" L-Band	IB pt 25				MSS1; L/A	GSO	R	1525 – 1530 MOBILE-SATELLITE (space-to-Earth) Mobile (aeronautical telemetry)	23
341 351 US78									341 351 US78	
1530 – 1533 MARITIME MOBILE-SAT- ELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Mobile (aeronautical telemetry)	"Lower" L-Band	IB pt 25				MSS1; L/A	GSO	R	1530 – 1533 MARITIME MOBILE-SAT- ELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Mobile (aeronautical telemetry)	19
341 351 US78 US315									341 351 US78 US315	
1533 – 1535 MARITIME MOBILE-SAT- ELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Mobile (aeronautical telemetry)	"Lower" L-Band	IB pt 25				M1; L/A	GSO	R	1533 – 1535 MARITIME MOBILE-SAT- ELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Mobile (aeronautical telemetry)	9
341 351 US78 US315									341 351 US78 US315	

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
1535 – 1544 MARITIME MOBILE-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 341 351 US315	"Lower" L-Band	IB pt 25				MSS1; L/A	GSO	R	1535 – 1544 MARITIME MOBILE-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 341 351 US315	6
1544 – 1545 MOBILE-SATELLITE (space-to-Earth) 341 356	"Lower" L-Band	IB pt 25				MSS1; L(2)	GSO	R	1544 – 1545 MOBILE-SATELLITE (space-to-Earth) 341 356	16
1545 – 1549.5 AERONAUTICAL MOBILE-SATELLITE (R) (space-to-Earth) Mobile-Satellite (space-to-Earth) 341 351 US308 US309	"Upper" L-Band	IB pt 25				MSS1; L(2)	GSO	R	1545 – 1549.5 AERONAUTICAL MOBILE-SATELLITE (R) (space-to-Earth) Mobile-Satellite (space-to-Earth) 341 351 US308 US309	0
1549.5 – 1555 AERONAUTICAL MOBILE-SATELLITE (R) (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 341 351 US308 US309	"Upper" L-Band	IB pt 25				MSS1; L(2)	GSO	R	1549.5 – 1555 AERONAUTICAL MOBILE-SATELLITE (R) (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 341 351 US308 US309	0
1555 – 1558.5 AERONAUTICAL MOBILE-SATELLITE (R) (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 341 351 US308 US309	"Upper" L-Band	IB pt 25				MSS1; L(2)	GSO	R	1555 – 1558.5 AERONAUTICAL MOBILE-SATELLITE (R) (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 341 351 US308 US309	0
1558.5 – 1559 AERONAUTICAL MOBILE-SATELLITE (R) (space-to-Earth) 341 351 US308 US309	"Upper" L-Band	IB pt 25				MSS1; L(2)	GSO	R	1558.5 – 1559 AERONAUTICAL MOBILE-SATELLITE (R) (space-to-Earth) 341 351 US308 US309	0
1559 – 1610 AERONAUTICAL RADIO-NAVIGATION US260 RADIONAVIGATION-SATELLITE (space-to-Earth) 341 US208	Navigation Equipment	WTB pt 87	D; analog	USA					1559 – 1610 AERONAUTICAL RADIO-NAVIGATION US260 RADIONAVIGATION-SATELLITE (space-to-Earth) 341 US208	22

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
1610 – 1610.6 AERONAUTICAL RADIO-NAVIGATION US260 RADIODETERMINATION SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 341 364 366 367 368 372 US208 US319	Navigation Equipment Big LEO	WTB pt 87 IB pt 25	D; analog	USA		MSS1; L(3)/A(3)	NGSO	G	1610 – 1610.6 AERONAUTICAL RADIO-NAVIGATION US260 RADIODETERMINATION SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 341 364 366 367 368 372 US208 US319	0
1610.6 – 1613.8 AERONAUTICAL RADIO-NAVIGATION US260 RADIODETERMINATION SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY 149 341 364 366 367 368 372 US208 US319	Navigation Equipment Big LEO	WTB pt 87 IB pt 25	D; analog	USA		MSS1; L(3)/A(3)	NGSO	G	1610.6 – 1613.8 AERONAUTICAL RADIO-NAVIGATION US260 RADIODETERMINATION SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY 149 341 364 366 367 368 372 US208 US319	10
1613.8 – 1626.5 AERONAUTICAL RADIO-NAVIGATION US260 RADIODETERMINATION-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) Mobile-Satellite (space-to-Earth) 341 364 365 366 367 372 US208 US319	Navigation Equipment Big LEO	WTB pt 87 IB pt 25	D; 1-way; analog	USA		MSS1; L(3)/A(3)	NGSO	G	1613.8 – 1626.5 AERONAUTICAL RADIO-NAVIGATION US260 RADIODETERMINATION-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) Mobile-Satellite (space-to-Earth) 341 364 365 366 367 372 US208 US319	45
1626.5 – 1631.5 MARITIME MOBILE-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 341 351 US315	GMDSS SATCOM Lower L-Band	WTB pt 80 IB pt 25	V/D; 2-way; digital	GLOBAL		MSS1; L/A	GSO	R	1626.5 – 1631.5 MARITIME MOBILE-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 341 351 US315	40
1631.5 – 1634.5 MARITIME MOBILE-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 341 351 US315	GMDSS SATCOM Lower L-Band	WTB pt 80 IB pt 25	V/D; 2-way; digital	GLOBAL		MSS1; L/A	GSO	R	1631.5 – 1634.5 MARITIME MOBILE-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 341 351 US315	0

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
1634.5 – 1645.5 MARITIME MOBILE-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 341 351 US315	GMDSS SATCOM Lower L-Band	WTB pt 80 IB pt 25	V/D; 2-way; digital	GLOBAL		MSS1; L/A	GSO	R	1634.5 – 1645.5 MARITIME MOBILE-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 341 351 US315	61
1645.5 – 1646.5 MOBILE-SATELLITE (Earth-to-space) 341 375									1645.5 – 1646.5 MOBILE-SATELLITE (Earth-to-space) 341 375	0
1646.5 – 1651 AERONAUTICAL MOBILE-SATELLITE (R) (Earth-to-space) Mobile-Satellite (Earth-to-space) 341 351 US308 US309	Upper L-Band	IB pt 25				MSS1; L(2)	GSO	R	1646.5 – 1651 AERONAUTICAL MOBILE-SATELLITE (R) (Earth-to-space) Mobile-Satellite (Earth-to-space) 341 351 US308 US309	2
1651 – 1656.5 AERONAUTICAL MOBILE-SATELLITE (R) (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 341 351 US308 US309	Upper L-Band	IB pt 25				MSS1; L(2)	GSO	R	1651 – 1656.5 AERONAUTICAL MOBILE-SATELLITE (R) (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 341 351 US308 US309	0
1656.5 – 1660 AERONAUTICAL MOBILE-SATELLITE (R) (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 341 351 US308 US309	Upper L-Band	IB pt 25				MSS1; L(2)	GSO	R	1656.5 – 1660 AERONAUTICAL MOBILE-SATELLITE (R) (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 341 351 US308 US309	0
1660 – 1660.5 AERONAUTICAL MOBILE-SATELLITE (R) (Earth-to-space) RADIO ASTRONOMY 149 341 351 US309									1660 – 1660.5 AERONAUTICAL MOBILE-SATELLITE (R) (Earth-to-space) RADIO ASTRONOMY 149 341 351 US309	0

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
1660.5 – 1668.4 RADIO ASTRONOMY US74 SPACE RESEARCH (passive) 341 US246									1660.5 – 1668.4 RADIO ASTRONOMY US74 SPACE RESEARCH (passive) 341 US246	0
1668.4 – 1670 METEOROLOGICAL AIDS (radiosonde) US99 RADIO ASTRONOMY US74 341									1668.4 – 1670 METEOROLOGICAL AIDS (radiosonde) US99 RADIO ASTRONOMY US74 341	124
1670 – 1675 METEOROLOGICAL AIDS (radiosonde) METEOROLOGICAL-SAT- ELLITE (space-to-Earth) 341 US211									1670 – 1675 METEOROLOGICAL AIDS (radiosonde) METEOROLOGICAL-SAT- ELLITE (space-to-Earth) 341 US211	135
1675 – 1690 METEOROLOGICAL AIDS (radiosonde) METEOROLOGICAL-SAT- ELLITE (space-to-Earth) 341 US211									1675 – 1690 METEOROLOGICAL AIDS (radiosonde) METEOROLOGICAL-SAT- ELLITE (space-to-Earth) 341 US211	58
1690 – 1700 METEOROLOGICAL AIDS (Radiosonde) METEOROLOGICAL-SAT- ELLITE (space-to-Earth) 289 341									1690 – 1700 METEOROLOGICAL AIDS (Radiosonde) METEOROLOGICAL-SAT- ELLITE (space-to-Earth) 289 341	35

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
1700 – 1710 METEOROLOGICAL-SAT- ELLITE (space-to-Earth) Fixed									1700 – 1710 FIXED METEOROLOGICAL-SAT- ELLITE (space-to-Earth)	56
289 341									289 341 G118	
1710 – 1850									1710 – 1850 FIXED MOBILE	7832
341 US256									341 US256 G42	
1850 – 1930 FIXED MOBILE	Broadband PCS	WTB pt 24	V/D/VDO; 1 & 2-way	MTA P-MP	7,917 (1850- 1990 p-p)				1850 – 1930	
1930 – 1970 FIXED MOBILE	Broadband PCS	WTB pt 24	V/D/VDO; 1 & 2-way	MTA P-MP					1930 – 1970	
1970 – 1980 FIXED MOBILE	Broadband PCS 2 GHz Band	WTB pt 24 IB pt 25	V/D/VDO; 1 & 2-way	MTA P-MP		MSS1; A(2)	NGSO	G	1970 – 1980	
1980 – 1990 FIXED MOBILE	2 GHz Band	IB pt 25	V/D/VDO; 1 & 2-way			MSS1; A(2)	NGSO	G	1980 – 1990	

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
1990 – 2010 FIXED MOBILE US111 NG23 NG118	Auxiliary Broadcasting STL / ENG / Reley (1990-2110) CARS Mobile (1990-2110)	WTB Pt 74 CSB Pt 78	VDO (1 or 2 way) V/D/VDO (1-way)	S; PTP; MP-P; P- R P-R	8,318 cars: 32	MSS1; A(2)	NGSO	G	1990 – 2010 NOTE: FCC NPRM to change this OET proceeding US111	
2010 – 2025 FIXED MOBILE US111 NG23 NG118	2 GHz Band (1970-2025)	IB pt 25				MSS1; A(2)	NGSO	G	2010 – 2025 US111	
2025 – 2110 FIXED MOBILE US90 US111 US219 US222 NG23 NG118	Remote Sensing (TT&C) (2025-2110)	IB pt 25				EES1 SR1	NGSO	G	2025 – 2110 US90 US111 US219 US222	
2110 – 2120 FIXED MOBILE US111 US252 NG23 NG153	Fixed Microwave (grandfathered)	WTB pt 101 & 22	V/D 1 or 2-way 800 kHz channels analog/digital	S; PTP	ils: 6,820 clm: 153				2110 – 2120 US111 US252	
2120 – 2130 FIXED MOBILE NG23 NG153	Fixed Microwave	WTB pt 101 & 22	V/D 1 or 2-way 800 kHz channels analog/digital	S; PTP					2120 – 2150	
2130 – 2150 FIXED MOBILE NG23 NG153	Fixed Microwave	WTB pt 101	V/D 1 or 2-way 800 kHz channels analog/digital	S; PTP	6,430				2120 – 2150	
2150 – 2160 FIXED NG23	Multipoint Distribution	MMB pt 21	V/D/VDO; 1- way 6 Mhz channel	P-MP P-R BTA					2150 – 2160	

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
2160 – 2180 FIXED MOBILE NG23 NG153	Fixed Microwave 2160 - 2180 PUBLIC MOBILE 2160.3 & 2179.9 Multipoint Distribution 2 GHz Band (2165- 2200)	WTB pt 101 WTB pt 22 MMB pt 21	V/D 1 or 2- way, 18 800 MHz channels Analog/digital V/D 2-way BW assignment based on need analog/digital	PTP; S PTP; S	ils: 6,172 clm: 147	2165- 2200 MSS 1; A(2)	NGSO	G	2160 – 2200	
2180 – 2200 FIXED MOBILE NG23 NG153	Fixed Microwave 2180 - 2200 2 GHz Band (2165- 2200)	WTB pt 101 IB pt 25	V/D; 1 or 2- way; 24 800 MHz channels analog/digital	PTP S	6,420	MSS 1; A(2)	NGSO	G	2160 – 2200	
2200 – 2290 US303									2200 – 2290 FIXED MOBILE (LOS only including aeronautical telemetry but excluding flight testing of manned aircraft) SPACE RESEARCH (space-to-Earth) (space-to-space) SPACE OPERATION (space-to-Earth) (space-to-space) EARTH EXPLORATION- SATELLITE (space-to- Earth)(space-to-space)	2305
2290 – 2300 SPACE RESEARCH (deep space)(space-to-Earth)									2290 – 2300 FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space)(space-to-Earth)	29

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
2300 – 2310 Amateur US253	Amateur Radio	WTB pt 97	V/D/image 2-way BW based on need analog/digital	USA OmniDir					2300 – 2310 RADIOLOCATION Fixed Mobile US253 G123	
2310 – 2360 BROADCASTING- SATELLITE US327 Mobile 396 US276 US328	BSS	IB pt 25				B1; A(4)	GSO	D	2310 – 2360 Mobile Radiolocation Fixed 396 US276 US327 US328 G2 G120	
2360 – 2390 MOBILE US276									2360 – 2390 MOBILE RADIOLOCATION Fixed US276 G2 G120	151
2390 – 2400 AMATEUR	Amateur Radio	WTB pt 97	V/D/image 2-way BW based on need analog/digital	USA OmniDir					2390 – 2400 G122	
2400 – 2402 Amateur 150 282									2400 – 2402 RADIOLOCATION 150 282 G2	
2402 – 2417 AMATEUR 150 282	Amateur Radio	WTB pt 97	V/D/image 2-way BW based on need analog/digital	USA OmniDir					2402 – 2417 150 282 G122	
2417 – 2450 Amateur 150 282	Amateur Radio	WTB pt 97	V/D/image 2-way BW based on need analog/digital	USA OmniDir					2417 – 2450 RADIOLOCATION 150 282 G2 G124	

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
2450 – 2483.5 FIXED MOBILE Radiolocation 150 US41	Fixed Microwave Private Land Mobile Auxiliary Broadcasting STL / ENG / Relay	WTB pt 101 WTB pt 90 MMB pt 74	V/D 1 or2-way 625 kHz channels analog/digital V/D 2-way BW based on need analog/digital VDO; 1 & 2- way; analog	S; PTP P-R; P- MP S; PTP; MP-P; P- R	1,077				2450 – 2483.5 150 US41	
2483.5 – 2500 RADIODETERMINATION- SATELLITE (space-to- Earth) 398 MOBILE-SATELLITE (space-to-Earth) 150 402 US41 US319 NG147	Fixed Microwave Big LEO	WTB IB pt 25	V/D 1 or2-way 625 kHz channels analog/digital	S; PTP		MSS1; L(3)/A(3)	NGSO	G	2483.5 – 2500 RADIODETERMINATION- SATELLITE (space-to- Earth) 398 MOBILE-SATELLITE (space-to-Earth) 150 402 US41 US319	8
2500 – 2520 FIXED BROADCASTING-SATELLITE US205 US269 NG47 NG101 NG102	MMDS ITFS	MMB pt 21 MMB pt 74	video, 6MHz channels analog/digital	BTA P-MP P-R	ILS: 3				2500 – 2520	
2520 – 2535 FIXED BROADCASTING-SATELLITE US205 US269 NG47 NG101 NG102	MMDS ITFS	MMB pt 21 pt 74	video, 6MHz channels analog/digital	BTA P-MP P-R					2520 – 2535	
2535 – 2655 FIXED BROADCASTING-SATELLITE 339 US205 US269 NG47 NG101 NG102	MMDS ITFS	MMB pt 21 pt 74	video, 6MHz channels analog/digital	BTA P-MP P-R					2535 – 2655 339 US205 US269	

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
2655 – 2670 FIXED BROADCASTING-SATELLITE Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) US205 US269 NG47 NG101 NG102	MMDS ITFS	MMB pt 21 pt 74	video, 6MHz channels analog/digital	BTA P-MP P-R					2655 – 2670 Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) US205 US269	
2670 – 2690 FIXED BROADCASTING-SATELLITE Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) US205 US269 NG47 NG101 NG102	Fixed Microwave MMDS ITFS	WTB pt 101 MMB pt 21 pt 74	to be determined video, 6MHz channels analog/digital video, 6MHz channels analog/digital	P-R; PTP BTA; P-MP; P-R					2670 – 2690 Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) US205 US269	
2690 – 2700 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246					c&g: 5				2690 – 2700 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246	19
2700 – 2900 423 US18	Airport Surveillance/ Weather RADAR	WTB pt 87	analoge (shared)	USA; OmniDir					2700 – 2900 AERONAUTICAL RADIO-NAVIGATION 337 METEOROLOGICAL AIDS Radiolocation 423 US18 G2 G15	1395
2900 – 3100 MARITIME RADIONAVIGATION Radiolocation US44 427 US316	RADAR Private Land Mobile	WTB pt 87 WTB pt 90	Analoge (shared) V/D, 2-way BW based on need; analog/digital	USA OmniDir (shared) P-R; P-MP	c&g: 89				2900 – 3100 MARITIME RADIONAVIGATION Radiolocation 427 US44 US316 G56	579

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
3100 – 3300 Radiolocation US110 149 333	Private Land Mobile	WTB pt 90	V/D, 2-way BW based on need; analog/digital	P-R; P- MP					3100 – 3300 RADIOLOCATION US110 149 333 G59	
3300 – 3400 Amateur Radiolocation US108 149	Private Land Mobile Amateur Radio	WTB pt 90 WTB pt 97	V/D, 2-way BW based on need; analog/digital V/D/image; 2- way; BW based on need; analog/digital	P-R; P- MP USA; OmniDir					3300 – 3400 RADIOLOCATION US108 149 G31	
3400 – 3500 Amateur Radiolocation 282 US108	Private Land Mobile	WTB pt 90	V/D, 2-way BW based on need; analog/digital	P-R; P- MP					3400 – 3500 RADIOLOCATION 282 US108 G31	
3500 – 3600 Radiolocation US110	Private Land Mobile	WTB pt 90	V/D, 2-way BW based on need; analog/digital	P-R; P- MP					3500 – 3600 AERONAUTICAL RADIONAVIGATION (ground-based) RADIOLOCATION US110 G59 G110	
3600 – 3700 FIXED-SATELLITE (space-to-Earth) US245 Radiolocation US110	Private Land Mobile	WTB pt 90	V/D, 2-way BW based on need; analog/digital	P-R; P- MP					3600 – 3700 AERONAUTICAL RADIONAVIGATION (ground-based) RADIOLOCATION US110 US245 G59 G110	68
3700 – 4200 FIXED FIXED-SATELLITE (space-to-Earth) NG41	Fixed Microwave C-band	WTB pt 101 IB pt 25 pt 25	V/D/Video; 1 or 2-way; 12 20MHz channels; analog/digital	S; PTP	ils: 19,961	FSS I; L(8)	GSO	R ces: 8,943	3700 – 4200	
4200 – 4400 AERONAUTICAL RADIO- NAVIGATION 440 US261	Altimeters	WTB pt 87	D; analog	USA	c&g: 2				4200 – 4400 AERONAUTICAL RADIO- NAVIGATION 440 US261	120

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
4400 – 4500					c&g: 39				4400 – 4500 FIXED MOBILE	393
4500 – 4660 FIXED-SATELLITE (space-to-Earth) 441 US245									4500 – 4660 FIXED MOBILE US245	344
4660 – 4685 FIXED FIXED-SATELLITE (space-to-Earth) 441 US245 MOBILE	General Wireless Communications Services	WTB pt 26	V/D; 5 MHz fixed or mobile; analogy/digital	EA					4660 – 4685 G122	
4685 – 4800 FIXED-SATELLITE (space-to-Earth) 441 US245									4685 – 4800 FIXED MOBILE US245	251
4800 – 4990									4800 – 4990 FIXED MOBILE	706
149 339 US203									149 339 US203	
4990 – 5000 RADIO ASTRONOMY US74 US257 Space Research (passive) US246									4990 – 5000 RADIO ASTRONOMY US74 US257 Space Research (passive) US246	18
5000 – 5150 AERONAUTICAL RADIO-NAVIGATION US260 367 444 US211	Instrument Landing System Big LEO (5091-5216)	WTB pt 87 IB pt 25	D; analog	USA		5091-5150 FSS I/FL ; L/A 5112.9-5187.1 F I/FL	NGSO NGSO	G G	5000 – 5150 AERONAUTICAL RADIO-NAVIGATION US260 367 444 US211	248

Non-Government									Government		
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.	
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage			
5150 – 5250 AERONAUTICAL RADIO-NAVIGATION US260 FIXED-SATELLITE (Earth-to-space) 446 US211 US307	Instrument Landing System Private Land Mobile Big LEO (5091-5216)	WTB pt 87 WTB pt 90 IB pt 25	D; analog V/D; 2-way; BW based on need; analog/digital	USA; P-MP P-R			5112.9-5187.1 FSS 1/FL FSS 1/FL ; L/A 5150-5216 FSS 1/FL	NGSO NGSO	G G	5150 – 5250 AERONAUTICAL RADIO-NAVIGATION US260 FIXED-SATELLITE (Earth-to-space) 446 US211 US307	16
5250 – 5255 Radiolocation US110 333	Private Land Mobile	WTB pt 90	V/D; 2-way; BW based on need; analog/digital	P-R; P-MP					5250 – 5255 RADIOLOCATION US110 333 G59		
5255 – 5350 Radiolocation US110 333	Private Land Mobile	WTB pt 90	V/D; 2-way; BW based on need; analog/digital	P-R P-MP					5255 – 5350 RADIOLOCATION US110 333 G59		
5350 – 5460 AERONAUTICAL RADIO-NAVIGATION 449 Radiolocation US48	Aircraft RADAR Private Land Mobile	WTB pt 80 WTB pt 90	D; analogy V/D; 2-way; BW based on need; analog/digital	USA; MP-MP (shared) P-R; P-MP					5350 – 5460 AERONAUTICAL RADIO-NAVIGATION 449 RADIOLOCATION US48 G56	240	
5460 – 5470 RADIONAVIGATION 449 US65 Radiolocation US49	Private Land Mobile	WTB pt 90	V/D; 2-way; BW based on need; analog/digital	P-R; P-MP					5460 – 5470 RADIONAVIGATION 449 US65 Radiolocation US49 G56	32	
5470 – 5600 MARITIME RADIO-NAVIGATION US65 Radiolocation US50	RADAR Private Land Mobile	WTB pt 80 WTB pt 90	D; analog V/D; 2-way; BW based on need; analog/digital	USA P-R					5470 – 5600 MARITIME RADIO-NAVIGATION US65 Radiolocation US50 G56	396	

Non-Government									Government		
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.	
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage			
5600 – 5650 MARITIME RADIONAVIGATION METEOROLOGICAL AIDS Radiolocation US51 452 US65	RADAR Private Land Mobile	WTB pt 80 WTB pt 90	D; analog V/D; 2-way; BW based on need; analog/digital	USA P-R; P- MP					5600 – 5650 MARITIME RADIONAVIGATION METEOROLOGICAL AIDS Radiolocation US51 452 US65 G56	271	
5650 – 5725 Amateur 282	Amateur Radio	WTB pt 97	V/D/Image; 2- way; BW based on need; analog/digital	USA; OmniDir					5650 – 5725 RADIOLOCATION		
5725 – 5830 Amateur 150	Amateur Radio	WTB pt 97	V/D/Image; 2- way; BW based on need; analog/digital	USA; OmniDir					5725 – 5830 RADIOLOCATION		
5830 – 5850 Amateur Amateur-satellite (space-to-Earth) 150	Amateur Radio	WTB pt 97	V/D/Image; 2- way; BW based on need; analog/digital	USA; OmniDir					5830 – 5850 RADIOLOCATION		
5850 – 5925 FIXED-SATELLITE (Earth-to-space) US245 Amateur 150	Amateur Radio <i>TIRS (5850 -5875) [PLANNED]</i>	WTB pt 97 WTB pt 90 IB pt 25	V/D/VDO 2-way BW Analog V/D; (For traffic control and emergency assistance)	OmniDir USA P-MP USA			FSS1 NGSO/G SO		5850 – 5925 RADIOLOCATION	76	
5925 – 6425 FIXED FIXED-SATELLITE (Earth-to-space) NG41	Fixed Microwave C-band Big LEO (5929.5 - 5930.5)	WTB pt 101 IB pt 25	V/D/Video; 1 or 2-way; 800 kHz to 30 MHz channels; analog/digital	S; PTP	ils: 50,743		FSS1; L(8)/A(3) 5929.5- 5930.5 FSS1/FL	GSO NGSO	ces: 18,192 R G	5925 – 6425	

Non-Government							Government			
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
6425 – 6525 FIXED-SATELLITE (Earth-to-space) MOBILE 440 458 NG122	Fixed / Mobile Microwave	WTB pt 101	V/D/Video; 1 or 2-way analog/digital	S[licensee 's franchised area - temporary basis] PTP	ils: 342				6425 – 6525 440 458	
	Auxiliary Broadcasting ENG CARS Mobile Big LEO (6500 - 6855)	MMB Pt 74 CSB Pt 78 IB pt 25	V/D/Video; 1 or 2-way; analog /digital V/D/VDO; 1-way	MP-P P-R						
6525 – 6700 FIXED FIXED-SATELLITE (Earth-to-space) 458	6525-6875 Fixed Microwave	WTB pt 101	V/D; 800 kHz to 10 MHz channels; analog/digital	S; PTP	ils: 20,264	6525-6541.5 FSS 1/FL	NGSO	G	6525 – 6700 458	
	Big LEO (6500-6855)	IB pt 25				6500-6855 FSS 1/FL	GSO	D		
6700 – 6875 FIXED FIXED-SATELLITE (Earth-to-space) 458	Big LEO (6525-6541.5)	IB pt 25				FL 1/; Cond.L (3)	NGSO	G	6700 – 6875 458	
	Big LEO feeder links (6700 - 7075)	IB pt 25				6500-6855 FSS 1/FL	NGSO	D		
6875 – 7075 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 458 NG118	Auxiliary Broadcating STL / ENG /Relay	MMB pt 74	VDO; 16 MHz channelsl	S; PTP	ils: 7,290				6875 – 7075 458	
	Fixed / Mobile Microwave	WTB pt 101		P-MP; PM-P						
	CARS Mobile	CSB pt 78	V/D/VDO 1 or 2 way	P-R						
	Big LEO feeder links (6700 - 7075)	IB pt 25				FSS 1/FL ; Cond.L (3)	NGSO	G		
	MSS LEO (6700 - 7075)					7025-7075 FSS 1/FL	GSO	D		

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
7075 – 7125 FIXED MOBILE 458 NG118									7075 – 7125 458	
7125 – 7190 458 US252									7125 – 7190 FIXED 458 US252 G116	835
7190 – 7235 458									7190 – 7235 FIXED SPACE RESEARCH (Earth-to-space) 458	539
7235 – 7250 458									7235 – 7250 FIXED 458	164
7250 – 7300									7250 – 7300 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Fixed G117	230
7300 – 7450									7300 – 7450 FIXED FIXED-SATELLITE (space-to-Earth) Mobile-Satellite (space-to-Earth) G117	1226
7450 – 7550									7450 – 7550 FIXED FIXED-SATELLITE (space-to-Earth) METEOROLOGICAL-SAT- ELLITE (space-to-Earth) Mobile-Satellite (space-to-Earth) G104 G117	815

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
7550 – 7750									7550 – 7750 FIXED FIXED-SATELLITE (space-to-Earth) Mobile-Satellite (space-to-Earth) G117	1776
7750 – 7900									7750 – 7900 FIXED	1226
7900 – 8025									7900 – 8025 FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) Fixed G117	673
8025 – 8175 US258	Remote Sensing	IB pt 25				SR1; L(2)	NGSO	G	8025 – 8175 EARTH EXPLORATION- SATELLITE (space-to- Earth) FIXED FIXED-SATELLITE (Earth-to-space) Mobile-Satellite (Earth-to- space)(No Airborne Transmission) US258 G117	1146
8175 – 8215 US258	Remote Sensing	IB pt 25				SR1; L(2)	NGSO	G	8175 – 8215 EARTH EXPLORATION- SATELLITE (space-to- Earth) FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL-SAT- ELLITE (Earth-to-space) Mobile-Satellite (Earth-to- space)(No Airborne Transmissions) US258 G104 G117	284

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
8215 – 8400 US258	Remote Sensing	IB pt 25				SR1; L(2)	NGSO	G	8215 – 8400 EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) Mobile-Satellite (Earth-to-space)(No Airborne Transmissions) US258 G117	1129
8400 – 8450									8400 – 8450 FIXED SPACE RESEARCH (space-to-Earth) (Deep Space only)	168
8450 – 8500 SPACE RESEARCH (space-to-Earth)									8450 – 8500 FIXED SPACE RESEARCH (space-to-Earth)	182
8500 – 8750 Radiolocation US110 333	Radiolocation	WTB pt 90	D; 2-way; BW based on need; analog/digital	P-R; P-MP	plm: 389				8500 – 8750 RADIOLOCATION US110 333 G59	
8750 – 8850 Radiolocation US110 US53	Radiolocation	WTB pt 90	D; 2-way; BW based on need; analog/digital	P-R; P-MP					8750 – 8850 RADIOLOCATION US53 US110 G59	
8850 – 9000 Radiolocation US110	Radiolocation	WTB pt 90	D; 2-way; BW based on need; analog/digital	P-R; P-MP					8850 – 9000 RADIOLOCATION US110 G59	
9000 – 9200 AERONAUTICAL RADIO-NAVIGATION 337 Radiolocation US48	RADAR	WTB pt 90	D; 2-way; BW based on need; analog/digital	USA; OmniDir (shared)					9000 – 9200 AERONAUTICAL RADIO-NAVIGATION 337 Radiolocation US48 G2 G19	415
9200 – 9300 MARITIME RADIO-NAVIGATION 472 Radiolocation US110 474	RADAR	WTB pt 90	D; 2-way; BW based on need; analog/digital	USA OmniDir (shared)					9200 – 9300 MARITIME RADIO-NAVIGATION 472 Radiolocation US110 474 G59	263

Non-Government									Government	
Allocation (MHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Utilization / Coverage		
9300 – 9500 RADIONAVIGATION 476 US71 Meteorological Aids Radiolocation US51 427 474 575	RADAR	WTB pt 90	D; 2-way; BW based on need; analog/digital	P-R; P-MP					9300 – 9500 RADIONAVIGATION 476 US71 Meteorological Aids Radiolocation US51 427 474 575 G56	811
9500 – 9800 Radiolocation US110 333	RADAR	WTB pt 90	D; 2-way; BW based on need; analog/digital	P-R; P- MP					9500 – 9800 RADIOLOCATION US110 333	
9800 – 10000 Radiolocation US110 479	RADAR	WTB Pt 90	D; 2-way; BW based on need; analog/digital	P-R; P- MP OmniDir (shared)					9800 – 10000 RADIOLOCATION US110 479	

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
10 – 10.45 Amateur Radiolocation US108 479 US58 NG42	RADAR Amateur Radio	WTB pt 90 WTB pt 97	D; 2-way; BW based on need V/D/Image; 2-way; BW based on need; analog/digital	P-R; P-MP USA;OmniDir					10 – 10.45 RADIOLOCATION US108 479 US58 G32	
10.45 – 10.5 Amateur Amateur-Satellite Radiolocation US58 US108 NG42 NG134	RADAR Amateur Radio	WTB pt 90 WTB pt 90	D; 2-way; BW based on need; analog/digital V/D/Image; 2-way; BW based on need; analog/digital	P-R; P-MP USA OmniDir					10.45 – 10.5 RADIOLOCATION US58 US108 G32	
10.5 – 10.55 RADIOLOCATION US59		WTB pt 90	unmodulated carrier	P-R P-MP	plm: 2,645				10.5 – 10.55 RADIOLOCATION US59	303
10.55 – 10.6 FIXED	Fixed Microwave	WTB pt 101	V/D; 1 or 2-way; 400 kHz, 800 kHz, 1.25, 2.5, 3.75, 5 MHz channels analog/digital	S; PTP	ils: 3,815				10.55 – 10.6	
10.6 – 10.68 EARTH EXPLORATION-SATELLITE (passive) FIXED US265 SPACE RESEARCH (passive) US277	Fixed Microwave DEMS (Note: systems authorized or applied for prior to 15Jul93, grandfathered)	WTB pt 101	V/D; 1 or 2-way; 400 kHz, 800 kHz, 1.25, 2.5, 3.75, 5 MHz channels analog/ digital	S; PTP					10.6 – 10.68 EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) US265 US277	0
10.68 – 10.7 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246 US74									10.68 – 10.7 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246	1

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
10.7 – 11.7 FIXED FIXED-SATELLITE (space-to-Earth) 441 US211 NG104 NG41	Fixed Microwave Ku-band	WTB pt 101 IB pt 25	V/D/Video; 1.25 to 40 MHz channels; analog/digital	S; PTP	ils: 16,321	FSS1/FL; A(3) FSS1/A(2)	GSO	ces: 31 R	10.7 – 11.7 US211	
11.7 – 12.1 FIXED-SATELLITE (space-to-Earth) Mobile except aeronautical mobile 488 NG143 NG145	Ku-band Fixed microwave	IB pt 25 WTB pt 101	V; 1-way; 40 Mhz channels; analog/digital	S;PTV; [licensee is franchised area - temporary basis]	ils: 61	FSS1; L(8)	GSO	ces: 2,845 R	11.7 – 12.1 488	
12.1 – 12.2 FIXED-SATELLITE (space-to-Earth) Mobile except aeronautical mobile 488 NG143 NG145	Ku-band Fixed microwave	IB pt 25 WTB pt 101	V; 1-way; 40 Mhz channels; analog/digital	S;PTV; [licensee is franchised area - temporary basis]		FSS1; L(8)/A(3)	GSO	R	12.1 – 12.2 488	
12.2 – 12.5 FIXED BROADCASTING-SATELLITE 488 490 NG139	Fixed Microwave DBS/BSS	WTB pt 101 IB pt 25	V/D; 2-way; up to 20 MHz channels; analog/digital	S; PTP	ils: 893	B1; L(8)/A	GSO	ces: 2 R/D	12.2 – 12.5 488 490	
12.5 – 12.7 FIXED BROADCASTING-SATELLITE 488 490 NG139	Fixed Microwave DBS/BSS	WTB pt 101 IB pt 25	V/D; 2-way; up to 20 MHz channels; analog/digital	S;PTP		B1; L(8)/A	GSO	R/D	12.5 – 12.7 488 490	

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
12.7 – 12.75 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE NG53 NG118	CARS (12.7-13.2) Fixed Microwave Auxiliary Broadcasting STL / ENG / Relay	CSB Pt 78 WTB pt 101 MMB pt 74	V/D/Vdo; 1 or 2 way V/D/Vdo; 1 or 2-way; 12.5 & 25 Mhz channels; analog / digital	P-MP S- PTP P-MP PTP; MP- P; P- MP;P-R; S	cars: 113,496 ils: 4,198				12.7 – 12.75	
12.75 – 13.25 FIXED FIXED-SATELLITE (Earth-to- space) 441 NG104 MOBILE US251 NG53 NG118	Low/Upper L-band (13 - 13.15) Low/Upper L-band (13.75-14)	IB pt 25 IB pt 25	V/D/Vdo; 1 or 2 way; 6, 12.5, 25 MHz channels			12.751- 12.851 FSS1/ FL 13-13.15 FSS1/ FL 13.2- 13.25 FSS1/ FL	GSO/ NGSO GSO GSO	ces: 8 R R	12.75 – 13.25 US251	
13.25 – 13.4 AERONAUTICAL RADIO- NAVIGATION 497 Space Research (Earth-to-space)	Navigation Equipment	WTB pt 87	D; analogy	USA					13.25 – 13.4 AERONAUTICAL RADIO- NAVIGATION 497 Space Research (Earth-to-space)	36
13.4 – 13.75 Radiolocation US110 Standard Frequency and Time Signal-Satellite (Earth-to-space) Space Research 333	RADAR	WTB pt 90	D; 2-way; BW based on need; analog/digital	P-R P-MP OMIDIR (shared)					13.4 – 13.75 RADIOLOCATION US110 G59 Standard Frequency and Time Signal-Satellite (Earth-to-space) Space Research 333	
13.75 – 14 FIXED-SATELLITE (Earth-to- space) US337 Radiolocation US110 Standard Frequency and Time Signal-Satellite (Earth-to-space) Space Research 333 502 503 503A	RADAR Extended Ku-band	WTB pt 90 IB pt 25	D; 2-way; BW based on need; analog/digital	P-R P-MP OMIDIR (shared)		FSS1; A(5)	GSO	R	13.75 – 14 RADIOLOCATION US110 G59 Standard Frequency and Time Signal-Satellite (Earth-to-space) Space Research US337 333 502 503 503A	275

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
14 – 14.2 FIXED-SATELLITE (Earth-to-space) RADIONAVIGATION US292 Land Mobile-Satellite (Earth-to-space) Space Research	Extended Ku-band	IB pt 25				FSS1; L(8); A(3)	GSO	ces: 23,128 R	14 – 14.2 RADIONAVIGATION US292 Space Research	115
14.2 – 14.25 FIXED-SATELLITE (Earth-to-space) Land Mobile-Satellite (Earth-to-space) Mobile except aeronautical mobile	14.2-14.4 Fixed Microwave	WTB pt 101	V/D/Video; various BW; analog/digital	S- [Licensee' s franchised area - Temporar y basis] PTP					14.2 – 14.25	
14.25 – 14.3 FIXED-SATELLITE (Earth-to-space) Land Mobile-Satellite (Earth-to-space) Mobile except aeronautical mobile									14.25 – 14.3	
14.3 – 14.4 FIXED-SATELLITE (Earth-to-space) Land Mobile-Satellite (Earth-to-space) Mobile except aeronautical mobile									14.3 – 14.4	
14.4 – 14.47 FIXED-SATELLITE (Earth-to-space) Land Mobile-Satellite (Earth-to-space)									14.4 – 14.47 Fixed Mobile	
14.47 – 14.5 FIXED-SATELLITE (Earth-to-space) Land Mobile-Satellite (Earth-to-space)	Extended Ku-band	IB pt 25				FSS1; L(8)/ A(3)	GSO	R	14.47 – 14.5 Fixed Mobile	

149 US203

149 US203

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
14.5 – 14.7145	C-band / Ku-band (14.4-15.35)	IB pt 25							14.5 – 14.7145 FIXED Mobile Space Research	440
14.7145 – 14.8 US310	C-band / Ku-band (14.4-15.35)	IB pt 25							14.7145 – 14.8 MOBILE Fixed Space Research US310	204
14.8 – 15.1365 US310	C-band / Ku-band (14.4-15.35)	IB pt 25							14.8 – 15.1365 MOBILE Fixed Space Research US310	478
15.1365 – 15.35 339 US211	C-band / Ku-band (14.4-15.35)	IB pt 25							15.1365 – 15.35 FIXED Mobile Space Research 339 US211	208
15.35 – 15.4 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246									15.35 – 15.4 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246	47
15.4 – 15.7 AERONAUTICAL RADIO- NAVIGATION US260 FIXED-SATELLITE (space-to-Earth) US211	GSO and/or NGSO / FSS	IB pt 25				FL1	NGSO	G	15.4 – 15.7 AERONAUTICAL RADIO- NAVIGATION US260 FIXED-SATELLITE (space-to-Earth) US211	126
15.7 – 16.6 Radiolocation US110	RADAR	WTB Pt 90	D; 2-way;BW based on need; analog/digital	P-R; P- MP OmniDir (shared)					15.7 – 16.6 RADIOLOCATION US110 G59	
16.6 – 17.1 Radiolocation US110	RADAR	WTB Pt 90	D; 2- way;BW based on need; analog/digital	P-R; P- MP OmniDir (shared)					16.6 – 17.1 RADIOLOCATION US110 Space Research (deep space)(Earth-to-space) G59	
17.1 – 17.2 Radiolocation US110	RADAR	WTB Pt 90	D; 2-way;BW based on need; analog/digital	P-R; P- MP OmniDir (shared)					17.1 – 17.2 RADIOLOCATION US110 G59	

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
17.2 – 17.3 Earth Exploration-Satellite (active) Radiolocation US110 Space Research (active)	RADAR	WTB Pt 90	D; 2-way; BW based on need; analog/digital	P-R; P-MP OmniDir (shared)					17.2 – 17.3 RADIOLOCATION US110 Earth Exploration-Satellite (active) Space Research (active) G59	
17.3 – 17.7 FIXED-SATELLITE (Earth-to-space) US259 US271 NG140	RADAR DBS/BSS	WTB pt 90 IB pt 25	D; 2-way; BW based on need; analog/digital	P-R; P-MP OmniDir (shared)		FL1; L(8)/A	GSO	ces: 17 (17.3-17.8) R	17.3 – 17.7 Radiolocation US259 US271 G59	
17.7 – 17.8 FIXED FIXED-SATELLITE (space-to-Earth)(Earth-to-space) MOBILE US271 NG140 NG144	17.70 - 18.14 (19.26 - 19.70) Fixed Microwave CARS Auxiliary Broadcasting STL/Relay	WTB pt 101 CSB pt 78 MMB pt 74 IB pt 25	V/D/Vdo; 5, 10, 20, 40, 80, 220 MHz channels; analog/digital <i>ditto</i> <i>ditto</i>	PTP S P-MP; PtP; P-R PTP; S	 ils: 1,684 cars: 36	FL1; L(8)/A FSS1; A(13)	GSO GSO	R G	17.7 – 17.8 US271	
17.8 – 18.1 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE US334 NG144						FSS1; A(13)	GSO	G	17.8 – 18.1 US334 G117	

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
18.1 – 18.14 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE 519 519 US334 NG144						FSS1; A(13)	GSO	G	18.1 – 18.4 519 US334 G117	
18.14 – 18.4 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE 519 519 US334 NG144	18.14 - 18.58 CARS	CSB Pt 78	V/D/VDO; 1 or 2-way transmission; 3, 5, 6, 10, 20,40, 80, 220 MHz channels analog/digital	P-MP; PtP		FSS1; A(13)	GSO	G	18.1 – 18.4 519 US334 G117	
	Fixed Microwave	WTB Pt 101	<i>ditto</i>	<i>ditto</i>	ils: 15,530					
	Auxiliary Broadcasting STL / Relay MDS (Response Channel)	MMB Pt 74 WTB Pt 21	<i>ditto</i>	<i>ditto</i>	MP-P					
18.4 – 18.6 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE US334 NG144	Ka-band	IB pt 25				FSS1; A(13)	GSO	R/G	18.4 – 18.6 US334 G117	

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
18.6 – 18.8 EARTH EXPLORATION FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobil SPACE RESEARCH (passive) US254 US255 US334 NG144	18.58 - 18.82 (paired: 18.92 - 19.16) Fixed Microwave	WTB pt 101	V/D/VDO; 1 or 2-way transmission; 2.5, 5, 10, 20, 40, 80, 220 Mhz channels; analog/digital	PTP; P- MP; P-R; S	ils: 1,667	FSS1; A(13)	GSO	R/G	18.6-18.8 EARTH EXPLORATION SATELLITE (passive) SPACE RESEARCH (passive) US254 US255 US334 G117	
	CARS	CSB Pt 78	<i>ditto</i>	<i>ditto</i>						
	MDS (Response Channel)	WTB Pt 21								
	Auxiliary Broadcasting STL / Relay Ka-band	MMB Pt 74 IB pt 25	<i>ditto</i>	<i>ditto</i>						
18.8-19.3 FIXED FIXED-SATELLITE (Space to Earth) MOBILE	Fixed Microwave [hub to sub: 18.82- 18.87; sub to hub: 19.16 - 19.21]	WTB pt 101	V/D/VID; 1 or 2-way transmission; 5 20 MHz channel pairs; digital only	P-MP; SMSA; Some P-R (BTA planned) non- exclusive	ils: 1,848 G-320	FSS1; A	NGSO	G	18.8 – 19.3 US334 G117	
	DEMS [hub to sub: 18.87- 18.92; sub to hub: 19.21 - 19.26]	WTB pt 101	V/D/VID; 1 or 2-way transmission; 5 20 MHz channel pairs; Digital only	P-MP; SMSA Some P-R (BTA planned) exclusive	G-87; (39 markets) P-248 (70 For new Markets)					

US 334 NG 144

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
	Fixed Microwave 18.92 - 19.16 Auxiliary Broadcast STL / Relay CARS 18.8-19.3 Ka-band	WTB pt 101 MMB pt 74 CSB pt 78 IB pt 25	V/D/VID; 1 or 2-way transmission; 3, 5, 6, 10, 20, 40, 80, 220 MHz channels analog/digital <i>ditto</i> <i>ditto</i>	PTP; S <i>ditto</i> P-MP; P-R; S	 ils: 1,632					
19.26 – 19.7 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE US334 NG144	Fixed Microwave Auxiliary Broadcast STL / Relay CARS Big LEO (19.3-19.7)	WTB pt 101 MMB pt 73 CSB pt 78 IB pt 25	V/D/Vdo; 1 or 2-way transmission; 3, 5, 6, 10, 20, 40, 80, 220 MHz channels; analog/digital <i>ditto</i> <i>ditto</i>	PTP; S <i>ditto</i> S; P-MR; P-R	 ils: 1,589 cars: 14	19.3-19.7 FSS1/FL ; Cond/A	NGSO	G	19.3 – 19.7 US334 G117	
19.7 – 20.1 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 525 526 527 528 529 US334	MSS LEO (19.7-20.2)	IB pt 25				FSS1; Cond/A(13)	NGSO	G	19.7 – 20.1 US334 G117	
20.1 – 20.2 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 525 526 527 528 US334		IB pt 25				FSS1; Cond/A(13)	GSO	R	20.1 – 20.2 US334 G117	

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
20.2 – 21.2 Standard Frequency and Time Signal-Satellite (space-to-Earth)									20.2 – 21.2 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Standard Frequency and Time Signal-Satellite (space-to-Earth) G117	
21.2 – 21.4 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) US263	Fixed Microwave	WTB pt 101	V/D/Video; 1 or 2-way; various BW up to 100 MHz; analog/digital	S; PTP	ils: 9,399				21.2 – 21.4 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) US263	101
21.4 – 22 FIXED MOBILE	Fixed Microwave	WTB pt 101	V/D/Video; 1 or 2-way; various BW up to 100 MHz; analog/digital	S; PTP					21.4 – 22 FIXED MOBILE	526
22 – 22.21 FIXED MOBILE except aeronautical mobile 149	Fixed Microwave	WTB pt 101	V/D/Video; 1 or 2-way; various BW up to 100 MHz; analog/digital	S; PTP					22 – 22.21 FIXED MOBILE except aeronautical mobile 149	117
22.21 – 22.5 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) 149 US263	Fixed Microwave	WTB pt 101	V/D/Video; 1 or 2-way; various BW up to 100 MHz; analog/digital	S; PTP					22.21 – 22.5 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) 149 US263	145
22.5 – 22.55 FIXED MOBILE US211	Fixed Microwave	WTB pt 101	V/D/Video; 1 or 2-way; various BW up to 100 MHz; analog/digital	S; PTP					22.5 – 22.55 FIXED MOBILE US211	40

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
22.55 – 23 FIXED INTER-SATELLITE MOBILE 149 US278	Fixed Microwave	WTB pt 101	V/D/Video; 1 or 2-way; various BW up to 100 MHz; analog/digital	S; PTP		ISS	ISS	G	22.55 – 23 FIXED INTER-SATELLITE MOBILE 149 US278	183
23 – 23.55 FIXED INTER-SATELLITE MOBILE 149 US278	Fixed Microwave ISS or ISL	WTB pt 101 IB pt 25	V/D/Video; 1 or 2-way; various BW up to 100 MHz; analog/digital	S; PTP		23.18- 23.38 ISS	ISS	G	23 – 23.55 FIXED INTER-SATELLITE MOBILE 149 US278	638
23.55 – 23.6 FIXED MOBILE	Fixed Microwave	WTB pt 101	V/D/Video; 1 or 2-way; various BW up to 100 MHz; analog/digital	S; PTP					23.55 – 23.6 FIXED MOBILE	64
23.6 – 24 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246									23.6 – 24 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246	6
24 – 24.05 AMATEUR AMATEUR-SATELLITE 150 US211	Amateur Radio	WTB pt 97	V/D/Image; 2-way; BW based on need; analog/digital	USA					24 – 24.05 150 US211	
24.05 – 24.25 Amateur Earth Exploration-Satellite (active) Radiolocation US110 150	RADAR Amateur Radio	WTB pt 90 WTB pt 97	D; 2-way; BW based on need V/D/Image; 2-way; BW based on need; analog/digital	P-R OmniDir USA (shared) USA OmniDir	plm: 1,016				24.05 – 24.25 RADIOLOCATION US110 Earth Exploration-Satellite (active) 150 G59	
24.25 – 24.45 RADIONAVIGATION									24.25 – 24.45 RADIONAVIGATION	8

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/ Utilization		
24.45 – 24.65 INTER-SATELLITE RADIONAVIGATION 540	GSO / FSS / BSS	IB pt 25				ISS	ISS	G	24.45 – 24.65 INTER-SATELLITE RADIONAVIGATION 540	4
24.65 – 24.75 INTER-SATELLITE RADIOLOCATION-SATEL- LITE (Earth-to-space)	GSO / FSS / BSS	IB pt 25				ISS	ISS	G	24.65 – 24.75 INTER-SATELLITE RADIOLOCATION-SATEL- LITE (Earth-to-space)	0
24.75 – 25.25 RADIONAVIGATION									24.75 – 25.25 RADIONAVIGATION	5
25.25 – 25.5 Standard Frequency and Time Signal-Satellite (Earth-to-space)									25.25 – 25.5 FIXED INTER-SATELLITE 533 MOBILE Standard Frequency and Time Signal-Satellite (Earth-to-space)	
25.5 – 27 Earth Exploration-Satellite (space-to-Earth) Standard Frequency and Time Signal-Satellite (Earth-to-space)									25.5 – 27 FIXED INTER-SATELLITE 533 MOBILE Earth Exploration-Satellite (space-to-Earth) Standard Frequency and Time Signal-Satellite (Earth-to-space)	
27 – 27.5									27 – 27.5 FIXED INTER-SATELLITE 533 MOBILE	5
27.5 – 28.5 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	LMDS 27.5 - 28.35 (proposed)	WTB Part 101 IB pt 25	V/D/VDO; 1 or 2-way transmission; 42.5 20 MHz channels; Analog/digital	C BTA (proposed)	ils: 248				27.5 – 28.5	
						28.35- 28.6 FSS1; A(13)	GSO	R		

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
28.5 – 29.1 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	Ka-band (28.6 - 29.1)	IB pt 25				28.35-28.6 FSS1; A(13)	GSO	R	28.5 – 29.5	
29.1 – 29.5 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	<i>LMDS 29.1 - 29.25 (H-S Only)</i>	WTB Pt 101 IB pt 25	V/D/Video; 1-way transmission; 7.5 20 MHz channels; Analog/digital	C BTA (proposed)		FSS1/FL; Cond.L/ A	NGSO	G	29.1 – 29.5	
29.5 – 29.9 FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space)	Ka-band (28.6 - 29.1)	IB pt 25				FSS1; A(13)	GSO	R	29.5 – 29.9	
525 526 527 529										
29.9 – 30 FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space)	Ka-band (28.6 - 29.1)	IB pt 25				FSS1; A(13)	GSO	R	29.9 – 30	
525 526 527 535										
30 – 31 Standard Frequency and Time Signal-Satellite (space-to-Earth)									30 – 31 FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) Standard Frequency and Time Signal-Satellite (space-to-Earth)	
									G117	

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
31 – 31.3 FIXED MOBILE Standard Frequency and Time Signal-Satellite (space-to-Earth) 149 US211	Fixed Microwave MOBILE CARS STL;RELAY <i>LMDS (proposed)</i> Auxiliary Broadcasting ENG; Relay	WTB pt 101 WTB pt 101 CSB Pt 78 WTB pt 101 MMB pt 74	V/D/Video; 1 or 2-way transmission; 6 25 MHz channel pairs; analog/digital V/D/Video 1 or 2-way transmission V/D/Video; 1 or 2-way transmission; 15 20 MHz channels; analog/digital	S Applicant defined service area P-R Applicant defined service area P-R or S P-MP BTA (proposed) PTP	ils: 235				31 – 31.3 Standard Frequency and Time Signal-Satellite (space-to-Earth) 149 US211	
31.3 – 31.5 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246									31.3 – 31.5 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246	0
31.5 – 31.8 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246									31.5 – 31.8 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246	3
31.8 – 32 RADIONAVIGATION US69 US211 US262	Aeronautical Navigation Aids	WTB pt 87	D; analog						31.8 – 32 RADIONAVIGATION US69 US211 US262	13

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
32 – 32.3 INTER-SATELLITE RADIONAVIGATION US69 548 US262 US278	Aeronautical Navigation Aids GSO / FSS / BSS	WTB pt 87 IB pt 25	D; analog			ISS	ISS	G	32 – 32.3 INTER-SATELLITE RADIONAVIGATION US69 548 US262 US278	10
32.3 – 33 INTER-SATELLITE RADIONAVIGATION 548 US69 US278	Aeronautical Navigation Aids GSO / FSS / BSS	WTB pt 87 IB pt 25	D; analog			ISS	ISS	G	32.3 – 33 INTER-SATELLITE RADIONAVIGATION 548 US69 US278	6
33 – 33.4 RADIONAVIGATION US69	Aeronautical Navigation Aids	WTB pt 87	D; analog						33 – 33.4 RADIONAVIGATION US69	21
33.4 – 34.2 Radiolocation US110	RADAR	WTB pt 90	D; 2-way; BW based on need;	P-R; OmniDir USA (shared)					33.4 – 34.2 RADIOLOCATION US110 G34	
34.2 – 34.7 Radiolocation US110 US252	RADAR	WTB pt 90	D; 2-way; BW based on need;	P- R;OmniDi r USA (shared)					34.2 – 34.7 RADIOLOCATION US110 G34 US252	
34.7 – 35.2 Radiolocation US110	RADAR	WTB pt 90	D; 2-way; BW based on need; analog/digital	P-R; OmniDir USA (shared)					34.7 – 35.2 RADIOLOCATION US110 G34	
35.2 – 36 Radiolocation US110 551	RADAR	WTB pt 90	D; 2-way; BW based on need; analog/digital	P-R; OmniDir USA (shared)					35.2 – 36 RADIOLOCATION US110 G34 551	
36 – 37 EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) 149 US263									36 – 37 EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) 149 US263	1
37 – 37.5	Fixed Microwave 37 - 38.6 (proposed)	WTB pt 101	V/D/V/VDO; 1 or 2-way ; 14, 50 MHz channel pairs; 4 channels unpaired; Analog/digital	(BTA proposed)	ils: 1,779				37 – 37.5 FIXED MOBILE	129
37.5 – 38 FIXED MOBILE									37.5 – 38 FIXED MOBILE	8

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
38 – 38.6 FIXED MOBILE									38 – 38.6 FIXED MOBILE	5
38.6 – 39.5 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE US291	Fixed Microwave	WTB pt 101	V/D/VDO; 1 or 2-way transmission; 9, 50 MHz channel pairs; Analog/digital	PTP; S Licensee Defined Rectangul ar Service Area (BTA proposed))					38.6 – 39.5 US291	
39.5 – 40 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) US291	Fixed Microwave	WTB pt 101	V/D/VDO; 1 or 2-way transmission; 9, 50MHz channel pairs; Analog/digital	PTP;S Licensee Defined Rectangul ar Service Area (BTA proposed)					39.5 – 40 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) US291 G117	0
40 – 40.5 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth)									40 – 40.5 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) G117	0
40.5 – 42.5 BROADCASTING-SATELLITE BROADCASTING Fixed Mobile US211	<i>LMWS (proposed)</i>	WTB pt 101	V/D/Video; 1 or 2-way transmission; 2 1000 MHz blocks; Analog/digital	P-MP MTA					40.5 – 42.5 US211	

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
42.5 – 43.5 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE except aeronautical mobile RADIO ASTRONOMY									42.5 – 43.5 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE except aeronautical mobile RADIO ASTRONOMY	
43.5 – 45.5									43.5 – 45.5 FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) G117	
45.5 – 47 MOBILE MOBILE-SATELLITE (Earth-to-space) RADIONAVIGATION RADIONAVIGATION- SATELLITE S5.554	Automobile radar 46.7 - 46.9 Ghz	OET pt 15							45.5 – 47 MOBILE MOBILE-SATELLITE (Earth-to-space) RADIONAVIGATION RADIONAVIGATION- SATELLITE S5.554	
47 – 47.2 AMATEUR AMATEUR-SATELLITE	<i>Amateur Radio (proposed)</i>	WTB pt 97	V/D/Image 2-way transmission Analog/digital	OmniDir USA					47 – 47.2	
47.2 – 50.2 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.149 S5.555 US264 US297	<i>LMWS (proposed)</i>	WTB pt 101	V/D/Video 1 or 2-way transmission 2 400 MHz blocks Analog/digital	P-MP MTA (proposed)					47.2 – 50.2 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.149 S5.555 US264 US297	
50.2 – 50.4 EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) US263	No service designation proposed.								50.2 – 50.4 EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) US263	

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
50.4 – 51.4 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space)	No service designation proposed.								50.4 – 51.4 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space) G117	
51.4 – 54.25 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) US246									51.4 – 54.25 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) US246	
54.25 – 58.2 EARTH EXPLORATION- SATELLITE (passive) FIXED INTER-SATELLITE MOBILE S5.558 SPACE RESEARCH (passive) US263	No service designation proposed.	IB pt 25				ISS			54.25 – 58.2 EARTH EXPLORATION- SATELLITE (passive) FIXED INTER-SATELLITE MOBILE S5.558 SPACE RESEARCH (passive) US263	
58.2 – 59 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) US246									58.2 – 59 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) US246	
59 – 64 FIXED INTER-SATELLITE MOBILE S5.558 RADIOLOCATION S5.559 S5.138	GSO and/or NGSO / FSS Unlicensed	IB pt 25 OET pt 15				ISS; A	ISS	G	59 – 64 FIXED INTER-SATELLITE MOBILE S5.558 RADIOLOCATION S5.559 S5.138	
64 – 65 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) US246									64 – 65 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) US246	

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
65 – 66 EARTH EXPLORATION-SATELLITE SPACE RESEARCH Fixed Mobile									65 – 66 EARTH EXPLORATION-SATELLITE SPACE RESEARCH Fixed Mobile	
66 – 71 MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE S5.554									66 – 71 MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE S5.554	
71 – 74 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space) US270	<i>LMWS 71 - 71.5 Ghz (proposed)</i>	WTB pt 101	V/D/VDO; 1 or 2-way transmission; 2 250 MHz blocks; Analog/digital	P-MP (MTA proposed)					71 – 74 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space) US270	
74 – 75.5 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE US297	No service designation proposed.								74 – 75.5 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE US297	
75.5 – 76 AMATEUR AMATEUR-SATELLITE	<i>Amateur Radio (proposed)</i>	WTB Pt 97	V/D/VDO; 2-way transmission; Analog/digital	OmniDir USA non-exclusive					75.5 – 76	
76 – 77 RADIOLOCATION Amateur	<i>Amateur Radio (proposed)</i>	WTB Pt 97	V/D/VDO; 2-way transmission; Analog/digital	OmniDir USA non-exclusive					76 – 77 RADIOLOCATION	
77 – 81 RADIOLOCATION Amateur Amateur-Satellite S5.560	<i>Amateur Radio (proposed)</i>	WTB Pt 97	V/D/VDO; 2-way transmission; Analog/digital	OmniDir USA non-exclusive					76 – 81 S5.560	

Non-Government									Government	
Allocation (GHz)	"Common" Service Name	Bureau and Rule Part	Terrestrial Services			Satellite Services			Allocation (MHz)	Util.
			Operational Parameters	Usage	Utilization	License Type	Orbit	Coverage/Utilization		
81 – 84 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth)	No service designation proposed.								81 – 84 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth)	
84 – 86 FIXED MOBILE BROADCASTING BROADCASTING-SATELLITE S5.561 US211	(LMWS 84-84.5 proposed)	WTB pt 101	V/D/VDO; 1 or 2-way transmission; 2 250 MHz blocks; Analog/digital	P-MP (MTA proposed)					84 – 86 FIXED MOBILE S5.561 US211	
86 – 92 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246									86 – 92 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246	
92 – 95 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIOLOCATION S5.149									92 – 95 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIOLOCATION S5.149	
95 – 100 MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE Radiolocation S5.149 S5.554 S5.555									95 – 100 MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE Radiolocation S5.149 S5.554 S5.555	

rev: 96.10.18 —(1) replaced "Do." with "ditto"; (2) 462.5375-462.7375 Mhz, incorrect radio service and rule part;