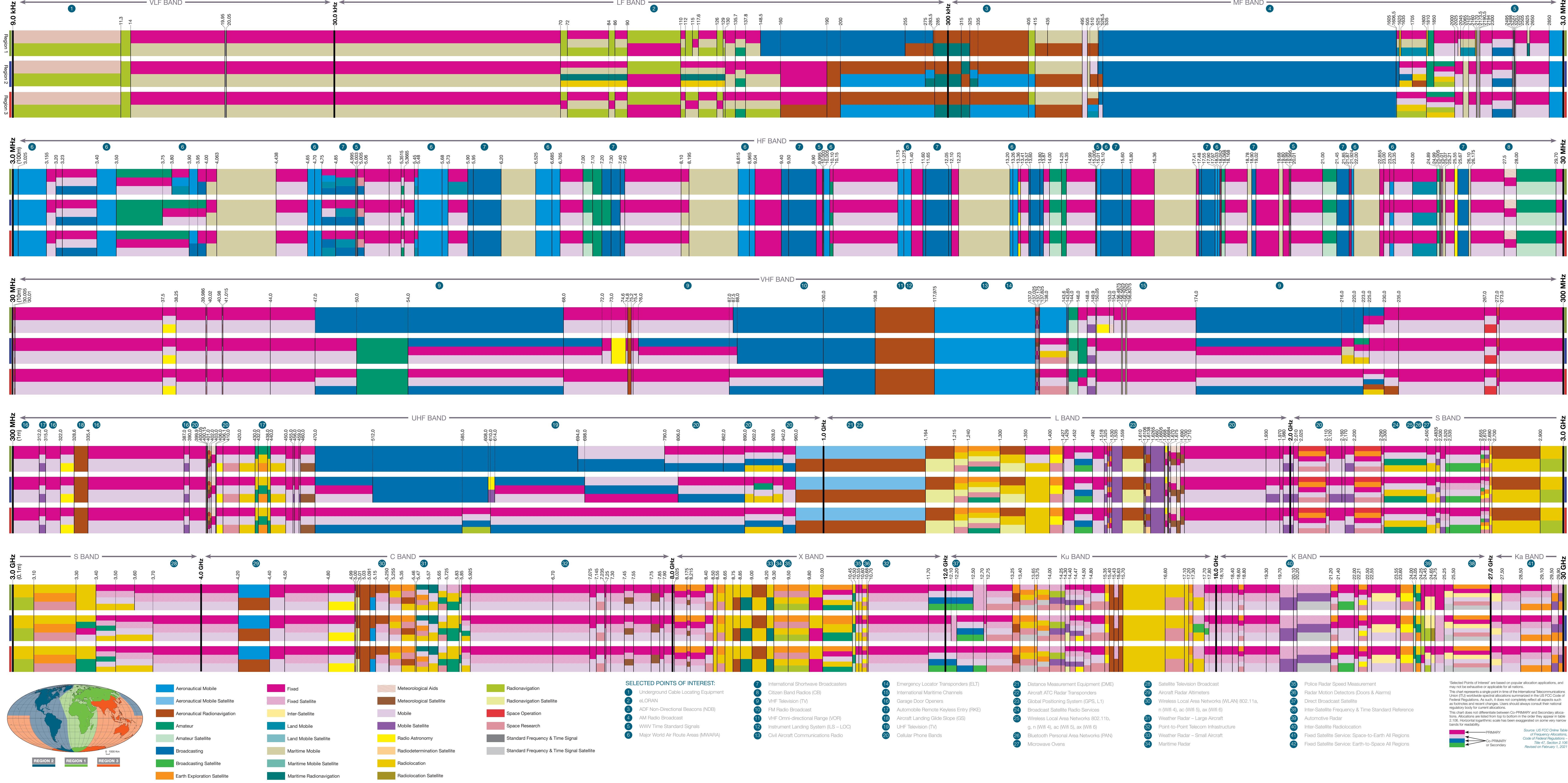


Worldwide Spectrum Allocations

(Courtesy of Tektronix)

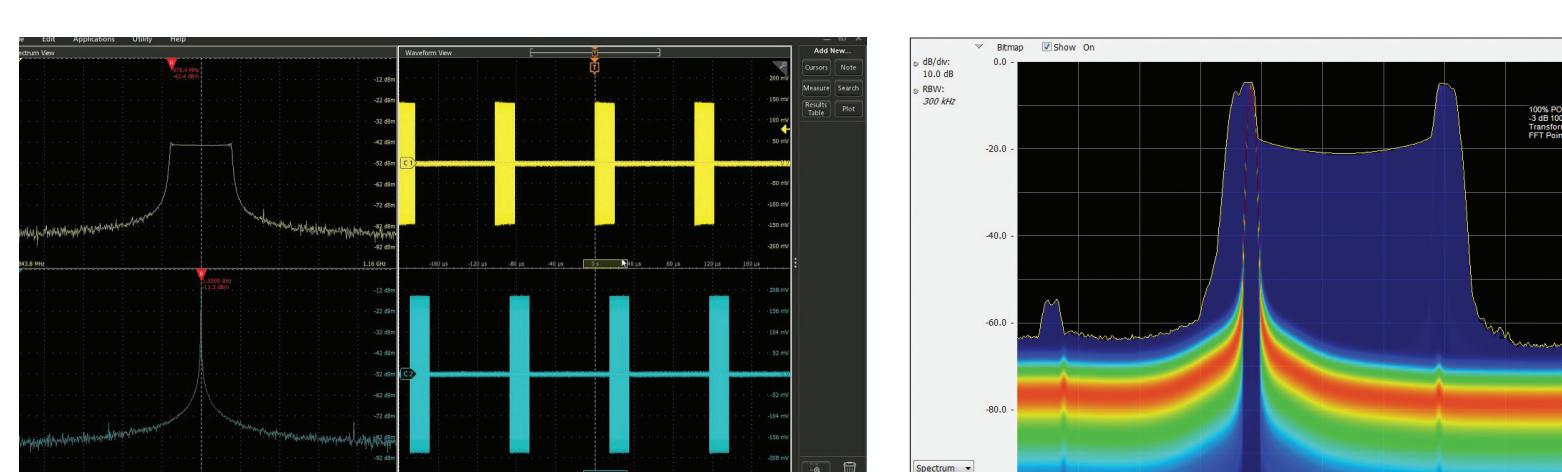


TEKTRONIX REAL-TIME SPECTRUM ANALYSIS SOLUTIONS

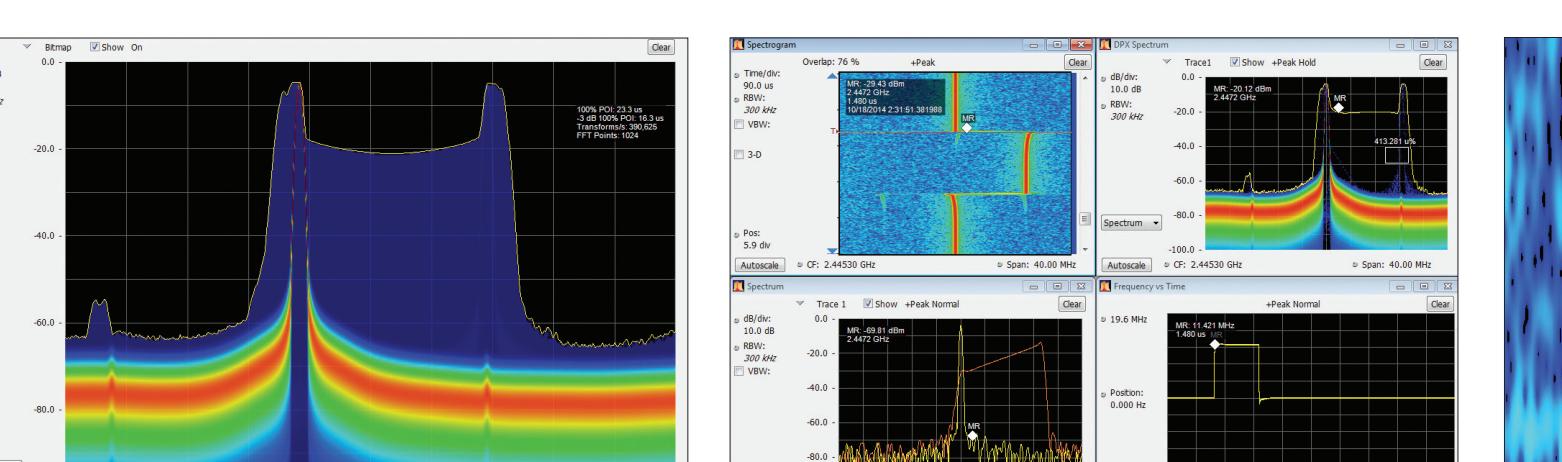
Solving your RF challenges from the bench to the field



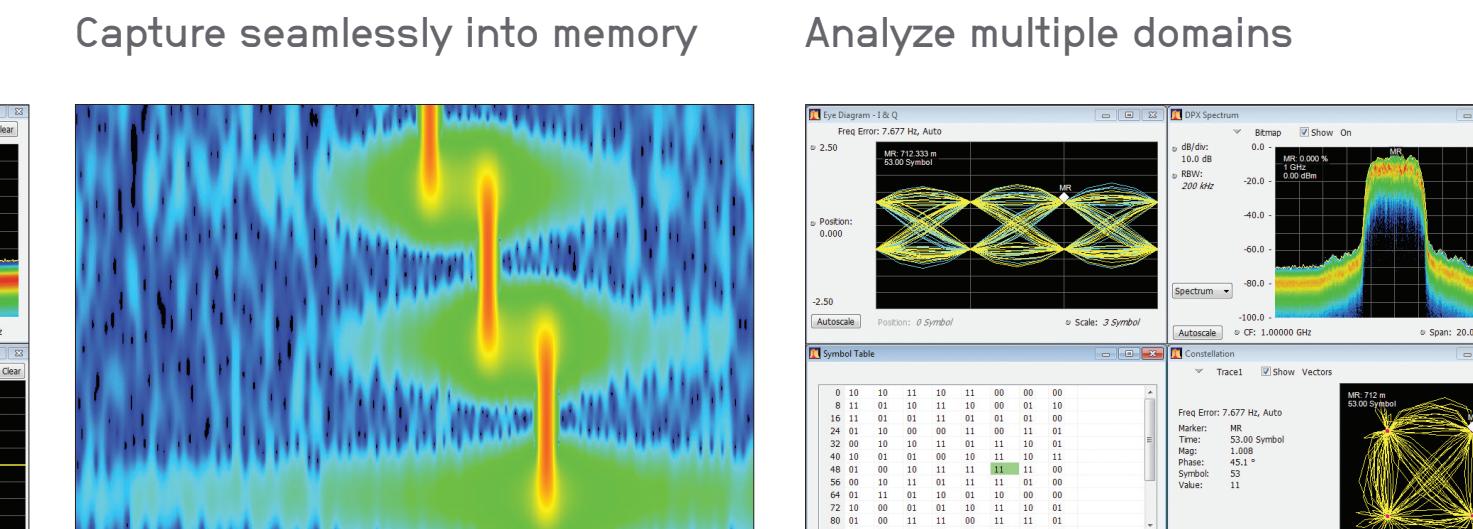
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Gain deeper insight

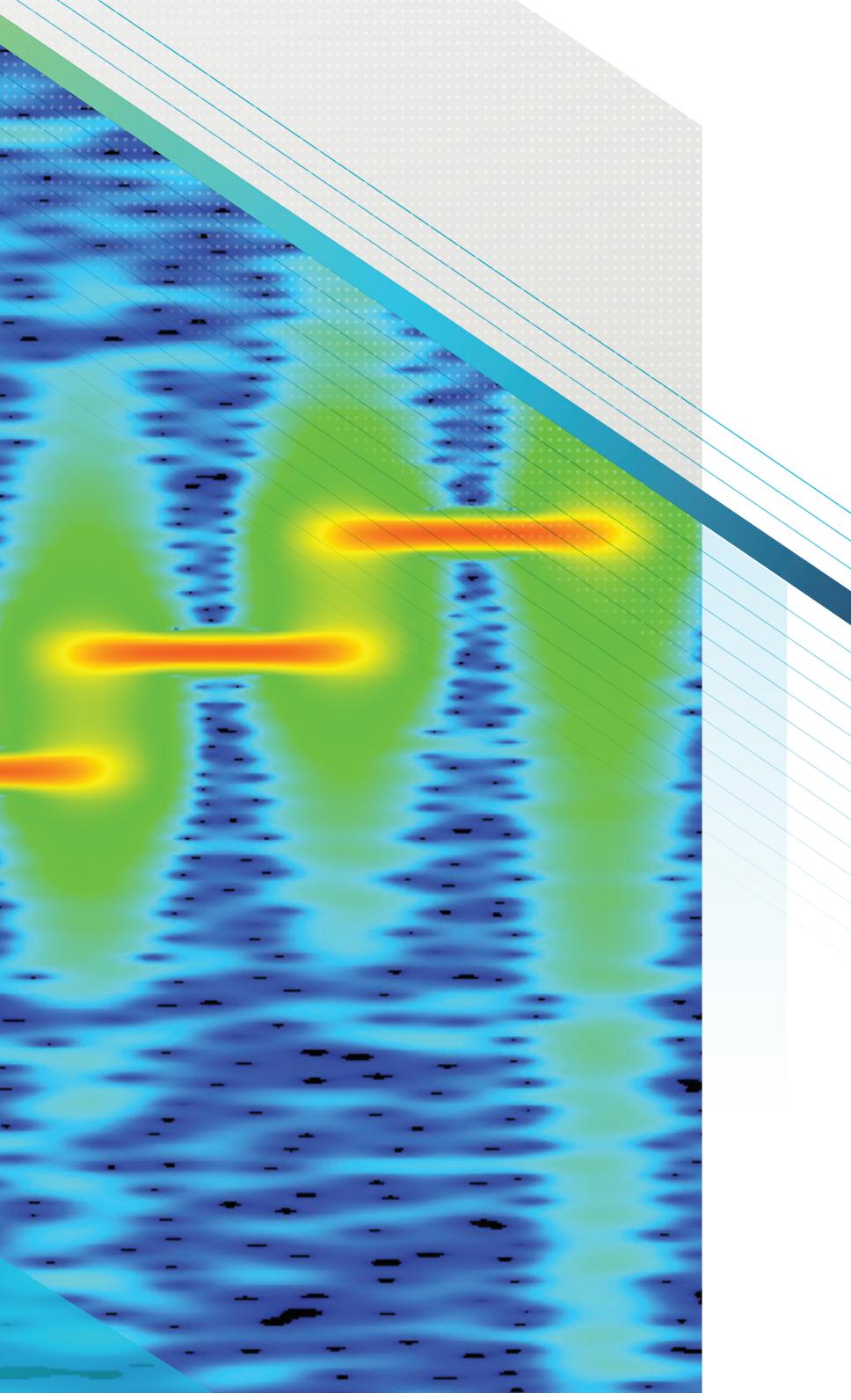


Trigger on frequency changes



COMMON WORLDWIDE WIRELESS TECHNOLOGIES

WIRELESS TECHNOLOGIES						
TECHNOLOGY	CHANNEL SPACING	COMMON FREQUENCIES				
		FR1	FR2	FR3	FR4	FR5
NR - FR1 (New Radio - Frequency Range 1)	5 MHz	50 MHz	600 MHz (USDD)	1600 MHz (L-Band)	2300 MHz (S-Band)	
	10 MHz	60 MHz	700 MHz	1700 MHz (E-AWS)	2500 MHz (S-Band/BRS)	
	15 MHz	70 MHz	800 MHz (EUDD)	1800 MHz (DCS)	2600 MHz (IMT-E)	
	20 MHz	80 MHz	850 MHz (CLR/E-CLR)	1900 MHz (PCS/E-PCS)	3500 MHz (C-Band)	
	25 MHz	90 MHz	900 MHz (E-GSM)	2000 MHz (AWS-4)	3700 MHz (C-Band)	
	30 MHz	100 MHz	1500 MHz (L-Band)	2100 MHz (IMT)	4700 MHz (C-Band)	
	40 MHz					
NR - FR2 (New Radio - Frequency Range 2)	50 MHz	200 MHz	26 GHz (K-Band)	39 GHz (Ka-Band)		
	100 MHz	400 MHz	28 GHz (Ka-Band)	41 GHz (V-Band)		
LTE - TDD	1.4 MHz	10 MHz	700 MHz	2100 MHz (IMT)	2600 MHz (IMT-E)	
	3 MHz	15 MHz	1900 MHz (PCS)	2300 MHz	3500 MHz	
	5 MHz	20 MHz	1990 MHz	2500 MHz (BRS/EBS)	3700 MHz	
LTE - FDD	1.4 MHz	10 MHz	LSMH A/B/C/D/E, USMH C/D:	900 MHz (E-GSM)	1900 MHz (PCS / EPCS)	
	3 MHz	15 MHz		1500 MHz (U/LPDC)	2000 MHz (S-Band)	
	5 MHz	20 MHz	700 MHz	1600 MHz (L-Band)	2100 MHz (IMT)	
			800 MHz (EUDD / SMR)	1700 MHz (AWS)	2600 MHz (IMT-E)	
			850 MHz (CLR/ECLR)	1800 MHz (DCS)		
WCDMA/HSPA	5 MHz		Band I: 1920-1980 MHz (UL); 2110-2170 MHz (DL) Band V: 824-849 MHz (UL); 869-894 MHz (DL) Band II: 1850-1910 MHz (UL); 1930-1990 MHz (DL)			
CDMA2000/EVDO	1.25 MHz		800/850 MHz band: 824-849 MHz (MS); 869-894 MHz (BS) Japan Cellular band: 887-925 MHz (MS); 832-870 MHz (BS) PCS 1900: 1850-1910 MHz (MS); 1930-1990 MHz (BS) IMT 2000 band: 1920-1980 MHz (MS); 2110-2170 MHz (BS)			
GSM	200 kHz		GSM 900: 890-915 MHz (UL); 935-960 MHz (DL) DCS 1800: 1710-1785 MHz (UL); 1805-1880 MHz (DL)			
WIRELESS TECHNOLOGIES						
TECHNOLOGY		CHANNEL SPACING		COMMON FREQUENCIES		
LoRa		500 kHz		169, 433, 868, 915 MHz		
Sigfox		200 Hz UL, 600 Hz DL		250 - 750 MHz, 784, 868, 915 MHz		
WIRELESS TECHNOLOGIES						
TECHNOLOGY		CHANNEL SPACING		COMMON FREQUENCIES		
Wifi6 - IEEE 802.11ax		20, 40, 80, 160 MHz		2.4, 5, 6 GHz		
Wifi5 - IEEE 802.11ac		20, 40, 80, 160 MHz		5 GHz		
Wifi4 - IEEE 802.11n		20, 40		2.4, 5 GHz		
Legacy - IEEE 802.11a/b/g		20		2.4, 5 GHz		
WIRELESS TECHNOLOGIES						
TECHNOLOGY		CHANNEL SPACING		COMMON FREQUENCIES		
Bluetooth 5		2 MHz		2.4 GHz		
Bluetooth 4 (LE)		2 MHz		2.4 GHz		
Bluetooth BR/EDR		1 MHz		2.4 GHz		
Zigbee - IEEE 802.15.4		2 MHz (915 MHz) 5 MHz (2.40 GHz) 500 MHz-1355 MHz		250-750 MHz 784, 868, 915 MHz 2.40 GHz (ISM band) 3.10-4.80 GHz; 6.00-10.60 GHz		

A heatmap showing worldwide spectrum allocations. The background is blue, indicating lower power density, while green and yellow areas indicate higher power density. Three red vertical bars are overlaid on the heatmap, pointing to specific frequency bands.

* European toll-free number. If not accessible, call +41 52 675 3777

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Worldwide Spectrum Allocations

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