



WRC

Agenda Item 1.1

to consider additional spectrum allocations to the mobile service on a primary basis and identification of additional frequency bands for International Mobile Telecommunications (IMT) and related regulatory provisions, to facilitate the development of terrestrial mobile broadband applications, in accordance with Resolution 233 (WRC-12)

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Requirements



- Meet expected growth that is driven to a large extent by audiovisual content
- Available in a timely manner
- Harmonized worldwide
- Preferably adjacent to existing allocations

Estimated Spectral Needs



Source	US	Australia	Russia	Japan	China	Huawei, Ericsson, Nokia	GSMA	India
Date	2014	2020	2020	2020		2020	2020	
Total:		1 081 MHz	1 065 MHz	2 020 MHz	600-800 MHz (by 2015) 1 700-2 100 MHz (by 2020)	1 240 MHz (Low user density) 1 880 MHz (High user density)	1 600-1 800 MHz	
Additional:	275 MHz	300 MHz	385 MHz					300 MHz (by 2017) 200 MHz (by 2020)



Expected Benefits

- Multimedia applications
 - Mobile telemedicine
 - Teleworking
 - Distance learning
- Reduce digital divide between urban & rural areas
- Improved RLAN performance/capacity
- Continued growth of the mobile market



Frequency Bands Identified for Study

- 470 - 698 MHz (FS, MS, BS & RAS)
- 1 300 – 1 400 MHz (ARNS, RLS, RNSS, MS & FS)
- 1 427 – 1 527 MHz (SOS, FS, MS, BS & BSS)
- 1 695 – 1 700 MHz (Met Aids & Met Satellite)
- 2 700 – 2 900 MHz (ARNS & RLS)
- 3 600 – 4 200 MHz (FS, FSS & MS)
- 5 350 – 5 470 MHz (EESS, RLS, ARNS & Space Research)
- 5 850 – 6 425 MHz (FS, FSS, MS, RLS & AS)

Existing/Proposed Mobile Bands



300 MHz

3 GHz

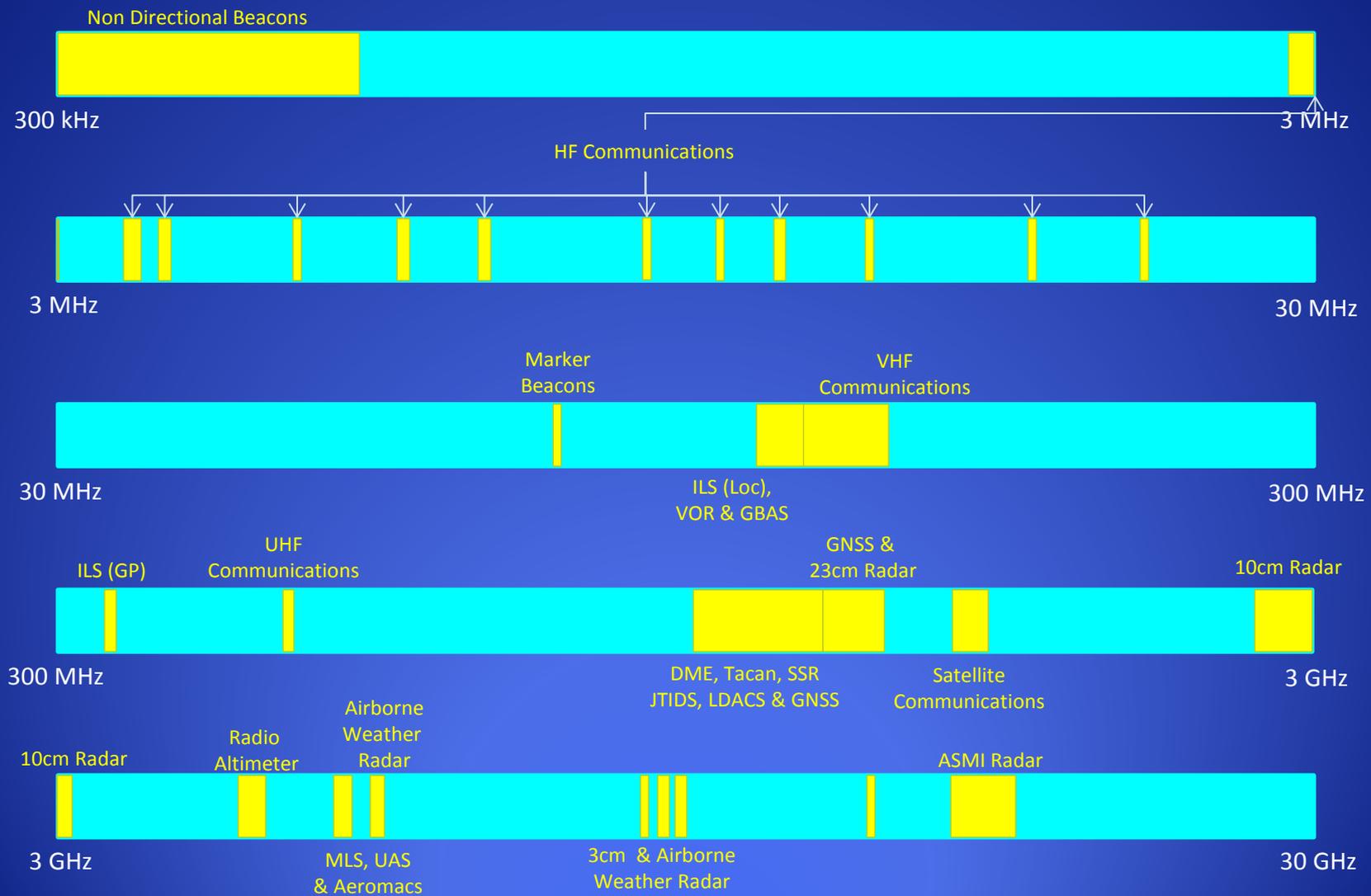


3 GHz

30 GHz



Aeronautical Spectrum





Aeronautical Frequency Bands Threatened

- Co-Band Sharing
 - 1 300 – 1 350 MHz (En-route Primary Radar)
 - 2 700 – 2 900 MHz (Airport Primary Radar)
 - 5 350 – 5 470 MHz (Airborne & Ground Weather Radar)
- Adjacent Band Sharing
 - 4 200 – 4 400 MHz (Radio Altimeters)



Where is the Work Being Done

- Globally
 - Joint Task Force 4-5-6-7
 - Working Party 5D
- Regionally
 - Africa - ATU
 - Americas – CITEL
 - Arab Group – ASMG
 - Asia Pacific – APT
 - Europe – CPG PT-D
 - Russian Commonwealth – RCC
- ICAO
 - ACP WG-F



Questions