

The ITU & its Impact on Space Activities

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Aarti Holla
Secretary General

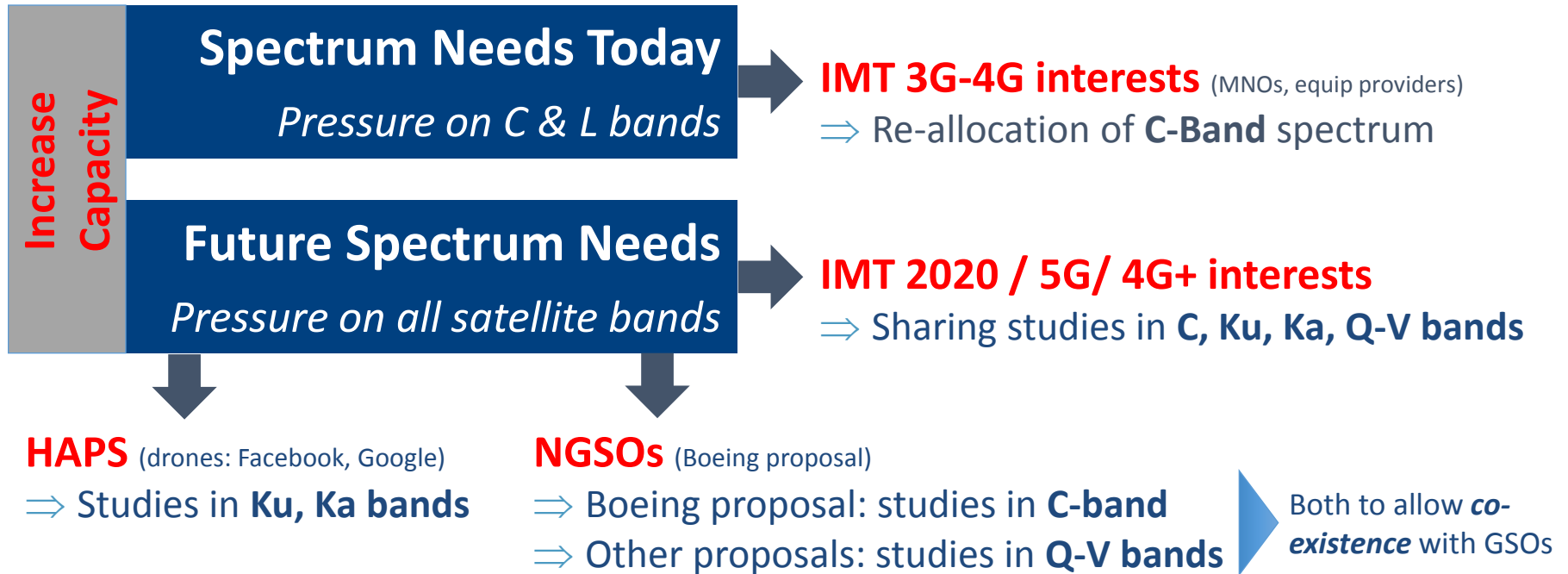
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21 operators – Europe – Middle-East - Africa



Multiple Initiatives that affect ESOA Members' ability to access core satellite spectrum on a long-term sustainable & viable basis:

- ⇒ Without risk of interference
- ⇒ Without severe, licensing constraints



Protecting existing & future investments & growth

Generally: WRC15 outcome in line with global trends & requirements:

- ❖ More spectrum for **mobile** data growth
- ❖ Continuity of essential **satellite** services
- ❖ Need for spectrum for secure flight tracking (**mobility**)

Satellite Perspective:

- ❖ Minimal impact on existing users receiving essential satellite services
 - ❖ Broadcast community
 - ❖ First responders / disaster relief
- ❖ WRC15 decisions “*promised*” no impact on growth potential for High-Throughput Ka Band satellites at 28GHz

Heavily reliance on C Band due to favourable propagation characteristics and heavy rainfall across all ITU regions

No global identification of entire C Band for IMT BUT:

- ❖ Lower portion of C band **3.4GHz - 3.6GHz** identified for IMT in Regions 1 & 2 only and only by a few countries in APT Region 3
- ❖ Clear recognition of APAC's specific need for satellite services (in wake also of natural disasters)
- ❖ Decision to preserve **3.6 GHz - 4.2 GHz** largely carried by APT Member States heavily reliant on satellite services for which IMT provides no alternative (broadcasting / disaster relief / rural backhaul & Internet connectivity)

WRC-15 Decisions

3.4-3.6 GHz: Global allocation to IMT, except some APT countries

3.6-3.7 GHz: NO IMT, except 4 CITELE countries who took footnote

3.7-3.8 GHz: NOC (NO IMT)

3.8-4.2 GHz: NOC (NO IMT)

⇒ Implementation of 3.4 - 3.6 for IMT and its **impact on existing satellite services** remains to be seen



Spectrum for 5G/IMT can be found below 6GHz & in mm wave bands

WRC15: Every world region indicated candidate bands above 31GHz

31.8 – 33.0 GHz

At least 1.2 GHz contiguous spectrum available for global harmonization

APT

CITEL

CEPT

RCC

ASMG

From	To
25.25	25.5
31.8	33.4
39	47
47.2	50.2
50.4	52.6
66	76
81	86

From	To
10	10.45
23.15	23.6
24.25	27.5
27.5	29.5
31.8	33
37	40.5
45.5	47
47.2	50.2
50.4	52.6
59.3	76

From	To
24.5	27.5
31.8	33.4
40.5	43.5
45.5	48.9
66	71
71	76
81	86

From	To
25.25	27.5
31.8	33.4
39	40.5
40.5	41.5
45.5	47.5
48.5	50.2
50.4	52.6
66	71
71	76
81	86

From	To
Above 31GHz	
&	
BY IMPLICATION	
66	71
71	76
81	86