

Session 2

5G Spectrum

Speakers and Panel

- Speakers and panel:
 - Mr. Colin Langtry, Chief of the Radiocommunication Study Groups Department, ITU
 - Mr. Jonas Wessel, Director of Spectrum at PTS (Sweden)
 - Mr. Yuji Nakamura, Ministry of Internal Affairs and Communications, Japan
 - Mr. Julius Knapp, Chief Office of Engineering & Technology, FCC
 - Dr. KIM KyungMee, Director RRA
 - Mr. Chang RuoTing, Director of the Division of Frequency Planning of Bureau of Radio Regulation, MIIT
- Moderator:
 - Mr. Takehiro Nakamura, Chairman of Strategy & Planning Committee of 5G Mobile Communications Promotion Forum

Questions to the panel

- Considering different use case aspects of 5G, i.e. eMBB, mMTC and URLLC, what is the need for 5G Spectrum below 1 GHz, between 1 and 6 GHz and various bands above 24 GHz?
- How important is early release of spectrum to achieve your policy and national/regional goals for 5G?
- What actions will you (or your organisation) implement to coordinate spectrum availability, enable early 5G technology/network introduction, and support 3GPP/ITU standardization processes?
- Do you (or your organisation) have any preference on authorisation approaches and whether these should be different for 5G? How might the approach help to address the policy objectives?
- How do you assess the possibility to harmonise 5G spectrum globally?

Spectrum Candidates for Early 5G

Frequency band	Bandwidth	For eMBB	Device availability	Spectrum availability				
				Europe	US	JPN	KOR	CHN
3.3-3.4GHz	100MHz	😊	😊	😞	😞	😞	😞	😊
3.4-3.6GHz	200MHz	😊	😊	😊	😊	😊 for 4G	😊	😊
3.6-3.8GHz	200MHz	😊	😊	😊	😊 Not available above 3.7GHz	😊	😊	😞
3.8-4.2GHz	400MHz	😊	😊	😞	😞	😊	😊	😞
4.4-4.99GHz	500MHz	😊	😊	😞	😞	😊 4.4-4.9GHz only	😞	😊 4.4-4.5, 4.8-4.99GHz only
5.15-5.35GHz*	200MHz	😊	😊	😊 Indoor only	😊	😊 Indoor only	😊 Indoor only in 5.10-5.25GHz	😊
5.47-5.85GHz*	380MHz	😊	😊	😊 Not available above 5.725GHz	😊	😊 Not available above 5.725GHz	😊	😊 Not available above 5.725GHz
24.25-27.5GHz	3,250MHz	😊	?	😊?	😊? 24.25-24.45GHz, 25.05-25.25GHz	😊	😊	😊 24.25-25GHz only?
27.5-29.5GHz	2,000MHz	😊	?	😞	😊 27.5-28.35 GHz	😊	😊	😊?
31.8-33.4GHz**	1,600MHz	😊	?	😊?	😊 31-31.3GHz	😊	😊?	😊?
37-40.5GHz	3,500MHz	😊	?	😊	😊 37-40GHz	😊 Partially	😊? 37-42.5GHz	😊 39-40GHz only?

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<u>3.4-3.6GHz</u>	200MHz	😊	😊	😊	😊	😊 for 4G	😊	😊
<u>3.6-3.8GHz</u>	200MHz	😊	😊	😊	😞 Not available above 3.7GHz	😊	😊	😞
3.8-4.2GHz	400MHz	😊	😊	😞	😞	😊	😊	😞
<u>4.4-4.99GHz</u>	500MHz	😊	😊	😞	😞	😊 4.4-4.9GHz only	😞	😊 4.4-4.5, 4.8-4.99GHz only
5.15-5.35GHz*	200MHz	😊	😊	😊 Indoor only	😊	😊 Indoor only	😊 Indoor only in 5.10-5.25GHz	😊 Indoor only
5.47-5.85GHz*	380MHz	😊	😊	😊 Not available above 5.725GHz	😊	😊 Not available above 5.725GHz	😊	😊 Not available above 5.725GHz
<u>24.25-27.5GHz</u>	3,250MHz	😊	?	😊?	😊? 24.25-24.45GHz, 25.05-25.25GHz	😊	😊	😊 24.25-25GHz only?
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