

## RF Spectrum Open Issues

### Frequency Bands and Center Frequencies

It was suggested on the Nov 20 Ad Hoc call that we combined the FDD DS frequency band and center frequency increment into a set of mandatory and another set of optional center frequencies. So the following table does just that.

#### FDD Downstream Channels (Center Frequencies)

Parameter	Possible Values	Recommendation to TF
Mandatory Channel Set	[648, 650, ... 904, 906]	
Optional Channel Set	[204, 206, ... 644, 646] and [908, 910, ... 1702, 1704]	

We may also want to take the same approach for the FDD US and for TDD once we have an idea of the channel bandwidth.

#### FDD Upstream Band

Parameter	Possible Values	Recommendation to TF
FDD US Lower Band Edge	<ul style="list-style-type: none"><li>• 5 MHz</li><li>• 15 MHz</li></ul>	
FDD US Upper Band Edge	<ul style="list-style-type: none"><li>• 200 MHz</li><li>• 250 MHz</li></ul>	

#### TDD Band1

Parameter	Possible Values	Recommendation to TF
TDD Band1 Lower Band Edge	<ul style="list-style-type: none"><li>• 5 MHz</li></ul>	
TDD Band1 Upper Band Edge	<ul style="list-style-type: none"><li>• 200 MHz</li></ul>	

#### TDD Band2

Parameter	Possible Values	Recommendation to TF
TDD Band2 Lower Band Edge	<ul style="list-style-type: none"><li>• 860 MHz</li><li>• 960 MHz</li></ul>	
TDD Band2 Upper Band Edge	<ul style="list-style-type: none"><li>• 1200 MHz</li><li>• Approx. 1800 MHz</li></ul>	

### Center Frequency Tunability

Parameter	Possible Values	Recommendation to TF
FDD US Center Frequency Tunability Resolution	<ul style="list-style-type: none"><li>• 2 MHz</li></ul>	
TDD Center Frequency Tunability Resolution	<ul style="list-style-type: none"><li>• 2 MHz</li></ul>	

## OFDM Channel Bandwidth

Parameter	Possible Values	Recommendation to TF
FDD DS OFDM Channel Bandwidth	<ul style="list-style-type: none"> <li>• 192 MHz</li> </ul>	TF selected 192 MHz
FDD US OFDM Channel Bandwidth	<ul style="list-style-type: none"> <li>• 192 MHz</li> </ul>	
TDD OFDM Channel Bandwidth	<ul style="list-style-type: none"> <li>• 192 MHz</li> </ul>	

## Exclusion Sub-Band Rules

Note, the standard may include multiple exclusion sub-band rules, so the TF may have multiple recommendations to the Task Force on exclusion sub-band rules.

Topic	Possible Rules	Recommendation to TF
FDD DS Exclusion Sub-Band Rules	<ul style="list-style-type: none"> <li>• Exclusion sub-band can be on the lower portion of the channel, the upper part of the channel, or within the channel</li> <li>• Two possible approaches                             <ul style="list-style-type: none"> <li>○ Exclusion sub-bands are a multiple of 2 MHz and on a 1 MHz grid</li> <li>○ Alternative method would be to specify the start and stop index for the exclusion sub-band.</li> </ul> </li> <li>• After exclusion sub-bands there must be a continuous sub-band of at least 24 MHz wide. (Do we want to make sure this is the middle 24 MHz?)</li> <li>• A minimum amount of cumulative bandwidth</li> <li>• Do not support exclusion sub-bands for analog TV services within the 192-MHz OFDM channel.</li> </ul>	<ul style="list-style-type: none"> <li>• Exclusion sub-band can be on the lower portion of the channel, the upper part of the channel, or within the channel</li> </ul>
FDD US Exclusion Sub-Band Rules	<ul style="list-style-type: none"> <li>•</li> </ul>	
TDD Exclusion Sub-Band Rules	<ul style="list-style-type: none"> <li>•</li> </ul>	

## Out-of-Band Emission Requirements

Parameter	Possible Values	Recommendation to TF