EPoC RF Channel Definition

## Structure & Control

RF Spectrum Ad Hoc
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Defined to date (DS only)

- RF Channel 192 MHz wide sampled at 10.24 MHz
  - (Geneva motion 12)
- High/Low/Mid Exclusion Bands
  - (Geneva motion 10 & Phoenix motion 6)
- Two possible FFT sizes: 4096 or 8192
  - Sub-carriers of 50 or 25 kHz respectively (Phoenix motion 11)

f

$192+ f_{min}$ High exclusion band

Mid exclusion band(s)

f_{min} Low exclusion band

t

4k or 8k sub-carriers
50 or 25 kHz each resp
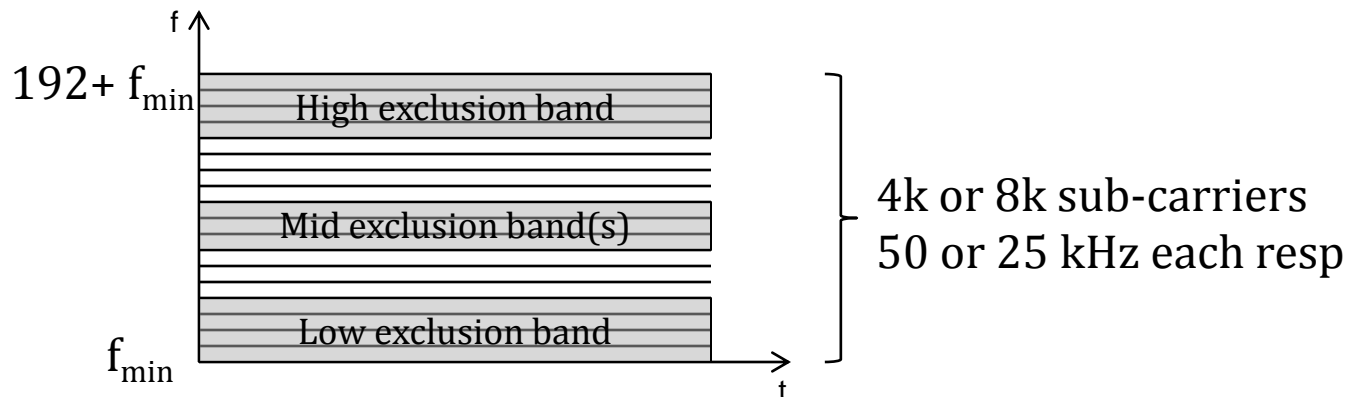
Terms

- RF Channel – the 192 MHz of spectrum defined in GVA-12

- Exclusion Band – a part of the RF Channel in which the PHY is not allowed to transmit. Typically used for: narrowing the RF Channel boundaries, protecting legacy services within the RF Channel, or prevent egress interference.

Spectrum Granularity

Straw Poll #1

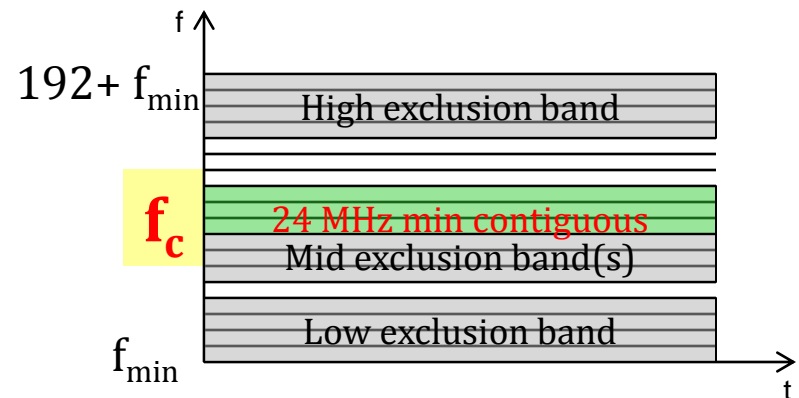- The granularity for setting the Center Frequency (f_c) of the RF Channel should be:

8 MHz	__0____
6 MHz	__0____
2 MHz	_2____
1 MHz	_8__
500 kHz	__0____
200 kHz	__0____
Undecided	__1___

RF Spectrum Upper Bound

Straw Poll #2a

- The system should be capable of communicating an upper bound of the RF spectrum of:

1 GHz   __0___
1.2 GHz   __0___
1.8 GHz   __0___
2.5 GHz   __0___
5.0 GHz   _11__
Other   _____ GHz

RF Spectrum Upper Bound

Straw Poll #2b

- I prefer the minimum upper bound of the RF spectrum supported by the PHY to be:

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                 TDD        FDD
1.0 GHz   _2____      _2____
1.2 GHz   _3____      _7__
1.8 GHz   _1____      _1____
3.0 GHz   _0____      _0____
Other     _0____      _0____ GHz
Don't know _5____  _1____
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RF Spectrum Upper Bound

Straw Poll #3a

- I prefer the minimum Lower bound of the RF spectrum supported by the PHY to be:

	FDD DS	
85 MHz	_2____	
108 MHz	_6___	
120 MHz	_0____	
240 MHz	_0____	
300 MHz	_0____	
550 MHz	_2____	
Other	_0.0____	MHz
Don't know	_0____	

RF Spectrum Upper Bound

Straw Poll #3b

- I prefer the minimum Lower bound of the RF spectrum supported by the PHY to be:

	TDD (low band)
5 MHz	_9___
54 MHz	_0____
85 MHz	_0____
108 MHz	_0____
120 MHz	_0____
240 MHz	_0____
300 MHz	_0____
550 MHz	_1____
Other	_____ MHz
Don't know	_1____