

RF Spectrum Ad Hoc – Minutes July 9, 2013

Provided the IEEE-SA Patent Policy link. Everyone on the call was familiar with the patent policy.

- <https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf>

Everyone on the call was familiar with the IEEE patent policy.

Discuss TDD Band

Possible Upper TDD Band is 860 MHz to 1700 MHz

An alternative lower band edge could be 560 MHz

C: The lower band edge will not have a big impact on power. As the total bandwidth increases requires more TX power and possibly more equalization.

C: Going above 1700 MHz, some techniques like direct digital synthesis may not be as practical, so another architecture may be needed.

C: The challenge is mostly the lost above 1000 MHz, so more power is required.

C: So far the details on more than 192 MHz have not yet been worked out, so it may not look like one large signal.

Straw Poll #1

The standard shall support an upper TDD frequency band from approximately 500 MHz to 1700 MHz.

Yes	6
No	0
Other	0
Abstain	2

Discussed Lower TDD Band

Possible upper band edge

$$85 + 192 = 277$$

(85 is upper DOCSIS 3.0 upstream band)

Between 5 MHz and 10 MHz there is a lot of noise

From 10 MHz to 20 MHz it is little better

And from 20 MHz to 40 MHz is even better

By setting the lower band edge higher it allows more analog filtering to improve the SNR

Straw Poll #2 (Chicago Voting)

Possible TDD lower bands

- | | |
|--------------------------------------|---|
| • 5 – 234 MHz (same as FDD upstream) | 5 |
| • 5 – 277 MHz | 0 |
| • 15 – 277 MHz | 2 |
| • 20 – 277 MHz | 2 |

- 10 – 500 MHz 1
- Abstain 1

C: would have preferred 15-234, but it was not in the list.

C: If we do another round, we can remove the items that got zero votes

C: We could add in 15-234

C: Let's divide the question and straw poll the lower band edge and the upper band edge.

Straw Poll #3

What lower band edge do you prefer for the TDD lower band?

- 5 MHz 1
- 10 MHz 2
- 15 MHz 3
- 20 MHz 2

Straw Poll #4

What upper band edge do you prefer for the TDD lower band?

- 234 MHz 1
- 277 MHz 5
- 500 MHz 1

Request that the Task Force chair run eStraw Polls on Straw Polls 1, 3 and 4.

Attendance

Person	Affiliation
Mark Laubach	Broadcom
Michael Peters	Sumitomo Electric
Bill Powell	Alcatel Lucent
Saif Rahman	Comcast
Duane Remein	Huawei
Steve Shellhammer	Qualcomm
Joe Solomon	Comcast