

**Project: IEEE P802.15 Working Group for Wireless Personal Area Networks
(WPANs)**

Submission Title: Progress in Regulation above 275 GHz

Date Submitted: 26 July 2016

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Abstract: In the last WRC a resolution was approved to have an Agenda Item 1.15 in the upcoming WRC 2019. In these slides some information on the progress is presented

Purpose: Provide information to the IG.

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Progress in Regulation above 275 GHz

Outline

- The way from one WRC to the next WRC (simplified)
- AI 1.15 above 275 GHz
 - Introduction to current regulatory situation
 - What can be changed within AI 1.15 in the next WRC
 - Involved Groups in ITU-R
 - Current status and way forward

From WRC to WRC (simplified)

- At the WRC (e.g. 2015) resolutions for future Agenda Items (AI) have been approved.
- (Also the other resolutions are incorporated to the Radio Regulations)
- In addition in these resolutions ITU-R is invited to “prepare” these topics for the next WRC
- If possible topics have already a broad support after the studies in ITU-R
- At the WRC (e.g. 2019) resolutions for the AI may be approved (leads to adjustments in the Radio Regulations)

Current regulation above 275 GHz

- Footnote 5.565 in the Radio Regulations (RR):
“The following frequency bands in the range 275-1 000 GHz are identified for use by administrations for passive service applications:
- **Radio astronomy service:** 275-323 GHz, 327-371 GHz, 388-424 GHz, 426-442 GHz, 453-510 GHz, 623-711 GHz, 795-909 GHz, 926-945 GHz;
- **Earth exploration-satellite service (passive) and space research service (passive):** 275-286 GHz, 296-306 GHz, 313-356 GHz, 361-365 GHz, 369-392 GHz, 397-399 GHz, 409-411 GHz, 416-434 GHz, 439-467 GHz, 477-502 GHz, 523-527 GHz, 538-581 GHz, 611-630 GHz, 634-654 GHz, 657-692 GHz, 713-718 GHz, 729-733 GHz, 750-754 GHz, 771-776 GHz, 823-846 GHz, 850-854 GHz, 857-862 GHz, 866-882 GHz, 905-928 GHz, 951-956 GHz, 968-973 GHz and 985-990 GHz.
- The **use** of the range 275-1 000 GHz by the passive services **does not preclude use** of this range by **active services**. [...]” as long as the passive services are protected.

AI 1.15 above 275 GHz

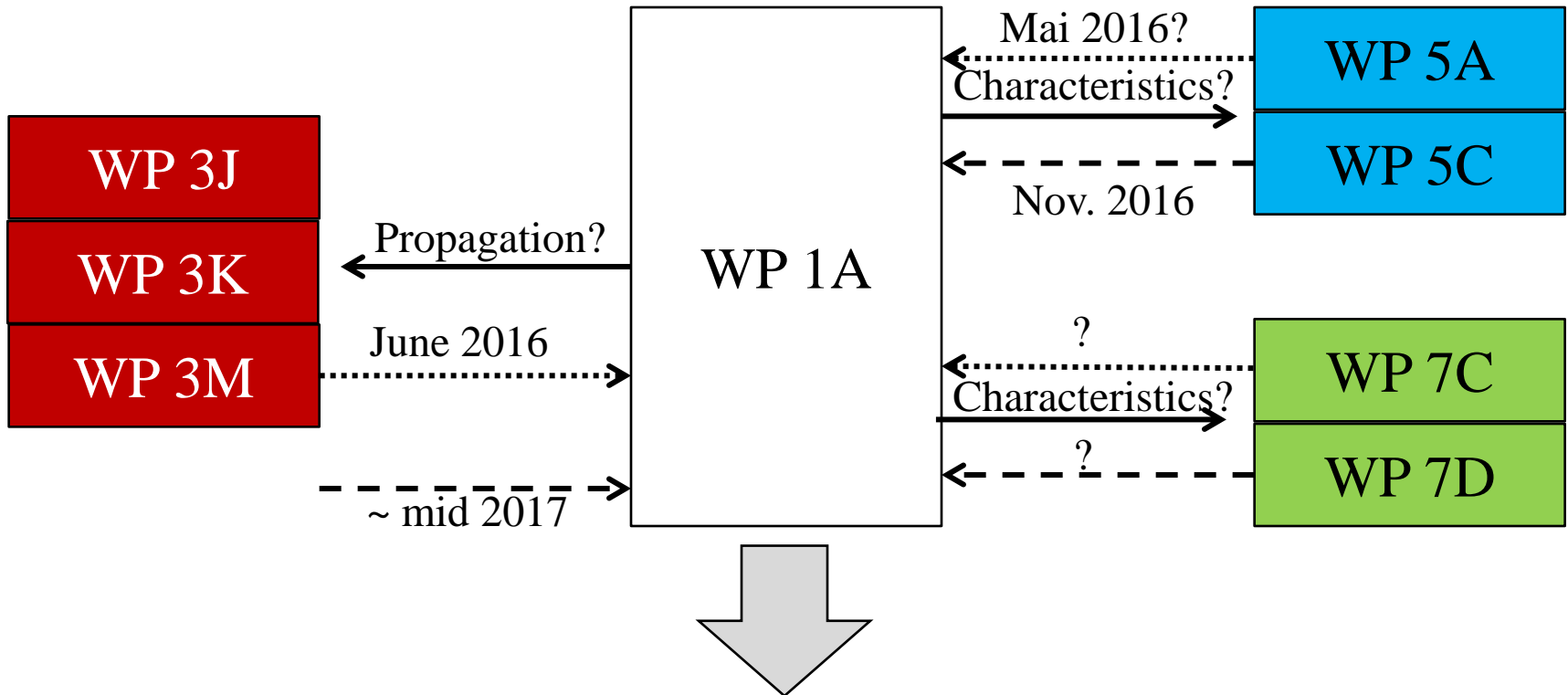
WRC 2015 agreed in resolution 767:

- to have an agenda item for WRC 2019 to consider **identification** of spectrum for **land-mobile** and **fixed active services** in the range of **275 GHz to 450 GHz** while maintaining **protection of the passive services** identified
- ITU-R is invited to
 - identify **technical and operational characteristics**
 - study spectrum needs
 - develop propagation models
 - conduct **sharing studies with the passive services**
 - identify candidate frequency bands

ITU-R groups involved

- WP 1A “spectrum engineering techniques”
- WP 3J “propagation fundamentals”
- WP 3K “point-to-area propagation”
- WP 3M “point-to-point and earth space propagation”
- WP 5A “land mobile service”
- WP 5C “fixed services”
- WP 7C “earth exploration-satellite service, space research”
- WP 7D “radio astronomy”

Who does what?



Sharing Studies

**Vielen Dank für
Ihre Aufmerksamkeit.**

Thank you for paying attention!