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**IEEE P802.19**  
**Wireless Coexistence**

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Project	IEEE P802.19 Wireless Coexistence WG		
Title	<b>June 26 2018 Sub 1 GHz Interest Group Telecon Minutes</b>		
Date Submitted	June 26, 2018		
Source	Benjamin A. Rolfe Blind Creek Associates / MERL P.O. Box 798 Los Gatos, CA, USA 95031	Voice:	(408) 395 7207
		E-mail:	ben.rolfe @ ieee.org
Re:	[Sub 1 GHz Interest Group meeting]		
Abstract	[Meeting Minutes]		
Purpose	[]		
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Tuesday June 26, 2018.

## Introduction

Teleconference Called to order at 16:00 PDT

Agenda:

1. Meeting preamble and Review of last call - Rolfe
2. Review of simulation parameters table - Shellhammer
3. Next steps
4. Any other business
5. Adjourn

Approved by unanimous consent.

### 1. Meeting preamble and Review of last call

IEEE reminder and intro: see slides in doc 802.19/0025r0 (May WG opening report)

Reminded group; opportunity to object or disclose given, none heard.

Walk through of minutes from last call

(Minutes: <https://mentor.ieee.org/802.19/dcn/18/19-18-0037-01-0000-may-sub-1-ghz-interest-group-minutes.pdf> )

### 2. Review of simulation parameters table

(<https://mentor.ieee.org/802.19/dcn/18/19-18-0039-00-0000-sub-1ghz-coexistence-simulation-parameters.pptx>)

Discussion:

- 1) Channel spacing: Why 400kHz channel only for Japan? Actually, Japan allows 200kHz, 400kHz, 600kHz, 800kHz and 1000kHz; for the 100kbps data rate used, the channel spacing specified in the standard is 400 kHz in Japan. Should include 200kHz for consistency with Europe and North America.
- 2) CCA timing differences: 128us CCA time is fine for 802.15.4g, but 128us is not what is used in the 802.11ah standard, where CCA time < 40us. This affects probability of detecting contention.
- 3) For 802.15.4g, ACK waiting window is a variable by PHY, need to pick some typical values. 1ms is specified for MR-FSK (now SUN FSK) and used by external specifications based on 802.15.4g. Why so long? Per 802.15.4e, the ACK may be secured and may carry information (Enh-ACK). Typical use of Enh-ACK requires software/firmware processing to generate and additional time to secure.
- 4) Confusion on 360us duty cycle in Japan: is it for whole network or for an individual station? Jianlin will review and provide clarification.
- 5) Total offered load: current up limit is 10kb/s for entire network. We need to consider the worst case scenarios for real applications. Device vendors want their devices to function normally

under all conditions. Otherwise, it will be very costly. In addition, 802.11ah and 802.15.4g can be applied to different applications. Therefore, we should consider asymmetric offered load scenarios. Ben will ask more people for applications such as smart utility. Some application may require more bandwidth. Having right use cases is important.

6) It was suggested to have two sets of parameters: one set for Japan and one set for Europe.

### 3. Next steps

No call July 3<sup>rd</sup>.

### 4. Any other business




















None heard

### 5. Adjournment

Adjourned at 16:42 PDT



Attendance

Attendance: (16)	Participants												
<table border="1"><tr><td>Ben Rolfe</td></tr><tr><td>Aaron Jehun Lee</td></tr><tr><td>Don Sturek</td></tr><tr><td>Hidetoshi Yokota</td></tr><tr><td>Jianlin Guo</td></tr><tr><td>Kunal Shah</td></tr><tr><td>Ren</td></tr><tr><td>Sakie Nagakubo</td></tr><tr><td>Steve Shellhammer</td></tr><tr><td>Takenori Sum</td></tr><tr><td>Shoichi Kitazawa</td></tr><tr><td>(Plus 5 unidentified attendees)</td></tr></table>	Ben Rolfe	Aaron Jehun Lee	Don Sturek	Hidetoshi Yokota	Jianlin Guo	Kunal Shah	Ren	Sakie Nagakubo	Steve Shellhammer	Takenori Sum	Shoichi Kitazawa	(Plus 5 unidentified attendees)	<ul style="list-style-type: none"><li> Ben Rolfe (You)</li><li> Aaron Jehun Lee</li><li> Don Sturek</li><li> Hidetoshi Yokota</li><li> Jianlin Guo</li><li> Kunal Shah</li><li> Ren</li><li> Sakie Nagakubo</li><li> Steve Shellhammer</li><li> Takenori Sumi</li><li> Viewer 3</li><li> Viewer 16</li><li> Viewer 18</li><li> +14083957207 - LOS GATOS, CA</li><li> +16176217500 - CAMBRIDGE, MA</li><li> +17604409127 - RAMONA, CA</li><li> +19493907157 - IRVINE, CA</li><li> +815031908977 - Japan</li><li> +815031909342 - Japan</li></ul>
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