IEEE P802.19  
Wireless Coexistence

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IG CUB July 2014 Plenary Minutes | | | | |
| Date: 2014-07-16 | | | | |
| Author(s): | | | | |
| Name | Company | Address | Phone | email |
| Hyunduk Kang | ETRI | 138 Gajeong-Ro, Yuseong-Gu, Daejeon, 305-700, South Korea | +82-42-860-1074 | henry@etri.re.kr |

The document contains IEEE 802.19 IG CUB minutes from the July 2014 plenary.

# **Tuesday July 15th, 2014 AM1**

The meeting was called to order at 08:10.

### Call for secretary

Nobody from the IG CUB volunteered for secretary for the meeting and the IG CUB chair, Hyunduk Kang, acted as the recording secretary for the IG CUB for the July 2014 plenary.

### IEEE IPR statement

The chair informed the TG about the IEEE patent policy and showed the set of 4 slides identified as “Highlights of the *IEEE-SA Standards Board Bylaws* on Patents in Standards” available at the IEEE PATCOM web site (<http://standards.ieee.org/board/pat/pat-slideset.ppt>).

The chair made a call for essential patents: No one came forward.

### Approval of April, May, June, July 2014 IG CUB Teleconference minutes

**Motion: To approve minutes of IG CUB teleconference as in contributions 19-14/0033r1, 19-14/0034r0, 19-14/0036r1, 19-14/0038r0, and 19-14/0039r0.**

**Motion passes with unanimous consent**

### Call for submissions, discussions and approval of agenda

The chair gave an introduction to agenda proposal in 19-14/0026r1. A set of contributions were assigned a time slot in the agenda that was updated accordingly.

**Straw poll: Approve IG CUB agenda (19-14/0043r1) for the July 2014 plenary**

**Straw poll passes with unanimous consent**

**The chair presented opening report (19-14/0044r0) regarding purpose of IG CUB, topics discussed over teleconference calls, and action items of the week.**

**Alireza Babaei (CableLabs) presented contribution on Impact of LTE in unlicensed spectrum on Wi-Fi (19-14/0037r2).**

The meeting was recessed at 09:10.

# **Tuesday July 15th, 2014 PM2**

The meeting was called to order at 16:05.

### Agenda review

The IG CUB agenda was updated.

**Straw poll: Approve IG CUB agenda (19-14/0043r2) for the July 2014 plenary**

**Straw poll passes with unanimous consent**

**Ron Murias (InterDigital) presented contribution on LTE-U Coexistence Mechanisms (19-14/0035r2).**

### Discussion on coexistence issues

**The group discussed on possible coexistence issues as follows;**

* **New standards targeted for unlicensed frequency bands**
* **Definition on coexistence**
* **Coexistence scenario**
* **How to define performance metric**
* **Definition on fairness and how to measure it**

The meeting was recessed at 17:15.

# **Wednesday July 16th, 2014 AM2**

The meeting was called to order at 10:35.

### Agenda review

The IG CUB agenda was updated.

**Straw poll: Approve IG CUB agenda (19-14/0043r3) for the July 2014 plenary**

**Straw poll passes with unanimous consent**

**Hyunduk Kang (ETRI) presented contribution on Status of ISM Bands (19-14/0045r0).**

### Discussion on coexistence issues

**The group continued to discuss on possible coexistence issues as follows;**

* Target frequency bands? e.g., 2.4GHz, 5GHz
* Coexistence problem due to difference access technologies: asynchronous vs. scheduled transmission
* Operating channel bandwidth
* Carrier aggregation
* Co-located coexistence
* LTE-U + Wi-Fi
* Possible solutions
* Listen-before-talk
* TDMA with coordination
* Coordination b/w Wi-Fi and LTE-U

The meeting was recessed at 11:55.

# **Wednesday July 16th, 2014 PM2**

The meeting was called to order at 14:10.

### Agenda review

The IG CUB agenda was updated.

**Straw poll: Approve IG CUB agenda (19-14/0043r5) for the July 2014 plenary**

**Straw poll passes with unanimous consent**

**Hyunduk Kang (ETRI) presented contribution on LTE-U acvivities (19-14/0047r0).**

### Discussion on SG formation

**The group discussed on SG formation as the followings:**

* **General direction of the study group**
* **Purpose and target frequency bands**
* **Possible action items**

The meeting was recessed at 17:20.

# **Thursday July 17th, 2014 AM2**

The meeting was called to order at 10:34.

### Agenda review

There is no update on the IG CUB agenda.

**Shoichi Kitazawa (ATR) presented contribution on Overview of 802.15 SRU SG (19-14/0046r0).**

### Discussion on SG formation

**The group decided to continue IG CUB for 4 months more.**

### Teleconference call schedule

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Day** | **Date** | **Start Time** | **End Time** | **Call Host** |
| Wednesday | July 30 | 7:00 PM Eastern Daylight Time | 8:00 PM Eastern Daylight Time | Hyunduk Kang |
| Wednesday | August 13 | 1:00 AM Eastern Daylight Time | 2:00 AM Eastern Daylight Time | Hyunduk Kang |
| Wednesday | August 27 | 7:00 PM Eastern Daylight Time | 8:00 PM Eastern Daylight Time | Hyunduk Kang |
| Wednesday | September 10 | 1:00 AM Eastern Daylight Time | 2:00 AM Eastern Daylight Time | Hyunduk Kang |

The IG CUB is expected to continue to explore coexistence issues in unlicensed frequency bands such as current situations, potential problems, fairness definition and how to measure it, and discuss possible solutions to solve coexistence problems.

The meeting was adjourned at 11:50.

**Attendance**

|  |  |
| --- | --- |
| **Name** | **Affiliation** |
| **Belal Hamzeh** | **CableLabs** |
| **Alireza Babaei** | **CableLabs** |
| **Jee-Yon Choi** | **ETRI** |
| **Sang-Kyun Kim** | **ETRI** |
| **Reza Hedayat** | **Cisco** |
| **Dutuos Elbert** | **ATMEL** |
| **Art Astrin** | **Astrin Radio** |
| **Prabodh Varshney** | **Nokia** |
| **Ron Murins** | **InterDigital** |
| **Stu Jeffery** | **Self** |
| **Jim Miller** | **InterDigital** |
| **Scott Martin** | **Nokia** |
| **Iksoo Eo** | **ETRI** |
| **Ander Myler** | **Cisco** |
| **Paul Nikolich** |  |
| **John Humbert** | **Sprint** |
| **Reza Hedayat** | **Cisco** |
| **VK Jones** | **Qualcomm** |
| **Harry Wosrsiell** | **AT&T** |
| **Ivan Reede** | **Amerisys** |
| **Steve Shellhammer** | **Qualcomm** |
| **Stephen Rayment** | **Ericsson** |
| **John Syder** | **Mdurly Couuadc** |
| **Tianyu Wu** | **Mediatek** |
| **Yong Liu** | **Apple** |
| **Masa Ariyoshi** | **ATR** |
| **Shoichi Kitazawa** | **ATR** |
| **Eunkyo Kim** | **TTA** |
| **Hyunduk Kang** | **ETRI** |