# IEEE P802.15

**Wireless Personal Area Networks**

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| Project | Dependability Interest Group | |
| Title | **Meeting Minutes for November 2018** | |
| Date Submitted | November 15th, 2018 | |
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| Re: | Meeting Minutes | |
| Abstract | Cooperation with ETSI smartBAN and smartM2M has been discussed as well as IEICE TC RCC and MICT. Focused use cases for automotive industry and additional medical BAN use cases have been discussed by updating technical requirement which is common and different among these use cases. | |
| Purpose | Minutes of Dependability Interest Group sessions | |
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**Monday, November 12th, 2018, PM2, 16:00-18:00**

**Room: Apartment 8**

* 1. Meeting called to order 16:01

By Chair Ryuji Kohno (YNU / CWC-Nippon)

* 1. Roll Call

Notepad for Attendance circulated.

* 1. Opening Report

Chair presented Opening report　　　　　　　　　　　　　 Doc #18-0526-r1

Chair showed IEEE Patent policy.

Chair issued Call for Potentially Essential Patents

No essential intellectual property in the scope of IG DEP was declared.

Chair presented agenda this week

* 1. Approval of previous meeting minutes

Upon no comments on the previous meeting minutes, doc #18-0380-01 was approved.

* 1. Review of ID DEP activities

1. Overview of IG DEP activities for Cars and other IoT & M2M Use cases and Amendment of IEEE802.15.6 Wireless Medical doc #15-18-0347-00
2. Overview of ETSI Smart BAN Project Activities doc.#15-18-0535-01
   1. Discussion

Corresponding to request from chair Dr. John Faserote, smartBAN TC of European standard body ETSI when Kohno joined in smartBAN TC meeting in Oulu, Finland while international conference BodyNets2018 wad held. Commonality and difference between smartBAN and IG-DEP have been discussed in order to make sure if IG-DEP can collaborate with ETSI smartBAN or not.

TC smartBAN covers:

* communication and the associated physical layer (PHY) and the Medium access control (MAC) layer
* network layer, security, Quality-of-Service (QoS) and provision of generic applications and services,
* a star network around a “smart” hub such as a handset or a watch, with the option for a multi-hop relay.

TC smartBAN is going to address to

* Targets a more efficient MAC and PHY, yielding very low latency emergency messaging, very low energy consumption and rapid initial set up time and channel reassignment.
* Provides additional semantic and data analytic enablers (e.g. semantic discovery, reasoning / rules) and automatic node discovery such as semantic discovery of nodes or composition.
* Provides added robustness via forward error correction
* Supports operation across heterogeneous networks with enhanced interoperability / connectivity options, including data, network and semantic interoperability.

Possible collaboration with ETSI TC smartBAN has been discussed to design appropriate MAC and PHY for the common targets, permissible packet and bit error rates, feedback controlling loop delay, and so on.

* 1. Recess at 17.55.
  2. Attendees 6

Iwao Hosaka(NICT)

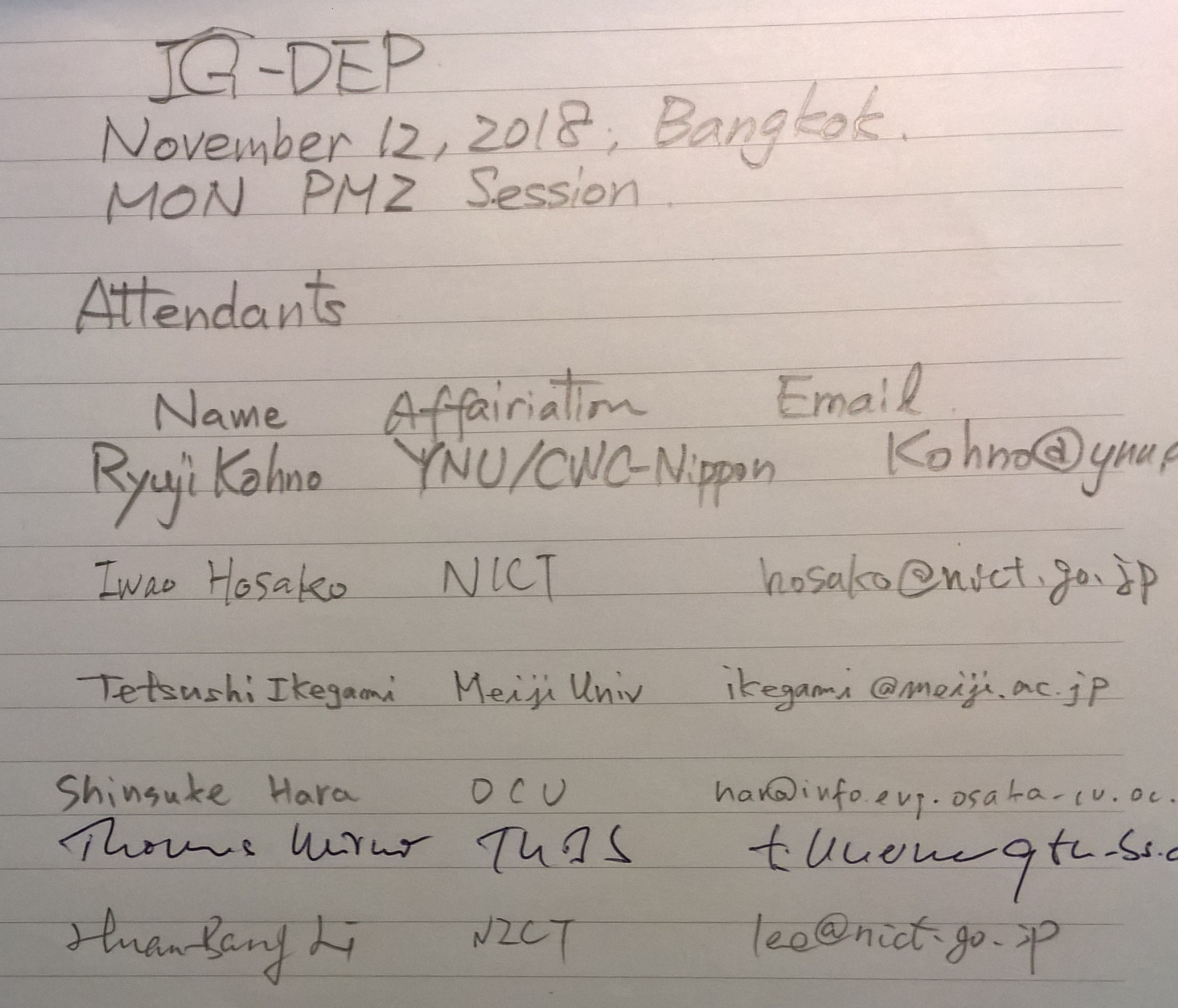
Tetsushi Ikegami(Meiji University)

Shinsuke Hara(OCU)

Thomas Kurner(TU Braunschweig)

Huanbang Li(NICT)

Ryuji Kohno(YNU/CWC-Nippon)



**Tuesday 13 November, 2018, PM2, 16:00-17:48**

**Room; Apartment 8**

* 1. Meeting called to order 16:01

By Chair Ryuji Kohno (YNU / CWC-Nippon)

* 1. Roll Call

Notepad for Attendance circulated.

* 1. Quick review of the last session
  2. Presentation

To consider other possible collaboration different from ETSI TC smartBAN, Prof. Shinsuke Hara gave two presentation to introduce two IEICE activities of TC Reliable Communications and Control, i.e. RCC and TC Healthcare Medical ICT, ICT, i.e. MICT.

* Reviewing IEICE TC on Reliable Communication and Control (RCC)
* doc.#15-18-0304-02-0dep
* Reviewing IEICE TC on Healthcare and Medical Information Communication Technology (MICT) doc.#15-18-0305-02-0dep

In an introduced example of RCC published paper, multicasting vehicle controlling data to adjacent driving vehicles and multi-hop relay for dependable intervehicle communications physical and MAC layers technologies were discussed as a typical use case of IG DEP focused applications.

* 1. Discussion

Since Kohno gave a talk on “Update of Japanese UWB Radio Regulation,” doc.#18-15-0546-02-0dep in AM1 session of 802.15.4z EIR(extended impulse radio UWB), several members of 15.4z attended in IG-DEP session.

* A killer application of 15.4z such as keyless entry for a car may have common PHY with a main application of IG DEP such as internal car network or CAR BAN. If a common chip set is employed for the both applications, a size of market will be enlarged.
* One of core PHY technologies in IG-DEP is assumed UWB radio as well as 4z.
* Approach of 15.4z such as amendment of 15.4 MAC and two PHYs such as HDR and LDR(1Mbps) could be simpler than approach of IG-DEP to make a new standard.

* 1. Update of Technical Requirement

If IG-DEP includes more use cases medical BAN and UAV remote sensing and controlling as well as the already selected focused use cases of automotive, then technical requirement may be too wide to implement every requirement.

However, IG-DEP started listing up technical requirement for dependable BAN in the table to compare with the ready listed technical requirement for the focused use case such as internal car, Inter cars, and car and car electronics factory manufacturing line. If most of technical requirement for dependable BAN are similar to any of the focused three use cases, both the use cases will be able to be merged.

A draft of updating technical requirement was discussed.

* Focused and Additional Applications, and Updated Technical Requirements

doc.#15-18-0575-02-0dep

* 1. Recess at 17.50.
  2. Attendees 11

Fredserf Borens(FB Consulting Save)

Iwao Hosaka(NICT)

Time Harrrington(UWB Alliance)

Tetsushi Ikegami(Meiji University)

Shinsuke Hara(OCU)

Thomas Kurner(TU Braunschweig)

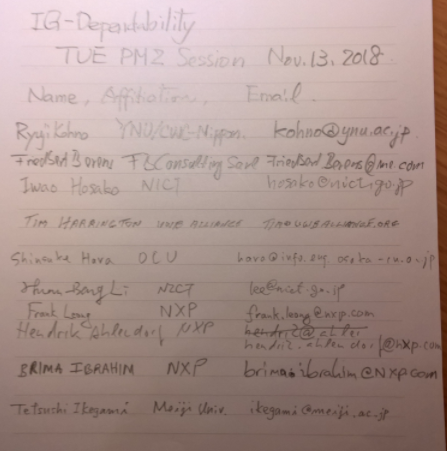
Huanbang Li(NICT)

Franl Leong(NXP)

Hendrik Ahlecdorf(NXP)

Brima Ibrahim(NXP)

Ryuji Kohno(YNU/CWC-Nippon)



**Wednesday 14 November, 2018, PM1, 13:30-15:30**

**Room; Apartment 8**

* 1. Meeting called to order at 13:33
  2. Roll Call
  3. Presentation & Discussion

ETSI TC smartBAN and smartM2M joint meeting  doc.#15-18-0586-00-0dep

* + ETSI 103 378 SmartBAN open data model & ontology specification and
  + ETSI TR 103 327 SmartBAN reference architecture
  + ETSI SmartM2M STF “SAREF extensions for Automotive, eHealth/Ageing-well and Water domains”
  + ETSI TS 102 690 M2M Device: A device that runs M2M Application(s) using M2M Service Capabilities. M2M Area Network and Gateway

have been reviewed.

* 1. Discussion

Since the last session remained technical requirement for dependable BAN in the table has been discussed and updated to compare with the ready listed technical requirement for the focused automotive use cases. It has been completed.

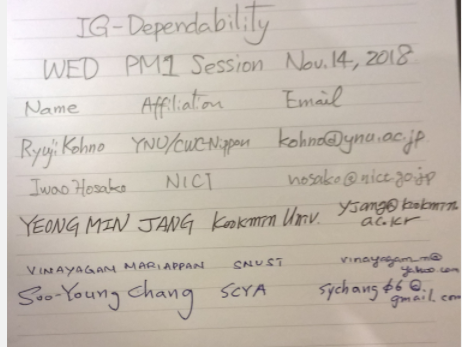
Focused and Additional Applications, and Updated Technical Requirements

doc.#15-18-0575-02-0dep

Due to absence of both chair and secretary in January meeting, IG-DEP will decide the next step to SG/TG in March meeting.

* 1. Adjourn 13:31
  2. Attendees 6

Iwao Hosaka(NICT)



Demir Rakanovic (U-BLOX)

Yeong Min Jang (Kookmin Univ.)

Vinayagam Mariappan (SNUST)

Soo-Young Chang(SCYA)

Ryuji Kohno (YNU/CWC-Nippon)