**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title |  | |
| Date Submitted | [2021-10-23] | |
| Source | [Vinayagam Mariappan] [SMR Automotive Modules Korea Ltd.] | Voice: [+82 32 6507 785 ] Fax: [+82 32 6507 871 ] E-mail: [vinayagam@ieee org] |
| Re: | [TG7a September 2021 Electronic Interim Meeting Minutes] | |
| Abstract | [This document contains the TG7a Higher Rate, Longer Range Optical Camera Communications (OCC) meeting minutes for the September 2021 Electronic Interim Session] | |
| Purpose | [To provide minutes of the meeting for TG7a] | |
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**Wednesday, September 15, 2021, 9:00 AM ~ 11:00 AM (EST)**

**Attendees:**

* Yeong Min Jang (Kookmin University)
* Vinayagam Mariappan (SMR Automotive Modules Korea)
* Sang-Kyu Lim (ETRI)
* Sangsung Choi (Kookmin University)
* Yoshio Kashiwagi (Nissin Systems)
* Stephen McCann (Huawei)
* Huy Nguyen (Kookmin University)
* Robert Golshan (Apple)
* Around 15 Members.

**Meeting Activities:**

1. Meeting called to order by Chair.
2. Welcome \ Patent Policy presented by Chair.
3. Motion on July meeting minutes doc (15-21-0438-00-007a)

Result: Approved unanimously

1. Agenda document 15-21-0471-00-007a presented by Chair and discussion on agenda.
2. Call for Proposals and Agenda Approval (doc 15-21-0471-01-007a)

Result: Approved unanimously

1. Proposal Contribution Presentations:
2. Draft D0-PHY Layer Operating Modes and Specifications of Rolling Shutter OFDM scheme (doc 15-21-0463-00-007a) by Huy Nguyen.
3. Draft D0-PHY Layer Operating Modes and Specifications of Hybrid S2-PSK OFDM scheme (doc 15-21-0464-00-007a) by Huy Nguyen.
4. Draft D0-PHY Layer Operating Modes and Specifications of MIMO C-OOK scheme (doc 15-21-0468-00-007a) by Huy Nguyen.
5. Draft D0-PHY Layer Operating Modes and Specifications of Hybrid OOK-OFDM scheme (doc 15-21-0466-00-007a) by Huy Nguyen.
6. Draft D0-PHY Layer Operating Modes and Specifications of MIMO-OOK scheme (doc 15-21-0467-00-007a) by Huy Nguyen.
7. Meeting recessed.

**Thursday, September 16, 2021, 9:00 AM ~ 11:00 AM (EST)**

**Attendees:**

* Yeong Min Jang (Kookmin University)
* Vinayagam Mariappan (SMR Automotive Modules Korea)
* Sang-Kyu Lim (ETRI)
* Sangsung Choi (Kookmin University)
* Yoshio Kashiwagi (Nissin Systems)
* Stephen McCann (Huawei)
* Huy Nguyen (Kookmin University)
* Srivathsa (NXP)
* Around 20 Members.

**Meeting Activities:**

1. Meeting called to order by Chair.
2. Welcome \ Patent Policy presented by Chair.
3. Agenda document 15-21-0471-01-007a presented by Chair and Discussion on Agenda.
4. Call for Proposals and Agenda Approval (doc 15-21-0471-02-007a).

Result: Approved unanimously

1. Proposal Contribution Presentations:
2. Draft D0 of pothole detection from the rear LED shapes of the forwarding vehicle using optical camera communication (OCC) (doc 15-21-0469-00-007a) by Md. Osman Ali.
3. Draft D0 of Bi-level pulse position modulation (BPPM) for single camera-based optical vehicular communication (doc 15-21-0470-00-007a) by Md. Osman Ali.
4. Draft D0 Performance Enhancement of Vehicular Communication using Neural Network (doc 15-21-0489-00-007a) by Md Faisal Ahmed.
5. Draft D0 of Accurate Data Transmitting LED Detection Scheme (doc 15-21-0490-00-007a) by Md. Habibur Rahman.
6. Design of a Power-domain Optical Non-Orthogonal Multiple Access (PDO-NOMA) Mechanism with Ultra-massive-link Setup for the vehicular OCC System - Draft D0 (doc 15-21-0491-00-007a) by Md. Shahjalal.
7. Optical Non-Orthogonal Multiple Access (O-NOMA) Scheme for OCC System - Draft D0 (doc 15-21-0492-00-007a) by Md. Shahjalal.
8. Update Agenda document 15-21-0471-02-007a with TG7a to confirm the ITU-R reply doc. 15-21-0434-01-0000 (Liaison Response to ITU-R WP\_1A on VLC standards) from WG.
9. Call for Proposals and Agenda Approval (doc 15-21-0471-03-007a).
10. Motion on TG7a to confirm the ITU-R reply doc. 15-21-0434-01-0000 (Liaison Response to ITU-R WP\_1A on VLC standards) from WG.

Moved by: Huy Nguyen

Seconded by: Sangsung Choi

Motion Result: Motion passes with unanimous consent.

1. Meeting adjourned by Chair.