**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |
| --- | --- |
| 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] |
| Notice | This document has been prepared to assist the IEEE P802.15. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. |
| Release | The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by P802.15. |

**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.