### IEEE P802.24 Vertical Applications TAG

Project	IEEE P802.24 Smart Grid Technical Advisory Group			
Title	TAG November 2022 Minutes			
Date Submitted	November 15, 2022			
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Re:	802.24 TAG meeting			
Abstract	Meeting minutes for 802.24 TAG and TGs.			
Purpose	Document meeting and action items.			
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# Minutes TAG 24

November Plenary Session (hybrid)

#### 802.24 TAG

**TAG and TG1 Chair:** Tim Godfrey (EPRI)

Vice Chair and Recording Secretary: Benjamin Rolfe (Blind Creek Associates)

### **Table of Contents**

Tuesday, November 15, 2022	. 2
Opening	
Liaison review:	. 3
IoT Whitepaper and related works:	. 3
Low Latency Whitepaper	. 3
IEEE 802 Solutions for Vertical Applications Whitepaper	. 4
Recess	
Wednesday November 16, 2022	. 4
Opening	
Future Venue Poll	. 5
Action Items	. 5
AoB	. 5
TAG Closing	. 6
Adjourn	
Gratuitous Cat Related Picture.	. 7

### Tuesday, November 15, 2022

### **Opening**

Called to order at 16:00 local time by chair. Chair present and recording secretary present. Chair presents meeting slides document # 802.24-22-0018r02.

Agenda given in document # 802.24-22-0018r02.

Discussion: mention and brief introduction to the coexistence joint effort between 802.11 and 802.15 planned for PM2 Wed.

Following no further discussion not objection agenda approved by unanimous consent.

The chair presents the Guidelines for IEEE-SA Meetings and Participation in IEEE 802 Meetings, including the copyright slides provided by IEEE. An opportunity is provided for attendees to respond. No responses nor questions heard.

Approval of Minutes for Sept, 2022 interim session, document # <u>802.24-22-0017-00</u>: Following neither discussion nor objection approved by unanimous consent.

#### Liaison review:

• Changes: Chris D. is TIA-TR42 liason

#### IoT Whitepaper and related works:

- Discussion on strategy to complete
- Presentation of Ethernet IoT paper by Chris D (doc # TBD)
- Plan to move forward:
  - o Abandon original draft 802.24-17-0036r3
  - Suggest keeping separate and referencing from the doc 22-0011 24-22-0011.
  - o Incorporate parts of Single Pair Ethernet
  - o Expand with Wireless 802 standards highlights.
  - o Chris DiMinico will start adding some basic of SPE into 24-22-11r1
  - Other contributions w.r.t wireless standards.
- Outstanding action item: Ben and Alan and Allan will coordinate an ad-hoc to refine and expand IoT White Paper.

### Low Latency Whitepaper

- Allen J. presents the text added to doc  $\underline{24-19}$ -0003-17-0000
- Completes section on latency
- A lot of new research and development on security related and privacy issues
  - o A lot of new things arise out of the last 2 years
  - o Explosion of papers since 2021
- Low latency is a critical part of secure uses and real time update of information
- Discussion follows
  - Discussion on latency WRT vehicle uses
  - o Discussion on contact tracing latency constraints?

- Final steps:
  - Ben to look into contact tracing
  - o Consider autonomous vehicle use cases? Any more details?
  - o Identify gaps in 802 standards in this area
  - Clean up and move to IEEE editors

### IEEE 802 Solutions for Vertical Applications Whitepaper

- Doc # 22/24-22-0012-02
- Max presents changes made to section 7
- Discussion follows
  - o 802 supports IP and a lot of other upper layers
  - Other than IP is less visible but also important
  - o Being agnostic to higher layers is a good thing
- Discussion on "next steps" finish it up

#### Recess

Recess at 17:24 Local Time.

### Wednesday November 16, 2022

### **Opening**

Called to order at 16:00 local time by chair. Chair present and Acting recording secretary present. Chair continues with meeting slides document Chair presents meeting slides document #802.24-22-0018r02.

### Presentation on AFV Infrastructure (EV and H2V) Fueling

Presentation: 24-22-0020-01 AFV Fueling Vertical update.

Presents opportunities in 802 cutting across multiple working groups. Also a possible industry outreach opportunity. Discussion:

- Convergence of Power, Energy and Communications
- Exploration on how 802 services such as TSN, location and privacy could play a role.
- Opportunities for Secure L2 EV charging comms fabric. (possible 802.15) as well as 802.1/.3/.11
- Single pair ethernet is also worth exploring for certain applications
- Use of Wi-Fi for large-scale (fleet) EV (AC) charging as well as parking structures
- H2 Fueling can involve (802.1/802.11)
- Exploring how 802.1 and 802.3 support AFV fueling
- 20ms Europe/16.6ms US charging reaction timing

- Action: Chris DiMinico and Craig Rodine to flesh out and diagram what energy fueling comms would look like
- Requires multiple standards working together
- Current work in progress in both 802.11 and 80215 may be relevant
  - o E.g. Wireless charging requires precise positioning on charging pad
  - o 802.15.4z in high volume silicon presently available provides cm precision ranging to support (relative) positioning.
- Opportunity for new standards work in 802 (1,3,11,15)
- How to proceed:
  - Action: 802.24 develop a white paper capturing requirements (Craig Rodine to take the first pass at outlining the whitepaper)
- Chair discussed charge management and storage would need to be fleshed out
- Action: Support AFV presentation in 802.11 WNG in January

#### Future Venue Poll

Chair reviewed and took the poll with the group on future venues Poll results:

- If the 2023 January Interim Session is held in Baltimore, Maryland, as a mixed-mode session, will you attend?
- (In person 4/ remote 1/ not 1)
- If the 2023 March Plenary Session were held at the Hilton Atlanta, GA as an in-person only session, would you attend? (yes 5/ no1)
- If the 2023 March Plenary Session is held at the Hilton Atlanta, GA as a mixed-mode session, will you attend?
- (In person 5 / remote 1/ not 0)

#### **Action Items**

- 1. IoT white Paper actions Slide 14
- 2. Low latency White Paper on Slide 16
- 3. AFV (above)
  - a. Chris DiMinico and Craig Rodine to flesh out and diagram what energy fueling comms would look like
  - b. 802.24 develop a white paper capturing requirements (Craig Rodine to take the first pass at outlining the whitepaper)
  - c. Support AFV presentation in 802.11 WNG in January

#### AoB

None

# TAG Closing

Reminder for the January interim session given.

# **Adjourn**

Adjourned at 17:34 local time.

### **Gratuitous Cat Related Picture**

Not what you were expecting? Now for something completely different...



Vertical Tail Advisory