# IEEE 802.24 Working Group Liaison Report to OPC Foundation May 2016

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Acknowledgments

- Tim Godfrey
- Chris DiMinico

### Agenda

Overview 802.24.2 IoT Sub-Group Overview

Updates Since the Last Report

Final Thoughts: Feedback on Report Format

## All those dots....decoder ring

- > 802.1 Bridging and Architecture generally the top of the link layer
- ➢ 802.3 Ethernet
- 802.11 Wireless LAN (WLAN)
- 802.15 Wireless Personal Area Network (WPAN)
- 802.16 Broadband Wireless Access (BWA)
- 802.18 Radio Regulatory TAG
- > 802.19 Coexistence
- 802.21 Media Independent Handover
- 802.22 Wireless Regional Area Networks (WRAN)
- 802.24 Vertical Applications TAG

## IEEE 802.24 TAG

#### 802 Focal Point for vertical applications

- ▶ IEEE 802.24.2 is part of IEEE 802.24 TAG
- Previously was Smart Grid TAG
- Scope of IEEE 802.24

	The IEEE 802.24 Vertical Applications Technical Advisory Group (TAG) focuses on application categories that use IEEE 802
$\checkmark$	technology and are of interest to multiple IEEE 802 WGs and have been assigned to IEEE 802.24 by the IEEE Executive
	Committee.
What 802.24	For those application categories, IEEE 802.24:
does	Acts as a liaison and point of contact with industry organizations, other SDOs, government agencies, IEEE societies,
	etc., for questions regarding the use of 802 standards in those vertical applications
	> Develops white papers, presentations and other documents that do not require a PAR that describe the application of
	> 802 standards to those vertical applications
and what it	> Acts as a resource for understanding 802 standards for regulatory agencies and for certification efforts by industry
does NOT do	bodies, that require more than one IEEE 802 WG's input
> TAG	is a Technical Advisory Group
> TAG	does not produce standards or recommended practices
Cont	ains two subgroups: 802.24.1 (Smart Grid) and 802.24.2 (IoT)

## IEEE 802.24.2 IoT TG

- IEEE 802.24.2 is a Task Group which is a subgroup of IEEE 802.24 TAG focused on IoT
  - > Formed out of the IEEE 802 March 2015 Plenary
- Scope of IEEE 802.24.2
  - The IoT Task Group provides a forum to discuss substantive basis for applying 802 standards to evolving IoT in specific vertical application areas and to gather together like minded experts interested in exploring the topics. The scope of the IoT task group is to:

### What 802.24.2 does

- Develops white papers, presentations and other documents that do not require a PAR that describe the application of IEEE 802 standards to identified IoT vertical applications.
  - Identify technology gaps in identified IoT vertical applications and recommend standardization tasks to the appropriate IEEE 802 Working Group.
  - Provide forum for liaison activities with industry organizations, other SDOs, government agencies, IEEE societies, etc. in identified IoT vertical applications.
  - Maintain consistency with IoT architecture framework in development in IEEE P2413
- Initial focus areas
  - Industrial Automation, Data Center Management, Security/Video Networks- Wireless/Wired, Building Automation, Automotive

**IoT Focus Domains** 

### IEEE 802.24 – Officers

#### ➤ Leadership

- TAG Chair Tim Godfrey
- TG Chair Chris DiMinico
- TG Vice-Chair Mike Bennett
- TG Secretary Andrew Jimenez
- TG Liaison Coordinator and liaison to OPC Foundation Wael William Diab (wael.diab@gmail.com)

#### Resources

- IEEE 802 home page: <u>http://www.ieee802.org</u>
- IEEE 802.24: <u>http://www.ieee802.org/24/</u>
- Join the reflector: <u>https://listserv.ieee.org/cgi-bin/wa?SUBED1=STDS-802-24</u>

## Updates Since the Last Report

- Logistical information
  - Met once in March 2016. Working Group meeting, in Macau, China
- Key developments
  - Approval of liaison request from OPC Foundation!!!
  - 802.24 TAG
    - Re-election of Chair, Tim Godfrey
      - All appointed officer positions including liaisons remain the same
    - Review plans for student paper competitions
  - 802.24.1 (Smart Grid) TG
    - Topics considered for new white papers
      - FAN / NAN applications / terminology
        - Discussed, but no interest in developing a white paper
      - 802.15 LLC (ULI) and implications on overall network integration of 802 for grid applications
        - There is interest in this area, but it may be premature
      - Time Sensitive Networking and Deterministic Networks in utility applications
        - Good discussion and interest. Will collaborate further with 802.1 and 802.3 to define utility requirements
      - Considerations of commercial LTE vs 802 networks in utility applications

IoT Work

- Review of development of Sub-1 GHz White Paper
  - Nearing completion. Goal to finalize Smart Grid Whitepaper Companion Presentation

### • 802.24.2 (IoT) TG

- Review of liaison coordinator's report
- Exploring relationship with Thread Group
- IoT White Part development ongoing
  - Discussion of scope of paper: Standardization, Open Source, Promotion, Verticals under the umbrella of IoT

## Final Thoughts: Feedback on Report Format

- As this is the first liaison "report", would appreciate feedback
  - Content
    - What you liked...
    - ...and did not like
  - Frequency
    - Report out at every WG meeting if there is something new
  - Detail
    - Less, more or about the same?
  - Audience
    - Anyone else should see this outside the OPC WG?
- As your liaison, please do not hesitate to reach out for information and I will be more than happy to assist