



WIRELESS TECHNOLOGY ASSOCIATION

Updated April 13, 2015.

Return to WTA [Home Page](#)

Internet of Things and LTE-M A Technology Workshop

CONFIRMED PRESENTERS: Alcatel-Lucent, AT&T, Altair Semiconductor, CalAmp, Ericsson, Intel, Qualcomm, Sequans Communications, Sierra Wireless, Telit, and u-blox.

April 22, 2015

Atlanta, GA
Hosted by [AT&T](#)

Chair: Peter Rysavy, [Rysavy Research](#)

CONTENTS

[Background](#)
[Workshop Agenda](#)
[Workshop Location](#)
[Hotel and Travel Information](#)
[Registration](#)
[Information for Presenters](#)

BACKGROUND

This Wireless Technology Association workshop is a unique, deep-dive opportunity to learn how LTE-M for Machine-Type Communications will dramatically enable and power the Internet of Things through low cost and low power consumption. The workshop will cover capabilities of modules, price expectations, evolution across 3GPP releases, and vision for 5G. Presenters are leaders in the industry. The workshop format, consisting of presentations and panel discussion, provides ample opportunity for discussion and networking.

The industry of Internet of Things is gaining momentum and promises billions of connected things by the end of the decade. Things will communicate by many means, but a key communications technology will be a version of LTE called LTE-M. This workshop will evaluate the potential, capabilities, and evolution of LTE-M.

The Wireless Technology Association is pleased to present a technology workshop that will showcase the engineers, technology experts, service providers, and thought leaders at the epicenter of these issues.

WTA workshops emphasize technical depth combined with market and business perspective, and keep commercial content to a minimum. The format consists of presentations on key topics followed by Q&A discussion and panel discussions.

AGENDA

Workshop. Wednesday, April 22, 2015
8:00 a.m. – 4:00 p.m.

Agenda and schedule subject to change.

8:00 to 8:20 Registration and Breakfast.

8:20 to 8:30 Peter Rysavy, Executive Director, Wireless Technology Association.
WTA Update.

8:30-9:10. Steve Hardin, Director of Product Development, Internet of Things Solutions Group, AT&T. Host Presentation.

9:10-9:50. Presentation. Ken Stewart, Chief Wireless Technologist, Intel Fellow, Intel. LTE-M: Technical Fundamentals and the Evolution of Cellular MTC.

This presentation focuses on the evolution of air interface technology and features, and companion architectures, which will drive the next generation of cellular MTC access. Specifically, the presentation will discuss:

- LTE-M Definition - The Strategic Landscape and Outlook for Cellular MTC
- 3GPP Rel-12 and Rel-13 LTE for MTC - Key Concepts and Features
- Comparison with Non-LTE 3GPP Rel-13 and Non-Standard MTC Access
- LTE Device Categories for MTC including Comparative Performance and Complexity
- Standardization Timelines for MTC Including 5G

9:50-10:30. Itay Lusky, Executive Director of Product Strategy, Altair Semiconductor. Low-Power, Low-Cost Category 1/Category 0 LTE Chipsets, A Current Reality.

- A comparative overview of the power/size/cost implementation merits of new Category 1/Category 0 and future eMTC Release 13 chipsets.
- Architectural overview of Category 1/Category 0 chipsets.
- Power consumption analysis of typical IoT use case scenarios.

10:30 - 10:40. Break.

10:40-11:20. Ambroise Popper, Vice President and General Manager, M2M Business Unit, Sequans Communications. Use Cases and Opportunities – What Is Possible with a High-Throughput, Long-Battery Life, and Low-Modem-Cost Network?

- The LTE-M benefits versus other competing technologies.
- How does LTE-M exceed legacy-generation technologies (2G & 3G) in terms of performance and cost?
- LTE-M spectrum bands - how to get to lowest-possible-cost modems with greatest international coverage.
- Build and deployment timeline for target integrators, when is it safe to proceed?

11:20-12:00. Chung-Zin Liu, Alcatel-Lucent. End to End Architecture - Evolution of User Plane & Control Plane Bearers and Addressing Mechanisms.

12:00 - 1:00. Lunch provided.

1:00-1:40. Matt Branda, Staff Manager, Technical Marketing, Qualcomm Technologies. IoT, LTE-M, and the evolution to 5G.

This presentation takes a broader look at what role LTE MTC will play in scaling to connect tens of billions of devices/things. Specifically, the presentation will discuss:

- The challenge: Scaling to connect tens of billions of devices/things
- Role of LTE MTC: When, where, why
- Role of LTE Advanced: Other technologies to meet the IoT challenge
- 5G: A vision for 5G and the road to get there

1:40-2:20. Anders Svensson, Principle Solution Manager, Ericsson. The likely timeline of features being delivered to the market from the major infrastructure suppliers.

2:20-2:45. Networking Break.

2:45-4:00. Panel Discussion.

Panelists:

- Cameron Coursey, VP Product Development, **AT&T.**
- Gabriel Nave, Director of Business Development, **CalAmp.**
- Miguel Dajer, Vice President, Wireless R&D, **Huawei Technologies (USA).**
- Philippe Guillemette, CTO, **Sierra Wireless.**
- Mike Ueland, President, **Telit.**
- Nikolaos Papadopoulos, President, **u-blox.**

Moderator: Peter Rysavy, Rysavy Research.

Format: Five-minute introductory remarks by each panelist, followed by discussion. Initial questions from moderator, subsequent questions from the audience.

Panel topic: What must the industry do to get cellular/LTE based modules to a price point at which they are competitive with 2G, Low-Power Wide-Area Networks, and Wi-Fi modules? Higher level, what are the challenges and opportunities in developing a formidable cellular IoT platform?

WORKSHOP LOCATION

The workshop will be at:

AT&T
Vail Auditorium
675 Peachtree Street
Atlanta, GA 30308

HOTEL AND TRAVEL INFORMATION

We do not have a room block, but the following hotels are close to the workshop location:

Crowne Plaza Atlanta - Midtown
590 West Peachtree Street Northwest
Atlanta, GA 30308
(404) 877-9000
http://www.ihg.com/crowneplaza/hotels/us/en/atlanta/atlpw/hoteldetail?cm_mmc=Local_LCLZ--cp--USEN--atlpw

The Georgian Terrace Hotel
659 Peachtree Street Northeast
Atlanta, GA 30308
(404) 897-1991

<http://www.thegeorgianterrace.com/>

Hampton Inn Atlanta-Georgia Tech-Downtown
244 North Avenue Northwest
Atlanta, GA 30313
(404) 881-0881

<http://hamptoninn3.hilton.com/en/hotels/georgia/hampton-inn-atlanta-georgia-tech-downtown-ATLGTHX/index.html>

Renaissance (Marriott) Atlanta Midtown Hotel
866 West Peachtree Street Northwest
Atlanta, GA 30308
(678) 412-2400

<http://www.marriott.com/hotels/travel/atlbd-renaissance-atlanta-midtown-hotel/>

Hyatt Atlanta Midtown
125 10th Street Northeast
Atlanta, GA 30309
(404) 443-1234

http://atlantamidtown.hyatt.com/en/hotel/home.html?src=agn_mls_hyt_lclb_qplaces_atlhm

Hilton Garden Inn Atlanta Midtown
97 10th Street Northwest
Atlanta, GA 30309
(404) 524-4006

<http://hiltongardeninn3.hilton.com/en/hotels/georgia/hilton-garden-inn-atlanta-midtown-ATLAMGI/index.html>

REGISTRATION

The registration deadline is April 17, 2015.

(Normally: Workshops are intended primarily for WTA members. However, non-member organizations may attend for a discounted fee of \$295 per person until March 29, otherwise \$495. This fee can be applied towards future membership. Executive-level members may send five people, associate-level members may send two people and affiliate-level members may send one person without incurring meeting charges.)

There is no attendance charge for members of the press.

If you plan to attend, please register soon.

[Click here to register for the meeting using Eventbrite.](#)

[Click here to see a current list of members.](#)

INFORMATION FOR PRESENTERS AND PANELISTS

The following information is for people presenting at the WTA workshop:

- Presentations: 30 or 45 minutes including Q&A discussion for main presentations. Panel presentations typically 10 minutes long, slides optional.
- Presenters must provide their presentations (PDF or PPT) at least one week prior to the workshop to allow for copying to the members area of the WTA Web site, as well as to allow detailed questions for discussion.
- Emphasis should be on industry and technology at large, versus selling your product (limit of 3 slides). Consider items such as compatibility, technical alternatives, standardization, deployment considerations, interoperability, certification and adoption.
- Generally, a dynamic and attentive audience of key industry stakeholders attend

each workshop, representing a broad spectrum of the mobile computing industry, including operators, infrastructure vendors, device vendors, middleware providers, policy makers, and application developers.

- We will provide a video projector and computer for presenting. Presenters should use their own presentation templates.
- Because WTA workshops are considered public meetings, please do not include any confidential or proprietary information. Please do not mark your presentations with any terminology indicating confidential or proprietary information.

[WTA home Page](#)

•