2015 U.S. DEPARTMENT OF ENERGY
CONNECTED LIGHTING SYSTEMS MEETING

November 16, 2015 • Portland Marriott Downtown Waterfront • Portland, OR

Preliminary Agenda

7:00 a.m.	*Registration Opens and Continental Breakfast*
MORNING SESSION	
8:00 a.m.	**Welcome and Introduction** There is a lot of buzz today about the Internet of Things and the convergence of intelligent controllable light sources, communication networks, sensors, and data exchange in future lighting systems. There is less talk, however, about how exactly we get from *here* to *there*. At this inaugural Connected Lighting Systems Meeting, top experts from the lighting, semiconductor, and IT industries will share perspectives and forge a path forward toward a new lighting paradigm, and deeper energy savings. JAMES BRODRICK, U.S. DEPARTMENT OF ENERGY
8:15 a.m.	**Keynote Address** TOM HERBST, CISCO SYSTEMS
9:15 a.m.	**Why Lighting Systems Need to Become More Connected** Technology for lighting control has long been available in the market, but it has seen limited deployment to date and has not always met energy-saving expectations. This session will offer perspective on why yesterday's technology has met with limited success, and lay the groundwork for the ensuing meeting discussions on how tomorrow's connected lighting systems might overcome these issues. GABE ARNOLD, DESIGNLIGHTS CONSORTIUM
9:45 a.m.	*Break*
10:15 a.m	**DOE Focus Areas and Panel Introduction** MICHAEL POPLAWSKI, PACIFIC NORTHWEST NATIONAL LABORATORY
10:30 a.m.	**Why Should We (and How Can We) Enable Lighting Systems to Report Their Own Energy Consumption?** You can't (effectively) manage what you can't measure. Connected lighting systems that can report their own energy consumption could usher in a new era for lighting energy management. How accurate does the reporting need to be? What examples of this capability are already commercially deployed? What is needed to enable this capability more broadly? MODERATOR: KELLY SANDERS, NORTHWEST ENERGY EFFICIENCY ALLIANCE MICHAEL POPLAWSKI, PACIFIC NORTHWEST NATIONAL LABORATORY BRENT PROTZMAN, LUTRON JEFFERAY LAWTON, MICROCHIP
Noon	*Lunch*

AFTERNOON SESSION

1:00 p.m.

Where and When Do We Need Interoperability?

System performance is dependent not just on constituent device capabilities, but also on the ability of those devices to work together. Computing, IT, and mobile device platforms that have driven lifestyle changes, technology development, and much of the economy over the past few decades were enabled by interoperability specifications and standards that describe how devices should work together. What is required to unlock the potential of connected lighting systems? Where do we need interoperability today, and in the future?

MODERATOR: MICHAEL POPLAWSKI, PACIFIC NORTHWEST NATIONAL LABORATORY
PHILIP DESAUTELS, THE LINUX FOUNDATION, REPRESENTING THE ALLSEEN ALLIANCE
ROY HARVEY, OSRAM SYLVANIA, REPRESENTING THE ZIGBEE ALLIANCE
REMY MARCOTORCHINO, SIERRA WIRELESS, REPRESENTING ONEM2M
DAVID MCCALL, INTEL, REPRESENTING THE OPEN INTERCONNECT CONSORTIUM

2:30 p.m. *Refreshment Break*

3:00 p.m.

How Can Lighting System Configuration Complexity Be Effectively Reduced?

Systems that are overly complicated and time-consuming to configure have historically delivered less than ideal performance. Broad deployment of connected lighting systems will require system configuration complexity to be well-matched to user capabilities and maturity, or greatly simplified, or effectively removed from the user. Various approaches to tackling this challenge are starting to emerge—from self-configuring solutions and platforms to service-based business models. What can these approaches achieve today, and what is their long-term potential and place in the market?

MODERATOR: CHRISTINE WU, U.S. GENERAL SERVICES ADMINISTRATION
DAGNACHEW BIRRU, PHILIPS LIGHTING
TOM GRIFFITHS, AMS-TAOS
KISHORE MANGHNANI, ORAMA

4:30 p.m.

Making It Happen: Connected Lighting Systems That Are Changing the Game

Connected lighting systems hold the potential to deliver not only improved energy performance and lighting quality, but also a growing list of other benefits that might result in the creation of new business models and revenue streams. This session will look at a few recent examples of installed systems that are demonstrating improved lighting energy performance and/or other benefits that significantly impact the business case. What can these examples tell us about how to further unlock this potential in the real world?

MODERATOR: MARC LEDBETTER, PACIFIC NORTHWEST NATIONAL LABORATORY
KAYNAM HEDAYAT, DIGITAL LUMENS
DAN COCOSA, GOOGLE

5:30 p.m. *Networking Reception, sponsored by Northwest Energy Efficiency Alliance (NEEA)*