



You are cordially invited to participate in this workshop on August 11-12, 2014, and join your colleagues in launching the new [Cyber-Physical Systems Public Working Group \(CPS PWG\)](#), which was formed by NIST to facilitate broad collaboration and build a unified technical foundation that accelerates progress in CPS across all domains. The purpose of the workshop is to develop consensus around the scope, milestones, and work program for the CPS PWG and its sub-groups.

CPSs—or “smart” systems—are co-engineered interacting networks of physical and computational components. These systems are at the heart of our critical infrastructure and form the basis of future smart services. They promise increased efficiency and interaction between computer networks and the physical world, enabling advances that improve our quality of life in fields such as personalized health care, emergency response, traffic flow management, and the electric power generation and delivery.

The CPS PWG brings together R&D experts working on existing and planned CPSs across a diverse set of technical stakeholder communities in industry, academia, and government. The PWG’s efforts are focused on four principal topics, around which CPS PWG sub-groups have been formed. Each group is led by a multi-sector team of co-chairs, as shown below.

CPS PWG Sub-Groups and Co-Chairs

Definitions, Taxonomy, & Reference Architecture	Janos Sztipanovits, Vanderbilt University	Stephen Mellor, Industrial Internet Consortium (IIC)	Abdella Battou, NIST
Use Cases	John Baras, University of Maryland	Stephen Mellor, Industrial Internet Consortium (IIC)	Eric Simmon, NIST
Cybersecurity & Privacy	William Sanders, University of Illinois at Urbana-Champaign	Claire Vishik, Intel Ronald Perez, Advanced Micro Devices	Victoria Pillitteri, NIST
Timing & Synchronization	Sundeep Chandhoke, National Instruments	Hugh Melvin, National University of Ireland	Marc Weiss, NIST

REGISTER NOW

<http://www.nist.gov/cps/cps-pwg-workshop.cfm>

Participants must register in advance to gain access to the NIST Campus. There is no fee to attend.

Workshop Program

The workshop begins at 9:00 am on August 11 and ends just before noon on August 12. The agenda includes stage-setting plenary talks and facilitated breakout sessions where everyone will have the opportunity to contribute. The preliminary agenda follows.

Who Should Participate and Why

The CPS-PWG and this Workshop are open to anyone with an interest in cyber-physical systems from all sectors worldwide and participation is free.

Workshop participants will help to shape the action plans that the CPS PWG and its sub-groups will follow, and provide the foundation to drive progress going forward.

About the CPS PWG

The PWG was kicked off via [webinar](#) on June 30, 2014. It is composed of four working sub-groups, as shown below. Participants may choose to be members of one or more sub-groups. These groups meet virtually on a bi-weekly basis, as well as face to face at the August workshop and at another open meeting to be held at a later date. Each sub-group will be actively engaged in preparing documents reflecting the input, contributions and dialog of participants in a consensus-driven process.

NIST Cyber-Physical Systems Public Working Group Workshop

This is a one and a half day workshop to be held on August 11-12, 2014 at NIST in Gaithersburg, MD.

Monday, August 11, 2014

- 9:00 am **Keynote: Introduction to the Cyber-Physical Systems Public Working Group**
 Howard Harary, Acting Director, Engineering Laboratory, NIST
- 9:30 am **CPS PWG Vision and Proposed Schedule for 2014 and Beyond**
 David Wollman, Deputy Director, Smart Grid and Cyber-Physical Systems Program Office, NIST
- CPS PWG Sub-group Presentations:**
- 10:00 am **Definitions, Taxonomy, and Reference Architecture Sub-group Plan**
 Co-Chair, Definitions/Taxonomy & Reference Architecture
- 10:15 am **Use Cases Sub-group Plan**
 Co-Chair, Use Cases
- 10:30 am **Break**
- Sub-group presentations (continued)**
- 10:45 am **Timing and Synchronization Sub-group Plan**
 Co-Chair, Timing and Synchronization
- 11:15 am **Cybersecurity and Privacy Sub-group Plan**
 Co-Chair, Security/Privacy
- 11:45 am **Lunch**
- 1:00 pm **Concurrent Breakouts**
 Professionally facilitated working sessions will be held for each sub-group topic.
- 4:00 pm **Adjourn Workshop Day 1**
- 4:15 pm *Co-chairs coordination meeting*

Tuesday, August 12, 2014

- 9:00 am **Convene Workshop Day 2**
- Breakout Session Reports:**
- Definitions/Taxonomy & Reference Architecture
 - Use Cases
 - Timing and Synchronization
- 10:30 am **Break**
- 10:45 am **Breakout Session Reports (continued):**
- Cybersecurity and Privacy
- 11:15 am **Concluding Remarks**
 David Wollman, NIST
- 11:30 am **Workshop Adjourns**

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