## Cyber-Physical Systems Testbed Workshop

## February 24-25, 2015 National Institute of Standards and Technology Gaithersburg, MD

http://www.nist.gov/cps/cyber-physical-systems-testbed-workshop.cfm

## Agenda

Day 1:

9:00 am Opening remarks: Testbeds for progress in cyber-physical systems

Chris Greer, NIST

9:20am Presentation: Insights from smart grid testbeds

Paul Boynton, NIST

9:40am Presentation: CPS Testbeds and Homeland Security

Scott Tousley, DHS

10:00am Break

10:15am Lighting Round – Lab Success Stories/Key Concerns

Each attendee will introduce themselves and share a brief highlight of a key success they have had in implementing their facility or a key concern for testbed design or operation.

12:00pm Break for lunch (on your own in the cafeteria)

1:00pm Working Session: Developing High Level CPS Testbed Architectures and Identifying

**Key Attributes** 

Participants will break into sub-groups to develop alternative strawmen architectures and list of desired attributes for functions and components

1:00pm Getting the Strawman Right

Starting with the provided strawman architecture, the group will either validate it or change it to better reflect their needs and experience.

2:00pm Identifying Desired Attributes

The sub-groups will identify the key attributes of the components and functions in their strawman architecture. (Breaks as needed)

4:15pm Outbrief and Cross-Pollination

The sub-groups will report on their preliminary results.

5:00pm Adjourn for day

## **Day 2:**

9:00am Day 2 introduction and plan

Provide attendees a summary of day 1 outcomes, a refresher on the goals for day 2, and announce some administrative details

9:30am Working Session: Identification of Design Principles

The sub-groups will develop a set of design principles that would support the development of a testbed which manifests all the desired attributes.

12:00pm Break for lunch (on your own in the cafeteria)

1:00pm Working Session – Final Preparations for Report Out

Each group will put together the final touches on what they want to present to the workshop body as a whole

2:00pm Break

2:15pm Report Out from the Groups

Each group will present the results of the two working sessions and facilitate discussion

Each group presents testbed architecture and key attributes

• Discuss key design principles

Discuss cross-domain applicability

4:15pm Concluding Remarks: NIST Next Steps

Paul Boynton, NIST