NIST Smart Manufacturing Workshop April 18-19, 2016

SM Standards Capability Analysis Session Agenda (Draft, April 15, 2012):

Building 220, AMSANT Room

Time	Topic	Participants
10:30-12:30	**Opening Plenary, Bldg 101, Portrait Room**	Joint Session
Apr. 18 1:30-3:00	**Session 1 Integrating IoT into Smart Manufacturing, Bldg 220, B105 Moderated by David Noller**	
1:30-1:45	Standards Capability Analysis in ISO/TMB/SAG Industry 4.0 /Smart Manufacturing	Youichi Nonaka, Hitachi
1:45-2:00	IEC SG 8 on Smart manufacturing	Alec McMillan, ANSI
2:00-2:15	The challenges of integrating IT and OT in Process Automation	Dave Emerson, Yokogawa
2:15-2:30	Smart manufacturing related standards and IEC TC 65 WG Smart Manufacturing	Ingo Weber, Siemens
2:30-2:45	MTConnect and Smart Manufacturing	Russell Waddell, AMT
2:45-3:00	ISA-95 Status and road map toward Smart Manufacturing	Keith Unger, Advanced Operational Excellence
3:00-3:15	IoT/OT Integration -the Journey to Smart Manufacturing	David Noller, IBM
3:15-3:30	**Break**	
Apr. 18 3:30-5:30	**Session 2 Smart manufacturing lifecycle and connected Enterprises, Bldg 220, B105 Moderated by Yan Lu**	
3:30-3:45	Standards for Additive Manufacturing: An Exercise in Roadmapping	Paul Witherell, NIST
3:45-4:00	ISO TC 184 Strategy and roadmap	Patrick Lamboly, Schneider Electric
4:00-4:15	Coordination of Standards Development for Smart Manufacturing	Pat A. Picariello, ASTM
4:15-4:30	Vision 2020 for Quality into the Entire Value Chain	Conrad Leiva, iBaseT
4:30-4:45	Platform with profile for smart manufacturing and its reference model	Seisuke Kano, Japan Advanced Manufacturing Research Institute
4:45-5:00	Enabling Transparent Inspected Manufacturing using a SWIM stack	Martin Hardwick, STEP Tools, Inc.
5:00-5:15	Bridging Between Systems and Analysis Models for Operational Control Decision-support	Tim Sprock, George Tech University
5:15-5:30	Wrap-up for the first day	
Apr. 19 8:30-10:30	**Session 3 SM standards Gap analysis and how to close It, Moderated by Simon Frechette, Bldg 220, B105** **Topic Areas 1:** **Topic Areas 2:** **Actions:**	All participants of SM Standards Analysis Session
10:30-10:45	**Break**	
10:30-12:00	**Closing Plenary, Portrait Room**	**Joint Session**
1:00pm	**Adjourn**	**Joint Session**

Session - SM Standards Analysis

Chair – Dr. Yan Lu, NIST (yan.lu@nist.gov) and Dave Noller, IBM (nollerd@us.ibm.com).

Abstract:

Today's manufacturers face ever-increasing demands of greater customization, and adaptability to sudden supply-chain changes. Successful manufacturers will have to choose and incorporate Smart Manufacturing System technologies that help them quickly adapt to rapid change and to elevate product quality while optimizing use of energy and resources. The core of the emerging SMS technologies is information flow that maximizes the use and re-use of data throughout the enterprise. The ability of disparate systems, however, to exchange, understand, and exploit product, production, and business data rests critically on information standards. This session provides a forum for key stakeholders of SMS standards to review the body of pertinent standards in the areas of product lifecycle management, production system engineering and operation, and business communication. We will discuss opportunities and challenges for new and existing standards, and present future work addressing these opportunities. In long term, we aim to collaborate with standards development organizations, SMS technology providers and manufacturers to develop a SMS standards development roadmap.

Objective:

This session is intended to bring standards developers, technology providers and manufacturers together to discuss needs, opportunities and challenges for standards relevant to SM in order to accelerate smart manufacturing technology adoptions.

Outcome:

The thought after outcomes of this break out session are the identification of gaps, overlaps, and priority areas in smart manufacturing standards and existing research needs. It is also planned to initiate an effort on working out a roadmap on SM standards development indicating important milestones. The results will be summarized and developed in publishable form as a tangible outcome and basis for further discussion within the community.