

Sensor Standards Harmonization Working Group Report

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# Status of Sensor Standards Harmonization Working Group Meeting

September 12, 2006  
National Institute of Standards and Technology  
Gaithersburg, Maryland

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## Purpose

- Provide a forum for industry, academia, and government to exchange information and improve understanding of the various sensor-related standards programs being advanced by various standards development organizations (SDO)
- Identify opportunities to frame the harmonization of sensor-related standards to meet the need of the community, and
- provide opportunities for collaborative demonstration of standards implementation.

## Summary

- Workshop was held and SSH working Group was formed on 12/13/05
- Quarterly working group held 3/14/06, 6/21/06,
- Discussions and presentations
  - **Sensor Requirements for CBRNE Detection & Identification**
  - **Standards-Based Framework for Interoperable Sensor Networks**
  - **Various standards such as ANSI N42.42, IEEE 1451, SensorML, TransducerML, CAP, EDXL, and CBRN Data Model**
  - **Sensor Standards Harmonization Effort**
  - **“Net-ready” CBRN Sensors**
  - **A National Effort on Emergency Data Distribution**
  - **Sensor Standards Frameworks Meeting A Variety of Business Needs**
  - **Sensor Standards in a Global Marketplace**
- Identified issues, opportunities, and potential next steps for consideration by all involved

Presentations are made available at the NIST website:

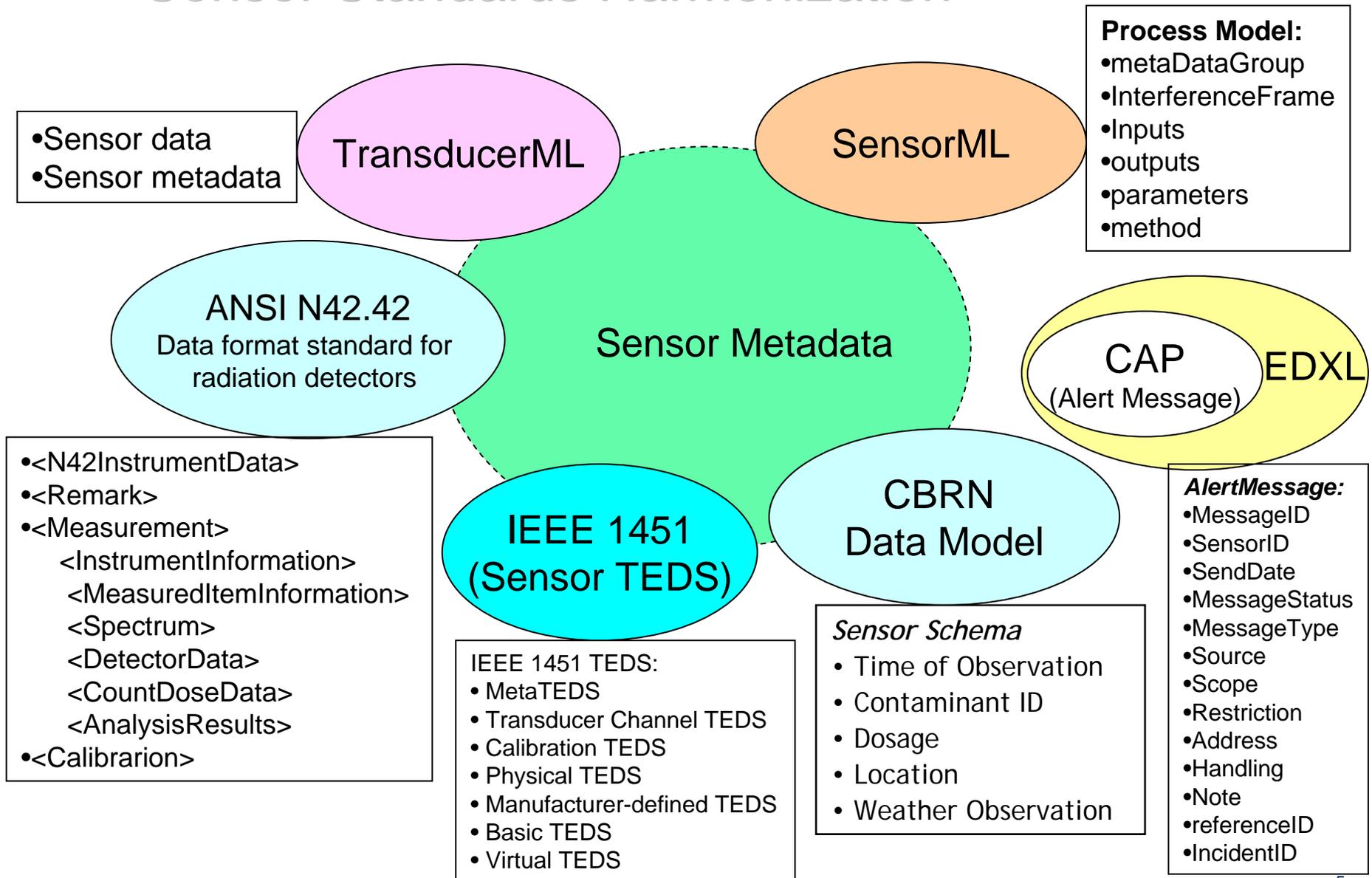
<http://ieee1451.nist.gov/membersonly/>

For login - userid: 1451mem , password: 1451member

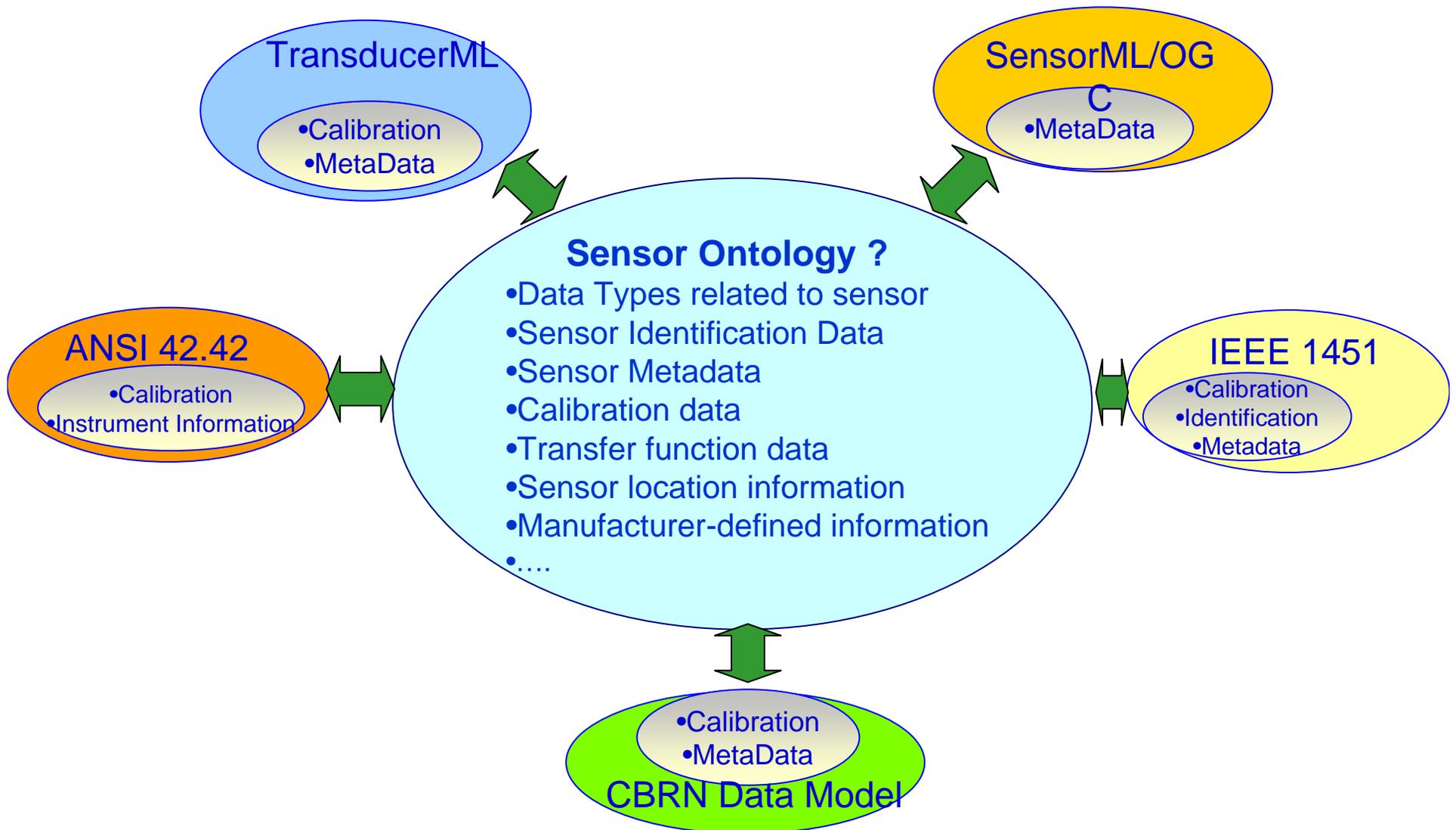
## Harmonization Issues and Opportunities

- **Testbed and implementation demonstrations** are good ways to show that systems are functional and interoperable – from lower level sensor network to higher level application layer.
- Provide cooperating standards organizations with a **common set of use cases**, along with access to sensor assets for testing and prototyping.
- Identify **gaps and harmonization issues** among existing and emerging standards.
- Is **ontology** a tool for harmonization among standards of interest?

# Sensor Standards Harmonization



# Sensor Standard Harmonization Using Ontology ?



- **Next meeting: Nov 28, 2006 at NIST**