# Towards Ontology-based Standards: What Can Ontologies Offer?

Preparation for Ontology Summit 2009
Panel Discussion
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## Challenge

• How can ontologies support the development, analysis, and extension of information standards in industrial domains?

### **Discussion Questions**

 Design ontologies that formalize ambiguously defined concepts within existing standards

• Ontological analysis of existing standards (i.e. identify potential problems and semantic ambiguities) and the subsequent use of ontologies to reengineer existing standards

### **Discussion Questions**

• Can existing ontologies be used to support the integration of existing standards? If not, what ontologies are needed?

• What ontologies should we be designing to lay the foundations for emerging standards and standards that are are currently under development?

## Potential Benefits of Ontologies

• Improved quality of standards, leading to more robust implementations of the standards

Automatic conformance-checking

Semantic integration of multiple standards

#### **Panelists**

- Barry Smith (State University of New York at Buffalo)
- Ed Barkmeyer (National Institute of Standards and Technology)
- Nicola Guarino (Laboratory for Applied Ontology)
- Bill McCarthy (Michigan State University)
- Conrad Bock (National Institute of Standards and Technology)
- Michael Gruninger (University of Toronto)