Current & Emerging Standards for KGs at OMG

Elisa F. Kendall
Partner, Thematix Partners LLC
Member, Architecture Board, Board of Directors
Knowledge Graph Infrastructure / Cross-Platform Ontology Standards

• OMG’s Ontology Platform Special Interest Group (PSIG) has been an active, contributing working group for 15+ years

• Platform standards published:
  ✓ Ontology Definition Metamodel (ODM) – ODM 2.0 planned for Q3/Q4 2020
  ✓ Distributed Ontology, Model and Specification Language (DOL) – DOL 1.1 planned for December 2020
  ✓ Languages, Countries and Codes (LCC) – LCC 1.2 planned for Q3 2020
  ✓ MOF to RDF Mapping – MOF2RDF 1.0 published in March 2020

• Platform standards in work:
  ✓ APIs for Knowledge Platforms (API4KP) – revised submission planned for Q3 2020
  ✓ Multiple Vocabulary Facility (MVF) – revised submission planned for Q3 2020
Ontologies at OMG

• Domain standards published:
  ✓ Financial Industry Business Ontology (FIBO) – FIBO 2.0 is planned for Q3/Q4 2020
  ✓ Financial Instrument Global Identifier (FIGI) – FIGI 1.1 is planned for September 2020
  ✓ Information Exchange Packaging Policy Vocabulary (IEPPV) – update planned for 2020

• Domain standards in work:
  ✓ Robotic Service Ontology – initial submission planned for December 2020, joint effort with the IEEE Robotics community
  ✓ Unified POS Fiscal API / Digital Receipt API – initial submission planned for June 2020 (includes preliminary Retail Industry Ontology, mainly for digital receipts)
Business Modeling & Integration Related Standards

• Case Management Model and Notation (CMMN) 1.1
• Decision Model and Notation (DMN) 1.3
• Date Time Vocabulary (DTV) 1.3 (a subset is used in FIBO)
• Pedigree and Provenance (PP) – in work
• Production Rule Representation (PRR) 1.0
• Semantics of Business Vocabularies and Rules (SBVR) 1.5
• Standard Business Report Model (SBRM) – presented in March 2020, coming soon
Ontology PSIG Roadmap

• RFC for the Architecture Board’s Specification Metadata
  ✓ Currently used by all OMG ontology standards
  ✓ Also used in OMG Specification Catalog automation
  ✓ RFC would include support for UML models & profiles, IDL

• Guidelines for ontology publication and maintenance at OMG

• Extensions to the ODM to support RDF* / SPARQL* (potentially)

• Continued support for any task force that wants to publish an ontology as an OMG standard

• Collaboration with the AI Task Force & migration from ADTF to AI for new platform standards publication as appropriate