



WG16 and IOP Status & Plans

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Introduction

- **WG16 Status**
- **CPSM Profile and IOP Status**
- **ENTSO-E Profile and IOP Status**
- **UCA Sponsored IOP Plans**
- **CIMug Interoperability and Compliance Test Working Group**



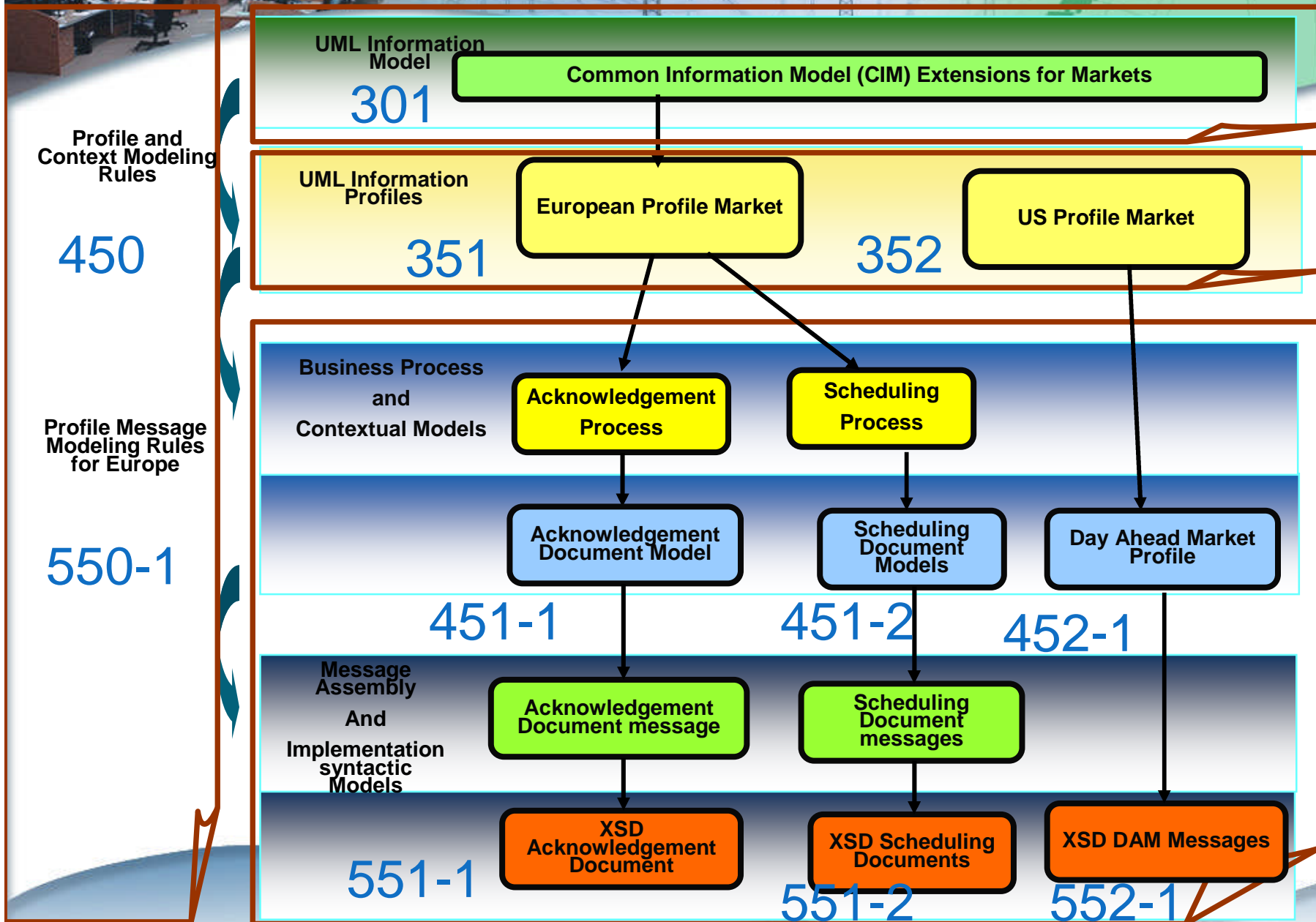


WG16 Status

- We have submitted and received approval for 4 NWIPs for the Market Model Extensions(62325-301), a Profile and Context Modeling Rules Standard (62325-450) a European Style Market Profile (62325-351) and a European Style Market Contextual Model (62325-451-1).
- We have submitted 2 NWIPs for a US Style Market Profile (62325-352) and a US Style Market DAM Profile (62325-452-1).
- The WG16 team has started working on the approved NWIPs and the schedule is to produce a Committee Draft by December, 2010.
- The schedule for the 2 US NWIPS is currently scheduled to produce a Committee Draft by April, 2011.



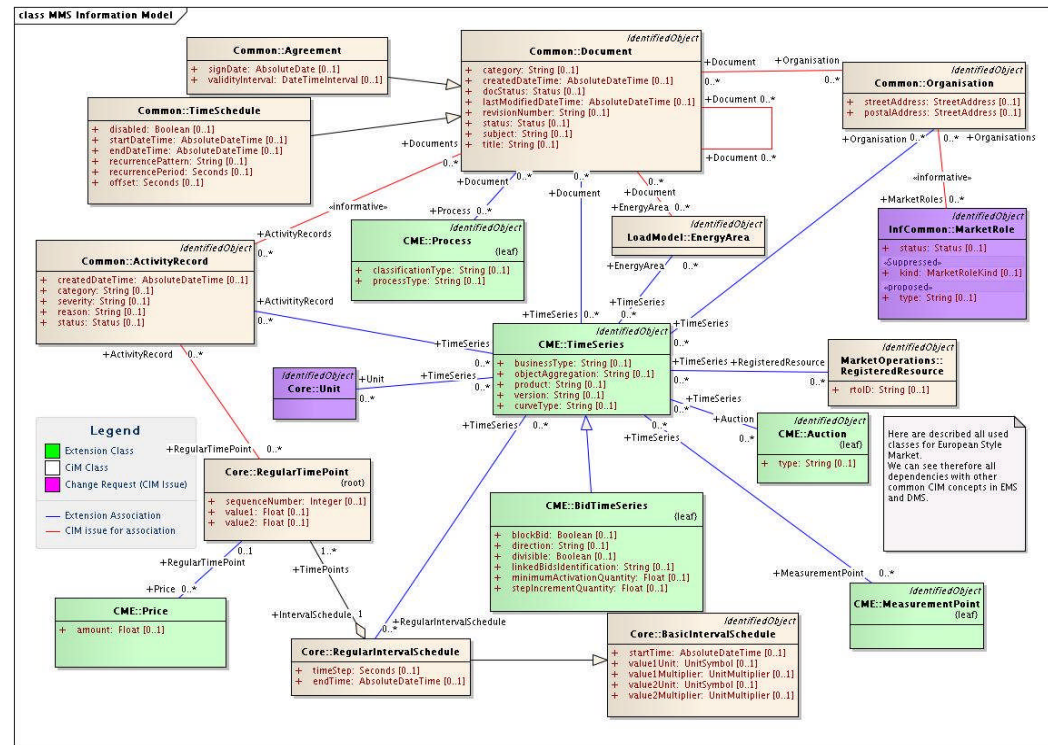
WG16 Numbering Scheme



Proposed CIM Extensions – EU Market

- 6 new UML CIM classes along with their new associations and attributes

- Process
- TimeSeries
- BidTimeSeries
- Auction
- Price
- MeasurementPoint



CPSM Profile and IOP Status

- The CPSM IOP Contains the following Profiles:
 - The Equipment Profile as described in IEC 61970-452
 - The StateVariable Profile as described in IEC 61970-456
 - The Analog and Discrete Measurement Profile as described in IEC 61970-456
- These profiles will provide a sufficient schema to develop instance files that will meet the requirements of the NERC CPSM Use Cases and Goals (to exchange sufficient information to execute a Power Flow and exchange a Solved Case).
- The IOP Test will be held in Knoxville the week of June 28, 2010.
- This IOP Test is sponsored by EPRI.





CPSM Profile and IOP Status

- The CPSM IOP will contain the following tests:
 - Full Model Exchange
 - Incremental Model Exchange
 - Partial Model Exchange using Model Authority Sets
 - Exchange of Header Information in the Model Instance CIM XML RDF Files
 - Exchange of Solved Power Flow Cases
 - StateVariable values will be modified and new solved cases will be exchanged.
- The IOP will use the following Models:
 - ABB 40 Bus
 - Areva 60 Bus
 - GE 262 Bus
 - Siemens PTI 16 Bus
 - SISCO Small Model (2 substations)





CPSM Profile and IOP Status

- Participants in the Test:
 - ABB
 - Areva
 - GE
 - Open Grid Systems
 - Siemens PTI
 - SISCO
 - TIBCO
- Test Witnesses:
 - Greg Steinmetz of AEP
 - David Bogen of Oncor
 - Tim Simmons of SISCO
- Test Director & Witness is Margaret Goodrich





ENTSO-E Profile and IOP Status

- The ENTSO-E IOP Contains the following Profiles:
 - The Equipment Profile as described in IEC 61970-452
 - The StateVariable Profile as described in IEC 61970-456
 - The Analog and Discrete Measurement Profile as described in IEC 61970-456
 - The Topology Profile as described in IEC 61970-456
 - The Dynamics Profile as described in the EPRI Dynamics Project Report
- These profiles will provide a sufficient schema to develop instance files that will meet the requirements of the ENTSO-E Use Cases and Goals (to exchange sufficient information to execute a Power Flow, exchange Solved Cases, Run Planning and Dynamics Studies).
- The IOP Test will be held in Brussels the week of July 12, 2010.
- This IOP Test is sponsored by ENTSO-E.





ENTSO-E Profile and IOP Status

- The ENTSO-E IOP will contain the following tests:
 - Full Model Exchange
 - Incremental Model Exchange
 - Partial Model Exchange using Model Authority Sets
 - Exchange of Header Information in the Model Instance CIM XML RDF Files
 - Exchange of Solved Power Flow Cases
 - StateVariable values will be modified and new solved cases will be exchanged.
- The IOP will use the following Models:
 - Siemens PTI 16 Bus with Model Authority Sets
 - Siemens PTI 16 Bus without Model Authority Sets



ENTSO-E Profile and IOP Status

- Participants in the Test:
 - 27 individual participants representing approximately 15 Vendors
- Test Witnesses:
 - 16 individual witnesses from the ENTSO-E Member TSOs
- Test Director & Witness is Chavdar Ivanov



UCA Sponsored IOP Plans

- The UCA has approved a combined IOP Test for at least 4 Standard that would include, at a minimum the following WG14 IEC standards: Part 13, Part 9, Part 3, Part 6, 61850.
- Possible Use Case for this IOP Test - "Tap for New Subdivision"



UCA Sponsored IOP Plans

- This is listed in the Part 4 use cases. It could include these aspects:
 - Design of new network and cost estimating - Part 6
 - Analysis of proposed design in DMS - Parts 6 & 13
 - Asset procurement and construction - Parts 4 & 6
 - Installation of AMI assets - Parts 4 & 9
 - Synchronization of as-built changes to/from GIS - Parts 4 & 13
 - Switching order for energization of subdivision - Part 3
 - Energization of subdivision - Parts 3, 9, & 13



UCA Sponsored IOP Plans

- IOP would use the following Profiles:
 - The Distribution Model Profile as described in IEC 61968-Part 13 – both Balanced and Unbalanced Models as well as Connectivity Models will be represented.
 - The Meter Reading and Control Message Profiles as described in IEC 61968-Part 9
 - The Profiles for Network Operations as described in IEC 61968-Part 3
 - The Profiles for Maintenance and Construction as described in IEC 61968-Part 6
 - Profiles and models for 61850
- These profiles will provide a sufficient schema to develop instance files that will meet the requirements of the Use Cases defined for this IOP.





UCA Sponsored IOP Plans

- The CPSM IOP will contain the following tests:
 - Full Model Exchange – DMS to DMS (Operational Model)
 - Incremental Model Exchange – DMS to DMS and GIS to DMS
 - Full Model Exchange - GIS to DMS (Connectivity Model)
 - Message from Meter Systems to OMS
 - IOP for 61850 Devices
- The IOP will use the following Models:
 - A Full Operational Balanced Model
 - A Full Operational Unbalanced Model
 - A Full Connectivity GIS Model
 - Incremental Models





UCA Sponsored IOP Plans

- The IOP will use Messages for Meter (AMI/MDM) and Outage Management Systems
- Participants in the Test:
 - Vendors for the following Products:
 - AMI Systems
 - MDM Systems
 - Distribution Management Systems
 - GIS Systems
 - Outage Management Systems
 - Asset Maintenance Systems
 - 61850 Vendors





UCA Sponsored IOP Plans

- The IOP Test will be held in January, 2011 in Europe (location is under discussion)
- Test Witnesses will be from Utilities in Europe and possibly North America
- Test Director & Witness is Margaret Goodrich





CIMug Interoperability and Compliance Test Working Group

- CIMug IOP Test Working Group will work with the UCAIug Testing Committee to develop a full set of compliance and IOP documents including:
 - Certification Criteria and Certification Procedures for Labs
 - Compliance and IOP Test Procedures
 - Certification for Test Labs
 - Sponsorship of Test when needed (Support and Witnesses)
 - Training for Standards
- Funding for this group may come from several places including UCA, Utilities, Vendors, Labs, NIST, etc.
- WE need volunteers to work in this Working Group





Questions & Contacts

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