NIEM MILOPS

STAKEHOLDER ENGAGEMENT

Wednesday, 09 February 2022

Time	Topic	Presenter
1000 -1010	Opening Remarks / Introductions	Mrs. Katherine Escobar
1010-1020	NIEM 5.2 Release	Mrs. Christina Medlin
1020-1030	Metamodel	Dr. Scott Renner
1030-1040	NBAC Status	Mr. Kamran Atri & Mr. Thomas Krul
1040-1050	NTAC Status	Dr. Scott Renner & Mr. Mike Hulme
1050-1110	MEP Tool Demo	
1110-1125	Open Discussion	All
1125-1130	Closing Remarks	Mrs. Katherine Escobar

OPENING REMARKS / INTRODUCTIONS

Katherine Escobar

DOMAIN WAY FORWARD

- Transition from APAN to Github
- Domain Governance review
- Membership (audit and criteria)
- MOMS release, CJCSI, OASIS
- Survey

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NATIONAL INFORMATION EXCHANGE MODEL
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NIEM 5.2 RELEASE

Christina Medlin

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NIEM 5.2

Notes

- NIEM 5.2 will be a minor release and will include updates to domains and code sets

- Check release status at
  https://niem.github.io/niem-releases/

Expected changes

- **Cyber** domain – Cyber Physical System (CPS) content

- **International Human Services** domain – *New domain*

- **Learning and Development** domain – *New domain*

- **MilOps** domain – USMTF content

- Code set updates

Phase	NIEM
MOMS 5.1	March 2022
Alpha 1	March 2022
Beta 1	June 2022
RC 1	September 2022
Release	Fall 2022
MOMS	Q1 2022

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METAMODEL

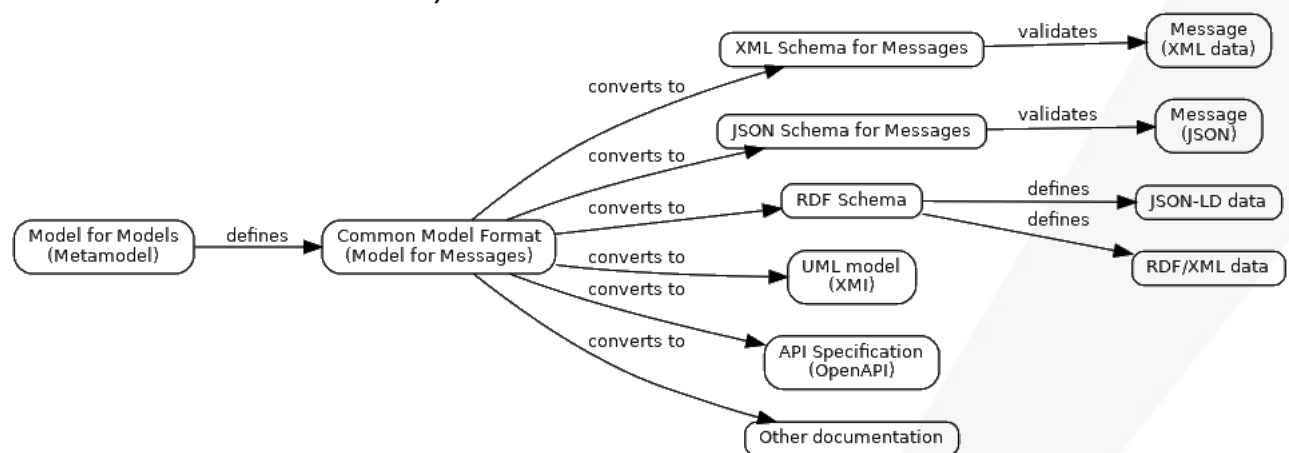## Dr. Scott Renner

NBAC STATUS

Kamran Atri & Thomas Krul

NTAC STATUS

Dr. Scott Renner & Mike Hulme

- Common Model Format (CMF)
  - Multiple technology support (XML, JSON, RDF, …)
  - Provide open-source CMF toosl for developers
- Guidance for NIEM Message Specifications
- NIEM 6 Architecture improvements

NIEM COMMON MODEL FORMAT (CMF)

- Goal: Technology independence for data models
  - Before: Data models are represented as XML Schema documents
  - After: Data models are represented in the *Common Model Format (CMF)*
- The metamodel is the data model for CMF
- Benefits
  - The NIEM model (core & domains) can be used by developers working with many data formats (JSON, RDF, etc.), and not just XML
  - A single message model can support many message formats
  - A NIEM message in one format can be translated into other formats (XML to JSON, JSON to XML, etc.)

CMF STATUS & 2022 WORK PLAN

- Develop free, open-source metamodel / CMF tools
- Refine the metamodel / CMF as tool development proceeds
- Working now:
  - Metamodel / CMF version 2
  - Convert NIEM-based XML schema to CMF
  - Convert CMF to NIEM XML schema documents
- Planned for 2022:
  - Convert CMF to ontology formalism (RDFS+OWL)
  - Convert CMF to JSON Schema
  - Convert CMF to UML diagrams (XMI)
  - Convert UML diagrams to CMF
- Other technologies, eventually: Google Protocol Buffer, Apache Avro, YAML, etc.

NIEM MESSAGE SPECIFICATIONS

- The simplified next generation of IEPDs
  - Convention over configuration
  - Simple cases made simple, while complex cases still supported
- *Guidance for NIEM Message Specifications* in preparation now
  - A "how-to" guide, not a technical specification
  - Formal specification to follow, if needed

NIEM 6 ARCHITECTURE

- Major architectural changes happen only with a major release
- Next major release is NIEM 6.0 in 2023 (if so directed)
- Several significant changes in the works:
  - Replace XML Schema with CMF as the NIEM model representation
  - Simplify or replace metadata attributes
  - Handle ordered, repeated properties (replace @sequenceID)
  - Currently 14 other proposals
- For each proposal: consider, test, consult NBAC
- All in good time for v6.0 release

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MEP TOOL DEMO

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OPEN DISCUSSION

Closing Remarks

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