Introduction to the "new" NIEM Open Project
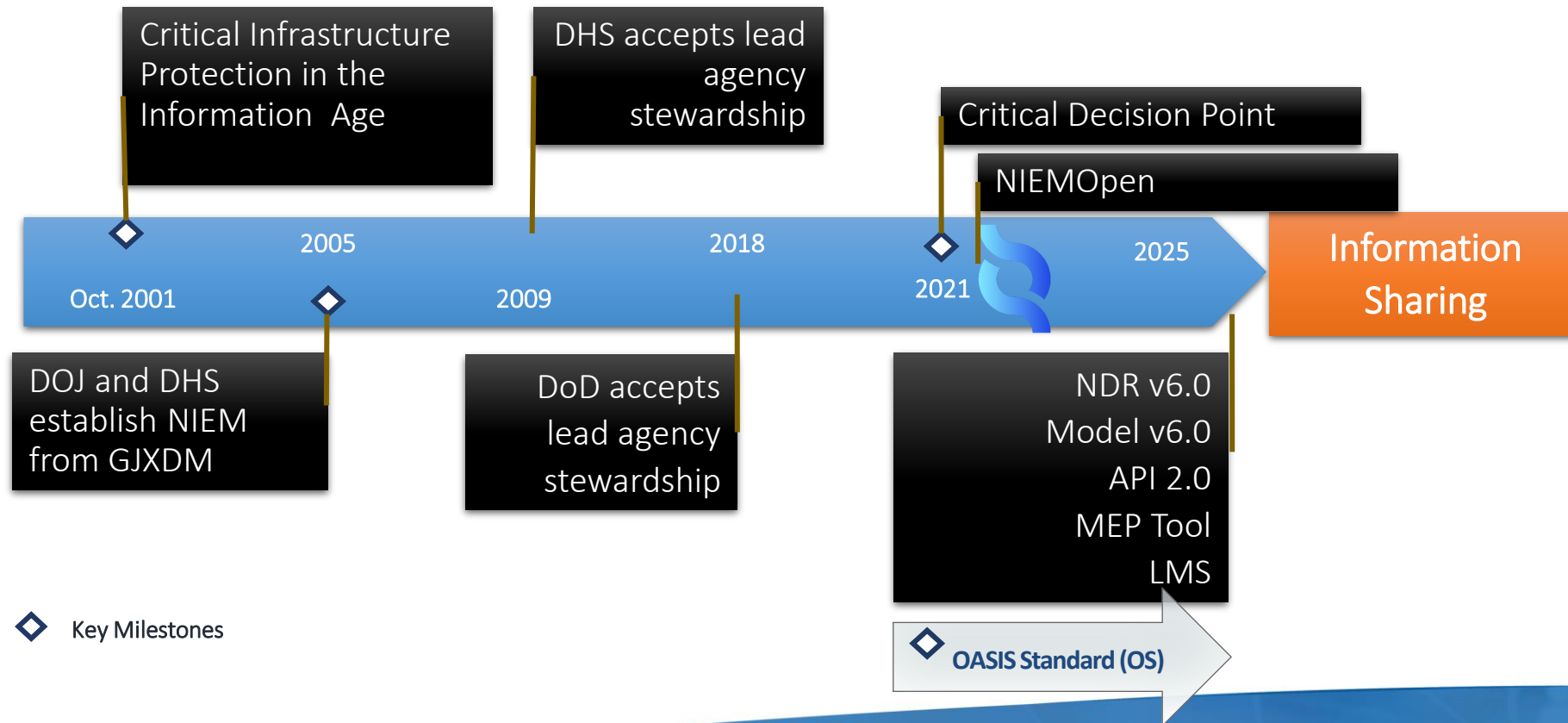
22 May 2025

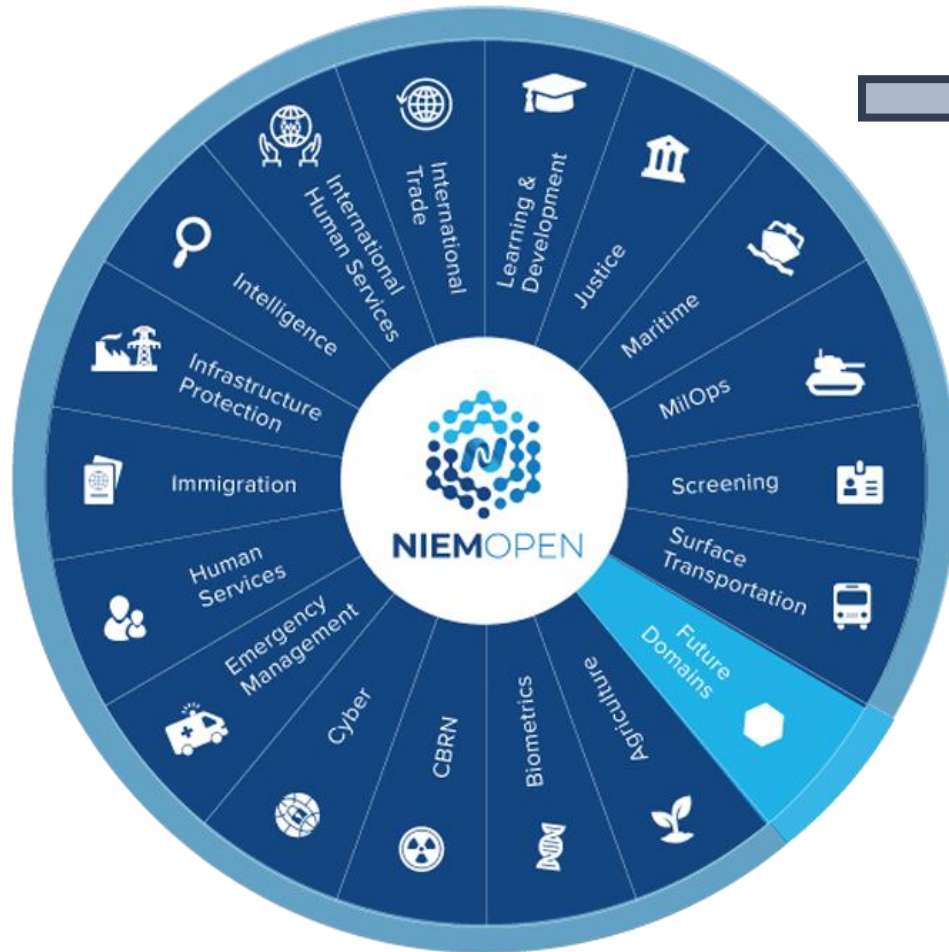Katherine Escobar

Chair, NIEMOpen

Webinar Agenda

- 1:00 Welcome and relevance - Maria Cardiellos (Executive Director, IJIS)
- 1:10 Introduction to the new NIEMOpen – Katherine Escobar (PGB Chair)
- 1:20 NIEM 6.0 Architecture
  — CMF/CMF Tool (includes demo) – Dr. Scott Renner (NTAC Co-Chair)
  — NIEM Toolbox and API 2.0 – Dr. Scott Renner (NTAC Co-Chair)
- 1:40 Future Architecture, role of Ontologies, and AI - Brad Bolliger (NTAC Co-Chair)
- 2:00 The future of NIEMOpen with OASIS – Jim Cabral (OASIS Board Member)
- 2:10 NIEM on the ground – Tammi Blackstone, JD (Iowa Integrated Justice Coordinator), Jim Pingel (Mission Critical Partners)
- 2:20 New dimensions for NIEMOpen in ontologies – Paul Wormeli, Carolyn Staats (Director of Innovation, Sonoma County), Jodi Leveque (Assistant CEO, Sonoma County Courts)
- 2:30 The future, plans and resources – Katherine Escobar (PGB Chair)
- 2:35 Open Discussion/Q&A (Katherine Escobar, Maria Cardiellos, NBAC and NTAC Co-chairs)
- 3:00 Close

Introduction to the new NIEMOpen

As NIEM celebrates its 20th anniversary its worth spending a little time reflecting on how far we've come:

Critical Infrastructure Protection in the Information Age

DHS accepts lead agency stewardship

Critical Decision Point

NIEMOpen

2005

2018

2021

2025

Oct. 2001

2009

Information Sharing

DOJ and DHS establish NIEM from GJXDM

DoD accepts lead agency stewardship

NDR v6.0
Model v6.0
API 2.0
MEP Tool
LMS

◆ Key Milestones

◆ OASIS Standard (OS)

DOMAINS

- **17 Domains Plus Core**

- **3 Domains in the Offing**
  — Forensics
  — Analytical Laboratories
  — Identity Management

- **Other Interested Parties**
  — DISA
  — NATO

NIEMOpen Current Sponsors

- **Sponsors**
  - **JS J6**
  - **DHS S&T**
  - **CJIS (FBI)**
  - GTRI
  - Equivant
  - NAJIS
  - BJS
  - IJIS
  - NIJ
  - APN
  - ODGA (Virginia)

Premier   Premier   Premier
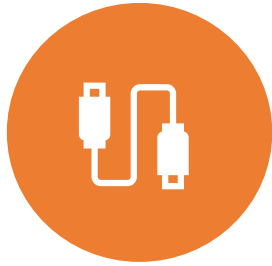
All Purpose Networks, Inc.

Sponsors in the Offing

Department of National Defense

What can an Open Project do?

Utilize the same tools and infrastructure to develop open source and standards.

Leverage a wide network of experts and stakeholders to inform strategic decisions.

Iterate quickly while taking advantage of thorough, best-practices process.

Attract a bigger community of contributors with clear, open, transparent governance.

WHAT OASIS BRINGS TO THE TABLE

What you get
(and don't get)
with Open Projects

~~High cost of a Foundation~~
Stakeholder governance

~~Legal headaches, IPR obstacles~~
Industry-vetted IP licenses, support

~~Fractured development efforts~~
Unified community

~~Ignored by government procurement~~
International recognition

~~Opaque rules and processes~~
Transparent tools, support, best practices

IJIS
INSTITUTE

Why OASIS?

- NIEM Open Project recognized as accredited standard
- Improves International adoption
  - Preference to accredited standards
- Increased scalability and keeps pace with speed of innovations in data technologies and standardization to accelerate adoption and public-private exchange/interoperability
  - Sustainable
  - Aligns with Government Policy/Process/Procedure
  - Open Standard removes barriers – industry hesitation to participate, conflict of interest concern
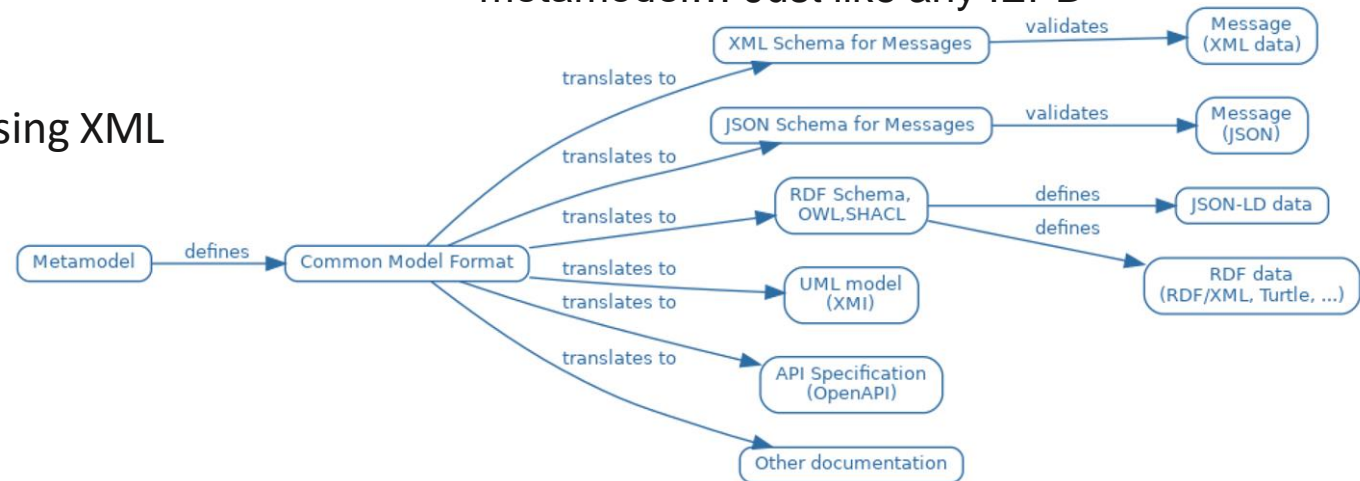
NIEM in the 21st century

Common Model Format (CMF)

- NIEM has always used XML Schema as its data modeling language
  - Model semantics formally defined via mappings to Resource Description Framework (RDF)
  - Mappings defined in the Naming and Design Rules
  - Convenient for designers and developers implementing XML-based data exchange

- NIEM now supports developers who aren't using XML
  - XML Schema is not convenient for them

- For NIEM 6, we created the NIEM metamodel and Common Model Format
  - Metamodel: A conceptual data model for the things we want to know about data models
  - CMF: A NIEM-based implementation of the metamodel… Just like any IEPD

Leaning forward into the future

- Official Standard
- New Architecture
- New Model
- New Design Rules
- New Tools & APIs
- New Training/Learning Management System
- Embracing New Technologies
  - AI
  - Knowledge Graphs
  - Ontologies
- Support for Other Standards
- Outreach to Industry and International Partners

NIEMOpen Future

22 May 2025

Katherine Escobar

Chair, NIEMOpen
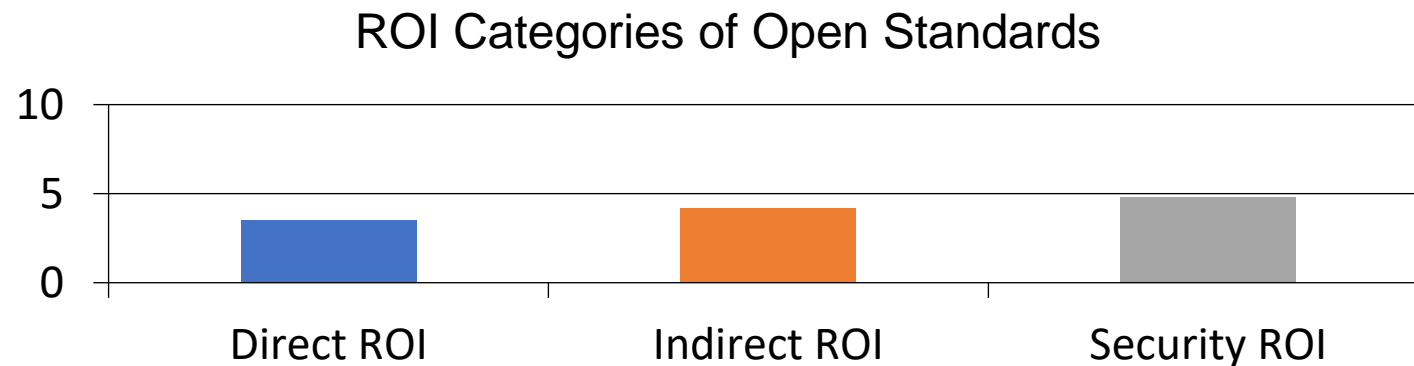
The NIEMOPEN Future

Why Choose NIEMOpen

- Recognized Standard

- Flexible & Adaptable Architecture

- Robust AI Support

- Host for Emerging Technologies

- World Class Accredited Training

- Cutting Edge Tools

- International Footprint

- Industry and Government Choice

- Expanding Community of Interest

- Sustainable Infrastructure & Growth

ROI of Open Standard Investment

- Direct Returns: Increased interoperability, reduced costs, vendor diversity.

- Indirect Returns: Spurs innovation, enhances security, accelerates compliance.

- Example: NIST & FIPS investment led to globally adopted cryptographic standards.

ROI Categories of Open Standards

Conclusion

- Investing in NIEMOpen isn't a cost — it's a strategic advantage.
- Now is the time for Federal, State, Local and Industry leadership.

Let's shape the future, not just comply with it.

Sponsor NIEMOpen

Resources/CONTACT US

OASIS OPEN

oasis-open.org

NIEMOPEN

niemopen.org

niem.gov/

Latest Model Specification v6.0 PS02
GitHub - niemopen/niem-model: The NIEM reference data model

GitHub

Git Repos
github.com/NIEM/NIEM.github.io
NIEMOpen: github.com/niemopen
NTAC TSC (admin): github.com/niemopen/ntac-admin
NBAC TSC (admin): …/nbac-admin
NMO TSC (admin): …/nmo-admin

Groups & Mailing Lists
NIEMOpen: lists.oasis-open-projects.org/g/niemopen
NTAC TSC: …/niemopen-ntactsc
NBAC TSC: …/niemopen-nbactsc
NMO TSC: …/niemopen-nmotsc

On the Website, select an option for access:

+ Apply For Membership In This Group   or   ➜] Log In If You Are Already A Member

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