

# NIEMOPEN

NBAC TSC Slides 29 May 2025 Meeting

#### 29 MAY 2025 NBAC TSC AGENDA

- 1:00 NBAC Chair (s) Opening Remarks Mr. Kamran Atri, Thomas Krul & Paul Wormeli
- 1:05 NIEM Management Office (NMO) Update Mr. Steve Sullivan
  - 22 May Webinar
  - 29 May PGB Meeting
  - 8 October Reveal
- 1:10 NTAC Update Scott Renner, Brad Bolliger
- 1:15 Communications & Outreach NMO Sub-Committee Paul Wormeli
  - Washington DC held an information sharing conference for the Justice community this May. Mr. Wormeli provided a brief showcasing NIEMOpen. He will share that presentation with us, now.
- 1:45 Questions/Final Remarks



#### NIEM MANAGEMENT OFFICE

- Webinar conducted 22 May 1-3 PM EDT
  - Video will be made available

- PGB Meeting 29 May 2-4 PM EDT
  - Microsoft Teams May PGB

#### Join the meeting now

Meeting ID: 993 272 665 665

Passcode: yQ6Cz6Wh

Dial in by phone

+1 410-874-6749,,743104072# United States, Odenton

Phone conference ID: 743 104 072#



#### **REVEAL SUMMIT UPDATE**

Date/time: 8 October 2025, 12 Noon – 4 PM

Venue: National Press Club Ballroom

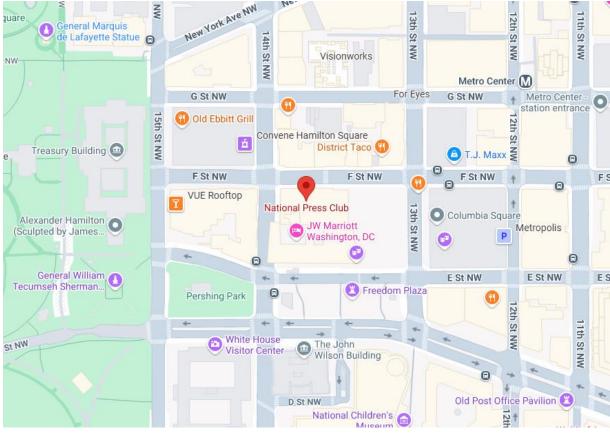
529 14th St NW, Washington, DC 20045

Registration: link available mid-June

"DRAFT" Agenda

Time	Duration	Topic	Presenter
12:00 PM	30 min	Registration & Admin	Staff
12:30 PM	20 min	<ul> <li>Welcome/Introduction/ Agenda</li> <li>Admin remarks</li> <li>Agenda</li> <li>NIEMOpen an OASIS Open Project</li> <li>Organization</li> <li>Leadership - PGB</li> <li>Sponsors</li> <li>Domains</li> </ul>	Katherine Escobar
12:50 PM	30 min	Keynote	TBD
1:20 PM	10 min	NIEM Technical Architecture Overview	Dr. Scott Renner
	10 min	NDR v6.0, Model Version 6.0	Dr. Scott Renner
	10 min	Common Model Format (CMF) Concept & Demo	Dr. Scott Renner
1:50 PM	5 min	MEP Tool	Shunda Louis
	5 min	API 2.0 Functionalities & Demo	Shunda Louis
	10 min	Break	
2:10 PM	45 min	Future of NIEMOpen	Katherine Escobar
2:55 PM	15 min	Break	
3:10 PM	40 min	NIEMOpen Excellence Awards	Shunda Louis, Katherine Escobar
3:50 PM	10	Closing & Adjourn	Katherine Escobar







#### **PGB APPOINTED VOTING MEMBERS**



Ms. Katherine
Escobar
PGB Chair
Deputy Division
Chief, Data and
Standards Division at
Joint Staff J6 and
NIEM Managing
Director



Ms. Christina Bapst-Stump Science and Technology Directorate, US Department of Homeland Security



Mr. Gary Egner Director Business Development, Equivant



Mr. John Wandelt Principal Research Scientist, Georgia Tech Research Institute



Ms. Maria Cardiellos Executive Director Integrated Justice Information Systems Institute



Mr. Payton Lamb
Data Engineer
Commonwealth of Virginia
Office of the secretary of
Administration
Office of Data Governance
and Analytics



Ms. April Mitchell
FBI It Specialist and Technical
Lead of Data Standards in the
Criminal Justice Information
Services (CJIS) Division



Ms. Erin Partin
Data Scientist,
Office of the
Principal Deputy
Director, National
Institute of Justice
(NIJ)



Ms. Erica Smith
Data Scientist, Unit
Chief – Law
Enforcement
Incident-Based
Statistics Unit,
Bureau of Justice
Statistics (BJS)



Mr. Tom Welch
Director of
Information
Technology OHIO
HIDTA –
Including Northern
KY & Western PA



Mr. James T. Herbert VP, CMO APN Software





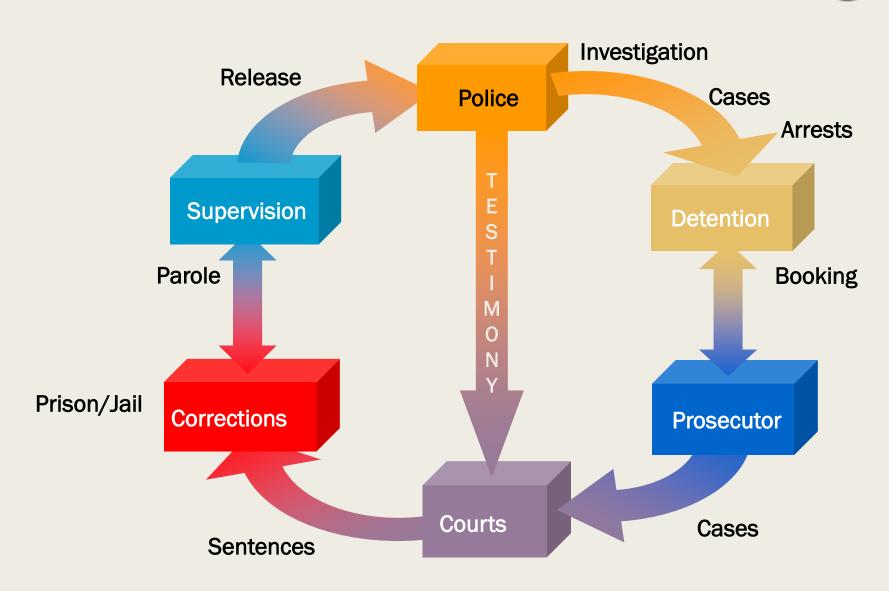
# DATA STANDARDS FOR INTEROPERABILITY

Paul Wormeli Co-Chair NIEMOpen Business Architecture Committee

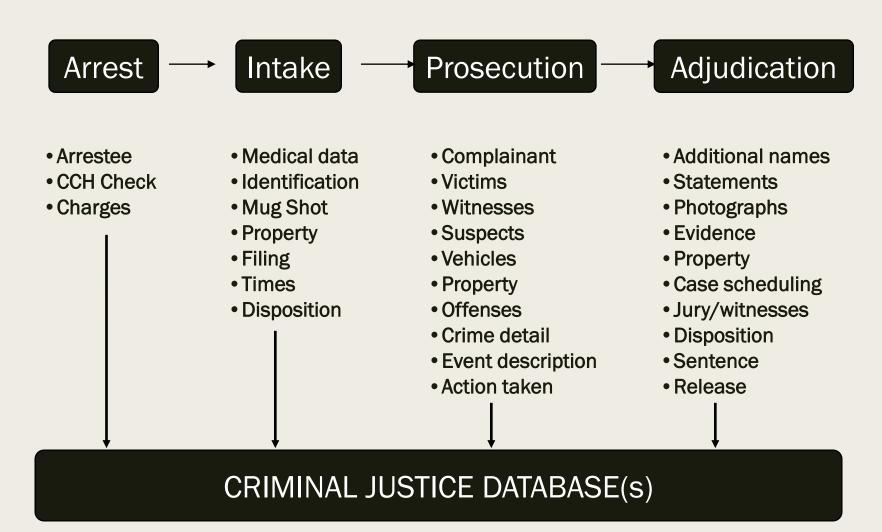


Information Sharing is at the heart of the criminal justice enterprise

## Justice Information Sharing

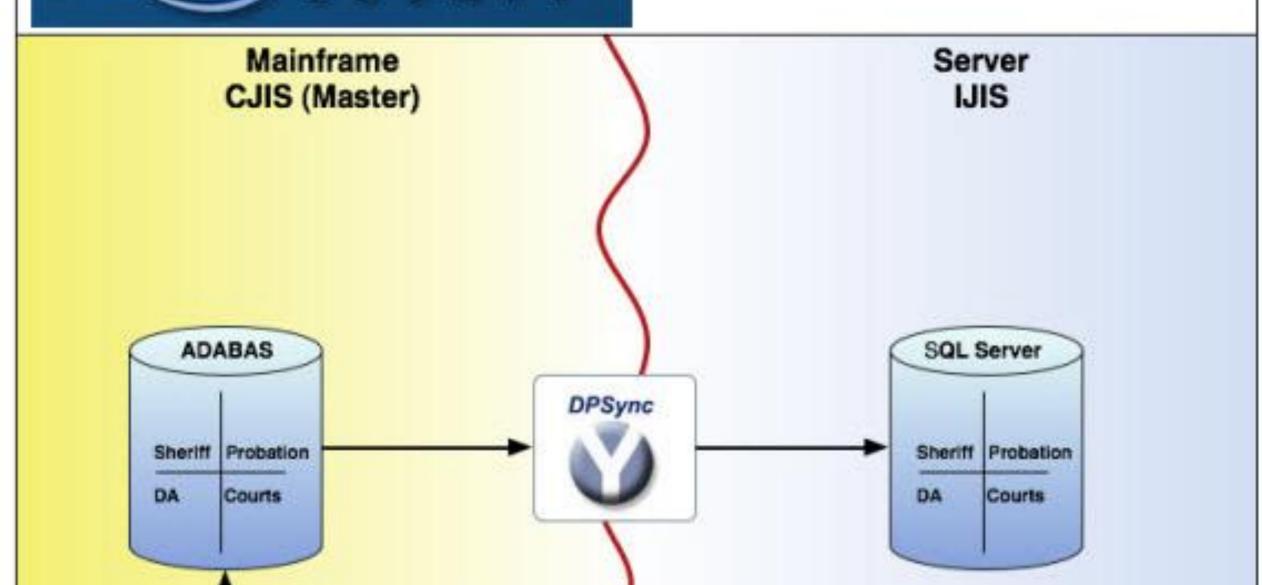


#### Criminal Justice Information Flow

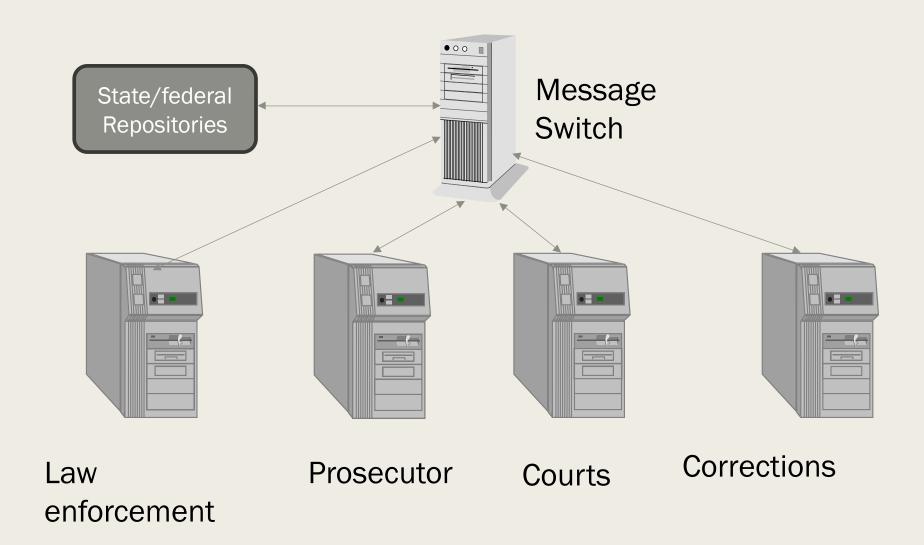




#### Early CJIS monolithic systems



### Late 20<sup>th</sup> century architectures



The numbers game—What is a case?

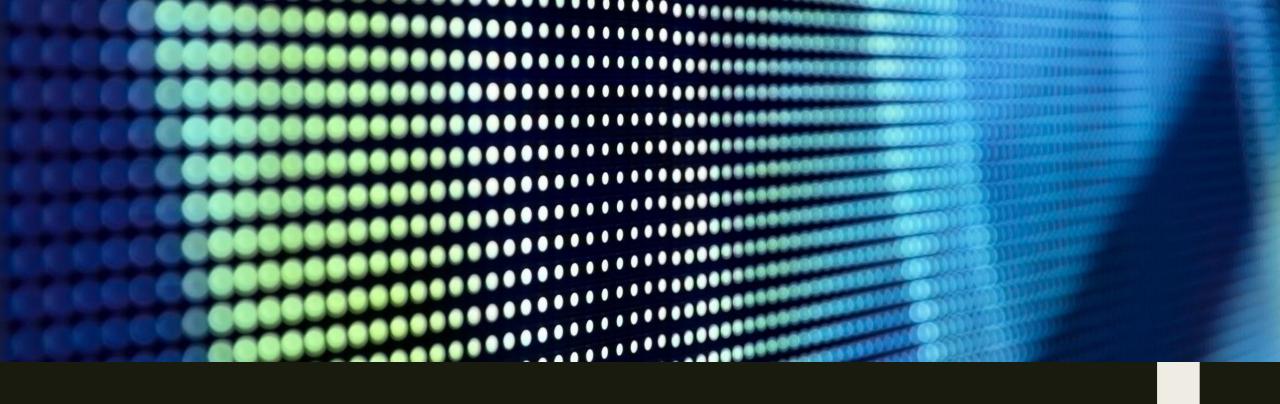
Matching records—Which John Smith is it?

Proprietary architectures and data— Who owns the data?

Incompatible database designs— Computerspeak variations in data

Varying structures in separate silos the inward focus

# Obstacles to sharing information



# THE NEXT GENERATION

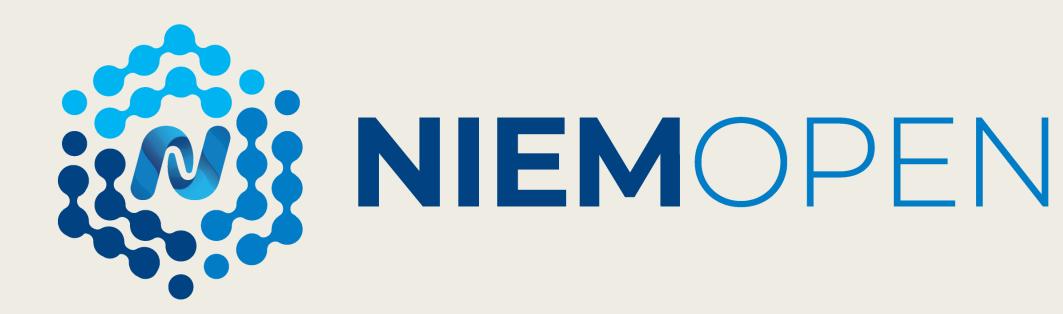
### **Key Features**

- Person-centric data integration
- Electronic case folder—a 360-degree view
- Integrating structured and unstructured data sources
- Seamless workflow management across agencies
- Notification and alerts
- Flexible output reporting
- Full video/audio integration
- Distributed data management
- Deployable anywhere (on-premise or on any cloud)



### Key technologies

- Digital evidence management across agencies
  - Interaction of body-worn, dash, and surveillance cameras
- Knowledge graph technologies to define business rules and data relationships
- Entity resolved knowledge graph
- Generative AI to construct inquiries
- Standards-based AI for data extraction
- Multi-dimensional business intelligence
- Al-based video and audio integration



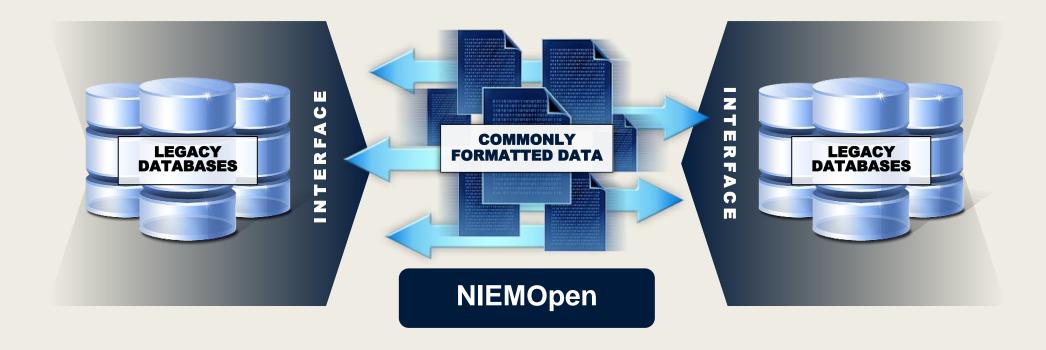
Data Interoperability 2025

#### MISSION:

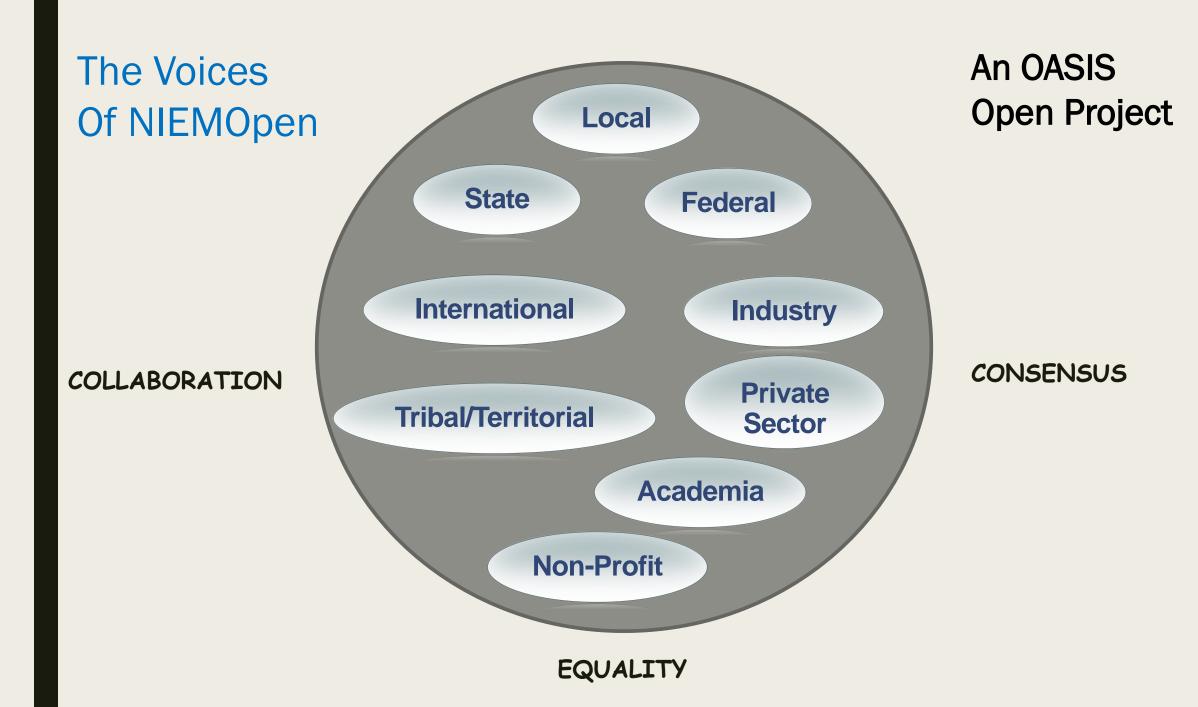
Enable Interagency
And Cross-Domain
Information Sharing



#### Semantic and syntactic data standards



Community-based data standards for information exchanges and building enterprise ontologies



#### NIEMOpen Model Content

#### NIEMOpen has 17 Domains •

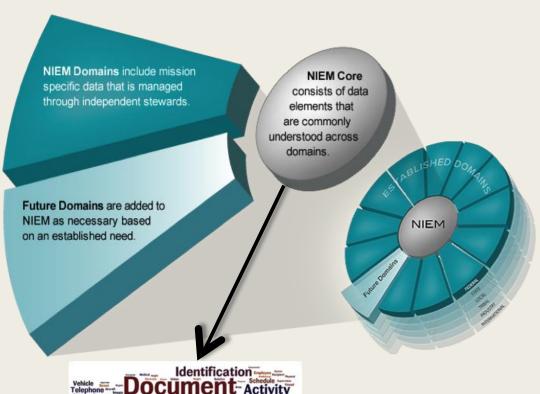
- Agriculture
- Biometrics
- Chemical, Biological, Radiological, & Nuclear
- Cyber
- Emergency Management
- Human Services
- Immigration
- Infrastructure Protection

- Intelligence
- International Trade
- International Human Services
- Learning & Development
- Justice
- Maritime
- Military Operations
- Screening
  - Surface Transportation

#### **Features**

- 20,000+ harmonized data components
- Naming and design rules
- Common model format supporting XML,JSON, RDF
- Open source API and development tools

# See more at NIEMOpen.org





### NIEMOpen Offers

An open standard format for data specifications across justice participants

Reuse of community-agreed data models, with local extensions

A technology-neutral data modeling language

Knowledge graph representation of exchanged data

A methodology to define exchange standards

Automated validation of information exchanges to improve data quality

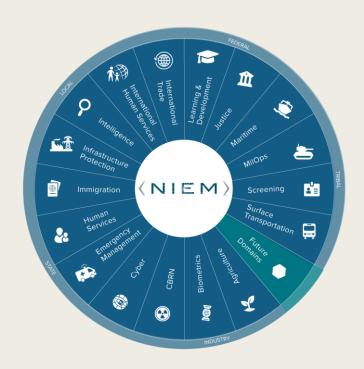
Interoperability with other jurisdictions and disciplines

# NIEMOpen an Open Source standard

- Aligns with the National Institute of Standards and Technology
- Consistent with government and industry formal standards
- Inherent Interoperability due to rigor in vetting standards
- Potential to be an ANSI or ISO standard
- Increased visibility, contribution, and use by opensource tool developers
- Free to all users in government or industry

#### NIEMOpen Is About Cooperation, Not Control

- Data components chosen and harmonized by consensus among users
- Components are established when participants believe that a common definition will make their exchanges easier to create and implement
- Each domain changes on its own schedule, under its own control
- Changes in the core or in a domain do not force changes in other domains or in any data exchange
- No one is ever required to use a component that does not satisfy the data exchange needs, so there is no leverage for controlling the participants



### NIEM IMPACT





#### Open Knowledge Network:

[...] multi-domain access to linked data in a federated system, accessed by natural language queries, empowered by artificial intelligence.





# A Vision for Law Enforcement/Public Safety Information Sharing

Brian D. Griffith
Deputy Assistant Director
Criminal Justice Information Services Division
Federal Bureau of Investigation

#### A Bold Vision for FBI CJIS

- Create a roadmap for adopting NIEM
   Open standards across CJIS systems
- Increase availability of Full Lifecycle
   LE/PS data via NCIC-carefully
- Increase availability of LE/PS data via agency RMS (API?)
- Explore the concept of a LE/PS Data Sharing Fabric

--Brian Griffith





#### Solution Extensions

- Feed data to criminal history repositories (District, national)
- Coordinate and consolidate criminal intelligence data
- Manage interaction between justice, healthcare and social services
- Generate input to national statistical systems
- Create a public-facing interactive dashboard to promote transparency
- Manage police and prosecutor diversion programs, pre-trial services

# NIEMOpen Webinar Unveiling the Future of NIEM

May 22, 2025

1:00 - 3:00 PM (ET)





# NIEMOPEN.ORG