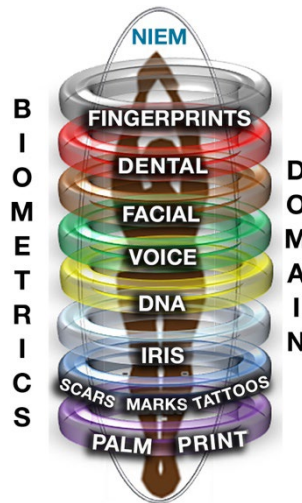


## Editor's Note

Welcome to your National Information Exchange Model (NIEM) Biometrics Domain newsletter. This publication provides Domain members with situational awareness of the latest features and related news of the Biometrics Domain, and enhances the exchange of intelligence and information across the Domains. Domain members represent the full range of operations dealing with the gathering, analysis, fusion, and dissemination of biometrics intelligence. Our readers represent a broad audience of decision makers, stakeholders, and practitioners of the NIEM Biometrics Domain (NBD).

This newsletter presents NBD notable changes and current work. This issue covers topics such as facial image standards, the NBD Voice Data Model, NATO NIEM Biometrics Implementation, FBI CJIS update, NIEM Biometrics 5.2, NIEM Governance Documents Review, NIEM OASIS Transition, and the NIEM 2022 Annual meetings including briefings provided by the OASIS team, NMO team, and NBAC team.



## About the NIEM Biometrics Domain

The NIEM Biometrics Domain is a data model of agreed upon terms, definitions, and formats. It supports information sharing and promotes interoperability between mission-based organizations engaged in activities such as homeland security, national defense, border management, immigration benefits, and global law enforcement through the joint development and alignment of Extensible Markup Language (XML) Biometric Standards. The NBD was launched in July 2012 and functions under the stewardship of the Office of Biometric Identity Management (OBIM) within the Department of Homeland Security (DHS). OBIM transitioned to the DHS Management Directorate after passage of the Cybersecurity and Infrastructure Security

Visit the NIEM Biometrics Domain  
Community Online [here!](#)



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The NIEM Biometrics Domain Executive Committee (NBDEC) includes:

Chair: John Boyd (OBIM)

Co-Chair: Jennifer Stathakis (DOJ/FBI)

Co-Chair: Ryan Triplett (DOD)

Ombudsman: Diane Stephens (NIST)

## Facial Image Standards

International Organization for Standardization (ISO)/ International Electrotechnical Commission (IEC) Joint Technical Committee (JTC) 1 Sub Committee (SC) 37, the committee for standardization in biometrics, has two projects in working draft related to improving facial image quality assessment:

- [ISO/IEC 29794-5](#): Definitions of tests for a face image quality vector

- [ISO/IEC 24358](#): Specifications for face-aware capture subsystems

Face recognition accuracy has improved markedly due to development of new recognition algorithms and approaches. For more information, please see:

- [NIST update on the Ongoing Face Recognition Vendor Test \(FRVT\)](#)

- [NIST FRVT Quality Summarization and Analysis](#)

## Maturing Voice Data Model for NIEM Biometrics at OBIM

The NIEM Biometrics Domain Working Group (NBDWG) lead at OBIM, Tara Etemadi, holds bi-weekly biometrics standards meetings to mature the Human Language Technology (HLT)/Voice Data Model. Participants from DHS, DOD, DOJ, NIST, the Project Team, and HLT Subject Matter Experts (SMEs) are developing concept maps to define terminology involved in the voice model for submission to the International Committee for Information Technology Standards (INCITS) M1 for M1 consideration to ISO/IEC WG 1 SD 2. Recent activities include:

- Provided a September 2022 INCITS M1 status update and approved concept maps contribution: Speak, Speech, Data Subject, Speech Sample, Speech Sample Metadata, and Data Subject Metadata.
- Continued development of the concept maps, trying to submit additional contribution by year end.

Note: issues are logged, and the project is tracked through the NBD GitHub repository.

To join our NBDWG discussions: [Email the NBD Team](#)

### NBAC Monthly Meeting

November is cancelled

December is TBD

January 26<sup>th</sup>, 1 – 2pm

## North Atlantic Treaty Organization (NATO) Northern Spirit 22 (NOSP22) – NIEM Biometrics Implementation

The U.S. Department of Defense (DOD) Defense Forensic and Biometric Agency (DFBA) works closely with NATO nations to assist in the development of biometric capabilities. As part of these efforts, DFBA participated in the planning and execution of the NOSP22 exercise. Vignettes were developed for NOSP22 to demonstrate the sharing of biometric data between multiple national automated biometric identification systems. While all of this was conducted in a simulated and test environment, NATO understands the importance of interoperability across multiple nations. The cooperation and the ability to share information between the NATO nations relies on the implementation of tactics, techniques, and procedures as well as agreed upon standards.

While there are numerous NATO standards, DFBA has a particular interest in the biometric data interchange standard that is responsible for formatting biometric data to share seamlessly between the NATO Nations. DFBA serves as the Custodian of NATO Standardization Agreement (STANAG) 4715 – Biometric Data Interchange. As a co-chair of the NBD, DFBA is postured to advocate for the integration of the NBD into NATO STANAG 4715 Edition 2.

During development efforts, DFBA promoted the utilization of the NBD and opined that it was the best solution for NATO to achieve interoperability when producing and transmitting XML files to national automated biometric identification systems. NATO member nations agreed on this solution and DFBA endeavored to complete the development of the second edition of the STANAG, which was approved in February 2022.

Thanks to the NBD, NATO biometric systems will have a leg up in seamlessly sharing crucial biometric data in future NATO exercises and events.

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## FBI CJIS Update

The Criminal Justice Information Services (CJIS) Division provides state-of-the-art biometric identification and criminal history services through its Next Generation Identification (NGI) system. This fall, CJIS is upgrading NGI's friction ridge matcher services and implementing the Electronic Biometric Transmission Specification (EBTS) version 11, which draws from the NBD version 4.0.1.

The III NIEM XML (criminal history transactions) changes include deployed service for unsolicited messages to agencies, including Immigration and Customs Enforcement (ICE) – Homeland Security Investigations, FBI Human Resources Division, and Royal Canadian Mounted Police. Other groups preparing to onboard include ICE – Enforcement and Removal Operations, Nevada, Utah, Pennsylvania, and Warrants Administrative Message Script.

## NIEM Release 5.2 NBD Updates

NIEM 5.2 will be a minor release scheduled for Release Candidate 1 in November 2022 with the final release in December 2022. Potential changes to the NIEM 5.2 Biometrics Domain data model include:

- Biometrics Domain data model changes for DNA based on the latest changes to the ISO/IEC 19794-14 (DNA) Data interchange Format (2022 FDIS).
- Changes include the addition of four properties, modifying one existing property, and editing four types.
- Harmonization of enumerations in screening domain for "ChargeCategoryCode."

To submit a new issue or to include any content into the 5.2 version, email feedback to [niem-comments@lists.gatech.edu](mailto:niem-comments@lists.gatech.edu).

## 2022 NIEM Annual Meeting Overview

### NIEM Governance Documents Review

During the NIEM Annual Meeting, the NIEM Business Architecture Committee (NBAC) discussed the revised NIEM governance documents under NIEM OPEN, an Organization for the Advancement of Structured Information Standards (OASIS) OPEN Project. Documents include:

1. Instantiating a New Domain
2. NIEM OPEN NBAC Governance Document
3. NIEM Charter

To obtain a copy of the documents: [Email the NBD](#)

### NIEM Open Release Process Review

During the NIEM Annual Meeting, NBAC discussed the revised release process under NIEM OPEN, an OASIS OPEN Project.

To obtain copy of the documents: [Email the NBD Team](#).

### NIEM OASIS Open Sponsorship

Current Founding NIEM Open Sponsors include:

- DOD Joint Staff J6
- DHS Science and Technology (S&T)
- Georgia Tech Research Institute
- [Equivant](#)

To sponsor NIEM Open, contact [Dee Schur](#), OASIS Development & Advocacy.

### NIEM OASIS Transition & Services

NIEM Management Office (NMO) announced in September 2022 that NIEM will transition from the DOD to OASIS, an American National Standards Institute-accredited and ISO-recognized standards development organization. This move creates a path for NIEM to become an official standard in national and international policy and procurement.

OASIS is nonprofit, 501(c)(6) organization hosting open standards and open-source projects. OASIS Open Projects support shared community development of code, application programming interfaces, standards, and reference implementations, all in one place under open-source licenses with a path to recognition in international policy and procurement.

During the NIEM Annual Meeting, Dee Schur (OASIS Development & Advocacy) discussed the core services OASIS provides including:

- Legal entity, management of trademarks and copyrights
- Contributor License Agreement administration
- Collaboration tool set: GitHub org, mailing group, calendar, roster, ballot, asynchronous chat, video meetings.
- OASIS Standards process submission management
- Submission of approved deliverables to ISO, IEC, and the International Telecommunication Union (ITU) via OASIS
- Community management support
- Assistance in writing charter, Code of Conduct, other policies
- Governance administration and support
- Support for project assets such as website design, hosting, site maintenance, collateral, and logo design
- Press, promotion, and outreach to attract developers and sponsors
- Meeting planning and coordination
- Free public access to deliverables in perpetuity

### Annual Meeting Links

During the NIEM Annual Meeting, the NBAC suggested the below for additional reading:

Annual Meeting GitHub Repository  
<https://github.com/NIEM/NIEM-Annual-Meetings/tree/master/2022>

OASIS Policies <https://www.oasis-open.org/policies-guidelines/>

Open Project Lightweight Rules  
<https://www.oasis-open.org/policies-guidelines/open-projects-process/>

Open Project CLAs <https://www.oasis-open.org/policies-guidelines/open-projects-process/#CLAs-license-notice>

OASIS WIKI HOME <https://oasis-open.atlassian.net/wiki/home>

NBAC TSC <https://lists.oasis-open-projects.org/g/niemopen-nbactsc>

NTAC TSC <https://lists.oasis-open-projects.org/g/niemopen-ntactsc>

MEP Builder  
<https://sourceforge.net/projects/niem-mep-builder/>

### Why OASIS Open Standard?

OASIS is a global, nonprofit consortium for advancing open standards and open-source projects, which allows:

1. Freedom to create a portfolio of complementary materials under one organizational umbrella.
2. Option to advance appropriate deliverables through to the OASIS Standard with the potential to be referenced by global Standard Development Organizations like ISO, IEC, and ITU.
3. Industry-vetted intellectual property policies and world-class legal support.
4. Clear rules to support strategic leadership and shared community development.

Visit: <https://www.oasis-open.org/>

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