



Good Afternoon, It is my privilege to present the Best of NIEM 2020 and NIEM recognition awards.

2020 marks NIEM's 15th anniversary – the Best of NIEM awards have been presented since they were created in 2009.

In that first year, projects that demonstrated how intergovernmental collaboration and innovative technology delivered results that improved performance, increased efficiency, and supported transparency using NIEM as the primary enabler.

This year, we are recognizing those NIEM implementation projects demonstrating significant accomplishments – with noteworthy contributions to the use, growth, and adoption of NIEM.

For 2020, we strongly encouraged our larger NIEM community to recognize these NIEM projects and encourage nomination submissions. Beginning in July, we actively promoted the Best of NIEM 2020 awards through August.

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So Without further ado, I present to you in alphabetical order, the Best of NIEM 2020 awards



Our first award is presented to The Interoperability Solution Division -- a part of Employment and Social Development Canada – with an important role in enterprise solution delivery and modernization

The Employment and Social Development's complex business relationships rely heavily on data sharing both internal and external to the department (--pause--) **making data interoperability an essential part of business delivery and a catalyst for service excellence**

Interoperability Solutions is committed to data standardization, providing consistent service in data interoperability, and to enhancing information exchange capabilities. **The seamless exchange of information and the reusability of services is vital in meeting the future needs of Employment and Social Development Canada.**

In support of this commitment to standardization, in 2018 **NIEM became the preferred choice for packaging information exchanges in support of data standardization and interoperability.**

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Interoperability Solutions showcased two projects using NIEM version 4.2 that are working successfully with other program areas and partner departments, to include:

- A common system for Grants and Contributions with multiple implementations,
- Canada's Student Loans Program,
- Public Works and Government Services payment processing, and
- The Canada Revenue Agency's Collections Process

The first project worked with the Department Accounts Receivable System

By using NIEM, the speed and accuracy of financial information between systems is expected to improve the overall user experience and the rapid recovery of overpayments.

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The Hosted Contact Center Solution similarly provides timely and accurate data exchanges - allowing Canadian citizens, for the first time – the self-service ability to receive benefit information

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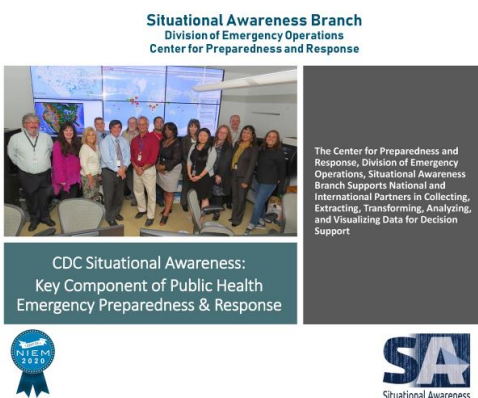


This Best of NIEM award recognizes the value that the Interoperability Solutions Division has brought to Canada's government and citizens.

By using NIEM, ISD delivers critical, timely and accurate data for multiple programs -- achieving seamless data interoperability -- positioning Employment and Social Development Canada as a leader in supporting the Government of Canada's goal of a digital government.

And the next award:

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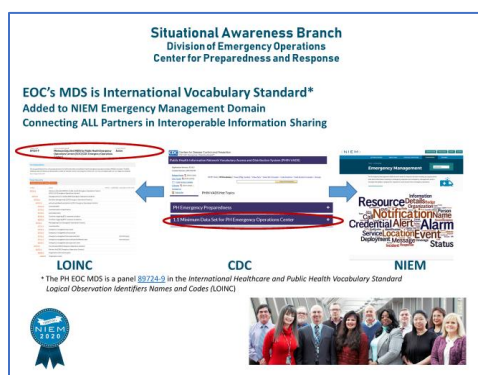


Goes to, The Situational Awareness Branch a part of the Centers for Disease Prevention and Control's Center for Preparedness and Response and the Division of Emergency Operations.

To achieve the Situational Awareness Branch's mission of improving public health emergency planning and response they:

- Analyze critical information about many kinds of public health hazards--
- Collect and validate important information about public health emergencies --
- Turn data and analyses into easy-to-use -- accessible information,
- And Share this with CDC's partners

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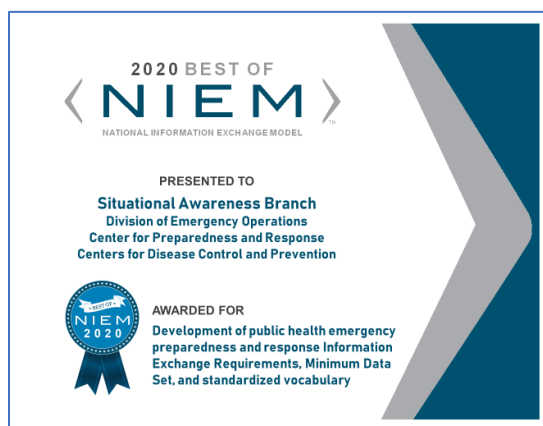
Special Awareness successfully challenged ineffective paradigms, garnered partnership support, and rallied resources across jurisdictional lines to develop and validate public health emergency preparedness and response Information Exchange Requirements.

They co-authored and supported development of the World Health Organization Emergency Operations Center Network and led partner engagement in developing a Minimum Data Set with W H O, CDC, and the Department of Homeland Security.

To ensure completeness and harmonization with National standards, Special Awareness partnered with NIEM to adopt and harmonize the CDC's EOC Minimum Dataset with NIEM's Emergency Management Domain

This effort will **ensure all-hazards data interoperability to support effective public health data sharing at the State, National, and International levels**

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This is the CDC's Emergency Operation Center's Public Health Emergency Management's -- first-ever harmonized information exchange, -- minimum dataset and standard vocabulary, -- increasing the NIEM's Emergency Management domain with approximately 230 new elements.

This first-of-its-kind accomplishment cannot be overstated for the impact and potential to improve the speed and accuracy of automated data sharing and reporting during domestic and international multi-sectorial emergency response.

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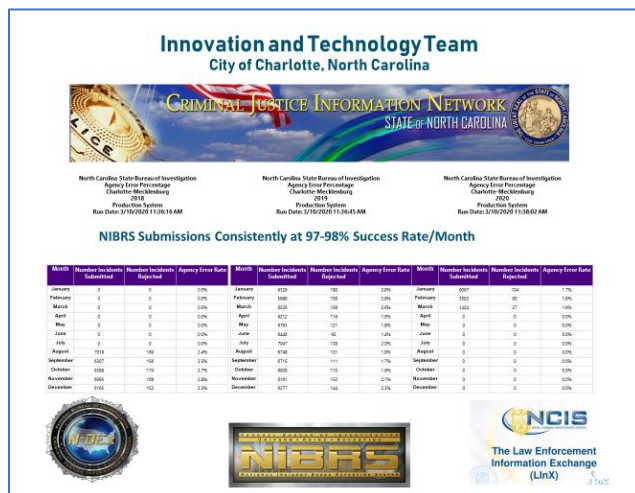


Moving on, our next award goes to: The City of Charlotte.

As one of the 25 largest cities in the U.S. and the largest city in North Carolina, **Charlotte's Innovation & Technology** department provides executive-level leadership for the City's Technology Governance Policy, -- they deliver technology services to the City departments and partners, and coordinate IT initiatives to support, enhance, and advance citizen service delivery.

The team's efforts helped to make Charlotte one of the 2019 **Top 10 Technologically Innovative Cities** in the nation.

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Over the last five (5) years, the Innovation and Technology Team has led two major data integration projects using NIEM information sharing and law enforcement reporting programs in support of the Charlotte-Mecklenburg Police Department.

Charlotte's first major project integrated Police Department data with the Naval Criminal Investigative Service's Law Enforcement Information Exchange known as LInX, and "LinX Carolinas," providing secure access to regional crime and incident data, enabling investigations across jurisdictional boundaries.

LInX provides the largest volume of data to the FBI's N-Dex System. LinX is built using NIEM and leverages IEPD's, providing interoperability with other regional and federal reporting systems.

As the team worked on the LinX Carolinas project and became familiar with NIEM IEPDs and data mapping, they recognized the value NIEM provides for this interface. Ultimately driving the implementation to use the FBI N-DEx NIEM IEPD ensuring compliance with federal standards.

The second initiative was the integration of the City of Charlotte Police Department data with North Carolina's National Incident Based Reporting System (NIBRS) program.

Team leaders, Sonya Williams and Crystal Cody, worked with the North Carolina State representatives to negotiate the data format used for this interface.

Based upon recent innovation from the FBI, the team used the NIBRS 2019.2 IEPD. Sonya and Crystal directed the implementation of this integration, leveraging the NIEM data mapping from the prior LInX project for NIBRS and future data feeds.

Charlotte is one of the first agencies to use this IEPD, and NIBRS submissions are consistently being reported at a 97-98% success rate each month.

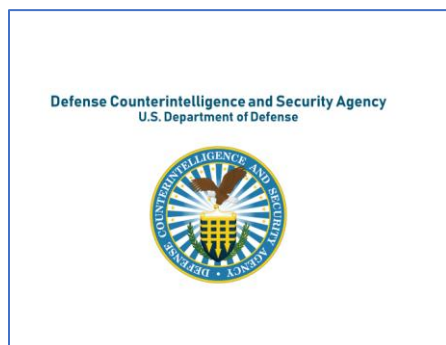
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Through their use of a unique single-mapping design using NIEM, the City of Charlotte has created an efficient, enduring, standards-based interface for their Police systems State and Federal reporting purposes.

Their innovation demonstrated outstanding technical leadership in leveraging NIEM and IEPD reuse in support of critical policing and reporting interfaces.

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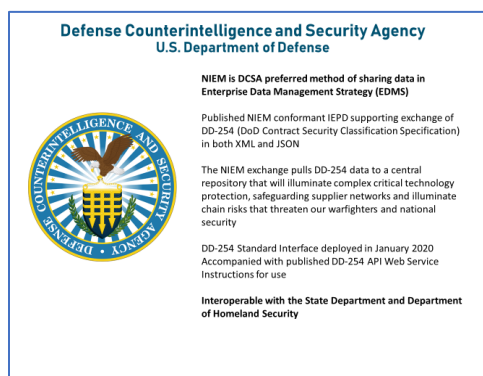


OK, our next award is presented to The Defense Counterintelligence and Security Agency (DCSA), an agency of the Department of Defense -- DCSA is the largest counterintelligence and security agency in the federal government.

DCSA administers the National Industrial Security Program (NISP) Contract Classification System -- facilitating the processing and distribution of contract security classification specifications for contracts requiring access to classified information.

Working on behalf of the Department of Defense and 33 other federal agencies, approximately 12,500 contractor facilities are cleared for access to classified information under DCSA's security oversight responsibilities.

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DCSA adopted NIEM as the preferred method of sharing data in its 2018 Enterprise Data Management Strategy. -- **DCSA developed a Conceptual Data Model, mapping key enterprise data –pause- and of note, the semantic content of the model was formally published in the 4.1 NIEM release.**

In 2019, DCSA published the NIEM conformant IEPD supporting the exchange of The DoD Contract Security Classification Specification, or DD-254, form data in both XML and JSON.

The DD-254 form, provides security classification guidance to cleared contractors working under the National Industrial Security Program. Additionally, it provides security guidance for every contract issued to eliminate misunderstanding pertaining to classified work and prevent the possible compromise or loss of classified information.

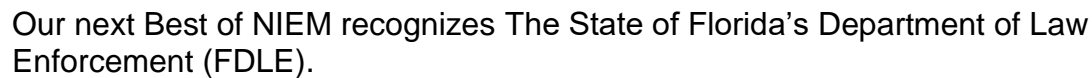
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The DCSA IEPD was submitted to the Defense Logistics Agency as an interface engineering change to NISP's Contract Classification System. It was deployed in January 2020 and is interoperable with the U.S. Departments of State and Homeland Security.

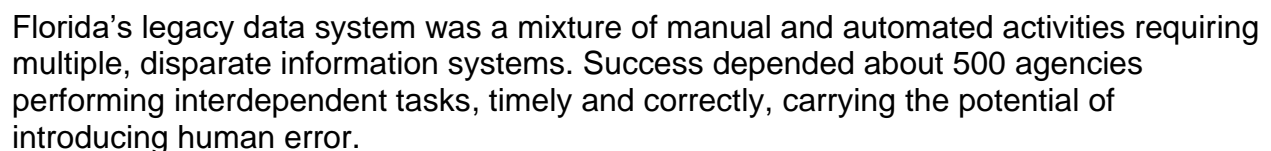
Modernizing the DD-254 is a critical step in the fight against our adversaries who are stealing our technology at an unprecedented rate and represents an example of the power of NIEM.

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FDLE's Criminal Justice Information Services (CJIS) is the central repository of criminal history records for the State of Florida -- CJIS provides statistical information regarding crime for use by policymakers and that is of interest to the public, including the compilation of Uniform Crime Report (UCR) and Hate Crime information collected from local law enforcement agencies.

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CJIS built a structure that collects data on an event and/or a person. It starts from the point of a law enforcement call for service, continues to an arrest event — through the entire court process.

To lessen the reporting burden on state and local agencies, CJIS developed a NIEM XML schema for Florida agencies to collect and share standardized, uniform criminal justice data.

The system schema structure is written using two IEPDs **that work together to create the overall collection and provide Florida agencies with the blueprint for their local systems to communicate using the new statewide standard.**

Over 800 data elements across multiple systems were reviewed, defined, and mapped.

This standardization is essential in helping to reduce the work effort on the state and local agencies for submitting data to the Florida Department of Law Enforcement, and in turn to national partners, such as the FBI.

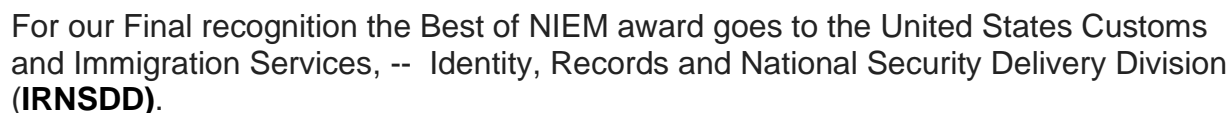
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Through the use of NIEM, CJIS standardized communications between the Florida Criminal Justice systems, data sharing is instantaneous, and allows for automated, near real time validation to ensure the data meets the criteria of the system. Additionally, CJIS assisted many Florida agencies in the successful implementation and interpretation of the IEPDs. To ensure adoption, the FDLE provides the necessary technical documentation, intends to continue helping the agencies with access to training materials and subject matter experts.

Going forward, this NIEM based system provides the foundation for Florida to standardize other criminal justice processes ultimately having the entire Florida criminal justice process NIEM XML compliant.

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USCIS's mission critical programs “**e-Verify**” and “SAVE Verification” help employers confirm candidate eligibility to work; and provides fast, secure and reliable immigration status information to assist benefit-granting agencies at the Federal, state, and local levels in maintaining their program integrity.

At the core of these mission critical programs is the need to manage the most current data and appropriately share that data with authorized partners across the private and public sectors.

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Using NIEM attributes and structures helped develop unified data models and exchanges for states, saving time and resources, create new reports and reconcile broken reports. The USCIS team was able to streamline data migration (by conducting uniform data mapping) from a legacy CRM system to the Salesforce CRM platform in less than 12 months --- Most importantly, the legacy data transfer to target platforms never went off-line and the team was able to migrate 60+ GB of business-critical data without any loss or break in service and as importantly, mature the organization's overall data management by harmonizing attributes across multiple legacy systems.



Within the larger USCIS data Governance Tiger Team, the IRNSDD helped create and publish the 2019 USCIS data strategy document and NIEM was used to harmonize 55+ data attributes across USCIS.

Incorporating and adopting NIEM data standards and JSON formats with open source tools was essential to USCIS IRNSDD's successful completion of a complicated data migration effort on critical systems.

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As we close the announcements for Best of NIEM awards, I want to point out that these six winners exemplify NIEM implementation projects – demonstrating significant accomplishments with noteworthy contributions to the use, -- growth, -- and adoption of NIEM.

Each represents organizations with unique responsibilities – regardless of their jurisdiction and size and each are using NIEM to solve real-world problems – enabling timely, accurate, and consistent data sharing and reporting – with greatly improved performance and increased efficiencies

Ladies and Gentlemen – I give you our 2020 Best of NIEM award winners –

Thank you.

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The Best of NIEM recognizes significant accomplishments in the implementation of NIEM and As importantly, we wish to recognize and express our appreciation to those individuals and teams whose work supports NIEM's continued growth and adoption.

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As the DoD CIO NIEM Executive Steering Council Chair, Mr. Ranks provided exceptional guidance and leadership, ensuring NIEM's continued success and growth. As you transition this role to Mr. Spirk we thank you for your time, energy and vision.

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Our next recognition goes to the NIEM 5.0 Harmonization Working Group.

NIEM 5.0 represents three years of extensive NIEM user-community input, development, and harmonization efforts to deliver information exchange solutions addressing our users' needs.

With NIEM's community-powered, open source approach, users directly contribute both content and technical expertise, propelling NIEM's growth forward with timely solutions to challenging interoperability problems.

NIEM's Harmonization Working Group plays a significant role in this work and in maintaining the collaborative, consensus-driven environment NIEM relies upon for the management of Core-related content. This large common vocabulary enables wide-ranging communities to better share information – as importantly, it requires an active and ongoing effort to ensure the quality, consistency, and usability of NIEM content.

This group is made up of dozens of **valued volunteer representatives** from the NIEM NBAC and NTAC, NIEM domains, and the NIEM user community.

Leveraging their various NIEM and data modeling backgrounds and expertise, they met regularly throughout the year to review the model, address user-submitted and quality assurance issues, reconcile overlap, represent temporarily un-stewarded domains, and refactor content in order to simplify and better model data requirements.

As a major release, the harmonization review for 5.0 included both Core and cross-domain content in order to resolve potential semantic overlap and duplication.

The group remodeled and refactored into the Core that content which is similar but added in different ways in different domains. Remodeling and refactoring improve consistency and easier reuse by other users. In all, the group resolved over eighty harmonization and technical issues and reviewed over a thousand components.

The cumulative result of this dedicated effort is a highly reliable NIEM model which is continuously growing, adapting, and improving.

Thank you for NIEM Harmonization Working Group for your dedication and support over the year to realize the 5.0 release.

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The Department of Homeland Security Web Content Management as a Service Team created, hosted, and maintained the NIEM.gov website for over 10 years. In 2020, with exceptional and consistent website development and support to the NIEM Management Office, this team has provided and continues to provide:

- Guidance, support and implementation of Drupal, the backend website engine, updates to the most current version 8.0;
- They have Provided subject matter expertise with the U.S. Web Design System requirements for U.S. agency websites;
- Network access for content management capabilities necessary to navigate a post-COVID work environment;
- And are assisting with requirements analysis of the NIEM IEPD registry; including developing an initial IEPD Registry proof of concept for presentations to NIEM Governance.

The NIEM Management Office and larger NIEM community give a big Thank You to the The DHS WCMaaS Team.

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Peter T. Ranks, SIS

Outstanding guidance and leadership as Chair – NIEM Executive Steering Council



NIEM 5.0 Harmonization Working Group

Significant contributions to the highly reliable NIEM 5.0 release by harmonizing NIEM Core and cross-domain content

Web Content Management as a Service Team

U.S. Department of Homeland Security

Exceptional development, hosting, and support of the NIEM.gov website and migration to Drupal 8.0 design

Again, I want to Thank all of you. Without your contributions, Organizations such as those recognized today as our Best of NIEM winners would not have the benefits and value that NIEM provides.

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