

Commonwealth of Pennsylvania

Pennsylvania State Police



NIEM XML RAP Sheet Project

2009 NASCIO Recognition Award Nomination

Digital Government: Government to Government

Executive Summary

In August of 2008, the Pennsylvania State Police (PSP) became the first state to successfully transmit an interstate criminal history RAP (Record of Arrest and Prosecution) Sheet using the National Information Exchange Model (NIEM) standard.

NIEM is designed to develop, disseminate and support enterprise-wide information exchange standards and processes that can enable jurisdictions to effectively share critical information in emergency situations, as well as support the day-to-day operations of agencies throughout the nation. NIEM is a partnership of the U.S. Department of Justice and the Department of Homeland Security.

Pennsylvania's NIEM RAP Sheet presents comprehensive criminal history information in an understandable, uniform format. The readability and presentation of the common look and feel RAP Sheet is more easily understood by the criminal justice communities.

This venture was a cooperative effort between the PSP and Nlets (The International Justice and Public Safety Network (Nlets)) agencies.

The financial support from the U. S. Department of Justice's Bureau of Justice Statistics (BJS) and technical assistance from Nlets has helped Pennsylvania to maintain its position as a national leader in information sharing and technology.

Description

PSP's Central Repository maintains the arrest and disposition information for Criminal History. The term 'RAP Sheet' denotes the computer generated report of criminal history information that officials rely on for decision-making in criminal processes and applicant positions of trust in and outside of government. During the criminal investigation stage, law enforcement use criminal history information to identify or eliminate possible suspects and support search warrants. RAP Sheets are used to steer prosecutorial decisions related to charges, plea-bargaining, and sentencing. Non-criminal justice entities rely upon RAP Sheet information to enhance public safety by screening applicants' backgrounds for such things as employment and child-care placement.

Over twenty-five percent of individuals arrested are Multi-State offenders that have Federal and State records in more than one state. A national uniform criminal history RAP Sheet format has never been made mandatory. The differences and deficiencies in format, content, and terminology, when shared from state to state, can make deciphering RAP Sheets difficult and cause problems and confusion within the criminal justice system.

Automated information sharing of criminal history data across state boundaries requires the definition of common standards. NIEM is a standard that enables information sharing, focusing on cross-domain information exchanges between communities of interest involving all levels of government. It was launched in 2005, through an agreement between the U.S. Departments of Justice and Homeland Security. The NIEM development methodology is built upon the confirmed success of the Global Justice XML Data Model. It provides standardized data content, tools, and managed processes.

The NIEM conformant XML (eXtensible Markup Language) interstate RAP Sheet exchange standard replaces the disparate formatting and data content previously produced by each state criminal history repository. Specifically, it provided the data layer standard that addresses the essential component of the information sharing architecture.

PSP is strategically positioning itself to adopt NIEM standards for effective integration of its criminal justice information systems. The \$19,658 funds appropriated to PSP through the Criminal History Information Exchange Format (CHIEF) Grant were used to implement their standardized NIEM (version 2.0) criminal history RAP Sheet. The RAP Sheet, which has been in production for the past nine months, is available nationally through Nlets.

To save time and funding, existing systems were leveraged in lieu of system replacements. Nlets and PSP technical staff worked jointly to develop the data specifications, state implementation plan, transformation style sheets, and completion and publication of reusable IEPDs / artifacts. The biggest barriers that PSP faced were the lack of previous staff experience in using NIEM and encountering problems translating code requirements for the previously developed offshore XML code.

To allow for linking of local, state, tribal, and federal disparate systems, Nlets developed and installed XML transformation services on their message exchange broker to be able to transform messages from GJXDM to NIEM, NIEM to GJXDM, and NIEM to ASCII Text. The overall project from start-to-end was an eight -month effort. Since this time, Nlets reports that nearly 20 states have expressed interest in deploying the NIEM XML RAPs.

Significance

PSP's NIEM Standardized RAP Sheet has the potential to improve the effectiveness of nearly every justice and public safety professional in the nation. It provides greater accuracy in the exchange of criminal history information and allows criminal justice professionals to be more efficient by preventing errors from misinterpretation of criminal history information and creates an environment to support statistical analysis.

Benefits of the Project

This specific project provides numerous instate and national benefits:

- Addresses the national information sharing imperative embraced by the Departments of Justice and Homeland Security, and the Office of the Director of National Intelligence;
- Advances the development of information exchanges critical to assuring the safety and security of our citizens, property and infrastructure;
- Supports the “standard of choice” for federal, state, tribal, and local governments;
- Provides faster access to critical information;
- Creates automated criminal history information exchanges with partners;
- Contributes to shaping national standards for information sharing at substantially less cost;

- Offers a better understanding of the cost and effort involved when moving to the NIEM environment;
- Provides knowledge transfer and practical hands-on experience for future NIEM efforts;
- Supports the initiatives of future Commonwealth projects, such as, the PSP Commonwealth Law Enforcement Assistance Network (CLEAN) upgrade;
- Reduces development costs for future projects by taking advantage of NIEM component reusability;
- Standardizes message content supports interoperability;
- Architectural approach provides reusable transmission logic, e.g., web services;
- Provides valuable lessons learned and performance metrics;
- Advances and promotes standardized RAP Sheet and facilitate Joint Task Force initiatives;
- Facilitates other state efforts to implement the standardized RAP Sheet;
- Provides comprehensive statistics to support crime prevention and recidivism efforts.
- Leverages existing systems and avoid high costs of system replacement or expensive single interface development;
- Engages additional information exchange partners in the future without incurring substantial new costs;
- Tailors specific exchanges to meet the needs of mission critical partners using NIEM and related technologies;
- Allows for ease of participation in regional, state, and national information sharing systems that are or will be based on NIEM standards;

- Contributes to helping solve the national information sharing problem, and
- Participates in and contributes to shaping national standards for information sharing.