Benefits of NIEM Extends Beyond Borders

EPOC USE OF NIEM

WHAT IS EUROJUST?
Eurojust, the European Union’s Judicial Cooperation Unit, was created by the Council of the European Union in February 2002, to help provide safety within the areas of freedom, security, and justice. Eurojust improves the fight against serious crime by facilitating the optimal coordination of action for investigations and prosecutions covering the territory of more than one European Union (EU) Member State with full respect for fundamental rights and freedoms. Eurojust is composed of 27 National Members, one from each EU Member State. Senior and experienced judges, prosecutors, and police officers of equivalent competence form the College of Eurojust.

THE EPOC IV PROJECT
The EPOC IV Experimentation Project started on April 1, 2009 for a three-year period with Eurojust and ten European Member State Project Partners. The Project’s key aim is to “Further evolution of the EPOC software to allow the exchange of information with national CMSs and the promotion of its usage in the Member States.”

One of the five objectives for the EPOC IV project was the “Drafting of a Data Standard to exchange data between different Case Management Systems.” From this data standard it was decided to develop a communication for the specific scenario of a Member State transmitting data to Eurojust. This scenario will likely be used in the future as Member States look to fulfill their obligations under the Eurojust Decision (Council Decision 2009/426/JHA). The IEPD for this communication has been validated and is 100% compliant to the ConTesA report.

Investigation for this objective started with the gathering of various judicial data standards and databases to assess if there were any data standards that were already used on a wide scale, and to establish to what extent data items overlapped between the various Standards/Systems. The results of this research were that:

- We suffer from having too many standards and too little standardization.
- There is minimal overlap of data items between various systems within the Judicial Realm.
- There is no central standard for data exchange available within the EU.
The conclusion was that member states have focused on their own activities (on a local or national level, and within specific domains) and that there is very little in the way of bigger-picture thinking with reference to standardization either internally at a national or transnational level. Where this does occur, the standard is domain-specific; there was no standard that was suitable for us to use “off the shelf.” The exception to this was NIEM.

It was decided that the EPOC IV project would utilize NIEM as much as possible during development, using NIEM V2.1 and NDR V1.3.

The EPOC Data Standard has been compiled using the data items from various judicial systems/standards, defining each data item semantically (EPOC IV was able to find NIEM semantic matches for approximately two-thirds of data items) and then mapping the data items from the various systems together. From that standard a communication schema was created using relevant data items. During the project three project partners experimented with the communication schema. Each partner used a different method of extracting data from their national systems and compiling the XML payload.

**NIEM BENEFITS**

The benefits of using NIEM as a basis of the EPOC data standard include:

- Using a mature, established model with existing semantic descriptions, thus eliminating the need to create new semantic descriptions for data items.
- The ability to easily extend where no semantic descriptions are available.
- The availability of tools to assist with development and checking of deliverables.
- Documentation detailing the development processes, which could be used by anyone wanting to participate in the communication.
- The fact that the model is open source.
- The availability of online training to familiarize anyone working with NIEM on the processes.
- That the use of NIEM is free.
- The ability for possible communicating across domains.

Another possible future benefit of using NIEM is the ability to create communications quickly and cost effectively with others using NIEM as we would be “speaking the same language.” One possible application of this is the UMF2 project’s interest in NIEM. If NIEM is used for the basis of the communication schema for this project then it could enable quicker development of future communications between the judicial and police.

For more information about EPOC go to [http://www.eurojust.europa.eu/epoc](http://www.eurojust.europa.eu/epoc)