Global Justice XML Data Model

- **Title of Standard/Specification**
  Global Justice XML Data Model

- **Current Version Number/Date Issued/Revised**
  3.0.
  The namespace for the current release is http://www.it.ojp.gov/jxdm/3.0

- **Definition/Explanation of Standard/Specification**
  The Global Justice XML Data Model (GJXDM) is an object-oriented data model for organizing the content of a data dictionary (GJXDD) in a database. From this database an XML schema specification can be generated that consistently represents the semantics and structure of common data elements and types required to exchange information within the justice and public safety communities. The purpose of the GJXDM is to provide a consistent, extensible, maintainable XML schema reference specification for data elements and types that represent the data requirements of the general justice and public safety communities. A secondary goal is to provide a baseline model for the data dictionary that can be represented in advanced technologies beyond XML Schema.

- **Open Source vs. Proprietary**
  Open Source

- **General Applicability of the Standard/Specification**

  The Global Justice XML Data Model (GJXDM) is intended to be a data reference model for the exchange of information within the justice and public safety communities. GJXDM and its associated GJXDD are intended to be used in the development and implementation of electronic information exchanges among justice, public safety and homeland security agencies.

- **Criminal Justice Exchange Types Utilizing/Requiring that Standard**
  All justice, public safety and homeland security electronic information exchanges can utilize GJXDM and GJXDD. It is anticipated that specifications which are developed utilizing GJXDM and GJXDD will be submitted to IIJIS for adoption.

- **Compliance Issues: Mandatory Compliance vs. Best Practice**
  GJXDM and GJXDD are recommended to be adopted as a best practice for justice information exchanges between justice agencies in Illinois. It is

anticipated that specifications which are developed utilizing GJXDM and GJXDD will be submitted to IIJIS for adoption.

- **Related Statute/Administrative Rule**
  None

- **Included Standards and Specifications**
  None

- **Related Standards and Specifications**
  None

- **Organization Responsible for Developing Standard/Specification (Full Address and Contact Information)**
  U.S. Department of Justice
  Bureau of Justice Assistance
  Office of Justice Programs
  810 Seventh Street,NW,8th Floor
  Washington, D.C. 20531
  Phone:202/514-5947
  Email it.ojp.gov

- **Description of Standard/Specification Development Process (including Date of Original Adoption)**

Began in March 2001 as a reconciliation of XML implementations, this project has evolved into a broad two-year endeavor to develop an XML-based framework that would enable the entire justice and public safety community to effectively share information at all levels - laying the foundation for local, state, and national justice interoperability.

Developed by the Global Advisory Committee on Information Sharing and OJP, the GJXDM is an object-oriented data model comprised of a well-defined vocabulary of approximately 2,500 stable data objects, or reusable components, that facilitate the exchange and reuse of information from multiple sources and multiple applications. Data components were built from approximately 35 data dictionaries, XML schema documents, or XML data models under development or in use around the justice and public safety communities. These sources yielded approximately 16,000 data components (elements, attributes, and types). Through study and analysis of the similarities and differences among these components, approximately 2,200 properties (xsd:element) and 550 type definitions (xsd:type) were synthesized to represent a common set of elements and types, the GJXDM v3. It is important

to realize that the authors have not attempted to invent content. Instead, the GJXDM tries to capture the requirements of the 35 data sources as completely and accurately as possible.

The GJXDM represents a significant milestone in the process of developing appropriate standards for expressing the baseline data needs of the justice and public safety communities and their related partners. In that sense, it will become a reference benchmark for jurisdictions in the justice and public safety communities to use, in its entirety or in part, to fulfill their specific needs.

Since its first prerelease in April 2003, the GJXDM has undergone an intensive review and validation process that included an open public comment period, pilot validation projects, an online feedback and error-reporting mechanism, and a listserv for sharing expertise and support. Today, more than 50 law enforcement and justice-related projects have been implemented utilizing the GJXDM, further demonstrating the flexibility and stability of the GJXDM.

- **Organization Responsible for Maintaining Standard/Specification (Full Address and Contact Information)**
  U.S. Department of Justice
  Bureau of Justice Assistance
  Office of Justice Programs
  810 Seventh Street,NW,8th Floor
  Washington, D.C. 20531
  Phone:202/514-5947
  Email it.ojp.gov

  Illinois contact (temporarily):
  John Loverude
  Chief Technology Officer
  Illinois State Police
  125 E. Adams, Room 300
  P.O. Box 19461
  Springfield, IL 62794-9461

- **Installed Base (Extent of Current Use) in Illinois**
  None

- **Installed Base (Extent of Current Use) Nationally**
  There are over 30 projects or agencies that are using or are committed to using the GJXDM for their data exchange applications. These currently represent about 15 of the 50 states. See attached

- **Future Plans for Standard/Specification (Planned Enhancements/Updates/other Modifications)**
  In the first year of release, it is anticipated that there will be many requests for additional components to be added to GJXDM. Global intends to provide information regarding such efforts to evolve the GJXDM content without publishing new releases too frequently. Once an official release is published, it becomes frozen and permanently available (in its namespace). However, at sometime in the future, they will also make available an experimental version of the next release. All such preview versions of the GJXDM will be working prototypes, subject to change without notice. Experimental use of such preview schemas is encouraged, however, operational use is at the user's own risk.

  The [Integrated Justice Information Systems (IJIS) Institute](#) has formed a GJXDM Performance Testing Committee that is currently formulating objectives and plans for formal performance testing of the GJXDM. The project will result in a written report providing detailed information regarding GJXDM performance testing results and shall make recommendations to the practitioner community regarding the implementation of the GJXDM.

- **Future Plans for Use of Standard/Specification by Justice Practitioners**
  POLARIS (collection of case-level probation data)
  Rap Sheet

- **Additional Information about Standard/Specification**

- **Benefits Associated with Adoption by IIJIS**

  Significant resources are being expended by governmental agencies and private industry to implement GJXDM. By adopting GJXDM, IIJIS will be able to leverage these investments, lay the foundation to standardize data exchanges, and develop reusable components.

- **Risks Associated with Adoption by IIJIS (including Costs to Adopt Future Changes to the Standard/Specification)**
  IIJIS is requested to adopt GJXDM as a best practice. As such, adoption poses little risk. Some negative factors which may impact its use in specific cases include:
  - Not everyone will share the vision of GJXDM
  - GJXDM is a big compromise; everyone will find one or more things they don't like about it
  - Is different from what people are used to
  - Appears big and complex
  - Lack of training and understanding can lead to overwhelming confusion
  - Often seems more difficult than what you would come up with on your own to implement a particular exchange

- Few reference schemas exist today
- GJXDM-specific tools are in their infancy
- GJXDM learning curve may be inconsistent with project timeline and cost
- Developers want to do what they want to do

- **Risks Associated with Non-Adoption by IIJIS**
  - County-level integration efforts proceeding as custom, non-reusable interfaces
  - County and local justice agencies reporting to state and federal databases in diverse formats, which contribute to inaccurate, untimely, incomplete, or missing data.