B.1. Electronic Commerce Formats and Standards
Information Technology Policy
Commonwealth of Pennsylvania
Governor's Office of Administration/Office for Information Technology

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General
Electronic Commerce (EC) generally involves three types of relationships:

- Business-to-business, where organizations exchange operational data and information between computer systems electronically, with no manual intervention.

- Business-to-customer, where businesses routinely interact with the customers in a manner where the business systems do not require manual intervention.

- Customer-to-business, where the customer initiates an ad-hoc transaction in which they perform a manual process to establish the exchange of information or data.

This IT Bulletin applies to all departments, boards, commissions and councils under the Governor's jurisdiction. Agencies not under the Governor's jurisdiction are strongly encouraged to follow this policy to ensure they develop and implement electronic commerce solutions that facilitate enterprise-wide interoperability and standardization.

Policy
All electronic commerce initiatives shall follow the formats and standards included herein for the creation and implementation of internal, as well as outsourced electronic commerce projects. These standards are not intended to apply to the creation and implementation of informational content web sites, but rather apply to the exchange of data and information required for agency operations.

Commonwealth agencies shall:

- Establish and maintain compatibility with currently published standards.

- Ensure that adopted standards do not limit competition.

- Ensure that all standards utilized are reliable and consistent with the best practices in place at the time.

- Utilize standard trading partner agreements with external entities when appropriate.

Standards
Where there is a legal or regulatory requirement that defines a particular format or standard for the conduct of electronic commerce, agencies shall abide with such requirements. Where a Commonwealth IT Bulletin exists and is relevant to the interchange, such bulletins shall govern. In any case where these requirements are in conflict with the consistent application of widely accepted, open standards and formats, the Office of Administration, Office for Information Technology (OA/OIT) should be notified for appropriate follow-on action.

In general, there is a hierarchy of standards that are recognized within the electronic commerce arena.

International Standards

International standards for electronic commerce, where available and appropriate to agency operations, must be adopted to ensure that agencies are capable of conducting such transactions or information exchanges internationally (for example: UN EDIFACT procurement transaction sets). Consideration should be given to statements of direction by global standard-setting bodies (for example UCC GEDI).

Where international standards are either not available, or not appropriate to agency operations, national standards must be adopted (for example: ANSI ASC X.12 transactions).

National Standards

National standards are inclusive of Federal requirements for interaction between the Commonwealth and the Federal government. As in the case of legal or regulatory requirements, if an instance occurs that appears to conflict with international or national standards for electronic commerce, the OA/OIT must be notified by the respective agency.

Industry Standards

Where international or national standards do not exist, industry standards must be utilized, with a commitment on the part of the respective agency to migrate to national or international standards when they do become available, and/or are appropriate. Industry standards are inclusive of those established by groups of similar, interested agencies/entities to conduct a specific type of information exchange (e.g., American Association of Motor Vehicle Administrators, AAMVA).

Emerging Standards (National and Industry)

The emerging national standards such as Extensible Markup Language (XML) must be watched closely for applicability to Commonwealth electronic commerce initiatives. This is a very dynamic field and change is inevitable. XML is expected to have a major impact on electronic commerce, but specific standards are yet to be known. Agencies implementing XML initiatives are encouraged to consider interoperable implementation to the enterprise desktop, network and electronic mail configurations.

Proprietary Standards

Proprietary formats and standards are **NOT** to be utilized without specific justification provided to, and approval granted by, OA/OIT. The justification should describe the current or planned availability of acceptable standards, and a commitment to migrate to such standards if and when they are developed. Participation in the development of standards is encouraged.

Specific Standards

Specific standards are adopted and implemented according to the nature of the interaction between each specific agency and the external entity, and the type of transaction to be conducted. It is further important to consider the broader implications of the community of business partners involved with the agency and/or other agencies/organizations, such that standards adoption between all entities is facilitated. Since e-commerce is integrated with business/operational systems, it is critical to recognize the scope of potentially affected entities.

Internet Sites related to EC/EDI/XML

(This is not a comprehensive list.)

www.ansi.org
www.nacha.org
www.w3.org/xml
http://msdn.microsoft.com/xml/default.asp

Questions
Questions regarding this policy should be directed RA-ITCentral@pa.gov

Related ITPs:
[ITP B.2.](ITP B.2.) Electronic Commerce Interface Guidelines