

Case No. 12-M-0476 et al.
EDI Business/Technical Working Groups
GISB EDM Discussion
8/10/2018

Statement:

The Self-Attestation asks whether:

All Confidential Utility Information is encrypted in transit utilizing industry best practice encryption methods.

Question 1:

What is industry best practice encryption for in transit for Confidential Utility Information?

Question 2:

What do New York's current EDI standards require?

Technical Operating Profile

For Electronic Data Interchange In New York

Processing Architecture; Phase I & Connectivity Testing

**Ver 1.5
April 30, 2018**

Table of Contents

I. Overview	2
II. General Technical Assumptions	3
III. Transaction Processing Architecture	4
IV. Phase I Testing Program	5
<i>A. General Requirements</i>	5
<i>B. Phase I Exit Criterion</i>	5
<i>C. Phase I Testing Assumptions</i>	6
<i>D. Phase I Critical Success Factors</i>	6
<i>E. Phase I Testing Scope</i>	6
V. Phase I - X12 Syntax Test Specifications	7
<i>A. Organization of X12 Tests</i>	7
<i>B. Utility Tests</i>	7
<i>C. ESCO Tests</i>	9
VI. Phase I - Data Transfer Mechanism Test Specifications	10
<i>A. DTM Protocol Specification</i>	10
<i>B. DTM Testing Guidelines</i>	12
<i>C. Detailed DTM Testing Specification</i>	13
Attachment A: New York Electronic Data Interchange Test Plan Overview	15
Attachment B: Transaction Processing Architecture	19
Attachment C: Relevant Sections of the GISB EDM, Version 1.4	24

	Summary of Changes
July 23, 2001	Initial Release
February 21, 2003	Version 1.1 Issued
	Phase I test scenarios added for 867 PTD*BK and PTD*PM loops. The test scenario for PTD*BK (Interim Bill Notice) is required for Utilities offering Bill Ready Consolidated billing. Test scenarios for the PTD*PM loop (meter reading data) are required for Single Retailer Utilities and MDSPs, and are optional for other Utilities.
October 23, 2014	Version 1.2 Issued
	<ul style="list-style-type: none"> Replaced references to Marketer and E/M with ESCO. Broadening of GISB EDM Version 1.4 Standard to include utility implementations of GISB EDM Versions 1.5 and 1.6.
January 29, 2016	Version 1.3 Issued
	Replaced references to Staff Phase I testing with Phase I testing through utilities.
March 31, 2017	Version 1.4 Issued
	<ul style="list-style-type: none"> Added references to Phase I testing of utilities with DPS Staff. Eliminations of references to 568 Transaction.
April 30, 2018	Version 1.5 Issued
	Modifications to enable DER suppliers to receive data through EDI on a similar basis as ESCOs.

III. Transaction Processing Architecture

New York's *Transaction Processing Architecture* document (Attachment B), submitted to the Commission as part of the October 10, 2000 filing, defines specific attributes of New York's EDI transaction processing environment. Attributes addressed are:

- processing flow
- response guidelines
- processing rules (e.g. first-in rule)
- enveloping
- tracking transactions (identifiers)
- archiving & auditing

In this document the Collaborative clarifies the enveloping/transport guidelines first presented in the October 10 filing as follows²:

- One data file will be transmitted in an HTTP session.³
- Only one ISA (envelope) may be transmitted in a data file
- Only one functional group (GS) will be used within an envelope (ISA).
- Multiple transactions (ST) of the same type will be allowed within functional group (GS). For example, multiple 814 transactions can be included in one functional group/envelope.

The intent of these recommendations is to facilitate ease of processing, error identification and correction as well as preserve New York's "First In" rule by easily and unequivocally being able to associate the "server post" time stamp with an ISA (envelope).

² These clarifications have been reflected in the updated *Transaction Processing Architecture* document contained in Attachment B.

³ The Gas Industry Standards Board (GISB) recommends that only one file be transmitted per HTTP session. The New York Collaborative adopts this recommendation, however, companies may, by bilateral agreement, agree to send multiple files during a single HTTP session.

VI. Phase I - Data Transfer Mechanism Test Specifications

A. DTM Protocol Specification

The Internet HTTP mechanism will be used by all parties engaged in EDI commerce in New York. Further, the Internet HTTP mechanism is based on, and aligned with, GISB's Electronic Data Mechanism (EDM), and the Internet Engineering Task Force's (IETF) EDIINT AS2 data exchange specification. The choice of this DTM meets the requirements of the Commission's April 12, 2000 EDI Order, which specified that an interoperable Internet-based protocol be utilized.

The GISB EDM version 1.4 (November 15, 1999)⁹ will provide the baseline detail specification (i.e. 'profile') defining all attributes required for trouble free, interoperable transport of X12 EDI messages between trading partners. New York specific attributes are denoted herein, thus defining the New York specific DTM profile. This profile is designed to achieve interoperability and satisfy the critical success factors defined in the June 30, 1999 Collaborative Report. It provides details of the necessary technical specifications (i.e. encryption standards, security standards), best operational practices (i.e. transmission failure retries, timing) and DTM testing guidelines.

1. Internet EDI data exchanges will follow the rules defined in sections of the GISB EDM Version 1.4 standard (outlined in Attachment C) unless explicitly stated in this document. Some key attributes are:
 - Data exchanges will be timestamp anchored on Eastern Prevailing Time (EST, utilizing Daylight Savings Time). All New York utilities operate in EST and neighboring jurisdictions are using EST, thereby providing compelling justification for this practice (GISB specifies the use of Central Time for its time stamp anchors).
 - Encryption depends on the PGP versions used by each trading partner being compatible. The recommendation is to use the most current PGP version, however both parties do not require the same version, as newer versions provide backward-compatibility. Parties should confer and document PGP versions being used in the trading partner agreement.
 - Use of the RSA algorithm is required
 - Use of 1024-bit public key is recommended
2. Archiving – Rather than comply with the GISB EDM 2 year archival guideline, companies must meet all archival and auditing conditions including financial record keeping requirements, PSC requirements, and any other jurisdictional or internal company requirements. The following points should be considered in a company's archiving plan: archive the data file as received at the GISB server; archive the associated PGP public key used to decrypt the data file; and optionally archive the EDI transaction map used to 'de-map' the data file.

⁹ While GISB EDM Version 1.4 is the standard for New York EDI, use of GISB EDM Versions 1.5 and 1.6, where supported by the utility, are permissible..

Attachment C: Relevant Sections of GISB EDM V. 1.4

Based on review of the GISB EDM Version 1.4, the following sections were determined to be relevant and controlling for implementation of New York's DTM:

1. In the Section entitled BUSINESS PROCESS AND PRACTICES, Subsection C. Electronic Delivery Mechanism Related Standards, the Sub-Subsection entitled Standards: Standards 4.3.7 through 4.3.15 inclusive.
2. The Section entitled TECHNICAL IMPLEMENTATION - INTERNET EDI/EDM & BATCH FF/EDM, subject to the following modifications and clarifications:
 - 2.1 - Ignore all references to "BATCH FF/EDM", "FF/EDM", "deadlines", "pipelines", and "nominations".
 - 2.2 - In the *Data Dictionary For Internet EDI*, the Format of the Business Name transaction-set refers to specific 8-character codes which are not relevant for our purposes
 - 2.3 - Under the Subsection entitled SENDING TRANSACTIONS, Sub-Subsection entitled Client Specifications, the reference to Central Time (Central Standard / Central Daylight) should be changed to Eastern Time (Eastern Standard / Eastern Daylight).
 - 2.4 - Under the Subsection entitled RECEIVING TRANSACTIONS, the Sub-Subsection entitled URL/CGI Implementation Guidelines is informational in nature only and has no force and effect. This Sub-Subsection shall not be construed as to impose any requirements on any UTILITY or ESCO.
 - 2.5 - Under the Subsection entitled RECEIVING TRANSACTIONS, Sub-Subsection entitled Server Specifications, the reference to Central Time (Central Standard / Central Daylight) should be changed to Eastern Time (Eastern Standard / Eastern Daylight).
3. Appendix A
4. Appendix B

The GISB EDM Version 1.4 is available at <http://www.naesb.org>.