North American Energy Standards Board

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ADDITIONAL STANDARDS

Version 1.7 December 31, 2003

Special Thanks and Acknowledgments to:

NAESB WGQ Member Companies for donating significant staff time to coordinate the publication of the ANSI ASC X12 guidelines.

FORESIGHT CORPORATION
For software used to develop the ANSI ASC X12 transaction sets.

NAESB WGQ SUBCOMMITTEES
For support and materials describing the business practices, related data sets, data set organization, data elements and data element formats, implementation guides and mapping.

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BUSINESS PROCESS AND PRACTICES

A. Overview

~~Within the NAESB WGQ communication of information, certain data is conveyed through the use of code values. In any given data set, the TSP supports the code values applicable to its business model. When submitting upload data sets to the TSP, the availability of a list of code values supported by the TSP enables the preparation of valid data sets. The Supported Code Value Information document provides such a list.~~

Creditworthiness:

In the natural gas industry, transportation service providers provide services for requesting parties ~~for which the transportation service provider is paid.~~ As a part of the process for contracting for these services, the transportation service provider may need to request credit information from the service requester and initiates an exchange of communication between the parties. Additionally, the service requester, once deemed to be non-creditworthy, may request credit re-evaluation by the transportation service provider.

RELATED STANDARDS

Common Codes

A decision made in 1993 by a FERC-established standards development group (EBB Working Group 5) resulted in a location coding system which cross-references proprietary point codes to a common industry-supported location code. This common location code, called the GRID Code, was developed based on the American Petroleum Institute (API) well code model. The FERC, in Order 563-A, directed the industry to establish any necessary relationships and to proceed with the implementation of the GRID Code. To achieve this implementation, in August 1994 trade associations representing three segments of the natural gas industry entered into an agreement with Petroleum Information Corporation (PI) to develop and maintain the PI *GRID*™ Common Code database. As GISB prepared standards for capacity release (July 1995) and nominations (September 1995), GISB fully endorsed the use of the PI *GRID*™ common codes.

However, after extensive consideration by GISB's Common Code Subcommittee, GISB adopted, on September 30, 1996, a new Common Code for Gas Transaction Points, the NAESB WGQ/PI Data Reference Number (generally referred to as "DRN"). The DRN is a one-to-nine digit, non-intelligent number also assigned by IHS (successor to PI), which has a one-to-one relationship with the PI *GRID*™ Code. For more information, access the NAESB Web Page at www.naesb.org.

In keeping with the trends in other industries involved with EDI, EBB Working Group 5 recommended the acceptance of the D-U-N-S®[1] Number as a common company identifier. This recommendation was also adopted in FERC Order 563-A. The D-U-N-S® Number is assigned to companies by the Dun & Bradstreet Corporation (D&B). Similarly, as GISB prepared standards for capacity release (July 1995) and nominations (September 1995), GISB fully endorsed the use of the D-U-N-S® Number common code.

For NAESB WGQ Common Code purposes, an entity will use one and only one D-U-N-S® Number. Entity common codes should be "legal entities," that is, Ultimate Location, Headquarters Location, and/or Single Location (in Dun & Bradstreet Corporation ("D&B") terms). However, in the following situations, a Branch Location (in D&B terms) can also be an entity common code: 1. When the contracting party provides a D-U-N-S® Number at the Branch Location level; or 2. to accommodate accounting for an entity that is identified at the Branch Location level. Since D&B offers customers the option of carrying more than one D-U-N-S® Number per entity, please refer to NAESB's Web Page at www.naesb.org for directions on determining the one and only one D-U-N-S® Number constituting the NAESB WGQ Entity Common Code.

In the datasets, an asterisk by a data element means that it is a "common code," so the field will reflect the industry-supported common code for location or company. In the event that a common code is not available for a company, parties should mutually agree to use the Transportation Service Provider's proprietary code for that company.

~~NAESB WGQ Electronic Data Interchange Trading Partner Agreement~~

~~In 1998, GISB adopted Standard 6.3.3, the NAESB WGQ Electronic Data Interchange Trading Partner Agreement (TPA) for exchange of data within the gas industry. The NAESB WGQ TPA defines the relationship of the sender and receiver of NAESB WGQ Standard ASC X12 documents. This agreement represents a complete set of balanced terms which a company should accept~~

1 D-U-N-S® is a registered trademark of Dun & Bradstreet, Inc.

whether it is sender or receiver of electronic documents. It has established all the data items necessary to exchange electronic documents in a step by step, fill in the blank model form. The use of the TPA minimizes preparation, negotiation and review time. This will allow more time for implementation of electronic commerce. Copies of this agreement may be obtained from the NAESB office or may be downloaded from the NAESB home page at www.naesb.org.

Party Roles

In all of the transaction sets, there are multiple parties that may be involved in the transaction. There are the Transportation Service Provider (a.k.a. Pipeline or Transporter), the Service Requester (a.k.a. Shipper), Service Requester Agent (a.k.a. Shipper's Agent) and Third Party Service Provider (a.k.a. Third Party Agent). It is important to distinguish between the role of the Service Requester Agent and the Third Party Service Provider.

The Service Requester Agent is the party contractually authorized by the Service Requester to submit business transactions to the Transportation Service Provider on behalf of the Service Requester for a service requester contract. Once the Service Requester Agent is contractually authorized, the agent becomes the Service Requester for subsequent business transactions unless and until the agency relationship is terminated.

The Third Party Service Provider is the communications agent that the Service Requester or Service Requester Agent may subscribe to in order to send and receive transactions with the Transportation Service Provider.

It is possible that a single entity may, at times, provide the role of a Service Requester Agent for one party while providing the role of Third Party Service Provider for another party. Likewise, a single entity could be both Service Requester Agent and Third Party Service Provider for a single party.

In EDI implementation, the party that is authorized to send and receive transactions will be the party identified in the transmission envelope (ISA Header Segment). If the sending party is a Service Requester, Service Requester Agent or Third Party Service Provider, their appropriate identifiers will appear here. In all cases, the Transportation Service Provider, Service Requester and Service Requester Agent (if applicable) will be identified in the body of the transaction (N1 Name Segment).

ANSI ASC X12 Standards

The NAESB WGQ standards reflect an industry utilization of the American National Standards Institute (ANSI) ASC X12 standards maintained by the Data Interchange Standards Association, Inc. (DISA). The technical implementation documents included in this manual reflect the NAESB WGQ subset of the ANSI ASC X12 standards versions. It is recommended that any industry participant who wishes to utilize the ANSI ASC X12 standards should also have a copy of the ANSI ASC X12 Standards Reference document for a full understanding of the X12 requirements. NAESB members may purchase an ANSI reference document through NAESB by contacting the NAESB office. Non-NAESB industry participants may purchase the reference document by contacting:

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333 John Carlyle Street, Suite 600
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As a member of ANSI, NAESB WGQ will utilize the ANSI ASC X12 standards and remain in full compliance. In all standards, occasions arise where the standard does not fully meet a need. NAESB WGQ recognizes this and will add interim usages and code values when required. When NAESB WGQ utilizes an interim solution, NAESB WGQ will apply to ANSI and the appropriate ANSI organizations for acceptance of the interim solution. ANSI's final solution may provide a usage or code value different than the interim solution. NAESB WGQ standards will be updated to reflect the final solution.

The architecture of ASC X12 is designed for end to end communications. The translator that generates the ASC X12 file and envelope will assign control numbers and counts that will appear within the ISA/IEA segments of the transaction and within the GS/GE segments of the transaction. These numbers and counts allow the translator to ensure that all of the segments in an envelope and all of the data elements in an envelope have been received and that the transmission was complete.

ISA contents

The ISA segment marks the beginning of an X12 document. It can be equated to an envelope that a paper document would come in via the mail. The envelope may contain one or more functional groups (defined by the GS segment) and one or more transaction sets.

The ISA is the interchange control segment to be utilized on all NAESB WGQ X12 standards. The segment identifies the sender and receiver of the document. The Interchange Sender ID/Interchange Receiver ID is published by both the sender and receiver for other parties to use as the sender/receiver ID to route data to them. The sender must always code the sender's ID in the sender element and the designated receiver's ID in the receiver ID. Trading partners utilizing a password for their documents will use the Security Information element. The receiver of the document identifies a password for the sender to include in this element. This sender and receiver information is specified in the NAESB WGQ Electronic Data Interchange Trading Partner Agreement.

There are additional elements in the ISA segment. These elements are traditionally assigned by the sending party's translator. These elements inform the receiver of the date/time that the envelope was generated, the X12 version number being utilized, whether the transmission is for test or production purposes, and what characters were used to designate the end of a sub element, element or segment. Different characters must be chosen for the sub element, element and segment delimiters. These delimiting characters must never appear in the data.

For more information on the ISA segment and the possible values for its elements, contact DISA at the above address or consult the appropriate version of the ANSI ASC X12 Standards Reference document corresponding to the NAESB WGQ transaction set being sent/received. Information about control segments (including the ISA and IEA) can be found in the Overview/Introduction and Control Standards sections of the reference document. Specific information about the ISA and IEA segments and corresponding elements can be found in the Segment Directory and Data Element Dictionary sections.

GS contents

The GS segment indicates the beginning of a functional group and provides control information for the data that follows it. A functional group can be defined as a group of transactions related to one business application. Within a mailing envelope, there may be a bundle of information relating to imbalances and a bundle of information relating to measurement information. Each of these 'bundles' is sent within its own (or a separate) GS Functional Group Header and a GE Functional Group Trailer in the X12 environment. The sender of a transmission provides the Application Sender's Code that the receiver of the transmission will reflect back on acknowledging documents. The receiver of a transmission provides the Application Receiver's Code that the sender will include in the transmission for the receiver to utilize in routing to internal applications. Group Control Numbers are originated and maintained by the sender of the document.

For more information on the GS segment and the possible values for its elements, contact DISA at the above address or consult the appropriate version of the ANSI ASC X12 Standards Reference document corresponding to the NAESB WGQ transaction set being sent/received. Information about control segments (including the GS and GE) can be found in the Overview/Introduction and Control Standards sections of the reference document. Specific information about the GS and GE segments and corresponding elements can be found in the Segment Directory and Data Element Dictionary sections.

997 Usage

The 997 Functional Acknowledgment is used to indicate the results of the syntactical analysis of the X12 documents. The documents include the transaction sets and functional groups with an ISA/IEA envelope. This standard covers all of the X12 and NAESB WGQ standard criteria that the receiver of the document has incorporated into the receiver's translator. The translator may be set to accept all information into the receiver's application processing, it may be set to accept only ANSI ASC X12 compliant information into the receiver's application processing, or it may be set to accept only ANSI ASC X12 and NAESB WGQ compliant information into the receiver's application processing. Compliance checking, in a translator, may be set to any of several levels. NAESB WGQ recommends that compliance checking be set to the element level in the Functional Acknowledgement.

The 997 informs the originator of the transaction whether the translator accepted the file, accepted it with errors, or rejected it. When errors occur, the 997 identifies the location and type of error that was encountered. Once a transaction passes the translator, the 997 is sent to the originator of the transaction and the data (if accepted) is passed on to the receiver's business application for processing.

Hypertext Transfer Protocol (HTTP)

The Hypertext Transfer Protocol (HTTP) is an application-level protocol with the lightness and speed necessary for distributed, collaborative, hypermedia information systems. It is a generic, stateless, object-oriented protocol which can be used for many tasks, such as name servers and distributed object management systems, through extension of its request methods (commands). A feature of HTTP is the typing of data representation, allowing systems to be built independently of the data being transferred.

HTTP has been in use by the World-Wide Web global information initiative since 1990. Appendix A of the Electronic Delivery Mechanism Related Standards manual contains a listing of the HTTP version(s) supported by NAESB WGQ.

HTTP transaction-set Code Values

The following table contains a list of code values to be used with the transaction-set data element, which is a mutually agreeable (MA) data element in the HTTP Request.

HTTP transaction-set Code Values	NAESB WGQ Standard Number	Transaction Set Description
G873NMST	1.4.1	Nomination
G874NMQR	1.4.2	Nomination Quick Response
G873RQCF	1.4.3	Request for Confirmation
G873RRFC	1.4.4	Confirmation Response
G873SQTS	1.4.5	Scheduled Quantity
G873SQOP	1.4.6	Scheduled Quantity for Operator
G874CRQR	1.4.7	Confirmation Response Quick Response
G860PDAL	2.4.1	Pre-determined Allocation
G865PDQR	2.4.2	Pre-determined Allocation - Quick Response
G865ALLC	2.4.3	Allocation
G811IMBL	2.4.4	Shipper Imbalance
G867MSIN	2.4.5	Measurement Information
G867MAUS	2.4.6	Measured Volume Audit Statement
G814RQIN	2.4.7	Request for Information
G814RRIN	2.4.8	Response to Request for Information
G811TSIN	3.4.1	Transportation/Sales Invoice
G820PYRM	3.4.2	Payment Remittance
G822STAC	3.4.3	Statement of Account
G811SRCA	3.4.4	Service Requester Level Charge/Allowance Invoice
G840CROF	5.4.1	Offer Download
G843CRBR	5.4.2	Bid Download
G843CRAN	5.4.3	Award Download
G832CRRC	5.4.4	Replacement Capacity
G843CRWD	5.4.5	Withdrawal Download
G840UPWD	5.4.6	Withdrawal Upload
G840UDOF	5.4.7	Offer Upload
G843UDVL	5.4.8	Offer Upload Quick Response
G840UDRC	5.4.9	Offer Upload Notification
G843UDBC	5.4.10	Offer Upload Bidder Confirmation
G824UDCV	5.4.11	Offer Upload Bidder Confirmation Quick Response
G567UDFD	5.4.12	Offer Upload Final Disposition
G840OAUC	5.4.13	Operationally Available and Unsubscribed Capacity

~~HTTP transaction-set Code Values~~	~~NAESB WGQ Standard Number~~	~~Transaction Set Description~~
~~G846UPRD~~	~~5.4.14~~	~~Upload of Request for Download of Posted Datasets~~
~~G846RURD~~	~~5.4.15~~	~~Response to Upload of Request for Download of Posted Datasets~~
~~G864SWNT~~	~~5.4.16~~	~~System Wide Notices~~
~~G864CRNS~~	~~5.4.17~~	~~Note/Special Instruction~~
~~G843BDUP~~	~~5.4.18~~	~~Bid Upload~~
~~G843BDQR~~	~~5.4.19~~	~~Bid Upload Quick Response~~
~~G997FNAK~~	~~N/A~~	~~Functional Acknowledgement~~