

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

#	Minutes Meeting Date	Group	IN NUMBER ORDER		Date of Review
				Language	
1	14-Aug-98	s1	Internet protocols should be used for accessing all industry business functions.		9-11
2	14-Aug-98	s2	Web browser interface should use Internet compatible common browser software.		9-11
3	14-Aug-98	s3	Industry Web sites should be accessible via the public Internet using common browser software.		9-11
4	14-Aug-98	p1	Web site standards should not preclude various levels of user response and inter-activity. Minimum levels of user response or inter-activity should be developed.		9-11
4.2.A.i	20-Aug-98	d3	"GISB EDI/EDM" is the term used to describe ANSI ASC X12 computer-to-computer electronic data interchange of information in files as mapped from the x.4.z GISB standards in the GISB Implementation Guides and communicated between trading partners over the Internet using the GISB Electronic Delivery Mechanism.		9-11, 10-12
4.2.7	16-Oct-98	d11	"Navigational Area" is the term used to describe the area on the left side of the browser display providing links to the Content Area and other navigational links. Navigational Area is not required to be displayed on Customer Activities Web pages where data entry, reporting or inquiry are displayed. [This a recommended replacement of GISB Standard No. existing 4.2.7]		
4.2.8	3-Sep-98, 16-Oct-98	d6	"Content Area" is the term used to describe the area directly to the right of the Navigational Area of the browser display. When the Navigational Area is not displayed the entire browser display is content area. [This a recommended replacement of GISB Standard No. existing 4.2.8]		10-12
4.3.A.ii.a	20-Aug-98	d4	"GISB FF/EDM" is the term used to describe a standardized flat file computer-to-computer electronic data interchange of information in files as mapped from the x.4.z GISB standards. GISB FF/EDM is communicated between trading partners over the Internet using the GISB Electronic Delivery Mechanism.		9-11, 10-12
4.3.A/L	17-Sep-98	s21	A Transportation Service Provider which determines to provide new features utilizing existing transaction sets via GISB EBB/EDM, for each transaction upon inception of support for such service, should: If GISB EDI/EDM or FF/EDM standards exist for the transaction set, provide the service via EDI/EDM, or FF/EDM or both, utilizing modifications defined by the Transportation Service Provider to the existing file structures; and, submit a request for modification or enhancement of the transaction set to GISB including details of the interim EBB/EDM, EDI/EDM and/or FF/EDM implementation.		

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

#	Minutes Meeting Date	Group	IN NUMBER ORDER		Date of Review
				Language	
4.3.Q	3-Sep-98	s22	Where a Transportation Service Provider (TSP) utilizes a subset of available GISB code values for specific data elements for inbound documents to the TSP, the TSP should make available a list of the supported code values in a download utilizing a GISB electronic format.		10-12
4.3.O	3-Sep-98	p12	When standardized, all elements used in standard EBB/EDM, EDI/EDM and FF/EDM should be defined in the related GISB x.4.z standard. [An example and note are associated for illustrative purposes and can be found in the minutes.]		10-12
4.3.A.iii	20-Aug-98	d5	'GISB EBB/EDM' is the term used to describe the GISB standardized electronic interchange of information for Customer Activities Web site presentations. GISB EBB/EDM is communicated between trading partners over the Internet using the GISB Electronic Delivery Mechanism for GISB EBB/EDM.		9-11, 10-12
5	14-Aug-98	p2	Web site standards should not dictate or limit back-end development technology or systems. Industry Web sites should be accessible by a Standard Client Configuration.		9-11, 10-12
5A	14-Aug-98	d1	"Standard Client Configuration" is the term used to describe the configuration that allows simultaneous access to multiple industry Web sites.		9-11, 10-12
6	14-Aug-98	s4	Each implementation of a current proprietary business function category on EBBs should remain available until such time as that business function category is tested and implemented via a Customer Activities Web site.		9-11
7A	17-Sep-98	s33	Providers of Customer Activities Web sites should ensure that the site operates within the guidelines of the "Technical Characteristics of the Client Workstation" described in the Appendix of the Electronic Delivery Mechanism Related Standards Manual. This appendix, listing examples of hardware and software configurations that providers should meet, should be reviewed and updated by the Future Technology Task Force, at a minimum, by the spring of each year and presented to the GISB Executive Committee for adoption by the June meeting of that committee.		10-12
8A	17-Sep-98	s34	Access to the Customer Activities Web Site should be protected by HTTP Basic Authentication or similar logon/password mechanism(s) using 40-bit encryption. A Customer Activities Web site should typically require a single logon/password pair for each user session.		10-12
8B	17-Sep-98	s35	At a minimum, data communications for Customer Activities Web sites should utilize 40-bit encryption. Where possible, 128-bit encryption is strongly recommended.		10-12
8C	17-Sep-98	s36	Custom downloadable modules presented by a Customer Activities Web site should be signed by the author. The signatures on these modules should be communicated in advance to Web site users.		10-12

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

#	Minutes Meeting Date	Group	IN NUMBER ORDER		Date of Review
				Language	
8D	17-Sep-98	s37	In the Navigational Area of the Informational Postings Web Site, the navigational link for "Customer Activities" should appear directly above the navigational link for "Site Map."		10-12
9A	17-Sep-98	s38	Private network connections to GISB EDM Web sites which include all GISB standardized Internet communication may be at any point on the Transportation Service Provider's (TSP's) firewall boundary at the TSP's discretion on a non-discriminatory access basis. The specific type and speed of these connections should be mutually agreed. It is at the discretion of the TSP on how multiple private network connections should be managed, so long as such management is done on a non-discriminatory access basis. TSPs are not responsible for any additional security exposures when using these private network connections.		10-12
10A	17-Sep-98	p15	Trading partners should maintain redundant connections to the public Internet for GISB EDM Web sites. These redundant connections should be topographically diverse (duality of) paths to minimize the probability of a single point of failure.		10-12
12	14-Aug-98	p3	A standardized Web site navigational structure should be developed to provide access to business functions. The hierarchical relationship, structure and order for navigation on the Web site should be established in a standardized manner.		9-11
13	14-Aug-98	p4	Additional Informational Postings under Standard No. 4.3.6 which are not yet standardized for Web sites should be communicated over the Internet via a "common look and feel" standardized Web page.		9-11
14	14-Aug-98	s5	Standard navigation should be used to access all business functions on industry Web sites.		9-11
16	14-Aug-98	s6	Navigation through the industry Web site menus should be consistent for location and technique.		9-11
17	14-Aug-98	d2	"Customer Activities" is the term used to refer to the business function categories relating to Nominations, Flowing Gas, Invoicing, Capacity Release, Contracts and other business functions on industry Web sites.		9-11
19A	14-Aug-98	s7	The categories and the labels for Customer Activities Web sites should appear, if applicable, in the Navigational Area as follows: <ul style="list-style-type: none"> <li>• Nominations</li> <li>• Flowing Gas</li> <li>• Invoicing</li> <li>• Capacity Release</li> <li>• Contracts</li> <li>• Informational Postings</li> <li>• Site Map</li> </ul> Links supporting Mutually Agreeable categories should precede Informational Postings.		9-11

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

#	Minutes Meeting Date	Group	IN NUMBER ORDER		Date of Review
				Language	
20	14-Aug-98	s8	<p>The sub-categories and the labels for the category of Nominations should appear, if applicable, in the Navigational Area as follows:</p> <ul style="list-style-type: none"> <li>• Nomination</li> <li>• Nomination Quick Response</li> <li>• Request for Confirmation</li> <li>• Confirmation Response</li> <li>• Confirmation Response Quick Response</li> <li>• Scheduled Quantity</li> <li>• Scheduled Quantity for Operator</li> </ul> <p>Links supporting Mutually Agreeable sub-categories will follow these links. This does not preclude a further breakdown of sub-sub-categories within each sub-category from being listed in the Navigational Area.</p>		9-11
21	14-Aug-98	s9	<p>The sub-categories and the labels for the category of Flowing Gas should appear, if applicable, in the Navigational Area as follows:</p> <ul style="list-style-type: none"> <li>• Pre-determined Allocation</li> <li>• Pre-determined Allocation Quick Response</li> <li>• Allocation</li> <li>• Shipper Imbalance</li> <li>• Measurement Information</li> <li>• Measured Volume Audit Statement</li> </ul> <p>Links supporting Mutually Agreeable sub-categories will follow these links. This does not preclude a further breakdown of sub-sub-categories within each sub-category from being listed in the Navigational Area.</p>		9-11
23	14-Aug-98	s10	<p>The sub-categories and the labels for the category of Invoicing should appear, if applicable, in the Navigational Area as follows:</p> <ul style="list-style-type: none"> <li>• Transportation/Sales Invoice</li> <li>• Service Requester Level Charge/Allowance Invoice</li> <li>• Payment Remittance</li> <li>• Statement of Account</li> </ul> <p>Links supporting Mutually Agreeable sub-categories will follow these links. This does not preclude a further breakdown of sub-sub-categories within each sub-category from being listed in the Navigational Area.</p>		9-11
24	14-Aug-98	s11	<p>The sub-categories and the labels for the category of Capacity Release should appear, if applicable, in the Navigational Area as follows:</p> <ul style="list-style-type: none"> <li>• Offers</li> <li>• Bids</li> <li>• Awards</li> </ul> <p>Links supporting Mutually Agreeable sub-categories will follow these links. This does not preclude a further breakdown of sub-sub-categories within each sub-category from being listed in the Navigational Area.</p>		9-11

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

#	Minutes Meeting Date	Group	IN NUMBER ORDER		Date of Review
				Language	
24A	14-Aug-98	s12	The sub-categories and the labels for the category of Contracts should appear, if applicable, in the Navigational Area as follows: <ul style="list-style-type: none"> <li>• To be Determined</li> </ul> Links supporting Mutually Agreeable sub-categories will follow these links. This does not preclude a further breakdown of sub-sub-categories within each sub-category from being listed in the Navigational Area.		9-11
26	14-Aug-98	p5	Customer Activities Web sites should be designed for ease of user interaction.		9-11
27	14-Aug-98	s13	A Customer Activities Web page may display information (data elements and code values) from multiple functionally related EDI data sets (i.e. nominated quantities and scheduled quantities may appear on the same Web screen).		9-11, 10-12
28	14-Aug-98	p6	There should generally be a one-to-one relationship between data elements used for EDI and/or flat files and the data displayed on Customer Activities Web pages.		9-11
29	14-Aug-98	s14	GISB standard code value descriptions should be displayed for code values where appropriate.		9-11
30	14-Aug-98	p7	Standard field name descriptors or abbreviations, and navigation and functional screen layouts should be used on all Customer Activities Web pages. There should be no standards for font size, colors, etc. Functional screen layouts should be developed as standards which would divide each transactional screen into separate areas and define which data elements belong in each specific area.		9-11
32	20-Aug-98	s15	The Customer Activities Web Site should include the name, nickname, or name abbreviation of the Transportation Service Provider in the browser title bar. The name of the business function should be displayed in the Header.		9-11, 10-12
33	20-Aug-98	s16	Where they exist for the same business function, flat files and EDI should use the same nomenclature for data set names, data element names, code values and/or code value descriptions, abbreviations and message text. Corresponding Web pages should use data set names, data element names, code value descriptions, abbreviations and message text that correspond to those used in flat files and EDI, where they exist.		9-11
34.3	20-Aug-98	p8	Information that is constant for the displayed Content Area may be placed in the page Header.		9-11
34.5	20-Aug-98	p9	Data elements that have default values may be placed last to minimize scrolling.		9-11
34.7	20-Aug-98	s17	Totals, when appropriate, should be displayed within the Content Area of the Web page in a manner which distinguishes them from the data.		9-11

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

#	Minutes Meeting Date	Group	IN NUMBER ORDER		Date of Review
				Language	
34.8	20-Aug-98	s18	Where navigation and/or processing functions exist for a Customer Activity, the Content Area should contain navigation in the Header on the left and processing functions in the Header on the right.		9-11, 10-12
34.9	20-Aug-98	s19	Navigation for input data lookups, if provided, should be placed near the field being looked up. Navigation for informational lookups, if provided, should be included in the Header.		9-11, 10-12
38	20-Aug-98	s20	GISB Common Codes for entity and location should be available for data validation or selection (viewing) on a Customer Activities Web site and in a standardized downloadable format for use by customers and third party service providers. Cross-references to proprietary codes may be provided on a mutually agreeable basis.		9-11, 10-12
41	20-Aug-98	p10	As a general guideline, the initial phase of each business function category (of a multiple phase implementation) of "common look and feel" for Internet transactions that are not currently standardized should begin subsequent to the implementation of the currently standardized data sets to the Web. This does not preclude the implementation of new standardized data sets as they become available.		9-11
47	20-Aug-98	p11	There is displayed information on Customer Activities Web sites which does not have a comparable data element in EDI; however, the data (e.g. totals, reports, calculations) is derived from other EDI data elements. Provision of such information does not require the development of an EDI data set to accomplish a one-to-one match. However, any Customer Activities Web function should be derivable from information available in EDI data sets.		9-11
49	3-Sep-98	s23	With regard to navigational links on Customer Activities Web sites, when using abbreviations, the following should be used: [Please refer to the table in the appendix for the abbreviations]		10-12
50A	3-Sep-98 10-16-98	s24	On the Nominations Web page, data should be organized in the Form in logical groupings. The logical groupings of data are specified in the nominations data dictionary.		10-12
51.1	3-Sep-98	s25	GISB FF/EDM flat files should be ASCII comma separated value (.csv) format.		10-12
51.2	3-Sep-98	p13	For GISB FF/EDM, the content and usage of flat files should reasonably correspond to the GISB data sets used for GISB EDI/EDM.		10-12
51.3	3-Sep-98	s26	Provisions to provide 'comment' rows within GISB FF/EDM flat files should be made. These rows should be ignored for processing purposes.		10-12
51.4	3-Sep-98	s27	The order of elements within GISB FF/EDM flat files should be that identified within the standards.		10-12

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

#	Minutes Meeting Date	Group	IN NUMBER ORDER		Date of Review
				Language	
51.6	3-Sep-98	p14	If GISB FF/EDM is implemented, flat files should be exchanged via the GISB EDI/EDM site or the Customer Activities Web site.		10-12
51.8	3-Sep-98	s28	Each transaction (e.g. nomination) within a GISB FF/EDM flat file should be represented by a single row layout.		10-12
52	3-Sep-98	s29	Where display information on a Customer Activities Web site is derivable from data provided in a previous upload or download, the information should not be included in the EDI/EDM standards [or FF/EDM standard, for later consideration] that directly correspond to the EBB/EDM Web page being displayed.		10-12
53	17-Sep-98	s30	The industry should use common codes for location points and legal entities when communicating via EDI/EDM, EBB/EDM and/or FF/EDM. The corresponding common code name should also be used in EBB/EDM.		10-12
54	17-Sep-98	d7	"Header" is the term used to describe the area at the top of the Content Area of the browser display.		10-12
55	17-Sep-98	d8	"Detail" is the term used to describe the area directly below the Header in the Content Area of the browser display.		10-12
57	17-Sep-98	s31	Customer Activities Web pages should support entry of the maximum length for valid data, however, display can be done in a manner to minimize left to right scrolling.		10-12
58	17-Sep-98	s32	On Customer Activities Web pages, informational display fields can be displayed with related data.		10-12
59	17-Sep-98	i1	Data Grouping for Nomination Transaction for all models (original)		10-12
60	1-Oct-98	d9	"Form" is the term used to describe the portion of the Content Area of the nominations browser display on Customer Activities Web sites used for single transaction entry as well as, optionally, data selection. The Form should be either in the upper portion of the nominations Content Area or alternatively a single page linked to the Matrix.		10-12
61	1-Oct-98	d10	"Matrix" is the term used to describe the portion of the Content Area of the nominations browser display on the Customer Activities Web sites used to display selected nominations and/or nominations entered on the Form and, optionally, for data entry. The Matrix should be either the lower portion of the nominations Content Area (that area below the Form) or, alternatively, a single page linked to the Form.		10-12
62	1-Oct-98	s39	On Customer Activities Web sites, nominations data entry should be available on the Form and the Transportation Service Provider may also provide for nominations data entry on the Matrix.		10-12
63	1-Oct-98	i1	Data Grouping for Nomination Transaction for all models (revised)		10-12

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

#	Minutes Meeting Date	Group	IN NUMBER ORDER		Date of Review
			Language		
64	1-Oct-98	s40	On the nominations data entry screen, data should be organized in logical groupings as defined in the Data Dictionary. The initial data element should be:		10-12
			<u>DATA GROUP</u>	<u>INITIAL ELEMENT</u>	
			Business Entity	Transportation Service Provider	
			Contracts	Service Requester Contract	
			Date	Beginning Date	
			Receipt	Receipt Location	
			Delivery	Delivery Location	
			Transaction Specific	Transaction Type	
65	1-Oct-98	s41	In the Form area of the nominations data entry screen, the data groups should appear in the following order: Business Entity, Contract, Date, Receipt, Delivery and Transaction Specific.		10-12
66	1-Oct-98	s42	The Transportation Service Provider's Customer Activities Web Site should include the name, nickname, or name abbreviation of the parent company and/or Transportation Service Provider so that it will appear first in the browser title bar.		10-12
68	1-Oct-98	s43	Columns and data fields that would contain data not supported by the Transportation Service Provider should be eliminated on display and/or entry, and left empty on download. [REPLACEMENT TO GISB STANDARD NO. 4.3.34]		10-12
69	1-Oct-98	s44	When the nominations Form and the nominations Matrix for Customer Activities Web sites are separate Web pages, a subset of the Form may be included by the Transportation Service Provider in the upper Content Area of the Matrix page.		10-12
70	1-Oct-98	i1	In the Nomination Data Dictionary Usage For All Model Types, remove the location group and all references to it. (revised)		10-12
71	16-Oct-98	s45	The Nominations data area of the Customer Activities Web sites should include a Form and a Matrix. The Form and the Matrix may be combined into one if no left and right scrolling is required to enter a nomination.		
72A	16-Oct-98	s46	Fields in the Groups on the Form in the Customer Activities Web Sites should appear in the following order:		
			Business Entity Group:	1. Transportation Service Provider 2. Service Requester	
			Contract Group:	1. Service Requester Contract 2. Model Type	
72B	16-Oct-98	s47	Fields in the Groups on the Form in the Customer Activities Web Sites should appear in the following order:		
			Date Group:	1. Beginning Date 2. Beginning Time 1. Ending Date 2. Ending Time	

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

#	Minutes Meeting Date	Group	IN NUMBER ORDER		Date of Review
				Language	
73	16-Oct-98	s48	A Transportation Service Provider which determines to provide new services which do not utilize existing transaction sets via GISB EBB/EDM, should, prior to implementation submit a request for standardization to GISB including descriptions of the EBB/EDM, EDI/EDM and, as applicable, FF/EDM implementation.		
74	16-Oct-98	s49	On Customer Activities Web pages, information which is not part of the data dictionaries may be displayed.		
75	2-Nov-98	s50	With regard to processing functions on Customer Activities Web sites, the following standard nomenclature should be used when the associated function is supported by the Transportation SP. Service Provider (TSP). TSPs may also support additional processing functions. [Please refer to the table in the appendix for the abbreviations]		
76	2-Nov-98	p16	Transportation Service Provider EDM implementations should minimize the number of outbound ports required to be opened on the client-side firewall.		
77	2-Nov-98	s51	Transportation Service Providers should be limited to the GISB approved list of available TCP ports and UDP ports for EDM implementations included in the appendix in the Electronic Delivery Mechanism Related Standards manual under Client Firewall Requirements for Service Provider EDM Implementations		
79	2-Nov-98	s52	TSP EDM implementations should not require any inbound ports to be opened on the client-side firewall.		
80	2-Nov-98	d12	"Batch Flat File" is the term used within GISB FF/EDM to describe the automated computer to computer transfer of flat files.		
81	2-Nov-98	d13	"Interactive Flat File" is the term used within GISB FF/EDM to describe the transfer of flat files using an interactive browser.		
82	2-Nov-98	s53	For Interactive Flat File EDM, 40-bit Secure Sockets Layer (SSL) encryption should be used. Where possible, 128-bit SSL encryption is strongly recommended.		
83	2-Nov-98	s54	For Interactive Flat File EDM, access should be protected by HTTP Basic Authentication.		
8A	2-Nov-98	s34	Access to the Customer Activities Web Site should be protected by HTTP Basic Authentication or similar logon/password mechanism(s). A Customer Activities Web site should typically require a single logon/password pair for each user session.		
4.3.8	2-Nov-98	4.3.8	The minimum acceptable protocol should be HTTP. All sending and receiving parties should be capable of sending and receiving using HTTP.		

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

#	Minutes Meeting Date	Group	IN NUMBER ORDER		Date of Review
				Language	
4.3.2	2-Nov-98	4.3.2	On time stamping, data leaves control of the originator by the same time (deadline), regardless of mechanism (3rd party service provider time stamp is acceptable) and 15 minutes of communication time should be available to allow accumulation of all transactions to the pipeline. A standard network protocol (TCP/IP) should be in service for direct connect to the pipeline designated site by 4/1/97.		
4.3.9	2-Nov-98	4.3.9	For EDI/EDM and FF/EDM, there is a time stamp (HTTP Timestamp) that designates the time that a file is received at the designated site. The receiving party should generate a timestamp upon successful receipt of the complete file and send as an immediate response to the sending party. The timestamp should be generated by Common Gateway Interface (CGI) of the receiving party, prior to further processing by the CGI.		
4.3.A.ii.a	2-Nov-98	d4	"GISB FF/EDM" is the term used to describe a standardized flat file electronic data interchange of information in files as mapped from the x.4.z GISB standards. GISB FF/EDM is communicated between trading partners over the Internet using the GISB Electronic Delivery Mechanism.		
84	2-Nov-98	i2	Nomination Quick Response (1.4.2) for groupings and usage inclusions for EBB, EDI and FF.		
85	2-Nov-98	i3	Request for Confirmation (1.4.3) for groupings and usage inclusions for EBB, EDI and FF with two sets of changes made for the data element Transaction Identifier - the grouping was changed from SLDG to BEDG for all model types, and for the data element Confirmation Tracking Identifier - the grouping was changed from N/A to TSDG for all model types. In addition, the business process and practices in the implementation guide should be updated for the use of Confirmation Tracking Identifier.		
86	2-Nov-98	i4	Confirmation Response (1.4.4) for groupings and usage inclusions for EBB, EDI and FF with changes made for the data element Transaction Identifier - the grouping was changed from SLDG to BEDG for all model types.		
87	2-Nov-98	i7	Confirmation Response Quick Response (1.4.7) for groupings and usage inclusions for EBB, EDI and FF with changes made for for the data element Transaction Identifier - the grouping was changed from SLDG to BEDG for all model types, for the data element Transaction Status Data - the grouping was changed from SLDG to BEDG for all model types, and for the data element Confirmation Tracking Identifier - the grouping was changed from N/A to TSDG for all model types.		

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

#	Minutes Meeting Date	Group	IN NUMBER ORDER		Date of Review
				Language	
88	2-Nov-98	i5	Scheduled Quantity (1.4.5) for groupings and usage inclusions for EBB, EDI and FF with changes made for the data grouping RecDG change to TSDG on all elements in this data set, the data grouping DeIDG should be change to TSDG on all elements in this data set, for the data element, Nominators Tracking ID the grouping was changed from NA to TSDG, and for the data element Statement Date Time the grouping was changed from SLDG to BEDG.		
89	2-Nov-98	i6	Scheduled Quantity for Operator (1.4.6) for groupings and usage inclusions for EBB, EDI and FF with changes made for the data element Confirmation Tracking Identifier - the grouping was changed from N/A to TSDG for all model types.		
90	2-Nov-98	i1	Nominator's Tracking ID in 1.4.1 to be changed with conforming change to TSDG		
91	2-Nov-98	i2	Nominator's Tracking ID in 1.4.2 to be changed with conforming change to TSDG		
92	2-Nov-98	i2	Transaction Status Data in 1.4.2 changed to BEDG		
93	2-Nov-98	s55	Providers of Customer Activities Web sites, at their discretion, may provide alternate views to data and transactions in addition to the GISB basic views. The alternate views should not replace GISB basic views and should be offered as separate views if available. If alternate views are offered, the GISB basic views should be the default views and clearly labeled as the GISB basic view. Any alternate or enhanced views must offer the same business result as the basic view and be accessible to all applicable users. The basic views must offer the same business result as the alternate or enhanced views and be accessible to all applicable users.		
94	2-Nov-98	s56	The content area of the nominations browser display should provide access to a query or listing of receipt and delivery point location names/common codes from which to pick in order to populate this data during transaction entry or selection.		
96	2-Nov-98	s57	Validation messages for nominations submitted should contain at least the same level of detail for EBB/EDM as EDI/EDM.		
97	2-Nov-98	s58	Data fields used to populate or control population of other fields can be placed before the fields to be populated. If these data elements apply to the entire content area they can appear in the header.		

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

#	Minutes Meeting Date	Group	IN NUMBER ORDER		Date of Review
			Language		
72C	2-Nov-98	s59	Fields in the groups on the Form in the Customer Activities Web sites should appear in the following order: Receipt Group:		
			1. Receipt Location		
			2. Upstream Contract Identifier		
			3. Upstream Identifier Code		
			4. Receipt Quantity		
			5. Receipt Rank (Priority)		
			6. Upstream Rank (Priority)		
			7. Upstream Package ID		
72D	2-Nov-98	s60	Fields in the groups on the Form in the Customer Activities Web sites should appear in the following order: Delivery Group:		
			1. Delivery Location		
			2. Downstream Contract Identifier		
			3. Downstream Identifier Code		
			4. Delivered Quantity		
			5. Delivery Rank (Priority)		
			6. Downstream Rank (Priority)		
			7. Downstream Package ID		
72E	2-Nov-98	s61	Fields in the groups on the Form in the Customer Activities Web sites should appear in the following order: Transaction Specific Group:		
			1. Service Provider's Activity Code		
			2. Transaction Type		
			3. Package ID		
			4. Associated Contract		
			5. Bid Transportation Rate		
			6. Capacity Type Indicator		
			7. Deal Type		
			8. Nominator's Tracking ID		
98	2-Nov-98	s62	Each data element which has been submitted for standardization in the GISB process should follow the GISB ordered data elements in the Form within a data group selected by the Transportation Service Provider.		
99	2-Nov-98	s63	On the confirmation data entry screen, the data groups should be organized in logical groupings as defined in the Data Dictionary. The initial data element should be:		
			Data Group	Initial Element	
			Business Entity	Confirmation Requester	
			Contracts	Confirmation Service	
			Contract		
			Dates	Beginning Date	
			Location	Location	
			For the Transaction Specific data group, either the Service Requester information or Upstream/Downstream information will be the initial elements, based on the business practices of the Confirmation Requester.		

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

#	Minutes Meeting Date	Group	IN NUMBER ORDER		Date of Review																		
				Language																			
100	2-Nov-98	s64	<p>On the confirmation data entry screen, one of the following confirmation views should be supported:</p> <ul style="list-style-type: none"> <li>Location View</li> <li>Contract View</li> </ul> <p>On the confirmation data entry screen for the location view, the data groups should appear in the following order:</p> <ul style="list-style-type: none"> <li>Business Entity</li> <li>Dates</li> <li>Location</li> <li>Contracts</li> <li>Transaction Specific</li> </ul> <p>On the confirmation data entry screen for the contract view, the data groups should appear in the following order:</p> <ul style="list-style-type: none"> <li>Business Entity</li> <li>Contracts</li> <li>Dates</li> <li>Location</li> <li>Transaction Specific</li> </ul>																				
101	2-Nov-98	s8	<p>The sub-categories and the labels for the category of Nominations should appear, if applicable, in the Navigational Area as follows:</p> <ul style="list-style-type: none"> <li>Nomination</li> <li>Confirmation</li> <li>Scheduled Quantity</li> </ul> <p>Links supporting additional sub-categories will follow these links. This does not preclude a further breakdown within each sub-category from being listed in the Navigational Area.</p>																				
102	2-Nov-98	s65	<p>On the Scheduled Quantity Web page, data should be organized in logical groupings. The logical groupings of data are specified in the scheduled quantity data dictionary.</p>																				
64	2-Nov-98	s40	<p>On the nominations data entry screen, data should be organized in logical groupings as defined in the Data Dictionary. The initial data element should be:</p> <table border="0"> <thead> <tr> <th><u>DATA GROUP</u></th> <th><u>INITIAL ELEMENT</u></th> </tr> </thead> <tbody> <tr> <td>Business Entity</td> <td>Transportation Service</td> </tr> <tr> <td>Provider</td> <td></td> </tr> <tr> <td>Contracts</td> <td>Service Requester Contract</td> </tr> <tr> <td>Date</td> <td>Beginning Date</td> </tr> <tr> <td>Receipt</td> <td>Receipt Location</td> </tr> <tr> <td>Delivery</td> <td>Delivery Location</td> </tr> <tr> <td>Transaction Specific</td> <td>Service Provider's Activity</td> </tr> <tr> <td>Code</td> <td></td> </tr> </tbody> </table> <p>If the initial element is not present, the next supported data element becomes the initial element for that data group.</p>	<u>DATA GROUP</u>	<u>INITIAL ELEMENT</u>	Business Entity	Transportation Service	Provider		Contracts	Service Requester Contract	Date	Beginning Date	Receipt	Receipt Location	Delivery	Delivery Location	Transaction Specific	Service Provider's Activity	Code			
<u>DATA GROUP</u>	<u>INITIAL ELEMENT</u>																						
Business Entity	Transportation Service																						
Provider																							
Contracts	Service Requester Contract																						
Date	Beginning Date																						
Receipt	Receipt Location																						
Delivery	Delivery Location																						
Transaction Specific	Service Provider's Activity																						
Code																							
104	2-Nov-98	s66	<p>The data elements should accommodate super-nominations. If a Transportation Service Provider chooses to support super-nominations, the GISB standard data sets should accommodate it.</p>																				

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

<b>IN NUMBER ORDER</b>				
#	Minutes Meeting Date	Group	Language	Date of Review
105	2-Nov-98	s67	The data elements should accommodate confirmation by exception. If a Transportation Service Provider chooses to support confirmation by exception, the GISB standard data sets should accommodate it.	

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

**Appendix**

**Abbreviation Table for Recommended Standard S23 (#50)**

Full Name	Abbreviation
Customer Activities	Customer Activities
Nominations	Nominations
Flowing Gas	Flowing Gas
Invoicing	Invoicing
Capacity Release	Capacity Release
	Contracts
Informational Postings	Info Postings
Site Maps	Site Maps
Nomination Area	Nominations
Nomination	Nom
Nomination Quick Response	Nom QR
Request for Confirmation	Req for Conf
Confirmation Response	Conf Resp
Confirmation Response Quick Response	Conf Resp QR
Scheduled Quantity	Sched Qty
Scheduled Quantity	Sched Qty Oper
Flowing Gas Area	Flowing Gas
Pre-determined Allocation	PDA
Pre-determined Allocation Quick Response	PDA QR
Allocation	Allocation
Shipper Imbalance	Shipper Imbal
Measurement Information	Meas Info
Measured Volume Audit Statement	Meas Vol Audit
Invoicing Area	Invoicing
Invoice	Invoice
Service Requester Level Charge/Allowance Invoice	Svc Req Invc
Payment Remittance	Pmt Remit
Statement of Account	Stmt of Acct
Capacity Release Area	Capacity Release
Offers	Offers
Bids	Bids
Awards	Awards
Contracts Area	Contracts

**Gas Industry Standards Board EBB Internet Implementation Task Force  
Standards Recommended by the Task Force as of November 2, 1998**

**Appendix**

**Abbreviation Table for Recommended Standard S49 (#75)**

75. With regard to processing functions on Customer Activities Web sites, the following standard nomenclature should be used when the associated function is supported by the Transportation SP. Service Provider (TSP). TSPs may also support additional processing functions.

Processing Function	Nomenclature
Create a new line item for data entry in the Matrix	New
Copy existing data on a screen or window	Copy
Delete the current line item from the Matrix, the screen or the window prior to Submit	Delete
Back out of a screen or window without executing the process which would cause the loss of all updates since the last Submit	Cancel
Print application data	Print
Send record/records from the matrix to TSP for processing	Submit
Sort displayed records based on specified criteria	Sort
Retrieve information from the TSP based on specified criteria	Retrieve
Post a line item from the form to the Matrix as a change to the current line item in the matrix prior to Submit	Change
Clear fields on the Form	Clear
Post a line item from the Form to the Matrix as a new record	Add
Provide information regarding current page or function	Help
Filter displayed records based on specified criteria	Filter

Implementation Guide Recommendations -- September 17, 1998  
Amended October 1, 1998

Implementation Guide Content under Customer Activities Sites

**Minimum Technical Characteristics of the Client Workstation**

Configuration\* Description:

**Hardware:**

CPU                    >= 166 MHz  
Memory                >= 64 MB Physical  
Display Resolution    >= 800 x 600

**Operating Systems:**

Multi-threaded and preemptive

**Connection:**

>=56KB (V90)

**Browser Characteristics (includes defined GISB current versions):**

---

Features as supported by both Netscape®<sup>1</sup> v4.06 and Internet Explorer®<sup>2</sup> v4.0 sp1 including:

- Frames and nested frames
  - Tables and nested tables
  - Style Sheets
  - HTML
  - Cookies
  - JavaScript
  - SSL®<sup>3</sup> (40 Bit RSA)
- 
- JAVA®<sup>4</sup> 1.1.6 Sun®<sup>4</sup> JDK (plug-in)
  - ActiveX®<sup>2</sup> (Plug-in for Netscape®<sup>1</sup>)
  - ICA®<sup>5</sup> v4 (Plug-in)

\*configuration shown indicates a minimum except where a specific level is established. "Minimum" implies a level where a reasonable experience for the user may be achieved. These levels also indicate the level that a user may expect that a client has been tested. Results may be less than satisfactory or may preclude use of a site if the user chooses to use anything less than those levels shown.

---

<sup>1</sup> Netscape® is a registered trademark of Netscape Communications Corp.  
<sup>2</sup> Internet Explorer® and ActiveX® are registered trademarks of Microsoft Corporation.  
<sup>3</sup> SSL® is a registered trademark of Solid State Logic Limited.  
<sup>4</sup> JAVA® and Sun® are registered trademarks of Sun Microsystems, Inc.  
<sup>5</sup> ICA® is a registered trademark of Citrix Systems, Inc.

Implementation Guide Recommendations -- September 17, 1998  
Amended October 1, 1998

Example Configurations of Client for Accessing Customer Activities Sites<sup>6</sup>

EXAMPLES BELOW REPRESENT A NON-COMPREHENSIVE SET OF CONFIGURATIONS WHICH A CLIENT MAY USE. THIS EXAMPLE LIST IN NO WAY SHOULD BE CONSTRUED AS AN ENDORSEMENT BY GISB OF ANY SPECIFIC PRODUCTS. OTHER PRODUCTS MEETING THE MINIMUM TECHNICAL CHARACTERISTICS OF THE CLIENT WORKSTATION MAY BE MAY BE USED.

**Hardware:**

CPU: P166 MHz or higher  
Memory >= 64 MB Physical  
Display Resolution >= 800 x 600  
Pointing Device with left and right click capability

**Operating Systems:**

Windows<sup>®7</sup> 95  
Windows<sup>®7</sup> 98  
Windows<sup>®7</sup> NT 4.0 service pack 3

**Connection:**

56KB (V90) modem  
ISDN  
Direct Connect (T1, Fractional T1...)

**Browser:**

Netscape<sup>®8</sup> Communicator/Navigator v4.06  
Microsoft Internet Explorer<sup>®9</sup> v4.0 service pack 1

**Plug-ins:**

JAVA<sup>®10</sup> 1.1.6 Sun JDK (Activator)  
ActiveX<sup>®9</sup> (Plug-in for Netscape)  
ICA<sup>®11</sup> v4 (Plug-in)

**SPECIFIC PRODUCTS SHOULD BE REVIEWED PRIOR TO IMPLEMENTATION FOR YEAR 2000 COMPLIANCE.**

---

<sup>6</sup> **Note to EII Task Force from the Future Technology Task Force (9/11/98):**

There is still a review of port numbers possibly needed to be opened on the client-side for certain protocols to be used. We want to arrive at a limited list on which users may rely to be able to access many TSP sites. Along with this, will be some other firewall administration notes addressing items such as applets. We intend to complete this draft in our October FTTF meeting.

<sup>7</sup> Windows<sup>®</sup> is a registered trademark of Microsoft Corporation.

<sup>8</sup> Netscape<sup>®</sup> is a registered trademark of Netscape Communications Corp.

<sup>9</sup> Internet Explorer<sup>®</sup> and ActiveX<sup>®</sup> are registered trademarks of Microsoft Corporation.

<sup>10</sup> JAVA<sup>®</sup> is a registered trademark of Sun Microsystems, Inc.

<sup>11</sup> ICA<sup>®</sup> is a registered trademark of Citrix Systems, Inc.

Implementation Guide Recommendations -- September 17, 1998

Implementation Guide Content under Security for Customer Activities Sites

**THE LIST OF PRODUCTS BELOW REPRESENT A NON-COMPREHENSIVE SET WHICH A CLIENT MAY USE. THIS LIST IN NO WAY SHOULD BE CONSTRUED AS AN ENDORSEMENT BY GISB OF ANY SPECIFIC PRODUCTS. OTHER PRODUCTS MEETING THE MINIMUM TECHNICAL CHARACTERISTICS OF THE CLIENT WORKSTATION MAY BE MAY BE USED.**

[The GISB Future Technology Task Force will review this on an annual basis during the version check cycle.]

Minimum

40 bit\* SSL® or 40 bit\* RSA JAVA®<sup>12</sup> communications or 40 bit\* Secure ICA®<sup>13</sup>

\*128 bit encryption is strongly recommended where possible.

**SPECIFIC PRODUCTS SHOULD BE REVIEWED PRIOR TO IMPLEMENTATION FOR YEAR 2000 COMPLIANCE.**

---

<sup>12</sup>

JAVA® is a registered trademark of Sun Microsystems, Inc.

<sup>13</sup>

ICA® is a registered trademark of Citrix Systems, Inc.

**Implementation Guide Recommendations -- September 17, 1998**

**Implementation Guide Content under Redundancy**

*\*In this context redundancy refers to normal operations redundancy (as opposed to disaster recovery contingencies).*

Customer Activities Sites

Users and providers should consider but not be limited to the following possibilities to achieve redundant connectivity:

1. Multiple dial-up connections
2. Multiple leased line connections
3. Multiple Internet service providers
4. Combinations of the above
5. Geographically diverse connections
6. Topographically diverse connections; i.e., connections which result in Internet pathways that do not pass through a single point/service/router
7. Multiple power sources for network equipment

Items 1-5 are potential means of achieving the defining characteristic of item 6. The intent is to eliminate the possibility of a single point of failure.

EDI/EDM Sites

Three possible approaches are:

1. Maintain multiple ISPs and multiple points of connectivity, each of which was identified by the same URL making the process of redundancy transparent to the sender.
2. Maintain different Internet connectivity URLs (presumably on topographically different ISPs). For this to result in communication redundancy, the sender should know of the existence of the secondary URL and have programming in place that will automatically switch batch-browser transmissions to the secondary URL when the primary URL is unavailable.
3. Maintain multiple connections to the same ISP. This involves only one URL but the presumption would be that the ISP would provide alternate diverse paths for the URL.

Receivers may maintain multiple URLs and, if such have been disclosed, the sender should attempt to use these during primary URL outages. The redundant public Internet connections can be through a single ISP or multiple ISPs.

If multiple URLs are provided for EDM access, the following conditions should be met:

1. The information provided by each URL should be exactly the same, although trans-ids can be different.
2. The trading partners should be informed of both URLs and their availability by system wide notice or by TPA.

**Implementation Guide Recommendations -- September 17, 1998**

**Implementation Guide Content under Redundancy (Continued)**

The URLs should be identified as primary and secondary if either:

1. There is a TSP connection speed difference between the URLs (The faster connection listed as primary).

or

2. One URL is only available when the other is down (primary URL being the most available).

The URLs should be listed as primary and alternate if:

1. The URLs have the same TSP connection speed.

and

2. The URLs are customarily available simultaneously.

Note: A URL is considered available (in the context of communication redundancy) if all the IP facilities are properly functioning up to and including the HTTP service. This would include any TSP provided facilities including firewalls, DNS servers, routers, hubs, LANs, etc. that are between the TSP's HTTP server and the ISP's point of presence.

Implementation Guide Recommendations -- November 2, 1998

**Client Firewall Requirements for Service Provider EDM Implementations**

[To be placed in the Electronic Delivery Mechanism Related Standards manual as implementation guidelines]

The following is a list of allowable TCP ports available for use by a Service Provider. Upon request, the Transportation Service Provider (TSP) should indicate to their trading partners which specific ports they will require to be opened to conduct electronic communication.

Allowable TCP Ports (not UDP ports):	
HTTP	80, 5713, 6112, 6304, 8674, 7403
SSL	443
ICA	1494
RMI(Java)	1099-1100
Java Telnet	31415
TCP Optional	8001-8020 <sup>14</sup>
Allowable UDP Ports (not TCP ports):	
Secure ICA	1604

There are other technologies available that will require additional ports to be opened, such as FTP, Telnet, and SMTP. If and when GISB approves such technologies, FTTF will modify this list of allowable ports accordingly.

The client-side firewall implementation and client browser settings should permit the downloading and installation of GISB approved plug-ins and modules. Please refer to the GISB defined Minimum Technical Characteristics for Accessing Customer Activities Web Sites for the listing of plug-ins and modules.

These guidelines will be reviewed and updated by the Future Technology Task Force, at a minimum, by the spring of each year and presented to the GISB Executive Committee for adoption by the June meeting of that group.

---

<sup>14</sup> The reservation of 20 optional ports was to provide room for implementations such as DCE, IIOF, and load balancing implementations. TSPs should endeavor to minimize the usage of these ports.