GAS INDUSTRY STANDARDS BOARD

EBB - INTERNET TRANSITION PLAN

REPORT TO THE BOARD OF DIRECTORS

June 1, 1998

EBB-INTERNET TRANSITION PLAN

The EBB-Internet Transition Team, (referred to hereafter as "Team"), is pleased to present the following report to the Board of Directors for their review and determination of direction. The report is organized into three sections:

(1) an Executive Summary,

(2) a Comparison of Models, and

(3) the Model Descriptions.

Two models are presented by the Team. The summary provides a brief description and diagram for each model. The comparison of models is a table that contrasts each model against functional aspects organized into six categories. The final section includes a full description of each model as prepared by the supporters of that model.

The Team is composed of two members from each segment plus the officers of the Executive Committee. Mike Bray and Jerry Hahn are the Executive Committee officers. Tommie Hartmann, Exxon U.S.A., and Tom Ehinger, Amoco Corporation, represented the producers. Jim Buccigross, National Registry of Capacity Rights, and Mark Scheel, NGC Corporation, represented the services segment. Dona Gussow, Florida Power and Light, and Laurie Valasek, Midland Cogeneration represented the end user segment. Shelley Corman, Enron Pipeline Group, and Norm Walker, El Paso Natural Gas, represented the pipeline segment. Bob Betonte, SoCal Gas, and Mike Novak, National Fuel Gas Distribution, represented the distribution segment.

The Team met seven times: December 30, 1997, and for 1998: February 27, March 5, March 19, April 9, May 4, and May 20. All but the March 19 and May 20 meetings were held via phone conference to minimize cost to the participants and broaden the participation. To access the minutes and work papers from these meetings, please access the GISB Home Page.

BACKGROUND

On March 3, the report from the Team to the Board of Directors was amended to the following action items, one of which is the drafting and distribution of this report by June 1, 1998:

1. On March 19, the team will request that the Executive Committee re-prioritize requests R97111 and R97120 for immediate attention by the appropriate subcommittees. [The requests were reprioritized for immediate action on March 19].
2. On March 19, assuming a simple majority vote from the Executive Committee to re-prioritize the requests, the chairmen of the appropriate subcommittees, defined by the Executive Committee in approval of the triage recommendations, will be notified of the expedited treatment for R97111 and R97120. [The requests were approved for expedited treatment on March 19].

3. After the Internet standards for the postings on web sites are approved by the Executive Committee, they will be reviewed for applicability to the transactional-based Internet web sites. The Executive Committee will determine the appropriate group to perform the review and draft the recommendations to be sent to the Executive Committee for its consideration. [The Internet standards were approved by the Executive Committee on May 20 and 21, and are under review now for applicability to transactional web sites.]
4. GISB has currently underway a concerted effort to draft a transition plan which addresses a migration for the industry regarding communication modality. The Board of Directors (BOD) has established a deadline of June 1, 1998 for the Executive Committee (EC) (and its related Task Forces) to report the results of its work. The EC is instructed to "drill down" to determine if there is EC consensus (17/2) on the "road map" that the industry will take in this migration. If consensus is reached by the EC, the results will be reported to the BOD by June 1. If consensus is not reached on a "single path," the EC will report back by June 1 on the several alternatives considered regarding the migration. [The Executive Committee through distribution of this report has completed this item].
5. The plan ("road map") or alternatives will be presented to the Board of Directors by June 1, for discussion at its June 18 Board meeting. [This item is on the agenda for the June 18 meeting].

After the March 3 Board meeting, the Team defined seven models drafted by: Jim Buccigross, Sylvia Munson of Altra Streamline, Norm Walker, Carl Caldwell of Deloitte and Touche, Mark Scheel, Mike Novak and Jerry Hahn. The original models can also be accessed from the home page. The models were analyzed against several functional aspects organized into six categories. Through this analysis and through separate coalition meetings, the groups collapsed the six models into two models: Model 1 supported by model drafters Jim Buccigross and Sylvia Munson, and Model 2 supported by Norm Walker, Carl Caldwell, Mark Scheel, Mike Novak and Jerry Hahn. There are two models presented in this report.

During the Executive Committee meeting on May 20, a procedural motion was made to report both models to the Board of Directors. The motion was seconded and adopted with twenty-one votes in favor and two votes in opposition. There was a motion for a sense of the room for support of model 1 as discussed and presented. The motion was seconded and received two votes in support and twenty-one votes in abstention. There was a motion for a sense of the room for support of model 2 as discussed and presented. The motion was seconded and received nineteen votes in support and four votes in abstention. The voting results can be found on the home page contained within the minutes of the May 20 Executive Committee meeting. Transcripts are also available from that meeting.

The Team requests, which the Executive Committee endorsed, that the Board of Directors accept this report and give guidance regarding the two models and approaches at the Board meeting scheduled for June 18.

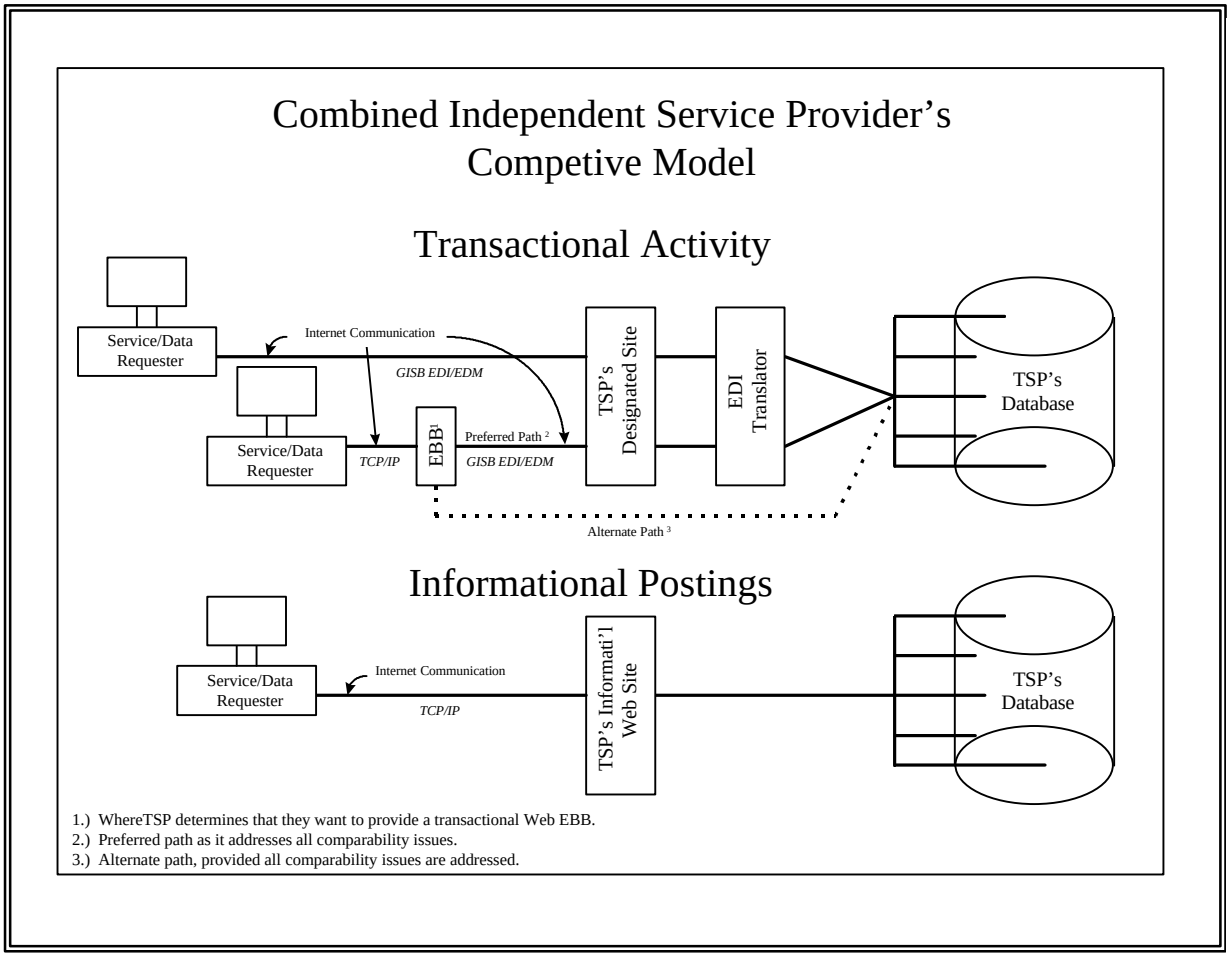
SECTION I -- EXECUTIVE SUMMARY

The two models are presented by two groups of drafters: Model 1 is prepared by a coalition group composed of drafters Jim Buccigross and Sylvia Munson with the model entitled the "Independent Service Provider's Model"; and Model 2 is prepared by a coalition group named CAMEL composed of drafters Norm Walker, Carl Caldwell, Mark Scheel, Mike Novak and Jerry Hahn.

Model 1: **Independent Service Provider's Model Description**

Regarding the requirement that pipelines provide all electronic information and conduct all electronic transactions with their customers over the public Internet using only Internet protocols and procedures: Transactional *functions* of the EBB's would be transitioned to the Internet and such information would be exchanged via ANSI X12 Documents (GISB EDI) utilizing the existing GISB Electronic Delivery Mechanism (EDM) standards for these transactions (together GISB EDI/EDM). GISB standardized EDI datasets would be developed for those transactions which are not currently standardized. Where there is another way chosen by the Transportation Service Provider (TSP) (from among phone, fax, or e-mail) for the TSP and the user to conduct a transaction and receive the same business result, there need not be a mandated movement to EDI (outside of the current mandatory 32 plus 2 - the 2 are upload of offer and upload of bid). Additional standards would be developed in order to specify the requirements of this approach. (See proposed standards, principles and definitions for this model.) These “additional” standards are for post 6/1/99 not by 6/1/99. As a baseline, the 32 + 2 would be required by 6/1/99. In addition, GISB through its normal standards adoption procedures, would review requests received from the TSPs for additional datasets, prioritize said requests, and determine the extent to which these additional datasets would be developed for a 6/1/99 implementation. Non-transactional data (Informational Postings) under Standard No. 4.3.6 (and future such informational presentations) would be communicated over the Internet via a "common look and feel" standardized web page. This means the post-GISB adoption of look and feel stays status quo once adopted. GISB would make no mandatory standards for transactional look and feel. Such work product, if developed would be in the form of guidelines. Nor would GISB draft standards which require TSP's to provide transactional web sites.

GISB makes no requirements as to TSPs establishing transactional web pages, nor is there any prohibition. TSP's can keep their current EBBs and do not have to shut them down. If a TSP chooses to establish such a web page, it should be treated as a competitive offering and, consistent with GISB Standard 1.1.11, users of such services should bear the cost. Alternatively, TSPs can provide “free EBBs” to rate-paying customers who choose to use the EBB provided the customer has a choice of receiving a credit - a reduced rate - for using EDI where the EBB is in rates. Finally, any transactional web page established by (or for) a TSP should communicate with the TSP's "back-end" systems so that users of EDI can accomplish business results comparable to those able to be accomplished via EBB. Additional standards would be developed in order to specify these components of this model. (See proposed standards, principles and definitions for this model.)



Model 1 -- Diagram

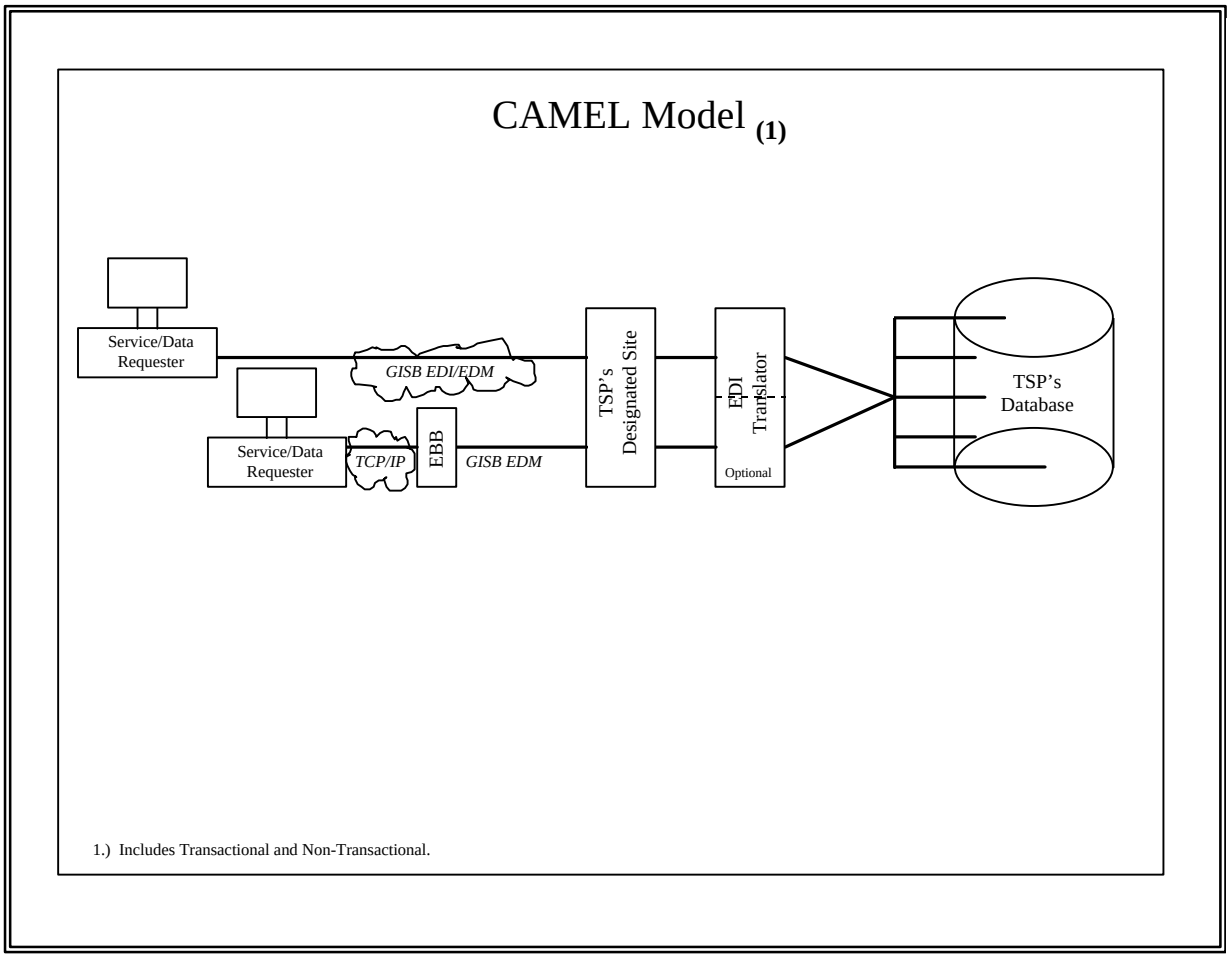
Model 2 -- CAMEL MODEL

The CAMEL Model (Consortium Advancing Mutual Electronic Links) is the product of five different models originally proposed at the commencement of deliberations of this task force: The Caldwell, Scheel, Hahn, Novak and Walker models. The resulting condensation is the CAMEL model which supports a dual approach to the transition to the Internet as the industry's solution to existing EBBs. The model supports parallel development of EDI over the Internet (GISB's work thus far) along with Web Sites that are standardized in a manner so that a common "look and feel" is accomplished. The CAMEL model takes no position on the future of EBBs beyond the discussion below.

It is clear that EDI will not be cost effective for every entity doing business in the natural gas industry. It is also clear that shippers employing EDI will not do so for every transportation service provider with which they trade because the level of business does not always justify the expenditure to set up the program at this stage in the industry's development of standardized business practices. Consequently, the CAMEL model recognizes that many companies would continue to utilize the existing EBBs offered by transportation service providers or use more up to date methods developed by the industry. The CAMEL model provides the blueprint to achieve that more efficient, up-to-date method by staging the timely development of a standardized interactive Web Site, which is the precise direction of the industry participants.

The CAMEL group has worked for cross segment support across the industry. The consortium, working within the considerably limited time frame allocated to its efforts, brought as many viewpoints into the CAMEL model as possible consistent with the objective of maintaining customer choice. The Consortium has resolved all differences in the key components of the six categories identified by the task force, [see model comparisons, Section 2], and will present more detailed principles of the model along with a example, proposed staging of the timely development for a standardized interactive Web Site and Web Site layouts, [see Model 2, Section 3].

Model 2 -- Diagram



SECTION I I -- COMPARISON OF MODELS

Excerpts from FERC Docket No. RM96 - 1 - 007; Order No. 587-G

The Commission is adopting the requirement that all transactions and information be conducted using the Internet.

GISB and the pipeline's should consider measures to ensure communication reliability, such as mirror (duplicate) servers and the use of a back-up ISP.

First , pipelines conducting business transactions electronically must conduct all such transactions using EDI format.

Thus, the pipelines and GISB need to create EDI datasets for all transactions not yet standardized.

Second, pipelines may, but will not be required to, provide interactive web sites. Pipelines will be permitted cost-of-service recovery in subsequent section 4 rate cases for the costs of the interactive web site only if the pipelines together with GISB create standards governing the access to, presentation, and format ("look and feel") of the sites.

As NGC notes, many electric utilities collaborated on developing a common Internet site that not only provided shippers with a standardized format, but significantly reduced the utilities' development costs as well. The pipelines and GISB should give serious consideration to pursuing a similar course.

All transactions available on the interactive web site also must be available through EDI communications.

Forth, by the June 1, 1999 conversion to Internet communications, communications using EBBs should cease.

The Commission will require pipelines to provide third-party connections as long as the third-party pays a reasonable fee, to be included in the pipelines' tariff, reflecting the costs of the pipeline of providing the connection.

All transactions provided on EBBs are covered by the regulation.

The pipelines should be prepared to move to the Internet by the June 1,1999 deadline regardless of whether standards are developed.

In addition, as discussed earlier, pipelines can save significant monetary and personnel resources as well as provide a more standardized product if, instead of each pipeline developing a proprietary solution, they collaborated on development of a standardized Internet communication system, as was done in the electric industry.

While pipelines should accommodate reasonably current versions of web browsers, they should not be required to accommodate browsers that have been out-of-date for several years. GISB should consider standards reflecting the level of HTML coding that should be supported.

DESCRIPTIONS OF CATEGORIES

ACCESS — Access covers the issues surrounding how to get to the Web pages

NAVIGATION — Navigation deals with the issues how to move around the page, the location, look and nomenclature of navigational tools.

CONTENT/FORMAT — Content deals with the data displayed on the Web pages. Format deals with the architecture of the Web page

UPLOAD/DOWNLOAD — Upload/Download deals with the ability to access and input data to the Web page instead of going directly into the Web page. (i.e. X12)

Alternate Definition[2]: Upload/Download deals with the ability to access and input data from the Web site without viewing the data on the Web site.

TIMING — Timing deals with priority and schedule for transition to the Internet.

SCOPE OF TRANSACTION STANDARDIZATION — This issue deals with the need to discuss, identify and explore what services need to be standardized with regard to transactional data during transition to the Internet.

[1] This date assumes complete implementation of all necessary standards, approval of appropriate regulations and testing throughout the industry.

TRANSACTIONAL WEB SITE COMPARISON CHART

	CATEGORY/KEY COMPONENTS	Model 1	Refs[2]	Model 2	Refs
	ACCESS				
1	The public Internet and internet communication protocols will be one mode of communication for accessing all pipeline business functions.	✔ in part	4.2.A, 4.3.A, 4.3.B, 4.3.C	✔	1
2	Web browser interface should use Internet compatible browser software.	✔ in part	4.3.B 4.3.C	✔	2
3	A TSP's EBB should be accessible via the public internet via standard browser software.	✘	4.2.B 4.1.A 4.3.F 4.3.Hi 4.3.Hii	✔	3
4	Any non-mandatory functions provided on web pages should be treated as a competitive offering and, consistent with GISB Standard 1.1.11, users of such services should bear the cost	✔	4.1.A 4.3.F	✘	
	Added by ISP Model Drafters (Model 1):				
4A	TSPs may, but are not required to, make their EBBs available over the Internet.	✔	4.3.F 4.3.Hi 4.3.Hii 4.1.A		
	NAVIGATION				
5	GISB should develop a standardized Web site navigational structure (Common Internet Format) to provide access to business functions.	✔ in part	4.3.B 4.3.C	✔	11, 12
6	Non-transactional data (informational Postings) under Standard No. 4.3.6 would be communicated over the Internet via a “common look and feel” standardized web page.	✔	4.3.C	✔	13
7	Standard navigation screens should be developed as templates.	✔ in part	4.3.C	✔	14
8	Navigation through the “menus” of the Common Internet Format should be consistent so far as location and technique.	✔ in part	4.3.C	✔	16, 18-24
	CONTENT/FORMAT				
9	The necessity and order of the existing 32 standard X12 data sets should be examined.	✘	4.3.D	✔	31
10	Standard field name descriptors or abbreviations should be used on all transactional web pages. [No standards for screen layouts, exact placement, font size, colors, etc.]	✔ in part	4.1.A 4.3.F 4.3.Hi 4.3.Hii	see 10A	
11	A list of standard transactions should be provided with the Common Internet Format.	✘	4.1.A 4.3.F 4.3.Hi 4.3.Hii	see 11A	

	CATEGORY/KEY COMPONENTS	Model 1	Refs[2]	Model 2	Refs
12	Consequently, the alternative solution is to simplify and consolidate, through standardization, the EBB screens.	✗		✗	
	Added by Camel Model Drafters (Model 2):				
10A	Standard field name descriptors or abbreviations should be used on all transactional web pages. [No standards for font size, colors, etc.] Standards to define screen layouts and data placement should be considered.			✔	30, 33
11A	A list of transactions should be provided with the Common Internet Format. [Master Menu]			✔	15
	UPLOAD/DOWNLOAD				
13	Valid codes available for data validation or selection on transactional web page should also be available in a downloadable format for use by customers and their third party service providers.	✗	4.3.Hii	see 13A	
14	Flat file uploads and downloads from the transactional web page should be allowed on a mutually agreeable basis.	✔ in part	4.3.I	✔	39
	Added by Camel Model Drafters (Model 2):				
13A	Common codes (i.e. DRN and D-U-N-S® Numbers) should be available for data validation or selection for viewing on transactional web site in a downloadable format for use by customers and their third party service providers. Cross references to proprietary numbers may be provided on a mutually agreeable basis.			✔	38
	TIMING				
15	The process of creating standards for transactional web sites should begin by 7/1/98.	✗	8.1.A	✔	40
16	The initial phase (of a multiple phase implementation) of common look and feel for internet transactions that are not currently standardized should be implemented subsequent to the implementation of the currently standardization data sets that are determined to be necessary on the web page.	✗	4.3.D	✔	41
17	The producer community would support delay of Web site implementation for transactional content past 6-1-99 in order to achieve greater standardization of TSP Web sites.	✗		See 17A	
	Added by Camel Model Drafters (Model 2):				
17A	Phased implementation for transactional content should begin 6-1-99 in order to achieve greater standardization of TSP Web sites.			✔	42, 43
	SCOPE OF TRANSACTION STANDARDIZATION				
18	This approach should begin with an industry 'survey' or 'study' of existing EBBs to determine the range of transactions that remain to be standardized.	✔ in part	4.3.D	✔	44
19	EDI Data Set development should address all current EBB transactional functions	✔	4.3.D 4.3.E	✗	45-48

	CATEGORY/KEY COMPONENTS	Model 1	Refs[2]	Model 2	Refs
20	All business transactions that are available in an electronic format should be defined in X12 datasets.	✔	4.3.D 4.3.E	✘	45-48
21	There should be a set of core data sets that are identified as mandatory for any party who offers electronic transactions to choose to offer those transactions electronically.	✔	4.3.D 4.3.E	See 21A	
	Added by Camel Model Drafters (Model 2):				
21A	There should be a set of core data sets that are identified as mandatory for any party who offers electronic transactions.			?	45-48

FOOTNOTES:

[2] The "Refs" column cross references the response to the proposed standards outlined for the model in section 3 of the report.

SECTION III -- MODEL 1 DESCRIPTION

MODEL 1

INDEPENDENT SERVICE PROVIDERS MODEL DESCRIPTION

Specific proposed standards, principles and definitions to implement Independent Service Providers Conceptual Outline:

4.2.A

"GISB EDI/EDM is defined as ANSI X12 Documents (EDI) exchanged via Internet designated site(s) utilizing Electronic Delivery Mechanism (EDM) standards."

4.2.B

For the purposes of GISB standards an EBB is an electronic method of presenting on a screen images containing data and which responds to user-entered keystrokes, without regard to mode of communications between the presentation screen and the source of the image. As used in GISB standards, EBB includes Internet EBB, web page EBB, dial-up EBB etc.

4.3.A

"Transactional functions required to be provided by Transportation Service Providers via EBBs (i.e., information required to initiate, execute and settle required transactions) should be transitioned to GISB EDI/EDM."

4.3.B

"The non-transactional data (Information Postings) listed as items 1 and 3 under Standard No. 4.3.6 should be made available via the existing GISB EDI/EDM standards."

4.3.C

"The non-transactional data (Informational Postings) listed as items 1 through 5 under Standard No. 4.3.6 should be communicated over the Internet via a "common look and feel" (i.e., information required to be available would be accessible via Internet web page(s) using common navigation and common naming conventions).

4.3.D

"Required transactional functions which should be provided by Transportation Service Providers via GISB EDI/EDM standards are those transactions identified within the:

a) 1.4.X,

b) 2.4.X (excluding 2.4.6 which is used only where the parties have mutually agreed to do so),

c) 3.4.X; and,

d) 5.4.X (excluding 5.4.4, 5.4.10, and 5.4.11, which are used only where applicable to TSP business practices),

sections of GISB's standards.

4.3.E

By June 1, 1999, GISB business practice and GISB EDI/EDM standards with respect to: 1) the ability to upload an offer, have it considered valid, and have it processed by the Transportation Service Provider; as well as, 2) the ability to upload a bid, have it considered valid, and be processed for bid evaluation and awarding purposes will be available and will be added to the list of required transactional functions under Standard 4.3.D.

8.1.A [8 denotes a new "general" section]

GISB makes no finding as to the specific timing of implementation of any Standard(s) that it establishes.

4.3.F

No Transportation Service Provider should be compelled to provide required transactional functions via an EBB (without regard to mode of communications with that EBB, including Internet EBB, web page EBB, dial-up EBB etc.) following a reasonable period of time after which the required transactional functions have become available via GISB EDI/EDM.

4.3.G [deleted]

4.3.H.(i)

A Transportation Service Provider which determines to provide transactional functions via an Internet EBB, Web-page EBB, or Internet accessible EBB (EBB) and which requires its trading partners to employ such EBB to achieve an intended transaction result or acquire transaction information, should request GISB EDI/EDM standards for such transactional functions; and, within a reasonable amount of time after such standards are approved and ratified, should support the conduct of such transactions using such standards with those trading partner(s) wishing to employ same.

4.3.H.(ii)

A Transportation Service Provider which determines to provide transactional functions via an Internet EBB, Web-page EBB, or Internet accessible EBB (EBB) should provide, upon reasonable request, tab-delimited downloads of files containing appropriate code value data and data element contents which code value data and data element contents are present in the EBB and used for validation or submission of a valid transactions via such EBB.

4.3.I

Where a transactional functionality, in addition to the required transactional functions, is provided by a Transportation Service Provider (TSP), and, the TSP's trading partners can achieve the same transaction result or acquire the same transaction information by a means other than use of the TSP's EBB (if any) then the requirements of [4.3.H -- insert applicable GISB Standard following adoption and ratification by GISB membership] do not apply. Only when a transaction can only be achieved via the TSP's EBB (without regard to type) would the use or support of EDI datasets become a requirement under [4.3.H -- insert applicable GISB Standard following adoption and ratification by GISB membership].

Thus, except where there exists a non-GISB X.4.X electronic data viewing/data collection mechanism which (without support for a GISB X.4.X functionality) would be the only mechanism available (i.e., where there is no provision for communication of a document via at least fax, e-mail, or phone-call), support for GISB X.4.X standards, other than those set forth in [4.3.D -- insert applicable GISB Standard following adoption and ratification by GISB membership], is on a mutually agreeable basis.

4.1.A

Users of EBB services for transactional functions (without regard to whether such EBB services are transitioned to Internet protocols and procedures or not) should bear the cost of that service. A Transportation Service Provider (TSP), at its option, may seek a determination, in an applicable regulatory proceeding, that on-going payment to the TSP by a trading partner for the TSP's transportation services (which services include the trading partner's no-fee use of Internet-EBB services for required transactional functions) meets the intent of this "users pay" principle with respect to such trading partner's receipt of Internet-EBB services for transactional functions from the subject TSP, provided, such paying user is provided the choice of using such EBB services, or not using such services, and where they do not use such services, receive a credit against their transportation service charges to reflect the fact that they employed GISB EDI instead of the EBB services. There is no requirement that a TSP seek such determination in any regulatory proceeding.

GISB Resolution:

With respect to the provision of Order 587-G which requires that all EBB functions must be accommodated in GISB EDI/EDM by 6/1/99, GISB recommends to the FERC that where the subject transactions can be accomplished pursuant to Standard 4.3.I, that the date for implementation of this requirement be extended, for any given transaction, until the first day of the month next occurring ninety days after GISB ratification of the appropriate standards relating to such transaction, and, where such transaction has not been approved as a standard by GISB, the date for implementation of GISB EDI/EDM requirement be extended until the Commission determines the status of such transaction with respect to its transition to GISB EDI/EDM.

Explanatory Discussion:

Proposed Standards 4.3.A, 4.3.B, 4.3.C, 4.3.H.(i), and 4.3.I clarify, and are within the meaning and intent of, Standard 4.3.6 which states in part:

"Transportation Service Providers should make all pertinent EBB functions and information available via the Internet or via technology recommended by GISB within a reasonable amount of time after each function or information has become standardized as appropriate by GISB.

Here the accent is on "*pertinent*". The *pertinent* functions and information are 1) the required *information* (the list of 1 through 5 in standard 4.3.6); and, 2) the required transactional *functions* which are clearly the already standardized 10 HPDR's, plus the remaining required, but yet to be standardized, uploads of Offers and uploads of Bids. As uploads of Offers and uploads of Bids have yet to be standardized, they are not yet in the GISB EDI/EDM group of standards. Once these were to be standardized, the "*pertinent*" functions and information referred to in the first paragraph after the listing of the five non-transactional items would have been so standardized. Proposed standards 4.3.H and 4.3.I also clarify that should a TSP

require parties to employ an EBB only, does the need for a commensurate GISB EDI/EDM standard arise. However, if a comparable non-EBB solution aside from a GISB EDI/EDM standard exists (i.e., at least phone, fax or email) then there would be no need for a particular TSP to support a GISB EDI/EDM standard for that activity or transaction as applicable. Of course those TSPs which wish to accomplish all activity via only electronic means can request a GISB EDI/EDM standard and then require parties to use either GISB EDI/EDM or an EBB methodology to accomplish that business result, users choice.

The other portion of 4.3.6 states:

"Within a reasonable amount of time, all EBB information, functions and transactions should be achieved via one mode of communications. Information and functions should remain available through existing systems until one mode of communication is available".

As to "all EBB *information*"; this term refers to the present list of required 4.3.6 non-transactional data. This data is now available on web pages. There exists no unmet requirement for additional information to be "available". Therefore, there is no additional "non-transactional information" to be made available via web pages and no new non-transactional standards need be formulated.

As to "all... ...functions and transactions [being] achieved via one mode of communications". The one mode of communications is clearly via the Internet. And, in this context, "one mode of communications" refers to the GISB EDI/EDM standards to achieve the functions and transactions listed in the X.4.X standards. With respect to the "all" portion of the sentence, if we interpret this to mean all *required* transactional functions, then, the only *requirements* (as set by GISB or FERC) that are not yet met for transactions and functions (i.e., those which are not yet achievable via the X.4.X standards) are: 1) the ability to upload an offer, have it processed by the TSP; as well as, 2) the ability to upload a bid, have it considered valid, and be processed for bid evaluation and awarding purposes.

Proposed Standard 4.3.D, makes it clear that while there may be other transactions and functions on TSP EBBs, they are not among the "required" transactional functions which are the only ones that need to be migrated to the Internet via GISB EDI/EDM.

Proposed Standard 4.3.E, makes it clear that the only new ones to be added are the upload of Offers and Uploads of Bids, and that once they are standardized they will be part of the list in 4.3.D.

Proposed Principle 8.1.A, makes it clear that when GISB publishes standards it makes no finding as to the timing of implementation of that standard. With the exception of the GISB resolution which is intended to buy time for post 6/1/99 implementation (the FERC's date) for the excess EDI standards, GISB should stay out of the deadline setting business.

Proposed Standard 4.3.F, gets to the heart of maintaining dual systems. No one should be compelled to maintain dual systems for required transactional functions after the availability of GISB EDI/EDM for such functions.

Proposed Standard 4.3.H.(i), as mentioned at the top of this explanatory discussion further clarifies the intent of the last paragraph at the end of the current 4.3.6.

Proposed Standard 4.3.H.(ii), adopts the data comparability provision from the original Caldwell Model.

Proposed Standard 4.3.I, as mentioned at the top of this explanatory discussion further clarifies the intent of the last paragraph at the end of the current 4.3.6.

Proposed Standard 4.1.A straightens out the competitive comparability issue and makes clear that users pay, that users may be deemed to have paid when they pay for transportation service (assuming the TSP wishes to provide EBB service for free and seeks regulatory determination of this) provided they have the choice of using the EBB (and paying for it in rates) or receiving a credit against rates if they use EDI instead. This applies only to EBBs transitioned to Internet web pages. In answer to concerns about GISB staying away from the compensability issue, this is true in spades for the whole issue of GISB making standards that, if it makes them determine the compensability and competitive posture of presentation systems. If people object to this language about compensability, then in the same breath they should require GISB to decline to come up with standards for Web-page EBBs.

Proposed Standard 4.1.A straightens out the competitive comparability issue and makes clear that users pay, that users may be deemed to have paid when they pay for transportation service (assuming the TSP wishes to provide EBB service for free and seeks regulatory determination of this). This applies only to EBBs transitioned to Internet web pages. It would not apply to existing “un-transitioned systems. This marks a softening of TransCapacity's position to the minimum acceptable to TransCapacity from a competitive stand-point.

SECTION III -- MODEL 2 DESCRIPTION

MODEL 2

CAMEL MODEL DESCRIPTION

PipeCo. Proposed Roadmap for Web Transition

ACCESS : Access covers the issues surrounding how to get to the Web pages.

I . Internet communication protocols will be the mode of communication for accessing all pipeline business functions. (Order 587G requires private communication networks to be allowed access that would bypass the public Internet. This wording would encompass EDI/EDM, private communication networks and access via a Web browser.)

2. Web browser interface should use Internet compatible common browser software. (See parenthetical on item 1.)

3. Web site should be accessible via the public internet using standard browser software. (See discussion on item 1.)

4. Transactional Web page data communication standards should allow various levels of user response and interactivity.

5. Transactional Web page data communication standards should not limit or dictate technology.

   Standards should allow the flexibility to support a forms-based batch process, including appropriate response (i.e. interactive Web equivalents of functional acknowledgment and quick response), and/or a fully interactive implementation.

   Standards should allow for flexibility in the choice of backend systems.

6. Current proprietary functionality should remain available until such time as that functionality is tested and implemented via an interactive Web site.

7. Minimum technical requirements for access to the transactional Web site are suggested below. These suggestions should be forwarded to FTTF for further development.

Connection Device	*28.8K or above*
Operating System	Multi-threaded & Pre-emptive
RAM	32Mb or more
Display Capabilities	800 x 600, 256 colors
Monitor >	12' Laptop
>	15" Desktop
Browser Capabilities	*Support cookies,* frames and nested frames, tables and nested tables.

Examples of User Workstations meeting this criteria:

Hardware	*P 200MHz or greater*
Communication Device	Direct Connect
	ISDN
	Satellite
	56KB modem
Operating System	Windows 95 or greater
	NT 4.0 or greater
	Solaris 2.6
	System 8
Browser	*Microsoft IE 4.0*
	Netscape Communicator 4.04 or
	Netscape Navigator 4.04

8. FTTF should define security for the transactional Web site after the Business Process Subcommittee has defined the security requirements for access, privacy, integrity and non-repudiation. Security requirements are suggested below that should be forwarded to FTTF for further development.

· At a minimum, the transactional Web page data communications from the browser to the Internet server should be capable of encryption and occur in a protected session.

· Client-side certificates should not be required.

· Userid/password authentication is required.

· The authentication process should be in an encrypted session.

9. FTTF should define any necessary standards for connecting with third party communication networks.

10. FTTF should define redundancy recommendations for Internet connections which allow the TSP to choose the options that are most cost effective for meeting its customer's requirements.

NAVIGATION - Navigation deals with the issues of how to move around the page, the location, look and nomenclature of navigational tools.

11. “Navigational Area" is the term used to describe the left side of the browser display providing links to the content area and other navigational links.

12. GISB should develop a standardized Web site navigational structure to provide access to business functions. (The relationship, structure and order for navigation on the Web site shall be established in a standardized manner.)

13. Informational Postings under Standard No. 4.3.6 should be communicated over the Internet via a “"common look and feel" standardized Web page.

14. Standard navigation screens should be developed. Standard navigation should be used for all functions.

15. All transactions should be' included in the site map.

16. Navigation through the 'menus'' should be consistent for location and technique.

17. “Transactional Functions'' is the term that identifies electronic transactions relating to Nominations, Flowing Gas, Invoicing, Capacity Release and other transactional functions (i.e. Contracts).

18. The "Transactional Functions" navigational link should appear and be labeled as such immediately above Site Map on the Informational Postings Web site. FTTF should review this standard to determine if secure Web pages (transactional functions) should be available from public Web pages (Informational Postings).

19. The categories and the labels for Transactional Functions should appear in the Navigational Area as follows:

    Nominations

    Flowing Gas

    Invoicing

    Capacity Release

    Links supporting Mutually Agreeable categories will follow these links. This does not preclude a further breakdown of sub-categories within each category from being listed in the Navigational Area.

20. The sub-categories and the labels for the category of Nominations should appear in the Navigational Area as follows:

    Nomination

    Nomination Response (if applicable) Confirmation

    Scheduled Quantity

    Scheduled Quantity for Confirming Party

    Links supporting Mutually Agreeable sub-categories will follow these links. This does not preclude a further breakdown of sub-subcategories within each sub-category from being listed in the Navigational Area.

21. The sub-categories and the labels for the category of Flowing Gas should appear in the Navigational Area as follows:

    Pre-determined Allocation Allocation

    Shipper Imbalance

    Measurement

    Links supporting Mutually Agreeable sub-categories will follow these links. This does not preclude a further breakdown of sub-subcategories within each sub-category from being listed in the Navigational Area.

22. The sub-subcategories and the labels for the sub-category of Measurement should appear in the Navigational Area as follows:

    Measurement Information

    Measured Volume Audit Statement

    Links supporting Mutually Agreeable sub-subcategories will follow these links. This does not preclude a further breakdown of sub-sub-subcategories within each sub-sub-category from being listed in the Navigational Area.

23. The sub-categories and the labels for the category of Invoicing should appear in the Navigational Area as follows:

    Invoice

    Payment Remittance

    Statement of Account

    Links supporting Mutually Agreeable sub-categories will follow these links. This does not preclude a further breakdown of sub-subcategories within each sub-category from being listed in the Navigational Area.

24. The sub-categories and the labels for the category of Capacity Release should appear in the Navigational Area as follows:

    Offers

    Bids

    Awards

    Links supporting Mutually Agreeable sub-categories will follow these links. This does not preclude a further breakdown of sub-subcategories within each sub-category from being listed in the Navigational Area.

CONTENT/FORMAT Content deals with the data displayed on the Web pages for transactional functions. Format deals with the architecture of the Web page.

25. For Transactional Functions, "Content Area" is the term used to describe the area where transactional information is displayed. The Content Area includes: page header, content, page footer.
26. Transactional Web page standards should be designed for human interaction and visual implementation.
27. A Web page may display information (data elements and code values) from multiple functionally related EDI datasets (i.e. nominated volume and scheduled volume may appear on the same Web screen).
28. There will generally be a one-to-one relationship of data elements used for EDI to the data displayed on Web pages.
29. Code descriptions should be used in place of code values where appropriate.
30. Standard field name descriptors or abbreviations, and navigation and functional screen layouts should be used on all transactional Web pages. [No standards for font size, colors, etc.] Functional screen layouts are defined as standards that divide each transactional screen into separate areas and define which data elements belong in that specific area.

31. Transactional Web pages should support GISB Business Practice Standards in the following phased implementation stages:

· nominations

· flowing gas

·invoicing

·capacity release

The order (priority) of transitioning the existing 32 standard X12 data sets within each of the listed categories should be examined. (This does not preclude a service provider from accelerated implementation.)

32. The Web site should include the name, nickname, or name abbreviation of the Transportation Service Provider in the browser title bar.

33. Transactional Web pages should generally use the same nomenclature that is defined for EDI and Informational Postings, including data set names, data element names, code descriptions, abbreviations and message text.

34. Principles and standards for placing data elements on a Web page:

· Display space for content on Web sites should be maximized.

· On the Web sites the use of scrolling, especially left to right, should be minimized.

· Information that is constant for the displayed content section may be placed in the page header.

· Related data elements may be listed together so long as the standard flat file construction is not altered. Example: If a pipeline chooses to display Fuel (proposed mutually agreed data element) on the nominations screen, it would be after the Rank data element.

· Data elements that generally have default values may be placed last to minimize scrolling. Example: Beginning/end time for nominations may be listed last on the Nominations screen because it rarely changes.

Display of column and column headings for unused data elements should not be required.

· Totals, when appropriate, should be displayed within the content section of the Web page in a manner which distinguishes them from the data.

· Links to related functions are placed in the header or footer.

· Navigation for lookups, if provided, is placed near the field being looked up.

35. Standards for placing data elements on the Nominations related Web pages for the PATHED model:

· Transactional Web pages displaying or allowing input for receipt/delivery data elements should display receipt data elements on the left and the corresponding delivery data elements on the right.

· Allow multiple nominations to be entered and/or displayed on each Web page.

UPLOAD/DOWNLOAD **Upload/Download deals with the ability to access and input data to or from the Web site without viewing the data on the Web site.**

36. "Download" is the term used to describe the retrieval of information from a Web site in a format suitable for storage.
37. "Printing" is the term used to describe the typical printed layout derived when a document is printed from a display tool (browser, word processor, etc.)
38. Common Codes (i.e. DRN and D-U-N-S® Numbers) should be available for data validation or selection (viewing) on a transactional Web site and in a standardized downloadable format for use by customer and/or third party service providers. Cross-references to proprietary numbers may be provided on a mutually agreeable basis.
39. Standardized flat file uploads and downloads from the transactional Web page should be supported.

TIMING **Timing deals with priority and schedule for transition to the Internet.**

40. The process of creating standards for transactional Web sites should begin by 6/l/98.
41. As a general guideline, the initial phase (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 datasets to the Web. This does not preclude the implementation of new standardized data sets as they become available.
42. Phased Web site implementation for transactional content should begin 6-1-99 in order to achieve greater standardization of TSP Web sites.

    The purpose of this standard is to recommend a slower schedule to improve the quality of the standards and their implementation.
43. See attached chart for proposed phased implementation.

SCOPE OF TRANSACTION STANDARDIZATION **This issue deals with the need to discuss, identify and explore what services need to be standardized with regard to transactional data as we transition to the Internet.**

44. This approach should begin with a GISB notice to all members requesting additional transactions for EDI to be submitted for evaluation and processing by June 1, 1998. In June, GISB will begin to prepare a plan for EDI development, processing all requests as efficiently as possible.

    EDI data set development should address all current EBB transactional functions.

    All data elements required for business transactions should be included in one or more EDI datasets or be derivable from the data elements included in one or more EDI datasets.

47. There is displayed information on transactional Web sites which does not have a comparable data element in EDI; however, the data is derived from other EDI data elements. (e.g. totals, reports, calculations) Provision of such information does not require the development of an EDI dataset to accomplish a one-to-one match. However, any transactional Web function should be derivable from information available in EDI datasets.

BUSINESS PRACTICES BEFORE STANDARDIZATION **This issue deals with the need of the industry to have the flexibility to mutually agree to initiate a new business practice or to modify an existing business practice and try it out for a period of time before submitting it to GISB for standardization.**

48. Any group of parties should be able to mutually agree to initiate a new business practice or modify an existing business practice, and within 18 - 24 months after implementation of such practice submit a request to GISB for standardization.

Model 2: CAMEL - Timing Transition to Internet

Order	EDI Dataset	Data entry or validation	Implementation Date
1	1.4.1 Nominations	Yes	June 1999[1]
1	1.4.2 Nominations - Quick Response		June 1999*
1	1.4.5 Scheduled Quantity		June 1999*
1	1.4.6 Scheduled Quantity for Operator		June 1999*
1	1.4.3 Request for Confirmation		June 1999*
1	1.4.4 Confirmation	Yes	June 1999*
2	2.4.3 Allocation		Nov. 1999
2	2.4.4 Imbalance Reporting		Nov. 1999
2	2.4.5 Measurement Information		Nov. 1999
2	2.4.1 Pre-determined Allocations	Yes	Nov. 1999
2	2.4.2 Pre-determined Allocations - Quick Response		Nov. 1999
3	3.4.1 Invoice Statement		April 2000
3	3.4.2 Payment Remittance		April 2000
3	3.4.3 Statement of Account		April 2000
4	5.4.10 UPPD - Bidder Confirmation	Yes	June 2000
4	5.4.11 UPPD - Bidder Confirmation Validation		June 2000
4	5.4.12 UPPD - Final Disposition		June 2000
4	5.4.17 Notes/Special Instructions		June 2000
4	5.4.6 Electronic Withdrawal Upload	Yes	June 2000
4	5.4.7 Upload to Pipeline of Prearranged Deal (UPPD)	Yes	June 2000
4	5.4.8 UPPD - Validation		June 2000
4 BC	5.4.9 UPPD - Notification		June 2000
5	5.4.1 Firm Transportation and Storage - Offer		June 2000
5	5.4.2 Firm Transportation and Storage - Bid Review		June 2000
5	5.4.3 Firm Transportation & Storage - Award Notice		June 2000
5	5.4.5 Firm Transportation & Storage - Withdrawal		June 2000
6	5.4.13 Operationally Available & Unsubscribed Capacity		TBD
6	5.4.16 System-Wide Notices		TBD
6	2.5.6 Measured Volume Audit Statement		TBD
6	5.4.4 Replacement Capacity		TBD
6	5.4.14 Upload of Request for Download of Posted Data Sets		TBD
6	5.4.15 Response to Upload of Request for Download of Posted Data Sets		TBD