Overview

The reporting of market data product consumption and invoicing for data product use remains a complicated process that affects data providers, data vendors, and data end-user customers. Each participant in this process devotes significant resources to the tasks that they are required to perform. Data vendors must report their data consumption to the providers of the data. Customers who redistribute data internally often have reporting obligations to their vendors and data providers and often desire to reconcile the various charges from their data vendors and data providers. Data providers use these consumption reports to prepare invoices for their vendors and end-user customers, as well as for audit and compliance purposes.

Over time, data providers, data vendors, and end-user customers have each created specifications and procedures for reporting, invoicing, and reconciling data product inventory and data charges. The adoption of the Internet for data delivery and data consumption reporting has increased the number of participants and the variety of processes in use. As a consequence, there is little standardization throughout the various participants and processes.

The objective of the FISD Billing and Invoicing Working Group (B&IWG) is to identify the practices, specifications, and processes that can be standardized. The working group believes that by adopting these recommendations, in whole or in part, invoice providers will enable their customers to process invoices more quickly which will result in more timely payments to the providers. The Working Group has created two documents for invoice providers’ consideration:

(1) ‘Best Billing Practice’ recommendations have been created to define suggested business rules and procedures.

(2) The standard data elements used to generate invoices and report product inventory have been defined and organized in the Market Data Invoicing Schema (MDI Schema). A number of model invoices are included that demonstrate how the various data elements could be presented.

In these documents, a Provider is any organization that sends bills or collects fees from its Customers. Providers include exchanges, content providers, and market data vendors. A Customer is any organization that receives bills or pays fees to a Provider. Customers include market data consumers and market data vendors.

Best Billing Practices:

The Best Billing Practice Model identifies the reporting, billing, and payment practices that it believes are optimal for the market data industry. The group is documenting these
practices for the industry in the hopes that they will be adopted by the Providers (exchanges, vendors etc.) that send invoices to their clients. This document will be updated, as needed, by the FISD B&IWG.

The B&IWG recognizes that Providers’ adoption of the Model, in whole or in part, may be a long-term process as the Providers update and modernize their billing and accounts payable systems. To assist Providers in prioritizing among these recommendations, the Working Group has highlighted six recommendations that are considered to be particularly important. These six recommendations – sections A(2), A(5), B(4), D(2), E(1) and E(4) - are highlighted using **bold, italics**.

A. **Billing Options:**
   1) *Invoice information should be made available in an electronic format (e.g., .txt, .csv etc.) that facilitates automated processing and analysis of the data contained therein (i.e., not .pdf file).*
   2) Except as expressly requested by a specific Customer, Providers should **not** send electronic copies of invoices as e-mail attachments.
   3) Providers should offer secure electronic access to a repository through which Customers can access original invoices and copies of their invoices in the event that they did not receive or retain the invoice that was originally sent.
   4) Providers should initiate the invoicing process with their Customers. That is, a Provider should send to its Customers a notice that an invoice has been created and is ready to be accessed, rather than expect Customers to periodically pick-up their Invoices from the Provider. The Provider should then send a Customer a reminder if the Customer does not electronically pick-up the invoice.
   5) The Provider’s e-mail notice that a new invoice is ready to be accessed should use the following standard format for its subject line:

   [Provider Name] [Account Number] [Invoice Number] [Period Covered]

   6) **Providers should offer the option of Self-invoicing in situations where a Customer controls its own users’ access to a Provider’s services and reports those users to the Provider. Self-invoicing is where a Customer creates its own invoice for a Provider’s service, based on the Customer’s control of its users’ access to the service. The Customer then submits the invoice and associated payment to the Provider.**

B. **Invoice Information:**
   1) Electronic files that are made available by the Provider should be synchronized with the paper invoice that it supports both in terms of the data base that is the source of the information and the timing of activity reflected or included in the invoice.
2) The invoiced amount on the invoice should match the inventory data provided on the invoice.

3) Providers should give their Customers the option of receiving invoices with different levels of detail, namely (a) a notice that a new invoice is available to be accessed by the Customer through a secure web site; (b) a summary of the new invoice with high-level break-outs of the overall charges; and (c) a complete and detailed report showing the current inventory and current period inventory changes for which the Provider is billing the client.

4) **Customers should be provided with a way to review the usage reporting information that vendors provide to exchanges as the basis of the Customers’ exchange invoices. Vendors should provide Customers with access to this information both (a) prior to their submission to the exchanges so that inconsistencies may be detected prior to the issuance of the exchange invoice and (b) after their submission to the exchanges so that the source of billing inconsistencies may be identified. Vendors should provide Customers with notice that the reporting information is available for review and the projected date on which the data will be sent to the exchanges.**

5) Product descriptions on invoices should match product descriptions in Providers’ contracts.

6) Customer population information on invoices should indicate whether the population was taken from current reporting, or a prior month. The indication could consist of a (a) flag or (b) posting of the date of receipt of the report used to create the invoice.

7) The Billing Schema document provides complete details on the data elements that are desired for billing.

8) Invoices should include the Customer’s Provider-assigned account numbers. Customer's Provider assigned account numbers should be unique.

9) Certain countries, including the UK, by law require the invoice to show the sales tax in local currency as well as billed currency. In the UK this is known as sterling equivalent. See rule 16.4 or the UK VAT Guild.

10) The format used for all dates should indicate the day, month and year. Whatever format is used it needs to be clear which number refers to the year, month and day.

C. Payment:

1) Automated electronic payment should be facilitated. Provider should provide all necessary electronic payment information – ABA number and routing instructions, wire transfer numbers, ACH numbers – for domestic and international payments.
D. Customer Service:
1) Providers should offer ready access to their billing departments that clients can approach regarding questions, complaints, corrections etc. Both telephone and e-mail access should be offered. Escalation steps and points of contact (including account managers) within the Providers should be clear.

2) Each customer should have a dedicated representative responsible for their account, or at least each question/issue should be “owned” by a representative until its resolution.

3) Providers should provide a mechanism that allows Customers to track the resolution of their issue.

4) Providers should provide web access that allows them to view the state of their populations, recent invoices, and their payments.

E. Billing Cycles:
1) A uniform monthly cut-off date for reporting across Providers is desirable. That is, all Providers that collect population reports as the basis for their billing should commit to including in their next invoices all reporting received prior to the standard cut-off date (e.g., the 15\textsuperscript{th} of each month).

2) Providers should only bill in full-month increments and refrain from billing based on pro-ration of monthly usage. The use of pro-rated billing only adds complexity for both the Provider and Customer without giving either a consistent economic benefit.

3) Providers should only bill in advance for amounts that are contractually or otherwise committed and therefore unlikely to be subsequently adjusted. Billing in arrears is desirable for charges and populations that can fluctuate on a monthly basis.

4) Monthly billing periods are preferred over quarterly billing periods.

F. Reporting:
1) Zero populations should be reported using the numeral 0 – i.e., not a blank, space, etc.

2) Each reporting organization should take its snapshot consistently at the same time of the month, each month. Providers should not require that all vendors and customers take their population snapshots on the same specific day of the month.

The MDI Schema
The MDI schema defines the standard data elements and the database structure that can be used to electronically report data consumption and invoice details. It was agreed upon that identifying and standardizing data elements is an important part of simplifying this entire process. Accordingly, the data elements have been defined and organized by
logical group. The xml-based schema provides a good compromise between standardization and the flexibility to be suitable for all involved parties.

The MDI Schema consists of four groups of data elements. These groups are:

1) Invoice description information
2) Information about the invoice producer
3) Information about the invoice recipient
4) Invoice detail that lists each location, the product inventory, and charges

Certain data elements, such as the invoice description data, are required. Other data elements such as the invoice producer’s bank information are optional.

Defining reporting and invoicing data elements is the first step in standardizing the electronic reporting of this information. Standardized data elements allow senders and receivers to relate this information to their own internal database elements. With the data elements defined, it is possible to load any MDI data into a database for reconciliation and cost allocation purposes. Invoice data can be summarized. Invoiced data can be extracted and distributed to various departments or recipients. Different MDI data sets can be combined into one file.

The greatest asset of the MDI schema is that Customers who incorporate the schema will no longer be required to support a different data structure for each entity that they work with. We hope that this is the first step in reducing the administrative burden of reporting, invoicing, and reconciling market data product consumption.