TCB Data Systems, Inc.
Reporting Guidelines

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1.0   Where Do I go from here?

First – Read this document.
It is important to understand your reporting obligations. This document is dedicated to helping you understand just that. Market Data terms are defined, different product types are described, reporting methods are explored, and file layouts are included. This document contains all that you need to know to start reporting your market data to your information providers using TCB Data's systems.

Second – Go to www.tcbdata.com
Read all the overview documents available. The overviews give a more in-depth view of the different systems available on the site.

Third – Contact your information provider for setup information
Only information providers are able to set you up on tcbdata.com. They will supply you with your username and password. All product codes must be set up by the exchanges before they can be reported.

Fourth – Enjoy the service and support of TCB Data
By using the TCB Data system to report your market data obligations, you have the peace of mind in knowing that your data is correct, that your invoices are current, and that you have all your data in one place. No sending multiple reports in multiple formats every month – just log on, enter your data, and you're finished. If there is a problem with your data, TCB Data representatives will notify you. If not, your confirmation report will be emailed to you.

2.0   Glossary of TCBData terms

Account Number – Each customer location is assigned a unique account number (sometimes referred to as a 'Vendor Account Number' or VAN) by the vendor. Market Centers that maintain a customer inventory database use the account number to link each vendor customer account number to their own internal customer ID.

Controlled Device – A controlled device is a workstation or server whose access to data is controlled by a vendor.

Data Feed – Raw data received from a unique network wire with data. Vendors are obligated to report what they are doing with this data feed wire.

DDR Manager – Data feed Manager provides the capability to easily administer the data feed customer's account information.   DDR Manager outputs customer declarations in a variety of formats.

DDR – Direct Device Reporting System. An online interface for data feed users to report their activity to market data providers. Customers can submit their declarations on-line or by spreadsheet upload. Data product consumption can be by location or by user ID.

Location - Each specific street address where a device is capable of receiving market data.

Market Center – An organization that matches buyers and sellers and creates market data products.

Market Data Manager (MDM) - The Market Data Manager program is a windows-based data management and reporting program designed to interface with the Automated Reporting Services Host system. It provides information providers (exchanges) with a flexible and easy to use system for receiving, tracking, and billing for vendor and customer data usage. It automates vendor report processing, allowing multiple accounts to be linked to a single location. Market Data Manager provides a complete system for administering market data, with components covering every aspect of market data management.

MISU Credit – A multiple Installation, Single User Credit can be requested from market centers that sell their data products once per user, regardless of how many of the user's devices access the data. A **MISU Report** is a spreadsheet report that lists each user ID and each access to each data product. Market Centers use this report to credit the charges for the additional accesses.

Product Code – Is a code used to identify a market center's data product. It is up to ten alpha-numeric characters long. Product codes are used by TCBData to route the information to the appropriate market center. Product codes are often setup with a vendor product code and a market center product code so that vendor codes are translated into the code the market center uses to track and bill for the use.

Retroactive Adjustment – Is an inventory change (add or delete) that occurs prior to the current billing period. Retroactive adjustments trigger charges or credits for each month that predates the billing period. Market Centers have differing policies on how far back they will honor credits.

Site Manager –Allows each exchange to maintain the same ID number for the same customer location. This is necessary because each vendor has their own numbers for their customer, and the site manager establishes a common ID, called the Global Location Identifier (for ADFR customers only).

SOLAR – The Subscriber On-Line Activity Reporting System, SOLAR, is menu-driven, web-based program that enables users to create and manage their customer name, address, and inventory information. SOLAR can be updated manually on-line or by one of several spreadsheet formats. SOLAR creates market center outputs in the required format and delivers then according to the instructions.

SOLAR Invoicing Manager (SIM) – The Subscriber On-Line Activity Reporting System Invoicing Manager is a web based customer management and invoicing system. The SIM System is highly integrated with the VARS reporting

portal. All aspects of managing market data product sales are controlled by the SIM System. Product inventory history, invoice history, contact, audit, document management and other components are part of the SIM System.

Subscriber - Any person, entity or device receiving market data from a vendor, whether or not the vendor charges a fee for such receipt.

Usage Based Reporting – Electronic reporting procedure in which the vendor reports the entire amount of individual quotes and/or activated user id's of its end users without stating locations. Usage reporting allows vendors to report data consumption by customers from systems that are not required to report user names and address. Internet quotes and telephone response ports are example of usage products.

Uncontrolled Device – An uncontrolled device is a workstation or server whose access to data is controlled solely by the customer.

VARS – Vendor Automated Reporting System. The reporting standard used by market data vendors to report subscriber activity to market data providers. Used by vendors to report data consumption by their professional customers. By uploaded VARS files to TCB Data Systems, Inc, only product summary is kept.

Vendor - Any person or entity who or which receives a direct feed from the information provider and has executed or will execute a "vendor agreement" with the provider. This vendor agreement entitles the vendor to disseminate provider market data to end-users.

Vendor Code – Character string which identifies a vendor in electronic reporting. On www.tcbdata.com, the vendor code is the key which identifies the user.

VRXML - VRXML is an XML-based interchange format and common data dictionary on the fields needed for market data billing, reporting and inventory management. The initial draft was developed by the New York Stock Exchange (NYSE) to improve the quality, timeliness, and efficiency of reporting information from vendors

3.0 Methods of Reporting Through TCB Data Systems, Inc.

Direct Device Reporting is used by data feed customers. For every calendar month, all devices (workstation or server) that access each data product must be reported. Customers can report total accesses by location or alternatively, can report each user ID at each location (user-level detail).

Usage based reporting allows vendors to report monthly the total quantity of data products accessed during the month. Customer name and address information is not supplied. Examples of usage-based products are per-quote inquires and non-professional customers.

SOLAR is used by redistributors to manage and report data product use by professional customers. The Subscriber On-Line Activity Reporting System (SOLAR) can be updated manually, on-line, or by file and spreadsheet upload. SOLAR provides a convenient audit trail of the reporting history and offers several management and analysis reports. SOLAR creates outputs that conform to each market center's reporting specification. SOLAR allows redistributors to maintain one reporting process to report to all of their market centers, rather than creating customized outputs that conform to each market center's reporting requirement.

Emailed or ftp files are **not** accepted unless otherwise pre-arranged with TCB Data.

If you are not sure which system applies to you, please either contact your information provider, or TCB Data at admin@tcbdata.com*.*

4.0   Subscriber Reporting

4.1 How is Subscriber Reporting set up?

If the vendor meets the prerequisites for subscriber based reporting, then it must report the number of devices (User IDs or Server IDs) consuming each data product at each customer location. Each location is thereby assigned a unique 'account' number by the vendor. Data product inventory changes include an effective date (sometimes called an activity date) that indicates when the service commenced or removed.

The first report a vendor uploads must be a full, or starting, inventory. All required data elements must be entered or included in a file upload. Subsequent monthly reports usually contain only the changes (adds and deletes) that occurred since the prior report was submitted. Alternatively, complete inventory snapshots can be uploaded, but often because of the large amounts of data, this is not practical.

Smaller vendors or vendors with few inventory changes to report each month can easily and effectively maintain their inventory by making changes on-line. There is no action required for existing customers who do not have any changes.

The effective date allows vendors to report inventory adjustments to months prior to the actual month being reported. These 'retroactive adjustments' will trigger charges and credits from the market center. However, not all market centers honor retroactive corrections/adjustments. Vendors are encouraged to contact their information provider(s) before including a retroactive correction which is effective before the preceding month.

There are two types of subscriber reports:
- An Total Database report contains the total inventory of all subscriber codes and all product codes on an appointed day
- A Movement or Transaction report contains all the changes which have occurred since the last report.

Total Database reports are to be sent only upon request from the exchange or when the vendor is reconciling SOLAR inventory against the total database report produced by the vendor's internal management system.

Subscriber reports are due once a month, even if there is no movement in inventory. In order to facilitate timely reports, TCB Data will send out reporting reminders.

New subscriber
When licensed information is released to a new End User or a new location for the first time, the vendor must report the new subscriber account number, which it has newly allocated to the location, along with the relevant address data.

Change of name or address
If the name or address of a location changes, the vendor must report this by transmitting the subscriber code together with the new name or address. Vendors using the SOLAR system just have to enter the new information on-line, and it will be transmitted to all participating exchanges. Vendors using their own VARS system must be able to produce a correct formatted file, i.e., if there is a name or address change but no inventory change, the VARS file should include an 'ADD 0' transaction line.

Change in inventory

If the quantity of data products accessed at a location has changed due to:
- - a change in the number of the user ID's accessing a data product
- - new data product(s) are added
- - existing data product has been permanently de-registered

the vendor must report the changes regarding the inventory by entering the product code, the date and the scope of the change, as well as the new inventory with regard to the product code in the report.

4.2 VARS file format
for vendors who will upload files to tcbdata.com

Record Type 0 HEADER RECORD

Field Name	Type	Size	Comment
Record Type	alpha	1	Must be "0"
Vendor ID	alpha	3	Assigned by provider
Date File Created	num	8	Format: YYYYMMDD
Time File Created	num	6	Format: HHMMSS
File Type	alpha	1	"T" for transaction; "D" for total database
Report Version	alpha	3 (or 0)	"1.1" **ONLY** IF USING THE 10 DIGIT QUANTITY FIELD. If quantity field is 5, leave blank.

Total Size		22 (or 19)	

Record Type 1 CUSTOMER DATA RECORD

Field Name	Type	Size	Comment
Record Type	alpha	1	Must be "1"
Filler	alpha	3	Blank or vendor ID
Vendor's Subscriber ID	alpha	10	Required
Name 1	alpha	30	Required
Name 2	alpha	30	Optional
Address 1	alpha	30	Required
Address 2	alpha	30	Optional
Address 3	alpha	30	Optional
City Name	alpha	16	Required
State Name	alpha	12	Required
Postal Code	alpha	10	Required
Country	alpha	30	Required
Contact Name	alpha	30	Optional
Contact Telephone	alpha	30	Optional
Comment	alpha	70	Optional

Total Size		362	

Record Type 2 TRANSACTION RECORD

Field Name	Type	Size	Comment
Record Type	alpha	1	Must be "2"
Vendor's Subscriber ID	alpha	13	Optional
Vendor Product Code	alpha	10	Required
Transaction Quantity	num	10	Required (Positive Integer) ***
Customer Total Quantity	num	10	Required (Positive Integer) ***
Action Code	alpha	1	"A" or "D" only
Effective Date	num	8	Format: YYYYMMDD

	Total Size	53	

Record Type 8 TRAILER RECORD

Field Name	Type	Size	Comment
Record Type	alpha	1	Must be "8"
Vendor Entry Date	alpha	8	Format: YYYYMMDD
Vendor Entry Time	alpha	6	Format: HHMMSS
Vendor Product Code	alpha	10	Required
Total Added Product	num	10	Total "A" qty for PC in file ***
Total Deleted Product	num	10	Total "D" qty for PC in file ***
Total Product in Service	num	10	Grand total for product code ***

	Total Size	55	

Record Type 9 END OF FILE DESIGNATOR

Field Name	Type	Size	Comment
Record Type	alpha	1	Must be "9"
Vendor ID	alpha	3	Assigned by provider
Date File Created	num	8	Format: YYYYMMDD
Time File Created	num	6	Format: HHMMSS
Record Count	num	6	Total number of lines in this file, including type 0 and 9.

	Total Size	24	

*** The quantity field size of 10 applies to vars files with a report version of "1.1" at the end of line 0. If using 5 digit quantity fields, then use 3 blank spaces in the report version field.

Vars files in this format can also be uploaded into SOLAR. See the next section for specifics.

5.0   SOLAR Reporting

The Subscriber On-Line Automated Reporting System (SOLAR System) has been developed to facilitate timely, accurate reporting of subscriber information. The system provides an electronic reporting facility intended to replace paper reports and eliminate inherent errors. TCB Data Systems, Inc. (TCBD) has developed and manages the customized reporting system designed for this purpose.

The SOLAR System is easy to use. Its features include:

- multiple ways of entering data
- an audit trail for tracking customer accounts and activity
- a sophisticated database system for account management
- multiple output file formats (vars, vrxml, xls, etc.)
- a historical record of subscriber reports that have been sent to providers,
  reporting capability by account, send date and provider

Using SOLAR, information vendors capture activity changes that occurred in a given reporting period. Once flagged for processing, these changes are then transmitted to the information providers.

File processing includes:

- Collect pending activity data or inventory snapshot
- Perform edit checks and formatting
- Convert vendor product codes to provider product codes
- Format provider files to their required format
- Route reports to the appropriate mailboxes
- Notify providers by e-mail that their reports were delivered

Data is delivered to the appropriate information provider using a Product Code Table which contains all products distributed by information vendors. Vendors and providers can use different codes for the same product, but both must agree on what codes will be used for each product. After vendors and providers agree upon the code(s), the providers will enter the codes in the Product Code Table. Vendors should check the product code table periodically.

SOLAR allows vendors to transmit subscription activity reports to multiple information providers simultaneously. As vendors update the SOLAR database with their customer and service changes, those changes are captured. When the changes are marked for processing, they are distributed to the Information Providers.

5.1 SOLAR Manual Entry
SOLAR information can be entered on-line in a few easy to follow pages. Vendors can set up new accounts, change current account information, and enter all data transactions. A user guide and on-line help is available, plus customer service support during normal business hours (US Eastern Standard Time). Manual entry of SOLAR information is mostly used by smaller data redistributors who use SOLAR as their recording database.

5.2 Spreadsheet Upload

The SOLAR Spreadsheet Load Utility enables users to submit their inventory changes in a Microsoft Excel spreadsheet. This convenient process eliminates the need for manually entering customer inventory changes into the SOLAR System, and significantly reduces the programming time required for creating and maintaining an database-driven application for directly producing a formatted ASCII text file Subscriber Report.

The SOLAR Spreadsheet Load Utility reads a conforming MS Excel spreadsheet, updates the user's SOLAR database, and produces the Subscriber Report ASCII text file output.

Users log into the SOLAR System with their web browser and select the 'Spreadsheet Load' push-button. Next a file-browse window is displayed allowing the user to identify the spreadsheet for uploading. Once uploaded, an automated process reads through the spreadsheet until a blank line is encountered and processing is stopped. If the spreadsheet is error free, the tables are updated with the inventory changes. The user can then upload additional spreadsheets or submit the data for processing. If errors are returned, they must be corrected and the spreadsheet re-uploaded before a report can be generated.

5.2.1 Spreadsheet specifications

The spreadsheet used for the SOLAR Spreadsheet Load Utility must be a Microsoft Excel spreadsheet. There should be no, or minimal, formatting as the file will be automatically processed and the formatting must be skipped over.

The 'Column Name' headings must be entered exactly as they appear in the following table. These headings are used to identify what data element is in what column. The columns can be in any order so long as all of the required columns are included. Undefined (extra) columns will be ignored.

Each spreadsheet column contains one type of data element and there can be only four categories of columns (or data elements). These categories are, Required, Required/Lookup, Optional, and Undefined.

Required columns must have a data element for every row (inventory change transaction) in the spreadsheet. Invalid or blank elements will cause the entire spreadsheet to be rejected.

Required/Lookup columns can be omitted or have blank elements so long as the data elements for that account can be found in the SOLAR database. If the data elements cannot be found in the SOLAR database, the spreadsheet will be rejected. If the column (or data element) is included in the spreadsheet, that information will be included in the subscriber report output.

Optional columns do not have to be included in the spreadsheet or the cells can be blank. If the column cells are blank, or not found in the spreadsheet, no errors will be generated.

Undefined columns are any columns that do not have headings as specified in the spreadsheet layout. These columns will be ignored.

5.2.2 Spreadsheet layout

Layout Specifications

Column Name	Type/Size	Description
Account	C/10	Required. Branch location account number
Paccount	C/10	Required. Main location account number. Can be same as account.
ShortName	C/7	Optional. Alpha Name Sort
Name1	C/30	Required
Name2	C/30	Optional
Address1	C/30	Required/Lookup
Address2	C/30	Optional
Address3	C/30	Optional
City	C/16	Required/Lookup
State	C/20	Required/Lookup
PostCode	C/10	Required/Lookup
Country	C/30	Required/Lookup
LocType	C/10	Blank, Internal, or External only
ContactLName	C/30	Optional. Contact Last Name
ContactFName	C/30	Optional. Contact First Name
Telno	C/30	Optional
FaxNo	C/30	Optional
Email	C/100	Optional
EffDate	D	Required
[Transaction Information]		
Product	C/10	Required
Changeqty	N/5/0	Required Positive=Add quantity Negative=Delete quantity
Action	C/1	Optional if changeqty is positive/negative Otherwise, Required ('A'dd or 'D'elete only)
Newtotal	N/5/0	Required

Notes:
- Each spreadsheet row is organized into two parts; *customer information*, and *transaction information*. For each row, there can only be one set of customer information. There must be at least one set of transaction information, but optionally, there can be multiple sets of transaction information columns. With multiple sets of transaction information columns, each set would be used to report a different product code.
- If the *Action* column is included, the *Changeqty* column must be a positive number and the 'A' or 'D' in the Action column indicates whether the Changeqty has been added or deleted from the account.
- If the *Action* column is not included, the *Changeqty* must be a positive quantity for additions, and negative for deletions.

5.3 SOLAR VARS file upload

The SOLAR VARS report Load Utility enables users to submit their inventory changes in an ascii vrf format file. This convenient process eliminates the need for manually entering customer inventory changes into the SOLAR System. The VARS file upload is ideal for vendors already operating under the VARS system, but wish to have TCB Data keep track of their customer base and have use of the SOLAR reporting system.
The SOLAR Spreadsheet Load Utility reads a conforming vars file, updates the user's SOLAR database, and produces the Subscriber Report ASCII text file output.
Users log into the SOLAR System with their web browser and select the 'VARS file upload" button. Next a file-browse window is displayed allowing the user to identify the spreadsheet for uploading. Once uploaded, an automated process reads through the file until a 'Type 9' line (eof) is encountered and processing is stopped. If the file is error free, the tables are updated with the inventory changes. The user can then upload additional files or submit the data for processing. If errors are returned, they must be corrected and the file re-uploaded before a report can be generated.

VARS file uploads can be in either the format found under section 5.2, or the format found on the following page.

5.3.1 VARS file format for SOLAR 2.0

Record Type 0 HEADER RECORD

Field Name	Type	Size	Comment
Record Type	alpha	1	Must be "0"
Vendor ID	alpha	3	Assigned by provider
Date File Created	num	8	Format: YYYYMMDD
Time File Created	num	6	Format: HHMMSS
File Type	alpha	1	"T" for transaction; "D" for total database
Report Version	alpha	3	"2.0"

	Total Size	22	

Record Type 1 CUSTOMER DATA RECORD

Field Name	Type	Size	Comment
Record Type	alpha	1	Must be "1"
Vendor Prefix	alpha	3	Blank or vendor ID
Vendor's Subscriber ID	alpha	10	Required
Parent Account Number	alpha	10	Required
Name 1	alpha	30	Required
Name 2	alpha	30	Optional
Address 1	alpha	30	Required
Address 2	alpha	30	Optional
Address 3	alpha	30	Optional
City Name	alpha	16	Required
State Name	alpha	20	Required
Postal Code	alpha	10	Required
Country	alpha	30	Required
ContactFName	alpha	30	Optional
ContactLName	alpha	30	Optional
Contact Telephone	alpha	30	Optional
Contact Fax No	alpha	30	Optional
Contact Email	alpha	100	Optional
Internal/External	alpha	10	Required
Comment	alpha	70	Optional

	Total Size	550	

Record Type 2 TRANSACTION RECORD

Field Name	Type	Size	Comment
Record Type	alpha	1	Must be "2"
Vendor's Subscriber ID	alpha	13	Optional
Vendor Product Code	alpha	10	Required
Transaction Quantity	num	10	Required (Positive Integer)
Customer Total Quantity	num	10	Required (Positive Integer)
Action Code	alpha	1	"A" or "D" only
Effective Date	alpha	8	Format: YYYYMMDD
Status	alpha	10	<NEW> or blank

	Total Size	63	

Record Type 8 TRAILER RECORD

Field Name	Type	Size	Comment
Record Type	alpha	1	Must be "8"
Vendor Entry Date	alpha	8	Format: YYYYMMDD
Vendor Entry Time	alpha	6	Format: HHMMSS
Vendor Product Code	alpha	10	Required
Total Added Product	num	10	Total "A" qty for product code in file
Total Deleted Product	num	10	Total "D" qty for product code in file
Total Product in Service	num	10	Grand total for product code

	Total Size	55	

Record Type 9 END OF FILE DESIGNATOR

Field Name	Type	Size	Comment
Record Type	alpha	1	Must be "9"
Vendor ID	alpha	3	Required
Date File Created	num	8	Format: YYYYMMDD
Time File Created	num	6	Format: HHMMSS
Record Count	num	6	Total number of lines in this file, including type 0 and 9.

	Total Size	24	

Errors Checked During Loading of xls or vrf file

- Missing required column or field
- Invalid or missing data element
- Required/Lookup data element not found in spreadsheet or SOLAR tables
- Invalid Product Code
- Invalid quantity (negative numbers)
- Mathematical errors

6.0   Usage Based Reporting

6.1 How is Usage Based Reporting set up?

If the vendor meets the prerequisites for usage based reporting, it is required to count the number of individual quotes and/or the number of activated user ID's per data product code per month. Typically, during the first two weeks of the month usage-based data product totals for the prior month is collected and reported.

A Usage Based report must contain the following information relevant to the calculation of variable remuneration (see 4.3 for the detail format):

- the vendor code
- the sequence number
- the date and time when the report was created
- the calendar month to which the report applies
- the total individual quote count or the number of activated user id's for each relevant product code.

6.2 Reporting Usage

TCB Data Systems makes reporting usage easier by allowing the vendor to enter usage quotes on-line for all usage product codes. Usage history reports and the ability to easily report past reporting periods are also part of the system.

6.2.1 Metered Usage
Metered Usage quotes are individual quote packets (real time) served over the internet. No user information is needed. The information provider will classify the metered usage product code as an "M" type code. Usage is updated on TCB Data by either simple manual entry or file upload (format of the usage files in section 4.3).

6.2.2 Non-Professional
Non-pro are the maximum number of user that had access during the month to the data. (The users are using the data for their own account and not charging others.) No user information is needed. The information provider will classify the non-professional product codes as an "N" type code. Non-pro is updated on TCB Data by either simple manual entry or file upload. (format of the usage files in section 4.3).

6.2.3 Other Products
Other market data products could include voice response ports, and the usage would then be the number of simultaneous lines, even if they are not used to their maximum. No user information is needed. The information provider will classify the metered usage product code as an "P" type code. Usage is updated on TCB Data by either simple manual entry or file upload (format of the usage files in section 4.3).

6.3 Usage file format

The Usage Report is an ASCII text file created with a text editor capable of saving the file as ASCII text, or by a computer program that formats the data and outputs it to a text file. The report identifies the sender by: User ID; the reporting period covered; the name of the large customer consumers (where required); a product code to identify each market center's service(s); and the total quantity of quotes consumed for each product code. Each of these report elements are identified by a unique "Tag" that is enclosed in brackets and precedes the information. In the example <REPORTQTY>99000000, the "Tag" is followed by the reported quantity of quotes during the reporting period. Reports must begin with a <BOF> Tag, and end with a <EOF> Tag. Every user must have a valid user identifier <USERID> that has been assigned by the provider and date and time Tags with values that are used for control purposes.

Tag Name	Type	Size	Comment
<BOF>	alpha	3	"MR1", "NP1", or "MP1"
<USERID>	alpha	3	Vendor ID assigned by provider
<SENDDATE>	num	8	Date File Sent. Format: YYYYMMDD
<SENDTIME>	num	6	Time File Sent. Format: HHMMSS
<STARTDATE>	num	8	Reporting state period. YYYYMMDD
<ENDDATE>	num	8	Reporting end period. YYYYMMDD
<CUST NAME>	alpha	35	Optional. Customer Name
<PRODUCT>	alpha	10	Product Code
<QUANTITY>	num	13	Total number of inquiries (positive only)
<EOF>	alpha	3	Must match the <BOF> description

Currently, there are only 3 types of usage files that TCB Data accepts – Metered Usage (MR1), Non-Pro (NP1) and other Market Data Products (MP1). Vendors who report more than 1 type must send more than 1 file. Vendor's who enter their usage quantity on-line thru www.tcbdata.com can enter all types at once.

7.0   Data Feed Reporting using Direct Device Reporting (DDR)

Customers can electronically report the number of entitled devices that receive market data by using the Direct Device Reporting system. For each month, the number of devices that were entitled to access data is entered by the customer on a customized form located at http://www.tcbdata.com/ddr/.

The Data Feed Entitlement Report is a simple way for you to fulfill your data feed reporting obligation. The system itself is divided into three sections: Entry, Validation, and Submission.

Entry

The Entry section presents you with our current billing information for each of your locations. If you find the billing information is incorrect for a location, click on the appropriate "Edit this location's information" box to open an edit window to make the necessary corrections. You may also add a new data feed vendor for a location by clicking on the box labeled "Add New Data feed Vendor for this location". This will open an edit window which will allow you to enter the date range for reporting devices accessing the new data feed.

You may also add a completely new location by clicking on the "Add New Location" button, located at the bottom of the screen next to the submit and cancel buttons. This will open a new window with blank fields for the new location's address information, reporting date range (you will be required to report a new location's device quantities with THIS report), and vendor providing the data.

Once you have verified the billing information and created new data feed sources or locations, you must complete the device quantity fields for each month listed by location. EMPTY FIELDS WILL NOT BE ACCEPTED. If you do not have a device quantity to report, enter a "0" (zero) in the appropriate field. You may also enter a comment about a specific location by filling out the optional "Comments" box, located under the location's address information. When you have completed ALL device quantity fields and entered any comments, click on the "Next" button to navigate to the "Validation" section of the Data feed Entitlement Form.

Validation

The Validation section allows you to double-check the quantities entered in the Entry section. Each location will be listed with the entered quantities. If you find an error, use your browser's "BACK" button to return to the Entry section.

YOUR REPORT IS NOT COMPLETE AT THIS POINT! When you are done checking the entered quantities, click on the button labeled "Click Here to Validate Quantities". This will bring you to the third and final section of the Data feed Entitlement Report, "Submission".

Submission

The Submission section requires the user to verify that all name, address, and device quantities are correct. Complete the fields in the Submission Verification box and click the "Submit" button. EMPTY FIELDS WILL NOT BE ACCEPTED.

When you have finished your Data feed Entitlement Report, you will be presented with a table listing all of the locations and the quantities entered in this report. Feel free to print this page for your records

Notes:

1. In the absence of technical entitlement control, all devices able to have access to data are subject to fees and are to be reported. Administrative reports are not accepted in lieu of software-controlled entitlements.

2. When the device quantity decreases to one device, please return a printout of your system-generated entitlement report to substantiate the change.

8.0   Reporting Deadlines

Error-free reports, both usage and VARS, are due by the 15th of the month unless otherwise contracted by the exchanges. A report is considered error-free if the following conditions are met:
- the report is structured properly
- the report contains valid product codes
- no variance error occur when the control totals are checked
- no other irregularities are discovered (e.g.: header line without a transaction line)

If an error is found, the vendor will receive an error report detailing what the error was and where it occurred. This report should enable the vendor to identify the sources of the erroneous entries, carry out the corrections to it's system or it's data, and re-transmit the revised report.

Note that on-line users (usage or SOLAR) result in a much higher chance of error-free reporting.

Report reminders are sent out every month to vendors who have not sent in an error-free subscriber (VARS or SOLAR) by the 15th. The reminders will be sent every week thereafter until a report is received an processed by TCB Data. Contracting parties who are 4 or more weeks late with reporting are considered in Breach of contract, and will be reported to their information providers.

9.0   Contact

TCB Data Systems, Inc is located in mid-town Manhattan at

122 E 42nd Street
Suite 4505
New York, NY 10168.

We are open Monday thru Friday 9-5 EST.

Phone number   (212) 949-5847
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Appendix A – TCB Data Company Overview

TCB Data Systems, Inc. is a provider of electronic reporting systems for stock and commodity markets. Our Internet-based electronic reporting systems and comprehensive customer management software systems are used worldwide by market centers and brokerage firms, and by over 250 market data vendors.

TCB Data Systems, Inc. was incorporated in New York City in 1987 as a market data industry consulting and software application development company. In the mid 1990's we developed our first application for exchanging market data information between the New York Stock Exchange, the American Stock Exchange, Reuters, Bloomberg, Merrill Lynch, and others. Since then, this service, the Vendor Automated Reporting System (VARS), hosted at www.tcbdata.com, has become the worldwide standard in consolidating and reporting on this type of data.

Today, most North American and European market centers receive electronic reports of their data consumption via our Vendor Automated Reporting System (hosted at www.tcbdata.com). Nearly every major data redistributor utilizes our systems to report their data consumption to the originators of the data. The receivers of this data, market centers and data providers, use this information to produce invoices via their own internal software programs or via TCB Data provided software and services. Indirect bill data providers also often use TCB Data software or other applications to product vendor invoices and to reconcile vendor payments.

TCB Data Systems' Subscriber On-Line Activity Reporting System (SOLAR) is used by nearly every on-line brokerage company to communicate with the market centers on the details of terminal accesses, bid & ask quotes, and pricing. This data is collected for use in the regulation, marketing, and billing departments.

Currently, we see the consolidation of industry participants and the necessity of cost saving measures as the driving force behind our inventory management and billing systems.   Our specialty in application design, database software development, data collection and billing uniquely position us to provide cost-saving services to both our existing customers and to those who until now, have not needed to reduce costs by better controlling inventory management and billing processes.

Appendix B - Services and Systems Overview

Operating Philosophy and Practices

Electronic Reporting operates on the premise that a uniform reporting improves accuracy and timeliness, resulting in improved service to customers and savings for all participants. The administrators will make a best effort to accommodate different needs of the participants.

Receivers are required to comply with established formats, structures, error checking routines, and established reporting schedules. Changes in procedures and structure are reviewed with all receivers prior to implementation and every attempt is made not to disrupt any participants operation. Senders are expected to make a best effort to submit information accurately and on time.

Reporting issues affecting any participant should be brought to the attention of the Administrator and efforts will be made to find sound, reasonable solutions to any problem. TCB Data is empowered by the receivers to act on their behalf to resolve breakdowns in established protocols, formats, time-frames, etc. that are brought about by senders.

Subscriber Reporting Overview

The Vendor Automated Reporting System (VARS) is a web-based portal for gathering reports on services and subscriber activities from redistributors of market data for transmission to the providers of that data. The reporting portal eliminates the paper reports that have traditionally been sent the information providers and market centers for the purpose of reporting customer activity. Nearly every major redistributor of market data to sends activity, world wide, to the participating information providers.

The system benefits both the senders and receivers of data by simplifying the reporting process. The information providers, who receive reports from the vendors who redistribute their data, receive timely reports that have been checked for accuracy and required information. These structured reports can then be automatically loaded into their inventory or billing systems as well as used to generate management and analysis reports. Optionally, this report data can be loaded into TCB Data Systems' SOLAR Invoicing Manager System (SIM).

The redistributors of market data (the vendors) benefit from the VARS System because it allows them to have a single process to report all of their customer activity. This process can be integrated with their permissioning computer system which allows them to efficiently meet their reporting obligations with a minimal amount of administrative support.

Senders and receivers also benefit from the availability of Customer Service. Customer Service will help vendors identify and correct errors, maintain the product code and other tables, monitor the error reports, and can be a liaison between the senders and receivers if necessary. All employees of TCB Data Systems, Inc. ensure that the system is as functional and works as well as possible.

The reporting applications are part of a secure, closed system that requires all users to have ID's and passwords prior to utilizing the system. Reports can be uploaded via ftp file transfer, or by logging into the web system. Various database-drive web applications are available to assist in the reporting process. The system is available 24 hours each day, 7 days a week.

Subscriber Reporting Philosophy

Redistributors of market data collect the service activity that has occurred during each reporting period (usually the current month) from their internal data bases or reports. This activity consists of customer name and contact information and the data product codes that identify the data product and the provider of the information. This activity is transmitted to the VARS host system for processing and distribution to the proper recipient (information

provider). When the report is processed, edit routines check the report to determine if the information in the report passes the error checks for required information, valid dates and valid quantities.

If the report is error-free, it is accepted and the Host performs several additional processes. The report is reformatted, the product description codes sent by the redistributors are converted to their equivalent codes used by the receivers, control totals for each product are saved by the Host system, a sequence number is assigned to each receivers report, and a Status Report is e-mailed to the users on each senders and receiver's distribution list.
If the report contains errors, it is rejected by the Host system. A Status Report that details each error in the report is e-mailed back to the sender and receiver. The objective of the error messages is to make it as easy as possible for the sender to correct the problem(s) and to keep the recipients informed of the status.

Report Processing
The data formats and procedures that TCB Data Systems have established over the years are the only standards embraced by the industry and their continued acceptance and evolution demonstrate the depth of our understanding of the requirements and of the quality of our reporting systems.

Several types of electronic data are collected. They are:
- Subscriber Data (customer name & inventory data. Sometimes called VARS-formatted data)
- Spreadsheet Data (formatted spreadsheets with customer name & inventory data)
- Usage data (reports without name & address information, such as quote usage)
- Data Feed usage reporting (entitled devices reported by location)
- Snapshot Reporting (a 'snapshot' is taken of the vendor's entire database each month).

Subscriber On-Line Activity Reporting - SOLAR
The Subscriber Online Activity Reporting System, SOLAR, is a web-based application that allows data vendors and data consumers to manage their customers, locations, and inventory information. SOLAR Version 2.0 is the second generation of the SOLAR System and it offers an improved user interface, additional functionality, and enhanced print and output reports.

SOLAR is a comprehensive database that simplifies the reporting of data consumption to the data providers by providing a single, simple process. SOLAR can be updated by interactively creating customers and product inventory adjustments, or by uploading spreadsheets, VARS, or VRXML formatted text files.

One a month, SOLAR users transmits their reports to their data providers by selecting the 'Submit Pending Activity' option. This automatically creates outputs for each data provider in the specification required by each data provider.

SOLAR Invoicing Manager - SIM
The SOLAR Invoicing Manager has been developed to manage and bill for all aspects redistributing market data products. It is tightly integrated with the VARS reporting portal hosted at www.tcbdata.com. Multiple vendor customer accounts can be linked to one customer, allowing one invoice to include charges for multiple vendor services.

SOLAR Invoicing enables one to created a profile for each customer. Profile elements include:
- contact information
- contract information
- data product inventory history
- billing currency and tax exempt status
- audit history
- non-reported charges
- other information

Each month the invoicing process is invoked. All charges are calculated and an invoice preview spreadsheet is created. The preview lists each customer, their last invoiced amount, new invoice amount and the percent change. If the preview is acceptable, the invoices are created, archived, and are emailed or printed.

Current and historical invoices are available on-line and all invoice detail can be saved as a spreadsheet for analysis purposes.

Direct Device Reporting - DDR

The Direct Device Reporting System (DDR) is a database-driven web application that allows customers who receive uncontrolled data feed service to manage and report the quantity of devices accessing data products. DDR can be configured to accept data product totals by customer location, or to accept user-level product quantities.

Reporting user-level product detail allows one to create a Multiple Installation, Single User Report (MISU Report) to send to market centers that will give credits for accessing the same data products through different services.

Consulting and Support Services

System developers and administrative support is available from the TCB Data Systems staff. Custom software can be developed on an hourly or project basis. Our existing applications can often be modified to better suit the requirements of vendors and market centers.

Administrative support is also available from TCB Data Systems. Administrative functions ranging from all market data reporting administrative duties to help-desk services billed by the hour is available.