



S&P Capital IQ Real-Time Solutions

FeedOS™ Feed Description

OTC PINK SHEETS

Reference n°: 20150731 - 25222 - 28100 - 28101

S&P Capital IQ Real-Time Solutions FeedOS[™] Feed Description: OTC PINK SHEETS Reference 20150731 – 25222 – 28100 – 28101 July 31, 2015

France

52 Rue de la Victoire 75009 Paris France

Tel: +33 (0) 1 73 02 32 11

United States

55 Water Street, 44th floor New York, NY 10041 United States of America Tel: +1-(212)-438-4346

United Kingdom

20 Canada Square Canary Wharf London E14 5LH United Kingdom Tel: +44 (0) 203 107 1676 130 East Randolph One Prudential Plaza, Suite 2900 Chicago, IL 60601 United States of America Tel: +1-(312)-233-7129

Singapore

12 Marina Boulevard #23-01 Marina Bay Financial Centre Tower 3 Singapore 018982 Tel: +65 6530 6546

www.spcapitaliq.com

Copyright © 2015 by Standard & Poor's Financial Services LLC, a part of McGraw Hill Financial.

All rights reserved. S&P CAPITAL IQ is a trademark of Standard & Poor's Financial Services LLC. STANDARD & POOR'S, S&P, GLOBAL CREDIT PORTAL and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P's opinions and analyses do not address the suitability of any security. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

TABLE OF CONTENTS

FeedOS™ OTC PINK SHEETS Feed Description	1
1. Referential Data	1
1.1. Available Markets and Branches	
1.1.1. Markets	
1.1.2. Branches	2
1.2. Types of Instruments	2
1.2.1. Equities	
1.2.2. Bonds	
1.3. Specific Referential Tags	3
1.3.1. Operating MIC	
1.3.2. Segment MIC	
2. Quotation Data	4
2.1. Quotation Values	
2.2. TradingStatus	
2.3. Specific Quotation Tags	
2.3.1. Trade Conditions	
2.3.1.1. MARKET_ULTRAFEED_QuoteCondition	
2.3.2. Other Values	
2.3.2.1. Internal Daily Closing Price Type	
2.3.2.2. MARKET_PINKSHEET_QuoteFlags	
2.4. MBL and MBO Data	
3. Closing Price	9
4. Finding the Latest Information	9



FEEDOS™ OTC PINK SHEETS FEED DESCRIPTION

As part of the S&P Capital IQ Real-Time Solutions FeedOS™ documentation, this feed description provides you with details about the types of data broadcast on the OTC PINK SHEETS market data stream, their possible values and current FeedOS technical implementation.

The topics this feed description covers include:

- 1. Referential Data
- 2. Quotation Data
- 3. Closing Price
- 4. Finding the Latest Information.

1. Referential Data

The following sections describe the characteristics of the referential data on OTC PINK SHEETS market data stream, in terms of:

- 1.1. Available Markets and Branches
- 1.2. Types of Instruments
- 1.3. Specific Referential Tags.

1.1. Available Markets and Branches

This section details the list of Markets and Branches available on the OTC PINK SHEETS market data stream.

1.1.1. Markets

The OTC PINK SHEETS market data stream broadcasts informations about the following markets:

Table 1 List of markets available on the OTC PINK SHEETS market data stream

FeedOS Market ID	Market
ОТСМ	OTC Markets

The following example shows the list of markets available on the OTC PINK SHEETS market data stream and their IDs, returned by the command dumps:

1.1.2. Branches

The example below shows the list of branches available on the OTC PINK SHEETS market data stream, returned by the command dumps. Each branch displays the following details: FOSMarketID, SecurityType, CFICode and Quantity (of instruments):

```
BRANCHES
{ OTCM GO DBXXXX } qty: 570
{ OTCM NONE EXXXXX } qty: 28005
```

1.2. Types of Instruments

The following sections describe the instruments available on the OTC PINK SHEETS market data stream, according to their type:

- 1.2.1. Equities
- 1.2.2. Bonds.

1.2.1. Equities

The sample below illustrates the details of an equity:

```
instr # 323/501836 = 677881932
                                string{USD}
   PriceCurrency
                                string{BNNNF}
   Symbol 3
   SecurityType
                                string{NONE}
   FOSMarketId
                                OTCM
   CFICode
                                string{EXXXXX}
   CountryOfIssue
                                string{US}
                                Timestamp{2015-07-29 19:48:24:048}
   InternalCreationDate
   InternalModificationDate
                                Timestamp{2015-07-30 10:00:01:419}
   InternalSourceId
                                uint16{150}
   InternalAggregationId
                                uint16{150}
   InternalEntitlementId
                                int32{1000}
   DelayedFeedMin
                                uint16{15}
   LocalCodeStr
                                string{BNNNF}
   OperatingMIC
                                string{OTCM}
   SegmentMIC
                                string{PSGM}
```

1.2.2. Bonds

The sample below illustrates the details of a bond:

```
instr # 323/501622 = 677881718
   PriceCurrency
                                string{USD}
   Symbol
                                string{OTC72859}
   SecurityType
                                string{GO}
   FOSMarketId
                                OTCM
   CFICode
                                string{DBXXXX}
   CountryOfIssue
                                string{US}
   InternalCreationDate
                                Timestamp{2015-07-10 17:32:20:135}
   InternalModificationDate
                                Timestamp{2015-07-15 09:00:00:888}
   InternalSourceId
                                uint16{150}
   InternalAggregationId
                                uint16{150}
   InternalEntitlementId
                                int32{1000}
   LocalCodeStr
                                string{OTC72859}
   OperatingMIC
                                string{OTCM}
```

1.3. Specific Referential Tags

The following sections describe specific referential tags or tags with particular values available on the OTC PINK SHEETS market data stream:

- 1.3.1. Operating MIC
- 1.3.2. Segment MIC.

1.3.1. Operating MIC

The values of the referential tag **Operating MIC** conveyed on the OTC PINK SHEETS market data stream are disseminated via FeedOS data stream in *Referential* to specify the parent MIC.

FeedOS implementation of the tag OperatingMIC is described in the table below:

Table 2 OperatingMIC – technical implementation in FeedOS

Component	Value	Description
Tag Name	OperatingMIC	FeedOS tag name.
Numeric ID	9533	FeedOS unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Туре	String	String data type.
Format	[Exchange Specific Value]	An exchange specific value, specifying the parent MIC.
Possible Values	ОТСМ	Parent MIC for all OTC segment MICs.

1.3.2. Segment MIC

The values of the referential tag **Segment MIC** conveyed on the OTC PINK SHEETS market data stream are disseminated via FeedOS data stream in *Referential* to specify the child MIC of the market segment.

FeedOS implementation of the tag SegmentMIC is described in the table below:

Table 3 SegmentMIC – technical implementation in FeedOS

Component	Value	Description
Tag Name	SegmentMIC	FeedOS tag name.
Numeric ID	9534	FeedOS unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Туре	String	String data type.
Format	[Exchange Specific Value]	An exchange specific value, specifying the child MIC.
	ОТСВ	OTCQB
	отсо	OTCQX International OTCQX International Premier OTCQX US OTCQX US Premier
Possible Values	PINC	OTC Pink – Current
	PINI	OTC Pink – No Information
	PINL	OTC Pink – Limited
	PSGM	OTC Grey Market
	хотс	OTCBB

2. Quotation Data

The following sections describe the characteristics of the quotation data on the OTC PINK SHEETS market data stream, in terms of:

- 2.1. Quotation Values
- 2.2. TradingStatus
- 2.3. Specific Quotation Tags
- 2.4. MBL and MBO Data.

2.1. Quotation Values

The example below shows the possible values of an instrument on the OTC PINK SHEETS market data stream:

```
InstrumentStatusL1
-- 323/54030
        BID: 0.0005
                        30000
        ASK: 0.0006
                        1009900
        LastPrice
                                        float64{2.4149}
                                        float64{100}
        LastTradeQty
        DailyHighPrice
                                        float64{2.4149}
        DailyLowPrice
                                        float64{2.4149}
        DailyTotalVolumeTraded
                                        float64{2000}
        DailyTotalAssetTraded
                                        float64{4829.8}
        LastTradePrice
                                        float64{2.4149}
        LastTradeTimestamp
                                        Timestamp{2015-07-28 14:30:02}
        InternalDailyOpenTimestamp
                                        Timestamp{2015-07-29 10:00:01:684}
        InternalDailyHighTimestamp
                                        Timestamp{2015-07-28 14:30:01:470}
        InternalDailyLowTimestamp
                                        Timestamp{2015-07-28 14:30:01:470}
        InternalPriceActivityTimestamp Timestamp{2015-07-29 11:40:48:909}
        TradingStatus
                                        17=ReadyToTrade
        CurrentBusinessDay
                                        Timestamp{2015-07-29}
                                        Timestamp{2015-07-29 11:40:48:907}
        PriceActivityMarketTimestamp
        InternalDailyClosingPriceType
                                        char{d}
        MARKET_PINKSHEET_QuoteFlags
                                        uint16{1}
```

For more details about the fields and tags available in quotation data type, and their possible values, see *FeedOS Quotation Tags Guide*.

2.2. TradingStatus

Each time a modification of the trading status occurs, the values of the quotation tag **TradingStatus** conveyed on the OTC PINK SHEETS market data stream are disseminated via FeedOS data stream in *Other Values*:

- in the callback carrying the Level1 event notif_TradeEventExt(), for C++
- in the event handler TradeEventExtEventHandler, for C#
- in the callback carrying the Level1 event quotNotifTradeEventExt, for Java.

FeedOS implementation of the tag TradingStatus is described in the following table:

Table 4 TradingStatus – technical implementation in FeedOS

Component	Value	Description
Tag Name	TradingStatus	FeedOS tag name.
Numeric ID	9100	FeedOS unique ID disseminated on the S&P Capital IQ Real- Time Solutions data stream. This is the numeric equivalent of the tag name.
Туре	Enum	Enum data type.
Format	[Exchange Specific Value]	An exchange specific value , detailing the characteristics of the trading status.

Table 4 TradingStatus – technical implementation in FeedOS (Continued)

Component	Value	Description
	2	Trading Halt
Possible	5	Price Indication
Values	17	Ready to Trade
	18	Not Available for Trading

2.3. Specific Quotation Tags

The following section describes specific quotation tags available on the OTC PINK SHEETS market data stream:

- 2.3.1. Trade Conditions
- 2.3.2. Other Values.

2.3.1. Trade Conditions

The following subsections describe the trade conditions available on the OTC PINK SHEETS market data stream:

• 2.3.2.2. MARKET_PINKSHEET_QuoteFlags.

2.3.1.1. MARKET_ULTRAFEED_QuoteCondition

Each time a trade occurs, the values of the quotation tag **MARKET_ULTRAFEED_QuoteCondition** conveyed on the OTC PINK SHEETS market data stream are disseminated via FeedOS data stream in *Context* to indicate the condition(s) associated to a quote:

- in the callback carrying the Level1 event notif_TradeEventExt(), for C++
- in the event handler TradeEventExtEventHandler, for C#
- in the callback carrying the Levell event quotNotifTradeEventExt, for Java.

FeedOS implementation of the tag MARKET_ULTRAFEED_QuoteCondition is described in the table below:

Table 5 MARKET_ULTRAFEED_QuoteCondition – technical implementation in FeedOS

Component	Value	Description
Tag Name	MARKET_ULTRAFEED_QuoteCondition	FeedOS tag name.
Numeric ID	16410	FeedOS unique ID broadcast on the S&P Capital IQ Real- Time Solutions data stream. This is the numeric equivalent of the tag name.
Туре	UInt8	UInt8 data type.
Format	[Exchange Specific Value]	An exchange specific value , detailing the condition(s) associated to a quote.
	0	None Provided
	1	Regular
	2	Slow on Ask
Possible Values	3	Slow on Bid
	4	Closing
	5	News Dissemination
	6	Slow on Ask (LRP or Gap Quote)

Table 5 MARKET_ULTRAFEED_QuoteCondition – technical implementation in FeedOS (Continued)

Component	Value	Description
	7	Slow on Bid (LRP or Gap Quote)
	8	Trading Range Indication
	9	Slow on Bid and Ask
	10	Order Imbalance
	11	Due to Related – News Dissemination
	12	Due to Related – News Pending
	13	Open
	14	Closed
	15	Volatility Trading Pause
	16	Non-Firm Quote
	17	Opening
	18	News Pending
	19	Due to Related
	20	Resume
	21	Slow on Bid and Ask (LRP or Gap Quote)
Possible Values	22	In View Of Common
rossible values	23	Slow on Bid and Ask (Set Slow List)
	24	Equipment Changeover
	25	Sub-Penny Trading
	26	No Open / No Resume
	27	Fast Trading
	28	Slow on Bid and Ask (Non-Firm)
	29	One-Sided
	30	Order Influx
	31	Special Opening Quote
	32	Halted
	33	Benchmark
	34	Implied
	35	Exchange Best
	36	Market Wide Circuit Breaker Level 1
	37	Market Wide Circuit Breaker Level 2
	38	Market Wide Circuit Breaker Level 3

2.3.2. Other Values

The following subsections describe the other values available on the OTC PINK SHEETS market data stream:

- 2.3.2.1. InternalDailyClosingPriceType
- 2.3.2.2. MARKET_PINKSHEET_QuoteFlags.

2.3.2.1. InternalDailyClosingPriceType

The values of the quotation tag **InternalDailyClosingPriceType** conveyed on the OTC PINK SHEETS market data stream are disseminated via FeedOS data stream in *Other Values* to indicate the type of the internal daily closing price:

- in the callback carrying the Level1 event notif_TradeEventExt(), for C++
- in the event handler TradeEventExtEventHandler, for C#
- in the callback carrying the Levell event quotNotifTradeEventExt, for Java.

FeedOS implementation of the tag InternalDailyClosingPriceType is described in the table below (the values currently disseminated are highlighted in green):

Table 6 Internal Daily Closing Price Type – technical implementation in FeedOS

Component	Value	Description
Tag Name	InternalDailyClosingPriceType	FeedOS tag name.
Numeric ID	9155	FeedOS unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Туре	Char	Char data type.
Format	[Internal Specific Value]	An <i>internal specific value</i> , detailing the type of daily closing price, as described below.
	0	Undefined
Possible Values	a	Official Close – Explicit closing price value calculated and distributed by an exchange for the main trading session of a given trading day.
	b	Official Indicative – Exchange has provided an indicative price and marked it as indicative, however no trading activity is observed.
	С	Official Carry Over – Explicit Closing price value from a previous trading day carried forward by the exchange to the given trading day.
	d	Last Price – Final price disseminated by the exchange for the main trading session or dissemination period of a given trading day (for indices).
	е	Last Eligible Price – Execution price of the final trade (subject to trade qualifiers) accepted by the exchange for the main trading session of a given trading day.
	z	Manual – Price disseminated manually (in case of production correction).

2.3.2.2. MARKET_PINKSHEET_QuoteFlags

The values of the quotation tag **MARKET_PINKSHEET_QuoteFlags** conveyed on the OTC PINK SHEETS market data stream are disseminated via FeedOS data stream in *Other Values* to indicate the flag(s) associated to a quote:

- $\bullet \quad \text{in the callback carrying the Level1 event } \textbf{notif_TradeEventExt()}, for \ C++$
- in the event handler TradeEventExtEventHandler, for C#
- in the callback carrying the Levell event quotNotifTradeEventExt, for Java.

FeedOS implementation of the tag MARKET_PINKSHEET_QuoteFlags is described in the table below:

Table 7 MARKET_PINKSHEET_QuoteFlags – technical implementation in FeedOS

Component	Value	Description
Tag Name	MARKET_PINKSHEET_QuoteFlags	FeedOS tag name.
Numeric ID	14960	FeedOS unique ID broadcast on the S&P Capital IQ Real- Time Solutions data stream. This is the numeric equivalent of the tag name.
Туре	UInt16	Unsigned integer 16-bit data type.
Format	[Exchange Specific Value]	An exchange specific value , detailing the flag(s) associated to a quote.
	1	Quote Sizes are Provided in Shares, not Lots
Possible Values	4	Bid Unsolicited
	8	Ask Unsolicited

2.4. MBL and MBO Data

There is no MBL or MBO.

3. Closing Price

The closing price is the last trade price upon close.

4. Finding the Latest Information

For the latest documentation and product updates, additional support and training, please contact our support services one of the following ways:

- E-mail: rts-support@spcapitaliq.com
- Web: https://support.quanthouse.com.

^{*} The MBL and MBO data may not be included by default in your Level1 data subscription, but sold separately. Depending on your contract, additional terms, conditions and fees may apply. For more details about the subscription options, please contact S&P Capital IQ Real-Time Solutions.