### **S&P Capital IQ Real-Time Solutions**

## **FeedOS™ Feed Description**

#### **OMX TIP**

Reference n°: 20150504 - 23365 - 25891 - 26479



S&P Capital IQ Real-Time Solutions FeedOS<sup>™</sup> Feed Description: OMX TIP Reference 20150504 – 23365 – 25891 – 26479 May 18, 2015

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# FEEDOS™ OMX TIP FEED DESCRIPTION

As part of S&P Capital IQ Real-Time Solutions FeedOS™ documentation, this feed description provides you with details about the types of data broadcast on the OMX TIP 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. Official Closing Price
- 4. Special Behavior
- 5. Finding the Latest Information.

## 1. Referential Data

The following sections describe the characteristics of the referential data on the OMX TIP market data stream, in terms of:

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

#### 1.1. Available Markets and Branches

This section details the list of markets and branches available on the OMX TIP market data stream:

- 1.1.1. Markets
- 1.1.2. Branches.

#### 1.1.1. Markets

The OMX TIP market data stream broadcasts informations about the following markets:

Table 1 List of markets available on the OMX TIP market data stream

FeedOS Market ID	Market
XCSE	Copenhagen Stock Exchange
XTAL	Tallinn Stock Exchange
XHEL	Helsinki Stock Exchange
XICE	Iceland Stock Exchange
XRIS	Riga Stock Exchange
XLIT	National Stock Exchange of Lithuania
ISEC	ISEC (ICEX Second Market)
XST0	OMX Nordic Stock Exchange Stockholm AB
XOPV	OMX OTC Publication Venue
XFND	First North Denmark
XSAT	Aktie Torget
FNSE	First North Stockholm

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

```
MARKETS
market # 67
                CC=DK/DENMARK/COPENHAGEN, DESCR=COPENHAGEN STOCK EXCHANGE, WEB=www.cse.dk
   MIC = XCSE
   TimeZone = Europe/Copenhagen
    Country = DK
   NbMaxInstruments = 0
market # 73
               CC=EE/ESTONIA/TALLINN, DESCR=TALLINN STOCK EXCHANGE, WEB=www.hex.ee
   MIC = XTAL
   TimeZone = Europe/Tallinn
    Country = EE
    NbMaxInstruments = 0
market # 76
               CC=FI/FINLAND/HELSINKI, DESCR=THE HELSINKI STOCK EXCHANGE, WEB=www.hex.com
   MIC = XHEL
   TimeZone = Europe/Helsinki
    Country = FI
    NbMaxInstruments = 0
market # 113
               CC=IS/ICELAND/REYKJAVIK, DESCR=ICELAND STOCK EXCHANGE, WEB=www.icex.is
   MIC = XICE
   TimeZone = Atlantic/Reykjavik
    Country = IS
    NbMaxInstruments = 0
market # 159
                CC=LV/LATVIA/RIGA,DESCR=RIGA STOCK EXCHANGE;THE, WEB=www.rfb.lv
    MIC = XRIS
   TimeZone = Europe/Riga
    Country = LV
    NbMaxInstruments = 0
market # 161
               CC=LT/LITHUANIA/VILNIUS, DESCR=NATIONAL STOCK EXCHANGE OF LITHUANIA,
WEB=www.nse.lt
    MIC = XLIT
   TimeZone = Europe/Vilnius
    Country = LT
   NbMaxInstruments = 0
market # 379
                CC=IS/ICELAND/REYKJAVIK, DESCR=ISEC (ICEX SECOND MARKET), WEB=www.isec.is
    MIC = ISEC
   TimeZone = Atlantic/Reykjavik
    Country = IS
    NbMaxInstruments = 0
(see next page)
```

```
market # 430
                CC=SE/SWEDEN/STOCKHOLM, DESCR=OMX NORDIC EXCHANGE STOCKHOLM AB, WEB=
    MIC = XSTO
   TimeZone = Europe/Stockholm
    Country = SE
    NbMaxInstruments = 0
               CC=SE/SWEDEN/STOCKHOLM, DESCR=OMX OTC PUBLICATION VENUE, WEB=www.omxgroup.com
market # 440
   MIC = XOPV
   TimeZone = Europe/Stockholm
    Country = SE
    NbMaxInstruments = 0
market # 441
               CC=DK/DENMARK/COPENHAGEN, DESCR=FIRST NORTH DENMARK, WEB=www.omxgroup.com/
firstnorth
    MTC = XFND
    TimeZone = Europe/Copenhagen
    Country = DK
    NbMaxInstruments = 0
               CC=SE/SWEDEN/STOCKHOLM, DESCR=AKTIETORGET, WEB=www.actietorget.se
market # 442
    MIC = XSAT
   TimeZone = Europe/Stockholm
    Country = SE
    NbMaxInstruments = 0
market # 443 CC=SE/SWEDEN/STOCKHOLM, DESCR=FIRST NORTH STOCKHOLM, WEB=www.omxgroup.com/
firstnorth
   MIC = FNSE
    TimeZone = Europe/Stockholm
    Country = SE
    NbMaxInstruments = 0
```

#### 1.1.2. Branches

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

```
BRANCHES
{ XCSE NONE MRIXXX } qty: 363
{ XTAL NONE MRIXXX } qty: 1
{ XHEL NONE MRIXXX } qty: 361
{ XICE NONE MRIXXX } qty: 51
{ XRIS NONE MRIXXX } qty: 1
{ XLIT NONE MRIXXX } qty: 1
{ XSTO NONE MRIXXX } qty: 1249
```

## 1.2. Types of Instruments

This section describe the instruments available on the OMX TIP market data stream, according to their type:

• 1.2.1. Indices.

#### **1.2.1. Indices**

The sample below illustrates the details of an index:

```
instr \# 76/19550 = 159403102
    PriceCurrency
                                  string{EUR}
    Symbol
                                  string{OMXH25GI}
    Description
                                 string{OMX Helsinki 25 GI}
                                 string{NONE}
    SecurityType
    FOSMarketId
                                 XHEL
    CFICode
                                 string{MRIXXX}
   SecuritySubType string{Securities}
InternalCreationDate Timestamp{2014-06-30 06:00:06:286}
    InternalModificationDate Timestamp{2014-06-30 06:00:06:286}
    InternalSourceId
                                 uint16{68}
    InternalAggregationId
                                 uint16{68}
    LocalCodeStr
                                 string{INDEX_14238}
    ISIN
                                 string{FI4000090410}
    OperatingMIC
                                  string{XHEL}
```

#### 1.3. Referential Tags

The following sections describe the specific referential tags available on the OMX TIP market data stream:

• 1.3.1. OperatingMIC

#### 1.3.1. OperatingMIC

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

FeedOS implementation of the values currently available for 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 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 <b>exchange specific value</b> , specifying the parent MIC.
	XCSE	OMX Nordic Exchange Copenhagen A/S
Possible Values	XHEL	NASDAQ OMX Helsinki Ltd.
	XICE	NASDAQ OMX Iceland
	XST0	NASDAQ OMX Nordic

## 2. Quotation Data

The following sections describe the characteristics of the quotation data on the OMX TIP market data stream, in terms of:

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

#### 2.1. Quotation Values

The examples below shows the possible values of an instrument on the OMX TIP market data stream:

```
-- 76/19550
       BID: 0 0
                        *NO ORDER*
       ASK: 0 0
                        *NO ORDER*
       LastPrice
                                        float64{3656.577777}
       DailyHighPrice
                                        float64{3940.168445}
       DailyLowPrice
                                        float64{2933.567457}
       InternalDailyOpenTimestamp
                                        Timestamp{2014-12-05 08:00:02:237}
       InternalDailyCloseTimestamp
                                        Timestamp{2014-12-05 16:30:05:212}
       InternalDailyHighTimestamp
                                        Timestamp{2015-04-15 08:08:49:402}
       InternalDailyLowTimestamp
                                        Timestamp{2014-12-16 12:59:00:395}
       InternalPriceActivityTimestamp
                                        Timestamp{2015-05-18 09:06:05:392}
       TradingStatus
                                        18=NotAvailableForTrading
       DailyOpeningPrice
                                        float64{3196.421231}
       DailyClosingPrice
                                        float64{3651.745136}
       PreviousDailyClosingPrice
                                        float64{3175.093037}
       PreviousBusinessDay
                                        Timestamp{2014-12-04}
       CurrentBusinessDay
                                        Timestamp{2014-12-05}
```

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 OMX TIP 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 Levell event quotNotifTradeEventExt, for Java.

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

Table 3 TradingStatus – technical implementation in FeedOS

Component	Value	Description
Tag Name	TradingStatus	FeedOS tag name.
Numeric ID	9100	FeedOS unique ID disseminated on S&P Capital IQ Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Туре	Enum	Enum data type.
Format	[Exchange Specific Value]	An <b>exchange specific value</b> , detailing the characteristics of the trading status.
	2	Trading Halt
	5	Price Indication
	15	New Price Indication
Possible Values	17	Ready to Trade
	18	Not Available for Trading
	20	Unknown or Invalid
	21	Pre-open

## 2.3. MBL and MBO Data\*

There is no MBL. The MBO is full depth.

## 3. Official Closing Price

On the market OMX TIP there is no closing event, closing price or settlement price.

## 4. Special Behavior

The following sections detail the special behavior of the OMX TIP market data stream:

• 4.1. Microsecond Timestamp Precision on the Level1 Market Data.

<sup>\*</sup> 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.

## 4.1. Microsecond Timestamp Precision on the Level1 Market Data

Effective May 2015, the server timestamps displays microsecond units on the Level1 Market Data, as shown in the example below (highlighted in green):

```
"TE (TradeEvent) : MARKET_TIME INSTRUMENT LAST_PRICE TRADE_QTY BID_PRICE BID_QTY ASK_PRICE ASK_QTY *CONTENT_MASK* *FLAGS*"

TE 11:00:22:091.520 140709188 * * * * * 12.42 1@1
TE 11:00:22:091.612 140709188 * * 11.75 26@5 * *
TE 11:00:22:091.612 140709188 * * * 6 942@39
TE 11:00:22:091.868 140709188 * * 13.25 23@4 * *
```

## 5. 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.