

S&P Capital IQ Real-Time Solutions

FeedOS™ Feed Description

NGM

Reference n°: 20150512 – 25635 – 26167 – 26550



S&P Capital IQ Real-Time Solutions
FeedOS™ Feed Description: NGM
Reference 20150512 – 25635 – 26167 – 26550
May 12, 2015

France Offices

52 Rue de la Victoire
75009 Paris
France
Tel: +33 (0) 1 73 02 32 11

US Offices

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

130 East Randolph
One Prudential Plaza, Suite 2900
Chicago, IL 60601
United States of America
Tel: +1-(312)-233-7129

UK Offices

20 Canada Square
Canary Wharf
London E14 5LH
United Kingdom
Tel: +44 (0) 203 107 1676

Singapore Offices

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, indirect, 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™ NGM Feed Description	1
1. Referential Data	1
1.1. Available Markets and Branches	1
1.1.1. Markets	2
1.1.2. Branches	2
1.2. Types of Instruments	2
1.2.1. Equities	3
1.2.2. Bonds	3
1.2.3. Warrants	4
1.2.4. Note	4
1.3. Specific Referential Tags	5
1.3.1. OperatingMIC and SegmentMIC	5
2. Quotation Data	5
2.1. Quotation Values	6
2.2. TradingStatus	6
2.3. Specific Quotation Tags	7
2.3.1. Trade Conditions	7
2.3.1.1. Trade Condition	7
2.3.2. Other Values	8
2.3.2.1. LastAuctionPrice	8
2.3.2.2. LastAuctionVolume	9
2.3.2.3. LastAuctionImbalanceSide	9
2.3.2.4. LastAuctionImbalanceVolume	10
2.3.2.5. InternalDailyClosingPriceType	10
2.3.2.6. MARKET_NGM_KnockOutBuyback	11
2.4. MBL, MBO and BBO Data	12
3. Official Closing Price	12
4. Special Behavior	12
4.1. Post-Open Kinematics	13
4.2. Knocked Out Instruments	14
4.3. Circuit Breaker	15
4.4. Microsecond Timestamp Precision on the Level1 Market Data	15
5. Finding the Latest Information	15



FEEDOS™ NGM 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 NGM 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 NGM 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 NGM market data stream:

- [1.1.1. Markets](#)
- [1.1.2. Branches.](#)

1.1.1. Markets

The NGM market data stream broadcasts informations about the following markets:

Table 1 List of markets available on the NGM market data stream

FeedOS Market ID	Market
XNGM	NGM – Nordic Growth Market
NMTF	Nordic MTF

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

```
MARKETS
market # 252    CC=SE/SWEDEN/STOCKHOLM,DESCR=NORDIC GROWTH MARKET,WEB=www.ngm.se
MIC = XNGM
TimeZone = Europe/Stockholm
Country = Sweden
NbMaxInstruments = 2000000
market # 487    CC=SE/SWEDEN/STOCKHOLM,DESCR=NORDIC MTF,WEB=www.nordicmtf.se
MIC = NMTF
TimeZone = Europe/Stockholm
Country = Sweden
NbMaxInstruments = 2000000
```

1.1.2. Branches

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

```
BRANCHES
{ XNGM CB    DCXXXX } qty: 1
{ XNGM CS    ESXXXX } qty: 13
{ XNGM GO    DBXXXX } qty: 208
{ XNGM NONE  DTVSXX } qty: 210
{ XNGM NONE  MMXXXX } qty: 342
{ XNGM WAR   RMXXXX } qty: 9
{ XNGM WAR   RSXXXX } qty: 11
{ XNGM WAR   RWXXXX } qty: 22723
{ NMTF CB    DCXXXX } qty: 3
{ NMTF CS    ESXXXX } qty: 21
{ NMTF WAR   RSXXXX } qty: 14
```

1.2. Types of Instruments

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

- [1.2.1. Equities](#)
- [1.2.2. Bonds](#)
- [1.2.3. Warrants](#)
- [1.2.4. Note.](#)

1.2.1. Equities

The sample below illustrates the details of an equity:

```
instr # 487/1092 = 1021314116
  PriceCurrency      string{SEK}
  Symbol             string{METV MTF UR}
  Description         string{METALLVÄRDEN I SVERIGE UR}
  SecurityType       string{CS}
  FOSMarketId        NMTF
  PriceType          uint8{2}
  CFICode            string{ESXXX}
  RoundLot           float64{1}
  MinTradeVol        float64{1}
  MarketSegmentID    string{MST}
  InternalCreationDate Timestamp{2015-01-22 00:00:00:108}
  InternalModificationDate Timestamp{2015-02-04 06:00:01:608}
  InternalHideFromLookup bool{True}
  InternalSourceId    uint16{198}
  InternalAggregationId uint16{198}
  InternalEntitlementId int32{1068}
  DelayedFeedMin      uint16{10}
  LocalCodeStr        string{2952}
  ISIN                string{SE0006731725}
  PriceIncrement_dynamic_TableId uint32{12976229}
  OperatingMIC        string{XNGM}
  SegmentMIC          string{NMTF}
```

1.2.2. Bonds

The sample below illustrates the details of a bond:

```
instr # 252/6573 = 528488877
  PriceCurrency      string{EUR}
  Symbol             string{NBFC NDF 4597}
  Description         string{Företagslåneobligation High Yield 1/2017}
  SecurityType       string{GO}
  FOSMarketId        XNGM
  PriceType          uint8{1}
  CFICode            string{DBXXX}
  RoundLot           float64{1000}
  MinTradeVol        float64{1000}
  MarketSegmentID    string{DFMP}
  InternalCreationDate Timestamp{2014-03-30 02:30:02:127}
  InternalModificationDate Timestamp{2015-03-18 06:00:00:775}
  InternalSourceId    uint16{198}
  InternalAggregationId uint16{198}
  InternalEntitlementId int32{1068}
  DelayedFeedMin      uint16{10}
  LocalCodeStr        string{YKY}
  ISIN                string{SE0004328615}
  PriceIncrement_dynamic_TableId uint32{12976228}
  OperatingMIC        string{XNGM}
```

1.2.3. Warrants

The sample below illustrates the details of a warrant:

```
instr # 252/32145 = 528514449
  PriceCurrency      string{SEK}
  Symbol             string{B LONGTSLN P CBK}
  Description         string{B LONGTSLN P CBK}
  SecurityType       string{WAR}
  FOSMarketId        XNGM
  PriceType          uint8{2}
  CFICode            string{RWXXX}
  RoundLot           float64{1}
  MarketSegmentID    string{DSKO}
  InternalCreationDate Timestamp{2014-05-12 00:00:02:307}
  InternalModificationDate Timestamp{2015-01-08 09:12:11:247}
  InternalHideFromLookup bool{True}
  InternalSourceId    uint16{198}
  InternalAggregationId uint16{198}
  InternalEntitlementId int32{1068}
  DelayedFeedMin      uint16{10}
  LocalCodeStr        string{20AX}
  ISIN               string{DE000CB5UK89}
  PriceIncrement_dynamic_TableId uint32{12976228}
  OperatingMIC        string{XNGM}
```

1.2.4. Note

The sample below illustrates the details of a note:

```
instr # 252/16106 = 528498410
  PriceCurrency      string{SEK}
  Symbol             string{RBSC 680 180328}
  Description         string{Non-Capital Protected Notes linked to an Index}
  SecurityType       string{NONE}
  FOSMarketId        XNGM
  PriceType          uint8{1}
  CFICode            string{DTVSXX}
  RoundLot           float64{10000}
  MinTradeVol        float64{10000}
  MarketSegmentID    string{DSSP}
  InternalCreationDate Timestamp{2014-03-30 02:30:01:010}
  InternalModificationDate Timestamp{2015-03-18 06:00:00:808}
  InternalSourceId    uint16{198}
  InternalAggregationId uint16{198}
  InternalEntitlementId int32{1068}
  DelayedFeedMin      uint16{10}
  LocalCodeStr        string{1GVB}
  ISIN               string{SE0004976942}
  PriceIncrement_dynamic_TableId uint32{12976228}
  OperatingMIC        string{XNGM}
```

1.3. Specific Referential Tags

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

- [1.3.1. OperatingMIC and SegmentMIC.](#)

1.3.1. OperatingMIC and SegmentMIC

The values of the referential tags **OperatingMIC** and **SegmentMIC** conveyed on the NGM market data stream are disseminated via FeedOS data stream in *Referential* to specify the parent and child MIC.

FeedOS implementation of the tags **OperatingMIC** and **SegmentMIC** is described in the table below:

Table 2 **OperatingMIC and SegmentMIC – technical implementation in FeedOS**

Component	Value		Description
Tag Name	OperatingMIC	SegmentMIC	FeedOS tag name.
Numeric ID	9533	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.
Type	String	String	String data type.
Format	<i>[Exchange Specific value]</i>	<i>[Exchange Specific value]</i>	An <i>exchange specific value</i> , specifying the parent and child MICs.
Possible Values	XNGM	NMTF	Market places of NGM.

2. Quotation Data

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

- [2.1. Quotation Values](#)
- [2.2. TradingStatus](#)
- [2.3. Specific Quotation Tags](#)
- [2.4. MBL, MBO and BBO Data.](#)

2.1. Quotation Values

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

```
InstrumentStatusL1
-- 252/36064
    BID: 70 0      *NO ORDER*
    ASK: 78 0      *NO ORDER*
    LastPrice      float64{70}
    LastTradeQty   float64{1}
    DailyHighPrice float64{70}
    DailyLowPrice  float64{60}
    DailyTotalVolumeTraded float64{27}
    DailyTotalAssetTraded float64{1796}
    LastTradePrice float64{70}
    LastTradeTimestamp Timestamp{2015-04-29 13:41:44:875}
    InternalDailyOpenTimestamp Timestamp{2015-04-29 13:36:02:283}
    InternalDailyCloseTimestamp Timestamp{2015-04-23 17:00:00:110}
    InternalDailyHighTimestamp Timestamp{2015-04-29 13:38:57:831}
    InternalDailyLowTimestamp Timestamp{2015-04-29 13:36:02:283}
    InternalPriceActivityTimestamp Timestamp{2015-04-29 13:52:15:197}
    TradingStatus  5=PriceIndication
    DailyOpeningPrice float64{60}
    PreviousDailyTotalVolumeTraded float64{38100}
    PreviousDailyTotalAssetTraded float64{1383920}
    PreviousDailyClosingPrice float64{340}
    PreviousBusinessDay Timestamp{2015-04-23}
    CurrentBusinessDay Timestamp{2015-04-29}
    LastAuctionPrice float64{62}
    LastAuctionVolume float64{11}
    LastAuctionImbalanceSide char{B}
    LastAuctionImbalanceVolume float64{30}
    InternalDailyClosingPriceType char{a}
    InternalLastAuctionTimestamp Timestamp{2015-04-29 13:39:49:478}
    PriceActivityMarketTimestamp Timestamp{2015-04-29 13:52:15:194}
    MARKET_NGM_KnockOutBuyback char{S}
```

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 NGM 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 3 `TradingStatus` – technical implementation in FeedOS

Component	Value	Description
Tag Name	<code>TradingStatus</code>	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.
Type	Enum	Enum data type.
Format	<i>[Exchange specific value]</i>	An exchange specific value , detailing the characteristics of the trading status.
Possible Values	2	Trading Halt
	5	Price Indication
	15	New Price Indication
	17	Ready to Trade
	18	Not Available for Trading

2.3. Specific Quotation Tags

The following sections describe the quotation tags on the NGM 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 on the NGM market data stream:

- [2.3.1.1. Trade Condition.](#)

2.3.1.1. Trade Condition

Each time a trade occurs, the values of the quotation tag **Trade Condition** conveyed on the NGM market data stream are disseminated via FeedOS data stream in *Context*:

- 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 `TradeCondition` is described in the table below:

Table 4 TradeCondition – technical implementation in FeedOS

Component	Value	Description
Tag Name	TradeCondition	FeedOS tag name.
Numeric ID	277	FeedOS unique ID broadcast on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	String	String data type.
Format	<i>[Exchange specific value]</i>	An exchange specific value , detailing the conditions of a trade.
Possible Values	I	Sold Last (Late Reporting)
	AV	Outside Spread
	XAO	Opening auction Trade
	XAC	Closing auction Trade
	XAD	Circuit breaker dynamic auction Trade
	XAS	Circuit breaker static auction Trade
	XB	Knock out buyback trade
	XD	Distribution trade
	X0	Outside Spread Unknown
	XS	Sold out buyback trade

2.3.2. Other Values

The following sections describe the other values available on the NGM market data stream:

- [2.3.2.1. LastAuctionPrice](#)
- [2.3.2.2. LastAuctionVolume](#)
- [2.3.2.3. LastAuctionImbalanceSide](#)
- [2.3.2.4. LastAuctionImbalanceVolume](#)
- [2.3.2.5. InternalDailyClosingPriceType](#)
- [2.3.2.6. MARKET_NGM_KnockOutBuyback](#).

2.3.2.1. LastAuctionPrice

The values of the quotation tag **LastAuctionPrice** conveyed on the NGM market data stream are disseminated via FeedOS data stream in *Other Values* to detail the last price:

- 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 **LastAuctionPrice** is described in the following table:

Table 5 LastAuctionPrice – technical implementation in FeedOS

Component	Value	Description
Tag Name	LastAuctionPrice	FeedOS tag name.
Numeric ID	9146	FeedOS unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	Float64	Float64 data type.
Format / Possible Values	<i>[Exchange specific value]</i>	An <i>exchange specific value</i> , detailing the last auction price.

2.3.2.2. LastAuctionVolume

The values of the quotation tag **LastAuctionVolume** conveyed on the NGM market data stream are disseminated via FeedOS data stream in *Other Values* to detail the last volume:

- 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 **LastAuctionVolume** is described in the following table:

Table 6 LastAuctionVolume – technical implementation in FeedOS

Component	Value	Description
Tag Name	LastAuctionVolume	FeedOS tag name.
Numeric ID	9147	FeedOS unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	Float64	Float64 data type.
Format / Possible Values	<i>[Exchange specific value]</i>	An <i>exchange specific value</i> , detailing the last auction volume.

2.3.2.3. LastAuctionImbalanceSide

The values of the quotation tag **LastAuctionImbalanceSide** conveyed on the NGM market data stream are disseminated via FeedOS data stream in *Other Values* to indicate the imbalance side of a closing auction:

- 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 `LastAuctionImbalanceSide` is described below:

Table 7 `LastAuctionImbalanceSide` – technical implementation in FeedOS

Component	Value	Description
Tag Name	<code>LastAuctionImbalanceSide</code>	FeedOS tag name.
Numeric ID	9151	FeedOS unique ID disseminated on S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	Char	Char data type.
Format	<i>[Exchange specific value]</i>	An exchange specific value , detailing the imbalance side of a closing auction.
Possible Values	B	Buy
	S	Sell

2.3.2.4. `LastAuctionImbalanceVolume`

The values of the quotation tag `LastAuctionImbalanceVolume` conveyed on the NGM market data stream are disseminated via FeedOS data stream in *Other Values* to indicate the imbalance volume of a closing auction:

- 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 values available for the tag `LastAuctionImbalanceVolume` is described below:

Table 8 `LastAuctionImbalanceVolume` – technical implementation in FeedOS

Component	Value	Description
Tag Name	<code>LastAuctionImbalanceVolume</code>	FeedOS tag name.
Numeric ID	9152	FeedOS unique ID disseminated on S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	Float64	Float64 data type.
Format / Possible Values	<i>[Exchange specific value]</i>	An exchange specific value , detailing the imbalance volume of a closing auction.

2.3.2.5. `InternalDailyClosingPriceType`

The values of the quotation tag `InternalDailyClosingPriceType` conveyed on the NGM 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 Level1 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 9 InternalDailyClosingPriceType – technical implementation in FeedOS

Component	Value	Description
Tag Name	<code>InternalDailyClosingPriceType</code>	FeedOS tag name.
Numeric ID	9155	FeedOS unique ID disseminated on S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	Char	Char data type.
Format	<i>[Internal specific value]</i>	An internal specific value , detailing the type of daily closing price, as described below.
Possible Values	0	Undefined
	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.
	c	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).
	e	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).

2.3.2.6. MARKET_NGM_KnockOutBuyback

The values of the quotation tag `MARKET_NGM_KnockOutBuyback` conveyed on the NGM market data stream are disseminated via FeedOS data stream in *Other Values* to detail the type of buyback for a knock-out product:

- 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 `MARKET_NGM_KnockOutBuyback` is described in the table below:

Table 10 MARKET_NGM_KnockOutBuyback – technical implementation in FeedOS

Component	Value	Description
Tag Name	<code>MARKET_NGM_KnockOutBuyback</code>	FeedOS tag name.
Numeric ID	15040	FeedOS unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	Char	Char data type.
Format	<i>[Exchange specific value]</i>	An exchange specific value , detailing the particular condition applicable to the trade.

Table 10 MARKET_NGM_KnockOutBuyback – technical implementation in FeedOS (Continued)

Component	Value	Description
Possible Values	D	Circuit breaker dynamic
	S	Circuit breaker static
	U	Sold-out buyback
	V	Distribution
	W	Knock out
	X	Knock out buyback
	Y	Knock out soft
	Z	Under observation

2.4. MBL, MBO and BBO Data^{*}

The MBL book has a 10-level depth. The MBO book is full depth.

3. Official Closing Price

The closing price is the last trade price upon close, as provided by the exchange. When a stock splits, the closing price is adjusted after the closing. There is no settlement price.

4. Special Behavior

The following sections describe the special behavior of the NGM market data stream:

- [4.1. Post-Open Kinematics](#)
- [4.2. Knocked Out Instruments](#)
- [4.3. Circuit Breaker](#)
- [4.4. Microsecond Timestamp Precision on the Level1 Market Data.](#)

^{*} The MBL, MBO and BBO 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. Post-Open Kinematics

In the Post-Open kinematics **before 2014-03-17**, during the Post-Trading Hours (usually, after 17:30 Exchange Standard Time), an instrument had the Trading Status 5=Price Indication, as shown in the example below:

```
"TE (TradeEvent) : MARKET_TIME INSTRUMENT LAST_PRICE TRADE_QTY BID_PRICE BID_QTY ASK_PRICE
ASK_QTY *CONTENT_MASK* *FLAGS*"
"VU (ValuesUpdate) : SERVER_TIME INSTRUMENT VALUES..."
"SI (TradeEvent) *SIGNAL* : SERVER_TIME INSTRUMENT SIGNAL LAST_PRICE"

TE 16:24:51:065 528493787      *      *      417.63  5000@1  419.3   5000@1
VU 16:25:00:254 528493787      TradingStatus=5
SI 17:00:00:725 528493787      CLOSE   418.33
TE 17:00:00:725 528493787      418.33  *      *      *      *      *      C
VU 17:00:00:725 528493787      TradingStatus=18
VU 17:00:00:725 528493787      SessionVWAPPrice=3088818.98
```

In the Post-Open kinematics **after 2014-03-17**, during the same Post-Trading Hours, an instrument has the Trading Status 15=New Price Indication, as shown in the example below:

```
"TE (TradeEvent) : MARKET_TIME INSTRUMENT LAST_PRICE TRADE_QTY BID_PRICE BID_QTY ASK_PRICE
ASK_QTY *CONTENT_MASK* *FLAGS*"
"VU (ValuesUpdate) : SERVER_TIME INSTRUMENT VALUES..."
"SI (TradeEvent) *SIGNAL* : SERVER_TIME INSTRUMENT SIGNAL LAST_PRICE"

TE 16:24:51:065 528493787      *      *      417.63  5000@1  419.3   5000@1
VU 16:25:00:254 528493787      TradingStatus=15
SI 17:00:00:725 528493787      CLOSE   418.33
TE 17:00:00:725 528493787      418.33  *      *      *      *      *      C
VU 17:00:00:725 528493787      TradingStatus=18
VU 17:00:00:725 528493787      SessionVWAPPrice=3088818.98
```

Moreover, in the Post-Trading Hours, the session orders and the order changes are still not disclosed (not disseminated in the market data), although you can submit, modify and/or cancel other orders.

Caution	Effective 2014-03-17, the Trading Status value 5=Price Indication has been completely removed from the list of possible Trading Status values on the NGM market data stream.
----------------	--

4.2. Knocked Out Instruments

In the Level1 Market Data Kinematics **before 2015-04-13**, when the tag MARKET_NGM_KnockOutBuyback received the value Y=Knock out soft, a halted knocked out instrument changed its Trading Status from 2=TradingHalt to 17=ReadyToTrade after the OPEN signal, as shown in the example below:

```
"TE (TradeEvent) : MARKET_TIME INSTRUMENT LAST_PRICE TRADE_QTY BID_PRICE BID_QTY ASK_PRICE
ASK_QTY *CONTENT_MASK* *FLAGS*"
"VU (ValuesUpdate) : SERVER_TIME INSTRUMENT VALUES..."
"SI (TradeEvent) *SIGNAL* : SERVER_TIME INSTRUMENT SIGNAL LAST_PRICE"

VU 06:59:59:682 252/28794 TradingStatus=21
VU 07:00:00:475 252/28794 MARKET_NGM_KnockOutBuyback=Y TradingStatus=2
SI 08:00:00:244 252/28794 OPEN *
TE 08:00:00:244 252/28794 * * * * * * O
VU 08:00:00:244 252/28794 MARKET_NGM_KnockOutBuyback=Y TradingStatus=17
```

In the Level1 Market Data Kinematics **after 2015-04-13**, when the tag MARKET_NGM_KnockOutBuyback receives the value Y=Knock out soft, a halted knocked out instrument remains halted (Trading Status 2=TradingHalt) even after the OPEN signal, as shown in the example below:

```
"TE (TradeEvent) : MARKET_TIME INSTRUMENT LAST_PRICE TRADE_QTY BID_PRICE BID_QTY ASK_PRICE
ASK_QTY *CONTENT_MASK* *FLAGS*"
"VU (ValuesUpdate) : SERVER_TIME INSTRUMENT VALUES..."
"SI (TradeEvent) *SIGNAL* : SERVER_TIME INSTRUMENT SIGNAL LAST_PRICE"

VU 07:00:00:475.254 252/28794 MARKET_NGM_KnockOutBuyback=Y TradingStatus=2
SI 08:00:00:244.178 252/28794 OPEN *
TE 08:00:00:244.178 252/28794 * * * * * * O
VU 08:00:00:244.178 252/28794 MARKET_NGM_KnockOutBuyback=Y
```

4.3. Circuit Breaker

Effective 2015-06-01, the Circuit Breakers used to halt the trading each time an extraordinary market volatility occurs is flagged in the Level1 Market Data by the tag `MARKET_NGM_KnockOutBuyback` (see section 2.3.2.6. `MARKET_NGM_KnockOutBuyback`). Moreover, when the tag `MARKET_NGM_KnockOutBuyback` disseminates the value `D=CircuitBreakerDynamic` or `S=CircuitBreakerStatic`, the `TradingStatus` of the instrument changes to `5=PriceIndication`, as shown in the example below:

```
VU 04:00:00:100.974 528512640 TradingStatus=21
VU 04:45:00:143.912 528512640 TradingStatus=5
SI 05:00:00:103.317 528512640 OPEN *
TE 05:00:00:103.317 528512640 * * * * * 0
VU 05:00:00:103.317 528512640 TradingStatus=17
VU 08:03:14:268.636 528512640 MARKET_NGM_KnockOutBuyback=D TradingStatus=5
VU 08:03:24:369.549 528512640 TradingStatus=17 MARKET_NGM_KnockOutBuyback=?
TE 08:05:17:918.076 528512640 * * 4 45@1 ! 0
TE 08:05:33:287.851 528512640 * * * * 33 100@1
TE 08:06:00:024.556 528512640 * * 32 33@1 * *
VU 08:06:22:611.710 528512640 MARKET_NGM_KnockOutBuyback=S TradingStatus=5
TE 08:06:22:611.710 528512640 * * 33 33@1 * *
VU 08:06:22:612.046 528512640 LastAuctionPrice=33 LastAuctionVolume=33
LastAuctionImbalanceVolume=? LastAuctionImbalanceSide=?
TE 08:06:43:852.267 528512640 * * 33 120@1 * *
VU 08:06:43:852.267 528512640 LastAuctionVolume=100 LastAuctionImbalanceVolume=20
LastAuctionImbalanceSide=B
TE 08:07:26:108.058 528512640 * * * * 33.01 100@1
```

4.4. Microsecond Timestamp Precision on the Level1 Market Data

Effective 2015-04-13, the server timestamps display 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 14:06:20:564.560 528504599 * * 133 1800@9 * *
TE 14:06:20:564.560 528504599 * * 133 1600@8 * *
TE 14:06:20:564.560 528504599 * * 133 1400@7 * *
TE 14:06:20:564.560 528504599 * * 133 1200@6 * *
TE 14:06:20:564.560 528504599 * * 133 1000@5 * *
TE 14:06:20:564.560 528504599 * * 133 800@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>.