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

## **FeedOS™ Feed Description**

#### **ASX24 Feed**

Reference n°: 20150213 - 21158 - 21953



S&P Capital IQ Real-Time Solutions FeedOS<sup>™</sup> Feed Description: ASX24 Reference 20150213 – 21158 – 21953 February 24, 2015

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# FEEDOS™ ASX24 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 ASX24 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. Multi-Session Kinematics
- 5. Special Behavior
- 6. Finding the Latest Information.

## 1. Referential Data

The following sections describe the characteristics of the referential data on the ASX24 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 ASX24 market data stream.

#### 1.1.1. Markets

The ASX24 market data stream broadcasts informations about the following markets:

Table 1 List of markets available on the ASX24 market data stream

| FeedOS Market ID | Market                          |
|------------------|---------------------------------|
| XSFE             | Sydney Futures Exchange Limited |

The following example shows the complete list of markets available on the ASX24 market data stream and their IDs, returned by the dumps command:

#### 1.1.2. Branches

The example below shows the complete list of branches available on the ASX24 market data stream for each market, returned by the dumps command. Each branch displays the following details: FOSMarketID, SecurityType, CFICode and Quantity (of instruments):

## 1.2. Types of Instruments

The following sections describe the instruments available on the ASX24 market data stream, according to their type:

- 1.2.1. Futures
- 1.2.2. Options
- 1.2.3. Multilegs.

#### **1.2.1. Futures**

The sample below illustrates the details of a future:

```
instr # 21/1003069 = 45043261
   PriceCurrency
                                string{AUD}
   Symbol
                                string{IR}
   Description
                                string{90 Day Bank Accepted Bill Futures}
   SecurityType
                                string{FUT}
   StdMaturity
                                string{201409}
   FOSMarketId
                                XSFE
   CFTCode
                                string{FFNXXX}
   MarketSegmentID
                                string{SFE}
   InternalCreationDate
                                Timestamp{2014-05-26 00:40:44:783}
   InternalModificationDate
                                Timestamp{2014-05-26 00:40:44:783}
   InternalSourceId
                                uint16{246}
   LocalCodeStr
                                string{237419}
   PriceIncrement_static
                                float64{0.01}
   MaturityYear
                                uint16{2014}
   MaturityMonth
                                uint8{9}
   MBLLayersDesc
                                string{0,1}
   OperatingMIC
                                string{XASX}
   SegmentMIC
                                string{XSFE}
                                float64{1000000}
   FaceValue
```

#### **1.2.2. Options**

The sample below illustrates the details of an option:

```
instr # 21/1003489 = 45043681
   PriceCurrency
                                string{AUD}
   Symbol
                                string{IR}
   Description
                                string{90 Day Bank Accepted Bill Options}
   SecurityType
                                string{OPT}
   StdMaturity
                                string{201409}
   StrikePrice
                                float64{98125}
   FOSMarketId
                                XSFE
   CFICode
                                string{OCXNXX}
   MarketSegmentID
                                string{SFE}
   InternalCreationDate
                                Timestamp{2014-05-26 00:40:52:614}
   InternalModificationDate
                                Timestamp{2014-05-26 00:40:52:614}
   InternalSourceId
                                uint16{246}
   LocalCodeStr
                                string{304028}
   PriceIncrement_static
                                float64{0.005}
   UnderlyingLocalCodeStr
                                string{237419}
                                uint16{2014}
   MaturityYear
   MaturityMonth
                                uint8{9}
                                string{0,1}
   MBLLayersDesc
   OperatingMIC
                                string{XASX}
   SegmentMIC
                                string{XSFE}
   FaceValue
                                float64{1000000}
```

### 1.2.3. Multilegs

The sample below illustrates the details of a multileg:

```
instr # 21/1021784 = 45061976
    SecurityType
                               string{MLEG}
    StdMaturity
                               string{201409}
    FOSMarketId
                               XSFE
    CFICode
                               string{FFXXXS}
   NbLegs
                               uint8{2}
   MarketSegmentID
                               string{SFE}
   InternalCreationDate
                               Timestamp{2014-06-19 07:45:00:095}
   InternalModificationDate
                               Timestamp{2014-06-19 07:45:00:095}
   InternalSourceId
                               uint16{246}
                               string{330637}
   LocalCodeStr
    PriceIncrement_static
                               float64{1}
   MaturityYear
                               uint16{2014}
   MaturityMonth
                               uint8{9}
    MBLLayersDesc
                               string{0,1}
    OperatingMIC
                               string{XASX}
    SegmentMIC
                               string{XSFE}
    LegFOSInstrumentCode
                               uint32{45049057}
    LegFOSInstrumentCode_1
                               uint32{45061975}
    LegRatioQty
                               float64{1}
                               float64{1}
    LegRatioQty_1
```

## 1.3. Specific Referential Tags

The following sections detail the specific referential tags available on the ASX24 market data stream:

- 1.3.1. Description
- 1.3.2. Factor
- 1.3.3. FaceValue
- 1.3.4. SecurityTradingID.

## 1.3.1. Description

The values of the referential tag **Description** conveyed on the ASX24 market data stream are disseminated via FeedOS data stream in *Referential* to characterize an instrument.

FeedOS implementation of the values currently available for the tag Description is detailed in the table below:

Table 2 Description – technical implementation in FeedOS

| Component                   | Value                     | Description  |
|-----------------------------|---------------------------|--|
| Tag Name                    | Description               | FeedOS tag name.   |
| Numeric ID                  | 107                       | 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 / Possible<br>Values | [Exchange Specific Value] | An <b>exchange specific value</b> , characterizing the instrument.   |

#### 1.3.2. Factor

The values of the referential tag **Factor** conveyed on the ASX24 market data stream are disseminated via FeedOS data stream in *Referential* to specify the Contract Value Factor by which a price must be adjusted to determine the true nominal value of one futures/options contract.

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

Table 3 Factor – technical implementation in FeedOS

| Component                      | Value                     | Description  |
|--------------------------------|---------------------------|--|
| Tag Name                       | Factor                    | FeedOS tag name.   |
| Numeric ID                     | 228                       | 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                           | Float64                   | Float64 data type.   |
| Format /<br>Possible<br>values | [Exchange Specific Value] | An exchange specific value, specifying the Contract Value Factor by which a price must be adjusted to determine the true nominal value of one futures/options contract.  NOTE: The FeedOS tag Factor replaces the tag RoundLot, when the Financial Type is a Commodity or an Equity. |

#### 1.3.3. FaceValue

The values of the referential tag **FaceValue** conveyed on the ASX24 market data stream are disseminated via FeedOS data stream in *Referential* to specify the amount of money stated on the face of a note, bond or stock.

FeedOS implementation of the tag FaceValue is detailed in the table below:

Table 4 Description – technical implementation in FeedOS

| Component                   | Value                     | Description  |
|-----------------------------|---------------------------|--|
| Tag Name                    | FaceValue                 | FeedOS tag name.   |
| Numeric ID                  | 9565                      | 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.  |
| /-                          |                           | An <b>exchange specific value</b> specifying the amount of money stated on the face of a note, bond or stock.                        |
| Format / Possible<br>Values | [Exchange Specific Value] | NOTE: The FeedOS tag FaceValue replaces the tag RoundLot, when the Financial Type is a Government Bond or a Bank Bill.               |

## 1.3.4. SecurityTradingID

The values of the referential tag **SecurityTradingID** conveyed on the ASX24 market data stream are disseminated via FeedOS data stream in *Referential* to specify the instrument Security Code.

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

Table 5 SecurityTradingId – technical implementation in FeedOS

| Component       | Value                     | Description  |
|-----------------|---------------------------|--|
| Tag Name        | SecurityTradingId         | FeedOS tag name.   |
| Numeric ID      | 9525                      | 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          | [CCMYY[C999999[o]]]       | CC – Commodity Code (Future OR Option OR Spread) M – Month YY – Year C – Call/Put Indicator 999999 – Option Strike and o – Overnight Option Indicator where the Month codes are: F – January G – February H – March J – April K – May M – June N – July Q – August U – September V – October X – November Z – December |
| Possible Values | [Exchange Specific Value] | An <b>exchange specific value</b> , detailing the instrument Security Code.  |

## 2. Quotation Data

The sections below describe the characteristics of the quotation data on the ASX24 market data stream, in terms of:

- 2.1. Quotation Values
- 2.2. Trading Status
- 2.3. Specific Quotation Tags
- 2.4. MBL, MBO and BBO Data.

#### 2.1. Quotation Values

The example below shows the possible values of an instrument on the ASX24 market data stream:

```
InstrumentStatusL1
-- 21/1003069
       BID: 97.34
                        11035
                                @57
       ASK: 97.35
                        6235
                                @50
       LastPrice
                                        float64{97.35}
                                        float64{1}
       LastTradeQty
                                        float64{97.35}
       DailyHighPrice
       DailyLowPrice
                                        float64{97.35}
       DailyTotalVolumeTraded
                                        float64{181}
       DailyTotalAssetTraded
                                        float64{17620.35}
       LastTradePrice
                                        float64{97.35}
       LastTradeTimestamp
                                        Timestamp{2014-06-26 09:57:30:809}
       InternalDailyOpenTimestamp
                                        Timestamp{2014-06-26 07:07:30:052}
       InternalDailyCloseTimestamp
                                        Timestamp{2014-06-26 06:30:00:076}
       InternalDailyHighTimestamp
                                        Timestamp{2014-06-26 07:13:29:217}
       InternalDailyLowTimestamp
                                        Timestamp{2014-06-26 07:13:29:217}
       InternalPriceActivityTimestamp
                                        Timestamp{2014-06-26 09:58:59:078}
       TradingStatus
                                        17=ReadyToTrade
       TradingSessionId
                                        int8{2}
       SessionTotalOffBookAssetTraded float64{0}
        SessionTotalOffBookVolumeTraded float64{0}
        SessionTotalVolumeTraded
                                        float64{181}
       SessionOpeningPrice
                                        float64{97.35}
        PreviousSessionClosingPrice
                                        float64{97.34}
       SessionHighPrice
                                        float64{97.35}
       SessionLowPrice
                                        float64{97.35}
        SessionTotalAssetTraded
                                        float64{17620.35}
                                        float64{97.35}
        DailyOpeningPrice
       PreviousDailyTotalVolumeTraded float64{9654}
        PreviousDailyTotalAssetTraded
                                        float64{939855.33}
        PreviousDailyClosingPrice
                                        float64{97.34}
       PreviousBusinessDay
                                        Timestamp{2014-06-26}
        CurrentBusinessDay
                                        Timestamp{2014-06-27}
        PreviousDailySettlementPrice
                                        float64{97.35}
       InternalLastAuctionTimestamp
                                        Timestamp{2014-06-26 06:58:00:749}
        PriceActivityMarketTimestamp
                                        Timestamp{2014-06-26 09:58:59:036}
        SettlementPriceDate
                                        Timestamp{2014-06-26}
```

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

## 2.2. Trading Status

Each time a modification of the trading status occurs, the values of the quotation tag **Trading Status** in the ASX24 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 **Trading Status** is described in the table below:

Table 6 Trading Status of the ASX24 market data stream – technical implementation in FeedOS

| Component       | Value                     | Description   |
|-----------------|---------------------------|---|
| Tag Name        | TradingStatus             | FeedOS tag name.  |
| Numeric ID      | 9100                      | FeedOS unique ID broadcast on S&P Capital IQ Real-Time Solutions data stream. It is the numeric equivalent of the tag name. |
| Туре            | Enum                      | Enumeration data type.  |
| Format          | [Exchange Specific Value] | An <b>exchange specific value</b> , as described below, concerning the characteristics of the trading status.               |
|                 | 5                         | Price Indication  |
|                 | 16                        | Trade Dissemination Time  |
| Possible Values | 17                        | Ready to Trade  |
|                 | 18                        | Not Available for Trading   |
|                 | 21                        | Pre-Open  |

## 2.3. Specific Quotation Tags

The following sections describe the specific quotation tags available on the ASX24 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 ASX24 market data stream:

• 2.3.1.1. TradeCondition.

#### 2.3.1.1. TradeCondition

The values of the quotation tag **TradeCondition** conveyed on the ASX24 market data stream are disseminated via FeedOS data stream in *Context* to identify the a particular condition applicable to the trade:

- 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.

QuantFEED® implementation of the tag TradeCondition is described in the table below:

Table 7 TradeCondition – technical implementation in QuantFEED®

| Component       | Value                     | Description  |
|-----------------|---------------------------|--|
| Tag Name        | TradeCondition            | FeedOS tag name.   |
| Numeric ID      | 277                       | 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> , detailing the particular condition applicable to the trade.  |
|                 | <empty></empty>           | Normal Trade, trade price matches both order prices. Default value, not sent.  |
|                 | х                         | Crossed  |
|                 | z                         | Sweeping Trade, trade price matches resting order  |
|                 | z-x                       | Sweeping Trade, trade price matches resting order – Crossed  |
|                 | R                         | Levelling Trade, trade price may be different than price of resting order(s)   |
|                 | R-X                       | Levelling Trade, trade price may be different than price of resting order(s) – Crossed   |
| Possible Values | 1                         | Spread-to-Underlying trade (price is based on the order of the underlying future relating to intra, inter or custom matching with an outright order)           |
|                 | 1-X                       | Spread-to-Underlying trade (price is based on the order of the underlying future relating to intra, inter or custom matching with an outright order) – Crossed |
|                 | AA-4                      | Intra-Spread-to-Intra-Spread trade (price is based on the near contract's prior day settlement)  |
|                 | AA-4-X                    | Intra-Spread-to-Intra-Spread trade (price is based on the near contract's prior day settlement) – Crossed  |
|                 | 3                         | Inter-Spread-to-Inter-Spread trade (price is based on the secondary's contract's prior day settlement)   |
|                 | 3-X                       | Inter-Spread-to-Inter-Spread trade (price is based on the secondary's contract's prior day settlement)  — Crossed  |
|                 | АН                        | Custom-to-Custom trade   |
|                 | AH-X                      | Custom-to-Custom trade – Crossed   |

#### 2.3.2. Other Values

The following subsections describe the other values available on the ASX24 market data stream:

- 2.3.2.1. LowLimitPrice
- 2.3.2.2. HighLimitPrice
- 2.3.2.3. TradingReferencePrice
- 2.3.2.4. SettlementPriceDate
- 2.3.2.5. SettlementPriceType.

#### 2.3.2.1. LowLimitPrice

The values of the quotation tag **LowLimitPrice** conveyed on the ASX24 market data stream are disseminated via FeedOS data stream in *Other Values* to indicate the low limit of a 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 LowLimitPrice is described in the following table:

Table 8 LowLimitPrice – technical implementation in QuantFEED®

| Component                   | Value                     | Description   |
|-----------------------------|---------------------------|---|
| Tag Name                    | LowLimitPrice             | FeedOS tag name.  |
| Numeric ID                  | 1148                      | FeedOS unique ID disseminated on S&P<br>Capital IQ Real-Time Solutions data stream.<br>This is the numeric equivalent of the tag<br>name. |
| Туре                        | Float64                   | Float64 data type.  |
| Format / Possible<br>Values | [Exchange Specific Value] | An <b>exchange specific value</b> , indicating the low limit of a price.  |

#### 2.3.2.2. HighLimitPrice

The values of the quotation tag **HighLimitPrice** conveyed on the ASX24 market data stream are disseminated via FeedOS data stream in *Other Values* to indicate the high limit of a 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 HighLimitPrice is described in the following table:

Table 9 HighLimitPrice – technical implementation in QuantFEED®

| Component                   | Value                     | Description  |
|-----------------------------|---------------------------|--|
| Tag Name                    | HighLimitPrice            | FeedOS tag name.   |
| Numeric ID                  | 1149                      | FeedOS unique ID disseminated on S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name. |
| Туре                        | Float64                   | Float64 data type.   |
| Format / Possible<br>Values | [Exchange Specific Value] | An <b>exchange specific value</b> , indicating the high limit of a price.  |

#### 2.3.2.3. TradingReferencePrice

The values of the quotation tag **TradingReferencePrice** conveyed on the ASX24 market data stream are disseminated via FeedOS data stream in *Other Values* to indicate the reference 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 TradingReferencePrice is described in the following table:

Table 10 TradingReferencePrice – technical implementation in QuantFEED®

| Component                   | Value                     | Description  |
|-----------------------------|---------------------------|--|
| Tag Name                    | TradingReferencePrice     | FeedOS tag name.   |
| Numeric ID                  | 9370                      | FeedOS unique ID disseminated on S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name. |
| Туре                        | Float64                   | Float64 data type.   |
| Format / Possible<br>Values | [Exchange Specific Value] | An <b>exchange specific value</b> , indicating the reference price.  |

#### 2.3.2.4. SettlementPriceDate

The values of the quotation tag **SettlementPriceDate** conveyed on the ASX24 market data stream are disseminated via FeedOS data stream in *Other Values* to indicate the date of the settlement 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 SettlementPriceDate is described in the following table:

Table 11 SettlementPriceDate – technical implementation in QuantFEED®

| Component                   | Value                     | Description  |
|-----------------------------|---------------------------|--|
| Tag Name                    | SettlementPriceDate       | FeedOS tag name.   |
| Numeric ID                  | 9380                      | FeedOS unique ID disseminated on S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name. |
| Туре                        | Timestamp                 | Timestamp data type.   |
| Format / Possible<br>Values | [Exchange Specific Value] | An <b>exchange specific value</b> , indicating the date of the settlement price.   |

#### 2.3.2.5. SettlementPriceType

The values of the quotation tag **SettlementPriceDate** conveyed on the ASX24 market data stream are disseminated via FeedOS data stream in *Other Values* to indicate the type of settlement 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 SettlementPriceType is described in the following table:

Table 12 SettlementPriceType – technical implementation in QuantFEED®

| Component       | Value                     | Description  |
|-----------------|---------------------------|--|
| Tag Name        | SettlementPriceType       | FeedOS tag name.   |
| Numeric ID      | 9383                      | 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                      | Timestamp data type.   |
| Format          | [Exchange Specific Value] | An <b>exchange specific value</b> , indicating the type of settlement price.   |
| Possible Values | a                         | Official Daily Settlement Price  |
|                 | b                         | Official Indicative Settlement Price   |

## 2.4. MBL, MBO and BBO Data\*

The MBL and MBO books are full depth.

## 3. Official Closing Price

The closing price is the last trade price upon close. The settlement price is handled when provided by the market.

## 4. Multi-Session Kinematics

The following diagram describes the main trading phases and the update mechanism of the tags on the ASX24 market data stream:

<sup>\*</sup> 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.

Figure 1 Example of tags update mechanism for a 90 Day Bank Bill (IR) on the ASX24 market data stream in **Australian Eastern Standard Time** 

**AEST** 16:58:00 **PREOPEN**  CurrentBusinessDay = last trading day date **PreOpen** Phase 17:07:30 **LEVELLING Daily Opening Signal** 17:08:00 On Exchange message event "O" **OPEN** TradingSessionId = 1 • RESET DailyOpeningPrice • RESET DailyClosingPrice RESET DailyTotalVolumeTraded RESET SessionTotalAssetTraded RESET SessionClosingPrice • PreviousDailyClosingPrice = DailyClosingPrice • SessionOpeningPrice • CurrentBusinessDay = next business day or CurrentBusinessDay + 3 on Friday • PreviousDailyTotalVolumeTraded = DailyTotalVolumeTraded **SessionClosingPrice** 23:59:00 On Exchange message used to close **CLOSE** 08:18:00 **PREOPEN** PreOpen Phase 08:27:30 **LEVELLING** Trading Session ID +1 (=2) 08:28:00 **OPEN** SessionOpeningPrice • RESET SessionClosingPrice

On Exchange message used to open

- RESET SessionOpeningPrice
- Check CurrentBusinessDay and correct it in case of bank holidays
- Retrieve the open, DailyHigh and DailyLow before changing the CurrentBusinessDay
- If the instrument has not opened during the night session, then update the CurrentBusinessDay with the daily date

### **Daily Closing Signal**

On Exchange message used to close

- DailyClosingPrice
  - DailyTotalVolumeTraded
  - SessionClosingPrice

#### 16:00:00 CLOSE

## Closing Phase

Afternoon Session

## 5. Special Behavior

The following section detail the ASX24 market data stream special behavior in terms of:

- 5.1. Management of the Best Bid/Best Ask in Level1 Market Data
- 5.2. Management of the Volatility Controls
- 5.3. Market News.

## 5.1. Management of the Best Bid/Best Ask in Level1 Market Data

The format of the Level1 Market Data merges the outright and implied orders in the Best Bid and Best Ask, as shown below:

## 5.2. Management of the Volatility Controls

ASX DERIVATIVES Exchange uses several Volatility Controls – such as the *Anomalous Order Threshold (AOT)* and the Session State '*Regulatory Halt*' – on the following Equity Index Futures contracts:

- ASX SPI 200<sup>™</sup> index futures (AP)
- S&P/ASX 200 Resources index futures (AR)
- S&P/ASX 200 Financials-x-A-REIT index futures (AF).

The **Anomalous Order Threshold** (AOT) prevents aggressive orders from entering the market outside an allowed range, based on a Dynamic Reference Price (as described in section 2.3.2.3. TradingReferencePrice). The AOT range will initially be set at +/- 0.5% from the AOT reference price (as described in sections 2.3.2.1. LowLimitPrice and 2.3.2.2. HighLimitPrice). The AOT reference price is a moving average and is recalculated at regular intervals.

The **Regulatory Halt Session State** re-sets the AOT reference price in the event of erroneous trading. If a Regulatory Halt occurs, the Trading Status is set to 5=Price Indication (as described in section 2.2. Trading Status) and any spread orders and custom orders related to the halted product are purged.

#### 5.3. Market News

Each time the exchange sends a text message to inform about ad hoc events, this is disseminated in the ASX24 market data stream in *Market News*:

- in the callback carrying the Level1 event notif\_MarketNews(), for C++
- in the event handler MarketNewsEventHandler, for C#
- in the callback carrying the Level1 event quotNotifMarketNewsEvent, for Java.

The Market News messages on ASX24 market data stream notify about:

- · General announcements
- EFP trade information
- Block trade information
- Central strike option volatility
- Single Session Option series underlying settlement price
- Serial Option underlying settlement price
- Custom RFQs (from participants)
- Settlement information that is normally distributed on the last trading date to the market as a text message, for Index and Non-Index product types.

Below is an example showing the message dissemination in the Market News:

```
"MN : MarketNews"

MN null 2015-06-17 10:44:01:974 XSFE Normal Message from EFP EFP Regd @ 16:28 339 YTH5 @ 98.030 related_instruments: 21/1035797 21/1035796

MN null 2015-06-18 00:58:35:971 XSFE Normal Message from EFP Block Trade Reg'd: YTH5 25 Lots @ 41.65 related_instruments: 21/1035797 21/1035796
```

## 6. 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: http://support.quanthouse.com.