S&P Capital IQ Real-Time Solutions

FeedOS™ Feed Description

IDEM/EURO TLX

Reference n°: 20141224 – 15009 – 19296

S&P CAPITAL IQ
McGRAW HILL FINANCIAL

S&P Capital IQ Real-Time Solutions
FeedOS™ Feed Description: IDEM
Reference 20141224 – 15009 – 19296
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TABLE OF CONTENTS

FEEDOS™ IDEM/EURO TLX 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 IDEM/EURO TLX market data stream, their possible values and current FeedOS technical implementation.

The topics this feed description covers include:

1. Referential Data

The following sections describe the characteristics of the referential data on the IDEM/EURO TLX market data stream, in terms of:

1.1. Available Markets and Branches

This section details the list of Markets and Branches available on the IDEM/EURO TLX market data stream.

1.1.1. Markets

The IDEM/EURO TLX market data stream broadcasts informations about the following markets:

Table 1 List of markets available on the IDEM/EURO TLX market data stream

FeedOS Market ID	Market
XDMI	Italian Derivatives Market
ETLX	EuroTLX

The following example shows the complete list of markets available on the IDEM/EURO TLX market data stream and their IDs, returned by the `dumps` command:

```
MARKETS
market # 129    CC=IT/ITALY/MILANO,DESCR=ITALIAN DERIVATIVES MARKET, WEB=www.borsaitalia.it
    MIC = XDMI
    TimeZone = Europe/Rome
    Country = IT
    NbMaxInstruments = 2000000
market # 374    CC=IT/ITALY/MILANO,DESCR=EUROTLX,WEB=www.eurotlx.com,OLD=FRRF,SEQNUM=1
    MIC = ETLX
    TimeZone = Europe/Rome
    Country = IT
    NbMaxInstruments = 2000000
```

1.1.2. Branches

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

```
BRANCHES
    { XDMI FUT  FXXCXX } qty: 807
    { XDMI FUT  FXXPXX } qty: 520
    { XDMI MLEG SXXXXX } qty: 1491
    { XDMI NONE XXXXXX } qty: 296
    { XDMI OPT  OXAXPX } qty: 39722
    { XDMI OPT  OXEXCX } qty: 2166
    { ETLX CS   ESXXXX } qty: 137
    { ETLX GO   DBFXXX } qty: 3618
    { ETLX GO   DBXXXX } qty: 415
    { ETLX GO   DBZXXX } qty: 127
    { ETLX WAR  MXXXXX } qty: 957
    { ETLX WAR  RMXXCX } qty: 115
    { ETLX WAR  RMXXPX } qty: 4
    { ETLX WAR  RWXCCX } qty: 1
```

1.2. Types of Instruments

The following sections describe the instruments available on the IDEM/EURO TLX market data stream, according to their type:

1.2.1. Options

The sample below illustrates the details of an option:

```
instr # 129/56659 = 270589267
    PriceCurrency               string{EUR}
    Symbol                      string{MIBO2W4K17800}
    Description                 string{MIBO2W4K17800}
    SecurityType                string{OPT}
    StdMaturity                 string{201411}
    StrikePrice                 float64{17800}
    FOSMarketId                 XDMI
    CFICode                     string{OXEXCX}
    CountryOfIssue              string{IT}
    SecurityGroup               string{m2}
    InternalCreationDate        Timestamp{2014-11-13 04:50:02:524}
    InternalModificationDate    Timestamp{2014-11-17 10:14:11:208}
    InternalSourceId            uint16{53}
    InternalAggregationId       uint16{69}
    InternalEntitlementId       int32{1018}
    LocalCodeStr                string{ITA_D_030e518dcccabc80}
    ISIN                        string{IT0011999817}
    UnderlyingLocalCodeStr      string{IT0003465736}
    MaturityYear                uint16{2014}
    MaturityMonth               uint8{11}
    MaturityDay                 uint8{14}
    PriceIncrement_dynamic_TableId      uint32{3473510}
    OperatingMIC                string{XMIL}
    SegmentMIC                  string{XDMI}
    MARKET_LSE_SegmentCode      string{m2}
```

1.2.2. Futures

The sample below illustrates the details of a future:

```
instr # 129/6640 = 270539248
    PriceCurrency               string{EUR}
    Symbol                      string{2US4L}
    Description                 string{2US4L}
    SecurityType                string{FUT}
    StdMaturity                 string{201412}
    FOSMarketId                 XDMI
    CFICode                     string{FXXCXX}
    CountryOfIssue              string{IT}
    SecurityGroup               string{cy}
    InternalCreationDate        Timestamp{2014-05-13 14:32:39:502}
    InternalModificationDate    Timestamp{2014-11-17 10:14:06:608}
    InternalHideFromLookup      bool{True}
    InternalSourceId            uint16{53}
    InternalAggregationId       uint16{69}
    InternalEntitlementId       int32{1018}
    LocalCodeStr                string{ITA_D_030e0cd8863df53b}
    ISIN                        string{IT0011502660}
    UnderlyingLocalCodeStr      string{IT0004827447}
    MaturityYear                uint16{2014}
    MaturityMonth               uint8{12}
    MaturityDay                 uint8{19}
    PriceIncrement_dynamic_TableId      uint32{3473513}
    OperatingMIC                string{XMIL}
    SegmentMIC                  string{XDMI}
    MARKET_LSE_SegmentCode      string{cy}
```

1.2.3. Multilegs

The sample below illustrates the details of a multileg:

```
instr # 129/59111 = 270591719
    Description                 string{+1xTIT4K1.55 -1xTIT4K1.60}
    SecurityType                string{MLEG}
    FOSMarketId                 XDMI
    CFICode                     string{SXXXXX}
    NbLegs                      uint8{2}
    InternalCreationDate        Timestamp{2014-11-14 14:16:05:258}
    InternalModificationDate    Timestamp{2014-11-17 10:14:06:734}
    InternalSourceId            uint16{53}
    InternalAggregationId       uint16{69}
    InternalEntitlementId       int32{1018}
    LocalCodeStr                string{ITA_D_030e5a20cbb69519}
    OperatingMIC                string{XMIL}
    SegmentMIC                  string{XDMI}
    LegFOSInstrumentCode        uint32{270590141}
    LegFOSInstrumentCode_1      uint32{270590149}
    LegRatioQty                 float64{1}
    LegRatioQty_1               float64{1}
    LegFIXSide                  '1'=Buy
    LegFIXSide_1                '2'=Sell
```

1.2.4. Bonds

The sample below illustrates the details of a bond:

```
instr # 374/6207 = 784341055
    PriceCurrency               string{EUR}
    Issuer                      string{MEDIOBANCA SPA}
    Description                 string{MEDIOBANCA-FIX ESXX50 30GN21}
    SecurityType                string{GO}
    StdMaturity                 string{202106}
    FOSMarketId                 ETLX
    CFICode                     string{DBXXXX}
    CountryOfIssue              string{IT}
    RoundLot                    float64{1000}
    MinTradeVol                 float64{1000}
    SecurityGroup               string{DBB}
    InternalCreationDate        Timestamp{2014-10-20 04:00:52:840}
    InternalModificationDate    Timestamp{2014-11-17 06:30:05:534}
    InternalSourceId            uint16{53}
    InternalAggregationId       uint16{53}
    InternalEntitlementId       int32{1187}
    LocalCodeStr                string{TLX_0a0000000000666b}
    ISIN                        string{IT0005026759}
    SEDOL                       string{}
    MaturityYear                uint16{2021}
    MaturityMonth               uint8{6}
    MaturityDay                 uint8{30}
    PriceIncrement_dynamic_TableId      uint32{3473526}
    OperatingMIC                string{ETLX}
    DynamicVariationRange       float64{3}
    StaticVariationRange        float64{4}
    MARKET_LSE_NormalMarketSize float64{105000000}
    MARKET_LSE_SectorCode       string{DBBN}
    MARKET_LSE_SegmentCode      string{DBB}
```

1.2.5. Warrants

The sample below illustrates the details of a warrant:

```
instr # 374/6040 = 784340888
    PriceCurrency               string{EUR}
    Symbol                      string{X94623}
    Issuer                      string{BNP PARIBAS ARBITRAGE ISSUANCE BV}
    Description                 string{BNP ARB-EURIBOR(6M) 04AP19}
    SecurityType                string{WAR}
    StdMaturity                 string{201904}
    FOSMarketId                 ETLX
    ContractMultiplier          float64{100}
    CFICode                     string{RMXXCX}
    CountryOfIssue              string{NL}
    RoundLot                    float64{1}
    MinTradeVol                 float64{1}
    SecurityGroup               string{FCE}
    InternalCreationDate        Timestamp{2014-09-26 22:13:27:070}
    InternalModificationDate    Timestamp{2014-11-17 06:30:05:647}
    InternalSourceId            uint16{53}
    InternalAggregationId       uint16{53}
    InternalEntitlementId       int32{1187}
    LocalCodeStr                string{TLX_0a0000000000654f}
    ISIN                        string{XS1048946237}
    SEDOL                       string{}
    UnderlyingLocalCodeStr      string{}
    MaturityYear                uint16{2019}
    MaturityMonth               uint8{4}
    MaturityDay                 uint8{4}
    PriceIncrement_dynamic_TableId      uint32{3473520}
    OperatingMIC                string{ETLX}
    DynamicVariationRange       float64{30}
    StaticVariationRange        float64{50}
    MARKET_LSE_NormalMarketSize float64{300000000}
    MARKET_LSE_SectorCode       string{FLNP}
    MARKET_LSE_SegmentCode      string{FCE}
```

1.3. Specific Referential Tags

The following sections describe additional, specific referential tags available on the IDEM/EURO TLX market data stream:

1.3.1. DynamicVariationRange

The values of the referential tag **DynamicVariationRange** conveyed on the IDEM/EURO TLX market data stream are disseminated via FeedOS data stream in *Referential* to indicate the maximum permitted value around the dynamic price.

The **Dynamic Range** defines the maximum permitted variation around the *Dynamic Price* (in both directions) and it is expressed as a percentage. The *Dynamic Price* is the price fixed *in the last trade*, and may be the result either of an auction (in which case it will be the same as the static price) or of a trade made on the open market. The Dynamic Range remains in force only while the market is open and during the closing auction.

FeedOS implementation of the tag `DynamicVariationRange` is described in the following table:

Table 2 DynamicVariationRange – technical implementation in FeedOS

Component	Value	Description
Tag Name	`DynamicVariationRange`	FeedOS tag name.
Numeric ID	`9553`	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	*`[Exchange Specific Value]`*	An ***exchange specific percentile value***, detailing the maximum permitted value around the dynamic price.

1.3.2. StaticVariationRange

The values of the referential tag **StaticVariationRange** conveyed on the IDEM/EURO TLX market data stream are disseminated via FeedOS data stream in *Referential* to indicate the maximum permitted value around the static price.

The **Static Range** defines the maximum permitted variation around the *Static Price* (in both directions) and it is expressed as a percentage. The *Static Price* is the price fixed *at the last auction* (the auction allocation price). The Static Range remains in force during the entire session.

FeedOS implementation of the tag `StaticVariationRange` is described in the following table:

Table 3 StaticVariationRange – technical implementation in FeedOS

Component	Value	Description
Tag Name	`StaticVariationRange`	FeedOS tag name.
Numeric ID	`9554`	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	*`[Exchange Specific Value]`*	An ***exchange specific percentile value***, detailing the maximum permitted value around the static price.

1.3.3. MARKET_LSE_NormalMarketSize

The values of the referential tag **MARKET_LSE_NormalMarketSize** conveyed on the IDEM/EURO TLX market data stream are disseminated via FeedOS data stream in *Referential*, to detail the size of the transactions.

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

Table 4 MARKET_LSE_NormalMarketSize – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	MARKET_LSE_NormalMarketSize	FeedOS tag name.
Numeric ID	11000	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	*[Exchange Specific Value]*	An ***exchange specific value***, detailing the size of the transactions.

1.3.4. MARKET_LSE_SectorCode (EURO TLX)

The values of the referential tag **MARKET_LSE_SectorCode** conveyed on the EURO TLX market data stream are disseminated via FeedOS data stream in Referential, to identify a division of the market within a Market Segment.

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

Table 5 MARKET_LSE_SectorCode – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	MARKET_LSE_SectorCode	FeedOS tag name.
Numeric ID	11001	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 data type.
Format	*[Exchange Specific Value]*	An ***exchange specific value***, indicating a division of the market within a Market Segment.
Possible Values	DBBN	Domestic Settl Banking Bond Non Plain
	DBBP	Domestic Settl Banking Bond Plain
	DIG	Domestic Sett Italian and Foreign Govies
	DLNP	Domestic Settl Leva E Cap Non Prot
	DPPP	Domestic Settl Cap Prot E Parz Prot
	DSCF	Domestic Sett Corporate, Financial and Supra
	DSEO	Domestic Sett Emerging and Other Bonds
	FBBN	Foreign Settl Banking Bond Non Plain
	FBBP	Foreign Settl Banking Bond Plain
	FLNP	Foreign Settl Leva E Cap Non Prot
	FPPP	Foreign Settl Cap Prot E Parz Prot
	FSCF	Foreign Sett Corporate, Financial and Supra
	FSEO	Foreign Sett Emerging and Other Bonds
	FSG	Foreign Sett Govies Ger Fra
	FSGO	Foreign Sett Govies Other
	FSS	Foreign Sett Sovereign
	IEQ	International Equity

1.3.5. MARKET_LSE_SegmentCode (EURO TLX)

The values of the referential tag **MARKET_LSE_SegmentCode** conveyed on the EURO TLX market data stream are disseminated via FeedOS market data stream in *Referential* to uniquely identify a specific trading area as defined by LSE.

FeedOS implementation of the tag `MARKET_LSE_SegmentCode` is described in the following table:

Table 6 MARKET_LSE_SegmentCode – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	`MARKET_LSE_SegmentCode`	FeedOS tag name.
Numeric ID	`11002`	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 data type.
Format	*`[Exchange Specific Value]`*	An ***exchange specific value***, uniquely identifying a specific trading area.
Possible Values	`DBB`	Domestic Settled Banking Bonds
	`DCE`	Domestic Settled Certificates
	`DCF`	Domestic Settled Corporate, Financial, Supra, Emerging, Other Bonds
	`DGS`	Domestic Settled Govies & Sovereign
	`EEQ`	ETLX Equities
	`FBB`	Foreign Settled Banking Bonds
	`FCE`	Foreign Settled Certificates
	`FCF`	Foreign Settled Corporate, Financial, Supra, Emerging, Other
	`FGS`	Foreign Settled Govies & Sovereign

2. Quotation Data

The sections below describe the characteristics of the quotation data on the IDEM/EURO TLX 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 IDEM/EURO TLX market data stream:

```
InstrumentStatusL1
-- 374/6040
        BID: 0.031    0       *NO ORDER*
        ASK: 0        0       *NO ORDER*
        LastPrice                       float64{0.031}
        InternalDailyOpenTimestamp      Timestamp{2014-11-17 08:00:00:195}
        InternalDailyCloseTimestamp     Timestamp{2014-11-14 16:50:00:168}
        InternalDailyHighTimestamp      Timestamp{2014-11-17 05:00:53:160}
        InternalDailyLowTimestamp       Timestamp{2014-11-17 06:00:01:363}
        InternalPriceActivityTimestamp  Timestamp{2014-11-17 16:30:04:538}
        TradingStatus                   15=NewPriceIndication
        DailyClosingPrice               float64{0.0305}
        PreviousDailyClosingPrice       float64{0.031}
        PreviousBusinessDay             Timestamp{2014-11-14}
        CurrentBusinessDay              Timestamp{2014-11-17}
        InternalDailyClosingPriceType   char{a}
        PriceActivityMarketTimestamp    Timestamp{2014-11-17 16:30:04:537}
        MARKET_LSE_MIT_TradingStatusDetails     string{b}
        MARKET_LSE_MIT_TotalAuctionVolume       float64{0}
```

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 **TradingStatus** conveyed on the IDEM/EURO TLX 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 **Trading Status** is described in the table below:

Table 7 Trading Status of the IDEM/EURO TLX market data stream – technical implementation in FeedOS

Component	Value	Description
Tag Name	`TradingStatus`	FeedOS tag name.
Numeric ID	9100	FeedOS unique ID broadcast on the S&P Capital IQ Real-Time Solutions data stream. It is the numeric equivalent of the tag name.
Type	`Enum`	Enumeration data type.
Format	*`[Exchange Specific Value]`*	An ***exchange specific value***, as described below, concerning the characteristics of the trading status.

Table 7 Trading Status of the IDEM/EURO TLX market data stream – technical implementation in FeedOS

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

2.3. Specific Quotation Tags

The following section describe the specific quotation tags available on the IDEM/EURO TLX market data stream:

- 2.3.1. Trade Conditions
- 2.3.2. Other Values.

2.3.1. Trade Conditions

The following sections describe the trade conditions available on the IDEM/EURO TLX market data stream:

- 2.3.1.1. MARKET_LSE_MIT_OffBookReportingTradeTypeIndicator
- 2.3.1.2. MARKET_LSE_MIT_AuctionTypeIndicator
- 2.3.1.3. MARKET_LSE_MIT_CrossType.

2.3.1.1. MARKET_LSE_MIT_OffBookReportingTradeTypeIndicator

The values of the quotation tag **MARKET_LSE_MIT_OffBookReportingTradeTypeIndicator** conveyed on the IDEM/EURO TLX market data stream are disseminated via FeedOS data stream in *Context* to detail the off book trade type:

- 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_LSE_MIT_OffBookReportingTradeTypeIndicator` is described below:

Table 8 MARKET_LSE_MIT_OffBookReportingTradeTypeIndicator – technical implementation in FeedOS

Component	Value	Description
Tag Name	`MARKET_LSE_MIT_OffBookReportingTradeTypeIndicator`	FeedOS tag name.
Numeric ID	`15950`	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	*`[Exchange Specific Value]`*	An ***exchange specific value***, detailing the off book trade type.
Possible Values	17	LC – Late correction
	24	PC – Previous days' contra
	1000	O – Ordinary trade

Table 8 MARKET_LSE_MIT_OffBookReportingTradeTypeIndicator – technical implementation in FeedOS

Component	Value	Description
Possible Values	1004	IF – Inter-fund transfer with delayed publication
	1005	NK – Negotiated trade with delayed publication
	1006	NT – Negotiated trade with immediate publication
	1007	OC – Cancellation of OTC trade more than three days old
	1008	OK – Ordinary trade with delayed publication requested
	1009	OT – OTC trade with immediate publication
	1010	SC – SI late correction
	1011	SI – SI trade
	1012	SK – SI trade with delayed publication requested
	1013	TK – OTC trade with delayed publication requested
	1018	BF – Inter-fund cross with delayed publication requested (MTF 1 TBA)
	1019	BC – Cancellation of OTC trade after date of publication (MTF 1 TBA)
	1020	QT – OTC trade (MTF 2 TBA)
	1021	QK – OTC trade with delayed publication requested (MTF 2 TBA)
	1022	QF – Inter-fund cross with delayed publication requested (MTF 2 TBA)
	1023	QC – Cancellation of OTC trade after date of publication (MTF 2 TBA)
	1024	MT – Inter-fund cross with delayed publication requested (MTF 3 TBA)
	1025	MK – OTC trade with delayed publication requested (MTF 3 TBA)
	1026	MF – Inter-fund cross with delayed publication requested (MTF 3 TBA)
	1027	MC – Cancellation of OTC trade after date of publication (MTF 3 TBA)
	1028	CT – OTC trade (MTF 4 TBA)
	1029	CK – OTC trade with delayed publication requested (MTF 4 TBA)
	1031	CC – Cancellation of OTC trade after date of publication (MTF 4 TBA)
	1032	GC – Delayed publication late correction
	2001	BT – OTC trade (MTF 1 TBA)
	2002	CF – Inter-fund cross with delayed publication requested (MTF 4 TBA)
	2003	LT – Late trade – after hours
	3001	BK – OTC Trade with delayed publication requested (MTF 1 TBA)

2.3.1.2. MARKET_LSE_MIT_AuctionTypeIndicator

The values of the quotation tag **MARKET_LSE_MIT_AuctionTypeIndicator** conveyed on the IDEM/EURO TLX market data stream are disseminated via FeedOS data stream in *Context* to detail the auction type:

- 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_LSE_MIT_AuctionTypeIndicator` is described in the table below:

Table 9 MARKET_LSE_MIT_AuctionTypeIndicator – technical implementation in FeedOS

Component	Value	Description
Tag Name	`MARKET_LSE_MIT_AuctionTypeIndicator`	FeedOS tag name.
Numeric ID	`15951`	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	*`[Exchange Specific Value]`*	An ***exchange specific value***, detailing the auction type.
Possible Values	`A`	AESP
	`B`	EDSP
	`C`	Closing Auction
	`E`	Resume Auction
	`F`	Periodic Auction
	`O`	Opening Auction
	`P`	OPA

2.3.1.3. MARKET_LSE_MIT_CrossType

The values of the quotation tag **MARKET_LSE_MIT_CrossType** conveyed on the IDEM/EURO TLX market data stream are disseminated via FeedOS data stream in *Context* to detail the cross type:

- 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_LSE_MIT_CrossType` is described in the table below:

Table 10 MARKET_LSE_MIT_CrossType – technical implementation in FeedOS

Component	Value	Description
Tag Name	`MARKET_LSE_MIT_CrossType`	FeedOS tag name.
Numeric ID	`15953`	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	`Char`	Char data type.
Format	*`[Exchange Specific Value]`*	An ***exchange specific value***, detailing the cross type.

Table 10 MARKET_LSE_MIT_CrossType – technical implementation in FeedOS (Continued)

Component	Value	Description
Possible Values	5	Internal Cross
	6	Internal BTF
	7	Committed Cross
	8	Committed BTF
	9	EG1
	10	EG2

2.3.2. Other Values

The following sections describe the specific quotation tags available on the IDEM/EURO TLX market data stream:

- 2.3.2.1. MARKET_LSE_MIT_TradingStatusDetails
- 2.3.2.2. MARKET_LSE_MIT_TotalAuctionVolume.

2.3.2.1. MARKET_LSE_MIT_TradingStatusDetails

Each time a modification of the instrument status occurs, the values of the quotation tag **MARKET_LSE_MIT_TradingStatusDetails** conveyed on the IDEM/EURO TLX market data stream are disseminated via FeedOS data stream in *Other Values* to indicate the current status of the instrument:

- 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_LSE_MIT_TradingStatusDetails` is described in the table below:

Table 11 MARKET_LSE_MIT_TradingStatusDetails – technical implementation in FeedOS

Component	Value	Description
Tag Name	`MARKET_LSE_MIT_TradingStatusDetails`	FeedOS tag name.
Numeric ID	`14750`	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	*`[Exchange Specific Value]`*	An ***exchange specific value***, detailing the current status of an instrument.
XDMI Values		
Possible Values	`B`	Post Session
	`C`	Consultation Start
	`E`	No Cancel Period
	`F`	Consultation End
	`I`	Prohibited
	`M`	Mini Batch
	`N`	Market Operation Centre Intervention
	`O`	Opening
	`P`	Pre-opening scheduled transition

Table 11 MARKET_LSE_MIT_TradingStatusDetails – technical implementation in FeedOS (Continued)

Component	Value	Description
Possible Values	S	Continuous Trading Session
	Z	Interrupted
	c	Not Trading
	f	Forbidden
	h	Hidden
	r	Pre-opening extension/Intraday auction
	s	Suspended
ETLX Values		
Possible Values	H	Halt
	J	Halt – Matching partition Suspended
	K	Halt – System Suspended
	L	Halt – Instrument Level Circuit Breaker Tripped
	M	Trading Stop – Matching Partition Suspended
	N	Trading Stop – System Suspended
	O	Trading Stop – Instrument Level Circuit Breaker Tripped
	P	Halt – Regulatory Halt
	Q	Quoting Period
	R	Resume Order Deletion period
	S	Trading Stop
	T	Regular Trading/Start Trade Reporting
	b	Post-Close
	c	Market Closed
	w	No Active Session
	x	End of Post Close
	y	Pre-Trading (Start of Trading)
	z	Closing Price Publication

2.3.2.2. MARKET_LSE_MIT_TotalAuctionVolume

The values of the quotation tag **MARKET_LSE_MIT_TotalAuctionVolume** conveyed on the IDEM/EURO TLX market data stream are disseminated via FeedOS data stream in *Other Values* to indicate the auction 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 `MARKET_LSE_MIT_TotalAuctionVolume` is described in the following table:

Table 12 MARKET_LSE_MIT_TotalAuctionVolume – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	`MARKET_LSE_MIT_TotalAuctionVolume`	FeedOS tag name.
Numeric ID	`14756`	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	*`[Exchange Specific Value]`*	An ***exchange specific value***, indicating the auction's volume.

2.4. MBL, MBO and BBO Data*

The MBL book has a 10-level depth. The MBL Snapshot is provided every 150 ms. The BBO is real-time.

3. Official Closing Price

The closing price is the last trade price upon close, as provided by the exchange. If the instrument has an auction phase, the market sends the last auction price, which becomes the closing price. When a stock splits, the closing price is adjusted after the closing. The settlement price is handled when provided by the market.

4. Session Kinematics

The table below describes the main trading and auction phases for the instruments of the Borsa Italiana available on the IDEM/EURO TLX market data stream:

Table 13 Trading Hours and associated Trading Phases for the instruments available on the Borsa Italiana (expressed in the exchange local time)

Trading Hours	Trading Phase
07:00 – 08:30	Trading Start
08:30 – 09:00	Opening Auction Call
09:00 – 12:00	Continuous Trading 1
12:00 – 12:15	Intraday Auction Call
12:15 – 16:50	Continuous Trading 2
16:50 – 17:00	Closing Auction Call
17:00 – 18:15	Post Close
08:00 – 18:15	Trade Reporting

* 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.

5. Special Behavior

The following sections describe the special behavior of the IDEM/EURO TLX market data stream:

5.1. Absent Theoretical Auction Quantity

The values of the Theoretical Auction Quantity (expressed by the tag `LastAuctionVolume`) are not disseminated via IDEM/EURO TLX market data stream during the auction phase, as shown in the example below:

```
VU   07:58:09:425 270551529   LastAuctionPrice=20500  LastAuctionImbalanceVolume=3
LastAuctionImbalanceSide=B  (there is no LastAuctionVolume)
VU   07:58:09:904 270551529   LastAuctionImbalanceVolume=8
VU   07:58:17:951 270551529   LastAuctionPrice=20505  LastAuctionImbalanceVolume=4
VU   07:58:28:848 270551529   LastAuctionPrice=20515
VU   07:58:29:072 270551529   LastAuctionPrice=20525  LastAuctionImbalanceVolume=1
VU   07:58:32:761 270551529   LastAuctionImbalanceVolume=2
VU   07:58:35:316 270551529   LastAuctionImbalanceVolume=3
VU   07:58:37:584 270551529   LastAuctionPrice=20535
VU   07:58:42:161 270551529   LastAuctionImbalanceVolume=13
VU   07:58:42:872 270551529   LastAuctionPrice=20540  LastAuctionImbalanceVolume=2
VU   07:58:44:294 270551529   LastAuctionImbalanceVolume=4
VU   07:58:50:398 270551529   LastAuctionImbalanceVolume=5
```

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: https://support.quanthouse.com.