Document title

Euronext Cash and Derivatives Markets – Optiq MDG Client Specifications - Appendix

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PREFACE

PURPOSE

The purpose of this document is to provide a list of the features planned in future release of Euronext Cash and Derivatives Markets – Optiq MDG Client Specifications MDG, to be published before the opening of the Physical External User Acceptance (P-EUA) platform.

TARGET AUDIENCE

This document must be read by Euronext's clients developing a Market Data Feed Handler to consumer Euronext market data.

SCOPE

The scope of this document is listed below (✔ In scope, ✘ Out of scope):

Products	
Equities	✔
Funds	✔
Fixed Income	✔
Warrants & Certificates	✔
Options	✔
Futures	✔
Commodities	✔
Indices	✔

ASSOCIATED DOCUMENTS

Please read the following documents along with these specifications:

Title	Description
Euronext Cash and Derivatives Markets – Optiq MDG Client Specifications	Description of the Optiq MDG messages for Cash and Derivatives

Title	Description
Euronext Cash Market - UTP to Optiq MDG Transition Kinematics Specifications	Description of the message kinematics for Cash
Euronext Derivatives Market - UTP to Optiq MDG Transition Kinematics Specifications	Description of the message kinematics for Derivatives
Euronext Cash and Derivatives - File Specifications	Description of the files for Cash and Derivatives
Euronext Optiq™ Market Data Gateway Production Environment	Description of the Production feed configuration
Euronext Optiq™ Market Data Gateway External User acceptance Environment	Description of the External User Acceptance feed configuration

Please visit www.euronext.com/optiq.

SUPPORT

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FURTHER INFORMATION

- For additional product information please visit: www.euronext.com/optiq
- For updated capacity figures and details of IP addresses please visit: www.euronext.com/optiq

CONTENTS

1. GENERAL

Retail Matching Facility (RMF) will be renamed Best of Book (BoB)

2. DIFFERENCES BETWEEN BUNDLE 1 RELEASE IN V-EUA ENVIRONMENT AND V1.2.0 SPECIFICATIONS

The V1.2.0 specifications have been updated to align with the functionalities currently available on the V-EUA platform, following the most-recent bundle release. However, some differences between bundle 1 functionalities delivered on Virtual EUA and bundle 1 functionalities described in the V1.2.0 specifications released need to be taken into account by customers.

2.1 ENVIRONMENT

The V-EUA environment will be subject to stabilization in the first days after the opening which may impact the availability of the feed and some of its features

2.2 CASH KINEMATICS V1.2.0

In place of the TimeTable, the first message sent at the start-up of the session supported in this release will be Market Update sent for 'Clear Book' notification.
This will be corrected on V-EUA in next release expected early Q1 2017. The TimeTable will be the first message at the start-up of the session.

2.3 FILES SPECIFICATIONS V1.2.0

■ **The Derivatives Standing Data XML files**
The Derivatives Standing Data XML files provided does not contain the referential data for the Strategies. Until a later delivery when XML files will be delivered with full scope, clients should use the existing XDP FIXML files provided as parallel run to obtain this data.
This will be corrected on V-EUA in next release expected early Q1 2017. The Derivatives Standing Data XML files provided will contain the referential data for the Strategies.

■ **The Instrument Standing Data XML files**
The Instrument Standing Data XML files, as described in the technical specifications, provides the referential information and the feed configuration split by Optiq segment. However, in the V-EUA, the Instrument Standing Data XML files provides **:**
1. The referential information split per Optiq segment, as described in the specifications.
2. The same feed configuration information covering full scope of all segments in all the files. This second point will be corrected on V-EUA in next release expected early Q1 2017.

3. MESSAGES & FILES

3.1 MESSAGES

- **CFI codes**

  Mapping CFI / Instrument codes will be included in a future release

- **Partition ID field**

  Partition ID field will be added. This field will allow customers to find instruments in a partition.

- **Market Update (1001) message**

  A new field "Number of Orders" will be implemented to provide the number of buy / sell orders for a given aggregated limit.

- **Price update (1003) message**

  A table of possible updates per instrument for Price update (1003) message will be provided.

- **Market Status Change (1005) message**

  The details of possible values for all fields of Market Status Change (1005) message will be provided.

3.2 MESSAGES & FILES

- **Full Trade Information (1004) message / file**
  - The Full Trade Information message (1004) delivered by Optiq MDG will carry MMT Trade flags and other fields as required by MiFID II.
  - The field VenueofPublication will be removed from the Full Trade Information message (1004)
  - List of all MiFID II fields that will be populated with null value for phase 1 in the Full Trade Information (1004) message are:

  - MMTMarketMechanism
  - MMTTradingMode
  - MMTTransactionCategory
  - MMTNegotiationIndicator
  - MMTAgencyCrossTradeIndicator
  - MMTModificationIndicator
  - MMTBenchmarkIndicator
  - MMTSpecialDividendIndicator
  - MMTOffBookAutomatedIndicator
  - MMTContributiontoPrice

  - MMTAlgorithmicIndicator
  - MMTPublicationMode (in step 1 will only have 2 values : '-' = Immediate Publication and '1': Non-Immediate Publication)
  - MMTPostTradeDeferral
  - MMTDuplicativeIndicator
  - MiFIDQtyinMsrmtUnitNotation
  - MifidQuantityMeasurementUnit
  - MifidPriceNotation

- **Timetable (1006) message /file**

  The "Instrument State" field in the Timetable (1006) message will be renamed as "Phase Type".

- **Standing Data (1007) message /file**

- The "Instrument Issue Price" of the instrument will be added in the Standing Data (1007) message.
- The "nominal currency" will be added in the Standing Data (1007) message.
- The "nominal market price" will be removed from the Standing Data (1007) message.
- The field "par value" is currently a price, it will become an amount.

■ **Standing Data (1007) message / Outright Standing Data (1014) message / Strategy Standing Data (1012) message /file**
For cash, the Maturity Date will be used as a date. For Derivatives, Maturity Date is used as a maturity ID.

■ **Standing Data (1007) message / Contract Standing Data (1013) message /file**
The "MIC" description will be modified to specify this is the Market Segment MIC, based on ISO 10383.
ISO 10383 provides 2 MIC lists : an operating MIC list and a Market Segment list. The MIC in Standing Data message is the market segment MIC.

■ **Contract Standing Data (1013) message /file**
The field "Underlying Expiry" will be added and set as optional.

■ **Outright Standing Data (1014) message /file**
The field "Instrument Event Date" will be used as the First Trading Date.

3.3   FILES

■ **File name**
"Version" has been removed from the file names and will be included inside the file as a tag

■ **File service on P EUA and PRODUCTION environments**
Additional information will be provided on the (protocol, server IP addresses, tree structure of folders…)

■ **Optiq MDG Standing data file**
For Lending and Borrowing, settlement price will be provided in a new dedicated file and no longer provided via Optiq MDG.

The Indices standing data file will be delivered in Bundle 2.

4. FOCUS ON DERIVATIVES CONTRACT STANDING DATA : DECIMALS & TICKS MANAGEMENT

In UTP for Cash Markets, tick sizes were provided through a dedicated file. This file will be adapted to Optiq, and provided alongside referential files. Client may refer to the dedicated Files Specification document for more details and detailed description of the file.

In UTP for Derivatives markets tick sizes were provided in the FIXML referential file, through several "numerator" values in the corresponding nested attributes. Those different ticks are maintained as they are with UTP connected to Optiq MDG.

In Optiq, referential data (Standing Data messages on the feed and referential files) provide the following fields :

1- Price/Index level Decimals
2- Quantity Decimals
3- Amount Decimals
4- Ratio/Price Multiplier Decimals

Each of Optiq MDG field provided that corresponds to a price, a quantity, an amount, or a ratio is to be computed with the corresponding decimals value. The description of the field indicates explicitly the decimals field to be used.

In UTP for Derivatives Markets, specific fields for decimals are provided in the FIXML file for the client to be in line with order entry interpretation of price fields at CCG level. Those fields are maintained in Optiq for the first and second phases, in both referential file and feeds.

The following table summarizes the list of concerned field, behaviour and renaming:

UTP for Derivatives Markets	Optiq™ field	Description
Nested Attribute "25" Instrument denominator	Instrument Decimals Ratio	Default ratio used in Order Entry for prices computation. When entering a price if 100 is given is in this field for the designated contract, and client enters an order on a series that belongs to it with a price set at 14500 – the functional value of the entered price is 145
Nested Attribute "26" Instrument Numerator	Instrument Tick Size	Default Tick Size value applicable for all series that belong to the contract
Nested Attribute "101" Instrument Numerator Settlement	Instrument Settlement Tick Size	Default Tick Size value applicable for all Settlement Prices
Nested Attribute "102" Instrument Numerator EDSP	Instrument EDSP Tick Size	Specific Tick Size value applicable for EDSP
Nested Attribute "103" Strike Price Denominator	Strike Price Decimals Ratio	Specific ratio used for Strike Prices computations
Nested Attribute "104" Strike Price Decimal Locator	NA	Not provided – Redundant with the previous field
Nested Attribute "105" Premium Pricing Numerator	Premium Pricing Tick Size	Specific Tick Size value applicable for the instrument for premium over the threshold defined in Premium Pricing Threshold field

UTP for Derivatives Markets	Optiq™ field	Description
Nested Attribute "106" Premium Pricing Threshold	Premium Pricing Threshold	Premium threshold defining the change of Tick Size to be applied from the default one provided in Instrument Tick Size field to the one provided in Premium Pricing Tick Size field
Nested Attribute "107" Outright LIS Trade Threshold	Outright LIS Trade Threshold	Wholesale LIS Trade Threshold checked for Order Cross submission
Nested Attribute "108" Strategy LIS trade Threshold	Strategy LIS Trade Threshold	Wholesale Strategy LIS Trade Threshold checked for Order Cross submission
Nested Attribute "109" Outright G. Cross Threshold	Outright G. Cross Threshold	Wholesale Guaranteed Trade Threshold checked for Order Cross submission
Nested Attribute "110" StrategyG. Cross Threshold	StrategyG. Cross Threshold	Wholesale Strategy Guaranteed Cross Trade Threshold checked for Order Cross submission
MinPxIncr	Tick Value	Used to compute the Valuation Coefficient: allows the calculation of the amount in a currency which should be paid by the buyer to the seller for a given price, for a trading lot
NA	Price / Index Level Decimals	Price / Index level Decimals locator used in Market Data In line with the field Instrument Decimals Ratio : (Price / Index Level Decimals)=log(Instrument Decimals Ratio)
NA	Quantity Decimals	Price / Index level Decimals locator used in Market Data
NA	Amount Decimals	Price / Index level Decimals locator used in Market Data
NA	Ratio / Price Multiplier Decimals	Price / Index level Decimals locator used in Market Data

Notes:

I-   Lot Size

Clients should note that:

On cash markets, as the description states today, the Lot Size represents the minimum tradable quantity.

On Derivatives Markets, the Lot Size represents the amount of underlying instrument per one unit of a derivative contract (UTP FIXML corresponding field being RndLot). Description of the field will be enhanced in the next specification release.

II-   V-EUA Operability

Client are invited to use the FIXML file provided on a daily basis to conduct their tests and messages submission in the V-EUA environment. As long as the first phase of the Optiq Program does not impact CCG behaviour, the files are still valid as referential files until the update is done to let the customer use the Optiq Standing Data files as basis for their trading activity.

5.   CHANNELS

- **Market Update (1001) message**
  Short trade, with Market Update (1001), will be provided on SI channel.

- **Shaping**
  A detailed example for the shaping will be provided.

- **Best Bid and Offer (BBO) channels for Equities, Funds, Fixed Income and Bourse de Luxembourg**
  The Equities, Funds, Fixed Income and Bourse de Luxembourg Best Bid and Offer (BBO) channels have been changed in the MDG message specifications to become Full Order Book – Market Update Channels (including BBO) – this is target solution.
  The configuration on EUA is not yet changed and will be changed in Q1 2017. The configuration on v-EUA is showing BBO for Equities, Funds, Fixed Income and Bourse de Luxembourg and it's the same as the information we have currently in the PDF and XML files online.
  We will update the files below when the configuration on v-EUA will be changed:
  Files to update are available [here](#)
  - Section: *Technical documentation* / Sub section *Optiq phase 1 (MDG): specifications*
    1. OPTIQ™ MARKET DATA GATEWAY FEED CONFIGURATION. EURONEXT CASH AND DERIVATIVES MARKETS VIRTUAL AND PHYSICAL EXTERNAL USER ACCEPTANCE ENVIRONMENTS
    2. OPTIQ™ MARKET DATA GATEWAY FEED CONFIGURATION PRODUCTION AND DISASTER RECOVERY
    3. EURONEXT CASH MARKET - UTP TO OPTIQ™ MDG KINEMATICS SPECIFICATIONS
  - Section: *Technical documentation* / Sub section *Optiq phase 1 (MDG): files*
    4. MDG V-EUA XML STANDING DATA FILE

- **APA Service**
  APA Service is a new service provided by Euronext that allow clients to get the trade reporting for OTC (off-exchange) trades. This reporting is MiFID II compliant. APA service will be described in the next specifications release.