



TUG - TECHNICAL USER EXPERIENCE

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London
Stock Exchange Group

Simona Cervi

Head of Client Technology Services Italy Borsa Italiana



London
Stock Exchange Group

Gabriele Villa
Equity and Derivatives Markets Borsa Italiana



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Technical User Group

Business update

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Author:
Gabriele Villa



Agenda

1. MIT R8 - Business update
2. Sponsor Access to Borsa Italiana markets
3. Products update



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Section 2

MIT R8 - Business update



Trading at the Closing Auction Price (1)

The “Trading at the Closing Auction Price” phase will be introduced in order to provide clients with a further continuous trading session where trading can take place at the closing price.

The Trading at the Closing Auction Price session:

1. The “Trading at the Closing Auction Price” phase will be accessible to all members/clients (not just institutional)
2. Is valid for the markets that operate on the Millennium IT platform, for those instruments where the a Closing Auction phase is supported;
3. Takes place only if the Closing Auction results in a valid auction price;
4. Will be initially activated only on MTA market;
5. Trades during the CPX will not be considered on the purpose of the daily Official Price calculation
6. No different trading / clearing fees



Trading at the Closing Auction Price (2)

Trading on the MTA market, including the Star segment and the MTA International, shall take place using the auction and continuous trading methods with the following trading hours:



The **Closing Price Publication (CPP)** Session is specifically designed for dissemination of the closing price for an individual instrument at the end of the Closing Auction.



Self Execution Prevention (1)

At present, Borsa Italiana Members/Participants are able to place a buy and corresponding sell order on a book and trade with themselves. This is because there is currently no functionality within the various order books to prevent orders from the same firm matching against itself.

As an example, Members/Participants may use different passive and aggressive strategies in the same instrument. As such, it is possible (and probable) that orders from these strategies will match against one another to create a trade at some point.

With the MIT R8, trading Members would be able to decide in how they could prevent their orders self matching. The possible configurations would be defined in the following weeks



Self Execution Prevention (2)

The Self Execution Prevention will be a technological service/configuration to be required to Borsa Italiana by each Member/Participant.

Indicative Timeline:

1. Clients consultation in June
2. Available for testing as from the go-live of MIT R8
3. Available in production end of July



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Section 2

Sponsor Access to Borsa Italiana markets



Sponsored Access (1)

The Sponsored Access (SA) is a new market access facility Borsa Italiana want to introduce. It allows Exchange participants to provide trading low latency access to non-exchange members through their membership.

Sponsored Access operates via Interconnection in these markets: **MTA, MIV, MOT, SEDEX, ETFplus, TAH, ExtraMOT and AIM.**

Non-members will be able to enter these orders:

1. All types (limit, stop, stop limit, iceberg, market, market to limit);
2. Quotes, cross-orders, BTF;

BUT

Long orders will be rejected.



Sponsored Access (2)

Key differences from the existing Borsa Italiana interconnection model:

- Mandatory use of different CompIDs for each Sponsored User;
- Mandatory use of the «cancel on disconnect» functionality;
- Automatic disconnection of Clients in case the Sponsor lost the disconnection from the market;
- Notification by market intermediaries to Borsa Italiana of any technical breakdowns of the trading system of their Sponsored Clients.

Market Intermediaries will solely be responsible for all the orders sent via interconnection. The Borsa Italiana SA model allows Sponsors to define a high granularity of filters:

- Price band validation;
- Max gross consideration;
- Max order value;
- Max order quantity;
- Restricted instrument list.



Sponsored Access - GUI

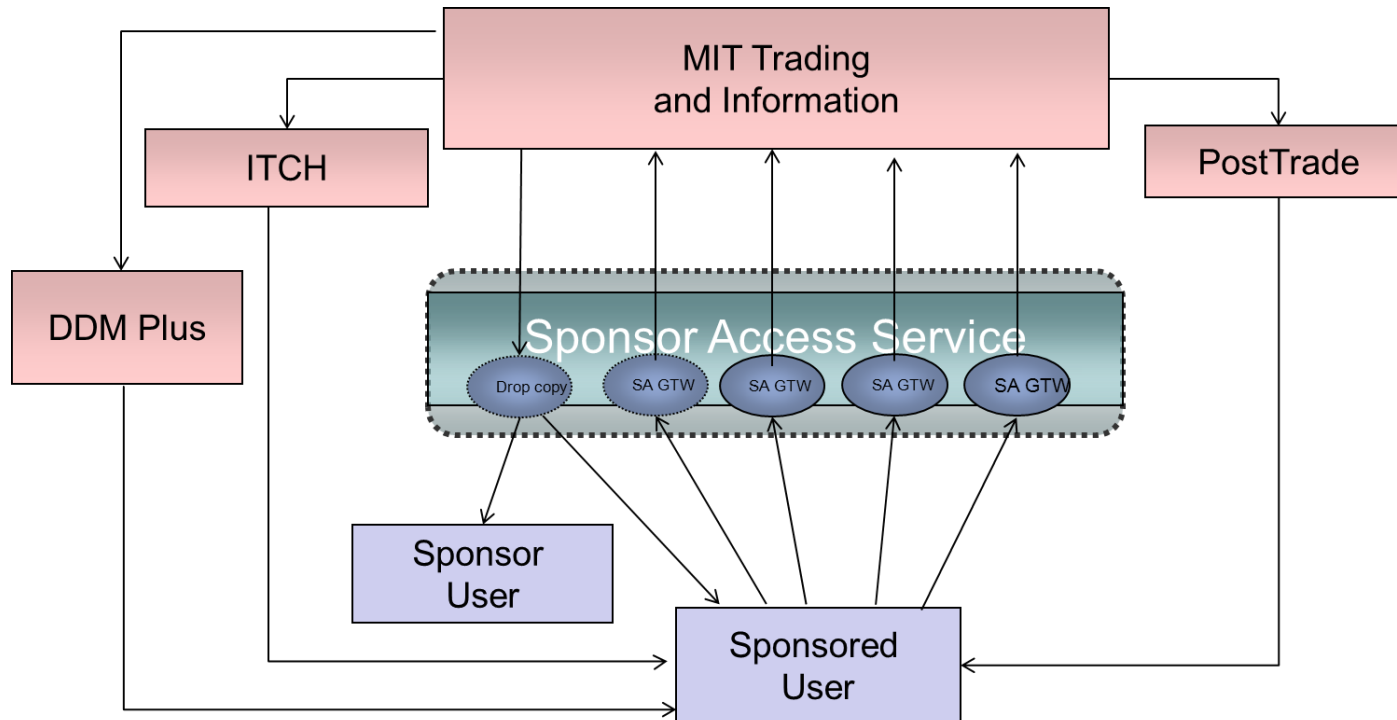
The screenshot shows a window titled "Authorization Service - Members/AuthorizationAdmin/TP_USER". The interface is divided into a left-hand tree view and a right-hand configuration panel.

Left Panel (Members):

- Members[]
 - CUSTOMER1[]
 - CUSTOMER2[]
 - Default[]
 - Administration group[Adminis
 - AuthorizationAdmin[Authoriza
 - TP_USER[]** (selected)
 - CUSTOMER3[]
 - CUSTOMER4[]
 - Default[]
 - BB[Bulletin Board]
 - BITOP[]
 - BITOP01[]
 - BITOP02[]
 - BITOP03[]
 - CCBITOP[]

Sponsored Access (3)

- The following diagram shows Sponsor Access architecture and interactions:



- BIT SA should be delivered in May/ June.
- The second phase (IDEM market) should be delivered in October/November.



Section 3

Products offering



Products offering

IDEX

- Subject to Instructions review, IDEX will soon introduce **Peak Load futures**, i.e. based on power price calculated during the peak 12 hours of the day (8-20) from Monday to Friday. The Target Launch date is Q2 2013.

LAUNCH DATE: May 6th

IDEM

- Starting from April 2013 (subject to Consob's approval), on IDEM will be available the new Dividend Stock Futures on Italian as well as European shares.

LAUNCH DATE: May 20th



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Roberto Fumagalli
Technical Account Manager
Client Technology Services Italy



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Annual Certification Test Program

Annual Certification Test Program



- Under EU and national regulatory requirements, LSEG is required to undertake standardized certification testing to ensure that members and participants systems used to access the venues have a minimum level of functionality that is compatible with fair and orderly trading.
- Only software that has fully certified is permitted to access to an LSEG Live Service. A live service is any production Trading or Information Services environment across LSEG.
- A new Standardized Mandatory Annual Certification Test Policy has been defined across Borsa, LSE and Turquoise.
- The new policy is still a DRAFT version, and will become effective when the Market Rules are updated accordingly, following the ordinary consultation process. The consequent go live date will be notified to clients by Borsa Italiana via Official Communication.

Annual Certification Test Program



- The new Annual Certification Test Program is based on regulatory compliance supporting interoperability against the three eligible London Stock Exchange Group (LSEG) venues - Borsa Italiana, London Stock Exchange and Turquoise.
- For equities, all three venues will be on the same Millennium code set will have a combined certification test template. This will enable customers to test the combined set on any of the platforms and it will be applicable across all three venues.
- For Derivatives, Borsa and Turquoise are already on the same SOLA code set and will also have a combined certification test template
- The new Annual Certification Test Program mandates any customer application that connect to Borsa, LSE, and Turquoise to certify at least twice a year with a minimum of 6 months between tests (This minimum period will be waived for mandatory LSEG Venue releases).

Annual Certification Test Program



- At least one Certification Test will be LSEG led (i.e. Mandatory release). The other required test will be Client Led. If the number of LSEG mandatory tests is greater than one, there will be no obligation to perform a Client Led test.
- In both LSEG and Client Led tests a customer will need to perform either a Full Certification Test or a Self Certification Checklist. A Full Certification Test is completed with support from LSEG. A Self Certification Checklist is a full certification test which is completed by the customer without support from LSEG.
- LSEG will allow software that has been tested on one venue, such as London Stock Exchange to be used on another venue, such as Borsa Italiana. This is where there is no difference in functionality between the venues and the related certification test cycles are the same on each venue.
- Customers that have successfully completed the full certification process are allowed to connect their software to any other eligible LSEG venues, under the following conditions:
 - The software name and version number are the same on each venue.
 - The functionality that will be used was tested as part of the Full Certification test.

Annual Certification Test Program



- A Customer's software application must be recertified if the software code is modified in any way that directly impacts LSEG interfaces.
 - Updates to Gateways, Order Management, Execution Management and Quote Management Software.
- Recertification is required regardless of if the software modifications are due to London Stock Exchange Group initiated changes or customer initiated changes.
- LSEG reserves the right to take action against any client's software that has not met the policy

- Client Technology Services Italy
 - Technical Account Management Italy
 - clients-services@borsaitaliana.it
 - +39 02 72426348/606/647
 - Service Desk Italy
 - service-desk@borsaitaliana.it
 - Toll Free: 0080026772000
 - From mobile: +39 02 45411399



London
Stock Exchange Group

Flavio Ravotto
Technical Account Manager
Client Technology Services Italy



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Stock Exchange Group

Millennium Exchange Enhancements - Release 8

- **Millennium Exchange Enhancements**

- The London Stock Exchange Group Millennium Exchange systems are being upgraded to bring functional, performance and operational enhancements to the MIT Trading and Data Feed interfaces
- Release 8 include the convergence of code sets across London Stock Exchange Group markets for greater operational efficiency and improved customers' release management
 - Software Vendors and Member Firms that develops in-house applications may use the same code version across all London Stock Exchange Group markets
 - Market Functionalities are activated market by market according to market models (that differ across London Stock Exchange Group markets)

- **Functional enhancements**

- **Introduction of Closing Price Crossing (CPX) Session**
- **Introduction of Single Side Quoting option**
 - Single Side Quoting will replace (**after the go-live, dates to be defined**) the single side Specialist activity via named order when only one side of the book is covered by the quoting obligation (e.g. BID only quoting, BTP Italia collocation, OPA, etc.)
 - Named Orders might remain for some activities (to be confirmed)
- **Iceberg order enhancements**
 - visible or hidden indicator on passive order Execution Reports



New CPX Session (1)

- Impacted market: MTA
- Duration: 5 minutes after the Closing Price Publication Session
- Allows to trade at the Closing Auctions Price
 - CPX is activated only if a Closing Auctions Price is generated (so, if there's at least a trade during the Closing Auctions)
 - Pending Limit orders and Market to limit orders are brought from the Closing Auction, so order book will be available and disseminated by Borsa Italiana Data Feed services
 - *Stop Orders activated by the Closing Auction Price do not participate to the CPX Session (will be on Book the next trading Day)*
- New “CPX” Time In Force has been introduced
 - Orders with TIF CPX can be inserted before the start of the CPX session and are activated at the beginning of the CPX (if the session is triggered)
 - Limit order with price different from the Closing Auction Price are
 - Accepted with price changed to the Closing Auction Price if it is better than the client inserted one (< for buy order and > for sell orders)
 - Cancelled if the Closing Auction Price is worse than the client inserted one (> for buy order and < for sell orders)



New CPX Session (2)

- During CPX session it is possible to send all TIF except:
 - Good Till Date
 - Good Till Cancel
 - Good For Closing Auction (GFX)
 - Good For Opening Auction (OPG)
 - At the Close (ATC)
- Instruments' Official Closing Prices are not modified during this session
- Trades executed during CPX will be disseminated by Borsa Italiana Data Feed services (ITCH, MDF/DDM Plus and GTP)
 - VWAP statistics (disseminated by GTP and MDF/DDM Plus) will not be changed during this session
 - At the end of the session, MDF/DDM Plus will disseminate a new OfficialClosingPrice message with updated statistics (VWAP, Closing Price and Best Bid and Offer will not be updated)
 - GTP will update Volume, Turnover and Number of Trades statistics with Trades executed during CPX
- An extended CPX session (between 3 and 4 pm CEST) on MV1 segment (in CDS) has been introduced in order to help customers testing the new phase

Iceberg Order Enhancements



Driver/Description	Potential Client Impact
<p>Currently with respect to Iceberg orders:</p> <ol style="list-style-type: none">1. The executions and the order book updates for a single iceberg order are disseminated with the same Order ID2. The executions and the order book updates related to iceberg orders are disseminated using the ITCH Order Executed with Price/Size message <p>To improve this functionality, the following changes are to be introduced:</p> <ol style="list-style-type: none">1. A new Public Order ID for each peak2. Use of standard Order Executed and Add Order messages	<ol style="list-style-type: none">1. The introduction of the Public Order ID is mandatory. Participants must use this ID to relate their own orders to market data, whilst the existing Order ID will remain and provide a common code for a single iceberg order2. Order Executed and Add Order messages will now be used for iceberg peak refreshes with each new peak refresh treated as if it is a new limit order

- **Protocol Changes**

- Native Trading Gateway
 - Message length of the Execution Report will increase to support new fields
 - New Reject Codes will be introduced
 - Type of Trade Field being added to Execution Report to indicate whether the executed portion of a passive order is visible or hidden
- FIX Trading Gateway, Drop Copy Gateway, Post Trade Gateway
 - New FIX tag(s) being sent in Execution Report messages
 - New Reject Codes will be introduced
- No protocol changes for ITCH, MDF and GTP data feed services

- **Certification Policy**

- **Mandatory re-certification for all Native and FIX Trading Gateways**
 - Checklist approach will be applied for applications that implemented the FIX Trading Gateways
 - Full Conformance for applications that implemented Native Trading Gateways
- Any other software requiring a code change will also need to be re-certified in accordance with our general Certification Policy



Project Timeline

- Documentation published on 8 March 2013
- Release 8 is available in CDS since 9 April 2013
 - Documentation updates have been published and more updates may come up in the next weeks
 - New MIT 201 publication on going
 - CDS Maintenance Closures for delivery of new software version will happen
- It is possible to schedule the Conformance Test
- Conformance Test to be completed by the beginning of June
- 1st Dress Rehearsal currently scheduled for 8 June 2013 (to be confirmed)
- Go-Live Weekend currently scheduled for 22 June 2013
 - First day of Trading of the Release 8 in production currently scheduled for 24 June 2013 with 1 July 2013 as contingency
 - These dates have to be confirmed subject to Customer Readiness

- Client Technology Services Italy
 - Technical Account Management Italy
 - clients-services@borsaitaliana.it
 - +39 02 72426348/606/647
 - Service Desk Italy
 - service-desk@borsaitaliana.it
 - Toll Free: 0080026772000
 - From mobile: +39 02 45411399



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