To: EuroTLX market participants

MiFIR / MiFID II: CHANGES TO EuroTLX RULES AND TECHNICAL DEPLOYMENT PLAN OF MILLENNIUM EXCHANGE 9.2 AND GTP 1.4.1

Dear Customer,

in view of the regulatory changes introduced by the revised Markets in Financial Instruments Directive (MiFID II) and Regulation (MiFIR), EuroTLX will adapt its Rules, trading systems and exchange services across November and December 2017, with the goal of ensuring: (i) an orderly migration to the new versions of its systems, and (ii) a proper management of the transition between the current and the new regulatory regime.

The objective of this document is to present:

- the roadmap of the deployment plan for technical and functional changes to EuroTLX’s trading systems and Group Ticker Plant (GTP), and related approach to the testing phase of the new versions of these systems;
- the regulatory plan to introduce related changes to EuroTLX’s Rules (subject to the completion of the approval process), including transitional provisions for changes that are consistent with the existing regulatory regime, and are considered necessary to facilitate a smooth transition process.
We would appreciate any feedback by market participants in relation to the proposed deployment approach, described in this document, and in particular on pre-trade controls topics, by **30 July 2017** to the following contacts:

- supervision@eurotlx.com
- regulation&posttrading@lseg.com

We will publish additional information and, if necessary, amendments to this proposed approach in due course.

Kind regards,

Pietro Poletto
EuroTLX CEO

Fabrizio Plateroti
Head of Capital Markets and Post Trading Regulation
Introduction and summary

EuroTLX is pleased to inform its customers that the key dates for the migration plan to the new versions of EuroTLX’s trading systems are the following. In order to ensure a proper management of the transition between the current and the new regulatory regime, Millennium Exchange 9.2 and GTP 1.4.1 will be deployed in production in advance of the legal entry into force of MiFIR / MiFID II on 3 January 2018.

<table>
<thead>
<tr>
<th></th>
<th>Millennium Exchange</th>
<th>GTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current version</td>
<td>Millennium Exchange 9.0</td>
<td>GTP 1.4.0</td>
</tr>
<tr>
<td>New version</td>
<td>Millennium Exchange 9.2</td>
<td>GTP 1.4.1</td>
</tr>
<tr>
<td>CDS go-live*</td>
<td>31 July 2017</td>
<td>31 July 2017</td>
</tr>
<tr>
<td>Customer Dress Rehearsals</td>
<td>14 October 2017</td>
<td>4 November 2017</td>
</tr>
<tr>
<td>Go-live</td>
<td>27 November 2017</td>
<td></td>
</tr>
</tbody>
</table>

(*) Detailed information regarding CDR planning will be communicated in due course

Market participants are informed that:

- the deployment of Millennium Exchange 9.2 will significantly change the structure of trading and market data protocols, in order to handle the additional information required by specific MiFIR / MiFID II provisions and related Technical Standards. The new structure of these protocols will be deployed in production on 27 November 2017 (technical go-live date of Millennium Exchange 9.2).
  Market participants will be required to conform to these new versions of trading and market data protocols in advance of the go-live date (as required by EuroTLX’s Conformance Test policy¹), and to properly handle new information required by incoming/outgoing technical messages;

- at their technical go-live date, Millennium Exchange 9.2 will introduce several functional enhancements that are required by MiFIR / MiFID II. Nevertheless, certain functionalities and configurations required to properly implement MiFIR / MiFID II provisions will have to remain ‘inactive’ till January 2018. In order to facilitate testing by market participants of functionalities and system configurations that will be activated only in January 2018, during the testing phase of Millennium Exchange 9.2 some

¹ As available at the following link: https://www.eurotlx.com/en/technicaldocumentation
specific financial instruments will be configured according to the expected behaviour that will be activated in January 2018;

- in order to facilitate exchange and client controls over technical configurations of their systems, most configurations of Millennium Exchange that are required to ensure compliance with MiFIR / MiFID II will become active on Monday 2 January 2018, one day in advance of MiFIR / MiFID II legal entry into force on Tuesday, 3 January 2018. This approach will be applied to functionalities and asset classes that are not currently regulated by MiFID provisions (i.e. non-equity products). Full details around exact implementation dates (Monday 2, or Tuesday 3 January 2018) are provided in this document.

Each of the following sections describe the technical changes and approach to EuroTLX’s Rules changes (including transitional provisions, where necessary) that will be applied by EuroTLX to ensure a proper management of the transition towards the full implementation of MiFIR / MiFID II, as follows:

1. Order record keeping and transaction reporting
2. Microsecond granularity and UTC timestamps
3. Matched Principal and Unmatched Principal trading capacity
4. RFQ Pre-trade transparency
5. RFQ Post trade transparency
6. Pre-trade controls
7. Tick size regime
8. Proposed deployment approach - Summary table
1. Order record keeping and transaction reporting

Messages from participants to the Exchange

In order to comply with MiFIR / MiFID II record keeping obligations, EuroTLX will be required to ask its participants to provide, for each order/quote message at order entry/modification/cancellation, additional information regarding:

- the identity of the direct client of the market participant that is submitting the order/quote;
- the identity of the person or algorithm within the investment firm that is responsible for the investment decision;
- the identity of the person or algorithm within the investment firm that is responsible for the execution of the order;
- whether an order has been inserted in the trading system by a DEA client;
- whether an order has been inserted in the trading system by an algorithm.

To ensure an orderly technical migration, EuroTLX has decided to deploy all necessary changes to native and FIX trading protocols (including Drop Copy and Post Trade Gateway) in use by Millennium Exchange, to collect the above information, on 27 November 2017 (technical go-live date of Millennium Exchange 9.2).

Consequently:

- EuroTLX’s Rules requiring market participants to provide the above information will enter into force at the go-live date of Millennium Exchange 9.2;
- market participants’ applications will be required to properly handle the new structure and content of trading protocols by the go-live date;
- starting from the go-live date, market participants will have to complete the new mandatory fields in order/quote entry messages in order to have their orders/quotes accepted by the trading system. Otherwise, the related order/quote message will be rejected.

Specific transitional provisions will be applied as part of EuroTLX’s Rules at the go-live date of Millennium Exchange 9.2, in order to provide flexibility in complying with these specific Rules’ provisions. In particular, during the transitional period, market participants will be only required to technically populate the new fields in order/quote messages, in order to have their messages

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2 In the format of ‘short codes’ and related qualifiers.
accepted by the trading system. Full regulatory obligations, according to MiFIR / MiFID II provisions and EuroTLX’s Rules, will enter into force on 3 January 2018.

EuroTLX will separately publish specific documentation in due course containing:

(a) guidelines for market participants in order to correctly populate the new mandatory fields in order/quote messages, during the transitional phase and starting from 3 January 2018;

(b) guidelines for market participants in order to correctly provide mappings between: (i) short codes and related qualifiers inserted in order/quote messages, and (ii) their related ‘long codes’ as required by RTS 24⁴ (e.g. Legal Entity Identifiers of member firms and clients of member firms; identifiers of natural persons acting as clients of member firms, investment decision makers or executors of an order; identifiers of algorithms);

(c) required timelines for this activity;

(d) dates of availability of the new version of the Member Portal, supporting the new MiFIR / MiFID 2 functionalities.

Messages from EuroTLX to participants

In addition, in order to support members to comply with their order keeping and transaction reporting obligations, EuroTLX is required to provide member firms with some additional information concerning orders and transactions executed on its trading venues (e.g. the “Waiver indicator”, as described in Field 61 of Annex I, Table 2 of RTS 22⁴; post trade “flags”, as described in section 5). This information will be provided to participants as part of the deployment of the new versions of trading protocols on 27 November 2017 (technical go-live date of Millennium Exchange 9.2⁵).

Please note that some of this information is connected to the new MiFIR / MiFID II pre- and post-trade transparency regime, and in particular with the classification of financial instrument as “liquid” or “not liquid” products. The “Waiver indicator” will be generated and disseminated starting from the go-live date of Millennium Exchange 9.2, according to instrument

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⁵ This change is not impacting EuroTLX’s Rules.
classifications available in the trading systems\textsuperscript{6}, but should not be considered as significant by market participants until MiFIR / MiFID II legally enter into force on \textbf{3 January 2018}.

For full details regarding the new structure of trading protocols, the list of new mandatory fields in order/quote messages, and new information included in outgoing messages, please refer to the technical documentation available on EuroTLX’s website.

\begin{center}
\begin{tabular}{|l|l|l|}
\hline
\textbf{Category} & \textbf{At go-live of Millennium Exchange 9.2} & \textbf{January 2018} \\
\hline
Shares & MIFID I classification & MiFIR / MiFID II classification (on January 3) \\
\hline
Fixed income instruments & All classified as illiquid & MiFIR / MiFID II classification (on January 2) \\
\hline
Securitised derivatives & MiFIR / MiFID II classification & No change \\
\hline
\end{tabular}
\end{center}


\textsuperscript{8} This change is not impacting EuroTLX’s Rules.

2. Microsecond granularity and UTC timestamps

In deploying the new versions of trading protocols, format and precision of timestamps will also be adapted according to the requirements of RTS 25\textsuperscript{7}. While this requirement is mandated by MiFIR / MiFID II on 3 January 2018, EuroTLX will introduce the new format and level of precision of timestamps (where necessary) on \textbf{27 November 2017} (technical go-live date of Millennium Exchange 9.2\textsuperscript{8}).

Market participants will be required to adapt their applications to the new timestamps at the go-live date.

For full details regarding the new format and level of precision of timestamps in trading protocols and market data feeds, please refer to the technical documentation available on EuroTLX’s website.

\textsuperscript{6} Considering ESMA’s timetable to communicate MiFIR / MiFID II categorisation of ‘liquid’ and ‘not liquid’ financial instruments, the following approach to update instruments’ classification will be put in place by EuroTLX:
3. Matched Principal and Unmatched Principal trading capacity

Order record keeping and transaction reporting requirements of MiFIR / MiFID II will require EuroTLX to accept orders inserted and trades executed in its trading systems under ‘matched principal’ trading capacity from 3 January 2018.

At this aim, EuroTLX is planning to introduce 2 additional values for trading capacity:
- Matched Principal trading capacity, to be used for orders on principal basis conforming to MiFIR / MiFID II definition of matched principal;
- Unmatched Principal trading capacity, to be used for orders on principal basis not conforming to MiFIR / MiFID II definition of matched principal.

While trading protocols will support the Matched Principal and the Unmatched Principal capacity from the go-live date of Millennium Exchange 9.2, EuroTLX is planning to enable insertion of orders under the new trading capacities by “Market Intermediary” on 3 January 2018\(^9\). Orders entered with Matched Principal or Unmatched Principal trading capacity before this date will be rejected.

EuroTLX is also planning to require changes to CompIDs used by “Market Intermediary” in order to segregate orders inserted using Agency trading capacity from orders inserted using Matched Principal and/or Unmatched Principal trading capacity. This means that new CompIDs will be provided by EuroTLX to “Market Intermediary” willing to insert orders with Matched Principal and/or Unmatched Principal trading capacity only. New CompIDs will be active on 3 January 2018.

For settlement instructions purposes, starting from 3 January 2018, “Market Intermediary” using Matched Principal and/or Unmatched Principal trading capacity are required to update EuroTLX Membership with their own settlement account information.

\(^9\) This change is not impacting EuroTLX’s Rules.
4. Pre-trade transparency

The new regulatory regime regarding pre-trade transparency requires EuroTLX to obtain new authorisations from ESMA in order to offer functionalities to insert orders and execute trades absent full pre-trade transparency.

The new transparency regime will impact the functioning of RFQ functionality.

In order to be compliant with the new regulatory requirements, different levels of pre-trade transparency will be introduced for RFQs. The trading system will automatically determine the applicable pre-trade transparency model, on the basis of the RFQ value and the pre-trade transparency thresholds defined for the instrument.

<table>
<thead>
<tr>
<th>Pre-trade transparency model</th>
<th>Level of market data disseminated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1: Full pre-trade transparency (FPT)</td>
<td>The RFQ order book immediately before the execution of the RFQ trade (i.e. all live quotes available on the market when the requestor decided to execute the RFQ) for the relevant RFQ session will be published.</td>
</tr>
<tr>
<td>Model 2: Partial pre-trade transparency (PPT)</td>
<td>An Indicative Quote Information message will be published, containing the last indicative price prior to the execution of the RFQ trade.</td>
</tr>
<tr>
<td>Model 3: No pre-trade transparency (NPT)</td>
<td>None of the submitted quotes nor the bid/ask indicative price will be publicly disseminated.</td>
</tr>
</tbody>
</table>

Support to the new RFQ transparency regime will be introduced, from a technical and regulatory perspective, on 2 January 2018.

In the context of adaptations to the new MiFIR / MiFID II regime, existing controls on the minimum size of RFQ in place on the Millennium Exchange platform will be converted from quantity to monetary value. EuroTLX is planning to switch from the existing quantity-based to the new value-based minimum thresholds for RFQ on 27 November 2017 (technical go-live date of Millennium Exchange 9.2).

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5. Post trade transparency

The new regulatory regime regarding post-trade transparency will require EuroTLX to provide immediate post trade transparency by disseminating information regarding transaction executed on its trading venues in a new, standardised format, as defined by RTS 1\textsuperscript{10} for equity and equity-like instruments, and RTS 2\textsuperscript{11} for non-equity instruments.

In order to comply with this requirement, EuroTLX will add a new message in the GTP service for all markets, replicating the structure and formats required by RTS 1 and 2.

These changes to existing messages, and availability of the new MiFIR / MiFID II compliant messages, will be deployed in production on 27 November 2017 (technical go-live date of Millennium Exchange 9.2\textsuperscript{12}). For full details, please refer to the technical documentation available on EuroTLX’s website. Market participants’ applications will be required to properly handle the new structure and content of trading protocols and market data feeds at the go-live date.

Please note that certain fields included in the structure of the new messages (e.g. “ILQD”, “ALGO” flags etc.) are connected to the new MiFIR / MiFID II pre- and post-trade transparency regime, and in particular with the classification of financial instrument as “liquid” or “not liquid” products. Post-trade transparency “flags”, as described in Table 4 of RTS 1 Annex I, and Table 3 of RTS 2 Annex II, will be generated and disseminated starting from the go-live date of Millennium Exchange 9.2, according to instrument classification available in the trading systems. They must not be considered as significant by market participants until MiFIR / MiFID II legally enters into force on 3 January 2018.

\textsuperscript{10} Commission Delegated Regulation (EU) 2017/587 of 14 July 2016 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council on markets in financial instruments with regard to regulatory technical standards on transparency requirements for trading venues and investment firms in respect of shares, depositary receipts, exchange-traded funds, certificates and other similar financial instruments and on transaction execution obligations in respect of certain shares on a trading venue or by a systematic internaliser.


\textsuperscript{12} This change is not impacting EuroTLX’s Rules.
6. **Pre-trade controls**

In order to comply with the new regulatory regime regarding pre-trade controls, EuroTLX will introduce a new exchange-level, pre-trade control on the maximum size of an incoming order/quote, defined by monetary value.

In case an order/quote is received by the system with a value above the pre-defined threshold, the order will be rejected. In order to favour a smooth transition process, EuroTLX will modify its Rules and activate this new exchange-level, pre-trade control on 27 November 2017 (technical go-live date of Millennium Exchange 9.2). Market participants’ applications will be required to properly handle order rejections connected to this new pre-trade control by the same date.

For the new maximum allowed value for an individual order/quote, please refer to the Guide to Trading Parameters.

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7. **Tick size regime**

The new regulatory regime regarding tick sizes is requiring EuroTLX to adjust the tick sizes table applied to shares traded on EuroTLX. Other instruments will not be affected by this change.

EuroTLX will publish a dedicated Notice in due course in order to inform market participants of the tick size tables that will be in place, for each share traded on the market, from 3 January 2018.

During the testing phase of Millennium Exchange 9.2, in order to facilitate market participants’ testing of system configurations that will be applied at the entry to force of MiFIR / MiFID II, a subset of instruments will be configured in the CDS environment with the new MiFIR / MiFID II tick size tables, that will be activated on 3 January 2018. The list of these instruments will be published in due course.

Finally, market participants must be aware that, starting from 27 November 2017 (technical go-live date of Millennium Exchange 9.2), in order to properly handle the transition to the new tick size regime, the existing tick size table applied to all shares traded on EuroTLX will be slightly modified to include the lowest boundary into the respective price band interval.

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8. **Proposed deployment approach - Summary table**

<table>
<thead>
<tr>
<th>Millennium Exchange</th>
<th>At go-live date of Millennium Exchange 9.2:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Deployment of new version of trading protocols, including new timestamps granularity and alignment to UTC</td>
<td></td>
</tr>
<tr>
<td>• Deployment of new version of market data protocols (GTP)</td>
<td></td>
</tr>
<tr>
<td>• Introduction of new pre-trade controls on maximum order value</td>
<td></td>
</tr>
<tr>
<td>• Tick size regime: change to existing tick tables (inclusion of lower boundary in existing price bands)</td>
<td></td>
</tr>
<tr>
<td>• Classification of 'liquid' vs. 'not liquid' included in reference data:</td>
<td></td>
</tr>
<tr>
<td>- Shares: according to current MiFID classification</td>
<td></td>
</tr>
<tr>
<td>- Fixed income instruments: all classified as 'illiquid', pending ESMA’s classification</td>
<td></td>
</tr>
<tr>
<td>- Securitised derivatives: according to ESMA’s MiFID II classification</td>
<td></td>
</tr>
<tr>
<td>• RFQ functionality: switch from quantity to value-based control for the minimum size of Request for Quotes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>On 2 January 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Update of 'liquid/not liquid' status according to ESMA’s MiFID II classifications for fixed income instruments</td>
</tr>
<tr>
<td>• RFQ functionality: is extended to cover all pre-trade transparency models as required by MiFIR / MiFID 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>On 3 January 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Update of 'liquid/not liquid' status according to ESMA’s MiFID II classifications for shares</td>
</tr>
<tr>
<td>• Tick size regime: Introduction of MiFID II tick tables for shares</td>
</tr>
<tr>
<td>• Introduction of <em>Matched Principal</em> and <em>Unmatched Principal</em> trading capacity, with dedicated ComplIDs</td>
</tr>
</tbody>
</table>
References to MiFIR / MiFID II documentation published by EuroTLX

The following documents are complementary to this communication. Additional documents related to our adaptation program to MiFIR / MiFID II will be published in due course.

Regulatory documents

For draft versions of MiFIR / MiFID II compliant versions of EuroTLX's Rules and Guide to Trading Parameters, please refer to:


Technical documents

For updated technical documents regarding Millennium Exchange 9.2, please refer to:


- MIT201 - EUROT LX - Trading Service Manual (Guide to the new Trading System) - Issue 3.0
- MIT202 - EUROT LX - Trading Gateway (FIX 5.0) Specification - Issue 3.1
- MIT203 - EUROT LX - Native Trading Gateway Specification - Issue 3.1
- MIT204 - EUROT LX - Post Trade Gateway (FIX 5.0) Specification - Issue 3.1
- MIT205 - EUROT LX - Drop Copy Gateway (FIX 5.0) Specification - Issue 3.1
- MIT303 - EUROT LX - Market Data Feed (MITCH) Specification - Issue 3.1
- MIT305 - EUROT LX - FTP Services Reference Data Specification - Issue 3.0
- MIT801 - EUROT LX - Trading System - Reject Codes and Reasons_v13.0

For updated technical documentation regarding GTP services, please refer to:

https://www.lseg.com/areas-expertise/technology/group-technology/group-ticker-plant