T7 Release 8.1

Preliminary Release Notes for the Trading Venues Xetra and Börse Frankfurt

Date 30 January 2020
PRELIMINARY RELEASE NOTES

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1. Overview of T7 Release 8.1

Deutsche Börse AG is planning to launch T7 Release 8.1 on 29 June 2020.

The following diagram gives an overview of the introduction schedule:

![Introduction Schedule Diagram]

Deutsche Börse AG provides a dedicated release simulation environment in order to give trading participants the opportunity to perform comprehensive testing of their trading applications, independent from the T7 production environment. The simulation period for T7 Xetra (XETR) of the T7 Release 8.1 is planned to start on 4 May 2020.

In addition and prior to the T7 release simulation, Deutsche Börse AG offers a T7 Release 8.1 Cloud Simulation to allow trading participants and Independent Software Vendors (ISVs) to test against the current T7 production and simulation software versions. In the Cloud Simulation, participants can initiate predefined market scenarios and test specific strategies more easily than in a shared environment. The Cloud Simulation is available around the clock for a fixed price per hour and will start on 6 April 2020. Please note that the T7 Cloud Simulation will include both trading venues T7 Xetra (XETR) and T7 Börse Frankfurt (XFRA).


1.1 New Features and Enhancements Overview

The following new features and enhancements will be introduced with T7 Release 8.1:

- Xetra EnLight below LIS.
- TES Auto Approval Rules for Clients.
- Other changes.

The exact date and time of activation of these new features will be published in the Final Release Notes.

Note on Interfaces

T7 Release 8.1 will provide backwards compatibility for the T7 ETI/FIX interface versions 8.0 and 8.0.1, i.e. participants who do not want to use the new functionality will still be able to connect to T7 with the interface layout version 8.0, or 8.0.1, even after production launch of T7 Release 8.1.

Market data, RDI, reports, and data files will not provide backwards compatibility.
1.2 Further Reading

The existing documents have been or will be revised for T7 Release 8.1. The following table provides an overview of the final schedule for the publication:

<table>
<thead>
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<td>T7 Functional Reference</td>
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<td>T7 Functional and Interface Overview</td>
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<td>T7 Participant Simulation Guide</td>
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<td>T7 Cross System Traceability</td>
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<td>T7 Incident Handling Guide</td>
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<td>T7 Participant and User Maintenance Manual</td>
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<td>Contract Notes Description</td>
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<td>T7 Known Limitations</td>
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<td>T7 Trader, Admin and Clearer GUI – User Manual</td>
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<tr>
<td>T7 Trader, Admin and Clearer GUI – Installation Manual</td>
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<tr>
<td>T7 Enhanced Trading Interface – Manual incl. Repository and Header files</td>
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<tr>
<td>T7 Enhanced Trading Interface – XML Representation</td>
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<tr>
<td>T7 FIX Gateway – FIX 4.2 and 4.4 Manual incl. Fixmate and Repository</td>
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<tr>
<td>T7 Extended Market Data Services – Manual incl. Fast Message Template and Underlying Ticker Data</td>
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<td>Cash Market Instrument Reference Data Guide</td>
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<td>T7 XML Report Reference Manual</td>
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<td>Common Report Engine User Guide</td>
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<td>N7 Network Access Guide</td>
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<td>Exchange Rules &amp; Regulations</td>
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<td>Market Model Continuous Trading in connection with Auctions</td>
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<td>Market Model Continuous Auction</td>
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- Release 8.1: ◆ Cloud Simulation / Preliminary Version
- Simulation Version
- Production / Final Version

Please note that the outlined schedule is preliminary and subject to change.

The documents will be available on the Xetra website [www.xetra.com/technology](http://www.xetra.com/technology) under the ink:

> Technology > T7 Trading Architecture > System documentation > Release 8.1

1.3 Contacts

If you have any questions or require further information, please contact your Global Key Account Manager Trading. Alternatively, please contact your Technical Key Account Manager using your VIP number or via e-mail to: cts@deutsche-boerse.com.
## 1.4 Definitions and Abbreviations

<table>
<thead>
<tr>
<th>Term/Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BU</td>
<td>Business Unit</td>
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<tr>
<td>CEF</td>
<td>Consolidated Exchange Feed</td>
</tr>
<tr>
<td>CRE</td>
<td>Common Report Engine</td>
</tr>
<tr>
<td>DBAG</td>
<td>Deutsche Börse AG</td>
</tr>
<tr>
<td>EMDI</td>
<td>T7 Enhanced Market Data Interface</td>
</tr>
<tr>
<td>EMDS</td>
<td>T7 Extended Market Data Service</td>
</tr>
<tr>
<td>EOBI</td>
<td>T7 Enhanced Order Book Interface</td>
</tr>
<tr>
<td>ETI</td>
<td>T7 Enhanced Trading Interface</td>
</tr>
<tr>
<td>FIX</td>
<td>Financial Information eXchange (portal)</td>
</tr>
<tr>
<td>GFD</td>
<td>Good-For-Day</td>
</tr>
<tr>
<td>GTC</td>
<td>Good-Till-Cancelled</td>
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<tr>
<td>GUI</td>
<td>Graphical User Interface</td>
</tr>
<tr>
<td>HF</td>
<td>High Frequency</td>
</tr>
<tr>
<td>ISV</td>
<td>Independent Software Vendor</td>
</tr>
<tr>
<td>LF</td>
<td>Low Frequency</td>
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<tr>
<td>LIS</td>
<td>Large in Scale (TES Type for on-exchange off-book trading)</td>
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<tr>
<td>MDI</td>
<td>T7 Market Data Interface</td>
</tr>
<tr>
<td>OCO</td>
<td>One-Cancels-the-Other Order</td>
</tr>
<tr>
<td>PAG</td>
<td>Product Assignment Group</td>
</tr>
<tr>
<td>PWT</td>
<td>Price-Without-Turnover</td>
</tr>
<tr>
<td>RfQ</td>
<td>Request for Quote</td>
</tr>
<tr>
<td>RDF</td>
<td>T7 Reference Data File</td>
</tr>
<tr>
<td>RDI</td>
<td>T7 Reference Data Interface</td>
</tr>
<tr>
<td>STP</td>
<td>Stop Order</td>
</tr>
<tr>
<td>T7</td>
<td>T7 is the trading architecture developed by Deutsche Börse Group</td>
</tr>
<tr>
<td>TES</td>
<td>T7 Entry Service</td>
</tr>
<tr>
<td>TSO</td>
<td>Trailing Stop Order</td>
</tr>
<tr>
<td>XETR</td>
<td>Market Identifier Code (MIC) of trading venue T7 Xetra</td>
</tr>
<tr>
<td>XFRA</td>
<td>Market Identifier Code (MIC) of T7 Börse Frankfurt including Börse Frankfurt Zertifikate</td>
</tr>
</tbody>
</table>
2. **Xetra EnLight below Large-in-Scale**

With T7 Release 8.1, T7 Xetra will offer the possibility to enter Xetra EnLight Request for Quotes (RfQ) below the ESMA defined Large-in-Scale (LIS) value. Xetra EnLight quotes below LIS will be published to ensure pre-trade transparency in accordance with the MiFID II regulation.

### 2.1 Functional Description

Until now, Xetra EnLight requires a minimum volume given by the LIS threshold. In the future, it will be possible to enter Xetra EnLight Request for Quotes (RfQ) below LIS, down to an instrument-specific, exchange-defined threshold called SRQS minimum size. Accordingly, the respondents’ quotes may be below LIS.

In accordance with MiFID II requirements, quotes with a volume below LIS will be published in market data. There will be no publication via EMDS.

#### 2.1.1 ETI

No impact.

#### 2.1.2 FIX

No impact.

#### 2.1.3 Reference Data

There will be a new field **SRQS minimum size**.

It will be published in the Reference Data files, but not via RDI.

#### 2.1.4 Trader GUI

**Xetra EnLight Quote Entry view:**

- A new field will display the notional value, i.e. quantity * reference price.
- The field **BuySide** will be moved up next to the new field with the notional value.

**Xetra EnLight Response History view:**

Here, the last status of an RfQ shall be displayed.

There are four valid values for the status:

- “Quoted”: The responder quoted but has not been selected.
- “Traded”: The responder quoted and has been matched.
- “Declined”: The responder declined the RfQ.
- “Expired”: The responder did not react on the RfQ or did just send “working”.

An **Xetra EnLight Negotiation Event ID** (EnID) will be displayed only once in the table. The view per EnID can be unfolded in case more than one quotes are available.

#### 2.1.5 XML Reports

No impact.
3. TES Auto Approval Rules for Clients

With T7 Release 8.1, Xetra will enhance the existing TES Auto Approval Rules which will provide the enhanced possibility to automate TES approval and the trade’s enrichment with information based on the following attributes:

- Product.
- TES Type.
- Instrument Type.
- Enrichment Key.

The new Enrichment Key can be chosen to be client specific enabling trading participants to perform straighter through processing of their client off-book business.

3.1 Functional Description

Instead of manually approving a TES trade and manually filling the clearing as well as the MiFID fields on the TES trade side, the approving user will be able to specify criteria for an automatic approval in a TES Auto Approval Rule, and to provide the contents of the clearing and MiFID fields as part of the TES Auto Approval Rule.

Once a TES trade side will be received which matches the criteria defined in the TES Auto Approval Rules, these prefilled values are automatically applied. Fields which are prefilled by the initiating user for the approving user will not be overwritten with the values provided by the TES Auto Approval Rule. In contrast to the already existing Auto Approval functionality, it will now be possible to apply selected rules for TES trades involving certain clients by providing a client key in the TES Auto Approval Rule.

After a successful application of an Automatic Approval Rule, the TES trade will be automatically submitted for approval, for which the usual validations are applied.

3.1.1 The TES Auto Approval Rules

The TES Auto Approval Rules are defined and maintained by the Admin user in the T7 Admin GUI for the (approving) users in his business unit. The TES Auto Approval Rules can be maintained intra-day and become effective immediately. An Approval Rule consists of three parts:

- Unique name of the rule.
- Selection key.
- Pre-filled Approval fields.

The selection key has the following fields:

- Initiating User: The initiating user of the TES trade.
- User: The approving user for which this rule is specified.
- Market Group: Either Product assignment group, or the whole market identifier.
- Product (optional): If provided, the rule has higher priority than a rule without product identifier.
- TES type (optional): If provided, the rule has higher priority than a rule without TES type.
- Instrument type (optional): If provided, the rule has higher priority than a rule without an instrument type.
- Enrichment Rule ID (optional): If provided and matching the Enrichment Key provided by the TES trade initiator, the rule has higher priority than other rules. It will be possible to apply certain rules for certain clients by filling the Enrichment Key with a client key.

The approval fields are as follows:

- Clearing & MiFID fields: These reflect the predefined fillings of clearing and MiFID fields as part of the TES Approval request. There are mandatory and optional fields. On setting up an Approval Rule, certain validations are performed such as validating that the Client Identifier must be provided if the Trading Capacity is Agency.
3.1.2 Application of TES Auto Approval Rules

If the TES profile allows auto approval, then on each TES trade entry/modification/upload request, for each trade side, the following algorithm will be executed step-by-step to find the applicable TES Auto Approval Rule:

Step 1: Check whether the approving user has TES Auto Approval Rules defined for the Initiating User:
- a. If no rules are found, then no TES Auto Approval Rule can be applied, and the request will be processed further for manual approval.
- b. If one or multiple rules are found, then continue with Step 2 using these rules.

Step 2: Product Assignment ID will be used to further restrict the selection criteria. The rules with Product Assignment group of the product will have priority over the market wide group.
- a. If no rules are found with the Product Assignment ID for the product provided in the TES trade entry/modification/upload request, then take all the rules with market wide group and continue with the Step 3.
- b. If one or multiple rules are found, then continue with Step 3 using these rules.
- c. If no rules are found with market wide group, then no TES Auto Approval Rule can be applied, and the request will be processed further for manual approval.

Step 3: Product ID will be used further to restrict the selection criteria:
- a. If no rules are found with the Product ID provided in the TES trade entry/modification/upload request, then take all the rules without Product ID and continue with the Step 4.
- b. If one or multiple rules are found, then continue with Step 4 using these rules.
- c. If no rules are found without Product ID, then no TES Auto Approval Rule can be applied, and the request will be processed further for manual approval.

Step 4: TES Type will be used further to restrict the selection criteria:
- a. If no rules are found with the TES Type provided in the TES trade entry/modification/upload request, then take all the rules without TES Type and continue with the Step 5.
- b. If one or multiple rules are found, then continue with Step 5 using these rules.
- c. If no rules are found without TES Type, then no TES Auto Approval Rule can be applied, and the request will be processed further for manual approval.

Step 5: Instrument Type will be used further to restrict the selection criteria:
- a. If no rules are found with the Instrument Type provided in the TES trade entry/modification/upload request, then take all the rules without Instrument Type and continue with the Step 6.
- b. If one or multiple rules are found, then continue with Step 6 using these rules.
- c. If no rules are found without Instrument Type, then no TES Auto Approval Rule can be applied, and the request will be processed further for manual approval.
Step 6: **Enrichment Rule ID** will be used further to restrict the selection criteria:

a. If Enrichment Rule ID is not filled in the TES trade entry/modification/upload request, or no matching rules are found with the provided value, then the rule without Enrichment Rule ID will be used for further processing of auto approval.

b. If there is no such rule with the Enrichment Rule ID not filled, then no TES Auto Approval Rule can be applied, and the request will be processed further for manual approval.

c. If one rule is found with the Enrichment Rule ID provided in the TES trade entry/modification/upload request, then that rule will be used for the further processing of auto approval.

### 3.1.3 Approval Result messaging

In case of a successful TES trade side approval performed on the basis of a TES Auto Approval Rule, the approver will be informed about the Approval Rule and its successful application via broadcast.

In case the TES trade side approval performed on the basis of a TES Auto Approval Rule fails due to a validation, the error message will be conveyed to the approving user via broadcast.

### 3.2 Impact on Interfaces

The following chapter outlines the changes to interfaces to support the functionality. The changes are described in a general fashion to provide an indication of upcoming changes. For detailed changes, please refer to the upcoming simulation versions of the interface manuals once they are published, and to the *Online Help* in the GUIs.

#### 3.2.1 ETI

New fields will be added to various TES request and broadcast messages.

#### 3.2.2 FIX

The FIX messages will be updated accordingly.

#### 3.2.3 Reference Data

No impact.

#### 3.2.4 GUI

*T7 Entry Service* views and TES view will be enhanced with additional fields.

The *TES Auto Approval Rule* view will show all fields of an Auto Approval Rule.

#### 3.2.5 XML Reports

A new daily report will reflect all defined TES Auto Approval Rules for the users of a business unit.

A new daily report will reflect all additions, modifications and deletions of the TES Auto Approval Rules for the business unit.
4. Further GUI Enhancements

With T7 Release 8.1, Xetra will introduce the following changes and enhancements for GUls. See also the GUI Reference manuals.

4.1 Change in Display of Previous Closing Price

Currently, the previous closing price is kept for one business day. If there is no trade on business day x, then on day x+1 there is no previous closing price available in the Market view. Therefore, the calculation of NetChange in the Market view is not possible, either.

With T7 Release 8.1, the last trade price will be kept for more than one business day, so that the previous closing price will not necessarily be from the previous business day, but it will be the price of the last trade. Therefore, the calculation of NetChange will always be possible.

4.2 Additional Columns in Market view

With T7 Release 8.1, new columns Quotation Unit and Cash Security Subtype will be introduced. Furthermore, the column Issuer is renamed to Quote Provider.
5. Other changes

5.1 DMA Flag for TES and Xetra EnLight

The DMA flag already known from ETI order entry requests is now introduced to ETI TES trade entry and approval requests, and to Xetra EnLight Hit Quote request. GUI is out of scope. It will be available in Auto Approval Rules and in XML Reports TC545, TC600, TC610, too. Default is false. The DMA flag is only allowed for Trading Capacity A and R.

5.2 Change in Behaviour of Delete All Order Request

Currently, on a Delete All Orders request a deletion broadcast is sent to Listener data even if only lean orders are affected while the Listener data is meant only for standard orders.

With T7 Release 8.1, no broadcast will be sent to Listener data anymore, if only lean orders are affected by a Delete All Orders request.