

Bidder Handbook

M7 Auction

Deutsche Börse AG

Mailing Address

Mergenthalerallee 61
65760 Eschborn

Web

www.deutsche-boerse.com

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Chairman of the Supervisory Board

Dr. Joachim Faber

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Carsten Kengeter (CEO)
Andreas Preuß (Deputy CEO)
Gregor Pottmeyer (CFO)
Hauke Stars (Member of Executive Board)
Jeffrey Tessler (Member of Executive Board)

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Term	Explanation
Auctioneer	Member that is offering the auctioned quantity
Broker	User trading as an agent for companies, which are not registered at the system
Call Phase	Phase, during which bids can be submitted, i.e. while the auction is in state "Running"
DBAG	Deutsche Börse AG
Finished Auction	Auction that is in "Finished" or "Rejected"
Freeze Phase	Phase, during which bids can no longer be submitted but the auction is not finished yet, i.e. while the auction is in state "Closed"
GUI	Graphical User Interface
Live Auction	Auction that is in "Published", "Running" or "Closed" state
XML	Extensible Markup Language

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1 Introduction

1.1 M7 Auction

M7 Auction Service offers single side auctions for the primary market with a dedicated quantity to be auctioned on behalf of the selling entity.

This document provides Bidder users with a functional overview of the M7 Auction, which is the platform where the primary market auction for various products is conducted. The M7 Auction is technically operated and hosted by DBAG.

The Service is a web-based solution accessible via the internet with a standard internet browser.

1.2 Document Content

This document contains the description of the:

M7 Auction Trader GUI chapters 2 - 4

M7 Auction Trader Reports chapters 5

2 GUI Overview

2.1 Functional Overview

The M7 Auction provides Bidders with trading functionality via a Graphical User Interface (GUI).

The Reporting Engine provides the M7 Auction user with a reporting tool. The reporting engine generates reports based on the information available in the data store, e.g. trades from an auction.

2.2 Graphical User Interface (GUI)

The GUI provides the user with an interface to the M7 Auction and allows the user to interact with the M7 Auction. The service is configurable for multiple languages on the instance level.

The M7 Auction front-end consists of workstations hosted on the user's site with a connection to the Internet using HTTPS protocol with a standard internet browser, e.g. Microsoft Internet Explorer or Mozilla Firefox. For optimal display, a resolution of 1920x1080 or higher should be used.

The users are not required to install any additional software on their workstations and do not need any detailed IT know-how. The M7 Auction GUI is simple and easy to use.

2.3 Menu Structure of M7 Auction GUI

Upon successful login, the M7 Auction GUI is displayed. The menu bar is in the upper left corner with items Auctions, Imprint and About.

2.4 Login

In order to start the M7 Auction GUI, the user must first connect to a website which links to the Login Dialog.

To access the system, the M7 Auction user must enter a valid user name and password in the "Login" pop-up window. The connection details will be provided in a separate document. The user's credentials will be communicated to the user via email after the registration process is completed. User ID and password will be distributed in two separate emails.

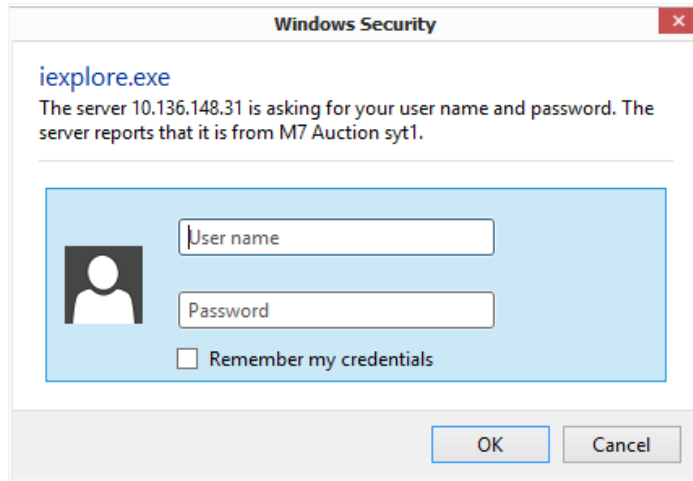


Figure 1 Login Screen

The User ID must have at most 8 characters in length and contain only characters 'a'-'z', 'A'-'Z', '1'-'9'. Special characters are not allowed.

The password must be at least 8 characters long and contain one or more characters from at least three groups listed below:

- 'A'-'Z'
- 'a'-'z'
- '0'-'9'
- Special character(s)
 - ;, @# \$% ^ & + =
 - an underscore sign

2.4.1 Browser Settings

The user should add the M7 Auction URL as a “trusted site” in the settings of the Internet browser. In order to do this:

- Open the Internet browser window,
- In the menu bar, select Tools > Internet Options > Security,
- Click on “Trusted Sites”, then “Sites”. Add the exchange’s internet address as a trusted site. Click “OK”.

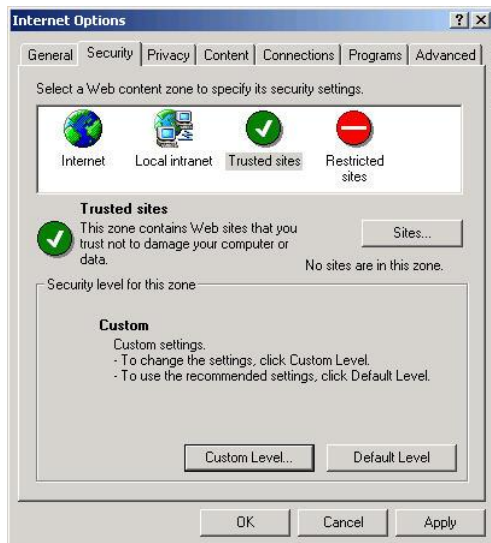


Figure 2 Internet Options

In the same dialogue window, the Custom Settings should be set up by clicking the “Custom Level” button. In the “Security Settings” window, the M7 Auction user should enable the following settings:

- Download signed ActiveX controls
- Download unsigned ActiveX controls
- Run ActiveX controls and plug-ins
- Script ActiveX controls marked safe for scripting
- File download
- Active Scripting



Figure 3 Security Settings

2.5 Single Login

Single login allows each authorized user to login to the M7 Auction one time per User ID. If a user is already logged into the system, a second login attempt with the same User ID will be only be successful once the first login session has been terminated.

If the user tries to login twice with the same User ID, the following screen is displayed:

We are really sorry but there can be only one session per user.
If you proceed, the other session will be deactivated.



Figure 4 Single Login

The user then has two options, either to 'Proceed Anyway' or to 'Logout'. If the button 'Logout' is pressed the user will be redirected to the M7 Auction Logout page. If the button 'Proceed Anyway' is pressed the user will be logged in to the M7 Auction. In this case, the first login of this user will be terminated.

2.6 Change Password

The menu item “Change Password”, placed in the upper right side of the page, allows the users to change their password at any time. The user is also forced to change his password after the initial login.

After the initial login, the password reset or clicking the menu item “Change Password”, the user is directed to a “Change Password” screen:

The password must be at least 8 characters long and must contain at least 3 of following character types.
No other characters are allowed :

- 1) Capital letter (A-Z)
- 2) Lower-case letter (a-z)
- 3) Numbers (0-9)
- 4) Special character (_ ; , @ # \$ % ^ & + =)

Old Password

New Password

Repeat New Password

Figure 5 Change Password

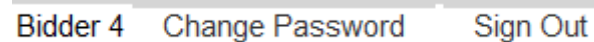
2.7 Reset Password

In case a user forgets the password, the account is locked due to inactivity or if the user submitted an incorrect password for 3 times, the user should contact the Market Supervision team who will arrange his/her password to be reset.

After the reset, the user will obtain two separate emails, one with the User ID and second one with a one-time password.

2.8 Logout

The Sign out menu item allows the user to log out from the M7 Auction system. It is placed in the upper right corner of the page.



Bidder 4 Change Password Sign Out

Figure 6 Logout

Upon successful logout, the following page is displayed:

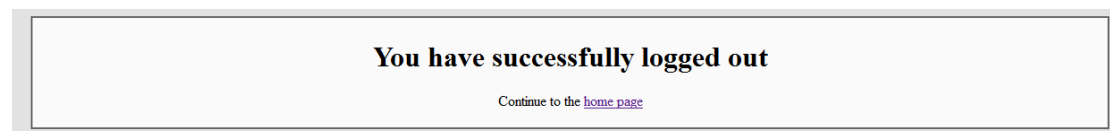


Figure 7 Logout Page

2.9 Messages

On the right-hand side of the window the “Messages” Panel is displayed. The messages depict all status changes of the auctions and all Auction Detail updates, as well as important updates from Market Supervision. All messages from the last 3 months can be viewed in the Messages Panel.



Figure 8 Messages

2.10 Refresh of GUI Page

The GUI page is automatically updated when a new message is displayed in the Messages Panel. If the user is viewing an auction, the page will also be automatically updated.

A refresh button is displayed on top of the message bar. Pressing this button updates the content of the entire page manually– status updates of the action, submitted bids, messages, etc. This button will appear in blue color when a view is invoked and is loading.



Figure 9 Refresh button in a passive status (white) and while loading an update (blue)

The GUI page can also be updated by pressing one of the open tabs:

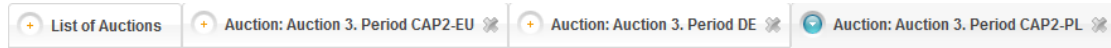


Figure 10 Open tabs

3 Auctions

The menu item “Auction” gives the M7 Auction Bidder users an overview of the auctions.

3.1 Auction Overview

The Auctions section allows the Bidder to view the auctions. The user can choose whether to view:

- All Auctions
- All Live Auctions - with state “Published”, “Running” or “Closed”
- All Finished Auctions - with state “Finished” or “Rejected” All My Live Auctions - with state “Running” or “Closed” in which the Bidder has a bid
- All My Finished Auctions - with state “Finished” or “Rejected” in which the Bidder has a bid.

No.	Auction ID	Name	Phase	Product	Quantity	Opening Time	Closure Time
1	203	Auction 3. Period CAP2-EU	Published	T3PA	4,250,000	06.10.2017 09:00	06.10.2017 11:00
2	202	Auction 3. Period CAP2-PL	Running	T3PA	4,850,000	26.09.2017 09:54	26.09.2017 16:00
3	201	Auction 3. Period CAP2-EU	Rejected	T3PA	4,250,000	26.09.2017 09:52	26.09.2017 09:53
4	200	Auction 3. Period DE	Closed	T3PA	4,750,000	26.09.2017 09:51	26.09.2017 09:51
5	199	Auction 3. Period CAP2-EU	Finished	T3PA	4,250,000	26.09.2017 09:47	26.09.2017 09:48

Figure 11 List of Auctions

3.2 Auction States

An auction can go through several stages:

- Published
- Running
- Closed
- Finished
- Rejected

As soon as an auction is “Published”, it is visible for all users. During the “Published” state the Bidder can view the available information for the auction: Name, Product, Zone, Auctioneer, Quantity, Opening Time [CET], Closure Time [CET], Auction Algorithm, Smallest Unit, Settlement Start and Maximum Bid Size.

Auction Details		Auction Configuration	
Name:	Auction 3. Period CAP2-EU	Auction Algorithm:	Price/Random
Phase:	Published	Smallest Unit:	500
Product:	T3PA	Settlement Start:	T + 1
Zone:	EU	Maximum Bid Size:	
Auctioneer:	TAUC1 View Data		
	Quantity: 4,250,000		
	Opening Time [CET]: 26.09.2017 09:00		
	Closure Time [CET]: 26.09.2017 11:00		

Figure 12 Published Auction

The field “Product” specifies the product which is traded in the auction. The field “Zone” specifies the zone for which the quantity of the product is being auctioned. The field “Auctioneer” specifies the member offering the quantity to be auctioned. The Maximum Bid Size determines the upper limit for each submitted bid for this auction. If no value is specified for it, the upper limit for the bids will be the auctioned quantity. The Smallest Unit specifies the smallest tradable unit that is allowed for this auction, i.e. a bid can only be submitted if it is a multiple of the Smallest Unit.

In case the auctioned quantity is offered by multiple auctioneers, the user can view the quantity allocations per country in the Auctioneer-Country matrix which will be displayed upon pressing the button “View Data” next to the Auctioneer. To hide the matrix, the user shall press the button “Hide Details.”

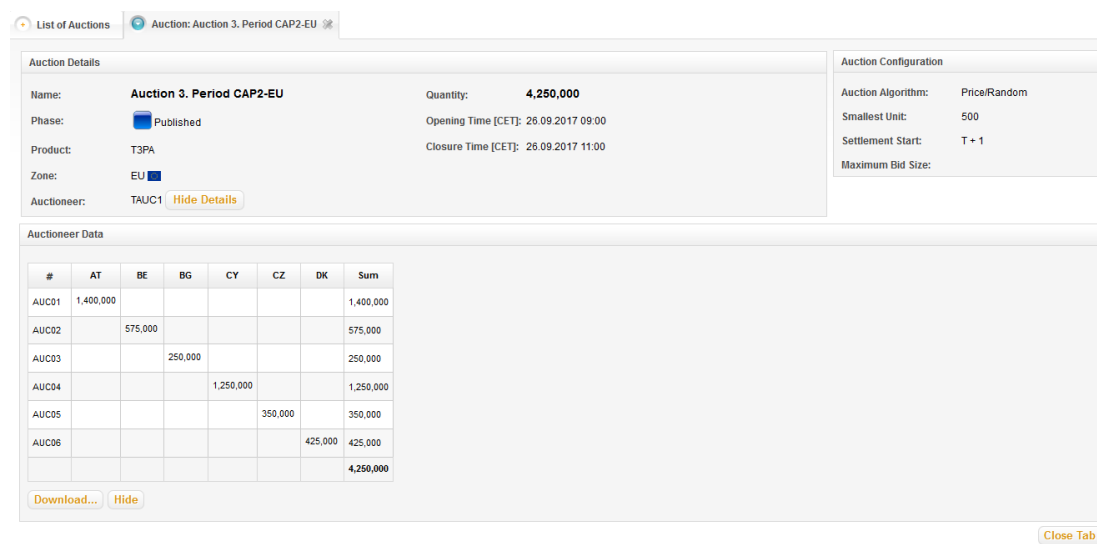


Figure 13 Auctioneer Country Matrix

The results of the auction are calculated based on the “Auction Algorithm”¹. Currently, two auction algorithms are defined – Price/Time and Price/Random. For the Price/Time algorithm the following rules apply:

1. The bids with the highest price are executed first
2. If there are bids with the same price the bids that are submitted earlier are executed first.

For the Price/Random algorithm the following rules apply:

1. The bids with the highest price are executed first
2. If there are bids with the same price the bids which should be executed are randomly selected.

The field “Settlement Start” determines when the settlement of the trade should happen. There are five possible values for the field “Settlement Start” – T+1, T+2, T+3, T+4, T+5. This means that the settlement should be done that amount of days after the trading day. Since weekends are not trading days, they must be skipped when calculating the settlement day.

The start of the “Running” state denotes also the start of the auction (also known as the “Call Phase”). During the “Call Phase”, the users can submit, modify or cancel bids. All bids that were submitted for an own member, regardless by which user, are visible for the Bidder and can be modified or cancelled.

¹ Auctions which are governed by EU Auction regulation will be held with “Price/Random Auction Algorithm”.

Auction Details

Name: **Auction 3. Period CAP2-PL** Quantity: **4,850,000**

Phase: **Running** Opening Time (CET): 25.09.2017 13:02

Product: T3PA Closure Time (CET): 25.09.2017 15:00

Zone: PL Ends In: 01:47:11

Auctioneer: TAUC1 [View Data](#)

Auction Configuration

Auction Algorithm: PriceRandom
Smallest Unit: 500
Settlement Start: T + 1
Maximum Bid Size:

Bids

Filter: <all members> With selected bids: - Quantity + Quantity - Price + Price

ID	Member	User	Last Modified	Reference	Quantity	Price
1437842992	MPVEX	CUT01	25.09.2017 13:10:33.798		150,000	7.01
182127293	MPVEX	CUT01	25.09.2017 13:10:20.162		5,000	6.90
1144131234	MPVEX	CUT01	25.09.2017 13:10:08.325		3,000	6.85
284797760	MPVEX	CUT01	25.09.2017 13:10:58.348		1,995,000	6.35

Input Parameter Configuration

Quantity steps: 500
Price steps: 0.01

Submit New Bid

Member: MPVEX
Quantity: 500
Price (EUR): 0.01

[Upload Bids](#) [Reset](#) [Apply](#)

[Auction Reports](#) [Close Tab](#)

Figure 14 Running Auction – Call Phase

The “Bid Overview” section located under the “Messages” panel provides the Bidder user with a summary of the current bid situation. The overview includes Maximum Price, Minimum Price, Average Price, Number of Bids and Quantity Total. The displayed values relate either to a specific member or to all members which are assigned to the Bidder user, depending on the filter selection made in the Bids table. At this stage, the values for Allocated and Value of Executed Bids fields are not available.

Bid Overview	
Maximum Price:	0.02 €
Minimum Price:	0.01 €
Average Price:	0.01 €
Number of Bids:	4
Quantity Total:	3,500
Allocated:	-
Value of Executed Bids:	-

Figure 15 Bid Overview – Live Auction

If the Bidder’s member has a foreign currency assigned and the Bidder submits a bid, the Exchange Rate for this currency is displayed in the right bottom corner in the section “Currencies”.

Currencies	
Code	Exchange Rate
HUF	308.3200 / 1 €

Figure 16 Currencies

When the specified time of the auction is over the auction goes to state “Closed” and thus the “Freeze Phase” starts. During this time the bidder can view the bids for the own Member but cannot modify or cancel them. During the “Freeze Phase” Market Supervision can decide whether the auction should be reopened², accepted or rejected. If an auction is reopened it goes back to state “Running”, if it is accepted it goes to state “Finished” and if it is rejected to state “Rejected”.

If the auction is accepted the fully executed bids are marked green and the partially executed bids yellow. Depending on the Auction Algorithm some bids might get a “Randomly Selected” flag, see chapter [Executed Bids](#). As soon as the auction is accepted, in the section “Auction Results” the Final Price, Total Value of Accepted Bids and Total Bids Quantities are displayed:

Auction Results	
Final Price:	0.01 €
Total Value of Accepted Bids:	5,000.00 €
Total Bids Quantities:	500,500

Figure 17 Auction Results

In the Bid Overview section, the user can find the bid situation, which was valid at the time when the auction was accepted or rejected. In case the auction was accepted, also the allocated quantity along with the value of executed bids are displayed in the respective fields. The overview information relates either to all members, or to one member, depending on the member selection made in the Bids table filter.

Bid Overview	
Maximum Price:	0.02 €
Minimum Price:	0.01 €
Average Price:	0.02 €
Number of Bids:	2
Quantity Total:	400,000
Allocated:	399,500
Value of Executed Bids:	3,995.00 €

Figure 18 Bid Overview – Finished Auction

If the auction is rejected no bids are executed.

² Auctions which are governed by EU Auction regulation will not be reopened.

The Market Supervision can also enter or modify Auction or Cash Limit of any member at any time. If the Market Supervision enters a Cash Limit that would not cover the member's open bids in the currently running auctions and all executed bids from the previous auctions of this auction day, M7 Auction will automatically cancel the necessary number of bids. First, bids from the auction with the latest closure will be deleted (the lowest-priced bids first), until the cash limit is no longer breached. If the cash limit is still violated, the deletion process continues for the running auction with the next latest closure time and stops when the Cash Limit is no longer breached or there aren't any open bids. In case multiple bids are candidates for the deletion, M7 Auction will select one of them on a random basis.

In case an Auction Limit for the Bidder's member is entered, M7 Auction checks if there are running and closed auctions for this product, and if the member has submitted bids with total quantity higher than this new auction limit, an automatic cancellation of bid is performed. Starting with the bid with the lowest price till the Auction Limit is fulfilled. The bid deletion is performed for each auction in which the Auction Limit has been violated.

In the event that the M7 Auction performs an automatic cancellation of bids, the Bid Overview section will contain the number of automatically cancelled bids.


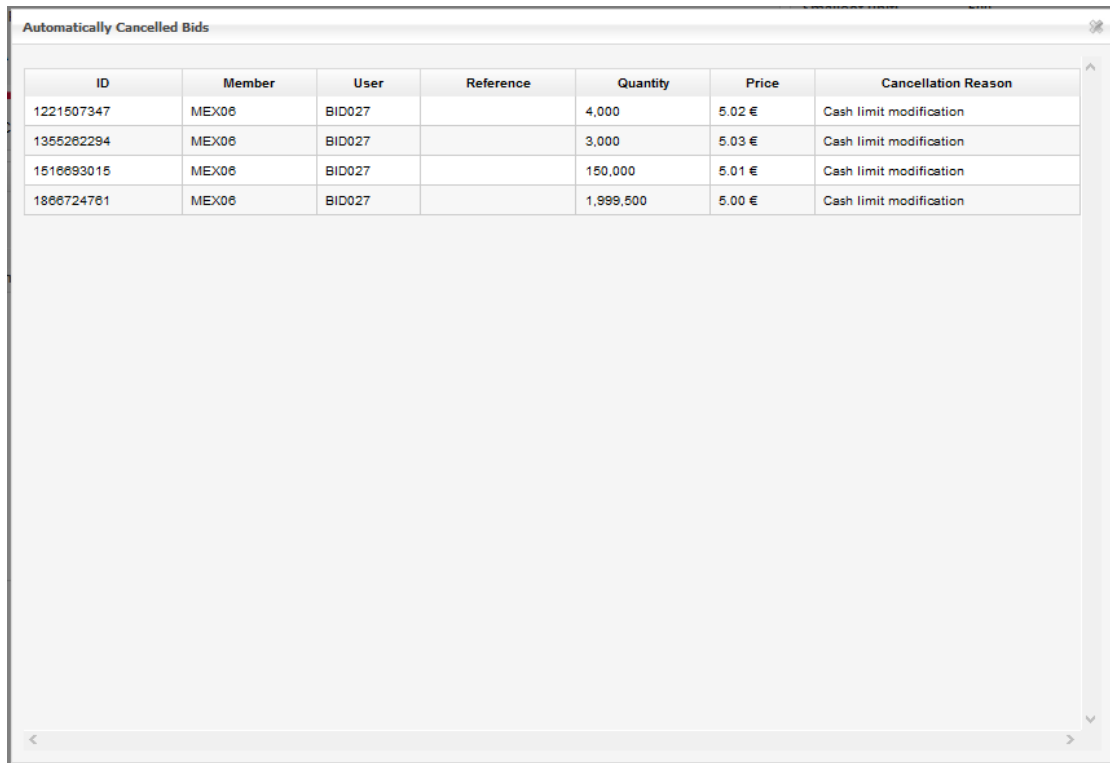
Bid Overview	
Maximum Price:	-
Minimum Price:	-
Average Price:	-
Number of Bids:	0
Quantity Total:	0
Allocated:	-
Value of Executed Bids:	-
Automatically Cancelled Bids:	4 

Figure 19 Bid Overview – Automatic Bid Cancellation

The Bidder can display the list and details of the deleted bids upon clicking on a magnifier icon highlighted in red. The reason why each bid was cancelled (cash or auction limit change, member suspension etc.) will be shown in the last column of the popup.



ID	Member	User	Reference	Quantity	Price	Cancellation Reason
1221507347	MEX08	BID027		4,000	5.02 €	Cash limit modification
1355282294	MEX08	BID027		3,000	5.03 €	Cash limit modification
1518693015	MEX08	BID027		150,000	5.01 €	Cash limit modification
1888724781	MEX08	BID027		1,999,500	5.00 €	Cash limit modification

Figure 20 Popup Automatically Cancelled Bids

4 Bids

The section “Bids” of the auction allows the M7 Auction Bidders to view, submit, modify and cancel bids.

The Bidder can either view all bids submitted by the members assigned to this user listed in a table. Alternatively, the user can select one member in the filter and see only bids submitted for this member. In the event that all of the bids cannot fit into the window, a scroll-bar will be available.

The screenshot displays the eex auction interface. On the left is a sidebar with navigation links: All Auctions, Live Auctions, Finished Auctions, My Live Auctions, and My Finished Auctions. The main content area is titled 'Auction: Auction 3. Period CAP2-PL'. It features an 'Auction Details' section with the following information: Name: Auction 3. Period CAP2-PL, Quantity: 4,850,000, Phase: Running, Opening Time (CET): 25.09.2017 13.02, Product: T3PA, Closure Time (CET): 25.09.2017 15.00, Zone: PL, and Auctioneer: TAUC1. Below this is the 'Bids' section, which includes a filter dropdown set to '<all members>', a table of bids, and buttons for 'Reset Modifications', 'Modify Bids', and 'Cancel Bids'. The table has columns for ID, Member, User, Last Modified, Reference, Quantity, and Price. The right-hand panel contains 'Auction Configuration' (Algorithm: PriceRandom, Smallest Unit: 500, Settlement Start: T + 1, Maximum Bid Size) and 'Input Parameter Configuration' (Quantity steps: 500, Price steps: 0.01). At the bottom of the right panel are 'Submit New Bid' fields for Member (MPVEX), Quantity (500), and Price (EUR) (0.01), along with 'Upload Bids', 'Reset', and 'Apply' buttons.

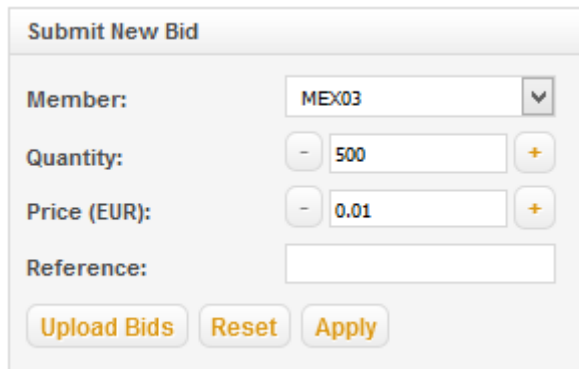
ID	Member	User	Last Modified	Reference	Quantity	Price
1437842992	MPVEX	CUT01	25.09.2017 13:10:33.798		150,000	7.01
182127293	MPVEX	CUT01	25.09.2017 13:10:20.162		5,000	6.90
1144131234	MPVEX	CUT01	25.09.2017 13:10:08.325		3,000	6.85
284797760	MPVEX	CUT01	25.09.2017 13:10:58.348		1,995,000	6.35

Figure 21 Bids for one Member

4.1 Submitting Bids

The Bidder can only submit bids for the offered quantity during the Call Phase. In order to submit a new bid, the Bidder must submit the values for the required fields in the section “Submit New Bid”:

- Member, from a drop-down menu
- Quantity
- Price (EUR)
- Reference (optional, to be provided only when trading as a Broker)



The screenshot shows a web form titled "Submit New Bid". It contains the following elements:

- Member:** A dropdown menu with "MEX03" selected.
- Quantity:** A numeric input field with "500" and minus/plus buttons.
- Price (EUR):** A numeric input field with "0.01" and minus/plus buttons.
- Reference:** An empty text input field.
- Buttons:** "Upload Bids" (orange), "Reset" (grey), and "Apply" (orange).

Figure 22 Submit a New Bid

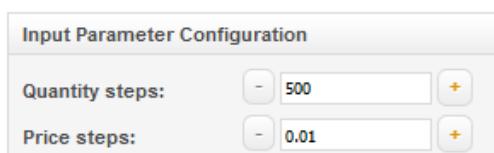
The field "Member" is already prefilled. The Reference field is displayed only if the user has the respective broker rights and must only be filled in only if the Bidder wants to bid as a broker.

The quantity that is submitted in the bid must be a multiple of the Smallest Unit. It must also be less than the Maximum Bid Size; otherwise, an error message will be displayed. The sum of all quantities submitted for a member per auction must not exceed the Auction Limit, which is the maximum total quantity that can be submitted per member and per auction for a specific product. It is displayed next to the name of the member in the drop-down menu "Member". Each member may also have a Cash Limit, which cannot be exceeded by the submitted bids. With every new bid the system would check if the sum of all already entered bids for the member and the bid to be entered do not violate the Cash Limit. **The check would be made based on the following formula:**

$$\sum \text{Bid Price} * \text{Bid Quantity} \leq \text{Cash Limit}$$

If the cash limit is exceeded an error message would be displayed rejecting the bid.

The Price and Quantity values can be either entered via keyboard or using the respective "+" and "-" buttons that are situated next to each field. These buttons increase or decrease the entered Price or Quantity by the respective steps which the Bidder user configured in the section "Input Parameter Configuration". The user can configure Quantity Steps, which must be a multiple of the Smallest Unit (default) and lower than the Maximum Bid Size (if it was set for the auction by Market Supervision) or the auctioned Quantity (if Maximum Bid Size was not set). The Price Steps can range from 0.01 EUR (default) to 10,000.00 EUR.



The screenshot shows a web form titled "Input Parameter Configuration". It contains the following elements:

- Quantity steps:** A numeric input field with "500" and minus/plus buttons.
- Price steps:** A numeric input field with "0.01" and minus/plus buttons.

Figure 23 Input Parameter Configuration

After specifying the required information the Bidder must press the button "Apply" in order to submit the bid. After the submission, the Quantity and Price fields will remain pre-filled with values of the just submitted bid. By pressing the button "Reset", the user can also set the values to the configured Quantity and Price Steps.

Alternatively, the Bidder can upload an Excel or a CSV file with bids by pressing the button "Upload Bids" in the section "Submit New Bid". When the button is pressed, a pop-up window is displayed. To upload bids with a Broker Reference, the user must submit a file where the "Broker?" field is "Yes".

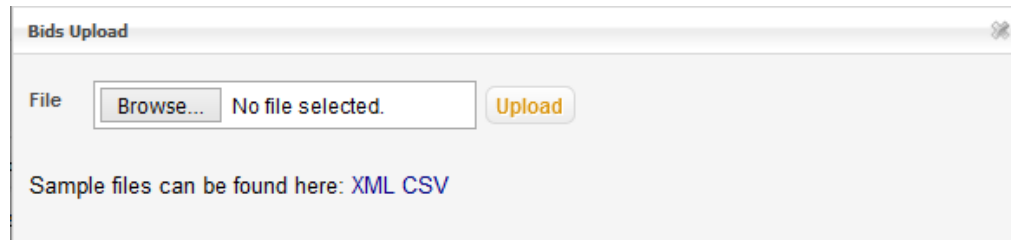


Figure 24 Popup Bids Upload

In order to choose the file that should be uploaded the user must press the button “Browse”, navigate to and choose the respective Excel or CSV file and click on the button “Upload”. Once the file is chosen, all bids are displayed and must be accepted by the user:

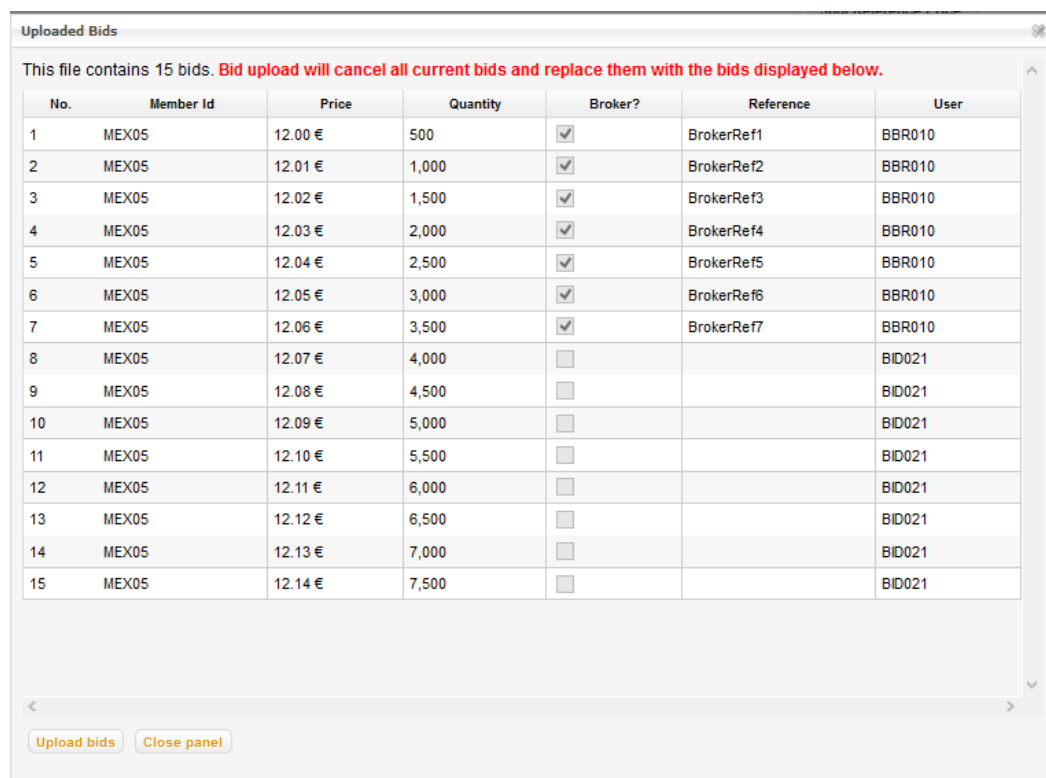


Figure 25 Uploading Bids

If the file is correct and there are already bids for the member, they will be replaced by the uploaded bids. The user is informed accordingly by a message in red font in the popup window. It is only after the button “Upload Bids” at the bottom of the pop-up window is pressed, and thus, all bids are accepted by the user, that the bids are really uploaded to the system.

All regulations when submitting a bid manually are also valid when uploading the bids. The user is responsible for uploading the file in the expected format. Depending on the character of the errors contained in the uploaded file, the file may be processed partially, be rejected with an error message or the upload may be completely disabled. In order to make the process of creating the file easier a sample file can be downloaded from the pop-up window, see chapter [Sample Bid File](#).

The system assigns a random globally unique Bid ID with maximum 10 digits and a Last Modified timestamp to every submitted bid.

4.2 Modifying Bids

The M7 Auction Bidder can modify the existing bids for the own Member any time during the Call Phase. In order to modify one or more bids, the user adjusts their values directly in the Bid table, either using “+” and “-” buttons or via keyboard. The buttons “+” or “-” increase, respectively decrease the bid price or quantity by the respective steps which are configured in the “Input Parameter Configuration” section. A Broker user can also modify the Reference field as long as the bid belongs to a user with broker rights.

The screenshot shows a web interface titled "Bids". At the top, there is a filter dropdown set to "<all members>". To the right, there are four buttons: "- Quantity", "+ Quantity", "- Price", and "+ Price". Below this is a table with the following columns: ID, Member, User, Last Modified, Reference, Quantity, and Price. Two rows are visible, both with checked checkboxes in the first column. The first row has ID 108904204, Member MEX01, User BID003, Last Modified 23.05.2017 18:07:21.203, Reference, Quantity 1,000, and Price 0.03. The second row has ID 378015789, Member MEX01, User BID002, Last Modified 23.05.2017 17:42:55.518, Reference, Quantity 500, and Price 0.04. At the bottom of the table, there are three buttons: "Reset Modifications", "Modify Bids", and "Cancel Bids".

Figure 26 Button Modify Bids

The user can also adjust Price or Quantity values of several bids in one direction at once. In order to do so, the user ticks the boxes in front of the respective Bid IDs and presses one of the buttons labelled “With selected bids” which are situated in the top right corner of the Bids table. After that, the Price or Quantity value will be adjusted in the desired direction, by the value of the respective steps configured in the “Input Parameter Configuration” section.

This image shows a close-up of the four buttons located in the top right corner of the Bids table: "- Quantity", "+ Quantity", "- Price", and "+ Price".

Figure 27 With Selected Bids

The screenshot shows the "Input Parameter Configuration" section. It contains two rows of controls. The first row is for "Quantity steps" and shows a minus button, a text input field containing "500", and a plus button. The second row is for "Price steps" and shows a minus button, a text input field containing "0.01", and a plus button.

Figure 28 Input Parameter Configuration

At this stage, none of the modifications is executed and the adjustments are highlighted in red colour. It is only when the user presses the “Modify Bids” button and confirms the modifications in a pop-up window that all displayed adjustments are taken into account. The values are now highlighted in green colour, indicating that the

modifications have been fully executed. At any time before the modifications are executed, all details of the bids can be reset to their actual values by pressing the “Reset Modifications” button.



Figure 29 Buttons Reset Modifications and Modify Bids

During the bid modification, the same validations are performed as during the bid submission. The new value of the bid Quantity must be a multiple of Smallest Unit and cannot be higher than the Maximum Bid Size (if it was set for the auction by Market Supervision) or auction Quantity (if it was not set). The sum of all bid quantities per auction for a member must not exceed the Auction Limit, which is displayed next to the Member ID in the drop-down menu “Member”. With each modification, the system will also check that the Cash Limit is not violated with the new quantities or prices. In such case, the user will be informed with an error message.

After the modifications are fully executed, the Bid IDs remain the same; however, the Last Modified timestamp of each modified bid is updated.

4.3 Cancelling Bids

The M7 Auction Bidders can cancel the existing bids for the own Member any time during the Call Phase. In order to cancel one or more bids, the Bidder ticks the boxes in front of the respective Bid IDs and presses the button "Cancel Bids".

The screenshot shows a web interface titled "Bids". At the top, there is a filter dropdown set to "<all members>". To the right, there are four buttons: "- Quantity", "+ Quantity", "- Price", and "+ Price". Below this is a table with the following columns: ID, Member, User, Last Modified, Reference, Quantity, and Price. The table contains three rows of data. The first row has an unchecked checkbox. The second and third rows have checked checkboxes. Below the table, there are three buttons: "Reset Modifications", "Modify Bids", and "Cancel Bids".

<input type="checkbox"/>	ID	Member	User	Last Modified	Reference	Quantity	Price
<input type="checkbox"/>	108234805	MEX01	BID003	24.05.2017 10:09:38.843		- 500 +	- 0.03 +
<input checked="" type="checkbox"/>	108904204	MEX01	BID003	23.05.2017 18:07:21.203		- 1,000 +	- 0.02 +
<input checked="" type="checkbox"/>	378015769	MEX01	BID002	23.05.2017 17:42:55.518		- 500 +	- 0.01 +

Figure 30 Cancel Bids Selection

Afterwards, the user must confirm the cancellation in a pop-up window.

The screenshot shows a small pop-up window with the title "Cancel selected bids?". The main text inside the window reads "You are about to cancel selected bids, do you want to continue?". At the bottom of the window, there are two buttons: "OK" and "Cancel".

Figure 31 Cancel Bids Popup

For convenience, the user can select all displayed bids, be that all bids or all bids filtered by member, by clicking into the headline of the column with the tick boxes, and then proceed with the cancellation as described above.

The screenshot shows a web interface titled "Bids". At the top, there is a filter dropdown set to "<all members>". To the right, there are four buttons: "- Quantity", "+ Quantity", "- Price", and "+ Price". Below this is a table with the following columns: ID, Member, User, Last Modified, Reference, Quantity, and Price. The table contains three rows of data, each with a checked checkbox in the first column. The Quantity and Price columns have input fields with minus and plus buttons. At the bottom of the interface, there are three buttons: "Reset Modifications", "Modify Bids", and "Cancel Bids".

<input checked="" type="checkbox"/>	ID	Member	User	Last Modified	Reference	Quantity	Price
<input checked="" type="checkbox"/>	106234805	MEX01	BID003	24.05.2017 10:09:38.843		- 500 +	- 0.03 +
<input checked="" type="checkbox"/>	108904204	MEX01	BID003	23.05.2017 18:07:21.203		- 1,000 +	- 0.02 +
<input checked="" type="checkbox"/>	378015789	MEX01	BID002	23.05.2017 17:42:55.618		- 500 +	- 0.01 +

Figure 32 Select All Bids

4.4 Executed Bids

When an auction is accepted, the Bidders can see all fully executed bids for the own Member marked green and all partially executed bids marked yellow. For executed bids, the allocated quantity and the value of the bid are displayed in columns "Allocated" and "Bid Value". If the Auction Algorithm is Price/Random, the bids that have been selected based on the random principle will get a "Randomly Selected" flag, as shown in the figure below.

In the Bids table, the Bidder can view all bids for the own members or filter them by the member. In case a member is selected, also the fields "Allocated on this Member" and "Value of Executed Bids" are shown.

The screenshot displays the 'Auction: Auction 3. Period DE' interface. It is divided into several sections:

- Auction Details:**
 - Name: Auction 3. Period DE
 - Phase: Finished
 - Product: T3PA
 - Zone: DE
 - Auctioneer: TAUC2
 - Quantity: 4,750,000
 - Opening Time [CET]: 25.09.2017 13:21
 - Closure Time [CET]: 25.09.2017 13:27
- Auction Configuration:**
 - Auction Algorithm: Price/Random
 - Smallest Unit: 500
 - Settlement Start: T + 1
 - Maximum Bid Size:
- Bids:**
 - Allocated on this Member: 25,000.00
 - Value of Executed Bids: 171,250.00 €
 - Filter: <all members>

ID	Member	User	Last Modified	Reference	Quantity	Price	Allocated	Bid Value
1386645575	MPYEX	CUT01	25.09.2017 13:21:30.938		1,000	7.00	1,000	6,850.00
601284901	MPYEX	CUT01	25.09.2017 13:22:12.804		100,000	6.85	24,000	164,400.00
631193756	MPYEX	CUT01	25.09.2017 13:22:23.896		250,000	6.25		
- Auction Results:**
 - Final Price: 6.85 €
 - Total Value of Accepted Bids: 32,537,500.00 €
 - Total Bids Quantities: 5,251,000

At the bottom of the interface, there are buttons for 'Auction Reports' and 'Close Tab'. A legend at the bottom of the bid table indicates: Fully Executed Bid (green), Partially Executed Bid (yellow), and Bid Not Executed (grey).

Figure 33 Accepted Auction and Randomly Selected Flag

If a member has the right to trade in a foreign currency, and was successfully allocated any quantity at the end of an auction, the value of its bids in the foreign currency will be displayed along with the applied exchange rate.

Bids

Allocated on this Member: 2,000,000.00 Filter: MEX06

Value of Executed Bids: 12,000,000.00 €

Value of Executed Bids In Currency: 3,695,040,000.00 HUF

Exchange Rate: 307.9200 / 1 €

ID	Member	User	Last Modified	Reference	Quantity	Price	Allocated	Bid Value
1842830417	MEX06	BID027	15.06.2017 14:52:33.070		50,000	6.01	50,000	300,000.00
1573257838	MEX06	BID027	15.06.2017 14:52:21.445		1,995,000	6.00	1,950,000	11,700,000.00

Fully Executed Bid || Partially Executed Bid || Bid Not Executed

Figure 34 Member with Foreign Currency

5 Reports

The M7 Auction Bidder has access to the following reports:

- Order Report
- Trade Report
- Extended Trade Report

5.1 Download a Report

The Bidder can download a report by first choosing the auction for which the reports should be downloaded and then pressing the button “Auction Reports” located under the Bids table on the left side:

The screenshot displays the M7 Auction interface. At the top, there are tabs for "List of Auctions" and "Auction: Auction 3. Period DE". The main content is divided into several sections:

- Auction Details:**
 - Name: Auction 3. Period DE
 - Phase: Finished
 - Product: T3PA
 - Zone: DE
 - Auctioneer: TAUC2
 - Quantity: 4,750,000
 - Opening Time [CET]: 25.09.2017 13:21
 - Closure Time [CET]: 25.09.2017 13:27
- Auction Configuration:**
 - Auction Algorithm: Price/Random
 - Smallest Unit: 500
 - Settlement Start: T + 1
 - Maximum Bid Size:
- Bids:**
 - Allocated on this Member: 25,000.00
 - Value of Executed Bids: 171,250.00 €
 - Filter: <all members>

ID	Member	User	Last Modified	Reference	Quantity	Price	Allocated	Bid Value
138645575	MPVEX	CUT01	25.09.2017 13:21:30.938		1,000	7.00	1,000	6,850.00
601284901	MPVEX	CUT01	25.09.2017 13:22:12.804		100,000	6.85	24,000	164,400.00
631193756	MPVEX	CUT01	25.09.2017 13:22:23.896		250,000	6.25		
- Auction Results:**
 - Final Price: 6.85 €
 - Total Value of Accepted Bids: 32,537,500.00 €
 - Total Bids Quantities: 5,251,000

At the bottom of the Bids table, there is a legend: "Fully Executed Bid || Partially Executed Bid || Bid Not Executed". A button labeled "Auction Reports" is located at the bottom left, and a "Close Tab" button is at the bottom right.

Figure 35 Download Report

As soon as the button is pressed a pop-up window is displayed, where the Bidder can select the type and format of the report to download. The reports are available in XML and CSV format.

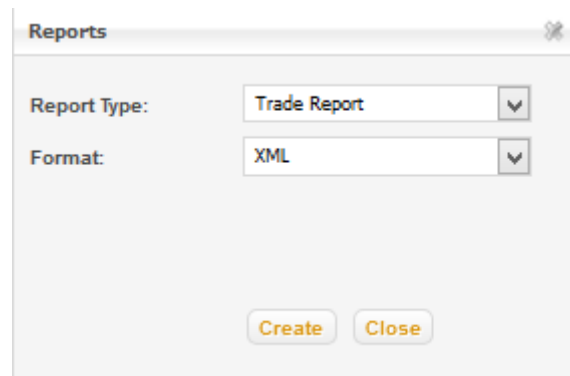


Figure 36 Reports Pop-up Window

5.2 Download a Report

The M7 Auction generates three types of reports for the Bidders.

5.2.1 Order Report

The Order Report contains information about all bids that were placed for the own Members. It also includes information about the Last Modified Time, Member and User for which the bid was submitted, as well as quantity and price of the bid. The report can be downloaded for auctions in the state Running or later and includes up-to-date information for the submitted bids for the own Members. It is available in XML and CSV format.

5.2.2 Trade Report

The Trade Reports contains information about all trades for the own Members for a specific auction. The report can be downloaded for auctions in the state Finished. It is available in XML and CSV format.

5.2.3 Extended Trade Report

In addition to the information provided in the Trade Report, the Extended Trade Report contains also the originally submitted bid quantity and customer's reference. The report can be downloaded for auctions in the state Finished. It is available in XML and CSV format.

6 Appendix

6.1 Order Report

XML Tag	Type	m/o	No.	Data Type	Short description
OrderRprt	SE	m	1	Structure	
auctionId	A	m		Integer	Auction ID of the Auction
OrderAuctionList	SE	m	1	Structure	
Order	SE	m	0..n	Structure	
ordId	A	m		Integer	Order Id as returned by the Trading Service.
actionType	A	m		Char(4)	Type of the action. Valid values are: UADD -> Order was added by a Trader AADD -> Order was added by an Admin (Market Supervision) UDEL -> Order was deleted by a Trader ADEL -> Order was deleted by an Admin (Market Supervision), order was deleted because the member was suspended NEXE -> Order was not executed PEXE -> Order was partially executed (traded) FEEXE -> Order was fully executed (traded) UMOD -> Order was modified by a Trader AMOD -> Order was modified by an Admin (Market Supervision) SCNL -> Order was cancelled because the auction was cancelled SREJ -> Order was rejected because auction was rejected
mbrId	A	m		Char(5)	Member Id for the submitted order
usrCode	A	o		Char(6)	User code of the user who entered the order
clearingAcctType	A	m		Char (1)	Specifies whether the order is entered on own account or as an agent. Valid values: "P": Proprietary, i.e. order is entered on own account "A": Agent, i.e. order is entered on customer account
acctRef	A	o		Char(20)	The free text written by the user if the value of the field above is "AGENT"
px	A	m		Long	Limit price of the order in Eurocent
qty	A	m		Integer	Quantity of the order
timeStamp	A	m		DateTime	Timestamp of the action in UTC as determined by the backend in the following format: YYYY-MM-DDThh:mm:ss[Z]
processed	A	m		Boolean	Indicates whether an order was considered in the matching process. Valid values are: "1": If the order was processed "0": If the order was not processed
bidOnBehalf	A	m		Boolean	Indicates whether an order was submitted on behalf. Valid values are: "1": If the order was submitted on behalf, ie by a Market Supervision user "0": If the order was not submitted on behalf, ie by a bidder
lastUsrCode	A	m		Char(6)	User code of the user who modified the order last

Figure 37 Order Report

6.1.1 Sample Order Report in XML Format

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<OrderRprt auctionId="32" created="2017-05-28T11:40:19.439Z" xmlns="http://www.deutsche-boerse.com/euauction/orderReport/v1.0">
  <OrderActionList>
    <Order ordId="76410499" actionType="UADD" mbrId="MEX01" usrCode="BID004" clearingAcctType="P"
    qty="50000" px="1" timeStamp="2017-05-28T09:23:11.730Z" processed="1" bidOnBehalf="0"
    lastUsrCode="BID004"/>
    <Order ordId="1055161497" actionType="UADD" mbrId="MEX01" usrCode="BID004" clearingAcctType="P"
    qty="1000" px="2" timeStamp="2017-05-28T09:23:33.290Z" processed="1" bidOnBehalf="0"
    lastUsrCode="BID004"/>
  </OrderActionList>
</OrderRprt>
```

```
<Order ordId="76410499" actionType="UMOD" mbrId="MEX01" usrCode="BID004" clearingAcctType="P"
qty="50000" px="1" timeStamp="2017-05-28T09:23:49.427Z" processed="1" bidOnBehalf="0"
lastUsrCode="BID004"/>
<Order ordId="1055161497" actionType="UMOD" mbrId="MEX01" usrCode="BID004" clearingAcctType="P"
qty="1000" px="3" timeStamp="2017-05-28T09:23:49.427Z" processed="1" bidOnBehalf="0"
lastUsrCode="BID004"/>
<Order ordId="76410499" actionType="PEXE" mbrId="MEX01" usrCode="BID004" clearingAcctType="P"
qty="50000" px="1" timeStamp="2017-05-28T09:26:09.659Z" processed="1" bidOnBehalf="0"
lastUsrCode="BID004"/>
<Order ordId="1055161497" actionType="FEXE" mbrId="MEX01" usrCode="BID004" clearingAcctType="P"
qty="1000" px="3" timeStamp="2017-05-28T09:26:09.660Z" processed="1" bidOnBehalf="0"
lastUsrCode="BID004"/>
</OrderActionList>
</OrderRprt>
```

6.1.2 Sample Order Report in CSV Format

```
Header;2017-05-28-11:41:13.879;,,,,,;
76410499;32;UADD;2017-05-28-09:23:11.730;MEX01;BID004;P;;1;50000;1;0;BID004
1055161497;32;UADD;2017-05-28-09:23:33.290;MEX01;BID004;P;;2;1000;1;0;BID004
76410499;32;UMOD;2017-05-28-09:23:49.427;MEX01;BID004;P;;1;50000;1;0;BID004
1055161497;32;UMOD;2017-05-28-09:23:49.427;MEX01;BID004;P;;3;1000;1;0;BID004
76410499;32;PEXE;2017-05-28-09:26:09.659;MEX01;BID004;P;;1;50000;1;0;BID004
1055161497;32;FEXE;2017-05-28-09:26:09.660;MEX01;BID004;P;;3;1000;1;0;BID004
Footer;6;,,,,,;
```

6.2 Trade Report

XML Tag	Type	m/o	No.	Data Type	Short description
TradeCaptureRprt	SE	m	1	Structure	
auctionId	A	m		Integer	Auction ID of the Auction
TradeList	SE	m	1	Structure	
Trade	SE	m	0..n	Structure	
tradeId	A	m		Integer	Globally unique Trade ID of the Trade
qty	A	m		Integer	Executed quantity
px	A	m		Decimal	Execution price in Eurocent
tradeExecTime	A	m		DateTime	Date and Time the trade was executed in UTC in the following format: YYYY-MM-DDThh:mm:ss[Z]
settlementDate	A	m		Date	Date the trade should be settled
buyOrdrId	A	o		Integer	Order Id of the buy side order
buyMbrId	A	o		Char(5)	Member ID of the user who entered the buy side order
buyUsrCode	A	o		Char(6)	User code of the user who entered the buy side order
sellMbrId	A	o		Char(5)	Member ID of the auctioneer
sellUsrCode	A	o		Char(6)	User code of the user who published the auction
random	A	m		Boolean	Indicates whether the trade was done based on a random selection. Valid values are: "1": If the order was randomly selected "0": If the order wasn't randomly selected
currencyXchgRate	A	o		Decimal	Exchange Rate from Euro to the respective currency of the member
currencyCode	A	o		Char(3)	Settlement currency chosen by the member

Figure 38 Trade Report

6.2.1 Sample Trade Report in XML Format

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<TradeCaptureRprt auctionId="32" created="2017-05-28T11:47:25.493Z" xmlns="http://www.deutsche-boerse.com/eua-auction/tradeReport/v1.0">
  <TradeList>
    <Trade tradeId="20" qty="44000" px="0.01" currencyCode="EUR" currencyXchgRate="1.0000"
tradeExecTime="2017-05-28T09:26:09.658Z" settlementDate="2017-05-29" buyOrdrId="76410499"
buyMbrId="MEX01" buyUsrCode="BID004" sellMbrId="TAUC2" sellUsrCode="MSPV05" random="1"/>
    <Trade tradeId="18" qty="1000" px="0.01" currencyCode="EUR" currencyXchgRate="1.0000"
tradeExecTime="2017-05-28T09:26:09.658Z" settlementDate="2017-05-29" buyOrdrId="1055161497"
buyMbrId="MEX01" buyUsrCode="BID004" sellMbrId="TAUC2" sellUsrCode="MSPV05" random="0"/>
  </TradeList>
</TradeCaptureRprt>
```

6.2.2 Sample Trade Report in CSV Format

```
Header;2017-05-28-11:48:30.591;,,,,,;
20;32;44000;0.01;2017-05-28-09:26:09.658;2017-05-
29;76410499;MEX01;BID004;TAUC2;MSPV05;1;EUR;1.0000
18;32;1000;0.01;2017-05-28-09:26:09.658;2017-05-
29;1055161497;MEX01;BID004;TAUC2;MSPV05;0;EUR;1.0000
Footer;2;,,,,,;
```


6.3 Extended Trade Report

XML Tag	Type	m/o	No.	Data Type	Short description
TradeCaptureRprt	SE	m	1	Structure	
auctionId	A	m		Integer	Auction ID of the Auction
TradeList	SE	m	1	Structure	
Trade	SE	m	0..n	Structure	
tradeld	A	m		Integer	Globally unique Trade ID of the Trade
qty	A	m		Integer	Executed quantity
px	A	m		Decimal	Execution price in Eurocent
tradeExecTime	A	m		Date Time	Date and Time the trade was executed in UTC in the following format: YYYY-MM-DDThh:mm:ss[Z]
settlementDate	A	m		Date	Date the trade should be settled
buyOrdrid	A	o		Integer	Order Id of the buy side order
buyMbrld	A	o		Char(5)	Member ID of the user who entered the buy side order
buyUsrCode	A	o		Char(6)	User code of the user who entered the buy side order
sellMbrld	A	o		Char(5)	Member ID of the auctioneer
sellUsrCode	A	o		Char(6)	User code of the user who published the auction
random	A	m		Boolean	Indicates whether the trade was done based on a random selection. Valid values are: "1": If the order was randomly selected "0": If the order wasn't randomly selected
currencyXchgRate	A	o		Decimal	Exchange Rate from Euro to the respective currency of the member
currencyCode	A	o		Char(3)	Settlement currency chosen by the member
originalBidSize	A	o		Integer	Original bid quantity
customerRef	A	o		Char(20)	Reference

Figure 39 Extended Trade Report

6.3.1 Sample Extended Trade Report in XML Format

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<TradeCaptureRprt auctionId="32" created="2017-05-28T11:58:01.043Z" xmlns="http://www.deutsche-boerse.com/eua-auction/tradeReport/v1.0">
  <TradeList>
    <Trade tradeld="20" qty="44000" px="0.01" currencyCode="EUR" currencyXchgRate="1.0000"
tradeExecTime="2017-05-28T09:26:09.658Z" settlementDate="2017-05-29" buyOrdrid="76410499"
buyMbrld="MEX01" buyUsrCode="BID004" sellMbrld="TAUC2" sellUsrCode="MSPV05" random="1"
originalBidSize="50000"/>
    <Trade tradeld="18" qty="1000" px="0.01" currencyCode="EUR" currencyXchgRate="1.0000"
tradeExecTime="2017-05-28T09:26:09.658Z" settlementDate="2017-05-29" buyOrdrid="1055161497"
buyMbrld="MEX01" buyUsrCode="BID004" sellMbrld="TAUC2" sellUsrCode="MSPV05" random="0"
originalBidSize="1000"/>
  </TradeList>
</TradeCaptureRprt>
```

6.3.2 Sample Extended Trade Report in CSV Format

```
Header;2017-05-28-11:58:56.780;,,,,,,,,,;
20;32;44000;0.01;2017-05-28-09:26:09.658;2017-05-
29;76410499;MEX01;BID004;TAUC2;MSPV05;1;EUR;1.0000;50000;
18;32;1000;0.01;2017-05-28-09:26:09.658;2017-05-
29;1055161497;MEX01;BID004;TAUC2;MSPV05;0;EUR;1.0000;1000;
Footer;2;,,,,,,,,,;
```

6.4 Sample Bid File

Member Id	Price	Quantity	Broker?	Broker Reference	User
Member	12.34	222			User
Member	12.35	444	Yes	BrokerRef1	User