T7 Cash Markets

Participant and User Maintenance Manual

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1. Definitions and Abbreviations

BU   Business Unit

CCP   Central counterparty

ETI   Enhanced Trading Interface

eXAS   Electronic Exchange Admission Service

FIX   Financial Information eXchange (Protocol)

GUI   Graphical User Interface

MOV   Maximum Order Value

T7   Cash and Derivatives trading system developed by Deutsche Börse Group

2.   Introduction

T7 operates the on-exchange trading functionality of the Cash Market exchange. Service Administrators in participant offices are able to add and maintain users via the Graphical User Interface (GUI).

This includes the maintenance and restriction of access to products, functions and entitlement, the order and quote volumes as well as the scope of orders, i.e. which orders can be acted upon.

2.1   Purpose of this Manual

This manual is intended to assist service administrators with maintaining participant and user related data in the T7 system.

The following areas are covered:

- Explanation of fundamental concepts.
- Pre-defined user roles (e.g. Cash Trader).
- Maintenance processes by service administrators.

2.2   Maintenance Summary

The Cash Market related member reference data is fully incorporated in the T7 system. The participant information, business units, user structure as well as entitlement will be maintained in T7 only.

2.3   Further Reading

The following documents provide additional information to complement this manual:

- T7 Functional and Interface Overview
- T7 Functional Reference
- Trader, Admin and Clearer GUI – Manual

These documents are available on the Xetra website www.xetra.com under:

Xetra > Technology > T7 trading architecture > System documentation.

2.4 What's new?

This chapter describes the major changes for the T7 release 6.0 in December 2017.

2.4.1 Maximum Order Quantity Validation

One MiFID II requirement for pre-trade controls for cash markets is the maximum order quantity validation, which prevents orders with a too large order size from entering the order book.

Please refer to chapter 3.7 for details of the maximum order quantity validation.

During the conversion to release 6.0, the MaximumOrderQuantity will be set automatically to 999.999.999 for every user. The Service Administrator of a member can then reduce this parameter to the required value. Maintenance of this value is effective immediately.

2.4.2 Xetra BEST

The BEST functionality, that T7 will offer with Release 6.0, will guarantee an execution price better than the price within the current order book by routing of Flow Providers' customer orders to specific market Participants acting as BEST Executors. Beyond this, the BEST functionality will eliminate the problem of partial executions, as all orders will be executed against the BEST Executor's quote with their full size.

Please refer to the Xetra Functional & Technical Release Notes for further details about this functionality.

In order to provide BEST Execution, the BEST Executor will enter a special quote type called BEST quote. The resource for entering this quote will be added to the already existing role "Cash Market Maker".

BEST quotes can be entered only with the trading capacity "E – Xetra BEST". This trading capacity can be assigned to the user (similar to e.g. M – Market Making") in the Admin GUI, User Maintenance functionality.

Please note:

- For entering BEST quotes the user needs the trading capacity "Xetra BEST" as well as the entitlement "Cash Market Maker" role.

3. Concepts

This chapter describes the fundamental concepts in T7 regarding products, participants, users, entitlements and risk limits.

3.1 Products

T7 includes a hierarchy containing product assignment groups, products and instruments. Instruments are the tradable entities, i.e. an order always refers to buying or selling a specified quantity of a certain instrument. Instruments of the same type can be grouped together to form products. However, every tradable instrument must belong to a product. Instruments of the same product are traded in the same way, i.e. trading parameters and trading schedules are defined for products rather than for individual instruments. A product is always associated with a product assignment group, which is used for entitlement and can be assigned to multiple product assignment groups simultaneously.
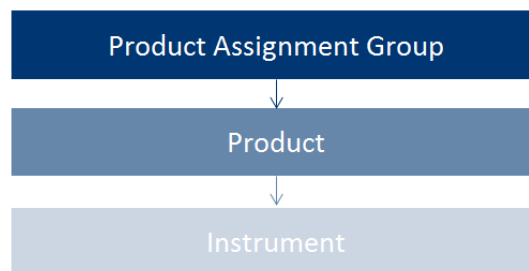
Image 1: Product structure

3.2 Participant Structure

The participant is an entity in T7 representing the member legal firm. Within a participant different units may exist that act independently from each other. These are so called Business Units (BU). There are two different types of BUs:

- Trading Business Unit

    A trading BU is necessary in order to participate in trading.

- Clearing Business Unit

    A Clearing BU receives trade notifications for the trades of the own trading BUs, as well as for the trades of the trading BUs of related NCMs. Additionally, the Clearing Member Stop functionality can be granted by the exchange to the Clearing BU.

A BU is represented by a business unit name, e.g. ABCFR in case of a trading business unit. For clearing business units "CL" is appended to this ID, i.e. to ABCFRCL to be able to distinguish both IDs easily.
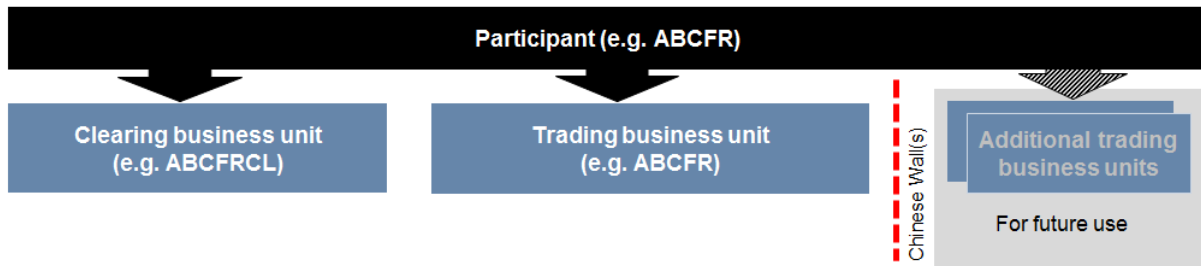
Image 2: Participant structure

Participant data is set up and maintained by Deutsche Börse. The participant is authorized to a market (e.g. XETR). Currently in T7, a participant can have up to two pre-defined business units. Trading members have one business unit designated for trading. Clearing members have one business unit designated for clearing. Clearing business units can receive all on-exchange trade notifications from every trading member for whom they are the designated clearing member. If a member performs trading as well as clearing operations, he will have one trading and one clearing BU. Cash Market distinguishes between settlement institutes and central counterparty (CCP) clearing members. While CCP clearing members only receive on-exchange trade notifications in CCP-eligible instruments, settlement institutes receive all trade notifications, including trades in non-CCP-eligible instruments. Clearing members that also participate in trading activities will have both, a trading and a clearing business unit.

Every business unit has a business unit short name (e.g. clearing business unit "ABCFRCL"), as well as a unique numeric business unit ID.

3.3 Users

A user is a person, such as a trader or a service administrator that interacts with the T7 system. A user may also be a machine, for example an order routing or quoting system. Every user of T7 belongs to exactly one business unit. It is not possible to assign the same user to multiple business units. Since trading and clearing business units generally fulfil different tasks, the entitlement will deviate also.

Service administrators define a user short name (e.g. TRD001). The user short name is unique on participant level, i.e. a user cannot have the same short name as another user, even if they are assigned to different business units. For example, if there is a user with user short name "TRD001" under the trading BU, it will not be possible to create another "TRD001" neither under the trading BU nor under the clearing BU of the same participant. Combining the participant ID (e.g. "ABCFR") with the user short name (e.g. "TRD001"), a user login name (e.g. "ABCFRTRD001") is generated, for use in the new Admin, Trader and Clearer GUIs.

Users have to be assigned to a user group. At least one user group has to be defined. Multiple user groups within the same business unit are optional. For example, user "TRD001" can be put in user group

"ABC" (name of user group can be different to the first three digits of user ID). A user group is created automatically, when the first user is assigned to it.

T7 provides a PIN code functionality on user level. For each user an own PIN code can be entered in the system. It is not mandatory required, as this is an optional field. PIN codes can be used to authorize the appropriate user at Deutsche Börse via telephone in order to perform risk control operations, such as an emergency mass deletion. Users can view their own PIN in the login window of the GUIs. It is important to note that users, who are assigned the Service Administrator role or the User Data View role, are also able to see the PIN codes of all other users within the same business unit.

3.4 User Roles

The T7 system provides a set of pre-defined user roles, configured and maintained by Deutsche Börse. User roles offer participants a simplified approach to administration:

- Sets of resources (e.g. Add Order) are combined to define a logical user role (e.g. Cash Trader).
- A participant assigns roles to users, and multiple roles can be assigned to the same user (multiple user IDs are not needed).
- A user is granted entitlements for specific roles for specific product assignment groups (see 3.5).

Refer to section 4 for the complete set of pre-defined user roles available to participants.

The following diagram is an example of the user role concept, showing that a subset of all available resources (on the left) is selected to form a role (trader role on the right):

Resources available	Trader role resources
Add order	Add order
Modify Order	Modify Order
Delete Order	Delete Order
Delete all Orders	Delete all Orders
Mass Quote	Cross Request
Delete All Quotes	Quote Request
Quote De(Activation)	
Cross Request	
Quote Request	
Maintain Users	
View Users	
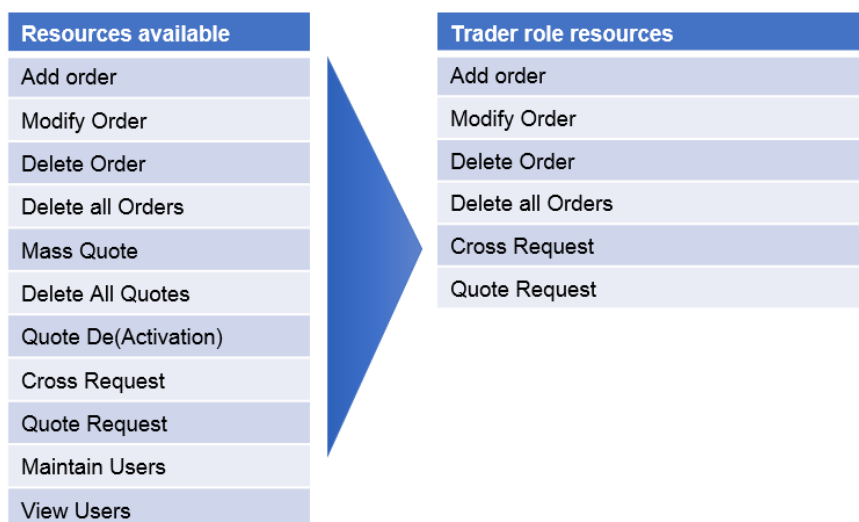
Image 3: Combination of resources to roles

3.5   Entitlements

Participants entitle users for specific user roles for specific product assignment groups.

The following diagram shows some example combinations of entitlements:
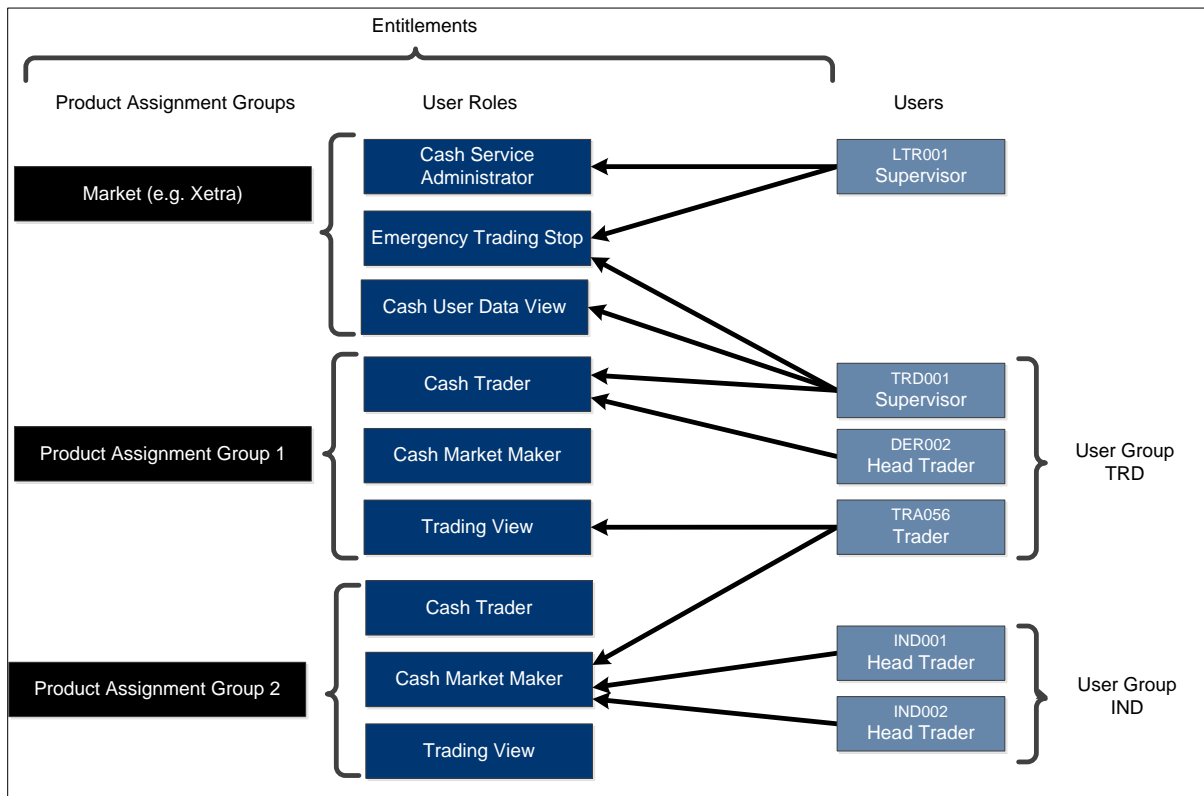
Image 4: Entitlement structure

For example, user TRD001 has a supervisor user level and has been entitled to the *Cash Trader* role for product assignment group 1 as well as *Emergency Trading Stop* and *User Data View* roles for the entire market. User TRA056 has been entitled to the *Cash Trading View* role in product assignment group 1 and the *Cash Trader* role in product assignment group 2.

Participants can assign users to more than one role, however certain restrictions apply that are described further in section 4.

3.6 Maximum Order Value

The Maximum Order Value (MOV) is a parameter determining the maximum value of an order that a trader is allowed to enter. The maximum order value validation will be done on order entry. The value of the order is calculated as quantity times limit price for buy limit orders (last trade price or the respective reference price for buy market orders). The MOV is stored in exchange currency, i.e. in case of orders in a foreign currency instrument, the respective exchange rate needs to be taken into account.

Maximum Order Value = Quantity X Limit Price of order

For sell side orders (limit and market), the last trade price or the respective reference price will be used. Stop orders will be validated based on their trigger price. One Cancels the Other orders will be validated based on their limit price. Iceberg orders will be validated with the full order quantity, refills of Iceberg orders are not relevant for the validation. Volume Discovery Orders will be validated with the full order quantity and for buy side orders with the Volume Discover Price (the second limit of the Volume Discovery Order). The validation will apply for BEST orders, but not for BEST quotes.
Note that the functionality described above applies for quotes as well, if not explicitly stated otherwise.

MOV for a specific user is maintained by the participants themselves, using the Admin GUI. Since this is an optional field, it is not required to enter a value. In this case, the user will not be able to enter orders and quotes.

3.7 Maximum Order Quantity

One MiFID II requirement for pre-trade controls for cash markets is the maximum order quantity validation, which prevents orders with a too large order size from entering the order book.
Participants will be able to maintain the maximum order quantity limits for their users intraday and the changes will be effective immediately. The maximum order quantity will be set on user level, meaning one limit per user. The validation can be skipped for orders and quotes entered via ETI and FIX gateways if the user wishes this explicitly. Orders entered via the T7 GUI are always subject to maximum order quantity check.
The total order quantity or the modified total order quantity will be validated against the maximum order quantity. Any previously matched partial execution will not be taken into account. If the order modification will lead to a maximum order quantity violation, then the modification request is rejected and the initial order remains in the order book.

Iceberg orders will be validated with the full order quantity when entering the order book, refills of Iceberg orders are not relevant for the validation. Volume Discovery Orders will be validated with the full order quantity.

3.8 Trading Capacities

Whenever a user enters an order, the order will have to be entered for a certain trading capacity.

Five different trading capacities will be supported for the cash markets on T7:

A   Agent Account

P   Proprietary Account

M   Market Making Account

E   Xetra BEST

The different trading capacities can be granted or revoked from a user independently of each other in the Admin GUI.

Please note:

- For entering quotes the user needs the trading capacity "Market Making" as well as the entitlement role "Cash Market Maker".
- For entering BEST quotes the user needs the trading capacity "Xetra BEST" as well as the entitlement role "Cash Market Maker".

3.9 User Levels (Scope of Orders)

Every user is designated to have one (and only one) user level: trader, head trader or supervisor. The user level defines which orders they are authorized to act upon (scope of orders):

User Level	Scope of Orders
1 – Trader	View, modify and delete own orders only.
2 – Head Trader	View, modify and delete own orders, as well as orders entered by other users of the same user group.
3 – Supervisor	View, modify and delete own orders, as well as orders entered by other users of the same business unit.

An order entered into T7 belongs to the entering user. If a second user changes this order, the ownership of this order will transfer to the second user. Only exchange Market Supervision can enter an order on behalf of another user.

Contrary to the ownership and scope of orders, a quote is owned by the session instead of the user. A session may enter only one quote per instrument. Sessions belonging to the same business unit may have different quotes in the same instrument, but only one quote per instrument per session is allowed. When a new quote is entered by the same session for the same instrument, the old quote will be overwritten. Based on the entitlement, a user may overwrite, modify or cancel any quote of another user that is owned by the same session.

In context of orders, the order attribute defines the order visibility. While standard orders can be viewed, modified and deleted by other sessions within the same business unit, lean orders cannot. For further information, please refer to the document "T7 Enhanced Trading Interface – Manual incl. Repository and Header files".

Participants define the user structure themselves, reflecting their business operations and practices. One or more supervisors can be defined, who are entitled to perform actions for the entire trading business unit.

Please note that users can only act upon orders in product assignment groups for which they are entitled, regardless of their user level (entitlement overrides user level), see 3.5.

4.   Pre-defined User Roles

This chapter describes the pre-defined user roles available to participants in the T7 system:

- Cash Service Administrator

- Cash User Data View

- Cash Trader

- Cash Market Maker

- Trading View

- Emergency Trading Stop

- Emergency Mass Deletion

- Trade Enrichment Rule

- Trade Enrichment Rule View

- Clearing Member Stop

- CM Backoffice View

- Examination Trader Role (special "negative" role, prevents the user from trading and can only be de-assigned by the exchange. Further details in chapter 4.12)

- Stop Trading BU (special "negative" role, prevents the user from trading. Is assigned and de-assigned automatically when BU is stopped by the member or the exchange or the user is stopped by the member. Further details in chapter 4.13)

- Stop Trading User (special "negative" role, prevents the user from trading. Is assigned and de-assigned automatically when user is stopped by the exchange. Further details in chapter 4.13)

Please note that the negative roles are not visible in the GUI User Maintenance Wizard, because they cannot be assigned manually by the Service admin. If one of the negative roles is assigned to the user, this is indicated as "NegOnExchAssgn" within the User Maintenance Section of the Admin GUI.
The roles are shown in the reports, if assigned.
A summary of user roles and their according resource assignments can be found in the appendix (see chapter 6).

While certain roles are granted only in context of specific product assignment groups, there are other roles, which are valid market wide. The market wide roles can be found below:

Product Assignment Group	Cash Service Admin.	Cash User Data View	Emergency Trading Stop	Emergency Mass Deletion	Trade Enrichment Rule / View
Market wide	✓	✓	✓	✓	✓

The following are examples of role assignments in context of product assignment groups. In the T7 GUI, these roles are referred to as on-exchange attributes:

Product Assignment Group	Cash Trader	Cash Market Maker	Trading View
AUS0	✓		
DAX1	✓	✓	
ETC1		✓	
AFR0			✓

4.1 Cash Service Administrator

Participants appoint one or more service administrators to create and maintain their user structure and entitlement. This includes several operations such as:

- Creation of new users
- Password resets
- Role assignments
- Setting the trading capacities
- Setting the maximum order value
- Setting the maximum order quantities
- Maintaining the PIN codes for each user

This role is relevant for the trading as well as for the clearing business unit.

Please note that new trading users have to be activated by the exchange before they are allowed to enter orders or quotes. The User must have been applied for via eXAS tool with an admitted trader linked.

The following table shows the specific resources assigned to the Cash Service Administrator role:

Resource	Role
Add Order	
Modify Order	
Delete Order	
Delete all Orders	
Mass Quote	
Delete All Quotes	
Quote De(Activation)	

Cross Request	
Quote Request	
Maintain Users	✓
View Users	✓
Delete All for STOP Trading	
Maintain Trade Enrichment Rules	

A service administrator user is not restricted to that single role. He may also be assigned one more of more additional roles.

The service administrator role is assigned to an entire market and thus is not specific to a product assignment group. For new participants, the first service administrator user is initially created by Deutsche Börse.

4.2 Cash User Data View

A user data view role is available to enable a user to view all users, entitlements and maximum order values, without update capability. The cash user data view role is valid market wide. This role is relevant for the trading as well as clearing business unit.

The following table shows the specific resources assigned to the Cash User Data View role:

Resource	Role
Add Order	
Modify Order	
Delete Order	
Delete all Orders	
Mass Quote	
Delete All Quotes	
Quote De(Activation)	
Cross Request	
Quote Request	
Maintain Users	
View Users	✓
Delete All for STOP Trading	
Maintain Trade Enrichment Rules	

4.3 Cash Trader

The trader role enables order-handling functions, cross requests as well as quote requests. This role is relevant for the trading business unit only and is assigned to specific product assignment groups.

The following table shows the specific resources assigned to the Trader role:

Resource	Role	Resource	Role
Add Order	✓	Maintain Users	
Modify Order	✓	View Users	
Delete Order	✓	Delete All for STOP Trading	
Delete all Orders	✓	Maintain Trade Enrichment Rules	
Mass Quote		View Trade Enrichment Rules	
Delete All Quotes		Stop trading for Business Unit	
Quote De(Activation)		Release trading for Business Unit	
Cross Request	✓	Stop Trading for User	
Quote Request	✓	Release Trading for User	
Add Short Order	✓		
Modify Short Order	✓		
Xetra BEST Quote			

4.4 Cash Market Maker

The cash market maker role enables all quote handling functions, such as adding and maintaining quotes, updating quotes as well as quote activation and deactivation. This role is relevant for the trading business unit only.

The market maker role is assigned to specific product assignment groups.

The following table shows the specific resources assigned to the Market Maker role:

Resource	Role	Resource	Role
Add Order		View Users	
Modify Order		Delete All for STOP Trading	
Delete Order		Maintain Trade Enrichment Rules	
Delete all Orders		View Trade Enrichment Rules	
Mass Quote	✓	Stop trading for Business Unit	
Delete All Quotes	✓	Release trading for Business Unit	
Quote De(Activation)	✓	Stop Trading for User	

Cross Request	✓	Release Trading for User	
Quote Request		Delete All Orders / Quotes for All Products	
Maintain Users			
Add Short Order	✓		
Modify Short Order	✓		
Xetra BEST Quote	✓		

Please note:

- For entering quotes the user needs the trading capacity "Market Making" as well as the entitlement role "Cash Market Maker".
- For entering BEST quotes the user needs the trading capacity "Xetra BEST" as well as the entitlement role "Cash Market Maker".

4.5 Trading View

The trading view role only applies to users of the Trader GUI and provides restricted display access to trading data in the Market View, Order View, Trade View, Time & Sales View and Ticker View windows. The trading view role is assigned to specific product assignment groups, and is not required if a user is already assigned a trader or market marker role. This role is relevant for the trading business unit only.

> The Trader GUI displays market information only for products that the user is assigned a trading view, trader or market maker role for the corresponding product assignment group.

4.6 Emergency Trading Stop

The emergency trading stop role enables risk control functions to stop trading for a user or the entire business unit, and automatically delete orders and quotes. In order to give this role to a user it is required that this user has his level set to 'Supervisor'. Without the Supervisor level, it will not be possible to grant this role. This role is relevant for the trading business unit only.

In case a business unit is stopped, this stop applies to all users of the business unit.
The emergency trading stop role can be added to supplement any other role, as long as the user level is set to supervisor. The emergency trading stop role is assigned to an entire market, not a product assignment group.

Participants must have at least two users with the emergency trading stop role in order to stop a user or business unit from trading; stop trading functions use the four-eye principle as a safeguard, see 5.4.

The following table shows the specific resources assigned to the Emergency Trading Stop role:

Resource	Role	Resource	Role
Add Order		Maintain Users	
Modify Order		View Users	
Delete Order		Delete All for STOP Trading	✓
Delete all Orders		Maintain Trade Enrichment Rules	
Mass Quote		View Trade Enrichment Rules	
Delete All Quotes		Stop trading for Business Unit	✓
Quote De(Activation)		Release trading for Business Unit	✓
Cross Request		Stop Trading for User	✓
Quote Request		Release Trading for User	✓
Xetra BEST Quote			

4.7 Emergency Mass Deletion

The emergency mass deletion role enables the market wide deletion of all orders and quotes for all products via the Trader GUI or the Admin GUI. This role is relevant for the trading business unit only.

Deletion of orders can be performed for a specific user or for the entire business unit. The scope of orders allowed to be selected for deletion is controlled by the assigned user level, see 3.9. For example, trader level can mass delete own orders only, and supervisor level can mass delete all orders for an entire business unit.

The scope of quotes allowed to be selected for mass deletion does not depend on the user level. With this role assigned, any user level can delete all quotes for the entire business unit.

The emergency mass deletion role can be added to supplement any other role, and is assigned to an entire market, not a product assignment group.

The following table shows the specific resources assigned to the Emergency Mass Deletion role:

Resource	Role	Resource	Role
Add Order		Maintain Users	
Modify Order		View Users	
Delete Order		Maintain Trade Enrichment Rules	

Delete all Orders		View Trade Enrichment Rules	
Mass Quote		Stop trading for Business Unit	
Delete All Quotes		Release trading for Business Unit	
Quote De(Activation)		Stop Trading for User	
Cross Request		Release Trading for User	
Quote Request		Delete All Orders / Quotes for All Products	✓
Xetra BEST Quote			

4.8 Trade Enrichment Rule

A trade enrichment rule role is available to enable a user to view and maintain trade enrichment rules for the entire business unit, using the Admin GUI. This role is relevant for the trading business unit only.

Trade enrichment rules are a new feature of T7, and are used for automatic enrichment of executed orders and quotes that use the short order message layout. The trade enrichment rule role is assigned to an entire market, not a product assignment group.

The trade enrichment rule role can be added to supplement any other role. Without this role, users are unable to maintain trade enrichment rules. For more information about trade enrichment rule functionality, please refer to the document "T7 Functional and Interface Overview".

The following table shows the specific resources assigned to the Trade Enrichment Rule role:

Resource	Role	Resource	Role
Add Order		Maintain Users	
Modify Order		View Users	
Delete Order		Maintain Trade Enrichment Rules	✓
Delete all Orders		View Trade Enrichment Rules	✓
Mass Quote		Stop trading for Business Unit	
Delete All Quotes		Release trading for Business Unit	
Quote De(Activation)		Stop Trading for User	
Cross Request		Release Trading for User	
Quote Request		Delete All Orders / Quotes for All Products	
Xetra BEST Quote			

4.9   Trade Enrichment Rule View

A trade enrichment rule view role is available to enable a user to view all trade enrichment rules without update capability. This role is relevant for the trading business unit only.

The trade enrichment rule view role is assigned to an entire market, not a product assignment group.

The following table shows the specific resources assigned to the Trade Enrichment Rule View role:

Resource	Role	Resource	Role
Add Order		Maintain Users	
Modify Order		View Users	
Delete Order		Maintain Trade Enrichment Rules	
Delete all Orders		View Trade Enrichment Rules	✓
Mass Quote		Stop trading for Business Unit	
Delete All Quotes		Release trading for Business Unit	
Quote De(Activation)		Stop Trading for User	
Cross Request		Release Trading for User	
Quote Request		Delete All Orders / Quotes for All Products	
Xetra BEST Quote			

4.10 Clearing Member Stop

The Clearing Member Stop role allows a user of a clearing member to stop one or many of his related trading participants. This role is relevant for the clearing business unit only. In case a trading BU is stopped by its clearing member, this stop applies to all users of the trading BU. The clearing member stop role is assigned to an entire market, not a product assignment group.

Participants must have at least two users with this role in order to stop a related trading BU as this functionality underlies a four-eye principle.

This functionality is only available to clearing members who have specifically applied for it. If participants are interested in making use of this functionality, they will have the possibility to contact their according Key Account Managers from Deutsche Börse Group.

The following table shows the specific resources assigned to the Clearing Member Stop role:

Resource	Role	Resource	Role
Add Order		Maintain Users	
Modify Order		View Users	
Delete Order		Delete All for STOP Trading	
Delete all Orders		Maintain Trade Enrichment Rules	
Mass Quote		View Trade Enrichment Rules	
Delete All Quotes		Stop trading BU by CM	✓
Quote De(Activation)		Release trading BU by CM	✓
Cross Request		Stop Trading for User	
Quote Request		Release Trading for User	
Xetra BEST Quote			

4.11 CM Backoffice View

The CM Backoffice View role allows a user of a clearing member to inquire all trades of his related trading participants. This role is relevant for the clearing business unit only.

The following table shows the specific resources assigned to the CM Backoffice View role:

Resource	Role	Resource	Role
Add Order		Maintain Users	
Modify Order		View Users	
Delete Order		CM Trade View	✓
Delete all Orders		Maintain Trade Enrichment Rules	
Mass Quote		View Trade Enrichment Rules	
Delete All Quotes		Stop trading BU by CM	
Quote De(Activation)		Release trading BU by CM	
Cross Request		Stop Trading for User	
Quote Request		Release Trading for User	
Xetra BEST Quote			

4.12 Examination Trader Role

The Examination Trader role prevents a user of a trading member from trading activities. It is automatically assigned to each new user and will be de-assigned by the exchange if the user has a trader exam and is therefore allowed for trading.

The following table shows the specific resources assigned to the Examination Trader role:

Resource	Role	Resource	Role
Add Order	Neg. Entitlement	Maintain Users	
Modify Order	Neg. Entitlement	View Users	
Delete Order	Neg. Entitlement	CM Trade View	
Delete all Orders	Neg. Entitlement	Maintain Trade Enrichment Rules	
Mass Quote	Neg. Entitlement	View Trade Enrichment Rules	
Delete All Quotes	Neg. Entitlement	Stop trading BU by CM	
Quote De(Activation)	Neg. Entitlement	Release trading BU by CM	
Cross Request	Neg. Entitlement	Stop Trading for User	
Quote Request	Neg. Entitlement	Release Trading for User	
Add Short Order	Neg. Entitlement	Xetra BEST Quote	Neg. Entitlement
Modify Short Order	Neg. Entitlement		

4.13 Stop Trading BU Role / Stop Trading User Role

These roles prevent a user of a trading member from trading activities. It is automatically assigned to each user in case the BU or the user is stopped (by the member or by the exchange). As soon as the BU or the user stop is released, the roles will automatically be de-assigned.

The following table shows the specific resources assigned to these roles:

Resource	Role	Resource	Role
Add Order	Neg. Entitlement	Maintain Users	
Modify Order	Neg. Entitlement	View Users	
Delete Order	Neg. Entitlement	CM Trade View	
Delete all Orders	Neg. Entitlement	Maintain Trade Enrichment Rules	
Mass Quote	Neg. Entitlement	View Trade Enrichment Rules	
Delete All Quotes	Neg. Entitlement	Stop trading BU by CM	
Quote De(Activation)	Neg. Entitlement	Release trading BU by CM	
Cross Request	Neg. Entitlement	Stop Trading for User	
Quote Request	Neg. Entitlement	Release Trading for User	
Add Short Order	Neg. Entitlement	Xetra BEST Quote	Neg. Entitlement
Modify Short Order	Neg. Entitlement		

5. Maintenance

This chapter describes the maintenance functions that will be performed by service administrators. Data related to product assignment groups, participants, business units, users and risk controls will be made available to service administrators, including all identifiers needed for all interfaces.

5.1 Product Assignment Groups

Product assignment groups are created and maintained by Deutsche Börse.

5.2 Participant and Business Unit

The participant and business unit structure is created and maintained by Deutsche Börse.

5.3 Users

This section describes the steps necessary to maintain users of T7.

Authorization can be configured by service administrators, as follows:

Type of restriction	Achieved by
Restrict products	Product assignment groups, see chapter 3. (also maximum order quantity limits and maximum order value limits on product level)
Restrict functions	User roles (e.g. market maker or trading view), see 3.4
Restrict quantities traded	Maximum order quantity limit, see 3.7
Restrict value traded	Maximum order value limit, see 3.6
Restrict scope of orders	User levels (trader, head trader, supervisor), see 3.9

Viewing restrictions apply to users of the Trader GUI. These restrictions may not be implemented in alternative applications that access T7 via the electronic interfaces.

5.3.1 Adding a user

Service administrators are able to add users themselves, according to the following steps:

#	Task	Description
1	**Apply for Trader Admission**	Participants must apply for admission for all trading users (trader role or market maker role). This is done using the Electronic Exchange Admission Service (eXAS) tool available in the T7 member section. This step can be skipped if the user is a non-trading user or a simulation user.
2	**Apply for user**	This is mandatory for all trading users and highly recommended for non-trading users. This is done using the eXAS tool available in the T7 member section. This step is not applicable to simulation users.
3	**Create user in T7**	Using the Admin GUI, a User Setup Wizard will guide service administrators through the necessary steps, to add: • User attributes (e.g. name, user level, user group, etc.) • Entitlements (roles per product assignment groups) • MOV • Maximum Order Quantity • Assignment of Trading Capacities • PIN • Initial password, either entered manually, or automatically generated (for password rules, see 5.3.3) • (Default) Settlement Account For more information regarding the User Setup Wizard and the T7 Admin GUI for Cash Market, please see chapter 7.3). Trading users must be activated by Deutsche Börse before they can trade using T7. A unique numeric user ID will be generated for each user and is available for display and export on the Admin GUI, as well as on reports RD110, RD115, RD130 and RD135 available in the Common Report Engine. These numeric identifiers are used in all of the electronic interfaces to T7 (ETI and FIX Gateway).

#	Task	Description
4	**Activate user** **(done by exchange)**	Prior to activation, new trading users will be assigned a negative entitlement "Examination Trader Role" that will prevent any trading activity. Deutsche Börse will activate trading users when the admission process and all above steps are completed. Simulation users are activated upon request, by emailing clearingdata@deutsche-boerse.com. Non-trading users can immediately begin using T7 after the user is created (step #3 above).

5.3.2 Modifying a user

Using the Admin GUI, service administrators may modify user information. If a non-trading user is updated to become a trading user, there must be a trader admission, see 5.3.1, step #1.

Modifications to the user attributes (MOV, entitlement, user group, user level and password resets) are effective immediately. Users must log out and then log back in for these changes to take effect.

5.3.3 Password Rules

User password requirements for T7 are:

- minimum of 8 and a maximum of 16 characters
- valid characters: [a-z, A-Z, 0-9] and special characters: ['+', '-', '@', '!', '_', '$', '%', '&', '/', '=', '*','#']
- minimum 1 uppercase letter and minimum 1 lowercase letter
- minimum 1 special character
- maximum number of repeated characters allowed is 6
- a password history is maintained to prevent the last 10 passwords from being re-used.

User passwords do not automatically expire. Users are able to change their passwords themselves. Passwords can only be changed using the GUI. Passwords generated during setup of new users and passwords generated during password reset by Service Administrator will automatically expire after first login. The user is then forced to create a new password. Participants are responsible for the regular refresh of user passwords, according to their own security guidelines.

5.3.4 Deleting a user

Service administrators may delete users, according to the following steps:

#	Task	Description
1	**Notify Exchange**	Deutsche Börse should be notified of all user deletions. This is required for all trading and non-trading users, using the eXAS tool. This step is not applicable for simulation users.
2	**Delete user**	User deletions are done using the Admin GUI and are effective on the next day (but user login is prevented immediately).

Before deleting a user, participants should ensure that there are no open orders remaining in the system that were entered by this user. Any open orders for deleted users are automatically removed at the end of the trading day.

Participants are responsible for immediate deletion of a user account, when the associated person is no longer with the organization.

5.4 Risk Controls

T7 provides several risk control functions for participants, which allows them to stop a user or an entire business unit from trading. In addition, clearing members are also able to stop one or more of their related trading members. Stopped users can continue to view trading activity, but are not able to enter new orders or quotes.

5.4.1 Stopping Trading for User

Users entitled to the emergency trading stop role may stop and release any user as follows:

#	Task	Description
1	**Stop Trading for user**	When a user is stopped (and confirmed), using the Admin GUI, any orders belonging to the user are immediately deleted. Note that quotes will not be deleted – quotes belong to the entering session, not a specific user. If a stopped user is subsequently released, the user may resume trading activities. Previously deleted orders are not restored.

#	Task	Description
2	**Confirm Stop / Release (four-eyes principle)**	The stop and release functions require that two users, both with emergency trading stop role, execute the function. If a stopped user is subsequently released, the user may resume trading activities. Previously deleted orders are not restored.

5.4.2 Stopping Trading for a Business Unit

Users entitled to the emergency trading stop role may stop and release an entire business unit as follows:

#	Task	Description
1	**Stop Trading for business unit**	When a business unit is stopped (and confirmed), using the Admin GUI, all open orders and quotes of the entire Business Unit are deleted.
2	**Confirm Stop / Release (four-eyes principle)**	The stop and release functions require that two users, both with Emergency Trading Stop role, execute the function. If the stopped business unit is subsequently released, all users may resume trading activities, except for any users previously stopped individually. Previously deleted orders and quotes are not restored.

5.4.3 Clearing member stopping a trading member

Clearing members may stop a trading member, for whom they are a designated clearing member, in T7 as follows:

#	Task	Description
1	**Stop Trading Member**	This operation can be performed using the T7 Clearer GUI. When a trading member is selected he can be stopped. As soon as the trading member is stopped, all open orders and quotes will be deleted and the participant will not be able to enter new orders and quotes. If the stopped business unit is subsequently released, all users may resume trading activities. Previously deleted orders and quotes are not restored.
2	**Confirm Stop / Release (four-eyes principle)**	The stop as well as the release functions require that two users, both with the Clearing Member Stop role, execute the function.

6. Appendix

The following tables show the specific resources assigned to the various roles, separated by context.

6.1 Administrative roles

Resource / Role	Cash Service Administrator	Cash User Data View	Emergency Trading Stop	CM Backoffice View	Clearing Member Stop
Add Order					
Modify Order					
Delete Order					
Delete all Orders					
Mass Quote					
Delete all Quotes					
Quote De(Activation)					
Cross Request					
Quote Request					
Maintain Users	✓				
View Users	✓	✓			
Delete All for STOP Trading			✓		
Maintain Trade Enrichment Rules					
View Trade Enrichment Rules					
Stop Trading for BU			✓		
Release Trading for BU			✓		
Stop Trading for User			✓		
Release Trading for User			✓		
Delete all Orders/Quotes for all Products					
CM Trade View				✓	
Stop trading BU by CM					✓
Release trading BU by CM					✓
			Supervisor Level		

6.2 On-exchange roles

Resource / Role	Cash Trader	Cash Market Maker	Trading View	Emergency Mass Deletion	Trade Enrichment Rule	Trade Enrichment View
Add Order	✓					
Modify Order	✓					
Delete Order	✓					
Delete all Orders	✓					
Mass Quote		✓				
Delete all Quotes		✓				
Quote De(Activation)		✓				
Cross Request	✓	✓				
Quote Request	✓					
Maintain Users						
View Users						
Delete All for STOP Trading						
Maintain Trade Enrichment Rules					✓	
View Trade Enrichment Rules					✓	✓
Stop Trading for BU						
Release Trading for BU						
Stop Trading for User						
Release Trading for User						
Delete all Orders/Quotes for all Products				✓		
Xetra BEST Quote		✓				

6.3 Negative Roles

Resource / Role	Examination Trader Role	Stop Trading BU Stop Trading User
Add Order	Neg. Entitlement	Neg. Entitlement
Modify Order	Neg. Entitlement	Neg. Entitlement
Delete Order	Neg. Entitlement	
Delete all Orders	Neg. Entitlement	
Mass Quote	Neg. Entitlement	Neg. Entitlement
Delete all Quotes	Neg. Entitlement	
Quote De(Activation)	Neg. Entitlement	Neg. Entitlement
Cross Request	Neg. Entitlement	Neg. Entitlement
Quote Request	Neg. Entitlement	Neg. Entitlement
Maintain Users		
View Users		
Delete All for STOP Trading		
Maintain Trade Enrichment Rules		
View Trade Enrichment Rules		
Stop Trading for BU		
Release Trading for BU		
Stop Trading for User		
Release Trading for User		
Delete all Orders/Quotes for all Products		
Add Short Order	Neg. Entitlement	Neg. Entitlement
Modify Short Order	Neg. Entitlement	Neg. Entitlement
Xetra BEST Quote	Neg. Entitlement	Neg. Entitlement

6.4 T7 Admin GUI Windows
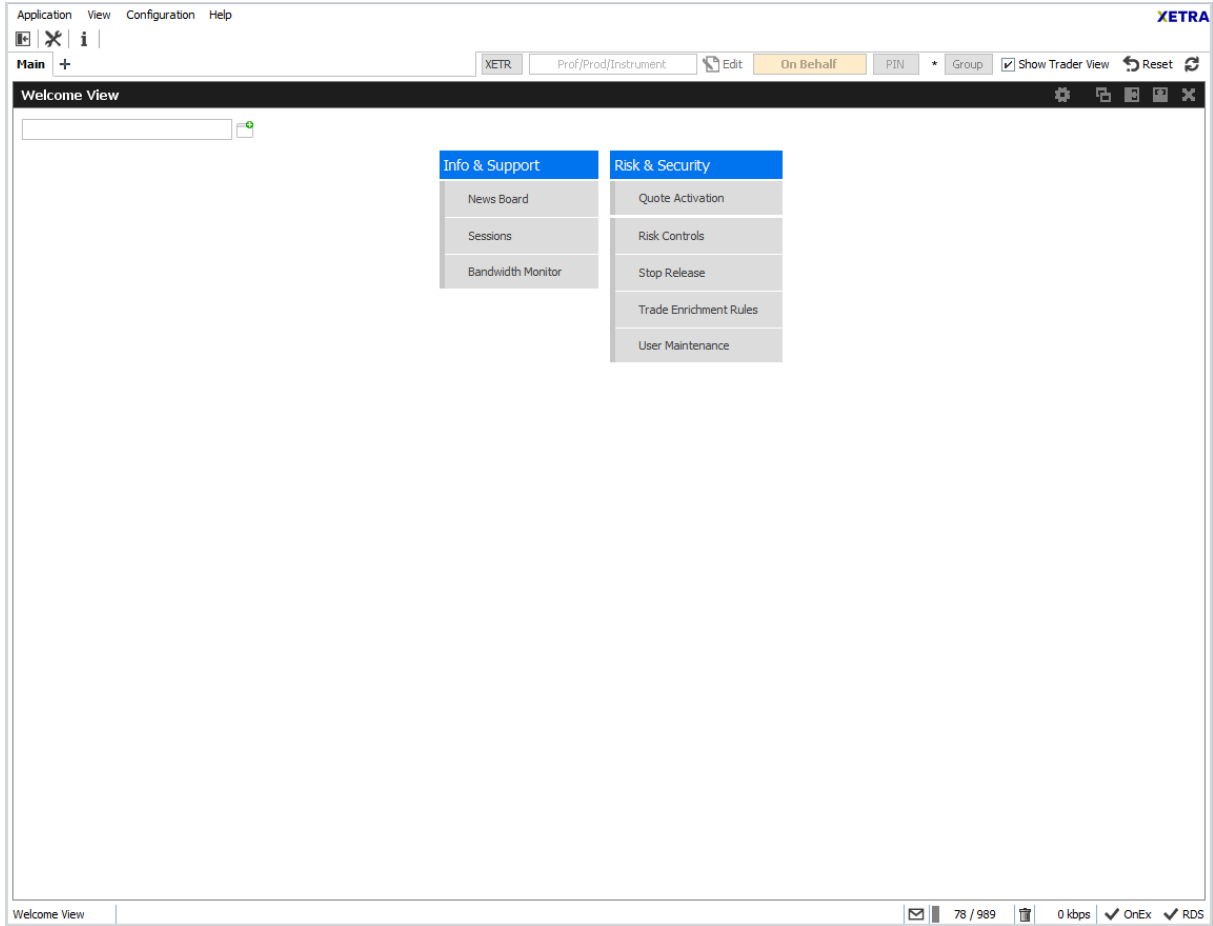
6.4.1 Welcome View

Image 5: T7 Admin GUI Welcome View

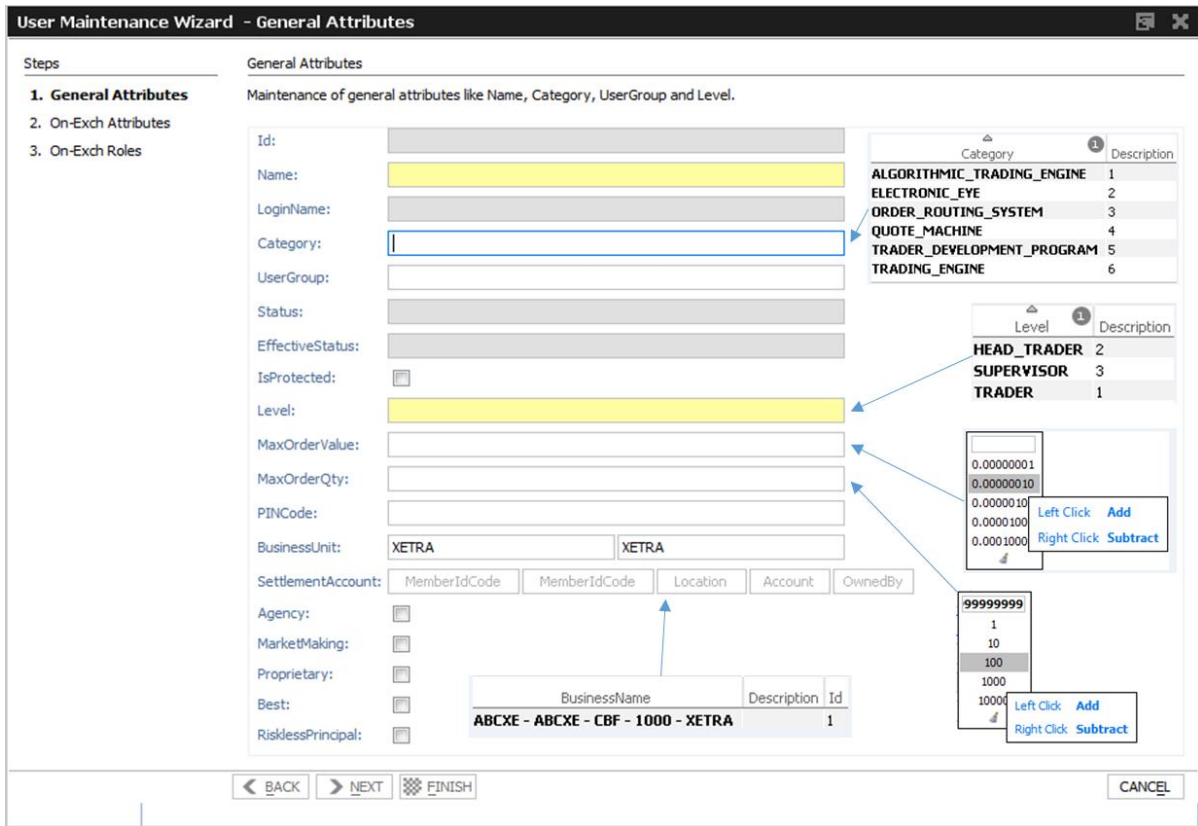### 6.4.2 User Maintenance Wizard – General Attributes

Image 6: T7 Admin GUI User Maintenance Wizard – General Attributes

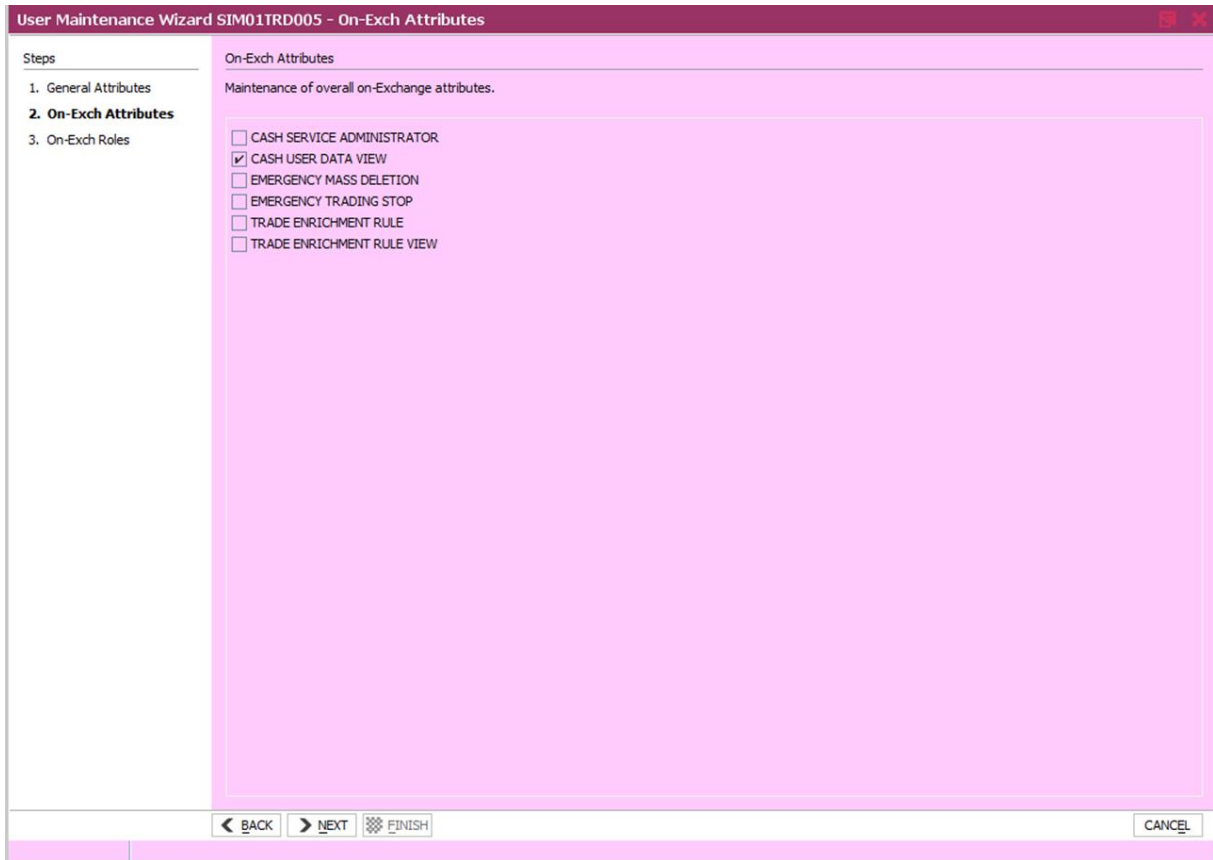### 6.4.3 User Maintenance Wizard – On-Exch Attributes

Image 7: T7 Admin GUI User Maintenance Wizard – On-Exch Attributes
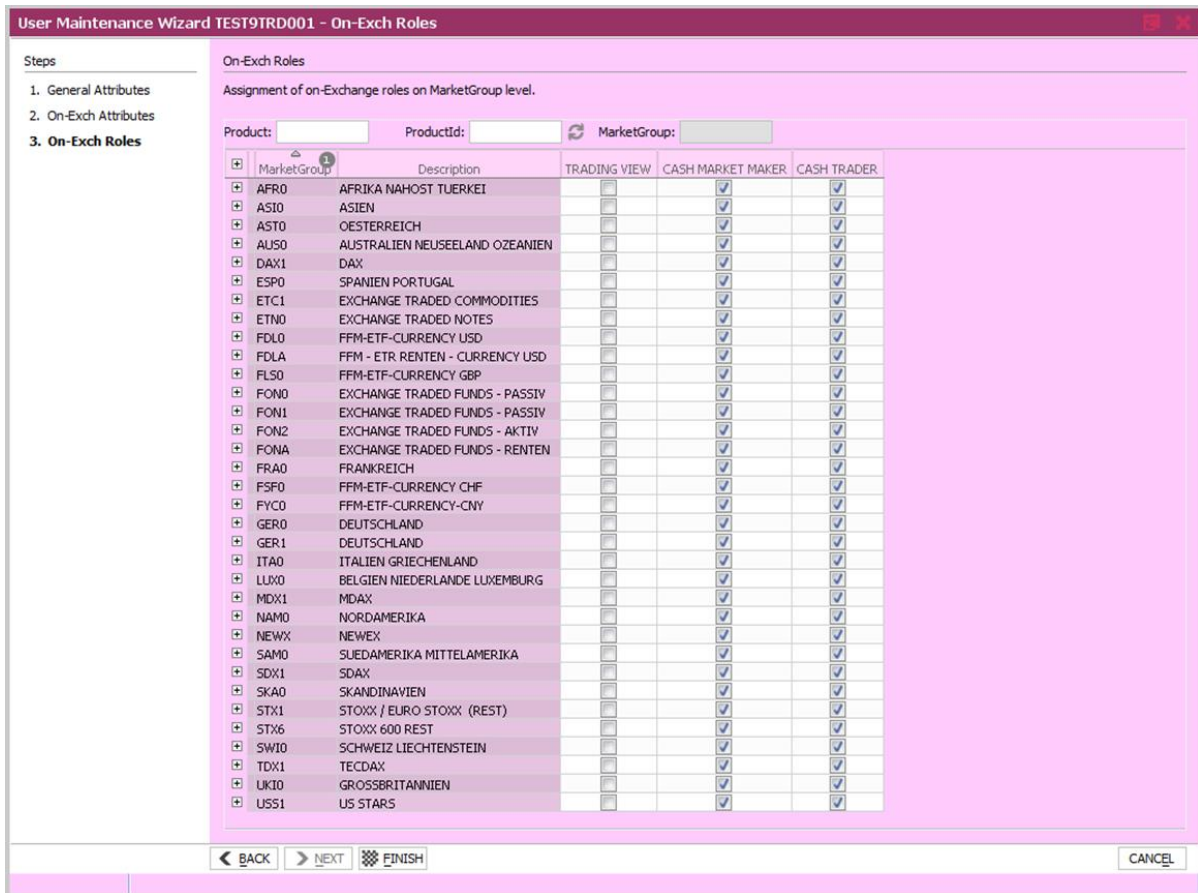
6.4.4   User Maintenance Wizard – On-Exch Roles

Image 8: T7 Admin GUI User Maintenance Wizard – On-Exch Roles