

| T2S CHANGE REQUEST FORM | | | | | | | |
|---|---|-----------------|----------------|--|--|--|--|
| General Information (Origi | General Information (Origin of Request) | | | | | | |
| □ User Requirements (URD) |) or GUI Busine | ss Functionalit | y Document (B | FD) | | | |
| Other User Functional or | Technical Docur | mentation (SYS | S) | | | | |
| Request raised by: 4CB | | | В | Date raised: 31/07/2024 | | | |
| Request title: New Mechanism for handling queries and a management for Direct Holding Markets | | | ccess rights | Request No.: T2S 0837 URD | | | |
| Request type: Common | Classification | : Scope Enhai | ncement | Urgency: Fast-track ¹ | | | |
| 1. Legal/business importance parameter: High ² | | | 2. Market imp | olementation efforts parameter: Low ³ | | | |
| 3. Operational/Technical risk parameter: Low4 | | | 4. Financial i | mpact parameter: ⁵ Very High | | | |
| Requestor Category: 4CB | | | Status: Propo | osed for a Release | | | |

Reason for change and expected benefits/business motivation:

On 11 September 2023 five new CSDs successfully migrated to T2S: the Bulgarian National Bank Government Securities Settlement System (BNBGSSS) and Central Depository AD (CDAD) in Bulgaria, Središnje klirinško depozitarno društvo d.d. (SKDD) in Croatia, Euroclear Finland and Euroclear Bank. The number of CSDs connected to T2S therefore increased to 24, and the number of European countries with CSDs relying on T2S increased from 20 to 23.

Euroclear Finland brought all its 2.3 million end-investor accounts to T2S as part of its migration. This approach contrasts with the "layered model" and less securities used by some other markets already active in T2S. The direct holding model is a model where securities accounts are segregated at the level of end-investor in T2S. This results in a very high number of accounts that have to be accessed when processing and settling settlement instructions.

While the migration was successful, the premigration activities detected some performance issues during the EOD reporting which were caused by the very high number of securities that T2S needed to handle. These issues where promptly handled before the migration weekend but highlighted the need to implement long term enhancements with the aim to prepare T2S for potential onboarding of new markets with an end-investor business model.

Deeper investigations have shown that increasing the number of accounts could create adverse effects on system performance. A contention area identified relates to the access right management (ARM) checks and U2A or A2A queries.

To mitigate the risk of adverse effects on the performance, some short-term measures have already been put in place. These are:

- Ad hoc fast track queries for selected criteria and search on small number of accounts.
- Prevention of ARM scan⁶ of securities accounts outside the system entity of the requestor.

¹ Fast-track justification: A fast-track approach is requested in order to implement the enhancements needed to onboard in T2S new CSDs with an end-investor business model.

² Legal/business importance parameter was set to "HIGH" since with this change implemented new direct holding markets could be on-boarding in T2S, fostering financial integration.

³ Market implementation effort parameter was set to "LOW" since this change is not expected to require a long implementation time and significant resources on the side of Participating CSDs, CBs and their communities in order for them to be able to take full benefit of the change.

⁴ Operational/technical risk parameter was set to "LOW" since this change is expected not to threaten the Service Level for Participating CSDs or CBs or to have no or insignificant operational impact on the Participating CSDs, CBs or 4CB.

⁵ Low < 100kEUR < Low-Medium < 200 kEUR < Medium < 400kEUR < High < 700kEUR < Very high

⁶ Data scanning is a method used in database management to examine and analyse data within a database. It involves traversing through records in a database or specific tables, scrutinizing each column's schema and data to understand its type, sample data, and characteristics.



These measures have been effectively improving response time but, given the growing number of securities accounts in T2S and potential onboarding of other direct holding markets to T2S, long term solutions must be put in place.

The objective of this change is to achieve the best performance for Direct Holding markets without any negative effect on the markets relying on different account structures.

Description of requested change:

Several options have been assessed to address the required optimization related to ARM process and inquiry of Securities Account related to Direct Holding Markets. The proposed solution will not impact the structure of the standard Securities Accounts and will allow the logical segregation of specific Securities Account entities, in order to differentiate between Direct Holding Market securities accounts and others:

New Securities Account Type for direct holding markets

In order to identify accounts belonging to a direct holding market and owned by end investors, a new Securities Account type, e.g. "End Investor Account", should be added to the Securities Account object.

The inclusion of this new type is expected to have a low to medium impact on CRDM entities connected to the Securities Account business domain, such as T2S CMB Securities Account Link, rule based models such as Message Subscription and Conditional Securities Delivery and so on.

Moreover, it will achieve the goal of having a clear separation by account type for End Investor Securities Accounts.

All T2S modules and Common Components accessing processes related to Securities Accounts have to be adapted to correctly filter out securities accounts according to the specific needs of the module in order to optimize searches and access rights management (ARM).

With a new Securities Account type for end investor accounts, it will be possible to exploit database-specific features in terms of information organisation in order to guarantee the necessary segregation of such accounts, thus reducing to the maximum extent the risk of impact on processing related to CSDs that use a different business model.

Since End Investor Securities Accounts are owned by individuals having a contractual agreement with a CSD participant, it will not be possible to switch the ownership of an account through the Securities Account Party Relationship entity.

As a prerequisite, only standard visibility rules will be applied to End Investor Securities Accounts, ruling out extensions or reductions of access privileges. These new access rights management checks will be implemented at account level.. With the envisioned degree of separation from existing Securities Account types, End Investor Securities Accounts will not be accessed for processing by CSDs that use a different business model, thus allowing optimized access paths also for the authorization checks.

The solution will be implemented by using specific database objects which simplify the access path, with a limited impact on intra-module interfaces. If necessary, new technical attributes could be defined without affecting external interfaces.

This solution implies an accurate performance testing phase that will consist in selecting which type of segregation has to be used (e.g. table partitioning of actual account table or use of a different object for this new account type).

Moreover, the detailed assessment phase will evaluate the accesses performed by T2S modules that have typically suffered from performance issues due to the introduction of these new accounts, in order to optimize them. Additionally, during the detailed assessment phase will evaluate the need for other functional constraints which have to be put in place for efficient and stable access to End Investor Securities Accounts.

Submitted annexes / related documents:

Outcome/Decisions:

- *CRG on 16 October 2024: the CRG agreed to recommend CR-0837 for authorisation by the T2S Steering Level.
- *PMG on 17 October 2024: the PMG agreed to launch the detailed assessment of CR-0837 with a view of scoping in R2026.NOV, subject to positive T2S Steering Level authorisation.
- *CSG on 31 October 2024: the CSG agreed to authorise CR-0837.
- *NECSG on 31 October 2024: the NECSG agreed to authorise CR-0837.
- *MIB on 4 November 2024: the MIB agreed to authorise CR-0837.
- *PMG 17 May 2025: the PMG agreed to launch the detailed re-assessment of CR-0837 with a view of scoping in R2025.FEB.
- *CRG on 13 June 2025: the CRG agreed to recommend to the PMG the inclusion of CR-0837 in the scope of R2027.JUN.
- *PMG on 13 June 2025: the PMG agreed to recommend the inclusion of CR-0837 in the scope of R2027.JUN.
- *CSG on 26 June 2025: the CSG approved the inclusion of CR-0837 in R2027.JUN.
- *NECSG on 26 June 2025: the NECSG approved the inclusion of CR-0837 in R2027.JUN.
- *MIB on 27 June 2025: the MIB approved the inclusion of CR-0837 in R2027.JUN.
- *CRG on 28 July 2025: the CRG agreed to recommend to the PMG the inclusion of CR-0837 in the scope of R2027.FEB.
- *OMG on 28 July 2025: the OMG identified no operational impact from the implementation of CR-0837 with R2027.FEB.
- *PMG on 28 July 2025: the PMG agreed to recommend the inclusion of CR-0837 in the scope of R2027.FEB.

Documentation to be updated:

CRDM UDFS

1.3.5.3 Description of the entities

1. Securities Account

This entity includes all Securities Account reference data required for settlement in T2S.

EUROSYSTEM

| ATTRIBUTE | DESCRIPTION |
|---|---|
| Securities Account Number | It specifies the unique securities account number. |
| Opening Date | Legal opening date for the securities account. |
| Closing Date | Legal closing date for the securities account. |
| Securities Account Type Hold Release Default | It specifies a classification for the securities account for the maintenance of CSD-account links. The exhaustive list of possible values is as follows: I CSD Participant Account I CSD Mirror Account I Inter-CSD Account I T2S Technical Offset Account I CSD Omnibus Account I Issuance Account I Issuance Account Default setting for specific settlement instructions related to the securities account. The exhaustive list of possible values is as follows: |
| | I Hold I Release |
| Negative Position | Boolean attribute specifying whether the securities account can hold a negative position in a security. |
| End Investor Flag | It specifies information to identify securities accounts where allocation instructions are posted. The exhaustive list of possible values is as follows: I No account allocations I FOP account allocations I DVP/FOP account allocations |
| Pricing Scheme | It is the option to configure the pricing scheme of the customer. The exhaustive list of possible values is as follows: I Account I ISIN |

Each Securities Account is linked to the Party (i.e. CSD or CSD participant) that operates the account. This link is time-dependent, as a CSD may transfer the relationship of a securities account from one account operator/sub-custodian to another account operator/sub-custodian within the same CSD. <u>Transfer is not available for End Investor accounts.</u>

[...]

4.5.3.5 Securities Account - New

I Record Type: "Securities Account"

The record is used to create a securities account.

Related activities covered:

EUROSYSTEM

| (;; | Excel | Column Name | Format | Description | Rules | Occurs per Record | Occurs per |
|---------|-------|---------------------------------|--|---|--|----------------------|------------|
| 2 | В | Record Id | NUMERIC (10) | Unique identifier of the record. | Must occur in each line of the record. | 1n | |
| Gro | up "S | ecurities Accoun | t" | | | 11 | |
| 3 | С | Securities Account Number | VARCHAR (35) | Unique securities account number. | | | 11 |
| 4 | D | Securities Account Type | Possible values: I CSDM I CSDP I ICSA I TOFF I CSDO I ISSA I ENDI | Classification of the securities account: I CSDM = CSD mirror account I CSDP = CSD participant account I ICSA = Inter-CSD account I TOFF = T2S technical offset account I CSDO = CSD omnibus account I ISSA = Issuance account I ENDI = End Investor Account | | | 11 |



5.1 Business Rules

| Rule Id | Description | Inbound message | Outbound message | Reason Code | Error Text | T2S | TIPS | RTGS | CLM | ECONS2 |
|------------|--|--------------------|------------------|----------------|---------------------------------|-----|------|------|-----|--------|
| | When performing a Security Account create request, if the Account Type is T2S technical offset account <u>or End Investor Account</u> , the relevant System Entity must be a Direct Holding CSD. | | reda.020 | REJT | CSD is not a Direct Holding CSD | Yes | No | No | No | No |



CRDM UHB Book 1

2.3.3.12 Grant/Revoke System Privilege - New/Edit Screen

[...]

Buttons

[...]

Submit (Input additional data)

This function enables the user to move the selected privileges from the 'Not Granted' list to the 'Granted' list inserting the additional information to privileges.

Reference for error message [}]:

[...]

IDRGP023

IDRRP001

[...]

2.3.3.14 Grant/Revoke Cross-System Entity Object Privilege - New/Edit Screen

Fields Description

| Object Priv | ileges |
|----------------------|--|
| [] | |
| Add/Remov | ve Value |
| [] | |
| Securities Number | Account Enter or select the number of the secured object securities account. If the secured element type is set to 'Securities Account' then this field is present and mandatory. It is not present otherwise. Required format is: max. 35 characters. Reference for error message []: IDRGP010 IDRGP013 IDRGP023 |

Buttons

[...]

Add and Submit

This function enables the user to add an item in the 'Object privilege' list by granting the inserted object privilege.

Reference for error message []:
[...]

IDRGP023
[...]

2.3.3.16 Grant/Revoke Object Privilege - New/Edit Screen

Fields

Description

| Object Privileges | |
|-----------------------------|--|
| [] | |
| Add/Remove Value | |
| [] | |
| Securities Accoun Number | t Enter or select the number of the secured object securities account. If the secured element type is set to 'Securities Account' then this field is present and mandatory. It is not present otherwise. Required format is: max. 35 characters. Reference for error message []: IDRGP010 IDRGP013 IDRGP023 |

Buttons

[...] Add and Submit This function enables the user to add an item in the 'Object privilege' list by granting the inserted object privilege. Reference for error message []]: [...] IDRGP023 [...] [...]

2.3.3.23 Secured Group - New/Edit Screen

[..] Fields

Description

| Secured Ob | ojects | | | | | | |
|----------------------|---|--|--|--|--|--|--|
| Securities A | Securities Accounts | | | | | | |
| Securities Number | Account Enter or select the number of the secured securities account. This field is mandatory and visible only if the secured group type is set to 'Securities Account'. Required format is: 35x characters. References for error messages [}: IDRCT002 IDRCT003 IDRCT004 IDRUT002 IDRUT007 IDRUT008 | | | | | | |

4.3.2.42 Grant/Revoke Cross-System Entity Object Privilege - New/Edit Screen

IDRUT004

| | rangitoroko oroso oystom | 110W/East Objects | |
|---------------|--------------------------|--------------------|--|
| Reference for | Field or Button | Error Text | Description |
| error | | | |
| message | | | |
| DRGP023 | ISecurities Account | Invalid Securities | When performing a Grant Privilege request, it is |
| | Number | Account type | not possible to grant an object privilege on a |
| | ISubmit button | | Securities Account with Account type equal to |
| | | | End Investor Account. |

4.3.2.44 Grant/Revoke Object Privilege - New/Edit Screen

| Reference for | Field or Button | Error Text | Description |
|---------------|---|----------------------------------|---|
| error | | | |
| message | | | |
| DRGP023 | ISecurities Account Number ISubmit button | Invalid Securities Account type. | When performing a Grant Privilege request, it is not possible to grant an object privilege on a Securities Account with Account type equal to |
| | ICOSTITIC SOCIETY | | End Investor Account. |

4.3.2.47 Grant/Revoke System Privilege - New/Edit Screen

| Reference for error message | Field or Button | Error Text | Description |
|-----------------------------|-----------------|---------------------------------|---|
| DRGP023 | ISubmit button | Invalid Securities Account type | When performing a Grant Privilege request, it is not possible to grant an object privilege on a Securities Account with Account type equal to End Investor Account. |

4.3.2.93 Secured Group - New/Edit Screen

| Reference for error message | Field or Button | Error Text | Description |
|-----------------------------|---|---------------------------------|--|
| DRCT004 | ISecurities Account Number field ISubmit button | Invalid Securities Account type | When performing a secured group create request, the specified Securities Account cannot have Account type equal to End Investor Account. |
| DRUT004 | ISecurities Account Number field ISubmit button | Invalid Securities Account type | When performing a secured group update request, the specified Securities Account cannot have Account type equal to End Investor Account. |

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2.2.3.3 Securities Accounts - Search/List Screen

Context of Usage

This screen allows the authorised users to search for Securities Account. The search results will display a list sorted by the values of the "Securities Account Type" column in ascending order (default setting).

[...]

Fields Description

| | Securities Account – Search Criteria |
|--|--|
| Status | Select the status of the Securities Account from the possible values: IAII IActive (default value) IDeleted |
| Securities Account Number Securities Account | Enter or select the securities account number. Required format is max. 35 characters. Select the securities account type from the possible values: |
| Туре | IAII (default value) |

| Securities Account – Search Criteria | | |
|--------------------------------------|-------------------------------|--|
| | ICSD mirror account | |
| | ICSD omnibus account | |
| | ICSD participant account | |
| | IInter-CSD account | |
| | Ilssuance account | |
| | IT2S technical offset account | |
| IEnd Investor Account | | |
|] | | |

[...] 2.2.3.5 Securities Account – New/Edit Screen

Context of Usage

This screen contains a number of fields regarding Securities Account. You can enter new data or edit existing ones. Afterwards you can proceed further by clicking on the buttons below.

[...]

Fields Description

| Securities Account | | |
|---------------------------|---|--|
| Securities Account Number | Enter the securities account number. Required format is: max. 35x. This field is mandatory and read only in edit mode. Reference for error message [}]: IDAC1023 IDAC1024 | |
| Securities Account Type | Select the securities account type from the possible values: ICSD mirror account ICSD omnibus account ICSD participant account IInter-CSD account IIssuance account IT2S technical offset account IEnd Investor Account This field is mandatory and read only in edit mode. References for error messages [}]: IDAC1031 | |

| Securities Account | | |
|--------------------|----------|--|
| | IDAC1032 | |
| | IDAC1033 | |
| | IDAC1034 | |
| [] | | |

| Account Holder | | | |
|----------------|--|--|--|
| Valid from | Shows the date from which the party securities account relationship is valid. This field is not visible in create mode. | | |
| Parent BIC | Enter or select the parent BIC of the party owning the account This field is mandatory and read-only in edit mode. Required format is: 11x. | | |
| | References for error messages [}]: IDAC1001 | | |
| | IDAC1030 IDAC1031 | | |
| | IDAC1032 IDAC1034 | | |
| | IDAU1001 IDAU1211 | | |
| | IDAU1212 IDAU1300 | | |
| | IDAU1305 IDAU1400 | | |

| Account Holder | | | |
|------------------|---|--|--|
| Party BIC | Enter or select the BIC of the party owning the account This field is mandatory and read-only in edit mode. Required format is: 11x. References for error messages [}]: IDAC1001 IDAC1030 | | |
| | IDAC1031 IDAC1032 IDAC1034 IDAU1001 IDAU1212 IDAU1305 | | |
| Party Short Name | Shows the short name of the party owning the account This field is not visible in create. | | |
| Party Type | Shows the type of the party owning the account This field is not visible in create. | | |

Buttons

| [] | |
|--|--|
| Reset | This function enables the user to set all fields to default value and blanks out all optional fields. |
| Cancel | This function enables the user to cancel the process and return to the previous screen. |
| Securities Account Transfer Management | This function enables the user to edit party-securities account relationships. This function is only available in edit mode. This function is not available for End Investor Accounts. |

2.2.3.6 Securities Account Transfer Management – Edit Screen $\left[\ldots\right]$

Buttons

| Submit | This function enables the user to create or edit a securities account party relationships according to the information entered in the fields. References for error messages []: IDAU1001 IDAU1205 IDAU1206 IDAU1207 IDAU1211 IDAU1212 IDAU1252 IDAU1300 IDAU1305 |
|--------|---|
| Cancel | IDAU1400 This function enables the user to cancel the process and return to the previous screen. |

4.3.2.36 Securities Account - New/Edit Screen

| 4.3.2.36 Securities Account - New/Edit Screen | | | |
|---|--|--|--|
| Reference for error message | Field or Button | Error Text | Description |
| DAC1033 | I Securities Account Type field I Submit button | t CSD is not a Direct Holding CSD. | When performing a Security Account create request, if the Account Type is T2S technical offset account or End Investor Account, the relevant System Entity must be a Direct Holding CSD. |
| DAU1212 | I Securities Account Type field I Parent BIC I Party BIC I Submit button | Invalid Securities Account Type | When performing a Securities Account update request, it is not possible to update the Party Securities Account Relationship for End Investor Accounts. |

4.3.2.40 Securities Account Transfer Management - Edit Screen

| Reference for error message | Field or Button | Error Text | Description |
|-----------------------------|--|--------------|--|
| <u>DAU1212</u> | I Securities Account Type field I Parent BIC I Party BIC I Submit button | Account Type | When performing a Securities Account update request, it is not possible to update the Party Securities Account Relationship for End Investor Accounts. |

Preliminary assessment:

- Financial Impact: Very High
- Impacted modules: CRDM, DMT, DWH, INTF A2A/U2A, LCMM, LQMG, SETT, QUM
- Impact on other Eurosystem Services or Projects: To be evaluated during DA.
- Risk analysis: No risks have been identified during PA, but potential performance impacts (positive as well negative) will be evaluated during DA.

Findings:

- The 4CB identified as most suitable solution the proposed Option <u>New Securities Account Type</u> for direct holding markets;
- Introduction of new Securities Account type "End Investor Account";
- The inclusion of this new type is expected to have a low to medium impact on CRDM entities connected to
 the Securities Account business domain, such as T2S CMB Securities Account Link, rule based models
 such as Message Subscription and Conditional Securities Delivery and so on.
- It will achieve the goal of having a clear separation by account Party type for End Investor Securities
 Accounts
- All T2S modules and Common Components accessing processes related to Securities Accounts have to be adapted to correctly filter out securities accounts according to the specific needs of the module in order to optimize searches and access rights management (ARM).
- With a new Securities Account type for end investor accounts, it will be possible to exploit databasespecific features in terms of information organisation in order to guarantee the necessary segregation of such accounts, thus reducing to the maximum extent the risk of impact on processing related to CSDs that use a different business model.
- Since End Investor Securities Accounts are owned by individuals having a contractual agreement with a CSD participant, it will not be possible to switch the ownership of an account through the Securities Account Party Relationship entity.
- As a prerequisite, only standard visibility rules will be applied to End Investor Securities Accounts, ruling out extensions or reductions of access privileges.
- During the DA phase 4CB will evaluate the accesses performed by T2S modules that have typically suffered from performance issues due to the introduction of these new accounts, in order to optimize them. Additionally, the need for other functional constraints which have to be put in place for efficient and stable access to End Investor Securities Accounts will be evaluated.

Detailed assessment:

EUROSYSTEM ANALYSIS - GENERAL INFORMATION

| | T2S Specific Components | | Common Components |
|------|--------------------------|-----|--------------------------------------|
| LCMM | | Com | mon Reference Data Management |
| Χ | Instructions validation | | Party data management |
| Χ | Status management | | Securities data management |
| | Instruction matching | | Cash account data management |
| | Instructions maintenance | X | Securities account data management |
| | Penalty Mechanism | | Rules and parameters data management |
| | | | Access rights management |
| | | | |

| Setf | lement | CRDN | // business interface |
|----------|---|-------|--|
| | Standardisation and preparation to settlement | | Report management |
| | Night-time Settlement | | Query management |
| | Daytime Recycling and optimisation | | Communication |
| | Daytime Validation, provisioning & booking | | Outbound Processing |
| | Auto-collateralisation | | Inbound Processing |
| | | | |
| | | | |
| Liqu | uidity Management | | |
| | Outbound Information Management | | |
| | NCB Business Procedures | | |
| | Liquidity Operations | | |
| | | | |
| | | | |
| Staf | istics and archive | | |
| | Short term statistical information | | Legal archiving |
| | | X | Data Warehouse |
| | | | |
| TOO | lutada a | | overtene Oliverte Mantest Infrastructure October |
| | Interface | Euros | system Single Market Infrastructure Gateway |
| T2S | Communication | Euros | Communication |
| | Communication Outbound Processing | Euros | Communication Outbound Processing |
| | Communication | Euros | Communication |
| | Communication Outbound Processing | Euros | Communication Outbound Processing |
| X | Communication Outbound Processing Inbound Processing | Euros | Communication Outbound Processing |
| X | Communication Outbound Processing Inbound Processing information management | Euros | Communication Outbound Processing |
| X T2S | Communication Outbound Processing Inbound Processing information management Report management | Euros | Communication Outbound Processing |
| X | Communication Outbound Processing Inbound Processing information management | Euros | Communication Outbound Processing |
| T2S | Communication Outbound Processing Inbound Processing information management Report management Query management | Euros | Communication Outbound Processing |
| T2S | Communication Outbound Processing Inbound Processing Information management Report management Query management Prational Services | | Communication Outbound Processing Inbound Processing |
| T2S | Communication Outbound Processing Inbound Processing Information management Report management Query management Prational Services Data Migration (T2S DMT) | Euros | Communication Outbound Processing Inbound Processing Data Migration (CRDM DMT) |
| T2S | Communication Outbound Processing Inbound Processing Information management Report management Query management Prational Services | | Communication Outbound Processing Inbound Processing Data Migration (CRDM DMT) Business Day Management |
| T2S | Communication Outbound Processing Inbound Processing Information management Report management Query management Prational Services Data Migration (T2S DMT) MOP Contingency Templates OMEGA Tool | | Communication Outbound Processing Inbound Processing Data Migration (CRDM DMT) Business Day Management Business Day Management business interface |
| T2S | Communication Outbound Processing Inbound Processing Information management Report management Query management Prational Services Data Migration (T2S DMT) MOP Contingency Templates | | Communication Outbound Processing Inbound Processing Data Migration (CRDM DMT) Business Day Management |

| Impact on major of | documentation | | |
|---|--|--|--|
| Document | Chapter | Change | |
| Impacted GFS chapter | | No impact. | |
| | CRDM 1.3.5.3 Description of the entities | New Securities Account Type to be added in the exhaustive list of possible values; Limitation on transfer of ownership for those accounts to be added. | |
| Impacted UDFS chapter | DMT - CRDM 4.5.3.5 Securities Account – New | New Securities Account Type to be added in the exhaustive list of possible values. | |
| | 5.1 Business Rules | Amendment of DAC1033 in order to check consistency between Account Type and the Direct Holding setting in the System Entity. | |
| Additional deliveries for Message Specification (UDFS, MyStandards, MOP contingency templates) | | | |

| | CRDM UHB BOOK 1 | New Business Rule DRGP023 in order to not | | | |
|--|---|---|--|--|--|
| | 2.3.3.12 Grant/Revoke System Privilege | allow to grant an object privilege on an account | | | |
| | - New/Edit Screen | with type "End Investor Account". | | | |
| | 2.3.3.14 Grant/Revoke Cross-System | | | | |
| | Entity Object Privilege – New/Edit | | | | |
| | Screen | | | | |
| | | | | | |
| | 2.3.3.16 Grant/Revoke Object Privilege - | | | | |
| | New/Edit Screen | | | | |
| | 00000 IO N /5 IV | New Business Rule DRCT004/DRUT004 in order not to insert "End Investor Account" in secured groups | | | |
| | 2.3.3.23 Secured Group – New/Edit | | | | |
| | Screen | | | | |
| | 4.3.2.42 Grant/Revoke Cross-System | | | | |
| | Entity Object Privilege - New/Edit Screen | | | | |
| | , | | | | |
| | 4.3.2.44 Grant/Revoke Object Privilege - | | | | |
| | New/Edit Screen | | | | |
| | 4.2.2.47 Cront/Poyolo Cyatam Privilega | | | | |
| | 4.3.2.47 Grant/Revoke System Privilege – New/Edit Screen | | | | |
| UHB | - INGW/LUIT OCIGGII | | | | |
| OTIB | 4.3.2.93 Secured Group - New/Edit | | | | |
| | Screen | | | | |
| | | | | | |
| | CRDM UHB BOOK 2 | | | | |
| | 2.2.3.3 Securities Accounts - Search/List | New Securities Account Type to be added for | | | |
| | Screen | "Securities Account Type" search criteria. | | | |
| | 0.00.5.0 - surities Assessed New/Edit | Nava Casanisia - Assaura Taras ta la saddad far | | | |
| | 2.2.3.5 Securities Account – New/Edit Screen | New Securities Account Type to be added for New business rule should be reported for | | | |
| | Scieen | Account Holder minor. Transfer management | | | |
| | | should be disabled for End Investor Accounts. | | | |
| | | | | | |
| | 2.2.3.6 Securities Account Transfer | DAU1212 to be added | | | |
| | Management – Edit Screen | | | | |
| | | | | | |
| | 4.3.2.36 Securities Account - New/Edit | DAC1033 description should be amended and | | | |
| | Screen | DAU1212 should be added. | | | |
| | | | | | |
| | 4.3.2.40 Securities Account Transfer | DAU1212 to be added | | | |
| | Management - Edit Screen | | | | |
| External training | | No impact | | | |
| materials Other imported | | No import | | | |
| Other impacted documentation | | No impact | | | |
| (FA Sch. 05, FA | | | | | |
| Sch. 07) | | | | | |
| Impacted GDPR | | No impact | | | |
| message/ screen | | | | | |
| fields | | | | | |
| Links with other requests Links Reference Title | | | | | |
| Links R | LIIIVO MEIGIGIICE IIIIE | | | | |

OVERVIEW OF THE IMPACT OF THE REQUEST ON THE T2S SYSTEM AND ON THE PROJECT

Summary of functional, development, infrastructure and migration impacts

INTF:

A2A and U2A queries must be adapted to the new end-investor securities accounts configuration, in order to avoid performance degradation. This requires that the system entities with end-investor accounts use only the default privilege scope, and not the reduced/extended privileges. With these aim, new business rules will be implemented.

CRDM:

A new Securities Account Type named "End Investor Account" is introduced to identify securities accounts related to individuals in Direct Holding markets.

End Investor Accounts could be opened only if the System Entity has opted for Direct Holding configuration.

This results in changing the Securities Account Create function adding a new Business Rule checking the consistency between the Securities Account Type and the related System Entity "Direct Holding Market" flag. Impact is in the U2A Securities Account Create screen.

It is not allowed to transfer ownership for End Investor securities accounts through business rule DAU1212. This should still guarantee the possibility for partitioning data at Party level.

It is not allowed to add an End Investor securities account into Secured Groups by introducing business rules DRCT004 and DRUT004.

DWH:

Update to reference table (will be specified during DA) that translates the four letter abbreviations or securities account types into descriptions.

LCMM:

Within the different LCMM processes, the initial data access to CRDM to retrieve information about the SAC of the Settlement Instruction being processed, will be carried out as usual, without specifying any value to filter out any type of securities account. That is, without indicating whether the SAC is an End Investor Account or not. In this initial access, the "Direct Holding Market" flag will be retrieved. For subsequent data accesses made in the processing of the same instruction, LCMM will include the previously retrieved value of the flag, where functionally and technically possible, in order to facilitate optimization of searches and access rights management (ARM) in CRDM.

A full non-regression campaign will be run to ensure no regression has been introduced after adapting the necessary data access. As part of this campaign, specific cases using end-investor static data will be introduced to verify that the obtained behaviour is consistent.

Disclaimer:

- Please note, that the migration aspects have not been included in this detailed assessment. Once stable requirements have been set, 4CB will perform a detailed reassessment of the CR-0837 to update the current analysis with migration aspects for subsequent agreement in the respective Technical Groups.
 - The requirements will be based on the differing needs for the already existing End Investor markets as well as the newly migrating one. The initial discussions so far indicate that for existing End Investor markets the impact should be limited. The impact for migrating CSD is similar to other onboardings while for existing non-End investor markets no functional impact or migration process is envisaged.
- 2. The CPU increase caused operational cost associated with the expected increase of the SAC over 7 Million is processed in parallel according to the new operational change procedure, given that only the combination of functional changes (as depicted in this CR) and these non-functional changes will allow the smooth processing of this SAC increase in T2S.

Main cost drivers:

Main Development Phase Cost Drivers:

- Implementation of the changes related to the introduction of the New Securities Account Type for direct holding markets and its integration in the processing by the different T2S modules: 64%
- Execution of a functional validation and full non-regression testing campaign to verify the correct implementation: 15%
- Update of the internal and external documentations to reflect the changes: 5%

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Other impacts:

Yes.

T2S

Impact on other TARGET Services and projects

No impact on other Eurosystem Services (T2, TIPS) or Projects (ECMS).

Summary of project risk

The new business rules should be sufficient to solve the performance issues, however only the test campaign could show, if there is room for concern.

Security analysis

No adverse effect has been identified during security assessment.

DG - MARKET INFRASTRUCTURE & PAYMENTS

ECB-PUBLIC



14 July 2025

Cost assessment on Change Requests

| T2S-837-SYS – New Mechanism for handling queries and access rights management for Direct Holding Markets | | | | |
|--|--|--------------------------|--------------|--|
| One-off | Assessment costs* - Preliminary - Detailed | not charged 20,000.00 | Euro Euro | |
| One-off | Development costs | 2,238,436.26 | Euro | |
| Annual | Operational costs - Maintenance costs | 171,285.41 | Euro | |
| | - Running costs | 59,785.91 | Euro | |

^{*}The relevant assessment costs will be charged regardless of whether the CR is implemented (Cf. T2S Framework Agreement, Schedule 7, par. 5.2.3).