EUROPEAN CENTRAL BANK

EUROSYSTEM

T2S CHANGE REQUEST FORM
General Information (Origin of Request) ☐ User Requirements (URD) or GUI Business Functionality Document (BFD) ☒ Other User Functional or Technical Documentation (SYS)

Request raised by: Clearstream	**Institute:** CSD	**Date raised:** 09/11/2022
Request title: T2S should support cross-border settlement via alternative Security CSD Links		**Request No.:** T2S 0797 SYS
Request type: Common	**Classification:** Scope Enhancement	**Urgency:** Normal
1. Legal/business importance parameter: High[1]		**2. Market implementation efforts parameter:** Low[2]
3. Operational/Technical risk parameter: Low[3]		**4. Financial impact parameter:** Very High (provided by 4CB)[4]
Requestor Category: CSD		**Status:** Allocated to a release

Reason for change and expected benefits/business motivation:

T2S was built to simplify, streamline, and boost cross-border settlement by implementing a common settlement platform for all markets. However, after more than 5 years of production, cross-border settlement activities still amount only for a low fraction of the overall activity. Significant progress has been made to set up links between markets, but in reality, a given T2S Actor is still far away from the possibility to settle any security issued in one T2S CSD with any counterparty in other T2S CSDs.

An issue exists if a given ISIN is made available for settlement in different T2S CSDs, but those CSDs are not connected via T2S cross-border settlement links. Namely, in such cases, a given Investor CSD can choose only one of those CSDs as Technical Issuer CSD. Counterparties in this Technical Issuer CSD will be eligible for cross-border settlement, but counterparties in the other CSDs (which are not chosen as Technical Issuer CSD) cannot be reached.

This is imposed by the fact that an Investor CSD can configure only one Security CSD Link per security.

This limitation should be waived:
- It should be possible for a given Investor CSD to configure several "Investor" type Security CSD Links per Security at the same point in time. One of those Security CSD Links must be defined as "default link".
- In case of cross-border settlement, T2S would then extract the CSD of the counterparty[5], verify whether an "Investor" type Security CSD Link to this Technical Issuer CSD exists, and then perform cross-border settlement via this Security CSD link.
- In case no "Investor" type Security CSD Link with the CSD of the counterparty as Technical Issuer CSD exists, then T2S would use the "default link"

Via this logic, if such alternative Security CSD Links are configured, a T2S Actor can
- reach counterparties for settlement in a given security in any other T2S CSD where this ISIN is eligible for settlement.
- receive such security from different places of safekeeping.

It should be noted that this Change Request does not request additional logic on T2S side for CSDs to support and manage different places of safekeeping. Such logic would need to be maintained on the CSD side, in particular the realignment process between different places of safekeeping. It should also be noted that T2S applies a provision

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[1] Legal/business importance parameter was set to "HIGH" as the change enables additional cross-border settlement flows.
[2] Market implementation effort parameter was set to "LOW" as the change is optional for CSDs.
[3] Operational/technical risk parameter was set to "LOW" since, although that there will be the need that the whole T2S community retest changes to the schema of some messages used on a daily basis by CSDs, the implementation of alternative links is optional for CSDs.
[4] Low < 100kEUR < Low-Medium < 200 kEUR < Medium < 400kEUR < High < 700kEUR < Very high
[5] For DELI legs: Receiving CSD, for RECE legs: Delivering CSD.

check on the Investor CSDs omnibus account, however, such place of safekeeping specific checks are not applied on the CSD Participant account level. Again, to limit the scope of the Change Request, it is up to the Investor CSDs to assess how to handle related implications.

Description of requested change:

A) Enable alternative Security CSD Links

An Investor CSD can configure several "Investor" type Security CSD Links for the same security at the same point in time.
- At each point in time, one of those "Investor" type Security CSD Links must be configured as "default link".
- Additional Security CSD Links can be configured, but those must not be flagged as "default link".

Such setup shall be possible in U2A and in A2A mode. Impact on reda.045 and reda.046 is expected, as new attributes need to be added to provide the additional information to differentiate the cases.

To limit use of alternative Security CSD Links to the key use cases, the following conditions shall apply:
- Alternative Security CSD Links cannot be created if there is already an "Issuer" type Security CSD Link defined for the same security.
- Alternative Security CSD Links can only be created for "Investor" type Security CSD Links.
- When a Security CSD Link with "Investor" type is created, and there is no other Security CSD Link defined yet, then this Security CSD Link must be configured as "default" link.
- When a Security CSD Link with "Investor" type is created, and there is already another "Investor" type Security CSD Link, then the new link must be configured as "alternative" link.
- When a Security CSD Link with "Investor" type is created, and it is configured as "alternative" link then both Investor CSD and Technical Issuer CSD must have party type "CSD".
- A "default" Security CSD Link with "Investor" type can only be updated if no "alternative" links exist for the same security in the same validity period
- One default and potentially several alternative Security CSD Links can coexist for a given security, but they must all refer to different Technical Issuer CSDs. There can only be one (default or alternative) Security CSD Link for a given combination of security, Investor CSD and Technical Issuer CSD

B) Enable cross-border settlement with an alternative Security CSD Links

T2S realignment logic needs to be adjusted to support different realignment chains for a given ISIN. Currently, the realignment chain is determined by verifying the Security CSD Link for each Investor CSD until the (Technical) Issuer CSD is reached.

This logic must be adjusted to support different realignment chains, depending on the CSD of the counterparty specified in the settlement instruction. The logic should be adjusted as follows:
- First, T2S tries to build the realignment chain according to current logic (purely relying on "default links").
    - If a complete realignment chain can be built,
    - and all Investor and (Technical) Issuer CSDs involved into this chain have party type "CSD" (i.e. the entire realignment chain can be built within T2S),
    - and only one or none of those CSDs is Issuer CSD (i.e. the settlement does not include different issuer CSDs for multi-issued securities)
    - then this realignment chain shall be used within the settlement process.
- Else, i.e. if no realignment chain can be built, or it involves External CSDs or different Issuer CSDs, then T2S shall attempt to build the realignment chain using Alternative Security CSD Links. The following logic shall be applied:
    - For a given Investor CSD, T2S checks whether this Investor CSD has configured a security CSD Link with the BIC11 of the CSD of the counterparty from the settlement instruction as Technical Issuer CSD.
    - If yes, T2S performs the realignment chain analysis with this Security CSD Link.
    - Else, T2S performs the realignment chain analysis with the Security CSD Link which is configured as "default link".
    - T2S will then generate the corresponding realignment on the omnibus account of the Investor CSD in the Technical Issuer CSD (CSD of the counterparty or "default") as well as on the corresponding mirror account, and continue with the realignment chain analysis on Technical Issuer CSD level.

An example might explain the setup in more detail. Consider CSD A which has
- a "default" Investor Security CSD link with CSD B as Technical Issuer CSD, and
- an alternative Investor Security CSD Link with CSD C as Technical Issuer CSD, where CSD B and CSD C

are not connected via T2S cross-border settlement links.

A participant from CSD A instructs a cross-border settlement instruction vs. a counterparty in CSD B to deliver securities. After matching, T2S will identify CSD B as Technical Issuer CSD for CSD A and generate the following realignments:
- DELI realignment on the omnibus account of CSD A in CSD B
- RECE realignment on the corresponding mirror account in CSD A

This is the current logic. However, if the participant from CSD A instructs a cross-border settlement instruction to deliver securities vs. a counterparty in CSD C, then the realignment chain analysis will show a different result: After matching, T2S will check whether an Investor Security CSD Link for CSD A exists where CSD C is mentioned as Technical Issuer CSD. This is the case, and so T2S uses this Security CSD Link for the realignment chain analysis. Now it will generate the following realignments:
- DELI realignment on the omnibus account of CSD A in CSD C.
- RECE realignment on the corresponding mirror account in CSD A.

It should be noted that the logic also works if another CSD, e.g. CSD X, uses CSD A as technical issuer CSD: Assume a participant of CSD X instructs a cross border delivery instruction vs. a counterparty in CSD C. Then T2S will perform the realignment chain analysis as follows:
- CSD X has only a "default" Security CSD Link to CSD A.
- So T2S uses this default Security CSD Link and continues with the realignment chain analysis in CSD A
- CSD A has an alternative Security CSD Link pointing to CSD C which is the CSD of the counterparty in the settlement instruction.
- So, T2S uses this Security CSD Link in the realignment chain analysis. As a result, T2S will generate the following realignments:
  - DELI realignment on the omnibus account of CDS X in CSD A
  - RECE realignment on the corresponding mirror account in CSD X
  - DELI realignment on the omnibus account of CSD A in CSD C
  - RECE realignment on the corresponding mirror account in CSD A

As a result, a CSD participant in CSD A can now settle vs. counterparties in both CSD B (via default link) and CSD C (via alternative link). Similarly, a CSD Participant in CSD X can settle vs. counterparties in both CSD B (via default link in CSD A) and CSD C (via alternative link in CSD A).

C) Cutover

When this new feature is enabled, all existing "Investor" type security CSD links in T2S must be declared "default links".

Submitted annexes / related documents:

- T2S-0797-SYS Annex1 T2S UDFS SETT Chapter 1.6.1.10 Realignment

- T2S-0797-SYS Annex2 T2S UDFS CRDM Configuration of Securities CSD Links

- T2S-0797-SYS Annex3 T2S GFS R2023.JUN clean 20230210

Outcome/Decisions:

*CRG on 18 January 2023: the CRG agreed to recommend CR-0797 for T2S Steering Level Authorisation, following a fast-track approach.
*AMI-SeCo on 26 January 2023: the AMI-SeCo agreed with the CRG recommendation of CR-0797 for T2S Steering Level Authorisation.
*NECSG on 27 January 2023: the NECSG authorised CR-0797.
*CSG on 27 January 2023: the CSG objected to authorise CR-0797.
*CRG on 31 January 2023: the CRG agreed to launch the preliminary assessment of CR-0797.
*CRG on 21 March 2023: the CRG agreed to approve the updated version of CR-0797 including additional clarifications under 'Description of requested change' section.
*CRG on 27 April 2023: The CRG agreed to recommend CR-0797 for authorisation by the T2S Steering Level. Regarding the open questions raised in the preliminary assessment, the CRG agreed that the 4CB assumption that no change was expected as far as auto-collateralisation feature was concerned, was correct. In addition, option 1 was the preferred one of the two proposed by 4CB to manage the securities CSD links in CRDM.

*AMI-SeCo on 9 May 2023: The AMI-SeCo agreed with the CRG recommendation of CR-797 for T2S Steering Level Authorisation
*CSG on 10 May 2023: the CSG agreed to authorise CR-797.
*NECSG on 10 May 2023: the NECSG agreed to authorise CR-797.
*MIB on 18 May 2023: the MIB agreed to authorise CR-797.
*PMG on 6 June 2023: the PMG agreed to launch the detailed assessment of CR-797 with a view of scoping in R2024.JUN.
*OMG on 23 August 2023: The OMG identified no operational impact from the inclusion of CR-0797 in the scope of release R2025.JUN.
*CRG on 6 September 2023: The CRG agreed to recommend to the PMG the inclusion of CR-0797 in the scope of Release R2025.JUN.
*PMG on 6 October 2023: The PMG agreed to recommend to the T2S Steering Level the implementation of CR-0797 in the scope of Release R2025.JUN.
*CSG on 16 November 2023: the CSG approved the inclusion of CR-0797 in the scope of R2025.JUN.
*NECSG on 16 November 2023: the NECSG approved the inclusion of CR-0797 in the scope of R2025.JUN.
*MIB on 22 November 2023: the MIB approved the inclusion of CR-0797 in the scope of R2025.JUN.
*CRG on 3 April 2024: The CRG agreed to change the wording of the CR parameter in the following way:
Operational/technical risk parameter was set to "LOW" since, although that there ~~could~~ will be the need that the whole T2S community retest changes to the schema of some messages used on a daily basis by CSDs, the ~~change~~ implementation of alternative links is optional for CSDs.

Documentation to be updated:

T2S UDFS
1.2.2.3 Configuration of Securities CSD Links

Once the responsible CSD has created a new security in T2S, data defining the eligibility of this security for cross-CSD settlement and external-CSD settlement must be configured in T2S, i.e. enabling T2S to process Settlement Instructions where the two involved counterparts belong to different CSDs (external-CSD settlement scenario involves at least one CSD not participating in T2S). For a given Settlement Instruction, irrespective of the scenario, a CSD can be:

The issuer CSD, when it is the CSD in which the security was issued and distributed on behalf of the issuer;

The investor CSD, when it is the CSD of at least one of the two counterparts; or

Both, when it is the CSD in which the security was issued and the CSD of at least one of the counterparts.

In this respect, each investor CSD has the choice between:

l   Opening one (or more) omnibus account(s) (See section Securities accounts [▶ **Error! Bookmark not defined.**]), reflecting the holdings of its participants for the given financial instrument, in the books of the issuer CSD or

l   Opening one (or more) omnibus account(s) in the books of any other CSD being already an investor CSD for the same financial instrument.

In both cases, the CSD where the omnibus account is opened is defined as the technical issuer of the investor CSD for the given financial instrument. This is the reason why each investor CSD has to define, for each financial instrument it intends to define as eligible for settlement, the technical issuer CSDs for this financial instrument. This results in the creation of a default and/or alternative link(s) between the

investor CSD and its technical issuer CSD(s) for a given financial instrument. For a given investor CSD, the technical issuer CSD may be different for each security, being in most cases the issuer CSD of the securities.

The following diagram illustrates the basic scenario in which an investor CSD (CSD A) defines the issuer CSD (CSD I) of a given financial instrument as the technical issuer CSD for that instrument. This results in the creation of a direct <u>default</u> link between the two CSDs:

*DIAGRAM 5 -* DIRECT <u>DEFAULT</u> LINK BETWEEN INVESTOR **CSD** AND ISSUER **CSD**
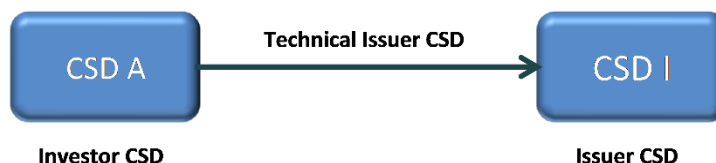
It is also possible that an investor CSD creates alternative links for the same financial instrument of Diagram 5 defining different technical Issuer CSDs. This link can be used in case it is not possible to build the realignment chain via default links, or if the default links reach an external CSD or two different issuer CSDs (multi-issuance scenario). Only one link, whether default or alternative, can be set up towards a given technical issuer CSD for a given investor CSD and a given ISIN.

~~As an alternative~~ In general, the Investor CSD may define any other Investor CSD (for the same financial instrument) as its Technical issuer CSD. E.g., in the example illustrated in <u>Relayed link between investor CSD and issuer CSD</u> [▸ 5], CSD A (Investor CSD) defines CSD B (Investor CSD) as its Technical Issuer CSD <u>via a default link</u>. In the same manner, CSD B defines CSD I (Issuer CSD) as its Technical Issuer CSD <u>via a default link</u>. As a result, CSD A establishes a relayed link with CSD I. The relayed link chain may consist of one or more intermediary CSDs between an Investor CSD and an Issuer CSD. Each intermediary Investor CSD is defined as a Technical Issuer CSD for the previous element of the relayed link chain.

*DIAGRAM 7 -* RELAYED <u>DEFAULT</u> LINK BETWEEN INVESTOR **CSD** AND ISSUER **CSD**

In this respect, the issuer CSD of a given security can be considered as being its own technical issuer for this security from a technical set-up point of view:

DIAGRAM 8 - TECHNICAL ISSUER CSD OF AN ISSUER CSD

Technical Issuer CSD
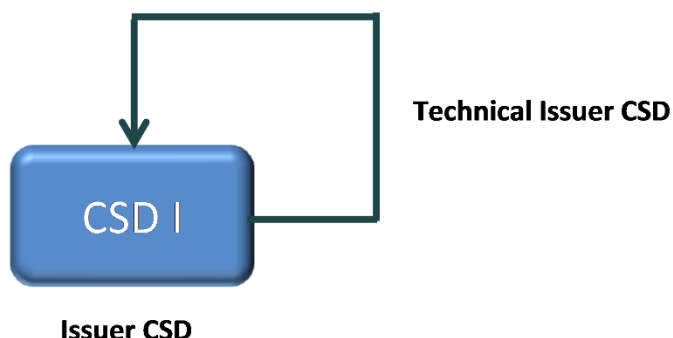
Issuer CSD

Note that for this configuration the Issuer CSD does not need to define an additional Security CSD Link defining itself as Investor and Technical Issuer at the same time. Defining itself as Issuer automatically implies that the CSD also acts as Technical Issuer for itself.

In this case, the account reflecting the holdings of its participants is the issuance account (See section Securities accounts [▶ **Error! Bookmark not defined.**]). When linking itself to a security, the issuer CSD can optionally specify one or more of its issuance accounts and one or more of the issuance accounts of its CSD participants for the same security. If any Issuance accounts of the issuer CSD are specified, one of them must be selected as the default Issuance account to be used for realignment for the given link.

The rest of this section provides a couple of three examples of configuration of investor-technical issuer links between CSDs. The first two examples refer to default links, while the last one to an alternative link.

EXAMPLE 1 - CONFIGURATION OF INVESTOR-TECHNICAL ISSUER DEFAULT LINKS BETWEEN CSDs (A)
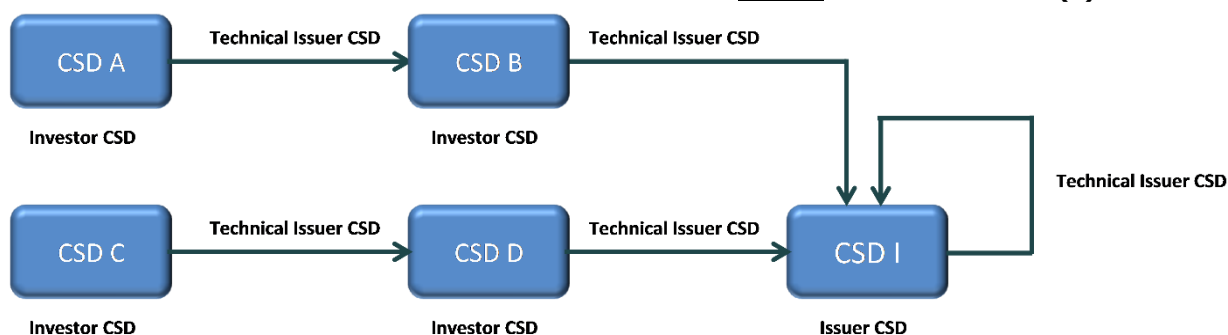
As shown in the example, CSD B and CSD D, investor CSDs for a given financial instrument, both define CSD I, issuer of the same instrument, as technical issuer CSD for this instrument. This results in the creation of two direct links between CSD B and CSD I and between CSD D and CSD I, respectively.

On the contrary, CSD A and CSD C, investor CSDs for the same financial instrument, define CSD B and CSD D respectively, both already defined as investor CSDs for the same instrument, as technical issuer CSD for this instrument. This results in the creation of two links between CSD A and CSD B and between CSD C and CSD D and, consequently, in two relayed links between CSD A and CSD I and between CSD C and CSD I, respectively.

Finally, as explained before, CSD I, as issuer CSD for the given financial instrument, is also by definition its own technical issuer CSD for the same financial instrument.

EXAMPLE 2 - CONFIGURATION OF INVESTOR-TECHNICAL ISSUER <u>DEFAULT</u> LINKS BETWEEN CSDS (B)
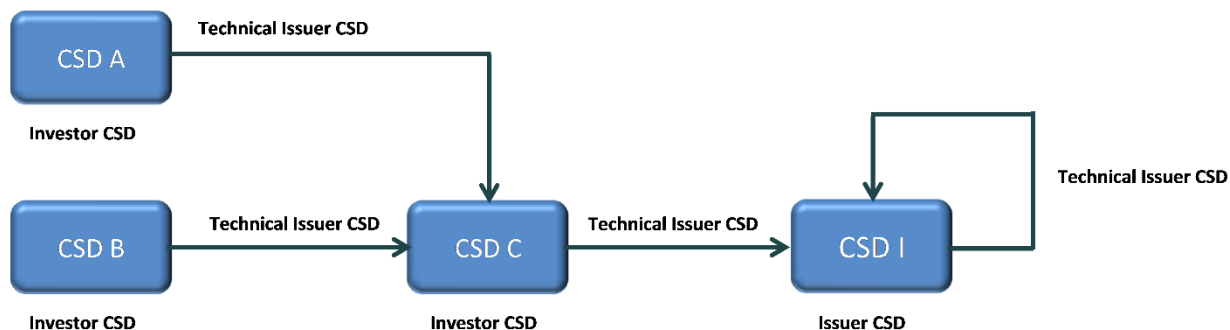

This second example shows a similar configuration of links, the only difference with respect to the previous example being that only one direct link exists between an investor CSD and the issuer CSD for the given financial instrument, i.e. the link defined between CSD C and CSD I.

As to CSD A and CSD B, they are defined as investor CSDs and have the same technical issuer CSD, i.e. CSD C, already defined as investor CSD for the same financial instrument. This results in the creation of two links between CSD A and CSD C and between CSD B and CSD C and, consequently, in two relayed links between CSD A and CSD I and between CSD B and CSD I, respectively.

Again, CSD I, as issuer CSD for the given financial instrument, is also by definition its own technical issuer CSD for the same financial instrument.

EXAMPLE 38 - CONFIGURATION OF INVESTOR-TECHNICAL ISSUER DEFAULT AND ALTERNATIVE LINKS BETWEEN CSDS (C)
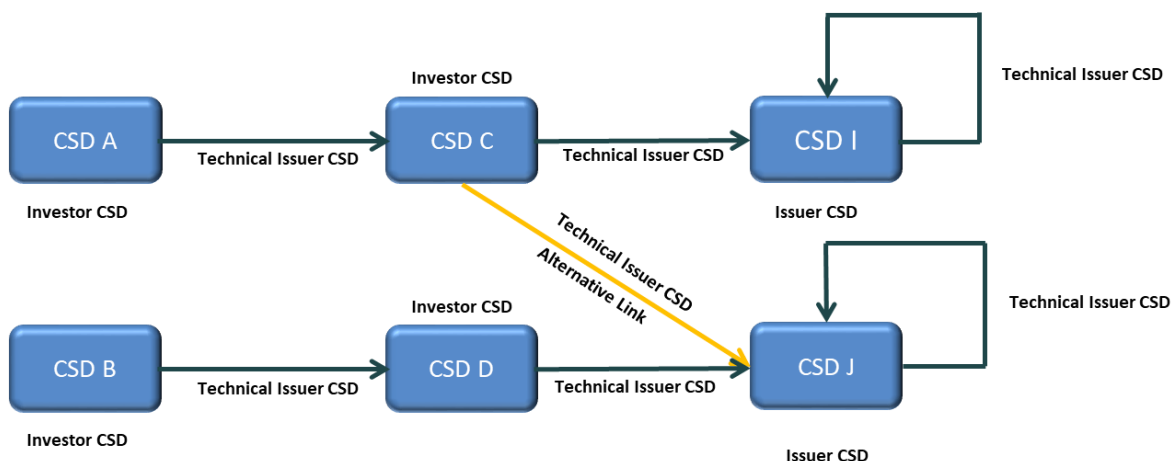
<u>This third example shows the case of alternative links. On the one hand, CSD A is defined as investor CSD having CSD C as technical issuer CSD via a default link. In the same manner, CSD C defines CSD I (Issuer CSD of the financial instrument) as its Technical Issuer CSD via a default link, but also defines CSD J as technical issuer CSD via an alternative link.</u>

<u>As a result, there are two possible chains based on default links, one from CSD A to CSD I, one from CSD B to CSD J. If CSD J is the counterpart of CSD A in the business settlement instructions, then T2S gives the preference to the alternative link, avoiding the complex configuration of double issuance.</u>

T2S GFS
3.5.5.3 Description of the functions of the module
New logic to be described to build up the realignment chain + new examples to be created

CRDM UDFS

A new DRAFT version of base ISO20022 reda.045 and reda.046 messages should be created, CoCo Usage guidelines and business rule to be applied to existing fields will be updated.

3.1.3.41 SecurityCSDLinkCreationRequest (reda.045) To be defined

3.1.3.42 SecurityCSDLinkMaintenanceRequest (reda.046)To be defined

4.5.3.10 Securities CSD Link - New

Flat file	Excel	Column Name	Format	Description	Rules	Occurs per Record	Occurs per Group
2	B	Record Id	NUMERIC (10)	Unique identifier of the record.	Must occur in each line of the record	1..n	
Group "CSD Link"						1..1	
3	C	ISIN	CHAR (12)	ISIN of the security.			1..1
4	D	Link Type	Possible values: ı NVST ı ISSR	Possible values: ı NVST = Investor ı ISSR = Issuer			1..1
5	E	Valid From	DATE	Valid from date of the securities CSD link.	Must be equal or greater than the current date.		1..1
6	F	Valid To	DATE	Valid to date of the securities CSD link.	Must be greater than the Valid From date.		0..1
7	G	Issuer/Investor Parent BIC	CHAR (11)	Issuer / investor parent BIC.			1..1
8	H	Issuer/Investor BIC	CHAR (11)	Issuer / investor BIC.			1..1
9	I	Security Maintenance	BOOLEAN	ı 'true' = the involved CSD			1..1

Flat file	Excel	Column Name	Format	Description	Rules	Occurs per Record	Occurs per Group
				(issuer / technical issuer / investor) is also the maintainer of the related reference data			
10	J	Default Link	BOOLEAN	▎ 'true' = the involved Security CSD Link is defined as default link ▎ 'false' = the involved Investor Security CSD Link is defined as alternative	When Link Type is 'ISSR' the value must be 'true'		1..1
1~~0~~1	~~J~~K	Technical Issuer Parent BIC	CHAR (11)	Technical issuer parent BIC.	Both values must occur together.		0..1
1~~1~~2	~~K~~L	Technical Issuer BIC	CHAR (11)	Technical issuer BIC.			0..1
Group "Issuance Account"						0..10	
1~~2~~3	~~L~~M	Issuance Account	VARCHAR (35)	Issuance account number.			1..1
1~~3~~4	~~M~~N	Primary	BOOLEAN	▎ true = The account is the primary issuance account (the one used for realignment chain)	At least one and only one issuance account must be primary.		1..1

5.1 Index of Business Rules and Error Codes
To be defined

CRDM UHB:
2.2.2.10 Security CSD Links - Search/List Screen

**Fields
Description**

Security CSD s Links – List
[…]
Valid From — Shows the date from which the link is valid. References for error messages [▶]: ❚ DSD4002 ❚ DSD4033 ❚ DSD4034 ❚ ~~DSD4047~~
Valid To — Shows the date until which the link is valid. References for error messages [▶]: ❚ DSD4033 ❚ DSD4034 ❚ ~~DSD4047~~
Issuer/Investor
Parent BIC — Shows the parent BIC of the issuer or investor. References for error messages [▶]: ❚ DSD4001 ❚ DSD4002 ❚ DSD4013 ❚ ~~DSD4047~~
Party BIC — Shows the party BIC of the issuer or investor. References for error messages [▶]: ❚ DSD4001 ❚ DSD4002 ❚ DSD4013 ❚ ~~DSD4047~~
Securities Maintenance — Shows the value of the security maintenance flag. Reference for error messages [▶]: ❚ DSD4043
Default Link — Shows whether the Security CSD link is the default link.
[…]

Buttons		
	Restore	This function enables the User to restore a previously deleted Security CSD Link.
		If the status of the selected Security CSD Link is already set to 'Active', this function is not available.
		References for error messages [▶]:
		❚ DSD4001
		❚ DSD4002
		❚ <u>DSD4005</u>
		❚ DSD4012
		❚ DSD4013
		❚ DSD4014
		❚ DSD4034
		❚ DSD4043
		❚ ~~DSD4047~~
		❚ DSD4049
		❚ DSD4050
	[…]	
	Delete	This function enables the User to delete the selected Security CSD Link, after confirmation.
		If the status of the selected Security CSD Link is already set to 'Deleted', this function is not available.
		References for error messages [▶]:
		❚ DSD4001
		❚ DSD4003
		❚ <u>DSD4006</u>
		❚ DSD4033

2.8.1.2.11 Security CSD Link - Details Screen

Fields Description

Security CSD s Links – List
[…]
Valid From — Shows the date from which the link is valid. References for error messages [▶]: ▮ DSD4002 ▮ DSD4033 ▮ DSD4034 ▮ ~~DSD4047~~
Valid To — Shows the date until which the link is valid. References for error messages [▶]: ▮ DSD4033 ▮ DSD4034 ▮ ~~DSD4047~~
Issuer/Investor
Parent BIC — Shows the parent BIC of the issuer or investor. References for error messages [▶]: ▮ DSD4001 ▮ DSD4002 ▮ DSD4013 ▮ ~~DSD4047~~
Party BIC — Shows the party BIC of the issuer or investor. References for error messages [▶]: ▮ DSD4001 ▮ DSD4002 ▮ DSD4013 ▮ ~~DSD4047~~
Securities Maintenance — Shows the value of the security maintenance flag. Reference for error messages [▶]: ▮ DSD4043
<u>Default Link</u> — <u>Shows whether the Security CSD link is the default link.</u>
[…]

Buttons

Restore	This function enables the User to restore a previously deleted Security CSD Link.
	If the status of the selected Security CSD Link is already set to 'Active', this function is not available.
	References for error messages [▶]:
	❚ DSD4001
	❚ DSD4002
	❚ DSD4005
	❚ DSD4012
	❚ DSD4013
	❚ DSD4014
	❚ DSD4034
	❚ DSD4043
	❚ ~~DSD4047~~
	❚ DSD4049
	❚ DSD4050
[…]	
Delete	This function enables the User to delete the selected Security CSD Link, after confirmation.
	If the status of the selected Security CSD Link is already set to 'Deleted', this function is not available.
	References for error messages [▶]:
	❚ DSD4001
	❚ DSD4003
	❚ DSD4006
	❚ DSD4033

2.2.2.12 Security CSD Link – New/Edit Screen

**Fields
Description**

Security CSD s Links	
[...]	
Issuer/Investor	
Parent BIC	Enter or select the parent BIC of the issuer or investor. This field is mandatory and read only in edit mode. Reference for error message: [...] Required format is: max. 11x characters.
Party BIC	Enter or select the party BIC of the issuer or investor. This field is mandatory and read only in edit mode. Reference for error message: [...] Required format is: max. 11x characters.
Securities Maintenance	Select the value of the security maintenance flag. Reference for error message: [...]
Default Link	Select whether the Security CSD link is the default link. This field is only selectable for Investor type links, while for Issuer type links it is selected and disabled. This field is read only in edit mode. Reference for error message: I DSC4002 I DSC4005 I DSC4051 I DSC4052
[...]	

Submit	This function enables the user to create or edit a Security CSD Link. References for error messages [▶]: ❙ DSC4001 ❙ DSC4002 ❙ DSC4005 ❙ DSC4020 ❙ DSC4021 ❙ DSC4030 ❙ DSC4040 ❙ DSC4041 ❙ DSC4043 ❙ DSC4044 ❙ DSC4045 ❙ DSC4046 ❙ DSC4047 ❙ DSC4048 ❙ DSC4049 ❙ DSC4050 ❙ DSC4051 ❙ DSC4052 ❙ DSU4001 ❙ DSU4002 ❙ DSU4003 ❙ DSU4005 ❙ DSU4021 ❙ DSU4095
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.

6.5.2.112 Security CSD Link - Details Screen

Reference for error message	Field or Button	Error Text	Description
DSD4002	l ISIN field l Valid From field l Issuer/Investor Parent BIC field l Issuer/Investor Party BIC field l Restore button l <u>Default Link</u>	Security CSD Link already exists	When performing a Security CSD Link restore request, only one <u>Default</u> Security CSD Link can exist for a given combination of Investor/Issuer Party, Valid From and Linked Security. <u>Exception to the above rule is represented by different alternative investor CSD Links that can be defined for the same Security and Investor CSD, but must differ for the Technical Issuer CSD.</u>
<u>DSD4005</u>	l <u>ISIN field</u> l<u>Issuer/Investor Parent BIC field</u> l <u>Restore button</u> l <u>Valid from field</u> l <u>Valid to field</u> l <u>Default Link</u>	<u>Default Link not defined</u>	<u>When performing a Security CSD Link restore request, the Default Link cannot be set to false if a Default Security CSD Link does not exist for the specified Security and Investor Party in the same validity period.</u>
<u>DSD4006</u>	l <u>ISIN field</u> l<u>Issuer/Investor Parent BIC field</u> l <u>Restore button</u> l <u>Valid from field</u> l <u>Valid to field</u> l <u>Default Link</u>	<u>Default Link not defined</u>	<u>When performing a Security CSD Link delete request, it is not possible to delete a Default Investor Link if there is an alternative investor link for the specified Security and Investor Party in the same validity period.</u>
~~DSD4047~~	~~l Valid from field~~ ~~l Valid to field~~ ~~lIssuer/Investor Parent BIC field~~ ~~lIssuer/Investor Party BIC field~~ ~~l Restore button~~	~~CSD already defined as Investor of the security.~~	~~When performing a Security CSD Link restore request, in a specific timeframe a CSD (internal or external) can be defined as Investor of a specific Security only once.~~

6.5.2.113 Security CSD Link - New/Edit Screen

Reference for error message	Field or Button	Error Text	Description
DSC4002	l ISIN field l Issuer/Investor Parent BIC field l Submit button l Valid from field	Security CSD Link already exists	When performing a Security CSD Link create request, only one <u>Default</u> Security CSD Link can exist for a given combination of Investor/Issuer Party, Valid From and Linked Security. <u>Exception to the above rule is represented by different alternative</u>

			investor CSD Links that can be defined for the same Security and Investor CSD, but must differ for the Technical Issuer CSD.
DSC4005	I ISIN field I Issuer/Investor Parent BIC field I Submit button I Valid from field I Valid to field I Default Link	Default Link must be true	When performing a Security CSD Link create request, the Default Link must be set to true if no other Investor Default Security CSD Link exists for the specified Security and Investor Party in the same validity period. While Issuer type links must be always default.
DSC4051	I Issuer/Investor Parent BIC field I Submit button I Default Link	Invalid Investor CSD	When performing a Security CSD Link create request, the Investor CSD cannot be an External CSD if the Default Link is set to False.
DSC4052	I Technical Issuer Parent BIC field I Submit button I Default Link	Invalid Technical Issuer Party	When performing a Security CSD Link create request, the Technical Issuer Party, if specified, cannot be an External CSD if the Default Link is set to False.
DSU4002	I ISIN field I Issuer/Investor Parent BIC field I Submit button I Valid from field I Default Link	Security CSD Link already exists	When performing a Security CSD Link update request, only one Default Security CSD Link can exist for a given combination of Investor/Issuer Party, and Linked Security in the same validity period. Exception to the above rule is represented by different alternative investor CSD Links that can be defined for the same Security and Investor CSD, but must differ for the Technical Issuer CSD.
DSU4005	I ISIN field IIssuer/Investor Parent BIC field I Submit button I Valid from field I Valid to field I Default Link	Default Link not defined	When performing a Security CSD Link update request, there cannot be an alternative investor security CSD link in a validity period not covered by a Default Investor Link for the specified Security and Investor Party.

6.5.2.114 Security CSD Links - Search/List Screen

Reference for error message	Field or Button	Error Text	Description
DSD4002	I ISIN field I Valid From field I Issuer/Investor Parent BIC field	Security CSD Link already exists	When performing a Security CSD Link restore request, only one Default Security CSD Link can exist for a given combination of Investor/Issuer Party, Valid From

	I Issuer/Investor Party BIC field **I** Default Link **I** Restore button		and Linked Security. Exception to the above rule is represented by different alternative investor CSD Links that can be defined for the same Security and Investor CSD, but must differ for the Technical Issuer CSD.
DSD4005	**I** ISIN field **I**Issuer/Investor Parent BIC field **I** Restore button **I** Valid from field **I** Valid to field **I** Default Link	Default Link not defined	When performing a Security CSD Link restore request, the Default Link cannot be set to false if a Default Security CSD Link does not exist for the specified Security and Investor Party in the same validity period.
DSD4006	**I** ISIN field **I**Issuer/Investor Parent BIC field **I** Restore button **I** Valid from field **I** Valid to field **I** Default Link	Default Link not defined	When performing a Security CSD Link delete request, it is not possible to delete a Default Investor Link if there is an alternative investor link for the specified Security and Investor Party in the same validity period.
~~DSD4047~~	~~**I** Valid from field~~ ~~**I** Valid to field~~ ~~**I**Issuer/Investor Parent BIC field~~ ~~**I**Issuer/Investor Party BIC field~~ ~~**I** Restore button~~	~~CSD already defined as Investor of the security.~~	~~When performing a Security CSD Link restore request, in a specific timeframe a CSD (internal or external) can be defined as Investor of a specific Security only once.~~

Preliminary assessment:

- **Financial Impact:** Very High
- **Impacted modules:** SETT, LCMM, CRDM, DWH
- **Impact on other Eurosystem Services or Projects:** No impact on T2, TIPS or ECMS;
- **Risk analysis:** No risks have been identified during PA

Findings

- **SETT impact:**

For a given business transaction, the chain chosen according to the logic described below will remain the same all along the business day (no modification of the chain will be taken into account during the business day), which is the current process.

Logic to be followed:

Following the exchange held with Clearstream and the ECB, the following logic will be put in place:

IF the complete realignment chain can be built in T2S via default Security CSD Links
AND all involved CSDs have party type CSD (no external CSD case),
AND at most one of those CSDs is Issuer CSD (no multi-issuance case), then
> **T2S shall settle via the Default Security CSD links.**

ELSE, i.e. if T2S cannot built a realignment chain, or some of the CSDs involved have party type External CSDs, or two or more of them are Issuer CSD then
> **T2S shall settle via Alternative Security CSD links as a priority, default security CSD links**

otherwise

Settling via Default Security CSD links:
The usual method is being used (building first the delivering part of the chain from the delivering Investor CSD up to the issuer CSD, then the receiving part from the receiving Investor CSD up to the Issuer CSD, and finally merging both parts, except that when looking for the technical Issuer CSD associated to a given Investor CSD for a given security, the link marked as "default" in CRDM should be chosen (as several links are now available with the CR)

Settling via alternative links as a priority, default security CSD links otherwise:
Starting from the delivering CSD, it should be checked at each step of the chain whether an alternative security CSD link to the counterpart CSD of the business SI exists. If such is the case, this alternative link should be used. Otherwise the default link should be used.
Only the alternative link to the counterpart CSD of the business SI should be used: in case an alternative link to another Investor CSD or to an Issuer CSD is found, then it should not be used.
This process should be carried out until either an alternative link is found or the Issuer CSD is reached, or a CSD external to T2S is reached. Once at the Issuer CSD or at the external CSD, the building of the chain should be stopped for the delivering part: No alternative link to the counterpart CSD should be looked for from the Issuer CSD or from the external CSD.
If no alternative link was found while building the delivering part of the chain, then the same process should be carried out for the receiving part. Otherwise the building of the chain stops when an alternative link to the counterpart CSD is found.

If no alternative link is found, neither on the delivering side nor on the receiving side, then the chain is to be built as is currently the case, including the multi-issuer and the external configurations.

- **CRDM impact**:

Various Changes to CRDM object "Security CSD Link":
1. Introduction of the "Default link" flag both via U2A and A2A. The Default Link can only be used for "Investor" type links.
2. Amendment of Business rules DSC4002/DSD4002 in order to check that at any given point in time (i) only one default link is allowed for a given Investor CSD and Security, (ii) only one non-default link is allowed for a given Investor CSD, Technical Issuer CSD and Security.
3. Introduction of new Business rules in order to forbid the creation/update/Restore of Security CSD Link with Default Link equal to false and External CSD as Technical Issuer CSD and/or as Investor CSD.

- **LCMM impact:**

- The communication between LCMM and SETT will not change at all.

- CRDM will communicate to LCMM any update in the relevant Security CSD links (i..e: deletions or updates) in the same way it is done nowadays.

- The Realignment Instructions associated with the alternative Security CSD links will not be selected for revalidation by LCMM, regardless of the modifications occurred after their creation; i.e.: even if a Security CSD link expires, the associated Realignment Instructions will not be selected for Revalidation by LCMM.

- Some Security CSD links validations and revalidations at LCMM will have to be updated in order to take into account more than one valid CSD link.

- To be investigated how LCMM revalidation process will deal with CRDM updates related to Security CSD links.

- **Open issues/ questions to be clarified by the originator:**

Assumption:

No change is expected as far as auto-collateralisation feature is concerned, the new realignment chains introduced by this CR can be used under the same conditions as the "default" current ones.

CRDM:
According to the requirements, it is requested check that, at a given point in time, there cannot be an Investor type link with Default Flag = F if there is not a Default Link for the same Investor CSD and Security. Here we see two options:
1. it is not possible to create and update an alternate link if in the same period there is not a default link for the same Investor CSD and Security. This option is quite rigid. If CSDs want to change the default link, it is necessary to close first all the active links (default and alternative) and then create the new links.
2. it is not possible to create an alternate link if in the same period there is not a default link for the same Investor CSD and Security. With this option it is possible to change the default flag, switching a link from alternative to default and vice versa. The check would be maintained on having at maximum only one default link for Investor CSD and security at any given point in time. However it could be possible that at a given point in time, there could not be a default link for a given Investor and security.

Detailed assessment:

EUROSYSTEM ANALYSIS – GENERAL INFORMATION	

T2S Specific Components		Common Components	
LCMM			
X	Instructions validation		
	Status management		
	Instruction matching		
	Instructions maintenance		
	Penalty Mechanism		
Settlement			
X	Standardisation and preparation to settlement		
	Night-time Settlement		
	Daytime Recycling and optimisation		
	Daytime Validation, provisioning & booking		
	Auto-collateralisation		
Liquidity Management			
	Outbound Information Management		
	NCB Business Procedures		
	Liquidity Operations		
T2S Interface		**Eurosystem Single Market Infrastructure Gateway** *(from R6.0 June 2022)*	
	Communication		Communication
	Outbound Processing		Outbound Processing
	Inbound Processing		Inbound Processing
Static Data Management *(until June 2022)*		**Common Reference Data Management** *(from R6.0 June 2022)*	
	Party data management		Party data management
	Securities data management	X	Securities data management
	Cash account data management		Cash account data management
	Securities account data management		Securities account data management
	Rules and parameters data management		Rules and parameters data management
Statistics and archive		**Statistics and archive**	
	Statistical information (until June 2022)		Short term statistical information
	Legal archiving (until June 2022)		Legal archiving (from R6.0)
		X	Data Warehouse (from R6.0)
Information *(until June 2022 containing reference data)*		**CRDM business interface** *(from R6.0 June 2022)*	
	Report management		Report management
	Query management		Query management
			Communication
		X	Outbound Processing
		X	Inbound Processing
Operational Services			
	Data Migration (T2S DMT)	X	Data Migration (CRDM DMT, from R6.0)
	Scheduling (until June 2022)		Business Day Management (from R6.0)
			Business Day Management business interface (from R6.0)
	Billing (until June 2022)		Billing (from R6.0)
			Billing business interface (from R6.0)
	Operational Monitoring		Operational and Business Monitoring
	MOP Contingency Templates		

Impact on major documentation	

Document	Chapter	Change
Impacted GFS chapter	3.5.5.3 Description of the functions of the module **1 – Realignment Chain Analyser**	New logic to be described to build up the realignment chain + new examples to be created
Impacted UDFS chapter	**T2S UDFS** 1.6.1.10 Realignment 1.2.2.3 Configuration of Securities CSD Links **CRDM UDFS:** 3.1.3.41 SecurityCSDLinkCreationRequestV01 (reda.045.001.01) 3.1.3.42 SecurityCSDLinkMaintenanceRequest (reda.046) 4.5.3.10 Securities CSD Link - New	New logic to be described to build up the realignment chain + new examples to be created Draft version of reda.045 and reda.046 messages, related Usage guidelines and business rule to be applied to existing fields will be updated. Insertion of the new flag for DMT
Additional deliveries for Message Specification (UDFS, MyStandards, MOP contingency templates)	reda.045 reda.046	Draft base ISO versions of reda.045 and reda.046 messages should be updated in order to support the new field. CoCo Usage Guidelines should be migrated to the new version of these messages. Annotation on the UGs will be updated for the changes related to business rules.
UHB	2.8.1.2.10 Security CSD Links - Search/List Screen 2.8.1.2.11 Security CSD Link - Details Screen 2.8.1.2.12 Security CSD Link – New/Edit Screen 6.5.2.112 Security CSD Link - Details Screen 6.5.2.113 Security CSD Link - New/Edit Screen 6.5.2.114 Security CSD Links - Search/List Screen	Introduction of 'Default Link' flag, update of business rules DSD4002/DSC4002, introduction of Business rules DSD4005, DSD4006, DSC4005, DSC4051, DSC4052, DSU4002, DSU4005. Removal of business rule DSD4047.
External training materials		
Other impacted documentation (FA Sch. 05, FA Sch. 07)		
Impacted GDPR message/ screen fields		No GDPR impact
Links with other requests		
Links	Reference	Title

OVERVIEW OF THE IMPACT OF THE REQUEST ON THE T2S SYSTEM AND ON THE PROJECT
Summary of functional, development, infrastructure and migration impacts

The requirement of the CR is to allow the set-up and use of a new type of Security CSD link (called "alternative links"), in addition to the existing ones, in order to facilitate cross-border settlement in T2S, in a case a T2S external CSD or more than one issuer CSD are involved in the settlement of a security.

With this CR, an investor CSD will be able to define several investor-type CSD links for a given ISIN, meaning that it can define several technical issuer CSDs for this ISIN.

If multiple investor CSD links are being defined, one has to be classified as default link. If there is a link where one of the CSDs is the Issuer CSD of the security, then this must be the default link.

Only investor-type links can be flagged "alternative" i.e. the issuer type CSD link cannot be an alternative link. No alternative links can be defined for an investor CSD or a technical issuer CSD outside T2S.

Among these investor security CSD links, one (and only one) is given the preference for settlement under simple configurations (all CSDs in T2S, no multi-issuance), this is the "default" link. Under more complex configurations (external CSD configuration, multi-issuance), the preference should go first to one of the other alternative links, more specifically the one pointing to the counterpart CSD, in case it is set up in the reference data. Otherwise, the default links should be checked once again also under those complex configurations.

Only one link, whether default or alternative, can be set up towards a given technical issuer CSD for a given investor CSD and a given ISIN.

CSD Link Validation:

When performing the ISIN code validation, T2S verifies whether the ISIN Code of an instruction is eligible for settlement in the corresponding CSD (i.e. the Delivering CSD, the Receiving CSD, or both, depending on the match status of the instruction validate) at the Intended Settlement Date (and additionally at the current Business Day when the intended settlement day it is in the past). For doing this check the main assumption is that one CSD can define only one technical Issuer for a given security. This validation has to be amended to accept an instruction if at least there is one valid Investor CSD link of this security, no matter if it is defined as default or alternative.

The revalidation of instructions due to an update of the CSD link will remain unchanged. All unsettled or partially settled instructions using the ISIN involved in the security CSD link will be revalidated and cancelled if after this static data update there isn´t any valid CSD link. If the CSD link closed is the one already used by Settlement for building the realignment chain, T2S will create the realignment chain again in the next business day according to the new static data and the previous realignment transactions (those that are not valid any longer) are cancelled. Additionally, T2S verifies whether the instructing party is the technical issuer of the security by using the CSD links configured by the relevant CSD to reject any settlement instruction with intended settlement date earlier than the issue date not instructed by the issuer or the technical issuer of the ISIN. This logic has to be adapted to the possible coexistence of various Technical issuers for the relevant depository.

Consistency Validation:

When the Counterparty CSD of an instruction is an External CSD, as the BIC of an External CSD is not unique in T2S, the system performs several checks based on the investor CSD links defined for the External CSD BIC, specified in the Settlement Instruction, in order to identify which is the counterparty of the transaction.

If, after checking the investor CSDs links of all the External CSDs possible candidates to be the counterparty CSD, it is still not possible to identify which is the counterparty CSD for this transaction, T2S tries to build the Realignment Depository Chain starting from the main depository.

This process needs to be adapted to be able to handle more than one Technical Issuers defined for the main internal depository of the transaction.

Amendments are needed in order to manage both default and alternative Security CSD Links.

The 'Default Flag' flag will be introduced both on U2A,A2A and DMT. The default link must be always True for Issuer type links, while it can be False for Investor type links. There can be only one default link (Default Link flag = True) for a given combination of Security and Issuer/Investor and only one alternative link (default Link flag = False) for a given combination of Security, Investor and Technical Issuer. It is not allowed to have an alternative link if there is not defined a default link for the same Investor Party and security in the same validity period. The Investor Party and Technical Issuer party of an alternative link cannot be External CSDs. In order to manage the alternative links, the following business rules will be amended/introduced:

-        DSD4002: (amended Business rule)
-        DSD4005: (new Business rule)

- DSD4006: (new Business rule)
- DSD4047: (removed Business rule) this BR will be removed in order to allow to restore investor CSD links even if there are other investor CSD links for the same Investor Party and Security in the same validity period.
- DSC4002: (amended Business rule)
- DSC4005: (new Business rule)
- DSC4051: (new Business rule)
- DSC4052: (new Business rule)
- DSU4002: (new Business rule)
- DSU4005: (new Business rule)

Creation of new DRAFT base ISO versions (DRAFT6) of reda.045 and reda.046 messages in order to support the new flag. The CoCo UGs will be migrated to the new DRAFT6 version, in particular:

- miming the U2A approach, the Default Link flag will be removed from the CoCo UGs for reda.046, since not updatable (read only in edit mode);
- the creation of a new, updated DRAFT version of ISO base messages will result in the message datatypes being updated to the latest ISO available versions. As a side effect, this will create some technical updates in the reda.045 and reda.046 CoCo UGs not directly part of this change request (e.g. the addition of a level in the xml path for the identification of parties or the datatype of the Security Maintenance flag from YesNoIndicator to TrueFalseIndicator). All these changes are purely technical without any impact on the business information.

Annotation on the UGs will be updated for the changes related to business rules.

Cancellation by the system:

The check introduced due to CR-789 "Handling automatic cancellation for T2S External Transactions" in the Automatic Cancellation process needs also to be adapted to the possibility of retrieving more than one Investor CSD links with different technical issuers for a dedicated a security when performing the checks that allow to exclude the instructions from the cancellation by the system process when the recycling period has been exceeded.

Main Cost Drivers

- Building of new logic for the realignment chain as described above.
- Check of the proper functioning of the new functionalities (use of default or alternative links during RTS and NTS)
- Adaption of the 'ISIN code validation', 'Consistency validation' and 'Cancellation by the System' functionalities so that the existence of a valid CSD link can be checked properly when more than one investor CSD link are defined.
- Amendments in order to manage both default and alternative Security CSD Links. Business rules will be created or amended in order to manage this flag. Introduction of 'Default Link Flag' in U2A ,A2A and DMT.
- Update of the Draft base ISO versions of reda.045 and reda.046 messages in order to support the new flag and migration of the CoCo UGs.
- Migration activities on the existing Security CSD Links. The value of the default link of existing links, both issuer and investor type, should be valued to True.

Outstanding wording proposals for UDFS and GFS will be provided end of March/ beginning of April 2024.

Impact on other TARGET Services and projects
No impact on other Eurosystem Services or projects (T2, TIPS, ECMS) has been identified during DA.
Summary of project risk
No risks has been identified
Security analysis
No adverse impact has been identified during DA.

target | T2S
services

17 August 2023

Cost assessment on Change Requests

T2S-797-SYS – T2S should support cross-border settlement via alternative Security CSD Links			
One-off	Assessment costs* - Preliminary - Detailed	2,000.00 10,000.00	Euro Euro
One-off	Development costs	913,436.11	Euro
Annual	Operational costs - Maintenance costs - Running costs	 87,515.03 0.00	 Euro 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).