



SETTLING
WITHOUT
BORDERS

Eurobond Cross-CSD settlement in T2S

Presentation to AMI-SeCo members

6th December 2017



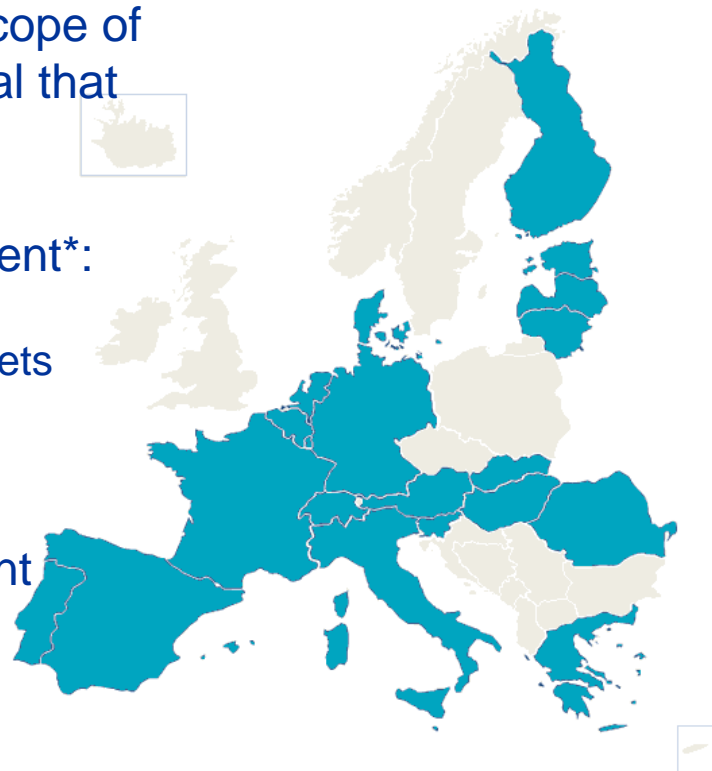
Post-trade made easy

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GROUP

Why are we launching this initiative ?

- Clear market demand to enlarge the scope of Euro-denominated assets and collateral that participants can use within T2S CSDs
- Eurobonds issued in the ICSDs represent*:
 - €9.2 Trillion value
 - 25% of all outstanding marketable assets
 - Eurosystem-eligible collateral
- Prepare for the emergence of the Eurosystem new collateral management system (ECMS)



* Source: ECB „Advancing financial market integration”, Government Borrowers Forum, May 2017.

Agenda

1. Objectives and Benefits
2. Proposed Solution
3. Settlement Flows and Use Cases
4. FAQ
5. Way Forward

Background

Our objectives

Objectives

Enable efficient settlement on T2S of Eurobonds issued in the ICSDS for:

- Eurosystem credit operations,
- T2S auto-collateral on-stock and on-flow
- Standard transactions on T2S platform

Instrument Scope

Initial scope is ECB eligible Eurobonds

- The model is designed to cope with other T2S-out securities

Background

Expected benefits

Offer a single and efficient access to:

- CSD counterparts (Intra CSD settlement)
- Other T2S CSDs counterparts (cross CSD settlement)
- ICSDs counterparts (external CSD settlement*)

Allows CSDs participants to use **Eurobonds for auto-collateral** or for **Eurosystem credit operations** with NCBs located in other T2S CSDs

Proposed model ensures **immediate settlement finality in T2S**

Model is **fast and easy for other Investor CSDs** to join as they can **use standard T2S configuration**

* According to EF and/or CBF service offering.

Proposed solution

Which securities?

Cross-CSD settlement of Eurobonds will primarily be offered for the following instruments

- Debt instruments
- Issued with the ICSDs
- Denominated in any currency (Euro and Non-Euro)
- ECB eligible

Subject to demand, the service could be extended to any other T2S-out security, provided it is Bridge-eligible.

Proposed solution

Which kinds of operations?

All kinds of intra-CSD and cross-CSD operations supported by T2S will be enabled:

- Standard transactions
 - Standard transaction types: FOP, DVP, DWP, PFOD
 - Already matched (for intra-CSD settlement only) or to be matched
- T2S auto-collateralisation (intra-CSD, cross-CSD)

Cross-CSD transactions will benefit from all T2S settlement processes, e.g.

- Partial settlement
- Linking
- Optimisation processes

Transactions will settle within standard NTS and RTS T2S settlement periods:

- Start of Day from 20:00, NTS then RTS
- DVP transactions until 16:00
- BATM transactions until 17:40
- FOP transactions until 18:00

Proposed solution

Which clients can use the service?

The model is designed so that any CSD participant can access the service

- Euroclear and Clearstream participants
- Other CSDs participants can use cross-CSD settlement of Eurobonds, through their CSD acting as investor CSD of either CBF or EF
- NCBs with accounts in CBF, EF or with any other CSD that joins the service will be able to settle Eurosystem credit operations, with counterparts within T2S CSDs or with the ICSDs
- Potential counterparties in T2S are all counterparties (incl. NCBs) in either CBF, EF, or in any other CSDs that joins the service.

Proposed solution

Main features

- **CBF and EF act as Technical Issuer CSD** for Eurobonds in T2S
- **CBF and EF will open a ‘cross-CSD holding account’** with each other, to track those positions which are not yet realigned through the ICSDs
- Settlement between CBF and EF participants with **immediate finality on T2S** and not conditional on realignments between CBF and EF in the ICSDs
- As needed, **CBF and EF will trigger realignments** of their cross-CSD holdings through the ICSDs
- **Daily reconciliation of ‘cross-CSD holding accounts’** between CBF and EF
- **T2S CSDs** other than CBF and EF **can also offer cross-CSD settlement** of Eurobonds, **by becoming Investor CSD** in CBF or EF
- This setup allows for **efficient cross-CSD settlement** between all T2S CSDs without changing current T2S functionalities

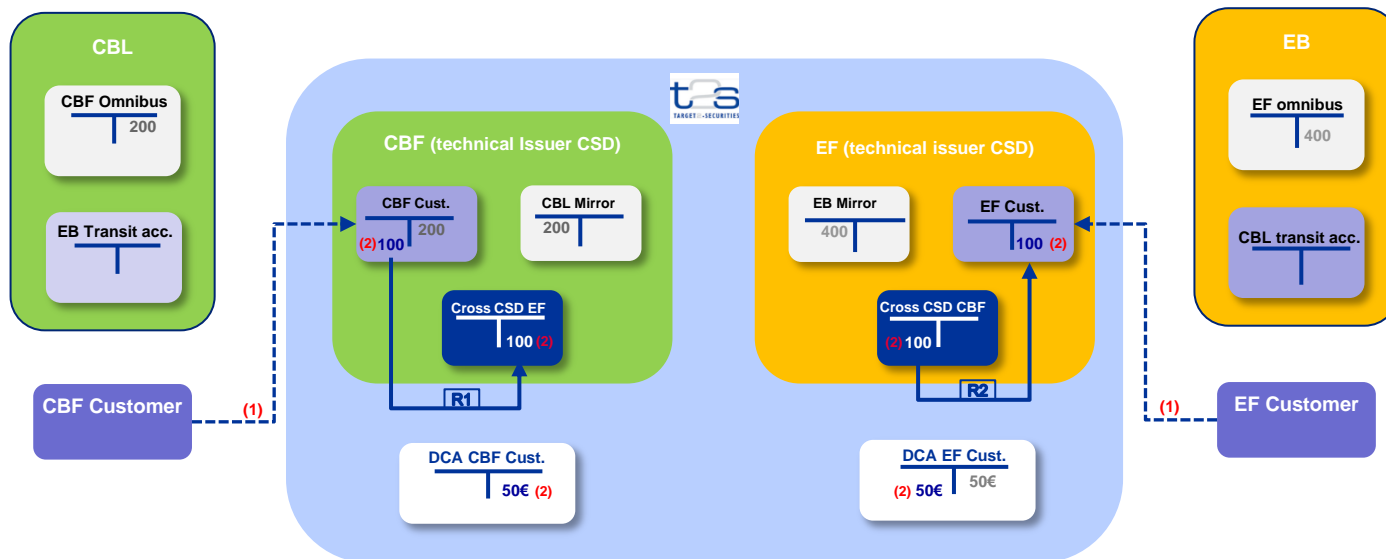
Settlement flows - EF CBF

DVP between CBF and EF customers

Use Case 1:

DVP between a customer of CBF and a customer of EF.

CBF customer instructs a DVP to EF customer for 100 shares and €50.



Amount in grey: Initial position (cash or shares)

Amount in blue: movement of shares/cash related to the trades

DVP from CBF's client to a counterparty in EF:

Initial situation:

- CBF is holding 200 via CBL
- EF is holding 400 via EB

Settlement flow

1. CBF and EF customers send their transactions to their respective CSDs.

- The instructions match in T2S, and T2S generates the realignments.

2. Settlement takes place:

In CBF:

- CBF customer account is debited,
- R1 (triggered by T2S): EF Cross CSD account is credited.

In EF:

- R2 (triggered by T2S): CBF Cross CSD account is debited
- EF customer account is credited.

Situation after settlement finality is achieved on T2S:

- EF is still holding 400 via EB
- In addition, EF is holding 100 via CBF (and CBL).
- CBF is still holding 200 via CBL, whereby 100 of that is the holding of EF in CBF.

Settlement flows – EF CBF

Tracking cross-CSD holdings via cross-CSD accounts

After the cross-CSD settlement is executed, CBF or EF might hold securities via two custodians

- One part of the holding is held via the own ICSD.
- A second part is held via the other CSD and the corresponding ICSD

Use Case

EF would hold 400 via EB
EF would hold 100 via CBF
(and CBL), in the same way
as EF currently holds
German securities via CBF

Each additional settlement between CBF and EF clients will adjust the distribution of holdings.

- This might:
 - decrease the positions held via the other CSD, or
 - lead to a reversal of the direction so that the second CSD is now holding positions via the first
- The Cross-CSD accounts will be used to track those Cross-CSD positions.

Use Case

If an EF client sells 150 to a CBF client, CBF would hold 50 via EF

In certain scenarios, e.g. upcoming corporate actions, it is preferable to hold all positions at one place only

- In this case, realignments will be triggered to realign the positions on ICSD level so that all holdings are exclusively held via the corresponding ICSD

Use Case

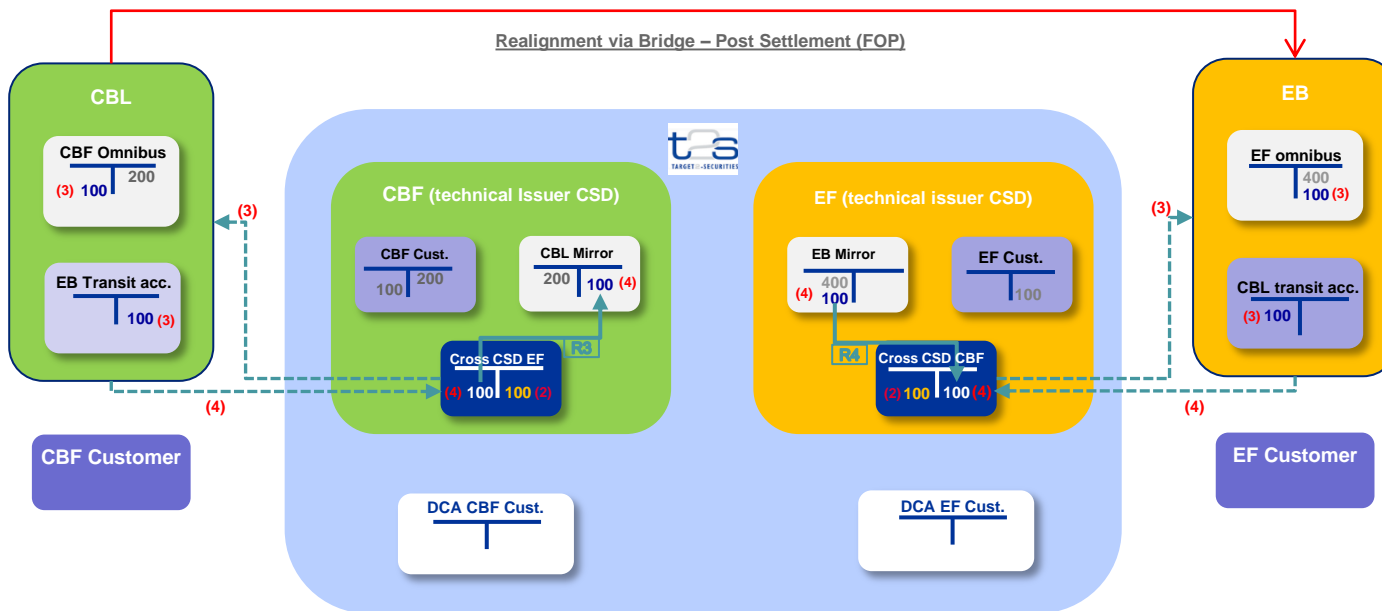
EF realigns its position of 100 from CBF to EB

Settlement flows – EF CBF

Housekeeping after cross-CSD settlement

Use Case 1:

Realignment Flow as Housekeeping after cross-CSD settlement on T2S. As a result of cross-CSD settlement activity in Eurobonds, EF holds a positions via CBF and wants to realign it to EB.



Amount in grey: Initial position (cash or shares)

Amount in blue: movement of shares/cash related to the trades

Housekeeping Realignment

Initial situation

- As a result of cross-CSD settlement, EF has a position of 100 via CBF (and CBL).

Realignment flow

3. A realignment between CBF and EF is triggered to realign the positions from CBF omnibus account in CBL via the Bridge to EF omnibus account in EB. The realignments of EF and CBF follow the Out-CSD flows established in EF and CBF.

4. Settlement confirmation of the Bridge realignment is sent by CBL to CBF, and by EB to EF. When CBF/EF receive the settlement confirmation, the settlement of the realignments in T2S will be concluded: In CBF, the Cross-CSD EF account is debited and the CBL mirror account in CBF is credited. In EF, the EB mirror account is debited and the Cross CSD CBF account is credited.

Final situation

- The cross-CSD accounts have no positions.
- EF is holding all positions via EB
- CBF is still holding all positions via CBL

Settlement flows – Investor CSDs

Requirements for Investor CSDs to join the model

Security Setup

- Securities will be configured by CBF / EF : No impact
- Investor CSDs need to set up Security CSD Links with either CBF or EF as Technical Issuer CSD

Account Setup

- Existing omnibus / mirror accounts in CBF / EF can also be used for Eurobond settlement : No adjustment needed

Eligible Counterparty CSD Setup

- Eligible counterparty CSD Links must be configured for Eurobonds for all potential counterparties in T2S (i.e. EF, CBF, and all other CSDs using either EF or CBF as Technical Issuer CSD)

Participation in the Eurobond Settlement Service of EF/CBF requires only small adjustments of the reference data

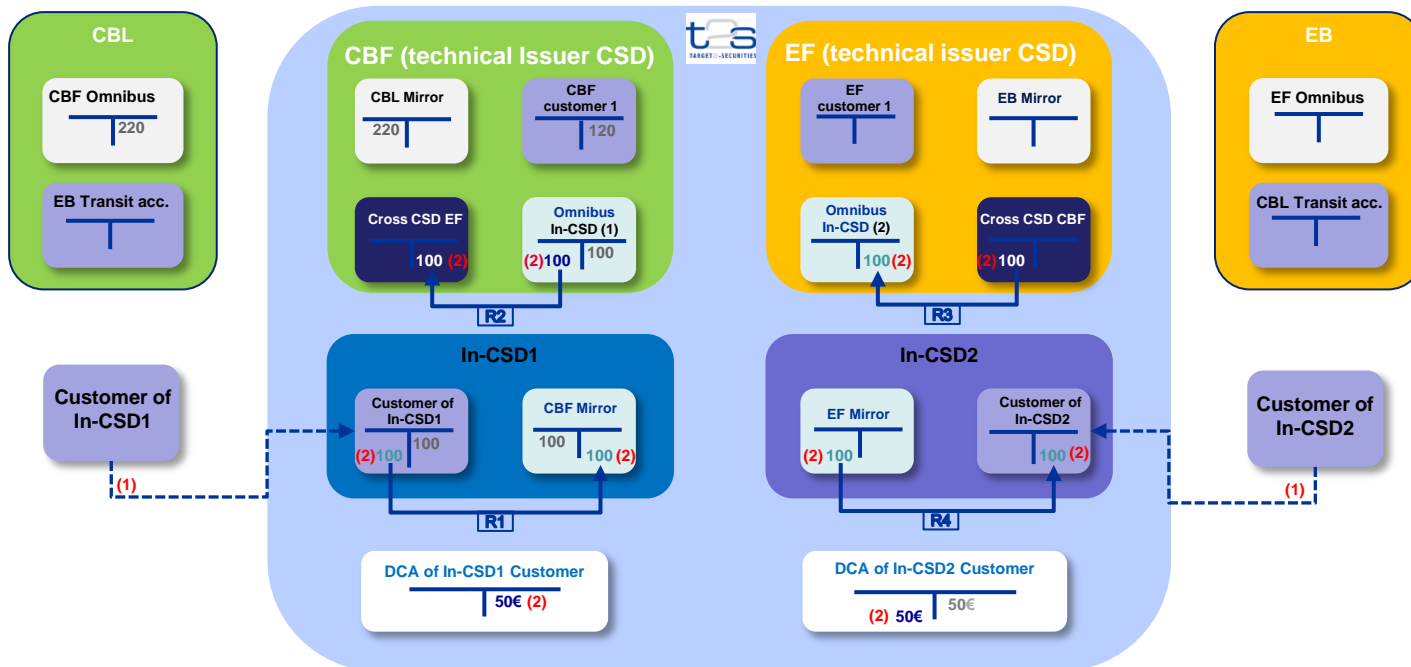
For Investor CSDs, settlement flows follow the standard T2S logic :
No adjustment needed in the settlement logic

Settlement flows – Investor CSDs

DVP between customers of investor CSDs

Use Case 2:

Customer of In-CSD1 instructs a DVP to a customer of In-CSD2 for 100 shares and €50. In-CSD1 is investor CSD in CBF while In-CSD2 is investor CSD in EF.



DVP from a customer of In-CSD1 to a customer of In-CSD2.

1. The customers of In-CSD1 and of In-CSD2 send their instructions to T2S. The instructions match in T2S.

2. After matching, T2S generates realignments on the involved mirror, omnibus and inter-CSD accounts. On ISD, settlement takes place in T2S:

- R1 in In-CSD1: customer account is debited, mirror account for CBF is credited
- R2 in CBF: omnibus account of In-CSD1 is debited and the Cross CSD EF account is credited.
- R3 in EF: the Cross CSD CBF account is debited, and the Omnibus account of In-CSD2 is credited.
- R4 in In-CSD2: mirror account for EF is debited, and customer account is credited.

=> Settlement is final on all accounts of In-CSD1/2.

Amount in grey: Initial position (cash or shares)

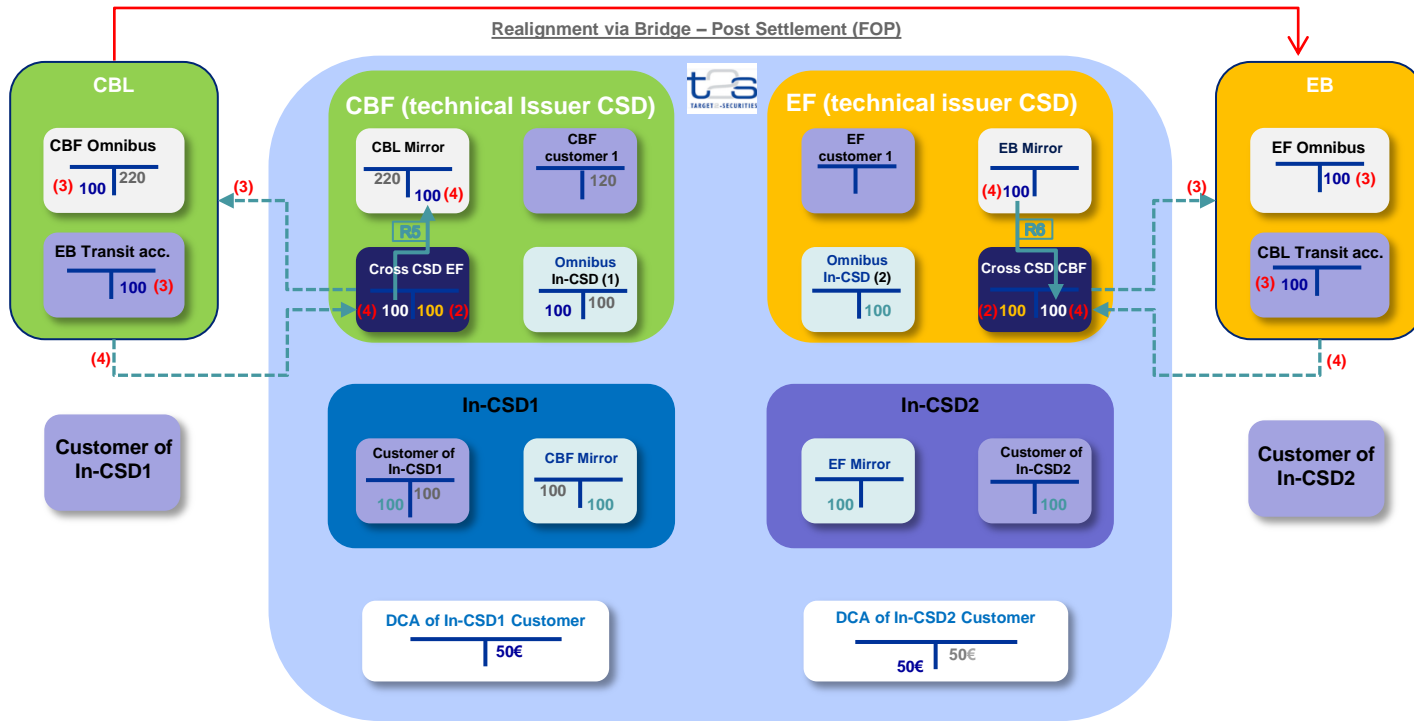
Amount in blue: movement of shares/cash related to the trades

Settlement flows – Investor CSDs

Housekeeping after cross-CSD settlement on T2S

Use Case 2:

Realignment Flows: Housekeeping after cross-CSD settlement on T2S.
As a result of settlement activity between In-CSDs 1 and 2, EF holds a positions via CBF and wants to realign it to EB.



Amount in grey: Initial position (cash or shares)

Amount in blue: movement of shares/cash related to the trades

Housekeeping Realignment

3. Realignment between CBF and EF via the Bridge. The trigger for the realignment will be an instruction in T2S from:
 - The Cross-CSD EF account in CBF via CBL
 - The Cross-CSD CBF account in EF via EB
 - In CBL: CBF Omnibus is debited and EB Transit account is credited.
 - In EB: CBL transit account is debited and EF omnibus account is credited.

4. Settlement confirmation of the Bridge realignment is sent by CBL to CBF and by EB to EF. When CBF/EF receive the settlement confirmation from both ICSDs, the instruction will settle in T2S (R5/R6):

- In CBF, the Cross-CSD EF account is debited, and the CBL mirror account is credited.
- In EF, the EB Mirror account is debited and the Cross-CSD CBF account is credited

Once the settlement is concluded, cross-CSD holding accounts are flat again.

Note: realignments do not affect any positions of In-CSD 1 or 2.

Why not trigger settlement in T2S only after securities are transferred in the ICSDs?

This solution was discarded as it does not bring tangible benefit. Moreover, it would prevent the use of many key T2S features such as:

- Auto-collateral
- Partial settlement
- Linking
- Some T2S optimisation processes

The presented solution is more cost-efficient, utilising net realignments as and when required.

How is settlement finality ensured with the concept of cross holding accounts?

Settlement takes place in T2S with immediate finality against the cross holding account opened by each CSD for Eurobonds cross CSD settlement

This is possible as positions on the Cross holding accounts:

- do not refer to transit or conditional positions
- represent true custody positions held by each CSD with the other, similar to positions held eg in domestic securities

Could additional CSDs take part in the cross-CSD settlement process as technical issuer CSD (and not investor CSD)?

With the current realignment logic of T2S, this is not possible.

To enable the cross CSD settlement flow for more than two technical issuer CSDs, would require:

- a re-design of the T2S realignment logic, so that T2S realignments are booked on counterparty CSD specific inter-CSD accounts.
- the adaptation of the design of the cross-CSD settlement process to enable “multilateral realignments”.

Do Investor CSDs have to remove existing configurations (if any) with External CSDs (ICSDs) in T2S?

Investor CSDs links to the ICSDs can co-exist with the Eurobond settlement model. The settlement flow will be steered via the Security CSD link.

Investor CSDs can decide which ISINs to settle via CBF/EF as Technical Issuer, and which ones via direct link to one of the ICSDs. For each ISIN, however, Investor CSDs have to take a decision which option to choose, as only one Technical Issuer CSD can be defined in the security CSD links.

Way Forward

Cooperation

Clearstream and Euroclear are now working on a detailed implementation plan

Communication

We will continue to provide regular statuses to AMI-SeCo members and to the market