

17 NOVEMBER 2017

CROSS-BORDER MARKET PRACTICE SUB-GROUP (XMAP) – REPORT ON CROSS-CSD ACTIVITY

Executive Summary

The purpose of this report is to provide the T2S community of stakeholders with an analysis regarding the status of the cross-CSD settlement activity in T2S, including the underlying reasons for this status.

This analysis was triggered in the XMAP, based on T2S Operations statistical information showing that the daily average volume of cross-CSD settled transactions remained marginally low after the Fourth Wave Migration, i.e. under 1% of all settlement volume in T2S.¹

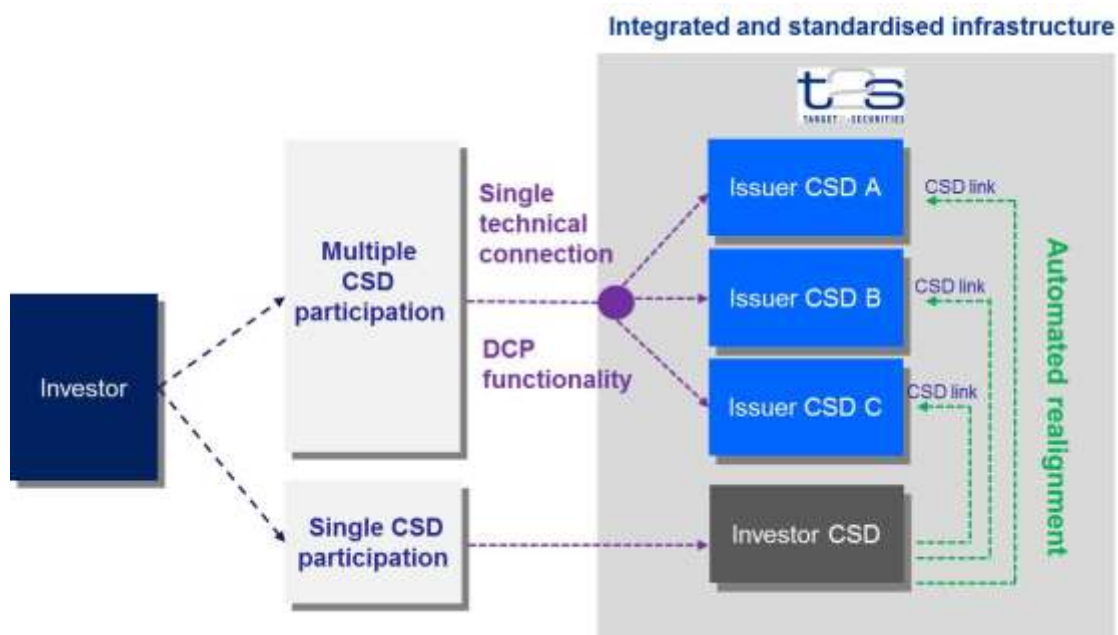
Based on the feedback collected in the XMAP and the follow-up discussions taking place in the relevant T2S (sub)-groups, some key elements can be identified:

- **T2S facilitates cross-border access to securities in multiple ways:** Investors have several possibilities to access multiple markets in T2S, whether through direct participation or through an intermediary: (i) by being participant of a CSD acting as Investor CSD; (ii) by being participant in multiple Issuer CSDs. Both operating models strongly benefit from the integrated and standardised settlement infrastructure provided by T2S. In particular the Directly Connected Party (DCP) functionality facilitates access to multiple Issuer CSDs through a single technical gateway and messaging standard, thereby reducing technical and operational efforts to connect to multiple national markets. However, while Investor CSD activity can be measured to a great extent² through cross-CSD settlement statistics, data for the cross-border settlement activity through multiple CSD participation is not readily available in T2S, as it mostly results in domestic transactions, aggregated with intra-CSD settlement statistics. Hence, cross-CSD settlement figures must be taken with caution as they just provide a partial indication of the cross-border settlement integration fostered by T2S.

Diagram 1 – Cross-border access fostered by T2S platform

¹ February daily average volume (value): 0,27% (0,34%)

² See Section 3 for more details



- Current set of T2S cross-CSD indicators need to be refined and monitored:** Cross-CSD statistics provide a good indication of the development of settlement activity through CSD links, i.e. via Investor CSDs. However, current indicators solely based on the volume of settled cross-CSD transactions between T2S CSDs do not provide a comprehensive picture of cross-CSD activity in T2S. In particular, cross-CSD settlement transactions involving a non-T2S CSD as well as intra-Investor CSD transactions³ are currently mostly aggregated with the reporting of settled intra-CSD transactions, i.e. as domestic activity. Hence, a revised set of indicators is under assessment in order to track this activity and refine the current statistical reports, whereby settled transactions between a T2S and a non-T2S CSD and settled intra-Investor CSD transactions would be reported separately in the T2S monthly Operations report.
- Market actors are adapting to the T2S landscape and its opportunities:** The focus of the T2S community has so far been largely concentrated on domestic activities, i.e. on achieving successful T2S implementation as well as migrating existing business to T2S. Compliance with the T2S harmonisation standards⁴ has also been the focus of the T2S Actors. Besides T2S, the CSDs and their participants are focusing their efforts on complying with the European regulatory initiatives launched in the past years in the post-trade area. As a result, strategic initiatives such as developing the usage of CSD links, or refactoring of operating model to centralise activities for CSD participants, have often been slowed down or put on hold.
- Remaining barriers hamper cross-border settlement integration:** Substantial harmonisation effort has been undertaken by the T2S stakeholders in order to define and monitor a set of standards covering a broad range of activities covering most of the well-known post-trade integration issues which have been the focus of the wider European agenda (see Giovannini Reports⁵). Nevertheless,

³ Settlement between 2 participants of a T2S CSD in a security issued by another CSD

⁴ https://www.ecb.europa.eu/paym/t2s/progress/pdf/ag/2017-01-31_7th_T2S_Harmonisation_Progress_Report.pdf?a088b1c2367e7f3ea1bb0448e303002b

⁵ https://ec.europa.eu/info/publications/giovannini-reports_en

important obstacles to cross-border settlement integration remain, and their resolution lies for a great part outside the competency of T2S stakeholders. Among those, remaining gaps for compliance to Corporate Action (non-T2S) market Standards and lack of harmonisation for withholding tax relief procedures have been highlighted by the XMAP members as key obstacles for Investor CSDs to provide robust asset and tax processing services. These remaining barriers are documented in the European Post-Trade Forum (EPTF) report on remaining barriers to cross-border clearing and settlement in Europe⁶. A European Commission communication on the follow up actions is expected by the end of 2017.

⁶ https://ec.europa.eu/info/sites/info/files/170515-eptf-report_en.pdf

1. Introduction

A consultation was initiated in the XMAP, based on the “T2S Operations Report” from February 2017 showing that the daily average volume of cross-CSD settled transactions remained marginally low after the Fourth T2S Wave Migration.⁷

XMAP members were asked whether the current low level of cross-CSD activity in T2S was perceived as an issue that prevents users to reap the full benefits of T2S, or whether this was a deliberate choice of market actors. In addition, they were asked to provide their views on the factors that were hampering or stimulating cross-CSD activity. A majority of members provided their input, including CSDs, custodian banks, CCP, and market associations.

In a second step, the ECB team conducted a survey with the DCPG to understand the impacts and benefits of T2S on their activities, especially in a cross-border context.

The analysis below is based on the input provided by XMAP and DCPG members, as well as the discussions taking place in the Harmonisation Steering Group (HSG) and the Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo).

2. T2S facilitates cross-border access to securities in multiple ways

On the question whether the low cross-CSD activity was perceived as an issue, several key elements were emphasised by XMAP members.

As per the guiding principles of the User Requirements Document (URD), “the overall objective of T2S is to facilitate post-trading integration by supporting core, borderless and neutral pan-European cash and securities settlement in central bank money so that CSDs can provide their customers with harmonised and commoditised settlement services in an integrated technical environment with cross-border capabilities”⁸.

While the focus has been placed on creating a level playing field and fostering competition among CSDs with a neutral pricing policy⁹, cross-CSD settlement is not an objective per se of T2S and must be seen as one of the possible means to provide cross-border access to securities.

One can argue that there are two main possibilities for investors to have multiple market reach in T2S; those are not mutually exclusive and can be achieved through direct or indirect participation:

- **Being participant of a CSD acting as Investor CSDs:** based on legal agreements between CSDs, commonly referred to as CSD links, a CSD acting as Investor CSD opens one or several omnibus account(s) with an Issuer CSD, in order to provide access to its participants to the securities issued by the Issuer CSD. There are different types of CSD links depending on whether the account is opened directly or indirectly by the Investor CSD (see Annex I for description of different types of links). Within T2S, settlement through CSD links does not always translate into cross-CSD settlement; when

⁷ February daily average volume (value): 0,27% (0,34%). Note: August 2017 daily average volume (value): 0,37% (0,25%)

⁸ URD version 5.05, Chapter 1.2 “General Principles of T2S”

⁹ Transactions on T2S are charged the same price for intra-CSD and cross-CSD settlement

intermediated via a custodian (indirect link), transactions carried over indirect links will result in intra-CSD settlement in T2S. As per current statistical reports, transactions involving a CSD external to T2S are also mainly reported with current intra-CSD settlement indicators¹⁰.

- **Being participant in multiple Issuer CSDs:** an institution, often a custodian bank, opens an account in various Issuer CSDs, and will use the account where its counterparty is located to settle the transaction, e.g. its account with Monte Titoli when buying assets for a German client/investor from an Italian counterparty. In doing so, it provides access to securities of all CSDs where it is acting as a participant. Within T2S, settlement through this operating model will mostly result in intra-CSD settlement. Hence, the cross-border settlement integration provided to investors by this model, i.e. cross border investment in a security, is not directly and easily measurable in T2S.

In the absence of concrete figures measuring cross-border activity in T2S, the ECB team decided to conduct a survey with the DCPG in order to understand whether the T2S platform combined with the DCP functionality is fostering the development of the multiple CSD participation model. A key element emphasised by respondents to the XMAP survey was that the development cost and effort to access an additional market has decreased due to the single connectivity and messaging standard provided by T2S. Most respondents observed concrete benefits of a standardised schedule of the T2S settlement day as well as the single settlement model and related functionalities, such as centralised liquidity management and monitoring, auto-collateralisation and other settlement optimisation techniques provided by the T2S platform to all T2S markets. This allows for increased operating safety and efficiency, de facto delivering a better settlement service to their clients. One respondent also reported an increase in settlement efficiency in several markets which was observed after their migration to T2S.

Several DCPs are in the process of further expanding their connections to T2S markets, e.g. one DCP member reported reaching 12 markets.

Respondents stressed that a high level of harmonisation and standardisation has been reached at the settlement level of T2S. This work has also influenced developments outside the T2S framework, e.g. regulatory requirements for the T+2 settlement cycle in the EU. However harmonisation gaps remain in other areas, as detailed further in Section 5 of this report.

One DCP member also reported that standardisation at T2S messaging level could still be improved, with some markets having in place practices requiring market-specific adaptations such as the use of special code words in T2S message fields or the need to connect to T2S in Indirectly Connected Participant (ICP) mode for some settlement flows.

3. Current set of cross-CSD indicators need to be refined and monitored

While acknowledging that it only provides a partial view of the overall cross-border settlement activity in T2S, it was widely agreed that the development of the activity through CSD links (Investor CSDs) in T2S¹¹ should be monitored over time via cross-CSD indicators.

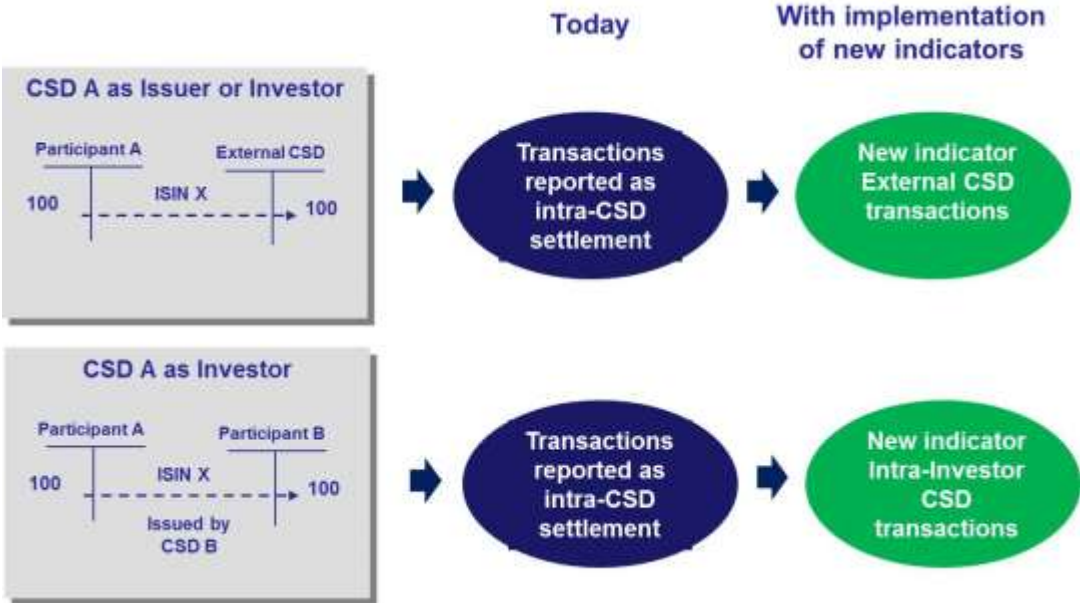
¹⁰ This is envisaged to be changed with the proposed revised set of cross-CSD indicators (External CSD transactions would be segregated from intra and cross-CSD transactions, see further information in Section 3)

However, XMAP members were of the view that the current indicators present in the T2S operations monthly report, solely based on the volume of settled cross-CSD transactions between T2S CSDs, are providing neither a comprehensive nor an accurate picture of cross-CSD activity in T2S. In particular, it was identified that cross-CSD transactions with a non-T2S CSD, i.e. External CSD transactions, as well as intra-Investor CSD transactions, which are currently mostly aggregated with the reporting of settled intra-CSD transactions, would constitute useful indicators. These new indicators will also impact existing intra and cross-CSD indicators (see detailed explanation in Section 3.1). All settlement indicators shall continue to provide a view of cross-CSD activity in T2S at an aggregated level, i.e. without further breakdown by CSD. The changes are under assessment and could be implemented in the scope of the work performed by the Data Access Task Force. The creation of these new indicators will enhance the existing intra and cross-CSD information currently available to T2S stakeholders.

As mentioned earlier in this note, the creation of new settlement indicators as described in this section will not allow the tracking of (i) cross-CSD activity through indirect CSD links, or; (ii) cross-border settlement activity through multiple CSD participation, as these mostly results in intra-CSD transactions and cannot be distinguished from purely domestic transactions.

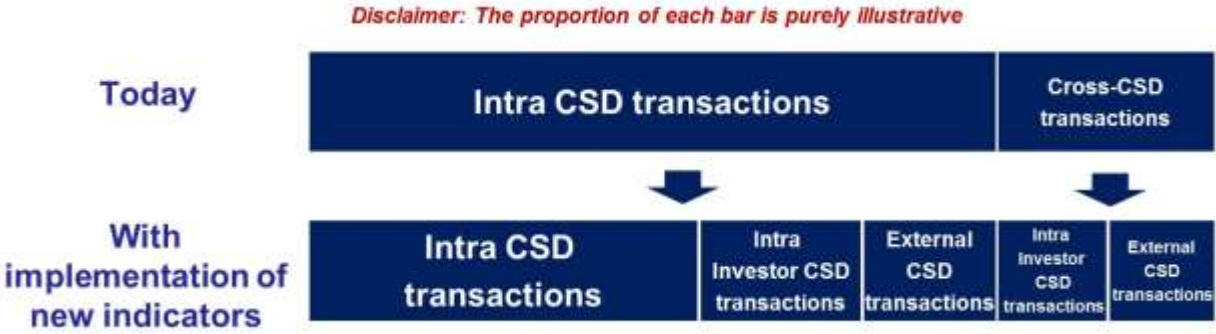
The diagrams below show the key changes brought by the proposed new indicators and the new statistical breakdown after these indicators would be implemented:

Diagram 3 – New settlement indicators



¹¹ With a caveat for indirect CSD links as described in Section 2

Diagram 4 – Impact of new settlement indicators on report breakdown structure



In addition to revised monthly settlement indicators, as cross-CSD settlement relies on the existence of adequate CSD link arrangements and appropriate technical configuration in T2S, the status of CSD links between T2S CSDs could be checked on an ad-hoc basis: the information will be drawn from an ECSDA report, planned to be released yearly, and compared to a query on T2S on the technical configuration of CSD links. Hence, this will not require any specific development on T2S.

3.1 Settlement indicators (monthly frequency)

- Updated: Intra-CSD settlement in T2S (settlement between participants of the same T2S CSD)

Currently reported in the monthly “T2S Operations Report”, this indicator provides in percentage the ratio of settled intra-CSD transactions between T2S CSDs compared to the total number of settled transactions in T2S, in daily average volume and value. Upon implementation of the new indicators, this indicator shall be updated to withdraw External CSD transactions and intra-Investor CSD transactions which were reported as intra-CSD.

- Updated: Cross-CSD settlement in T2S (settlement between T2S CSDs)

Currently reported in the monthly “T2S Operations Report”, this indicator provides in percentage the ratio of settled cross-CSD transactions between T2S CSDs compared to the total number of settled transactions in T2S, in daily average volume and value. Upon implementation of the new indicators, this indicator shall be updated to withdraw External CSD transactions and intra-Investor CSD transactions which were reported as cross-CSD.

- New: External CSD settlement in T2S (settlement between a T2S CSD and a non-T2S CSD)

In the “T2S Operations Report”, the volume of settled External CSD transactions are currently not reported separately, as they are aggregated with settled intra-CSD transactions or cross-CSD transactions, depending on where the counterpart is located.

The new indicator shall provide in percentage the ratio of settled External CSD transactions, i.e. settled transactions between a T2S CSD and a non-T2S CSD, compared to the total number of settled transactions in T2S, in daily average volume and value.

In order to build the indicator, settled External CSD transactions shall be understood as all settled transactions that contain an External CSD as delivering or receiving depository¹².

¹² External CSD is a specific party type in T2S, hence the query can be automated

For further granularity, the following breakdown information will be made available:

- External CSD transactions where the T2S CSD is acting as Issuer CSD;
- External CSD transactions where the T2S CSD is acting as Investor CSD

Note: T2S facilitates cross-CSD settlement with a non-T2S CSD via the External CSD and Conditional Securities Delivery functionalities. However, there is no check that the external depository is actually CSD, e.g. it could be a Custodian bank.

- New: Intra-Investor CSD settlement in T2S (settlement between 2 participants of a T2S CSD in a security issued by another CSD)

Intra-Investor CSD transactions will in most cases not trigger any realignment, unless the participants' accounts are mapped to different omnibus accounts at the Issuer CSD. Hence, currently the volume of settled intra-Investor CSD transactions are mostly aggregated with settled intra-CSD transactions in the "T2S Operations Report".

The new indicator shall provide in percentage the ratio of settled intra-Investor CSD transactions, i.e. transactions between two participants of a T2S CSD in a security issued by another CSD, compared to the total number of settled transactions in T2S, in daily average volume and value.

In order to build the indicator, settled intra-Investor CSD transactions shall be understood as settled transactions between the participants of the same T2S CSD in an ISIN for which the T2S CSD is not the Issuer CSD in T2S. This information will be derived by looking at the static data configuration of the Security CSD link, checking whether the T2S CSD has the link type issuer to the security.

3.2 Status of CSD links between T2S CSDs (ad-hoc basis)

- New: CSD link agreements between T2S CSDs (based on information provided by third-party)

As part of a report that it intends to publish on a yearly basis, ECSDA is compiling a matrix of CSD links between its members. This information could be used to provide an overview of the CSD link agreements between T2S CSDs.

- New: Cross-CSD links configuration in T2S (based on the definition of Security CSD Links)

This ad-hoc query shall provide in percentage the ratio of securities for which at least one Security CSD Link is defined as Investor CSD in T2S, compared to the total number of securities for which a Security CSD link is defined as Issuer CSD in T2S. The purpose is to provide an indication of the securities defined for cross-CSD settlement in T2S, to be compared with the information on CSD links agreement present in the ECSDA report (frequency to be aligned).

4. Market actors are adapting to the T2S landscape and its opportunities

A key message collected from the consultation was that considerable efforts and resources have been mobilised to ensure a smooth migration to T2S and complying with mandatory T2S standards¹³, while the priority was set the continuation of existing business which is largely concentrated on domestic activities.

In addition, major European regulatory initiatives in the post-trade area have been or are to be adopted in the near term. In particular, the CSD Regulation, which defines a new regulatory framework for CSDs in the European Union and mandates the implementation of settlement discipline measures, requires a lot of resources from CSDs and their participants. Hence, the implementation of strategic initiatives such as the development of CSD links, or refactoring of operating model for CSD participants to centralise activities in few market infrastructures have been slowed down or put on hold due to mandatory changes. Knowing that the implementation of such initiatives is a medium-term process that may require several years to be implemented, this partly explains why cross-CSD activity is currently limited. Beyond the timing aspect, respondents highlighted that the development of a CSD link is primarily the result of a business decision between CSDs and market participants: CSDs require a strong business case backed up by the needs of CSD participants, i.e. it is unlikely that smaller CSDs will develop a full network of links, while some CSD participants mentioned that, albeit the existence of adequate CSD links, direct participation in the Issuer CSD market may be favoured for a number of reasons to be analysed on an individual basis.

5. Remaining barriers hamper cross-border settlement integration

Several issues remain to be tackled to achieve further cross-border settlement integration at European level.

Substantial harmonisation effort has been made in order to define and monitor a set of standards covering a broad range of activities, largely based on the post-trade integration issues which are on the wider European agenda. Those are tracked within the Harmonisation Progress Report, and while outstanding efforts have been made by the T2S community to achieve a high level of compliance for Priority 1 activities, important gaps remain for national markets to comply with Priority 2 Standards, their resolution lying mostly outside the competency of T2S stakeholders. Non-compliance to corporate actions market standards¹⁴ and lack of harmonisation for withholding tax relief procedures have been highlighted as key obstacles for Investor CSDs to provide robust asset and tax processing services in line with the Issuer CSD offering. Those market-specific processes often require the involvement of custodian banks with local market expertise. Regarding withholding tax, it should be noted that the European Commission is working with national tax experts in order to share best practices and agree on a Code of Conduct on withholding taxes by end 2017. As noted by the Commission, this should be a practical step towards more efficient operational solutions for recovering withholding taxes¹⁵.

National disparities for ownership registration of securities have also been reported as hampering cross-border activity, due to the interdependency between registration and settlement process. Finally, it was mentioned that there are remaining restrictions at primary market and secondary market level favouring the continuation of domestic silos, as primary dealers are obliged to hold an account with the local market infrastructure in some markets, while as some trading venues and central counterparties (CCPs) restrict their members to hold and account with the national CSD.

¹⁴ <https://www.afme.eu/globalassets/downloads/briefing-notes/afme-cajwg-standards-revised-version-2012-updated-2015.pdf>

¹⁵ https://ec.europa.eu/info/publications/mid-term-review-capital-markets-union-action-plan_en

At wider European level, these remaining barriers are documented in the European Post-Trade Forum (EPTF) report on remaining barriers to cross-border clearing and settlement in Europe; barriers are categorised (structural, operational, legal, tax) and provided a main actor responsible to address them along with a recommended action plan. While some of these barriers may be overcome through coordinated action of the private sector, the dismantling of most barriers require actions at EU or national competent authority level. A European Commission communication on the follow up actions is expected by the end of 2017.

6. Conclusion

T2S is in its early years of operation, but the Eurosystem's settlement platform has brought substantial benefits to the fragmented post trade framework in Europe: through the provision of a single integrated and standardised settlement infrastructure with state of the art functionalities, it is delivering increased operating safety and efficiency to the T2S community. Thanks to the DCP functionality, T2S facilitates access to Issuer CSDs by reducing technical and operational efforts to connect to additional markets:

- (i) CSDs may act as Investor CSDs and offer a gateway to several markets to their participants. Settlement activity through this model results for most part in cross-CSD settlement that can be measured and tracked in T2S
- (ii) CSD participants may become members in multiple CSD, providing their customers with a multiple market reach. Cross-border settlement activity through this model is aggregated for most part with intra-CSD settlement statistics and cannot be accurately identified in T2S

Hence, the cross-border settlement integration brought by T2S shall not be evaluated on the basis of cross-CSD settlement statistics. Acknowledging this caveat, it is proposed to monitor more accurately the development of Investor CSD activity through CSD links by enriching the current set of cross-CSD statistics provided in the T2S Operations monthly report. Such changes may be considered in the scope of the work performed by the Data Access Task Force.

A number of harmonisation issues hamper the development of cross-border activity: among those, non-compliance to corporate actions market standards and lack of efficient withholding tax relief procedures are seen as key obstacles to the provision of services in a new market. The issue can be addressed through outsourcing the asset servicing with intermediaries that have local market expertise, which is seen as sub-optimal from an operational and cost perspective. Addressing those barriers will benefit all T2S actors and allow for more efficient links to the Issuer CSD market. In this context, the EPTF report on remaining barriers to cross-border clearing and settlement in Europe is expected to bring momentum to address some important harmonisation gaps, inter alia in the domain of withholding tax procedures.

7. Annex – Different types of CSD links

7.1 Definitions¹⁶

CSD link: A "CSD link" is an arrangement allowing a central securities depository to give its clients access to securities maintained in another CSD, without requiring its clients to be direct participants in the other CSD

Direct link: A CSD A (called the "investor CSD") has a securities account in CSD B (called the "issuer CSD").

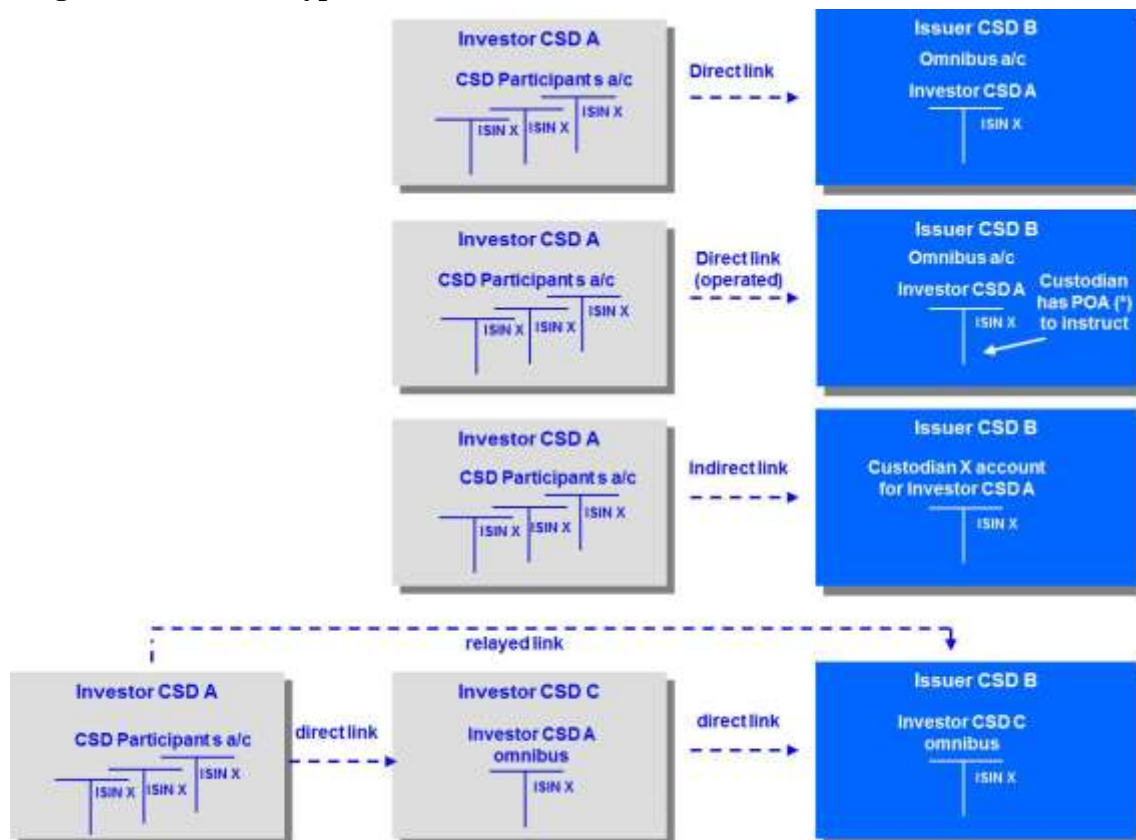
Direct link (operated): A CSD A (called the "investor CSD") has a securities account in CSD B (called the "issuer CSD"), and the daily management of the account is outsourced to a third party, typically a reputable custodian bank called the "operator".

Indirect link: A CSD A has account with an intermediary (sub-custodian) which holds securities on behalf of CSD A at CSD B. The intermediary is a direct participant in CSD B. CSD A is not.

Relayed link: A CSD A has a securities account with a CSD C (called "the middle CSD") which holds securities on behalf of CSD A at CSD B (the "issuer CSD"). CSD C is a direct participant in CSD B. CSD A is not.

7.2 Diagram

Diagram 4 – Different types of CSD links



(*) Power of Attorney

¹⁶ Based on ECSDA's "Overview of CSD links in Europe" ([link](#))