



EUROPEAN CENTRAL BANK

EUROSYSTEM

T2S Special Series

Issue No 3 | January 2014



Corporate actions in T2S

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This paper outlines how corporate actions (CAs) will be managed in the context of T2S. It describes the general set-up of CA processing in T2S and the T2S CA standards, which specify how the European market standards for processing corporate actions on flows (transaction management) will be implemented in T2S. It emphasises the need for harmonisation, not only among the CSDs but among all the relevant actors involved in corporate action processing, in order to achieve safe and efficient transaction management across all T2S markets.



Acknowledgements:

The author wishes to thank the many colleagues from the T2S Programme Office who have contributed to this paper and in particular George Kalogeropoulos, Nageswara Rao Patnala, Robert Neitzel and Anna Nuzzolo who have provided more substantive comments. Some members of the T2S Corporate Actions Sub-Group have also provided valuable comments.

The "T2S Special Series" is a series of papers aimed at informing the interested stakeholders about issues related to T2S.
It should not be reported as representing the views of the European Central Bank (ECB). The views expressed are those of the author(s) and do not necessarily reflect those of the ECB.

Introduction

T2S is a technical platform, which will provide core, borderless and neutral **settlement services** for CSDs. It will provide harmonised and commoditised delivery-versus-payment settlement in central bank money in euro (and other available currencies) for nearly all securities in Europe. By design, its focus is on settlement.

The core of T2S is settlement...

Custody/asset services such as corporate actions processing do not fall within the main remit of T2S. Nevertheless, T2S supports CSDs in their management of custody services by offering all the necessary functionalities to ensure their effective and efficient processing. This enables all CSDs to use T2S in a way that is suitable for their preferred asset servicing model, thereby supporting their services to their customers. Furthermore, as settlement becomes commoditised in T2S, asset services offered by CSDs play an increasingly important role in the competition framework of the securities post-trade industry.

... but CSDs are fully supported by T2S in their management of custody/asset services

Although T2S offers flexible tools to accommodate different asset servicing models, there is a need for harmonisation across participating CSDs and markets due to the fact that they will all use the T2S platform for settlement related to processing of corporate actions. This need is even clearer in the cross-border scenario (where securities holdings are recorded in multiple CSDs and transactions occur between participants of different CSDs). Two major CA business cases have to be considered with regard to implementing and harmonising CAs in T2S, as follows.

Harmonisation of CA processing is necessary in T2S

i) In the case of **corporate actions on “stock”**, i.e. on settled balances (e.g. payment of dividends, redemptions, stock splits, etc.), minimal change is expected in T2S in relation to the current practice of cascading delivery of proceeds (both in the form of securities and cash) via the chain of investment intermediaries to the end investors, as described in the European CA market standards¹ (see sections 2.1 and 3.1 of this paper for more information on the initiatives underway for harmonising CAs on stock). More specifically, in the case of cash proceeds, the issuer delivers the entitlements to the issuer agent; the issuer CSD then distributes the proceeds from the issuer agent to its own participants (including any investor CSDs); finally, the investor CSDs distribute to their own participants. In the case of delivery of securities proceeds, the path is similar, except that in the first step the issuer CSD creates the securities to be distributed based on the instruction of the issuer and credits them to its participants, including any investor CSDs. While this process remains the same in T2S, its execution will be greatly facilitated by the new functionalities offered by T2S and the synergies resulting from CSDs sharing a common platform.

Minimal change in processing corporate actions on stock in T2S

ii) In the case of **corporate actions on “flows”**, also known as “transaction management” (e.g. market claims or transformations), processing in the context of T2S requires further clarifications, in addition to the market CA standards provisions. The main issue stems from the fact that full information on pending transactions in the case of cross-CSD settlement can be retrieved only from T2S. In addition, servicing the settlement of corporate actions on flows involves cross-border instructions in T2S². To facilitate efficient processing of CAs on flows in these cases, compliance with the T2S CA standards is necessary. These standards, defined and endorsed by all T2S stakeholder categories via the T2S Advisory Group, are presented in sections 2.2 and 3.2 of this paper. Market and T2S CA standards are

However, efficient processing of corporate actions on flows in T2S requires harmonisation...

...which is part of the overall harmonisation agenda of T2S markets

1 The Market Standards for Corporate Actions Processing, developed by the Corporate Actions Joint Working Group (CAJWG), are available on the website of the European Banking Federation at <http://www.ebf-fbe.eu> by clicking on European Industry Standards.

2 The term “instructions” here refers to the T2S settlement function and not to the custody and CA-related information that may be exchanged outside T2S.

part of the T2S harmonisation list, i.e. the list of activities in which harmonisation is needed for ensuring safety and efficiency of cross-CSD settlement in T2S. The list is managed by the T2S Advisory Group, which publishes yearly harmonisation progress reports³, based on the contribution of its substructure, the Harmonisation Steering Group.

The exposition below is based on the updated version of the T2S CA standards as approved by the T2S Advisory Group in May 2013, which are in turn based on the revised 2012 market standards for CAs. The terminology used is consistent with the glossary of the market CA standards⁴. The paper starts by presenting the harmonisation efforts made in the CA field at the EU level and at the T2S level. It goes on to illustrate how CAs – on stock and on flows – will be processed in T2S according to the CA market standards and the T2S CA standards. Finally, it describes how progress towards compliance with those standards is monitored in T2S markets.

Plan of the paper

Harmonisation of corporate actions processing: market and T2S standards

2.1 The private sector EU initiative: the CA market standards

The launch of T2S comes at a time when a number of harmonisation initiatives are being put forward in the EU post-trading industry with the aim of establishing a level playing field for cross-border settlement in the EU (e.g. use of ISO 20022, a common European settlement cycle, a common settlement discipline regime, etc.). One such harmonisation initiative in the EU focuses on CA processing. Heterogeneous national market practices with regard to corporate actions processing were identified by the 2001 Giovannini report⁵ as one of the barriers to efficient cross-border settlement in the EU⁶. The CESAME Group⁷ (2004 to 2008), created to address the Giovannini barriers, invited the private sector – represented by the Broad Stakeholder Group⁸ – to create market standards for corporate actions processing in the EU. The aim was to streamline corporate actions processing so as to reduce costs and operational risks for market participants. The “Market Standards for Corporate Actions Processing” were drawn up by the Corporate Actions Joint Working Group (CAJWG), an industry working group with representation from issuers, market infrastructures and market participants. The standards were endorsed by the associations comprising the Broad Stakeholder Group in 2009. There was a minor revision of the standards in 2012, which was also subsequently endorsed by the associations that constitute the Broad Stakeholder Group.

Lack of CA harmonisation identified as barrier to efficient cross-border settlement

European market CA standards drawn up to harmonise market practices

3 For more information on T2S harmonisation and the T2S harmonisation progress reports you are referred to www.harmonisation.t2s.eu.

4 See footnote 1.

5 The report is available on the website of the European Commission, DG Internal Market, section Financial Markets Infrastructure here: http://ec.europa.eu/internal_market/financial-markets/index_en.htm, then by clicking on Clearing and Settlement, then Commission Communication and other documents.

6 More specifically, Giovannini barrier 3 is defined as “differences in national rules relating to corporate actions, beneficial ownership and custody”.

7 The European Commission’s Clearing and Settlement Advisory and Monitoring Expert Group.

8 The Broad Stakeholder Group includes representatives of the key European stakeholder associations and their respective members. These associations are: European Issuers, the European Central Securities Depositories Association (ECSDA), the European Banking Federation (EBF), the European Association of Co-operative Banks (EACB), the European Savings Banks Group (ESBG), the Association for Financial Markets in Europe (AFME), the Federation of European Securities Exchanges (FESE) and the European Association of CCP Clearing Houses (EACH).

2.2 Initiative of the T2S Community: the T2S CA standards

At an early stage in the T2S project, the T2S stakeholders already recognised the need for common T2S practices for processing CAs on flows (transaction management) when managing CAs in the context of T2S. Persistence of divergent practices of CSDs/markets in T2S would result in unnecessary costs and high rates of matching fails during the processing of certain types of corporate actions in the cross-border environment of T2S.

It is in this context that the T2S CA standards were agreed and endorsed by the T2S Advisory Group in 2009, based on the analysis provided by the T2S Corporate Actions Sub-Group (CASG), a group composed of experts on CA processing from CSDs, central counterparties (CCPs), and their participants⁹. Since then the Advisory Group has endorsed several minor updates of the standards (the latest of which in May 2013).

T2S CA standards were defined and endorsed by the T2S Community already in 2009

Corporate actions in T2S

A corporate action is “an action initiated upon a security by the Issuer or an Offeror”¹⁰. This action may result in: i) a change/cancellation of the underlying security (e.g. a reorganisation) and/or ii) payments of entitlements to beneficial owners of the underlying security (e.g. a dividend). These are both examples of CAs on stock, i.e. CAs on settled balances. These types of CAs will be processed in T2S according to the CA market standards.

Definition of corporate actions on stock...

On the other hand, transactions concluded or settling within the same time frame as the processing of a CA on stock may result in the need to trigger reallocation of the proceeds, also known as CA on flows or CA transaction management. These CAs are to be managed in T2S on the basis of the T2S CA standards. The processing of the two categories of CAs is described below.

...and on flows

3.1 CAs on stock

With CAs on stock, proceeds to entitled beneficial owners are processed on the basis of the balances held on securities accounts at a certain point in time (the “record date”). CAs on stock comprise distributions and reorganisations, as shown in the table below.

Types of corporate actions on stock

Corporate actions on stock	Types of corporate actions
<p>Distributions: CAs whereby the issuer of a security delivers particular proceeds to the holder of the underlying security without affecting the underlying security</p> <p>Reorganisations: CAs whereby the underlying security is replaced with proceeds</p>	<p>Cash distribution: a distribution where the proceeds consist of cash only (e.g. cash dividend, interest payment)</p> <p>Securities distribution: a distribution where the proceeds consist of securities (e.g. stock dividend, bonus issue)</p> <p>Distribution with options: a distribution with options is handled as two events: i) a distribution of intermediary securities (see securities distribution above) followed by ii) mandatory reorganisation with options (see below) (e.g. optional dividend)</p>
	<p>Mandatory reorganisation with options: a mandatory reorganisation with a choice of proceeds (e.g. conversion)</p> <p>Mandatory reorganisation: a reorganisation that mandatorily affects the underlying security (e.g. stock split, redemption)</p> <p>Voluntary reorganisation: a reorganisation in which participation is optional for the holder of the underlying security (e.g. tender offer)</p>

Types of corporate actions on stock

⁹ For more information about the CASG and the T2S CA standards, please visit the T2S website at <http://www.ecb.europa.eu/paym/t2s> and click on Governance, then Advisory Group, then Sub-Group on Corporate Actions.

¹⁰ This definition is taken from the glossary accompanying the market standards (footnote 1).

One concrete example of how to process in T2S a CA on stock (more specifically, a securities distribution) is provided in Annex 1.

Furthermore, corporate actions can be subdivided into mandatory and elective events. Mandatory corporate actions are events which apply to all beneficial owners in the same way. Conversely, for elective corporate actions the beneficial owner may express his/her preference as to whether the event will apply to him/her at all and/or in which way it should apply.

Mandatory versus elective corporate actions

The CA market standards prescribe standard rules and practices in three key areas: information flows, sequence of key dates, and operational processing.

a) Information flows

According to the market CA standards, it is the issuer (or in certain cases the offeror) who should inform the issuer CSD of the details of a CA as soon as it has been publicly announced. The information must then reach the end investor through the chain of CSDs and relevant investment intermediaries. The market standards for CAs prescribe the following path of information and/or proceeds of CAs (also known as the Christmas tree model).

Information flows in processing corporate actions:

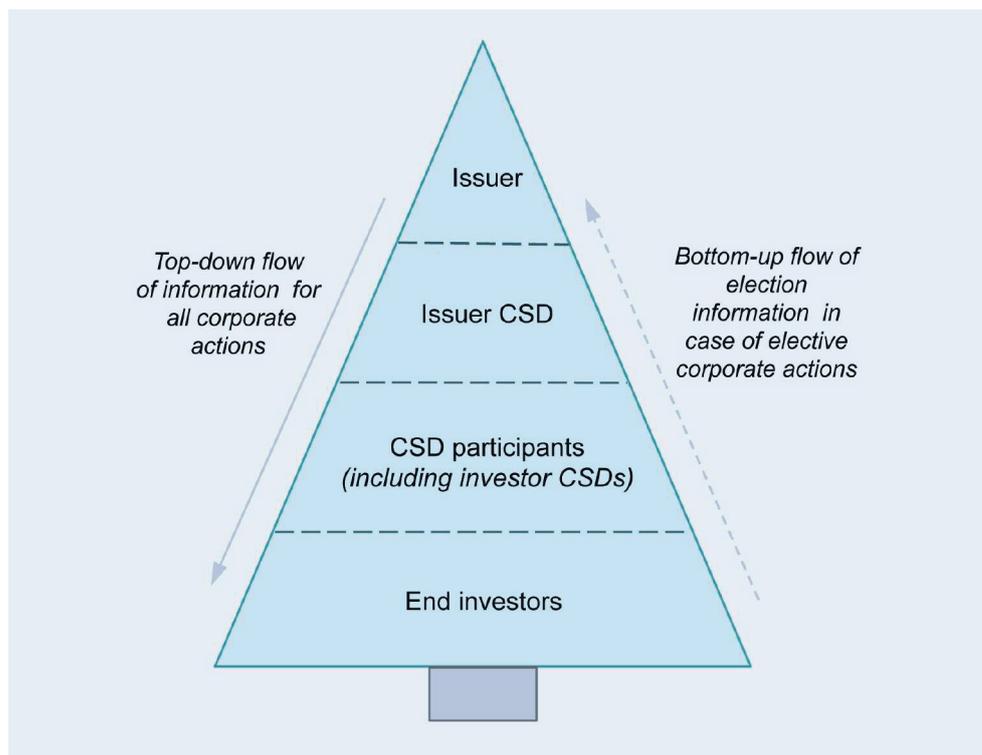


Diagram on the information flows with respect to CAs (so-called Christmas tree model)

- for mandatory CAs: only the top-down approach is followed, i.e. information is passed from the issuer down the chain of investment intermediaries to the end investors;
- for elective CAs: information is distributed to all end investors by way of a top-down approach. However, a bottom-up approach is used by the end investors to communicate their preferences up the chain of relevant investment intermediaries to the issuer.

b) Sequence of key dates

For all types of CAs the market standards prescribe a definite sequence of key dates for each type of event. The relevant dates are specified by the issuer as part of the CA announcement. The graph below describes the sequence of key dates to be followed for securities and cash distributions¹¹.

Sequence of key dates for corporate actions

Sequence of key dates:



The ex-date is the date starting from which the underlying security is traded without the benefit/right attached to it. For example, as of the ex-date, the shares traded on a regulated multilateral trading facility will no longer have the attached right to benefit from the proceeds of a CA (e.g. will be traded without the right to benefit from a dividend).

Definitions of key dates

The record date is the date at the end of which entitlements relating to a CA are to be determined based on the actual settled positions in the issuer (I)CSD's books at that moment in time. The rationale for this is to determine in an unequivocal and harmonised way the entitled party for every CA.

Finally, the payment date is the date on which the delivery of the proceeds of a CA is due.

c) Harmonised operational processing of corporate actions

The final area covered by the market standards is the harmonised operational processing of corporate actions. The market standards describe the main procedures to be followed in processing each type of corporate action. Using standardised procedures contributes significantly to increasing safety and efficiency in processing corporate actions. One example of such harmonised processing is the establishment of the rule whereby all payments related to corporate actions should be made by book entry. Another example is using the same payment mechanism for distribution of cash proceeds of CAs as the one used for the settlement of cash transactions by the issuer CSD.

Harmonised operational processing of corporate actions

3.2 Corporate actions on flows

In [corporate actions on flows](#) the proceeds of the underlying corporate action on stock are [reallocated](#) to the actual beneficial owner of securities based on an existing pending or settled transaction. These reallocations are usually carried out after payment of the proceeds to the entitled owner of the underlying CA on stock, which are then delivered automatically by the CSD to the actual beneficial owner. Only matched instructions in T2S are considered for CAs on flows.

CAs on flows within a single CSD framework are easier to manage as they are the sole responsibility of a single CSD (with no need to interact with other CSDs on pending transactions). The challenges for CA transaction management in the cross-CSD environment of T2S stem from the fact that more than one CSD may be

T2S CA standards facilitate processing of CAs on flows in the cross-CSD environment of T2S

¹¹ For the sequence of key dates to be followed for other CAs, please refer to the Market Standards for Corporate Actions Processing (see footnote 1).

involved in the transaction chain (i.e. issuer and investor CSD model), in which case T2S automatically creates necessary (DvP) realignment instructions for real-time settlement. Thus full information on pending cross-CSD transactions can only be retrieved from T2S.

Therefore, for the purposes of the T2S CA standards, a new concept has been introduced: the instruction owner CSD (IOC).¹² The IOC is defined as the CSD that provides the securities accounts on which the participant has sent a settlement instruction. By definition, the IOC is always aware of the pending instructions of its own participants in T2S, even when these participants maintain direct technical connectivity to T2S. Thus, the IOC is the same CSD for both instructions if the transaction is between two of its participants. However, there will always be two IOCs in a cross-CSD transaction in T2S.

Instruction Owner CSD (IOC) in T2S

CAs on flows comprise market claims, transformations and buyer protection mechanisms.

a) Market claims

A market claim can be defined as *the process of reallocating the proceeds of a distribution to the contractually entitled party*. This is the scenario in which the party that is contractually entitled to the proceeds of a distribution is not in possession of the underlying securities at close of business on the record date. Thus the need arises for the IOC to reallocate the proceeds to the contractually entitled party, which is done by generating a separate market claim instruction. The processing of market claims is based on the sequence of key dates of the underlying distribution as communicated by the issuer.

Market claim reallocates proceeds of a distribution to the entitled owner

A simplified example of how market claims will be managed in T2S is presented in Annex 1.

b) Transformations

A transformation is defined as *the process by which pending transactions still unsettled by the end of the record date (in the case of mandatory CAs) or the market deadline (in the case of elective CAs) are cancelled and replaced in accordance with the terms of a reorganisation*. The objective of the transformation process is to ensure that pending transactions affected by a reorganisation can continue their lifecycle without the intervention of the participants. Otherwise, in reorganisations in which the ISIN¹³ of a security is changed (e.g. as a result of stock split), the participants in a pending transaction, instructed with the old ISIN would have to amend their instructions if they want their transaction to be considered for settlement after the ISIN change. In T2S, the transformation process is managed by the IOCs/CCPs.

Transformation results in automatic conversion of unsettled transactions when the underlying security changes as a result of a reorganisation

The processing of transformations of cross-CSD transactions in T2S is presented in Annex 2.

c) Buyer protection

Buyer protection (BP) is *a process whereby a buyer who has yet to receive the underlying securities of an elective corporate action instructs the seller in order to receive the proceeds of his/her choice*. The objective of buyer protection is to ensure that the buyer in a pending transaction, who has acquired the right to elect in an (elective) reorganisation, will be able to express his/her preferred option, and thus

Buyer protection ensures that the buyer in a pending transaction will receive the proceeds of his/her choice

¹² For more on the concept of and rationale for selecting the IOC model for processing CAs on flows in T2S, please refer to the explanatory note on market claims and transformations, by going to <http://www.ecb.europa.eu/paym/t2s> and clicking on Governance/Advisory Group/Sub-group on Corporate Actions.

¹³ The International Securities Identification Number (ISIN) is the 12-character alpha-numerical code that serves for uniform identification of a security at trading and settlement.

receive the proceeds of his/her choice. The buyer can do so by instructing the seller, specifying the option(s) chosen; the seller will then pass the information on up the custody chain.

The BP instruction is not a settlement instruction but a communication between the buyer and the seller regarding the option of an election. Therefore, in all cases, BP instructions are detected, generated and communicated by the buyer and the seller outside the T2S operational framework. Standardisation of this procedure is, however, necessary from the perspective of T2S, as it would ensure that all relevant T2S actors have enough time to send any necessary settlement instructions to T2S resulting from such communications.

BP instruction is not a settlement instruction; it is communicated outside T2S but in a standardised manner

There are two options in the standards for implementing buyer protection: *automated* and *manual*. An *automated buyer protection mechanism* can be defined as a centralised, automated service provided by market infrastructure organisations. In this case the BP (or election) instruction is routed between the buyer and the seller via the chain of intermediaries and the CSDs/CCPs, which use the BP instruction to process the transformation. Only the potential resulting settlement (securities or cash) of the BP agreement, also referred to as protected entitlements, will be processed in T2S. Most T2S markets, however, have opted for the *manual buyer protection mechanism*, which relies on a bilateral agreement between the respective trading parties by means of a manual process. In this case no intervention of the market infrastructures is needed regarding the exchange of BP instructions and settlement in T2S, as these will be initiated by the parties involved in the transaction.

Automated BP service is provided by CSDs/CCPs

Manual BP service relies on direct bilateral agreement between buyer and seller

3.3 Timing of CA processing in T2S

Based on the market CA standards, the T2S Community has agreed on some fundamental principles regarding the timing of the CA processing in T2S.

They are primarily reflected in the endorsed T2S schedule of the settlement day, according to which CAs are processed at the start of the T2S settlement day. In particular, CAs on stock are to be sent to T2S before Sequence 1 of the first night-time settlement cycle, and CAs on flows before Sequence 4 of the first night-time settlement cycle¹⁴. The principle of processing corporate actions at the start of the settlement day is no different from the current market practices of the majority of national markets. In T2S this timing will have the added benefit of cash that is distributed to participants as a result of corporate actions early in the settlement day being available for the purposes of their subsequent settlement activities.

Corporate actions are processed at the beginning of the T2S settlement day

In exceptional cases where the T2S CSDs cannot adhere to this timeline, it is technically possible for them to send their CA settlement instructions at a later time, which will be processed in the next available T2S settlement sequence. However, such processing patterns will have to be monitored by the T2S Community, in particular with reference to ensuring a level playing field for clients (who will be receiving the proceeds from CAs later than other T2S markets).

¹⁴ For a detailed description of the T2S settlement day see part 1.4.4 of the T2S User Detailed Functional Specifications, available at <http://www.ecb.europa.eu/paym/t2s> and by clicking on News and Publications, then on Key Documents

Monitoring of compliance with CA standards

In the context of monitoring all T2S harmonisation standards, the Advisory Group has established a monitoring procedure to track the compliance of the T2S markets with the T2S CA standards. It is in effect an annual gap analysis, based on surveys, completed by T2S markets. The Corporate Actions Sub-Group (CASG) analyses and produces a detailed report on the findings, which is then endorsed by the Harmonisation Steering Group before publication. The results of the gap analysis are part of the annual T2S harmonisation progress reports of the Advisory Group¹⁵, and feature among the high-priority harmonisation activities, i.e. those activities that require resolution before the migration of the respective markets to T2S in order to ensure safe and efficient cross-CSD settlement.

CASG annual gap analysis measures compliance with T2S CA standards

As regards the market standards, the monitoring process for EU markets' compliance is administered by the European Market Implementation Group (E-MIG) via semi-annual surveys. The compliance status of individual markets is then ascertained at joint workshops of the E-MIG and the Corporate Actions Joint Working Group (CAJWG). The monitoring is finally reflected in regular implementation progress reports on dismantling Giovannini barrier 3 produced by the Broad Stakeholder Group¹⁶. Since compliance with the market CA standards is also part of the T2S harmonisation list, the E-MIG assessment regarding compliance of T2S markets is also included in the annual T2S harmonisation progress reports among the so-called priority 2 harmonisation activities. However, compliance with the market CA standards can be considered in practice a pre-requisite for compliance with the T2S CA standards. Thus if a market is not following the market CA standards for processing CAs on stock for certain securities, CSDs in T2S will not be able to process CAs on flows for these securities in T2S.

E-MIG measures compliance with market CA standards

Conclusion

All T2S markets must comply with the T2S CA standards (as well as the market CA standards) by the time of their migration to T2S. In addition, T2S markets should ensure that they can technically interact on the T2S platform in accordance with the T2S CA standards no later than the start of user testing for their migration wave.

All T2S markets must comply with the T2S CA standards by the time of their migration to T2S.

It is important to note that the Advisory Group monitors "T2S markets" as a whole and not the specific actors (i.e. issuers, market infrastructures, intermediaries and investors). While it appears that it is mostly the market infrastructures (CSDs and CCPs) which have to generate the respective CAs on flows in T2S, in reality all market actors need to follow the requirements of the standards in order to achieve harmonised processing of transaction management in T2S. As an example, issuers have to inform issuer CSDs sufficiently in advance and according to the CA market standards about the sequence of dates of the corporate action; intermediaries, including where applicable investor CSDs, need to pass in a timely manner relevant information between the issuer CSDs and end investors; and, finally, end investors have to notify their intermediaries on time about their preferences with respect to elective CAs.

All relevant actors from national markets need to be involved

In conclusion, as recognised by the T2S Community when defining and endorsing the T2S CA standards in 2009, only full compliance of all T2S markets with the market CA standards as well as the T2S CA standards will enable efficient and safe transactions management across the EU markets participating in T2S.

Goal is safe and efficient transaction management across T2S markets

¹⁵ See footnote 4

¹⁶ The implementation progress reports of the BSG are available on the website of the European Banking Federation at <http://www.ebf-fbe.eu> under European Industry Standards

For further reading about CAs in T2S

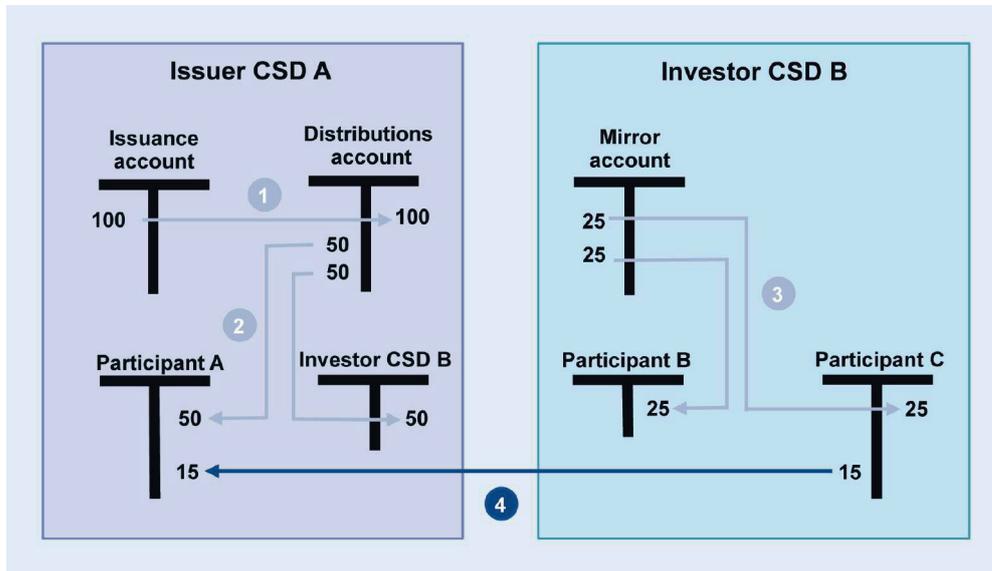
For additional, more technical, specific and up-to-date information on corporate actions processing in T2S please refer to the latest versions of: [For further reading](#)

1. T2S CA standards (for market claims, transformations and buyer protection)
<http://www.ecb.europa.eu/paym/t2s/governance/ag/html/subcompact/index.en.html>
2. Market Standards for Corporate Actions Processing
http://www.ebf-fbe.eu/index.php?page=market_standards
3. Explanatory note on market claims and transformations
<http://www.ecb.europa.eu/paym/t2s/governance/ag/html/subcompact/index.en.html>
4. Frequently asked questions on T2S CA standards
<http://www.ecb.europa.eu/paym/t2s/governance/ag/html/subcompact/index.en.html>
5. T2S Business Process Description (in particular part 5 “Corporate actions processes”)
<http://www.ecb.europa.eu/paym/t2s/about/keydocs/html/index.en.html>
6. User Detailed Functional Specifications
<http://www.ecb.europa.eu/paym/t2s/about/keydocs/html/index.en.html>

For more information about the T2S project, please visit www.t2s.eu.

To read more about the T2S post-trade harmonisation agenda, please visit www.harmonisation.t2s.eu.

Annex 1: Securities distributions and market claims in T2S: an example



Scenario description:

- There is a securities distribution event under which the holders of security with ISIN¹ A will receive one new share for each share that they currently hold.
- There is a pending transaction between participant A and participant C, under which participant C should have delivered (but did not do so by the end of the record date) 15 shares of security with ISIN A to participant A.

Securities distribution:

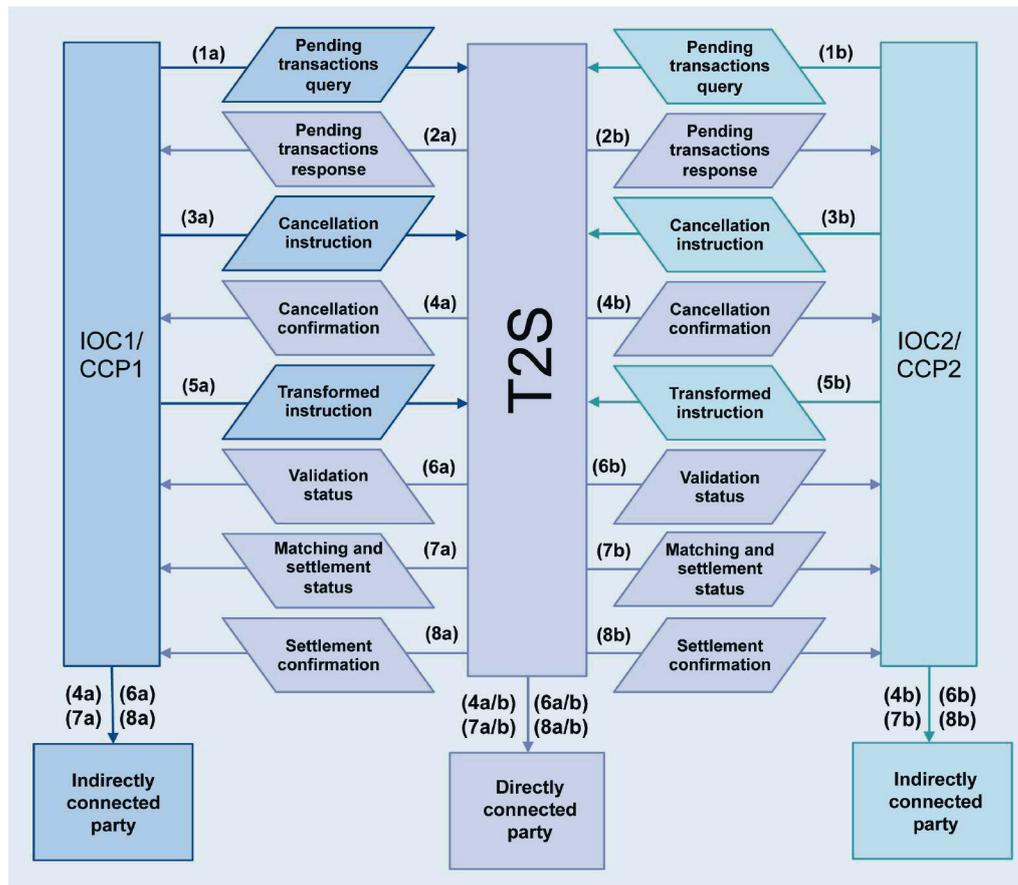
- In step 1, issuer CSD A for security with ISIN A creates the 100 shares that need to be distributed by debiting its issuance account and crediting its distributions account. This step may not be relevant for all CSDs as some of them do not make use of a distributions account.
- In step 2, the new shares are distributed to the holders of security with ISIN A as of the end of the record date, in proportion to their holdings.
- In step 3, investor CSD B re-distributes the securities received on its omnibus account with issuer CSD A to the entitled holders, in proportion to their holdings.

Market claim:

- In step 4, based on the pending transaction between participant A and participant C, issuer CSD A and investor CSD B automatically create instructions on behalf of their participants to transfer 15 shares from participant C to participant A.

¹ The International Securities Identification Number (ISIN) is the 12-character alpha-numerical code that serves for uniform identification of a security at trading and settlement.

Annex 2: Processing of transformations in cross-CSD environment



Process flow description:

- (1a,1b) – Each IOC/CCP queries T2S for all pending transactions related to the ISIN after the end of the record date/market deadline
- (2a,2b) – T2S reports the pending transactions to each querying entity
- (3a,3b) – Each IOC/CCP sends cancellation instructions to T2S on all pending transactions related to the event in T2S
- (4a,4b) – Once cancellation instructions are matched and processed in T2S, T2S sends cancellation confirmation to the relevant parties²
- (5a,5b) – Each IOC/CCP sends transformed instructions to T2S
- (6a,6b,7a,7b,8a,8b) – Once transformed instructions are validated, matched and settled in T2S, T2S sends confirmation messages to the relevant parties³

2 T2S sends validation, matching and confirmation messages: i) directly to directly connected parties (with a copy to their CSD if requested) or ii) to instructing CSDs which inform their indirectly connected parties

3 See previous footnote