T2S CORPORATE ACTIONS STANDARDS

TRANSFORMATIONS

This document sets out the market standards for the processing of transformations in the context of TARGET2-Securities (T2S).

The standards have been endorsed by the T2S Advisory Group (AG), and are addressed to all CSDs and NCBs in T2S and to the users, including CCPs.

All CSDs and their users, including the CCPs, should abide by these standards for all activity on T2S, and from the first day of such activity on T2S. CSDs and their users including CCPs, should have already implemented these standards prior to the start of T2S user testing, in accordance with the relevant synchronisation point[1] in the T2S Programme Plan.

It is also to be hoped that all European CSDs will, where applicable, abide by these standards for non-T2S settlement, so that a single harmonised European process be achieved.

The AG has mandated the Corporate Actions Subgroup (CASG) to support and monitor implementation of the standards.

---

[1] A synchronisation point is a key milestone that seeks to ensure the alignment of the readiness status of a CSD with the T2S Programme at key stages of the project by determining whether the stakeholders deliver what they expect from each other at specific points in time.

1. General comments

- The standards set out in this paper are based on a functional approach to transformations processing. The standards have been drawn up as best T2S market practices with the aim of introducing harmonisation in cross-CSD settlement in T2S.

- The CASG gap analysis aims at identifying any potential barriers (legal, regulatory, operational or fiscal) for their timely implementation (prior to T2S testing) by T2S markets.

- The T2S standards build on the Standards of the CESAME2 mandated Corporate Actions Joint Working Group (CAJWG), i.e. the *market standards for CA*. These market standards have been endorsed by all relevant industry associations (July 2009).[2] These same associations are using a revised version of the market standards (2012).

- The T2S CA standards are built on the principle that it is possible to distinguish functionally between the processing related to a corporate action on *stocks* or holdings, for example, the distribution of a cash dividend to record date (RD) holders and the processing related to a corporate action on *flows*, for example, the generation and processing of a transformation on a pending transaction.

- The T2S CA standards are valid for all transactions on T2S[3] (i.e. both for transactions between two participants of the same CSD as well as for cross-CSD settlement)

- In line with the market standards, cash payments which are the result of corporate action events should be paid via the same "payment mechanism" as any standard DVP activity. In the T2S context this means that the T2S currency cash entitlements which are the result of corporate actions should be paid via the T2S Dedicated Cash Accounts (DCAs) and not outside of the CSD/T2S environment.

- The standards take as working assumptions the T2S functionalities as reflected in the T2S User Requirements Document (URD) v5.02.[4]

---

[2] EuropeanIssuers, European Central Securities Depositories Association (ECSDA), European Association of Clearing Houses (EACH), Federation of European Securities Exchanges (FESE), European Banking Federation (EBF), European Association of Cooperative Banks (EACB), European Savings Banks Group (ESBG), European Securities Services Forum (ESSF/SIFMA)

[3] In line with CAJWG standards, T2S CA standards should apply to all securities used for direct investments (equities, fixed income instruments) deposited and settled in Book Entry form with an (I)CSD in Europe; investment funds listed and traded on a regulated trading venue should be processed, where possible, in accordance with the applicable standards.

[4] http://www.ecb.europa.eu/paym/t2s/pdf/URD_v5_02.pdf?9ec374be60248c6f40739664402afd66

Definition

As per the market standards for CA, a transformation is defined as the process by which pending transactions still unsettled by the end of RD/market deadline, are cancelled and replaced in accordance with the terms of the reorganisation.

2. Scope of Transformation standards

As per the market standards for CA the following event types trigger the transformation of a pending transaction:

- Mandatory reorganisations;

- Mandatory reorganisations with options (with or without a valid buyer election) as a single event or as the second part of the distribution event with options;

- Voluntary reorganisations where a valid buyer protection has been agreed.

Implementation for CSDs in T2S

It is crucial that the same transformation process applies to all pending transactions in T2S by respecting the principle that per ISIN and per EVENT, one unique process is applied across all CSDs in T2S. The transformation in T2S will be processed in two technical steps: first the cancellation of the underlying transaction, followed by the replacement of one or several new transformed transactions (or instructions, which will require matching, cf. 4.5).

Underlying transaction

The transformation concerns a pending (open or non-settled) transaction in T2S i.e.: the relevant instructions are matched irrespective of the location of the matching (in or outside T2S)[5].

As a reminder, unmatched instructions which are out of scope of transformations, are maintained in T2S for 20 T2S opening days and afterwards they are cancelled. No instructions can be matched and transformed after that deadline.

Applicable transactions

The scope of application of these standards covers in principle all securities transactions. These are among others, settlement of trades on the "spot (or cash) market transactions" *(transactions related to a securities trade, either against payment or not)* as well as settlement related to stock loans, portfolio/assets transfers, repos, etc. The Group recognised the business need for counterparties in the underlying transaction to be able to bilaterally "opt-out" from the transformations procedure on a transaction by transaction base, where relevant.
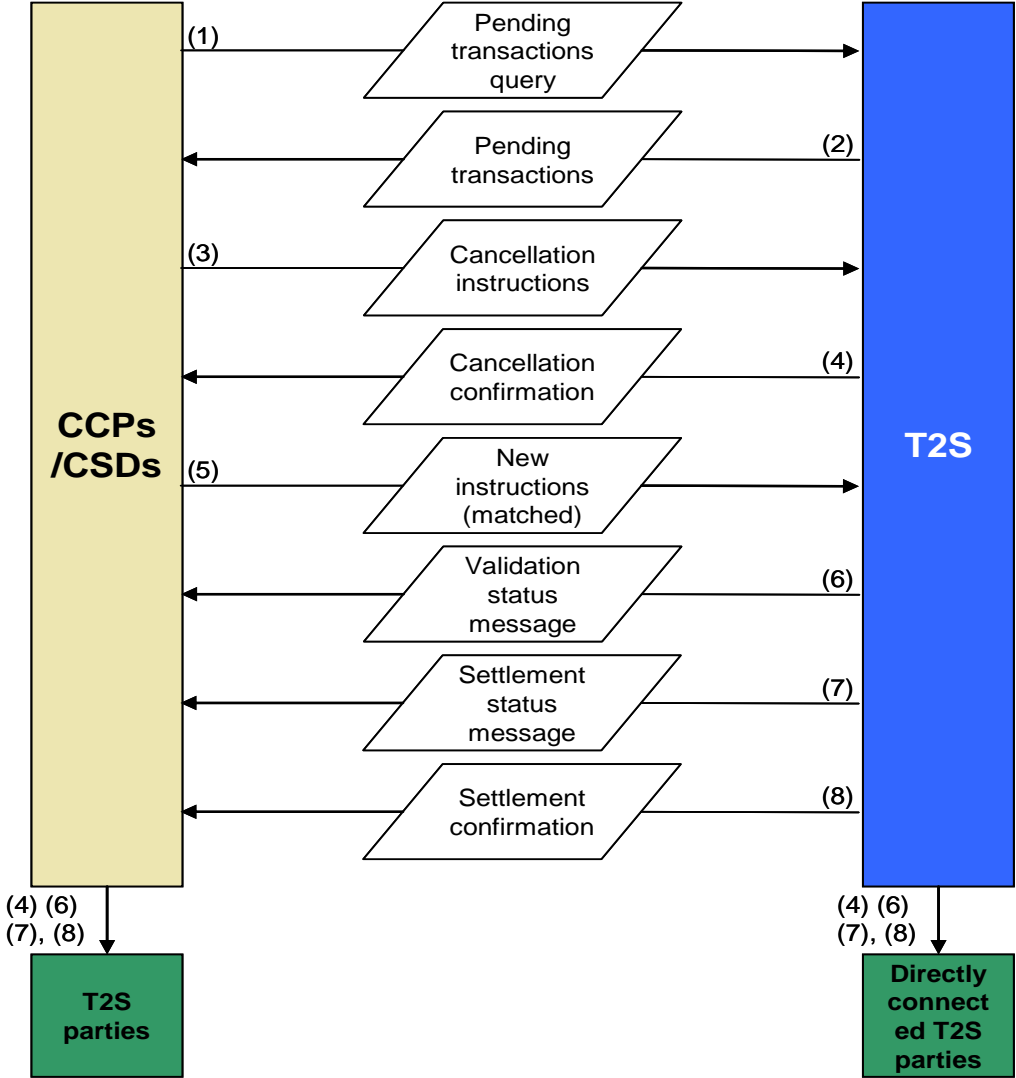
These standards cover all financial instruments eligible for settlement in T2S.

---

[5] For the distinction between "instruction" and "transaction": a typical OTC DvP transaction involves two settlement instructions sent by the counterparts to the CSD. Once the instructions are matched, they become one transaction which is then proposed for settlement on settlement date.

3. CSDs/CCPs interaction with T2S

3.1 Only one CCP/CSD is involved

```
CCPs/CSDs
  (1) ──→ Pending transactions query ──→ T2S
  (2) ←── Pending transactions
  (3) ──→ Cancellation instructions ──→
  (4) ←── Cancellation confirmation
  (5) ──→ New instructions (matched) ──→
  (6) ←── Validation status message
  (7) ←── Settlement status message
  (8) ←── Settlement confirmation

(4) (6) (7), (8) → T2S parties
(4) (6) (7), (8) → Directly connected T2S parties
```

(1): based on the details of the announcement, the CCP/ICSDs querries all pending transactions related to the ISIN by end of record date or by end of market deadline. The query should be done on stable pending transactions i.e.: between the End Of Day (EOD) settlement activity, and prior to the opening of the T2S settlement platform (first night cycle in T2S).

(2): T2S reports the pending transactions to the querying entity.

(3): The CCP/CSD cancels all pending transactions related to the event in T2S
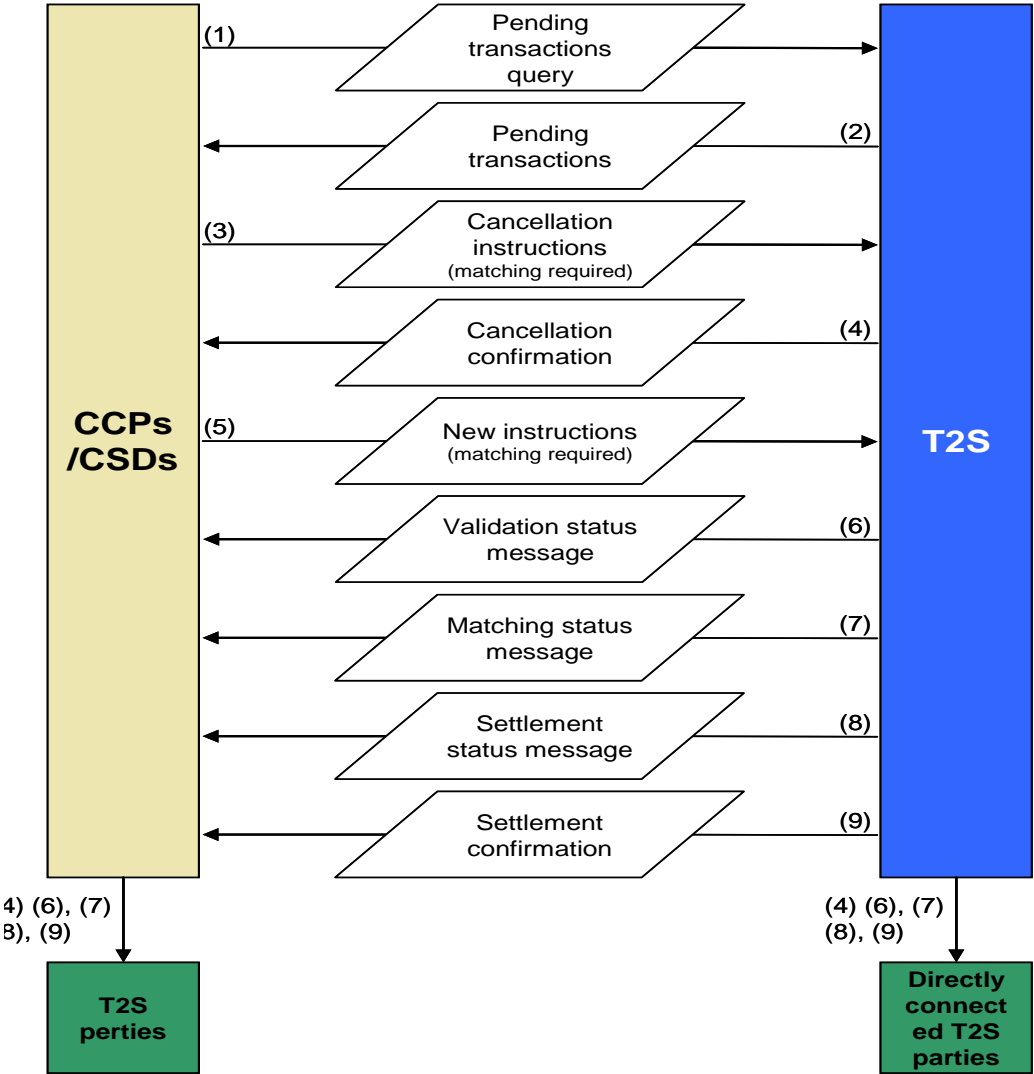
(4) & (6):
- Impacted CCPs/CSDs receive the appropriate messages related to the cancellation and to the creation of the new instruction
- Impacted CSD/CCP participants receive the appropriate messages (cancellation + new instructions) via T2S if they are directly connected T2S parties, or via their CCPs/CSDs

(5): The CCPs/CSDs re-instruct T2S. Both (3) and (5) steps should be done sequentially in T2S immediately after the query. If a valid buyer protection is attached to the pending transaction, the transformation event must be completed in accordance with the buyer protection process.

 (6), (7): T2S process these new instructions like regular settlement instructions (validation process…settlement process).

(8): T2S sends settlement confirmation to instructing CCPs/CSDs and directly connected T2S parties.

3.2 Two CCPs/CSDs are involved

CCPs/CSDs

(1) Pending transactions query →

(2) ← Pending transactions

(3) Cancellation instructions (matching required) →

(4) ← Cancellation confirmation

(5) New instructions (matching required) →

(6) ← Validation status message

(7) ← Matching status message

(8) ← Settlement status message

(9) ← Settlement confirmation

T2S

(4) (6), (7), (8), (9) → **T2S parties**

(4) (6), (7) (8), (9) → **Directly connected T2S parties**

(1): based on the details of the announcement, the CCPs/CSDs query all pending transactions related to the ISIN by end of record date or by end of market deadline. The query should be done on stable pending transactions i.e.: between the End Of Day (EOD) settlement activity, and prior to the opening of the T2S settlement platform (first night cycle in T2S).

(2): T2S reports the pending transactions to the querying entity.

(3): The CCPs/Investor CSDs cancel all pending transactions related to the event in T2S

(4) & (6):
- Impacted CCPs/CSDs receive the appropriate messages related to the cancellation and to the creation of the new instruction
- Impacted participants receive the appropriate messages (cancellation + new instruction) via T2S if they are directly connected T2S parties, or via their CCPs/CSDs

(5): CSDs/CSDs re-instruct T2S. Both (3) and (5) steps require a bilateral matching. These steps should be done sequentially in T2S immediately after the query. If a valid buyer protection is attached to the pending transaction, the transformation event must be completed in accordance with the buyer protection process.

(6), (7), (8): T2S process these new instructions like regular settlement transactions (validation process, matching process…settlement process).

(9): T2S sends settlement confirmation to instructing CCPs/CSDs and directly connected T2S parties.

6

4. Transformations standards

Sub-process	Standard number	Topic / Question	T2S Standard	Explanatory Comment
Transformation Management	**1**	*Who will manage the transformation on pending T2S transactions?*	CSDs and CCPs	***At the CCP level:*** When agreed with the Instruction Owner CSDs (IOCs)[6] the CCP itself can manage the transformation for CCP transactions via a Power Of Attorney (POA) on the participants' accounts by use of the T2S cancellation and replacement mechanisms. ***At the CSD level (both CSDs of the buyer and the seller are connected to T2S):*** The IOCs will manage the transformation: 1. When the underlying transaction impacts two accounts in the same IOC. The cancellation and replacement will be managed and instructed in T2S by the IOC itself. 2. In a cross-CSD transaction, each IOC has to cancel the instruction (bilateral cancellation process in T2S) and to send to T2S the new transformed instruction for matching. ***When the transaction is cross-border (one CSD is in T2S and the other is outside T2S):*** The T2S connected IOCs/CCP will manage the transformation. CSDs which are not connected to T2S cannot instruct T2S.

---

[6] ***Instruction Owner CSD (IOC):*** is defined as the CSD that provides the securities accounts on which the participant has sent an underlying instruction. The definition also includes the case where the CSD participant maintains a direct technical connectivity to T2S. There are always two IOCs per transaction, the IOC can be the same CSD if the transaction is between two of its participants. This role can be assigned either to the Issuer CSD or the Investor CSD, depending on the settlement chain scenario as described below. By definition, the IOC is always aware of the pending instructions of its own participants

Sub-process	Standard number	Topic / Question	T2S Standard	Explanatory Comment
	2	*When will the transformation take place in T2S?*	The transformation process shall take place by end of record date or market deadline and during the rest of the transformation detection period (i.e. 20 T2S opening days after the record date/market deadline).	At the end of record date, transformed settlement instructions should be sent to T2S between: • the T2S end of day time settlement activity (indicative T2S time at 18:00 CET) and • Sequence 4 of the first night-time settlement cycle, in which all instructions on CA on flows are attempted for settlement for the first time[7]. During the rest of the transformation detection period, transformed instructions should be sent to T2S as soon as possible after they are matched and without undue delay. The transformation detection process should be performed at least once per day.

---

[7] *See T2S UDFS v.1.2.1, Section 1.4.4 Detailed description of the settlement day*

Sub-process	Standard number	Topic / Question	T2S Standard	Explanatory Comment
	3	*Will some transactions be excluded from the transformations?*	As a general principle, transformations will be applicable to all eligible transactions. However, counterparties in the underlying transaction may choose to "opt-out" if they want to deviate from the standard transformation procedures.	The opt-out will be done on the underlying transaction when this is instructed or amended in T2S, i.e. before the transformation takes place. The opt-out will be instructed by both parties by using an opt-out ISO transaction condition indicator[8]. This needs to be an *additional* matching field in T2S (if one counterparty includes it then it becomes a mandatory matching field that needs to be matched against the other counterparty's instruction). Instructions with matched opt-out fields should be cancelled by the IOCs in T2S but not transformed. Matching is required and, if included, the opt-out indicator should not be matched to blank (i.e. indicator not included) in T2S Possible Scenarios:

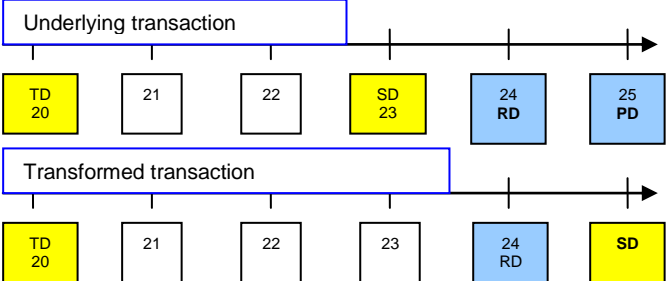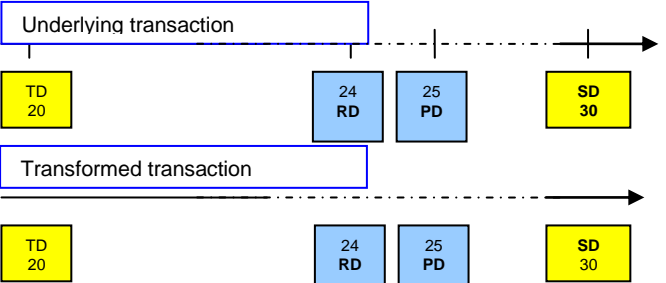| 1st instruction	2nd instruction	T2S system action
blank	blank	matching
opt-out	blank	no matching
opt-out	opt-out	matching
blank	opt-out	no matching

---

[8] Transaction condition indicator: Specifies the conditions under which the transaction is to be settled. The field tag in sese.023 is Document/SctiesSttlmTxInstr/SttlmParams/SttlmTxCond/Cd. Value NOMC represents Opt-out. When opt-out is not required for the transaction the indicator should not be sent in the ISO message.

Sub-process	Standard number	Topic / Question	T2S Standard	Explanatory Comment
Transformation Generation	**4**	*How will the transformation be triggered? What will be the formats and reference fields?*	IOCs/CCPs managing the transformation will use the ISO20022 format as specified in the T2S URD. IOCs/CCPs will include in the transformation settlement instructions the appropriate references so that their own participants can identify and process the transformation satisfactorily in their own books. The minimum references required include: T2S reference of the underlying transaction, the "TRAN" ISO settlement transaction condition code[9], and CSD corporate action event reference[10]. From a T2S system specification perspective, these references are only for information purposes (for CSDs/CCPs participants) as these references do not trigger any specific functionality in T2S (other than standard settlement processing).	A CSD participant should be able to identify that a particular pending transaction is the result of a transformation; for example, a CSD participant may want to search all pending transactions to find all transformations; in such a perspective. In order to cater for this need, the ISO standards body agreed to add specific settlement transaction condition code (TRAN) so as to identify transformations.

---

[9] Settlement transaction condition code: it specifies the condition code referenced in the settlement instruction. Field tag in sese.023 is Document/SctiesSttlmTxInstr/SttlmParams/SttlmTxCond/Cd, with value "TRAN" (Transformation).

[10] The recent harmonisation initiative of the Securities Market Practice Group (SPMG) for the introduction of standardised CA reference codes in the EU should facilitate further the question of choice of the appropriate CA reference code to be used when instructing T2S.

Sub-process	Standard number	Topic / Question	T2S Standard	Explanatory Comment
	5	*Do the transformation instructions require matching in T2S? - When the transaction is done within one CSD/CCP*	CSD/CCP may match locally the new instructions related to the transformation and send them to T2S as already matched for settlement or send them as separate instructions for matching in T2S.	
	6	*Do the transformation of cross-CSD instructions require matching in T2S?*	Both IOCs/CCPs should send new instructions to T2S, for matching purposes.	Matching is relevant and applicable to all kinds of transformations, i.e. securities (Free of payment, and/or DVP) and cash outturns (payment free of delivery - PFOD). These matching processes are already covered in the T2S URD. In all cases, matching will be completed within T2S (even if the transaction implies one participant outside T2S).

Sub-process	Standard number	Topic / Question	T2S Standard	Explanatory Comment
Lifecycle of a Transformation	**7**	*What will be the settlement date of the new transformed instructions in T2S?*	The earliest settlement date (SD) of the new transaction(s) should be the latest between the payment date (PD) of the entitlement and the SD of the underlying transaction.	**Example 1:** - Underlying transaction: Trade date: 20 June, SD: 23 June - Detail of the Reorganisation: RD: 24 June and PD: 25 June - MAX between (23, 25) is 25 - New replacement transaction: Trade date: 20 June and SD: 25 June **Example 2** - Underlying transaction: Trade date: 20 June, SD: 30 June - Detail of the Reorganisation: RD: 24 June and PD: 25 June - Max between (30 , 25) is 30 - New replacement transaction: Trade date: 20 June and SD: 30 June

12

Sub-process	Standard number	Topic / Question	T2S Standard	Explanatory Comment
	8	*Transformation into new security with a single outturn*	The transformed instructions should retain the same characteristics (trade date, cash consideration) as those of the underlying instruction with the possible exception of the three following fields in respect with the terms of the reorganisation: • The quantity of securities • The ISIN • The settlement date (SD)	

Sub-process	Standard number	Topic / Question	T2S Standard	Explanatory Comment
	9	*Transformation into two or more new securities (multiple outturns)*	The settlement amount of the transformed (new) instructions should be proportional to the ratio of each outturn securities. In case of multiple outturns (i.e. multiple new ISINs being generated by the transformation process), the new instructions should not be settled as linked settlement in T2S. The transformed instructions should retain the same characteristics (trade date) as those of the underlying transaction with the possible exception of the four following fields in respect with the terms of the reorganisation: • The quantity of securities • The cash consideration should be allocated to the transformed transactions according to the rates provided by the issuer • The ISIN • The settlement date (SD)	To calculate the settlement amount of each transformed instruction, determine first the percentage of each outturn security out of the total number of outturn securities. Apply the same percentage on the original settlement amount, to arrive at the settlement amount for transaction an outturn ISIN. Example: Consider a pending instruction #1 for 100 ISIN A against €150. Consider a reorganisation CA, where 1 ISIN A is replaced by 2 ISIN B and 3 ISIN C. Step 1: Sum the number of outturn securities, i.e. 2+3=5. Step 2: Determine the percentage of each outturn ISIN out of the total number of outturns, i.e. 2/5 for ISIN B and 3/5 for ISIN C. Step 3: Split the original settlement amount in the same percentage calculated in step 2, i.e. €150*2/5 = €60 for transformed instruction on ISIN B and €150*3/5 = €90 for transformed instruction on ISIN C. Step 4: Create the 2 transformed instructions, i.e. instruction #2: 200 ISIN B against €60 instruction #3: 300 ISIN C against €90

Sub-process	Standard number	Topic / Question	T2S Standard	Explanatory Comment
	10	*Transformation into cash*	The cash transfer(s) settlement instructions should retain the same characteristics as those of the underlying transaction. If the instruction of the underlying transaction was against payment, two new instructions, in opposite directions, will be created; one for the settlement amount and one for the cash outturn. The transfers should not be linked. If the instruction of the underlying transaction was free of payment, only one transfer, for the cash outturn, will be created	Example related to a final redemption of ISIN A at 100% of the nominal Initial transaction: DVP1: seller X has to deliver 3,000,000 ISIN A to buyer Y against €3,005,000 After the cancellation and transformation each CSD/CCP creates 2 PFOD instructions that will match in T2S. The resulting new instructions will be: PFOD1: X has to deliver 0 ISIN A to Y against €3,005,000 PFOD2: Y has to deliver 0 ISIN A to X against €3,000,000

Sub-process	Standard number	Topic / Question	T2S Standard	Explanatory Comment
	11	*Treatment of fractions in securities outturns*	When the transformation results in outturn securities fractions, the number of securities should be rounded down to the nearest whole number. Furthermore: a) In case the issuer does not compensate investors for the remaining securities fractions, then no further action is required by the IOCs b) In case the issuer compensates investors for remaining securities fractions with cash, then an additional PFOD transaction should be generated by the IOCs	**Background Info:** In principle the number of outturn securities in the transformed instruction should always be rounded down to the nearest whole number whether or not the issuer compensates for resulting fractions of securities. In case the issuer has announced a reference price for compensating securities fractions in cash, in the reorganisation CA announcement, then the IOC should create an additional PFOD transaction crediting the cash corresponding to the fractions. The additional transaction should be with the same characteristics as the underlying transaction. In this case the quantities of the securities are set to zero. The cash amount equals the number of residual positions multiplied by the "compensation price" as announced by the issuer. Two scenarios can be contemplated with regard to securities outturns which result in generating fractions: *Scenario 1: According to the issuer's announcement, the issuer **does not compensate** for resulting fractions in securities.* Example Details of the announcement of the reorganization are: 3 ISIN A are replaced by 1 ISIN B with no compensation of the resulting fractions. DVP1: X has to deliver 20 ISIN A to Y against EUR 100 DVP1 is still pending by the end of RD of the reorganisation event. The settlement quantity in the transformed instruction would be calculated as follows: 20*1/3=6.6666…, rounded down to 6. The replacement process will be: DVP1 is cancelled by end of RD and replaced by: DVP2: X has to deliver 6 ISIN B to Y against EUR 100 *Scenario 2: According to the issuer's announcement, the issuer **compensates** the resulting fractions in cash.* Example (same as above but with compensation of fractions) Details of the announcement of the reorganization are: 3 ISIN A are replaced by 1 ISIN B and each ISIN B is compensated by EUR 9.00 DVP1: X has to deliver 20 ISIN A to Y against EUR 100 DVP1 is still pending by the end of RD of the reorganisation event. The settlement quantity in the transformed instruction would be calculated as follows: 20*1/3=6.6666…, rounded down to 6. The remaining fractional part 0.6666 of ISIN B is compensated by 9.00*0.6666= EUR6.00. The replacement process will be: DVP1 is cancelled and replaced by 2 new transactions: DVP2: X has to deliver 6 ISIN B to Y against EUR 100 PFOD3: X has to pay EUR6.00 to Y with regards to ISIN B

16

Sub-process	Standard number	Topic / Question	T2S Standard	Explanatory Comment
	12	*With which status is the new transformed transaction instructed?*	The transformed transaction should be instructed with the same status as the underlying transaction.	**Rationale:** In an omnibus environment, deliveries are frozen/not released for settlement by the account servicer until the underlying client has the requisite holding. This is done to prevent one client from using another client's securities. In case of a market claim to deliver securities the omnibus account will most probably have enough securities to settle the delivery, but the underlying client may not - thus necessitating the delivery to be frozen/not released for settlement until the requisite holding has been verified.
	13	*Are there other specific fields from the original transaction that should be replicated in the new transformed transaction?*	The new transformed transaction should ensure that the following indicators are correctly replicated: • Partialling indicator of the original transaction instruction[11] • Ex/cum indicator • Opt-out indicator related to the market claim creation	The life cycle of the transformed transaction should continue according to the several indicators stipulated in the original transaction.

---

[11] The field tag in sese.023 is Document/SctiesSttlmTxInstr/SttlmParams/PrtlSttlmInd