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# Penalty Mechanism

T2S CSDR Task Force

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## **Executive summary:**

This document aims at gathering the clarifications and/or working assumptions that are deemed necessary for the definition of the Penalty Mechanism in the T2S platform and related User Requirements according to the discussions held in the ad-hoc CSDR Task Force established by the T2S Steering level.

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## 1. Introduction

The T2S CSDR Task Force was established by the T2S Steering level, in order to identify the necessary changes to the T2S platform, with the objective to facilitate T2S CSDs' timely compliance to the CSD Regulation (CSDR).

Based on the Article 19 of the Draft RTS on Settlement Discipline, according to which CSDs that use a common settlement infrastructure shall "jointly manage the calculation, application, collection and redistribution of cash penalties", it was decided at T2S Steering Level that T2S would offer a settlement penalty calculation mechanism.

This document aims at gathering the clarifications and/or working assumptions that are deemed necessary for the definition of the penalty mechanism and related T2S User Requirements according to the discussions held in the CSDR Task Force.

All the clarifications and/or working assumptions described will have to be analysed in detail during the CR assessment in order to see whether they are technically feasible or they require a significant impact in the T2S platform that would justify a different approach. Each of the clarifications and/or working assumptions is listed as "**C-X**" (for example C-3 is the clarification about the use of the T2S calendar in the Penalty mechanism). When these working assumptions are linked to questions pending clarification from Regulators, the reference to those questions has been added<sup>1</sup>.

### 1.1 Out of scope

This document is not intended to cover all aspects of the settlement penalty regime nor to provide CSDs and market participants with an exhaustive view of their obligations vis-à-vis CSDR in this context; it focusses on the clarifications and/or working assumptions that are deemed necessary for the definition of the T2S penalty mechanism. In particular, the following processes are not covered in substance:

- Derivation of the list of financial instruments subject to penalties and feed of a "golden data source"
- Reconciliation mechanisms and principles when 2 penalty systems calculate a different cash penalty for a transaction (e.g. in case of transaction with an External CSD subject to CSDR)
- Monthly reconciliation, billing, collection and redistribution of cash penalties
- Interaction with the buy-in process
- Reporting to competent authorities

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<sup>1</sup> Document: "List of CSDR Items for Clarification"

## 2. Definitions

In line with the principles of the CSDR, we can consider two types of Cash Penalties:

- **Settlement Fail Penalties:** For settlement instructions that i) are matched before the relevant cut-off of a given business day and that ii) having reached their Intended Settlement Date (ISD), fail to settle on that business day.

These penalties are calculated each business day the settlement fails in T2S (i.e. for each and every business day an instruction keeps failing in T2S a new penalty will be computed).

- **Late Matching Fail Penalties:** For settlement instructions that are matched in T2S after the relevant cut-off of their Intended Settlement Date (ISD).

These penalties are calculated only once (i.e. on the business day when they are matched) but do consider all the previous days where the instruction failed to settle due to the late matching i.e. due to the late sending of the instruction.

Note that a settlement instruction may be subject to Settlement Fail Penalties, to Late Matching Fail Penalties, or to both. The latter case will occur when, for example, a settlement instruction is sent and matched in T2S after its ISD (e.g. at the Start of Day of "ISD+1") and then fails to settle on that day (i.e. on "ISD+1") because of lack of securities.

The following examples illustrate different scenarios and the cash penalties applying in each of them:

### *Example 1:*

A settlement instruction enters and is matched in T2S on its ISD and before the relevant cut-off.

- No Late Matching Fail Penalty applies.
- In case the instruction fails to settle on ISD, then a Settlement Fail Penalty will apply.
- New Settlement Fail Penalties will apply for each further business day the instruction fails to settle in T2S. E.g.: in case the instruction fails again on "ISD+1", then a new Settlement Fail Penalty will be computed for "ISD+1".

### *Example 2:*

A settlement instruction enters and is matched in T2S on its ISD but after the relevant cut-off (i.e. it won't be possible to settle it on ISD).

- A Late Matching Fail Penalty applies because the instruction was matched after the ISD's cut-off and hence could not settle on its ISD due to the late matching.
- In case the instruction fails to settle on the following business day, "ISD+1", then a Settlement Fail Penalty will apply.
- New Settlement Fail Penalties will apply for each further business day the instruction fails to settle in T2S. E.g.: in case the instruction fails again on "ISD+2", then a new Settlement Fail Penalty will be computed for "ISD+2".

*Example 3:*

A settlement instruction enters and is matched in T2S two business days after its ISD (i.e. on Day="ISD+2") but before the relevant cut-off for "ISD+2" (i.e. it would be still possible to settle it on "ISD+2").

- A Late Matching Fail Penalty applies because the instruction was matched after the ISD's cut-off and hence could not settle on its ISD due to the late matching. The Late Matching Fail Penalty has to consider that the instruction did not settle on ISD and on "ISD+1" (the Late Matching Fail Penalty does not have to consider "ISD+2" because it can still settle on "ISD+2").
- In case the instruction fails to settle on "ISD+2", then a Settlement Fail Penalty will apply in addition to the Late Matching Fail Penalty.
- New Settlement Fail Penalties will apply for each further business day the instruction fails to settle in T2S. E.g.: in case the instruction fails again on "ISD+3", then a new Settlement Fail Penalty will be computed for "ISD+3".

*Example 4:*

A settlement instruction enters and is matched in T2S two business days after its ISD (i.e. on Day="ISD+2") and after the relevant cut-off for "ISD+2" (i.e. it won't be possible to settle it on "ISD+2").

- A Late Matching Fail Penalty applies because the instruction was matched after the ISD's cut-off and hence could not settle on its ISD due to the late matching. The Late Matching Fail Penalty will have to consider that the instruction did not settle on ISD, on "ISD+1" and on "ISD+2".
- In case the instruction fails to settle on the following business day, "ISD+3", then a Settlement Fail Penalty will apply.
- New Settlement Fail Penalties will apply for each further business day the instruction fails to settle in T2S. E.g.: in case the instruction fails again on "ISD+4", then a new Settlement Fail Penalty will be computed for "ISD+4".

### **3. General Principles**

#### **3.1 Use of T2S calendar (C-1)**

*See also "List of CSDR Items for Clarification", Item 15 "Calendar to be applied to identify business days for penalty calculation".*

Business days for the purpose of cash penalties shall be understood as T2S Settlement Days, i.e. days for which an instruction can settle in T2S.

In case of against payment instructions, T2S Settlement Days are business days that are not closing days for the relevant currency of the cash contained in an instruction to be settled in T2S.

In case of Free of Payment instructions, T2S Settlement Days relate to those business days that are not common T2S closing days for all currencies (i.e. as described in the T2S UDFS: All Saturdays, Sundays and other specific days such as 25, 26 December and 1 January are common closing days for all currencies).

In case of a transaction involving settlement outside T2S, the common opening days of the respective calendars must be used, i.e. a penalty shall not be calculated for the days where a transaction cannot settle. As a consequence, manual corrections of the penalties computed by T2S (i.e. reduce the amount to zero of the penalty calculated by T2S) may need to be applied ex-post in case a transaction does not settle due to closing of the external settlement system (e.g. Issuer CSD or payment system). The manual correction will be performed in T2S through the function "Removal of an existing Penalty by a CSD" described in section 8.1.

#### **3.2 Timing for computation and reporting of penalties (C-2)**

The calculation and the reporting of the penalties have to be performed on daily basis. Nevertheless, these two activities do not have to be done in a period of high traffic in T2S (e.g. no need to perform them neither at End of Day nor at the Start of Day of the following business day).

The calculation and the reporting of the penalties for a business day can be performed after the end of this business day (for example at the end of the T2S Night-time settlement of the following business day<sup>2</sup>).

This approach is also beneficial for the entities responsible for providing each business day the reference prices used in the calculation of the penalties, which consequently have more time to provide the reference data compared with the situation where the prices will have to be provided by the start of T2S end of day procedures (18:00).

*Note: The detailed schedule of the reporting as well as the deadline for provision of the reference data will be elaborated in a second step at technical group level.*

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<sup>2</sup> Midnight (0:00) is the indicative time for completion of the NTS in T2S (duration is dependent on settlement volumes)

### 3.3 Reference prices of the relevant business day (C-3)

The reference price used for calculating the Settlement Fails Penalties as well as the Late Matching Fail Penalties is the one of each business day (see section 3.1) where the settlement instruction is considered subject to penalty (i.e. using historical prices when relevant), independently on when the calculation is performed. I.e. The reference price for the calculation of each penalty is the one of the relevant day. For further information about the definition, provision and maintenance of the reference prices please see section 6 – Reference Data, the clarification C-22 related to Daily Price.

In order to illustrate the above principle, the same examples provided in the previous section 2- “Definitions” are provided hereafter showing the reference price used in the calculation of each penalty.

#### *Example 1:*

A settlement instruction enters and is matched in T2S on its ISD and before the relevant cut-off. At the time of computation of penalties for the day equal to the ISD, the reference price of the ISIN for that day is already known and stored in T2S and it is 8 Euros. I.e.  $P(\text{ISD}) = 8$

- No Late Matching Fail Penalty applies.
- In case the instruction would have failed to settle on ISD, then a Settlement Fail Penalty will apply. The Settlement Fail Penalty will be calculated using the price set for this day i.e.  $P(\text{ISD}) = 8$
- New Settlement Fail Penalties will apply for each further business day the instruction fails to settle in T2S. E.g.: in case the instruction fails again on “ISD+1”, then a new Settlement Fail Penalty will be computed for “ISD+1” and it will be calculated using the new price that will be set for this day i.e.  $P(\text{ISD}+1)$ .

#### *Example 2:*

A settlement instruction enters and is matched in T2S on its ISD but after the relevant cut-off (i.e. it won't be possible to settle it on ISD). At the time of computation of penalties for the day equal to the ISD, the reference price of the ISIN for that day is already known and stored in T2S and it is 8 Euros. I.e.  $P(\text{ISD}) = 8$ .

- A Late Matching Fail Penalty applies because the instruction was matched after the ISD's cut-off and hence could not settle on its ISD due to the late matching. For the calculation of the Late Matching Fail Penalty the price to be used is  $P(\text{ISD}) = 8$
- In case the instruction fails to settle on the following business day, “ISD+1”, then a Settlement Fail Penalty will apply. The Settlement Fail Penalty will be calculated using the new price that will be set for this day i.e.  $P(\text{ISD}+1)$ .
- New Settlement Fail Penalties will apply for each further business day the instruction fails to settle in T2S. E.g.: in case the instruction fails again on “ISD+2”, then a new Settlement Fail Penalty will be computed for “ISD+2” and it will be calculated using the new price that will be set for this day i.e.  $P(\text{ISD}+2)$ .

*Example 3:*

A settlement instruction enters and is matched in T2S two days after its ISD (i.e. on Day= "ISD+2") but before the relevant cut-off for "ISD+2" (i.e. it would be still possible to settle it on "ISD+2").

At the time of computation of penalties for the day equal to "ISD+2", the reference price of the ISIN for that day is already known and stored in T2S and it is 12 Euros. I.e.  $P(\text{ISD}+2) = 12$ . The historical prices of previous days are:  $P(\text{ISD}) = 8$ ;  $P(\text{ISD}+1) = 9$ .

I.e. Relevant reference prices:  $P(\text{ISD}) = 8$ ;  $P(\text{ISD}+1) = 9$ ;  $P(\text{ISD}+2) = 12$

- A Late Matching Fail Penalty applies because the instruction was matched after the ISD's cut-off and hence could not settle on its ISD due to the late matching. The Late Matching Fail Penalty has to consider that the instruction did not settle on ISD and on "ISD+1". The Late Matching Fail Penalty does not have to consider "ISD+2" because it was matched before the cut-off for "ISD+2" and hence it can still settle on "ISD+2".

For the calculation of the Late Match Fail Penalty the prices to be used are:

- For the failure on ISD, the price used shall be  $P(\text{ISD}) = 8$
- For the failure on "ISD+1", the price used shall be  $P(\text{ISD}+1) = 9$
- In case the instruction would have failed to settle on "ISD+2", then a Settlement Fail Penalty will apply in addition to the Late Matching Fail Penalty (i.e. both are calculated in the computation of penalties for the day equal to "ISD+2"). The Settlement Fail Penalty will be calculated using the price set for this day i.e.  $P(\text{ISD}+2) = 12$ .
- New Settlement Fail Penalties will apply for each further business day the instruction fails to settle in T2S. E.g.: in case the instruction fails again on "ISD+3", then a new Settlement Fail Penalty will be computed for "ISD+3" and it will be calculated using the new price that will be set for this day i.e.  $P(\text{ISD}+3)$ .

*Example 4:*

A settlement instruction enters and is matched in T2S two days after its ISD (i.e. on Day= "ISD+2") and after the relevant cut-off for "ISD+2" (i.e. it won't be possible to settle it on "ISD+2").

At the time of computation of penalties for the day equal to "ISD+2", the reference price of the ISIN for that day is already known and stored in T2S and it is 12 Euros. I.e.  $P(\text{ISD}+2) = 12$ . The historical prices of previous days are:  $P(\text{ISD}) = 8$ ;  $P(\text{ISD}+1) = 9$ .

I.e. Relevant reference prices:  $P(\text{ISD}) = 8$ ;  $P(\text{ISD}+1) = 9$ ;  $P(\text{ISD}+2) = 12$

- A Late Matching Fail Penalty applies because the instruction was matched after the ISD's cut-off and hence could not settle on its ISD due to the late matching. The Late Matching Fail Penalty has to consider that the instruction did not settle on ISD, on "ISD+1" and on "ISD+2". For the calculation of the Late Match Fail Penalty the prices to be used are:
  - For the failure on ISD, the price used shall be  $P(\text{ISD}) = 8$



- For the failure on "ISD+1", the price used shall be  $P (ISD+1) = 9$
- For the failure on "ISD+2", the price used shall be  $P (ISD+2) = 12$
- In case the instruction fails to settle on the following business day, "ISD+3", then a Settlement Fail Penalty will apply. The Settlement Fail Penalty will be calculated using the new price that will be set for this day i.e.  $P (ISD+3)$ .
- New Settlement Fail Penalties will apply for each further business day the instruction fails to settle in T2S. E.g.: in case the instruction fails again on "ISD+4", then a new Settlement Fail Penalty will be computed for "ISD+4" and it will be calculated using the new price that will be set for this day i.e.  $P (ISD+4)$ .

### **3.4 Instructions subject to computation of penalties (C-4)**

*See also "List of CSDR Items for Clarification", Item 11 "Scope of instructions subject to penalties".*

Only instructions sent by T2S Actors will be subject to computation of penalties.

In line with the understanding of the regulation that penalties are only applied to settlement instructions which are "transfer orders" as defined in the Settlement Finality Directive, T2S internally generated instructions (e.g. realignment instructions and auto-collateralisation instructions) will not be subject to penalties. Based on the same principle, settlement restrictions are excluded from penalties.

From the instructions sent by the T2S Actors, those instructions with specific 'transaction type' related to Corporate Actions on stocks (i.e. those with ISO Transaction Code equal to CORP) will be exempted from the computation. No further exemption will apply e.g.: instructions with ISO Transaction Code equal to ISSU (Issuance), REDM (Redemptions) or CLAI (Market Claims) will be subject to computation of penalties.

From all the instructions subject to computation of penalties, T2S will compute penalties when the ISIN of the relevant instruction is in scope. T2S will consider in scope those ISINs defined in the list of Securities subject to penalties part of the T2S reference data (see section 6- "Reference Data").

In this regard, it is worth clarifying that "External CSD settlement instructions" may also be subject to penalties. In the context of T2S, external CSD settlement can be defined as settlement which involves a CSD not participating in T2S. In case penalties are imposed in the context of T2S external CSD settlement because the instruction and its ISIN are in scope, the process will involve a chain of transactions and therefore a clarification for the settlement penalty mechanism was deemed necessary. Please refer to the Annex section 10.1- "Additional clarification for external CSD settlement" for further description and analysis.

### 3.5 Harmonise principles for computation of penalties (C-5)

In line with requirements in the CSDR<sup>3</sup>, in case a T2S Actor that foresees its instruction failing to settle in T2S due to the lack of the relevant resources, decides to send the instruction late, a penalty should be computed due to the late matching (Late Matching Fail Penalty) as if the instruction would have been sent on time but failed to settle in T2S (Settlement Fail Penalty).

I.e.: Settlement Fail Penalties and Late Matching Fail Penalties shall follow the same principles for their computation.

As a consequence, considering the same instruction, the penalty imposed should be for the same amount in the following two scenarios:

- The instruction fails to settle in T2S on its ISD, i.e. one day, because for example the instruction was put on hold or in lack of securities (Settlement Fail Penalty).
- The instruction was sent to T2S one day late (Late Matching Fail Penalty).

This principle is enforced by the previous principle of using the prices of the relevant business day. By using the reference price of the relevant day, it is ensured that the amount that would be imposed by the Settlement Fail Penalty and by the Late Matching Fail Penalty is the same in both scenarios.

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<sup>3</sup> Article 16.3 of RTS on Settlement Discipline

#### 4. Computation of Settlement Fail Penalties (SEFP)

Any settlement instruction sent by a T2S Actor, being in scope of the penalties calculation as described in chapter 3.4, that: i) is matched before the relevant cut-off of a given business day and ii) has reached its ISD, fails to settle on that business day, will be subject to computation of Settlement Fail Penalties (SEFP) for this business day.

In this regard, it is worth clarifying that:

**C-6:** A settlement instruction that “fails to settle on that business day” must be understood as: Settlement instructions in T2S that are not cancelled and remaining to be settled, fully or partially, by the time of the end of processing of the relevant cut-off<sup>4</sup>.

The end of processing of the relevant cut-off of each settlement instruction is the key point in time to take a “snapshot” of the status and reasons of a settlement instruction and determine its eligibility for a penalty.

*See also “List of CSDR Items for Clarification”: Item 5 “Failing settlement instruction (PENF)”.*

T2S will not take into account:

- **Neither previous statuses nor reasons before the relevant cut-off:** Previous statuses or reasons before the status/reason at the end of processing of the relevant cut-off are not considered by the penalty mechanism.

For example, in case an instruction is not settled during the Night Time Settlement because it is on hold, and such instruction is released during the Real Time Settlement, but it then fails because the counterparty has lack of securities, which remains until the end of the processing of the cut-off (i.e. status and reason for the cut-off is unsettled because the counterparty has lack of securities). In this case, T2S will consider for the computation of the SEFP the counterparty’s Lack of securities and will not take into account that the instruction was on hold before the cut-off.

- **Neither statuses nor reasons after the relevant cut-off:** New status or reasons after the end of processing of the relevant cut-off are not considered by the penalty mechanism. As a consequence, it is not relevant for the computation of SEFPs the status and/or reasons at the End of Day, only the ones at the end of processing of cut-off will be considered.

As discussed in the CSDR TF, after the cut-off, an instruction may change its status and/or reason. Changes of status and/or reason after the cut-off should not affect the calculation of the penalty. For example, the cancellation of an instruction by the T2S Actor during the End of Day should not have any impact on the calculation of the penalties. E.g. In case of some CCPs,

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<sup>4</sup> I.e.: Cut-offs are planned at 16:00 for DVP instructions, 17:40 for BATM/CBO related instructions, and 18:00 for FOP instructions. In addition to CR-0635, there will be a need for new T2S events of the settlement day indicating the end of processing of each and every cut-off to indicate the latest time when an instruction could be settled.

which cancel failed instructions at End of Day and reinstruct, after netting the failed instructions with the new ones for the following day, the failed instructions will be considered.

Once a given settlement instruction has been identified as subject to computation of SEFP according to rules defined above (i.e. not cancelled instruction that was matched before the relevant cut-off and having reached its ISD, fails to settle in T2S on a business day), the status and reasons stored in T2S by the time of the relevant cut-off, have to be analysed to determine if the penalty is to be imposed or not.

**C-7:** A penalty will be imposed if the settlement instruction, initially identified as subject to computation of SEFP for a given business day, fulfills at the time of the end of processing of the relevant cut-off, any of the below conditions:

- The instruction is on hold (any type of hold).
- The instruction is unsettled because it failed the eligibility/provision check with any reason associated to this instruction and not to the counterpart´s instruction (for more information see Annex section 10.2- "Additional clarification on statuses and reasons for SEFP").

*See also "List of CSDR Items for Clarification": Item 16 "Status of instructions in scope of penalties".*

Given that the analysis is performed per settlement instruction individually, it is worth clarifying that it is possible that the two counterparts of a transaction are imposed with a SEFP. This scenario will occur, for example, when the two matched instructions are on hold (i.e. both of them). In such scenario both parties will be imposed with a SEFP (examples are provided in section 4.1- "Examples of the computation of SEFP").

Once it has been determined that the penalty has to be imposed, there is a need for calculating its exact amount.

**C-8:** The amount imposed by the penalty shall be calculated depending on the type of transaction formed by the two matched settlement instructions, i.e. on the basis of the financial instrument(s) exchanged by the transaction and its/their direction.

*See also "List of CSDR Items for Clarification": Item 17 "Formula used for calculation of cash penalties".*

According to COMMISSION DELEGATED REGULATION (EU) C(2016) 7154 of 11.11.2016 supplementing Regulation (EU) No 909/2014, Article 3.2 Reference price of the transaction:

"The reference price referred to in paragraph 1 shall be used to calculate the level of cash penalties for all settlement fails, irrespective of whether the settlement fail is due to a lack of securities or cash".

Consequently, CSDR TF agreed that, in order to use the reference price irrespectively on the reason for settlement failure, in case of transactions with exchange of securities versus cash (a DVP settlement instruction matched with a RVP settlement instruction):

- The amount for the penalty shall be calculated based on the quantity of securities failed to be delivered (instead of the cash amount failed to be delivered) even when fail is due to a lack of securities or cash.

The following table summarizes the basis for calculating the amount imposed by the penalty for each type of transaction. Each case is further detailed afterwards in C-9:

Type of transaction	SEFP
i) Transactions with exchange of securities versus cash - Delivering versus Payment (DVP) - Receiving versus Payment (RVP)	Penalty based on the quantity of securities failed to be delivered and penalty rate of the ISIN, unless the reason for failing is "Lack of cash", in which case the penalty rate will be the discount rate of the relevant currency
ii) Transactions with exchange of securities only - Delivering Free of Payment (DFP) - Receiving Free of Payment (RFP)	Penalty based on the quantity of securities failed to be delivered and penalty rate of the ISIN
iii) Transactions with exchange of cash only <sup>5</sup> - Debiting Payment Free of Delivery (DPFOD) - Crediting Payment Free of Delivery (CPFOD)	Penalty based on the amount of cash failed to be delivered and the penalty rate will be the discount rate of the relevant currency
iv) Transactions with exchange of securities and cash (i.e. same direction) <sup>6</sup> - Delivery with Payment (DWP) - Receiving with Payment (RWP)	Penalty will be the sum of: - The penalty based on the quantity of securities failed to be delivered and penalty rate of the ISIN (case ii); and - The penalty based on the amount of cash failed to be delivered and the discount rate of the currency (case iii)

It is worth mentioning that for case iv, transactions with exchange of securities and cash i.e. same direction (DWP settlement instruction matched with RWP settlement instruction), two alternatives were analysed by the TF:

- Penalty will be the sum of:
  - The penalty based on the quantity of securities failed to be delivered and penalty rate of the ISIN (case ii); and
  - The penalty based on the amount of cash failed to be delivered and the discount rate of the currency (case iii)
- Two times the penalty of case i (two times the penalty based on the quantity of securities failed to be delivered and penalty rate of the ISIN, unless the reason for failing is "Lack of cash", in which case the penalty rate will be the discount rate of the relevant currency). I.e.:  $2 * \text{Rate} * \text{Reference Price} * \text{Quantity}$

The majority of the TF expressed a preference for the first alternative, which is the one described in this document.

<sup>5</sup> Those transactions are mostly used in the context of CA on stock for payment of cash proceeds, but can also result from CA on flows (market claims) and CCP netted transactions

<sup>6</sup> Those transactions are mostly the result from CCP netted transactions

**C-9: The formulas to calculate the amount imposed by a Settlement Fail Penalty (SEFP) are the following:**

See also "List of CSDR Items for Clarification": Item 17 "Formula used for calculation of cash penalties".

***i. For DVP and RVP Settlement Instructions:***

$$\text{SEFP} = \text{Rate} * \text{Reference Price} * \text{Quantity}$$

Where:

- **Rate** is:
  - o Either the flat penalty rate stored in Static Data for the asset type of the ISIN of the failed instruction (according to ESMA's classifications) and the business day for which the penalty is calculated;
  - o Or, in the specific case where the reason for unsettled of the failed instruction is "Lack of cash" (i.e. only possible in RVPs), the rate is the discount rate of the relevant currency stored in Static Data (according to ESMA definitions) and the business day for which the penalty is calculated.
- **Reference Price** is the price stored in Static Data for the ISIN of the instruction and the business day for which the penalty is calculated.
- **Quantity** is the quantity of securities failed to be delivered, which is the quantity of the instruction remaining to be settled at the time of end of processing of the relevant cut-off.

***ii. For DFP and RFP Settlement Instructions:***

$$\text{SEFP} = \text{Rate} * \text{Reference Price} * \text{Quantity}$$

Where:

- **Rate** is the flat penalty rate stored in Static Data for the asset type of the ISIN of the failed instruction (according to ESMA's classifications) and the business day for which the penalty is calculated.
- **Reference Price** is the price stored in Static Data for the ISIN of the instruction and the business day for which the penalty is calculated.
- **Quantity** is the quantity of securities failed to be delivered, which is the quantity of the instruction remaining to be settled at the time of end of processing of the relevant cut-off.

***iii. For DPFOD and CPFOD Settlement Instructions:***

$$\text{SEFP} = \text{Rate} * \text{Amount}$$

Where:

- **Rate** is the discount rate of the relevant currency stored in Static Data (according to ESMA definitions) and the business day for which the penalty is calculated.
- **Amount** is the cash amount failed to be delivered, which is the amount of the instruction remaining to be settled at the time of end of processing of the relevant cut-off.

Rationale: Although the CSDR prescribes to use the security quantity and reference price for the calculation of all settlement fail penalties, for DPFOD and CPFOD settlement instructions where the ISIN quantity is 0, the CSDR TF's working assumption is to use the cash amount to compute the penalty.

**iv. For DWP and RWP Settlement Instructions:**

$$SEFP = SEFP \text{ for the securities side} + SEFP \text{ for the cash side}$$

Where:

- **SEFP for the securities side** is the one calculated following the formula of case ii.
- **SEFP for the cash side** is the one calculated following the formula of case iii.

To simplify the above definitions, it has been considered in all the formulas that the price of the security and the cash amount of the settlement instruction is denominated in the same currency than the currency of the amount to be imposed by the penalty.

**C-10:** Shall the price or the amount be in a different currency, the exchange rate will be used in order to calculate the amount of the penalty in the relevant currency (e.g. Euro).

**Pending point:** Given that T2S is a multi-currency settlement platform, T2S provides cash settlement in central bank money in any T2S settlement currency, it has to be further discussed in the CSDR TF how to define the relevant currency of the amount imposed by a penalty.

For the time being an initial proposal could be:

- For settlement instructions against payment (cash settlement in a T2S settlement currency), the amount imposed by the penalty shall be denominated in the currency of the cash leg of the settlement instruction.
- For settlement instructions free of payment (no cash is settled in T2S), the amount imposed by the penalty shall be denominated in the currency defined for the penalties by the CSD of the non-failing participant. The currency defined must be a T2S settlement currency.

#### 4.1 Examples of the computation of SEFP

In order to illustrate the computation of SEFP, several examples are provided hereafter.

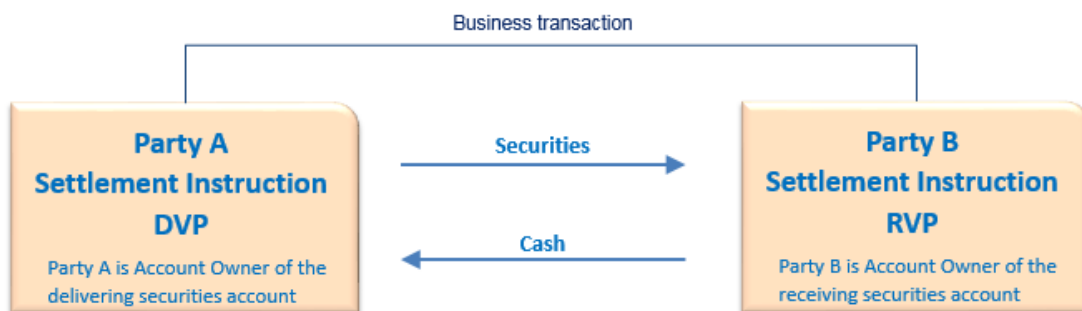
All of the examples have, as starting point, a pair of matched settlement instructions that were: i) not cancelled, ii) matched before the relevant cut-off and, that having reached its ISD, fail to settle in T2S.

The examples are provided within 4 cases, one for each type of transaction that failed to settle. I.e.:

- **Case i:** Delivery versus Payment transaction (i.e. composed by a DVP and an RVP matched settlement instructions)
- **Case ii:** Free of Payment transaction (i.e. composed by a DFP and an RFP matched settlement instructions)
- **Case iii:** Payment Free of Delivery transaction (i.e. composed by a DPFOD and an CPFOD matched settlement instructions)
- **Case iv:** Delivery with Payment transaction (i.e. composed by a DWP and an RWP matched settlement instructions)

For each case, the examples provided differ on the status and reasons associated, at the end of processing of the relevant cut-off, to the matched settlement instructions that form the transaction.

##### Case i: Delivery versus Payment transaction



Example 1: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DVP instruction: *Party hold*
- RVP instruction: *Counterpart's instruction is on hold*

In this example, the result of the computation will be the computation of one penalty:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:

$$\text{SEFP} = \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity}$$



Example 2: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DVP instruction: *Counterpart's instruction is on hold*
- RVP instruction: *Party hold*

In this example, the result of the computation will be the computation of one penalty:

- Party B is imposed with a Penalty to be paid to Party A. Amount of the penalty:  
 $SEFP = Rate\ for\ the\ ISIN * Reference\ Price * Quantity$

Example 3: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DVP instruction: *Party hold (and counterpart's instruction is on hold)*
- RVP instruction: *Party hold (and counterpart's instruction is on hold)*

In this example, the result of the computation will be the computation of two penalties:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:  
 $SEFP = Rate\ for\ the\ ISIN * Reference\ Price * Quantity$
- Party B is imposed with a Penalty to be paid to Party A. Amount of the penalty:  
 $SEFP = Rate\ for\ the\ ISIN * Reference\ Price * Quantity$

Example 4: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DVP instruction: *Lack of securities*
- RVP instruction: *Counterparty has lack of securities*

In this example, the result of the computation will be the computation of one penalty:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:  
 $SEFP = Rate\ for\ the\ ISIN * Reference\ Price * Quantity$

Example 5: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DVP instruction: *Lack of securities*
- RVP instruction: *Lack of cash*

This scenario is not possible given that (according to Change Request 621) in the T2S provision checks, T2S stops when lack of securities is found (i.e. T2S does not check the availability of cash in this situation). Hence, this example is the same as previous Example 4 (i.e. lack of securities in a DVP). I.e.:

- DVP instruction: *Lack of securities*
- RVP instruction: *Counterparty has lack of securities*

Example 6: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DVP instruction: *Counterparty has lack of cash*
- RVP instruction: *Lack of cash*

In this example, the result of the computation will be the computation of one penalty:

- Party B is imposed with a Penalty to be paid to Party A. Amount of the penalty:  
 $SEFP = \text{Discount Rate} * \text{Reference Price} * \text{Quantity}$

Example 7: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DVP instruction: *Settlement Instruction is unsettled because one of its linked settlement instructions is missing*
- RVP instruction: *Settlement Instruction is unsettled because one of the counterparty's linked settlement instructions is missing*

In this example, the result of the computation will be the computation of one penalty:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:  
 $SEFP = \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity}$

Example 8: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DVP instruction: *Settlement Instruction is unsettled because one of the counterparty's linked settlement instructions is missing*
- RVP instruction: *Settlement Instruction is unsettled because one of its linked settlement instructions is missing*

In this example, the result of the computation will be the computation of one penalty:

- Party B is imposed with a Penalty to be paid to Party A. Amount of the penalty:  
 $SEFP = \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity}$

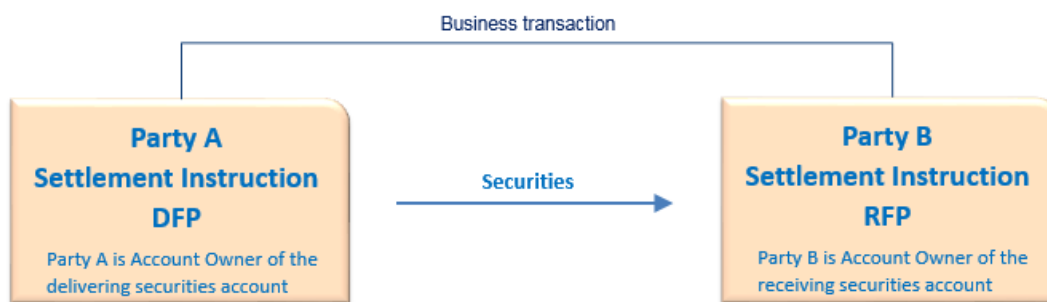
Example 9: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DVP instruction: *Settlement Instruction is unsettled because one of its linked settlement instructions is missing*
- RVP instruction: *Settlement Instruction is unsettled because one of its linked settlement instructions is missing*

In this example, the result of the computation will be the computation of two penalties:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:  
 $SEFP = \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity}$
- Party B is imposed with a Penalty to be paid to Party A. Amount of the penalty:  
 $SEFP = \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity}$

**Case ij: Free of Payment transaction**



**Example 1:** The status and reasons at the time of the end of processing of the relevant cut-off are:

- DFP instruction: *Party hold*
- RFP instruction: *Counterpart's instruction is on hold*

In this example, the result of the computation will be the computation of one penalty:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:  
 $SEFP = \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity}$

**Example 2:** The status and reasons at the time of the end of processing of the relevant cut-off are:

- DFP instruction: *Counterpart's instruction is on hold*
- RFP instruction: *Party hold*

In this example, the result of the computation will be the computation of one penalty:

- Party B is imposed with a Penalty to be paid to Party A. Amount of the penalty:  
 $SEFP = \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity}$

**Example 3:** The status and reasons at the time of the end of processing of the relevant cut-off are:

- DFP instruction: *Party hold (and counterpart's instruction is on hold)*
- RFP instruction: *Party hold (and counterpart's instruction is on hold)*

In this example, the result of the computation will be the computation of two penalties:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:  
 $SEFP = \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity}$
- Party B is imposed with a Penalty to be paid to Party A. Amount of the penalty:  
 $SEFP = \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity}$

Example 4: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DFP instruction: *Lack of securities*
- RFP instruction: *Counterparty has lack of securities*

In this example, the result of the computation will be the computation of one penalty:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:  
 $SEFP = \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity}$

Example 5: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DFP instruction: *Settlement Instruction is unsettled because one of its linked settlement instructions is missing*
- RFP instruction: *Settlement Instruction is unsettled because one of the counterparty's linked settlement instructions is missing*

In this example, the result of the computation will be the computation of one penalty:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:  
 $SEFP = \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity}$

Example 6: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DFP instruction: *Settlement Instruction is unsettled because one of the counterparty's linked settlement instructions is missing*
- RFP instruction: *Settlement Instruction is unsettled because one of its linked settlement instructions is missing*

In this example, the result of the computation will be the computation of one penalty:

- Party B is imposed with a Penalty to be paid to Party A. Amount of the penalty:  
 $SEFP = \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity}$

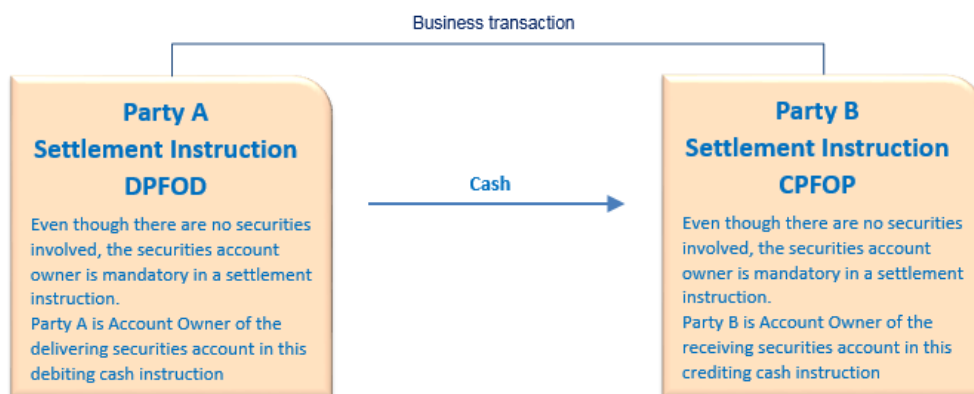
Example 7: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DFP instruction: *Settlement Instruction is unsettled because one of its linked settlement instructions is missing*
- RFP instruction: *Settlement Instruction is unsettled because one of its linked settlement instructions is missing*

In this example, the result of the computation will be the computation of two penalties:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:  
 $SEFP = \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity}$
- Party B is imposed with a Penalty to be paid to Party A. Amount of the penalty:  
 $SEFP = \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity}$

**Case iii: Payment Free of Delivery transaction**



**Example 1:** The status and reasons at the time of the end of processing of the relevant cut-off are:

- DPFOD instruction: *Party hold*
- CPFOP instruction: *Counterpart's instruction is on hold*

In this example, the result of the computation will be the computation of one penalty:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:  
 $SEFP = Discount\ Rate * Amount$

**Example 2:** The status and reasons at the time of the end of processing of the relevant cut-off are:

- DPFOD instruction: *Counterpart's instruction is on hold*
- CPFOP instruction: *Party hold*

In this example, the result of the computation will be the computation of one penalty:

- Party B is imposed with a Penalty to be paid to Party A. Amount of the penalty:  
 $SEFP = Discount\ Rate * Amount$

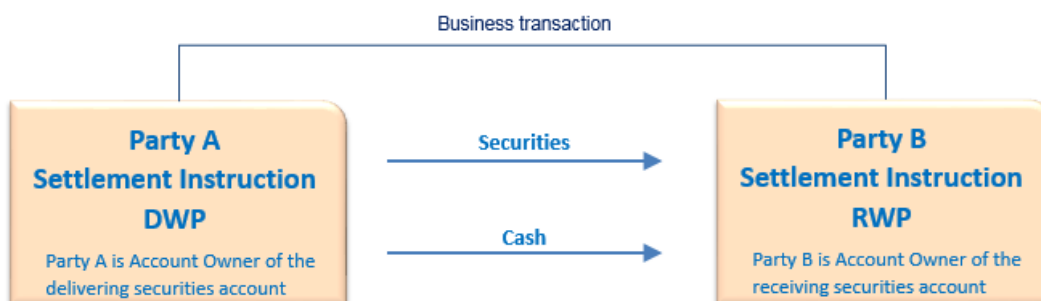
**Example 3:** The status and reasons at the time of the end of processing of the relevant cut-off are:

- DPFOD instruction: *Lack of cash*
- CPFOP instruction: *Counterparty has lack of cash*

In this example, the result of the computation will be the computation of one penalty:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:  
 $SEFP = Discount\ Rate * Amount$

**Case iv: Delivery with Payment transaction**



Example 1: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DWP instruction: *Party hold*
- RWP instruction: *Counterpart's instruction is on hold*

In this example, the result of the computation will be the computation of one penalty:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:  
$$SEFP = SEFP \text{ for securities} + SEFP \text{ for cash}$$
$$= \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity} + \text{Discount Rate} * \text{Amount}$$

Example 2: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DWP instruction: *Counterpart's instruction is on hold*
- RWP instruction: *Party hold*

In this example, the result of the computation will be the computation of one penalty:

- Party B is imposed with a Penalty to be paid to Party A. Amount of the penalty:  
$$SEFP = SEFP \text{ for securities} + SEFP \text{ for cash}$$
$$= \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity} + \text{Discount Rate} * \text{Amount}$$

Example 3: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DWP instruction: *Party hold (and counterpart's instruction is on hold)*
- RWP instruction: *Party hold (and counterpart's instruction is on hold)*

In this example, the result of the computation will be the computation of two penalties:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:  
$$SEFP = SEFP \text{ for securities} + SEFP \text{ for cash}$$
$$= \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity} + \text{Discount Rate} * \text{Amount}$$
- Party B is imposed with a Penalty to be paid to Party A. Amount of the penalty:  
$$SEFP = SEFP \text{ for securities} + SEFP \text{ for cash}$$
$$= \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity} + \text{Discount Rate} * \text{Amount}$$

Example 4: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DWP instruction: *Lack of securities*
- RWP instruction: *Counterparty has lack of securities*

In this example, the result of the computation will be the computation of one penalty:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:  
$$\text{SEFP} = \text{SEFP for securities} + \text{SEFP for cash}$$
$$= \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity} + \text{Discount Rate} * \text{Amount}$$

Example 5: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DWP instruction: *Lack of securities and lack of cash*
- RWP instruction: *Counterparty has lack of securities and lack of cash*

This scenario is not possible given that (according to Change Request 621) in the T2S provision checks, T2S stops when lack of securities is found (i.e. T2S does not check the availability of cash in this situation). Hence, this example is the same as previous Example 4 (i.e. lack of securities in a DWP). I.e.:

- DWP instruction: *Lack of securities*
- RWP instruction: *Counterparty has lack of securities*

Example 6: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DWP instruction: *Lack of cash*
- RWP instruction: *Counterparty has lack of cash*

In this example, the result of the computation will be the computation of one penalty:

- Party A is imposed with a Penalty to be paid to Party B. Amount of the penalty:  
$$\text{SEFP} = \text{SEFP for securities} + \text{SEFP for cash}$$
$$= \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity} + \text{Discount Rate} * \text{Amount}$$

Example 7: The status and reasons at the time of the end of processing of the relevant cut-off are:

- DWP instruction: *Settlement Instruction is unsettled because one of the counterparty's linked settlement instructions is missing*
- RWP instruction: *Settlement Instruction is unsettled because one of its linked settlement instructions is missing*

In this example, the result of the computation will be the computation of one penalty:

- Party B is imposed with a Penalty to be paid to Party A. Amount of the penalty:  
$$\text{SEFP} = \text{SEFP for securities} + \text{SEFP for cash}$$
$$= \text{Rate for the ISIN} * \text{Reference Price} * \text{Quantity} + \text{Discount Rate} * \text{Amount}$$

## 5. Computation of Late Matching Fail Penalties (LMFP)

Any settlement instruction sent by a T2S Actor, being in scope of the penalties calculation as described in chapter 3.4, that is matched in T2S after the relevant cut-off of its ISD<sup>7</sup>, will be subject to computation of Late Matching Fail Penalties (LMFP) for the business day when it is matched.

T2S will identify instructions subject to LMFP for a given business day by checking all instructions that were matched on that business day. Once a given settlement instruction has been identified as subject to LMFP according to rules defined above, its T2S accepted timestamp and the T2S accepted timestamp of the counterpart instruction have to be analysed to determine if a penalty is imposed or not.

**C-11:** A penalty will be imposed if the “matched late” settlement instruction, initially identified as subject to computation of LMFP, has a T2S accepted timestamp later than the T2S accepted timestamp of its corresponding counterpart instruction.

According to Point 4 of Article 16 (Collection of cash penalties) of the Draft Technical Standards on Settlement Discipline: “the penalty is charged to the last participant to enter or modify<sup>8</sup> the relevant settlement instruction for the periods between the ISD and the matching of the instruction”.

As a consequence, only one of the two counterparts of a transaction can be imposed with a LMFP. The participant with the earliest T2S accepted timestamp will not be considered as a failing participant and hence, no penalty will be imposed to this participant due to the late matching (even if such participant also sent the instruction late to T2S).

**C-12:** T2S offers the possibility to send settlement instructions as already matched. These settlement instructions will be subject to computation of Late Matching Fail Penalties in case they are sent late to T2S. However, it is not possible for T2S to determine the failing participant by comparing the T2S acceptance timestamps. Consequently, it was agreed in the CSDR TF that the LMFP will be computed and reported by T2S considering by default that the failing participant is:

- **Pending point:** Either the Instructing Party or the delivering party. CSDR TF will take a final decision on one or the other after further analysis on the topic.

Once the failing participant has been identified (either by comparing the two T2S accepted timestamps for instructions matched in T2S, or by using the default rule for instructions sent as already matched), there is a need for calculating the exact amount of the penalty.

**C-8 (bis):** Applying the same principles described in C-8 for SEFP, the following table summarizes the basis for calculating the amount imposed by the LMFP for each type of transaction. Each case is further detailed afterwards in C-15 and C-16:

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<sup>7</sup> I.e.: Cut-offs are planned at 16:00 for DVP instructions, 17:40 for BATM/CBO related instructions, and 18:00 for FOP instructions. In addition to CR-0635, there will be a need for new T2S events of the settlement day indicating the end of processing of each and every cut-off to indicate the latest time when an instruction could be settled.

<sup>8</sup> Note that the modifiable fields of settlement instructions in T2S are not matching fields, therefore the modification of an instruction is not considered by the T2S penalty mechanism and only the accepted timestamp must be checked.



Type of transaction	LMFP
i) Transactions with exchange of securities versus cash <ul style="list-style-type: none"> <li>- Delivering versus Payment (DVP)</li> <li>- Receiving versus Payment (RVP)</li> </ul>	Penalty based on the quantity of securities failed to be delivered and penalty rate of the ISIN.  Given that we are in a late matching scenario, it is not possible to have the reason for failing "Lack of cash"; hence, the penalty rate of the ISIN is always used.
ii) Transactions with exchange of securities only <ul style="list-style-type: none"> <li>- Delivering Free of Payment (DFP)</li> <li>- Receiving Free of Payment (RFP)</li> </ul>	Penalty based on the quantity of securities failed to be delivered and penalty rate of the ISIN
iii) Transactions with exchange of cash only <ul style="list-style-type: none"> <li>- Debiting Payment Free of Delivery (DPFOD)</li> <li>- Crediting Payment Free of Delivery (CPFOD)</li> </ul>	Penalty based on the amount of cash failed to be delivered and the penalty rate will be the discount rate of the relevant currency
iv) Transactions with exchange of securities and cash (i.e. same direction) <ul style="list-style-type: none"> <li>- Delivery with Payment (DWP)</li> <li>- Receiving with Payment (RWP)</li> </ul>	Penalty will be the sum of: <ul style="list-style-type: none"> <li>- The penalty based on the quantity of securities failed to be delivered and penalty rate of the ISIN (case ii); and</li> <li>- The penalty based on the amount of cash failed to be delivered and the discount rate of the currency (case iii)</li> </ul>

**C-14: The formulas to calculate the amount imposed by a Late Matching Fail Penalty (LMFP) are the following:**

The formulas will differ depending on whether the instruction subject to LMFP can either still settle, or no longer settle, on the business day when the instruction is matched (i.e. depending on whether it is matched before or after the relevant cut-off for the Matching Business Day).

- When the instruction can still settle on the business day when it is matched:** This scenario relates to those instructions matched after their ISD (late matching), but matched at a point in time when it is still possible to settle them on the business day when they are matched (i.e. matched before the relevant cut-off for Matching Business day).

As a consequence, in this scenario, the LMFP shall be calculated for each business day as from the ISD until, and excluding, the business day when the instruction is matched.

Example 3 of section 2-"Definitions" is an example of this scenario.

It is worth mentioning that in this scenario, in case the instruction does not settle on the business day when it is matched (even if it was possible because it arrived before the cut-off), then a separate calculation will have to be performed for an additional SEFP (please see Section 4 for further details). I.e. T2S will compute two penalties for that instruction for the same business day, a LMFP and a SEFP.

- **When the instruction can no longer settle on the business day when it is matched:**  
This scenario relates to those instructions matched, on or after the ISD, at a point in time when it is not possible to settle them on the business day when they are matched, because it is after the relevant cut-off.

As a consequence, in this scenario, the LMFP shall be calculated for each business day as from the ISD until, and including, the business day when the instruction is matched.

Example 2 and Example 4 of section 2-“Definitions” are examples of this scenario.

**C-15: Formula for Late Matching Fail Penalty (LMFP) of instructions that can still settle on the business day when they are matched:**

See also “List of CSDR Items for Clarification”: Item 17 “Formula used for calculation of cash penalties”.

- i. For DVP and RVP Settlement Instructions; and*
- ii. For DFP and RFP Settlement Instructions*

*Given that in LMFP, there is no possibility to have a “Lack of cash” (i.e. the fail is always due to a late sending of the instruction causing the late matching), the formula used is the same in both cases (i. and ii.) because the rate is always the rate for the ISIN.*

$$LMFP = \sum_{n=1}^N (Rate_{day\ x} * Reference\ Price_{day\ x} * Quantity)$$

Where:

- ***N*** is equal to the number of business days resulting from the difference between the “ISD and the Matching Business Day (MBD)”.
- ***Rate*** is the flat penalty rate stored in Static Data for the asset type of the ISIN of the failed instruction (according to ESMA definitions) and for the relevant business day (x).

Mathematically is “x= MBD – n” (see examples below).

- ***Reference Price*** is the price stored in Static Data for the ISIN of the instruction and for the relevant business day (x).

Mathematically is “x= MBD – n” (see examples below).

- ***Quantity*** is the quantity of securities failed to be delivered, which is the matched quantity of the Settlement Instruction. Given that LMFP relate to the matching time, it is not the remaining quantity at cut-off time like in SEFP but the matched quantity.

Two detailed examples are provided hereafter to clarify the formula:

First example: A DVP settlement instruction (delivering 5.000 shares of ISIN1 versus 39.000 Euros) is matched at 14:00 one business day after its ISD (i.e. MBD= "ISD+1"). Given that matching occurs at 14:00, it is matched before the relevant cut-off of "ISD+1" (i.e. DVP cut-off is at 16:00) so it can still settle on "ISD+1".

LMFP will be calculated as follows (i.e. considering each business day as from the ISD until, and excluding, the business day when the instruction is matched):

- N = 1
- X= (MBD-n), starting with n=1 until N=1, which implies:

$$LMFP = R(ISD) * P(ISD) * \text{Quantity}$$

Assuming that the Rate and reference Price for the ISIN1 on the ISD are R(ISD)= 1bp and P(ISD)= 8 Euros, the penalty imposed will be:

$$LMFP = 0,0001 * 8 * 5.000 = 4 \text{ Euros}$$

Second example: A DFP settlement instruction (delivering 5000 units of ISIN1) is matched at 17:00 two business days after its ISD (i.e. MBD= "ISD+2"). Given that matching occurs at 17:00, it is matched before the relevant cut-off of "ISD+2" (i.e. FOP cut-off is at 18:00) so it can still settle on "ISD+2".

LMFP will be calculated as follows (i.e. considering each business day as from the ISD until, and excluding, the business day when the instruction is matched):

- N = 2
- X= (MBD-n), starting with n=1 until N=2, which implies:

$$LMFP = R(ISD+1) * P(ISD+1) * \text{Quantity} + R(ISD) * P(ISD) * \text{Quantity}$$

Assuming that the Rate and reference Price for the ISIN1 on "ISD+1" and on ISD are R(ISD+1)= 1bp; R(ISD)= 1bp; P(ISD+1)= 9 Euros and P(ISD)= 8 Euros, the penalty imposed will be:

$$LMFP = 0,0001 * 9 * 5000 + 0,0001 * 8 * 5000 = 8,5 \text{ Euros}$$

**iii. For DPFOD and CPFOD Settlement Instructions (ISIN quantity is 0):**

$$LMFP = \sum_{n=1}^N (Rate_{day\ x} * Amount)$$

Where:

- **N** is equal to the number of business days resulting from the difference between the "ISD and the Matching Business Day (MBD)".
- **Rate** is the discount rate of the relevant currency stored in Static Data (according to ESMA definitions) and for the relevant business day (x).

Mathematically is "x= MBD – n"

- **Amount** is the cash amount failed to be delivered, which is the matched cash amount of the Settlement Instruction. Given that LMFP relate to the matching time, it is not the remaining amount at cut-off time like in SEFP but the matched amount.

**iv. For DWP and RWP Settlement Instructions:**

$$LMFP = LMFP \text{ for the securities side} + LMFP \text{ for the cash side}$$

Where:

- **LMFP for the securities side** is the one calculated following the formula of case i and ii.
- **LMFP for the cash side** is the one calculated following the formula of case iii.

**C-16: Formula for Late Matching Fail Penalty (LMFP) of instructions that can no longer settle on the business day when they are matched:**

See also "List of CSDR Items for Clarification": Item 17 "Formula used for calculation of cash penalties".

Everything will be exactly the same than in the previous point C-15 but we have now to include for the calculation, additionally, the business day where the instructions are matched.

I.e. The relevant formulas will be the same but with "n" starting with zero (starting with **n=0** instead of with n=1), in order to include in the calculation the business day where the instructions are matched.

**i. For DVP and RVP Settlement Instructions; and**

**ii. For DFP and RFP Settlement Instructions**

Given that in LMFP, there is no possibility to have a "Lack of cash" (i.e. the fail is always due to a late sending of the instruction causing the late matching), the formula is the same in both cases because the rate is always the rate for the ISIN.

$$LMFP = \sum_{n=0}^N (Rate_{day\ x} * Reference\ Price_{day\ x} * Quantity)$$

Where:

- **N** is equal to the number of business days resulting from the difference between the "ISD and the Matching Business Day (MBD)".
- **Rate** is the flat penalty rate stored in Static Data for the asset type of the ISIN of the failed instruction (according to ESMA definitions) and for the relevant business day (x).

Mathematically is "x= MBD – n" (see examples below).

- **Reference Price** is the price stored in Static Data for the ISIN of the instruction and for the relevant business day (x).

Mathematically is "x= MBD – n" (see examples below).

- **Quantity** is the quantity of securities failed to be delivered, which is the matched quantity of the Settlement Instruction. Given that LMFP relate to the matching time, it is not the remaining quantity at cut-off time like in SEFP but the matched quantity.

Two detailed examples are provided hereafter to clarify the formula:

First example: A DVP settlement instruction (delivering 5000 shares of ISIN1 versus 39.000 Euros) is matched at 16:30 on its ISD (i.e. MBD= ISD). Given that matching occurs at 16:30, it is matched after the relevant cut-off of the ISD (i.e. DVP cut-off is at 16:00) so it cannot be settled on ISD.

LMFP will be calculated as follows (i.e. considering each business day as from the ISD until, and including, the business day when the instruction is matched):

- N = 0
- X= (MBD-n), starting with n=0 until N=0, which implies:

$$\text{LMFP} = R(\text{ISD}) * P(\text{ISD}) * \text{Quantity}$$

Assuming that the Rate and reference Price for the ISIN1 on the ISD are R(ISD)= 1bp and P(ISD)= 8 Euros, the penalty imposed will be:

$$\text{LMFP} = 0,0001 * 8 * 5000 = 4 \text{ Euros}$$

Second example: A DFP settlement instruction (delivering 5000 units of ISIN1) is matched at 18:30 two business days after its ISD (i.e. MBD= "ISD+2"). Given that matching occurs at 18:30, it is matched after the relevant cut-off of "ISD+2" (i.e. FOP cut-off is at 18:00) so it cannot be settled on "ISD+2".

LMFP will be calculated as follows (i.e. considering each business day as from the ISD until, and including, the business day when the instruction is matched):

- N = 2
- X= (MBD-n), starting with n=0 until N=2, which implies:

$$\text{LMFP} = R(\text{ISD}+2) * P(\text{ISD}+2) * \text{Quantity} + R(\text{ISD}+1) * P(\text{ISD}+1) * \text{Quantity} + R(\text{ISD}) * P(\text{ISD}) * \text{Quantity}$$

Assuming that the Rate and reference Price for the ISIN1 on "ISD+2", "ISD+1" and on ISD are: R(ISD+2)= 1bp; R(ISD+1)= 1bp; R(ISD)= 1bp; P(ISD+2)= 12 Euros; P(ISD+1)= 9 Euros and P(ISD)= 8 Euros, the penalty imposed will be:

$$\text{LMFP} = 0,0001 * 12 * 5000 + 0,0001 * 9 * 5000 + 0,0001 * 8 * 5000 = 14,5 \text{ Euros}$$

**iii. For DPFOD and CPFOD settlement instructions (where ISIN quantity is 0):**

$$LMFP = \sum_{n=0}^N (Rate_{day\ x} * Amount)$$

Where:

- **N** is equal to the number of business days resulting from the difference between the “ISD and the Matching Business Day (MBD)”.
- **Rate** is the discount rate of the relevant currency stored in Static Data (according to ESMA definitions) and for the relevant business day (x).

Mathematically is “x= MBD – n”

- **Amount** is the cash amount failed to be delivered, which is the matched cash amount of the Settlement Instruction. Given that LMFP relate to the matching time, it is not remaining amount at cut-off time like in SEFP but the matched amount.

**iv. For DWP and RWP Settlement Instructions:**

$$LMFP = LMFP \text{ for the securities side} + LMFP \text{ for the cash side}$$

Where:

- **LMFP for the securities side** is the one calculated following the formula of case i and ii.
- **LMFP for the cash side** is the one calculated following the formula of case iii.

To simplify the above definitions, it has been considered in all the formulas that the price of the security and the cash amount of the settlement instruction is denominated in the same currency than the currency of the amount to be imposed by the penalty.

**C-10 (bis):** Shall the price or the amount be in a different currency, the exchange rate will be used in order to calculate the amount of the penalty in the relevant currency (e.g. Euro).

**Pending point:** As mentioned in clarification C-10 for SEFP, given that T2S is a multi-currency settlement platform, T2S provides cash settlement in central bank money in any T2S settlement currency, it has to be discussed in the CSDR TF how to define the relevant currency of the amount imposed by a penalty.

Same principle agreed for SEFP will be applied for LMFP.

**C-17:** For the computation of Late Matching Fail Penalties (LMFP) the maximum period, that T2S will be able to consider the relevant price for previous days where the instruction failed to settle due to the late

matching, is the period the reference data (reference prices) remains in the system without being purged (i.e. 3 calendar months).

I.e. in case an instruction is matched more than 3 calendar months after its ISD, only the prices for the business days within the last 3 calendar months (counting backwards from the business day the instruction was matched) are available for the computation of the LMFP.

As a consequence, in case an instruction has an ISD more than 3 calendar months in the past, T2S will compute the LMFP:

- Using the prices available for the business days within the last 3 calendar months, and
- For the prices for the business days before the last 3 calendar months (that are not available because these prices have already been purged), T2S will use in the computation of the penalty the closest price available (i.e. the price for the earliest business day, which is the price for the business day of 3 months ago).

## 6. Reference data

This section outlines the reference data required for the computation of penalties, as described in the previous sections. The section focuses on (i) the definition of the relevant data (in terms of classes of information and their attributes), (ii) the identification of the actors that shall be responsible for providing and maintaining these data and (iii) the identification of the T2S actors that shall be responsible for feeding T2S with these data and keeping them up-to-date. Conversely, at this stage it does not predicate any specific implementation option (neither in terms of functions nor from a data structure viewpoint), as this will require a detailed functional and technical assessment of the final set of user requirements, in conjunction with an adequate set of volumetric assumptions concerning the different reference data feeds (see section 10 – “Volumetrics and open questions on reference data”).

**C-18:** The **Financial Instrument Type** is a classification of securities according to which CSDs shall report, as laid out in the CSDR Level 2. This classification is also relevant, together with the **Liquidity** and **SME Growth Market** classifications (see below for their definition), for the identification of the applicable penalty rate for any given instruction. For each security, the Financial Instrument Type classification can be automatically derived from the CFI Code of the same security, according to the following mapping table (under review by ESMA):

**TABLE 1 – CFI CODE – FINANCIAL INSTRUMENT TYPE MAPPING TABLE**

CFI Code Structure	Financial Instrument Type
Position 1 of the code is “E”	SHRS
Position 1 of the code is “D” and position 4 is “T” or “C”	SOVR
Position 1 of the code is “D”, position 2 is not “Y” and position 4 is neither “T” nor “C”	DEBT
Position 1 of the code is “R”	SECU
Position 1 of the code is “C” and position 2 is “E”	ETFS
Position 1 of the code is “C” and position 2 is not “E”	UCIT
Position 1 of the code is “D”, position 2 is “Y” and position 4 is neither “T” nor “C”	MMKT
Position 1 of the code is “T”, position 2 is “T” and position 3 is “N”	EMAL
All other CFI Code structures	OTHR

*See also “List of CSDR Items for Clarification”: Item 2 “Types of Financial Instruments for review and evaluation of CSDs / reporting of settlement fails and ISO CF110962:2015 standard compliance”.*

ESMA, or another relevant market-wide body, shall be responsible for providing and maintaining this mapping table.

T2S should in any case implement the mapping table, because it will need it for the identification of the applicable penalty rate. This does not exclude that the same mapping table may also be implemented on the CSD side, e.g. for reporting purposes.



The implementation of the mapping table in T2S shall not necessarily imply storing the new information as a new attribute of the Security object (as originally requested with CR-608<sup>9</sup>), in order to avoid unnecessary impact on the application and on the securities reference data messages. In such case, reporting from T2S to CSDs would be based on the CFI code only.

This classification of securities is an attribute of the Securities Subject to Penalties (see C-21 below), therefore the T2S actor responsible for providing and maintaining this attribute and the T2S actor responsible for feeding T2S with this attribute and keeping it up-to-date are the same mentioned below for C-21.

**C-19:** The **Liquidity** is a binary classification of securities that applies for shares, i.e. when the Financial Instrument Type of the security is "SHRS" and that specifies whether the security is "Liquid" or "Illiquid".

This classification of securities is an attribute of the Securities Subject to Penalties (see C-21 below), therefore the T2S actor responsible for providing and maintaining this attribute and the T2S actor responsible for feeding T2S with this attribute and keeping it up-to-date are the same mentioned below for C-21.

**C-20:** The **SME Growth Market** is a binary classification of securities that applies for any type of securities and that specifies whether the security is listed/traded in a SME Growth Market or not.

This classification of securities is an attribute of the Securities Subject to Penalties (see C-21 below), therefore the T2S actor responsible for providing and maintaining this attribute and the T2S actor responsible for feeding T2S with this attribute and keeping it up-to-date are the same mentioned below for C-21.

*See also "List of CSDR Items for Clarification": Item 3 "Discrepancy between types of Financial Instruments for review and evaluation of CSDs / reporting of settlement fails and asset classes for calculating cash penalties".*

**C-21:** The **Securities Subject to Penalties** is a list of securities that defines the scope of financial instruments subject to penalties. Each item of this list is a class of information that includes the following attributes:

- ISIN
- Financial Instrument Type (as defined in C-18)
- Liquidity (as defined in C-19)
- SME Growth Market (as defined in C-20)
- Valid From (date from which the item of the list is valid)
- Valid To (data until which the item of the list is valid)

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<sup>9</sup> CR608 is currently on hold and pending decision

As to point (ii) of the introductory part of this section, ESMA, or a data provider based on raw data provided by ESMA, shall be responsible for providing and maintaining the list of securities subject to penalties (this is still under discussion with ESMA).

As to point (iii) of the introductory part of this section, the current default assumption is that each CSD (acting as a SME) shall be responsible for feeding T2S with these data (for the list of securities subject to penalties for which they act as Securities Maintaining Entity) and for keeping them up-to-date<sup>10</sup>.

*See also "List of CSDR Items for Clarification": Item 9 "Scope of financial instruments subject to penalties".*

**C-22:** The **Daily Price** is a list of prices that shall be used for the daily calculation of penalties, as described in the previous sections. Each item of this list is a class of information that includes the following attributes:

- ISIN
- Price Date (date of validity of the price)
- Currency Code
- Price (value of the price, i.e. the closing price of the day)

As to point (ii) of the introductory part of this section, an external provider shall be responsible for providing and maintaining the list of daily prices.

As to point (iii) of the introductory part of this section, the current default assumption is that each CSD (acting as a SME) shall be responsible for feeding T2S with these data (for the prices related to securities for which they act as Securities Maintaining Entity) and for keeping them up-to-date<sup>11</sup>.

**C-23:** The **Securities Penalty Rate** is a list of applicable rates for each security's asset type / liquidity. Each item of this list is a class of information that includes the following attributes:

- Asset Type / Liquidity
- Daily Flat Penalty Rate (rate value)
- Valid From (date from which the rate value applies)

*See also "List of CSDR Items for Clarification": Item 3 "Discrepancy between types of Financial Instruments for review and evaluation of CSDs / reporting of settlement fails and asset classes for calculating cash penalties".*

As to point (ii) of the introductory part of this section, the European Commission will adopt a Delegated Act related to the penalty rates to be applied to failed transactions (to be reviewed on an ad hoc basis). As to point (iii) of the introductory part of this section, the current working assumption is that the T2S

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<sup>10</sup> An alternative option may be investigated at a later stage whereby an external provider would feed T2S with the full list of Securities Subject to Penalties and keep them up-to-date on behalf of all the CSDs.

<sup>11</sup> An alternative option may be investigated at a later stage whereby an external provider would feed T2S with the full list of Daily Prices and keep them up-to-date on behalf of all the CSDs.

Operator will upload and update this information in T2S manually (it is expected that changes to the securities penalty rate would only be done on an exceptional basis, e.g. when market conditions are changing). CSDs shall be able to view this information, as for other general T2S parameters (see section 1.5.1 of the UDFS for a list of the general configuration parameters).

**C-24:** The **Cash Penalty Rate** is a list of applicable rates for each T2S settlement currency. Each item of this list is a class of information that includes the following attributes:

- Currency Code
- Daily Flat Penalty Rate (rate value, i.e. discount rate of the currency, enforced to zero in case of negative discount rates)
- Valid From (date from which the rate value applies)

As to point (ii) of the introductory part of this section, ECB shall be responsible for providing and maintaining the cash penalty rate for euro, whereas the relevant CB shall be responsible for providing and maintaining the cash penalty rate for other settlement currencies (e.g. the Danish CB for DKK). As to point (iii) of the introductory part of this section, the current working assumption is that the T2S Operator will upload and update this information in T2S manually (it is expected that changes to the cash penalty rate would only occur a few times per year).

**C-25:** The **Euro Foreign Exchange Reference Rate** is a list of daily applicable exchange rates for each currency against the Euro. Each item of this list is a class of information that includes the following attributes:

- Currency Code
- Daily Exchange Rate (rate value, i.e. the value in Euros corresponding to the currency unit)
- Exchange Rate Date (date of validity of the exchange rate)

As to points (ii) and (iii) of the introductory part of this section, ECB shall be responsible for feeding T2S with the daily exchange rates for all relevant currencies against Euro and for keeping them up-to-date.

**C-26:** The responsible actor shall create and maintain new penalties related reference data (e.g. a new security subject to penalties, a new daily price, etc.) in T2S before they are used for the calculation of penalties for a given date.

**C-27:** After reference data have been used for the calculation of penalties for a given date, some updates of reference data are still possible and they may trigger the re-calculation of penalties for previous dates. The following table provides the exhaustive list of all the possible reference data updates that may be performed by the relevant responsible actor, in order to trigger the recalculation and update of previously calculated penalties (see section 8.2- "Automatic update of existing penalties by T2S" for more information):

**TABLE 2 – POSSIBLE REFERENCE DATA UPDATES**

<b>Responsible T2S Actor</b>	<b>Class of Information</b>	<b>Attribute</b>	<b>Updatable</b>
CSD (acting as SME)	Securities Subject to Penalties	ISIN	No
		Financial Instrument Type	Yes
		Liquidity	Yes
		SME Growth Market	Yes
		Valid From	No
		Valid To	No
CSD (acting as SME) / External Provider	Daily Price	ISIN	No
		Price Date	No
		Currency Code	Yes
		Price	Yes
T2S Operator	Securities Penalty Rate	Asset Type / Liquidity	No
		Daily Flat Penalty Rate	Yes
		Valid From	No
T2S Operator	Cash Penalty Rate	Currency Code	No
		Daily Flat Penalty Rate	Yes
		Valid From	No
ECB	Euro Exchange Reference Data	Currency Code	No
		Daily Exchange Rate	Yes
		Exchange Rate Date	No

**C-28:** In order to ensure T2S does not allow amending reference data (and consequently recalculating penalties) after the billing process between the CSDs and their customer has been finalized, the above listed updates can only be performed on reference data that were within their validity period in the last X calendar days, with X being a pre-defined and configurable T2S system parameter (in any case not higher than the general T2S retention period of three months).

## 7. Reporting of penalties

The penalties are calculated and reported for each business day on a gross basis.

According to Point 5 of Article 16 (Collection of cash penalties) of the Draft Technical Standards on Settlement Discipline: "On a daily basis, the CSD shall provide to participants the details of the calculation of the penalties for every failed settlement instruction, indicating the account to which each failed settlement instruction refers".

In this line, all the penalties computed for a business day "D" will be reported by T2S at the end of the NTS on the following business day "D+1" via a new T2S ad-hoc functionality for reporting of penalties.

**C-29:** The penalties computed will be reported within the **Daily Penalty List**, which will be designed based on the ISO 20022 methodology. Penalties will be also made available **via U2A** (i.e. via T2S GUI).

**C-30:** The reporting of the penalties will be based on a new "penalties repository" in T2S, which will store the information needed to populate and send the relevant information for each penalty, i.e. instructions-like, the new repository will be used to keep the records and information for each and every penalty. Like other dynamic data, penalties will be purged after 3 calendar months from the business day when they are computed. Penalties will be also stored in Long Term Statistics (LTSI) and archived in Legal Archiving (LEA) and provided on request according to the LEA rules.

**C-31:** Penalties are computed for, and reported to, the relevant **Account owner of the securities account of the underlying settlement instruction**. No matter whether the cause of the failure was on the securities or on cash side of the transaction, the penalty will be always computed for the Account owner of the securities account.

According to clause 15 of the CSDR: "One of the most efficient ways to address settlement fails is to require failing participants to be subject to a compulsory enforcement of the original agreement."

Accordingly, the failing participant (party imposed with the penalty) and the non-failing participant (party entitled to receive the penalty) are the two counterparts responsible for the settlement of the underlying transaction, and consequently the Account owners of the securities accounts.

Reporting the penalties to the Account Owner of the securities account of the underlying settlement instruction (i.e. CSD Participant) is in line, not only with the CSDR and RTS on Settlement Discipline, but also with the ISO 20022 definitions where "Fail and Claim Management" are considered as part of "settlement / semt" messages or business area<sup>12</sup>. "Semt" message reporting is based on the securities side, for example, semt.018 (report of pending instructions) provide the information, i.e. unsettled instructions, based on the securities account of the pending instruction.

Reporting to the Account Owner of the securities account implies that it is the CSD participant that shall be in charge of reconciling the penalty even in case the penalty was imposed due to a settlement failure

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<sup>12</sup> [https://www.iso20022.org/securities\\_dashboard.page](https://www.iso20022.org/securities_dashboard.page)

on the cash side (e.g. in case of a failed RvP). Same as in the semt.018, the Account Owner of the securities account is in charge of reconciling and will have to contact the payment bank providing cash services if it is not its own DCA. The CSD participant will know the transaction to which the penalty applies to and, as a result, will be in a position to recharge it to its payment bank if, after investigation, the latter is held responsible. Please note that to help in this reconciliation, the Daily Penalty List will provide the DCA of the underlying settlement instruction.

Finally, reporting to the Account Owner of the securities account helps the monthly aggregation of the penalties compared with the case where the penalties imposed due to a settlement failure on the cash side would be reported to the payment bank owner of the DCA. Please note that the CSD may not have a relationship with all the payment banks providing cash services to its participants (and also in T2S, CSD participants are in the data scope of the relevant CSD whereas the payment banks are in the data scope of their Central Bank).

**C-32:** In case of "External CSD settlement instructions<sup>13</sup>", the External CSD is considered as the Account Owner of the relevant securities account of the underlying settlement instruction.

Please refer to the Annex section 10.1- "Additional clarification for external CSD settlement" for further details.

**C-33:** Each penalty computed will be reported twice:

1. To the Account Owner of the securities account of the underlying settlement instruction (i.e. CSD Participant) to whom the penalty is imposed<sup>14</sup> (i.e. the failing participant).
2. To the Account Owner of the securities account of the underlying settlement instruction (i.e. CSD Participant) entitled to receive the penalty<sup>15</sup> (i.e. the non-failing participant).

Please note that each penalty will have a common unique identification assigned by T2S that can be used for reconciliation on both sides. Additionally, T2S will provide an individual unique identification to each counterpart.

Consequently, any penalty might be identified by:

- Common identification of the penalty (it is a unique identification assigned by T2S to the penalty and it is common for both the failing and the non-failing participant)
- Unique individual identification of the penalty for the failing participant.
- Unique individual identification of the penalty for the non-failing participant.

It is worth clarifying that only two of them are reported together i.e. the Common identification of the penalty and the relevant Unique individual identification for the party that is addressed.

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<sup>13</sup> As defined in the annex, "External CSD settlement Instructions" are those whose depository is an External CSD and the securities account is unknown in T2S.

<sup>14</sup> In terms of the Penalty List message this has to be understood as: Penalty to be debited

<sup>15</sup> In terms of the Penalty List message this has to be understood as: Penalty to be credited

## 7.1 Daily Penalty List

The Daily Penalty List, including the penalties of a business day "D", will be generated after the end of the Night Time Settlement of "D+1".

**C-34:** In order to avoid unnecessary processing and storage, T2S will create the Daily Penalty List only if the requiring T2S Actor has set up in advance the configuration (needed to receive the Daily Penalty List. The configuration of the Daily Penalty List (standard T2S one-time configuration process) will be done via the T2S GUI.

**C-35:** The Daily Penalty List shall allow each CSD to receive, in a single message, all the relevant penalties computed for the previous business day. All the relevant penalties computed has to be understood as all the penalties that its participants (each Account Owner), i.e. all parties created under the CSD data scope, are either imposed with or entitled to receive.

Considering that penalties are informed per Account Owner of the securities account of the underlying settlement instruction (i.e. CSD Participant), in the new ISO 20022 message for the Daily Penalty List, the Account Owner shall be repetitive in order to be able to include all the information in a single message.

**C-36:** It shall also be possible for CSD participants that are directly connected to T2S (i.e. DCPs) to receive the Daily Penalty List including all the penalties that this CSD participant (i.e. Account Owner defined in a given CSD) is either imposed with or entitled to receive.

In case a DCP is an active participant of several CSDs, the DCP would have to configure and receive a Daily Penalty List per CSD where it is active / defined as participant. I.e. The DCP will receive, in a different flow/message, one Daily Penalty List for each CSD it is active with. The relevant CSD (Account Servicer BIC) of each Daily Penalty List will be provided within the message.

**C-37:** T2S Actors will be able to configure the Daily Penalty List according to their wish to:

- receive the Daily Penalty List directly after its creation (via A2A mode)
- not to receive directly after its creation but to query the Daily Penalty List afterwards (this latter query /pulling the list feature will be available via A2A as well as U2A).

**C-38:** All Daily Penalty List pushed in A2A mode will be compressed.

**C-39:** For the Daily Penalty List a message splitting at business level may occur in order to avoid exceeding the size limitation of 32 MB.

**C-40:** When sending the Daily Penalty List, T2S shall flag that this message is coming from T2S and, specifically, from the T2S "Penalty mechanism". For this purpose, the business application header of the Daily Penalty List will inform, additionally, the "Penalty mechanism" within the details of the originator of the message (i.e. within the "From block" of the business application header).

**C-41:** After the clarifications provided in this document regarding the computation of penalties, it is considered that each penalty computed for a given business day and reported to the Account Owner (CSD participant) and/or its CSD shall include the details listed hereafter.

**For a given business day, CSD and Account Owner, each penalty reported will inform:**

- **Penalty Details:**
  - Individual ID of the penalty I.e.: reference assigned by T2S to the relevant side of the penalty i.e. for the relevant account owner (either for the failing or for the non-failing participant).
  - Common ID of the penalty. I.e.: reference assigned by T2S to the penalty and that is common for both the failing and the non-failing participant.
  - Type of penalty. I.e.: "SEFP" (Settlement Fail Penalty) or "LMFP" (Late Match Fail Penalty)
  - Number of days:
    - o Value is always 1 in case of "SEFP".
    - o Number of business days used for the calculation of the "LMFP" (i.e. the business days as from the ISD until, and either including or excluding, the business day when the instruction is matched in T2S).
  - Penalty Rate in basis points and quotation date (repetitive field)
  - Reference Price and quotation date (repetitive field)
  - Foreign Exchange Rate Details, Price and quotation date in case the reference price is not in Euros (repetitive field)
  - **Amount of the Penalty:** Provided in the relevant T2S currency and together with:
    - o Debit if the penalty is imposed to the CSD Participant (i.e. for the failing participant)
    - o Credit if the CSD Participant is entitled to receive the penalty (i.e. for the non-failing participant)
  - **Related settlement instruction details:**
    - o T2S Actor Reference of the Settlement Instruction
    - o T2S Reference of the Settlement Instruction
    - o T2S Matching Reference
    - o Instructing Party BIC
    - o Common reference stated in the underlying instruction
    - o Corporate Action Id stated in the underlying instruction (in case of CAs on flows as otherwise the penalty would have not been computed)
    - o ISO Transaction Code



- ISD of the settlement instruction
- Securities Account number
- Securities Movement Type (DELI or RECE)
- Delivering and Receiving Parties<sup>16</sup>. I.e. communication of the:
  - Delivering Depository BIC (i.e. BIC of the delivering CSD)
  - Delivering Party 1 BIC (i.e. BIC delivering CSD Participant)
  - Delivering Party 2 (i.e. client of the delivering CSD participant, only if provided in the Settlement Instruction<sup>8</sup>)
  - Receiving Depository BIC (i.e. BIC of the receiving CSD)
  - Receiving Party 1 BIC (i.e. BIC receiving CSD Participant)
  - Receiving Party 2 (i.e. client of the receiving CSD participant, only if provided in the Settlement Instruction<sup>17</sup>)
- ISIN and classification details including:
  - Financial Instrument Type
  - Liquidity
  - SME Growth Market
- Quantity of the settlement instruction (remaining quantity for SEFP or matched quantity for LMFP)
- Payment Code (FREE or APMT).
- DCA number (only in case of settlement instructions against payment)
- DCA´s owner BIC (only in case of settlement instructions against payment)
- Currency and Amount of the settlement instruction (remaining amount for SEFP or matched amount for LMFP)
- Credit/Debit indicator of the settlement instruction (debit or credit of DCA)
- Acceptance and Matching timestamps (as per CR600)
- Information about the cut-off relevant for the instruction:
  - T2S event for the end of processing the relevant cut-off considered in the calculation of the penalty
  - Execution time of the event
- In case of "SEFP":
  - Reason code triggering the calculation of the "SEFP" (i.e. the "reason code by the time of the relevant cut-off").

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<sup>16</sup> Considering the securities movement type of the instruction, the Delivering and Receiving Parties allow the identification of the counterpart details

<sup>17</sup> The client of the CSD participant can be informed in the Settlement Instruction as a BIC or as a Proprietary Code or Name and Address (only when the any of the first two are used it is used for matching purposes)

**C-42:** The Daily Penalty List shall also include, per Account Owner (CSD Participant), the aggregated amount of all the penalties reported for the relevant business day. I.e.:

- Aggregated Debit Amount (sum of all penalties imposed to this CSD Participant that are reported in the Daily Penalty List, i.e. sum of all penalties reported as debit for this Account Owner);
- Aggregated Credit Amount (sum of all penalties reported in the Daily Penalty List that this CSD Participant is entitled to receive, i.e. sum of all penalties reported as credit for this Account Owner);

Within the CSDR TF it was clarified that even if T2S will not provide in the Daily Penalty List the aggregated amount including previous days, the ISO message shall allow informing it. I.e.:

- Aggregated amount including the previous business days (sum of all penalties imposed to this CSD Participant for the business day + the previous ones (sum of all penalties reported as debit + sum of all penalties reported as credit until the current business day))

## **7.2 Availability - query - of penalties in U2A**

As already mentioned, once the penalties are computed, they will be reported in the Daily Penalty List (if configured) and also made available in U2A to CSDs and directly connected parties (DCPs). Being available in U2A means that authorized T2S Actors will be able to query and view the penalties via the T2S GUI. **Pending point:** It is still under discussion whether CSD participants will be allowed to query penalties via U2A or not. For the time being, the functionality described hereafter considers that T2S will make penalties available in U2A to both, CSDs and CSD participants directly connected to T2S.

**C-43:** For the query of penalties, the T2S default rules for queries apply. For example, given that the query for penalties is in U2A, it will not be possible to send penalty queries to T2S during the maintenance window. In that case, a message will be returned indicating that T2S is currently under maintenance.

Additionally, following the same principle as for the U2A balance queries during the Night Time Settlement cycles, during the processing of penalties (i.e. daily calculation of penalties after the NTS) it won't be possible to query penalties. U2A penalty queries sent during the daily calculation of penalties shall not be stored in T2S for further processing, and the T2S actor should receive a real time message that the daily calculation of penalties is currently running.

**C-44:** In order to query penalties, a new privilege will be defined in T2S. I.e. "Penalty Query" shall be a new object privilege whose object is the relevant T2S Party (CSD, CSD Participant or External CSD).

**C-45:** When processing queries, T2S will only return results where the party that has submitted the query has the right to access the underlying data (the penalty).

Thus, a CSD participant or an External CSD can query the following penalties subject to access rights:

- Penalties that this party is imposed with;
- Penalties that this party is entitled to receive.

A CSD can query the following penalties subject to access rights:

- Penalties that its participants (i.e. parties defined under its data scope) are imposed with;
- Penalties that its participants are entitled to receive.

The queries presented hereafter are described in terms of search criteria and the results and screen to be provided as response, but do not predicate any specific implementation option in terms of the number of screens needed in T2S to provide these search criteria.

**C-46: Penalty query with a reference:** In order to query penalties, the query shall require the user to specify at least one or a combination of the following parameters:

- Common Id of the Penalty
- Individual ID of the penalty
- The T2S Actor Reference of the underlying settlement instruction (and the Instructing party)
- T2S Reference of the underlying settlement instruction.
- T2S Matching Reference

**Query response (depending on the reference used):**

- When the **Common Id** of the Penalty is used as parameter for the query, T2S shall return (subject to access rights) the relevant penalty and its common details for both the failing participant and the non-failing participant in the **Penalty common details screen**, where the following information will be provided:
  - Common ID of the penalty.
  - Type of penalty ("SEFP" or "LMFP")
  - Business Day when the penalty was computed
  - ISIN
  - Status of the penalty (i.e. Computed, Removed or Updated) and
    - o The description (free text) of the reason for the removal if the status of the penalty is removed and if it was provided by the CSD when the penalty was removed.
  - Euro Amount of the Penalty

Additionally:

- Individual Ids of the penalty (one for the failing and another for the non-failing participant) and for each of them:
  - o CSD

- Account Owner
- Related settlement instruction main references:
  - T2S Actor Reference of the Settlement Instruction
  - T2S Reference of the Settlement Instruction
  - T2S Matching Reference

Subject to access rights, it shall be possible to retrieve all the details of each individual penalty by accessing the Penalty details screen (described below) directly from the Penalty common details screen.

- When the **Individual Id** of the Penalty is used as parameter for the query, T2S shall return (subject to access rights) the relevant penalty (for the failing OR the non-failing participant) and its details in the **Penalty details screen**.

The **Penalty details screen** will provide the same information provided in the Daily Penalty List (see section 7.1).

Additionally: Subject to access rights, it shall be possible to retrieve all the details of the related settlement instruction (i.e. access to the "Settlement Instruction details screen") from the penalty details screen

- When either the **T2S Actor Reference** or the **T2S Reference** of the underlying Settlement Instruction is used as parameter for the query, T2S shall return (subject to access rights) all the penalties associated to this Settlement Instruction.

In case T2S returns a single penalty, the relevant penalty and its details will be provided (i.e. the **Penalty details screen** already described above).

In case there is more than one penalty returned, the list of penalties will be provided (**Penalty List screen**). Within this screen, T2S shall provide for each penalty returned:

- Common ID of the penalty
- Individual ID of the penalty
- Type of penalty ("SEFP" or "LMFP")
- Business Day when the penalty was computed
- ISIN
- CSD
- Account Owner
- Status of the penalty (i.e. Computed, Removed or Updated)
- Euro Amount of the Penalty and also the direction (Debit, Credit or TBD)
- Related settlement instruction main references:

- T2S Actor Reference of the Settlement Instruction
- T2S Reference of the Settlement Instruction
- T2S Matching Reference

From this screen (**Penalty List screen**), the T2S Actors shall be allowed to query the details of each single penalty reported in the list (i.e. to go to the **Penalty details screen**).

- When the **T2S Matching Reference** is used as parameter for the query, T2S shall return (subject to access rights) all the penalties associated to the two matched Settlement Instructions.

Same as in previous case:

In case T2S returns a single penalty, the relevant penalty and its details will be provided (i.e. the **Penalty details screen** already described above).

In case there is more than one penalty returned, the list of penalties will be provided (**Penalty List screen** already described above).

**C-47: Penalty query by ISIN Code:** T2S shall allow querying penalties associated to a given security and as of a specific date (i.e. computed on a given business day). I.e. query parameters:

- Business day
- Security (ISIN code)
- CSD
- Account Owner

This query shall require the ISIN and the date as minimum search criteria. In case the CSD is not specified, T2S will automatically consider the CSD associated to the party of the user performing the query.

When specifying the Business Day, it shall be allowed to specify a range / period. I.e. From and To. Limitations to the number of days will be provided in the in a second step at technical group level depending on volumetric assumptions and performance impacts.

**Query response:** The query shall return (subject to access rights) the relevant penalty /penalties. In case T2S returns a single penalty, the penalty and its details shall be provided in the **Penalty details screen** (details described above). In case there is more than one penalty returned, T2S will provide the list of penalties in the **Penalty List screen** (as described above).

**C-48: Penalty query by CSD Participant:** T2S shall allow querying penalties of a T2S Party or its responsible CSD as of a specific date (i.e. computed on a given business day). I.e. query parameters:

- Business day
- CSD

- Account Owner

This query shall require: i) either the CSD or the Account Owner (CSD participant) as well as; ii) the date as minimum search criteria. In case the CSD is not specified and only the Account Owner is provided, T2S will automatically consider the CSD associated to the party of the user performing the query.

When the Account Owner is provided in the query, it shall be allowed to specify a range / period for the Business day. I.e. From and To. Limitations to the number of days will be provided in the in a second step at technical group level depending on volumetric assumptions and performance impacts.

**Query response:** In the response to this query (subject to access rights), T2S shall provide not only the list of penalties, but also, per Account Owner (CSD Participant): the aggregated amount of all the penalties reported for the relevant business day. I.e.:

- Aggregated Debit Amount (sum of all penalties imposed to this CSD Participant i.e. sum of all debit penalties for this Account Owner);
- Aggregated Credit Amount (sum of all penalties that this CSD Participant is entitled to receive, i.e. sum of all credit penalties for this Account Owner);

**C-49: Query revisions of a Penalty:** T2S shall allow querying the revision history of a penalty. As it is described in following section 8- "Modification of existing penalties", existing penalties can be modified according to the rules defined in that section. As a consequence, T2S will allow to query the revisions (history) of a given penalty. This query will be accessible from the **Penalty details screen** containing the details of the penalty for which the T2S Actor wishes to see the history. The results will be provided in the **Penalty revisions screen**.

**C-50:** T2S shall provide the possibility to export the result of the queries from the current screen into a csv-file. If exporting a list (Penalty List screen), the related search criteria are exported as well whereas detailed data are only exported if the respective list and the details screen are covered by the same query. Otherwise just the list entry will be exported.

## 8. Modification of existing penalties

### 8.1 Removal of existing penalties by a CSD

According to ESMA's Technical Advice under the CSD Regulation (point 57 in page 17): "in the limited circumstance where settlement cannot be performed for reasons that are independent from any of the participants or the CSD, the penalty would not be charged. In order to achieve that exception, it should be possible to reduce the amount of the penalty to zero. Examples of these occurrences may be a suspension of the instrument from trading and settlement due to reconciliation issues, specific corporate actions which imply the instrument no longer exists, or technical impossibilities at the CSD level. In order to prevent abuse, these exemptions should be approved by the Competent Authority, either through approval of the CSD procedures detailing in which specific cases penalties do not apply, or on a case by case basis".

As a consequence, T2S will provide the CSDs the functionality to remove an already computed and reported penalty (i.e. to reduce the amount of the penalty to zero).

**C-51:** Removal of existing penalties can be requested in U2A (via T2S GUI). Considering that the removal of penalties shall occur only in limited circumstances, T2S will provide this functionality via U2A.

After discussions in the CSDR TF, it was agreed that also an A2A communication will be needed. Nevertheless, no ISO message was deemed necessary and a flat file communication can be foreseen (to be decided in a second step at technical group level).

**C-52:** CSDs will be able to request the removal of a penalty only when the penalty was imposed to one of its participants. For this purpose, the T2S operator will grant by default an ad-hoc privilege to the CSDs (e.g. "Privilege: Remove penalties"). The CSDs will then have to grant this privilege to their relevant U2A or A2A users that will manage the removal of penalties (i.e. T2S will require this privilege in order to perform the removal of a penalty).

The privilege will not be available for CSD participants (i.e. CSD Participants cannot be granted with this privilege).

**C-53:** In order to request the removal of a penalty in U2A, CSDs may query in U2A the penalty as described in previous section 7.2. The request for removal (related button) will be done from the Penalty details screen.

**C-54:** In order to ensure T2S does not allow modifying (removing) a penalty after the billing process between the CSDs and their customer has been finalized, CSDs will be able to request the removal of a penalty when the penalty was computed within the last X calendar days. With X being a pre-defined and configurable T2S system parameter (in any case not higher than the general T2S retention period of three months).

This limit is based on the assumption that the corrections shall be made before the payment of the penalty is done. Additionally, the payment may occur in a maximum period of 2 calendar months after the computation of the penalty according to the following:

- According to Point 5 of Article 16 (Collection of cash penalties) of the Draft Technical Standards on Settlement Discipline: “A CSD shall charge and collect at least monthly the net amount of cash penalties to be paid by each participant. On a daily basis, the CSD shall provide to participants the details of the calculation of the penalties for every failed settlement instruction, indicating the account to which each failed settlement instruction refers.”
- According to Point 1 of Article 17 (Redistribution of cash penalties) of the Draft Technical Standards on Settlement Discipline: “The CSD shall redistribute to the receiving participants that suffered from a settlement fail the net amount of cash penalties that it has collected in accordance with Article 16, at least monthly.”

Hence, it is predictable that the X number of days will imply a period that is: i) not only lower than the general T2S retention period of 3 three months but also ii) lower than 2 calendar months.

**C-55:** When the removal of a penalty is requested, the CSD will have the possibility to include a description (free text) of the reason why the penalty is removed i.e. set to zero.

**C-56:** The removal of a given penalty does not have any impact on possible future penalties that could be computed for the same underlying settlement instruction.

**C-57:** Once a penalty has been removed (i.e. amount has been set to zero), the penalty will be stored in T2S as status “Removed” together with the provided text description (if any). From the point in time a penalty is removed, it will be shown as removed in the GUI.

**C-58:** T2S will also report the removal of a penalty at the time of the creation of the following Daily Penalty List. For this purpose, T2S will generate a “**List of Modified Penalties**” together with the following **Daily Penalty List** (same time but different list).

I.e. On the following business day after the removal of the penalty, T2S will generate two lists:

- The normal **Daily Penalty List** with the penalties computed for the previous day; and
- The **List of Modified Penalties** including the penalties that have been removed since the generation of the lists of the previous business day. Within the List of Modified Penalties, the penalties that have been set to zero will be reported with:
  - New amount equal to zero,
  - Status “Removed”; and
  - The description (free text) of the reason for the removal if it was provided by the CSD when the penalty was removed.

The **List of Modified Penalties** will be generated only if at least one penalty has been modified since the generation of the lists of the previous business day. Otherwise, the **List of Modified Penalties** will not be generated. Within the **List of Modified Penalties** T2S will provide the new aggregated amount per Account Owner (CSD Participant) for the relevant business day for which a penalty has been removed.



Please note that in case penalties related to different business days were removed, T2S will generate a **List of Modified Penalties** per business day.

For example:

During business day 2016-11-25, two penalties are removed by a CSD (e.g. Penalty 1 computed for 2016-11-24 and Penalty 2 computed for 2016-11-23). After the Night Time Settlement of 2016-11-26, T2S will generate two Lists of Modified Penalties:

One informing about the modified penalties for 2016-11-24 (i.e. removal of Penalty 1) and, another, informing about the modified penalties for 2016-11-23 (i.e. removal of Penalty 2).

For more information about the List of Modified Penalties please refer to section 8.3- "List of Modified Penalties".

**C-59:** To cater for mistakes in the removal of penalties, T2S shall allow re-including a penalty that has been previously removed. The penalty will be flagged as "re-included" and T2S will calculate again the amount (it may have changed due to updates in the reference data while it was removed) at the same time as the next calculation of new penalties. T2S will report the re-inclusion (Penalty with status "re-included") in the following "**List of Modified Penalties**".

The re-inclusion can be requested in U2A (via T2S GUI). Similar to the removal, an A2A communication will be also needed for re-inclusions but no ISO message is deemed necessary and a flat file communication can be foreseen (to be decided in a second step at technical group level).

CSDs will be able to request the re-inclusion of a previously removed penalty when the penalty was computed within the last X calendar days. With X being a pre-defined and configurable T2S system parameter (in any case not higher than the general T2S retention period of three months).

## **8.2 Automatic update of existing penalties by T2S**

**C-60:** Upon changes of values of the related reference data, T2S shall recalculate existing penalties and update them in case its details have changed, for example, if there is a new amount due/entitled to receive.

The related reference data triggering the recalculation and possible update of a penalty are:

- Changes in the reference price of a given ISIN for a given business day that was used for the calculation of the penalty.
- Changes in the values of the attributes of the Securities Subject to Penalties object that was used in the calculation of the penalty. I.e. for a given ISIN, the changes of the value of the Financial Instrument Type, the Liquidity or the SME Growth Market of its Securities Subject to Penalties object that was valid at the time of calculation of the penalty.

- Changes in the values of the Daily Flat Penalty Rate that was used in the calculation of the penalty (either the Securities Penalty Rate or the Cash Penalty Rate).

**C-61:** For efficiency reasons, the recalculations of existing penalties will be done once a day (same time as calculation of new penalties, in a moment in time with low platform workload – i.e. after NTS) for all changes in the reference data occurred along the previous day (more precisely since the previous recalculation process /generation of penalty lists was performed).

**C-62:** T2S will only update those penalties that were computed within the last X calendar days. This will be ensured by not allowing changes of reference data that are related to dates that are more than X calendar days in the past (see section 6- "Reference data").

As already mentioned, the reasoning for this limit is that penalties shall not be modified after the billing process between the CSDs and their customer has been finalized.

**C-63:** T2S will only update those penalties that have not been removed by the CSD (i.e. penalties with status "Removed" will not be updated).

**C-64:** Once a penalty has been updated i.e. new reference data has been applied modifying the existing penalty, the penalty will be stored in T2S as "Updated".

In case a penalty is updated, T2S will generate a **List of Modified Penalties**. This List of Modified Penalties will be generated together with the generation of the following **Daily Penalty List**.

I.e. On the following business day, after the recalculation of a penalty, T2S will generate two lists:

- The normal **Daily Penalty List** with the penalties computed for the previous day; and
- The **List of Modified Penalties** including the updated penalties since the generation of the lists of the previous business day. Within the List of Modified Penalties, the penalties that have been updated will be reported with:
  - New updated amount and values; and
  - Status "Updated"

The **List of Modified Penalties** will be generated only if at least one penalty has been modified since the generation of the lists of the previous business day. Otherwise, the **List of Modified Penalties** will not be generated. Within the **List of Modified Penalties** T2S will provide the new aggregated amount per Account Owner (CSD Participant) for the relevant business day for which a penalty has been updated.

Please note that in case penalties related to different business days are updated, T2S will generate a **List of Modified Penalties** per business day.

For example:

During business day 2016-11-25, two penalties are updated by T2S (e.g. Penalty 1 computed for 2016-11-24 is updated due to a change in the price, and also Penalty 2 computed for 2016-11-23 is updated

due to a change in the price). After the Night Time Settlement of 2016-11-26, T2S will generate two Lists of Modified Penalties:

One informing about the modified penalties for 2016-11-24 (i.e. update of Penalty 1) and, another, informing about the modified penalties for 2016-11-23 (i.e. update of Penalty 2).

For more information about the List of Modified Penalties please refer to following section 8.3 below.

### **8.3 List of Modified Penalties**

The List of Modified Penalties shall be generated by T2S when there has been a modification (removal, re-inclusion or update) in a penalty since the generation of the previous business day lists. Otherwise, the **List of Modified Penalties** will not be generated. In case that there has been modifications of more than one penalty, and these penalties were computed for different business days, T2S will generate a **List of Modified Penalties** per business day as described in sections 8.1 and 8.2.

The List of Modified Penalties shall behave in the same way than the Daily Penalty List in terms of possible recipients, configuration and information provided. As a consequence:

**C-65:** In order to avoid unnecessary processing and storage, T2S will create the List of Modified Penalties only if the requiring T2S Actor has set up in advance the configuration needed to receive the List. The configuration of the List of Modified Penalties (standard T2S one-time configuration process) will be done via the T2S GUI.

**C-66:** It shall be possible for both CSDs and DCPs to receive the List of Modified Penalties. The penalties will be reported per Account owner. DCPs will need to configure one List of Modified Penalties per CSD they are active with.

**C-67:** T2S Actors will be able to configure the List of Modified Penalties according to their wish to:

- receive the List of Modified Penalties directly after its creation (via A2A mode)
- not to receive directly after its creation but to query the List of Modified Penalties afterwards (this query /pulling the report will be available in A2A as well as in U2A).

**C-68:** All the Lists of Modified Penalties pushed in A2A mode which exceed the minimum compression size of 2 kb will be compressed.

**C-69:** For the the List of Modified Penalties a message splitting at business level may occur in order to avoid exceeding the size limitation of 32 MB.

**C-70:** When sending the List of Modified Penalties, T2S shall flag that this message is coming from T2S and, specifically, from the T2S "Penalty mechanism". For this purpose, the business application header of

the List of Modified Penalties will inform the "Penalty mechanism" within the details of the originator of the message (i.e. within the "From block" of the business application header).

**C-71:** For each penalty reported (i.e. each penalty that has been modified) in the List of Modified Penalties, the same fields and structure per Account Owner as in the Daily Penalty List will be provided.

The penalty will be reported with status "Updated" and the new data after the modification will be informed in the relevant field. For example, the new amount computed for the penalty will be informed in the field amount.

The List of Modified Penalties shall also include, per Account Owner (CSD Participant), the new aggregated amount(s) for the business day (i.e. considering the new data).

## 9. Volumetrics and open questions on reference data

Id	Question
Q-01	How many items of the list of Securities Subject to Penalties will be created, updated and deleted per day and with which distribution/peaks?
Q-02	Will there be any initial loading of the list of Securities Subject to Penalties for securities that already exist in T2S? Yes.
Q-03	How many active/valid elements will contain the list of Securities Subject to Penalties (in terms of min-max range)?
Q-04	How many items of the list of Daily Prices will be created, updated and deleted per day and with which distribution/peaks?
Q-05	How many active/valid elements the list of Daily Prices will contain (in terms of min-max range)?
Q-06	<p>The volumes of penalties need to be estimated:</p> <ul style="list-style-type: none"><li>- Number of SEFP per business day- This one can be related to the expected max ratio of 5% of failed settlement instructions (according to current T2S volumetric assumptions). Please note that the number of reported penalties will be twice this number as the penalties are reported to the party the penalty is imposed with as well as to the party entitled to receive the penalty.</li><li>- Number of LMFP per business day- Currently no data is available for the whole T2S community about the number of instructions sent to late. It shall be estimated the number of instructions sent to late as well as the average number of days that the instructions are sent late.</li></ul>

## 10. Annex

### 10.1 Additional clarification for external CSD settlement

See also "List of CSDR Items for Clarification": Item 13 "Cross-border settlement penalty reconciliation".

In the context of T2S, external CSD settlement can be defined as settlement which involves one CSD not participating in T2S. In case penalties are imposed in the context of T2S external CSD settlement because the instruction and its ISIN are in scope, the process will involve a chain of transactions and therefore further clarification was deemed necessary.

An External CSD (CSD not participating in T2S) is defined as a specific party type "External CSD" by a CSD participating in T2S (with which it has established a legal relationship outside T2S). An "External CSD" T2S party is considered as a CSD Participant of the CSD in T2S.

In this context, "External CSD settlement instructions" are those whose depository is an External CSD, i.e.:

- Delivering settlement instructions whose Delivering Depository is an External CSD
- Receiving settlement instructions whose Receiving Depository is an External CSD

These settlement instructions may be sent directly by the External CSD (if DCP), or by the CSD in T2S on behalf on the External CSD, or by another authorised party.

The above clarification, regarding the treatment in T2S of "External CSD" parties as CSD Participant of the CSD in T2S, is very relevant for the penalty mechanism because it implies that: in external CSD settlements for which a penalty is computed, T2S will consider the "External CSD" as either the failing participant or the participant entitled to receive the penalty. In other words, in "External CSD settlement instructions", the "External CSD" acts as Account owner. This is in line with the fact that the participants of an "External CSD" are not known by T2S (i.e. they are not T2S parties).

Four examples (two for each of the two most representative scenarios for external CSD settlement) are provided hereafter in order to illustrate how the penalty mechanism will work in external CSD settlement:

First scenario: Issuer CSD in T2S (CSD I) and investor CSD (CSD A) outside and defined as "External CSD" by CSD I:

- *Example 1*: Delivery from Participant I (at issuer CSD I) to Participant A (at investor External CSDA)
- *Example 2*: Delivery from Participant A (at investor External CSDA) to Participant I (at issuer CSDI)

Second scenario: Investor CSD (CSD A) in T2S and the issuer CSD (CSD I) outside and defined as "External CSD" by CSD A:

- *Example 1*: Delivery from Participant I (at External CSDI issuer of the security) to Participant A (at investor CSDA)

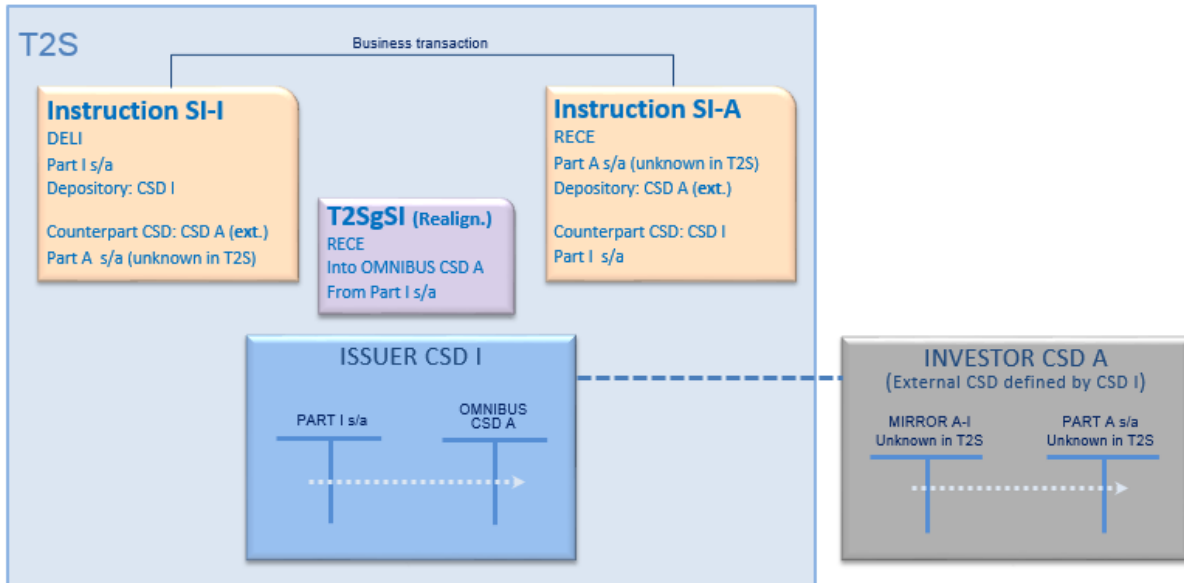
- *Example 2:* Delivery from Participant A (at investor CSDA) to Participant I (at External CSDI issuer of the security)

First scenario with Issuer CSD in T2S (CSD I) and investor CSD (CSD A) outside and defined as “External CSD” by CSD I

*Example 1: Delivery from Participant I (at Issuer CSD I) to Participant A (at investor External CSDA)*

The business transaction is composed by the matched settlement instructions: SI-I and SI-A.

- SI-I is a delivering settlement instruction of a CSD in T2S (CSDI)
- SI-A is a receiving “External CSD settlement instruction” (CSDA)
- Additionally, T2S will generate a settlement instruction (T2SgSI) for realignment purposes within the CSDI.



In this scenario, if SI-I is subject to a penalty in T2S (Participant I is the failing participant):

1. Details of the penalty will be provided by T2S in the Daily Penalty List of issuer CSD I:
  - Penalty imposed to Participant I; and
  - “External CSD A” is entitled to receive the penalty.

The CSD I shall provide the “External CSD A” with the details of the penalty

*Note that if “External CSD A” acts as DCP, then the “External CSD A” could receive the Daily Penalty List directly from T2S.*

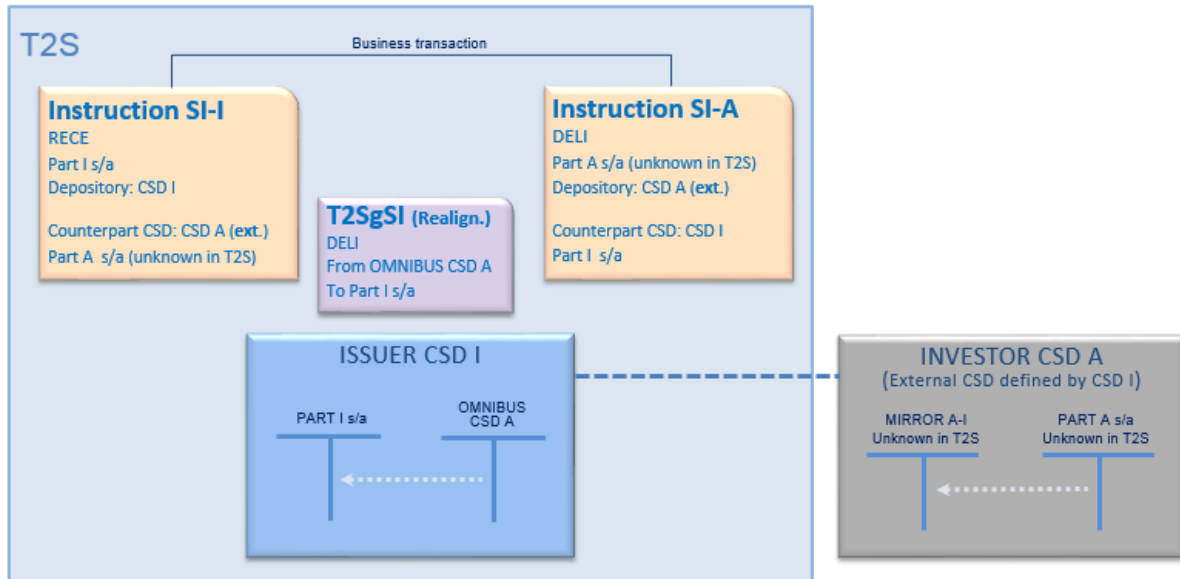
2. The “External CSD A” shall reconcile the details of the penalty provided (the one calculated by T2S) with the penalty calculated in its own system (theoretically for the same amount) and distribute the information to its participant, hence providing Participant A with the information about the penalty it is entitled to receive.

First scenario with Issuer CSD in T2S (CSD I) and investor CSD (CSD A) outside and defined as “External CSD” by CSD I

*Example 2: Delivery from Participant A (at investor External CSD A) to Participant I (at Issuer CSD I)*

The business transaction is composed by the matched settlement instructions: SI-I and SI-A.

- SI-A is a delivering “External CSD settlement instruction” (CSDA)
- SI-I is a receiving settlement instruction of a CSD in T2S (CSDI)
- Additionally, T2S will generate a settlement instruction (T2SgSI) for realignment purposes within the CSDI.



In this scenario, if SI-A is subject to a penalty in T2S (“External CSD A” is the failing participant):

1. Details of the penalty will be provided by T2S in the Daily Penalty List of issuer CSD I:
  - Penalty imposed to “External CSD A”; and
  - Participant I is entitled to receive the penalty.

The CSD I shall provide the “External CSD A” with the details of the penalty

*Note that if “External CSD A” acts as DCP, then the “External CSD A” could receive the Daily Penalty List directly from T2S.*

2. The “External CSD A” shall reconcile the details of the penalty provided (the one calculated by T2S) with the penalty calculated in its own system (theoretically for the same amount) and distribute the information to its participant, hence providing Participant A with the information about the penalty it is imposed with.

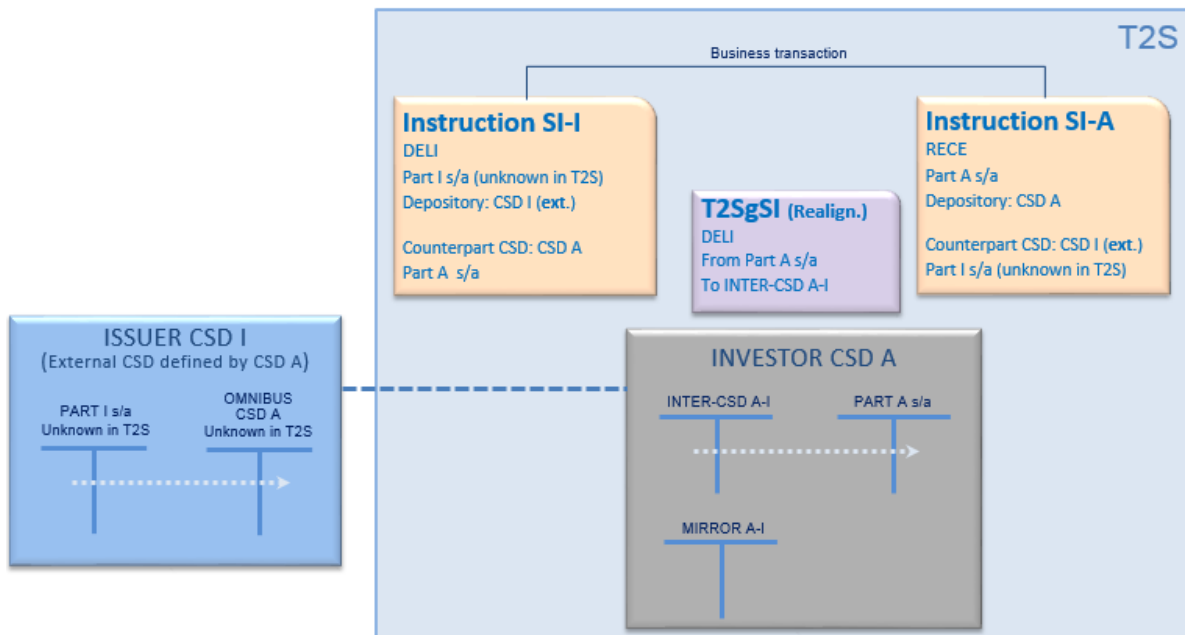


Second scenario with investor CSD (CSD A) in T2S and the issuer CSD (CSD I) outside and defined as External CSD by CSD A

*Example 1: Delivery from Participant I (at External CSD I issuer of the security) to Participant A (at investor CSDA)*

The business transaction is composed by the two matched settlement instructions: SI-I and SI-A.

- SI-I is a delivering “External CSD settlement instruction” (CSDI)<sup>18</sup>
- SI-A is a receiving settlement instruction of a CSD in T2S (CSDA)
- Additionally, T2S will generate a settlement instruction (T2SgSI) for realignment purposes within the CSDA.



In this scenario, if SI-I is subject to a penalty in T2S (Participant A is the failing participant):

1. Details of the penalty will be provided by T2S in the Daily Penalty List of investor CSD A:
  - Penalty imposed to “External CSD I”; and
  - Participant A is entitled to receive the penalty

The CSD A shall provide the “External CSD I” with the details of the penalty

*Note that if “External CSD I” acts as DCP, then the “External CSD I” could receive the Daily Penalty List directly from T2S.*

2. The “External CSD I” shall reconcile the details of the penalty provided (the one calculated by T2S) with the penalty calculated in its own system (theoretically for the same amount) and distribute the information to its participant, hence providing Participant I with the information about the penalty it is imposed with.

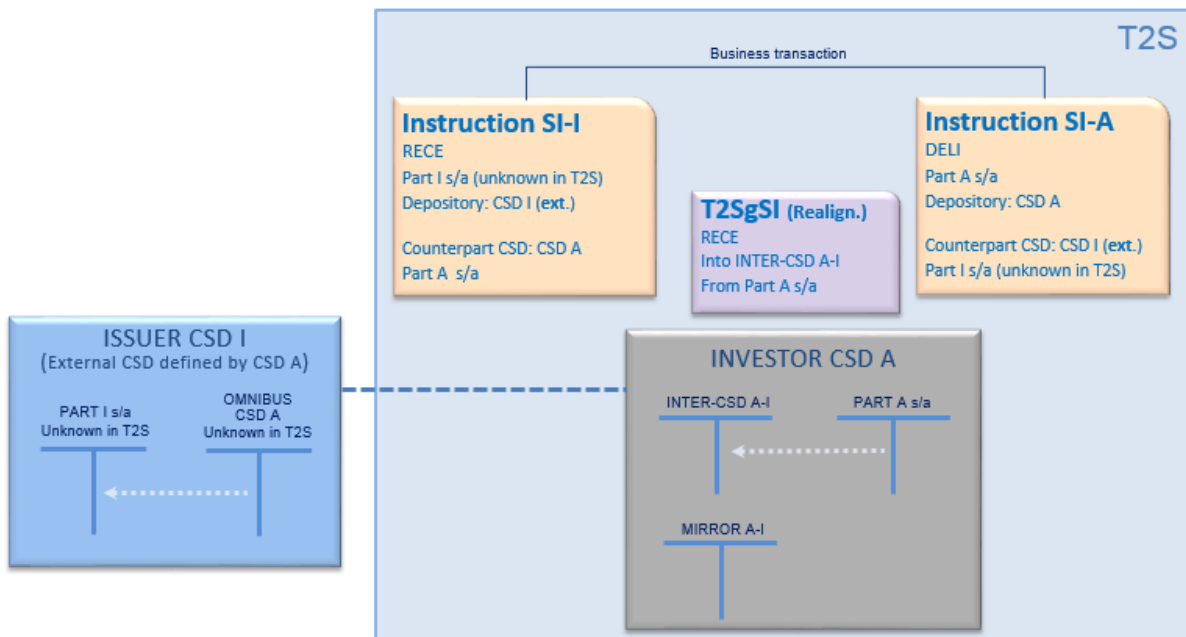
<sup>18</sup> Please note that following the settlement chain, issuers CSDs do not instruct investor CSDs. This instruction (SI-I) is generated by the investor CSD for matching purposes in T2S (it is generated either upon the receipt of an allegation from CSD I or once its participant A has instructed).

Second scenario with investor CSD (CSD A) in T2S and the issuer CSD (CSD I) outside and defined as External CSD by CSD A

*Example 2: Delivery from Participant A (at investor CSDA) to Participant I (at External CSDI issuer of the security)*

The business transaction is composed by the two matched settlement instructions: SI-I and SI-A.

- SI-A is a delivering settlement instruction of a CSD in T2S (CSDA)
- SI-I is a receiving “External CSD settlement instruction” (CSDI)<sup>19</sup>
- Additionally, T2S will generate a settlement instruction (T2SgSI) for realignment purposes within the CSDA.



In this scenario, if SI-A is subject to a penalty in T2S (Participant A is the failing participant):

1. Details of the penalty would be provided by T2S in the Daily Penalty List of investor CSD A:
  - Penalty imposed to Participant A; and
  - “External CSD I” is entitled to receive the penalty

The CSD A shall provide the “External CSD I” with the details of the penalty

*Note that if “External CSD I” acts as DCP, then the “External CSD I” could receive the Daily Penalty List directly from T2S.*

2. The “External CSD I” shall reconcile the details of the penalty provided (the one calculated by T2S) with the penalty calculated in its own system (theoretically for the same amount) and distribute the information to its participant, hence providing Participant I with the information about the penalty it is entitled to receive.

<sup>19</sup> Please note that following the settlement chain, issuers CSDs do not instruct investor CSDs. This instruction (SI-I) is generated by the investor CSD for matching purposes in T2S (it is generated either upon the receipt of an allegation from CSD I or once its participant A has instructed).

## 10.2 Additional clarification on statuses and reasons for SEFP

Within the CSDR TF it was discussed whether i) all reasons for failure that do not relate to the counterparty, or ii) only a sub-set (e.g. lack of securities), shall be considered to determine a participant as failing participant (i.e. if the penalty has to be imposed or not to a participant).

The final agreement was that “any reason for the failure of the eligibility/provision check associated to the instruction and not to the counterparty instruction” shall be considered. For the list of possible reasons, please refer to the T2S UDFS.

The below analysis provides a clarification by example, with the usage of the linking functionality, that all the reasons for non- or unsuccessful settlement have to be considered as a general principle, and not just “Lack of securities” and “Lack of cash”, in order to ensure consistent application of the penalties.

For this purpose the following business case is presented:

- Party A delivers securities to Party B
- Party B delivers the same securities to Party C

I.e. Party A → Party B → Party C

This settlement chain can be instructed in T2S, by Party B, either not using the T2S linkage functionality or using it.

Hereafter both cases are shown, first case where the linkage functionality is not used (case of instructions without LINKs) and second case where the linkage functionality is used (case of instructions with LINKs)

### **Case of instructions without LINKs**

Party A: SI-A DELI (to counterpart Party B)

Party B: SI-B1 RECE (from Party A)

Party B: SI-B2 DELI (to counterpart Party C)

Party C: SI-C RECE (from Party B)

### **Case of instructions with LINKs**

Party A: SI-A DELI (to counterpart Party B)

Party B: SI-B1 RECE (from Party A)

Party B: SI-B2 DELI (to counterpart Party C)  
and with Link AFTER SI-B1

Party C: SI-C RECE (from Party B)

Considering the situation where Party A fails to deliver to Party B, due to lack of securities, and consequently Party B also fails to deliver:

If the reasons for settlement failure that are related to links (for example unsettled because it states a link WITH or AFTER another failed instruction) are not considered for being subject to penalties then, in each of the two cases described, it would imply the following net result in terms of the penalties computed:

**Penalties in case of instructions without LINKs**

SI-A is subject to penalty to be paid by Party A (to Party B)

SI-B2 is subject to penalty to be paid by Party B (to Party C)

*Net result:*

*Party A pays;*

*Party B flat;*

*Party C receives.*

**Penalties in case of instructions with LINKs**

SI-A is subject to penalty to be paid by Party A (to Party B)

SI-B2 is not subject to penalty because the reason for failure is the link and not the lack

*Net result:*

*Party A pays;*

*Party B receives;*

*Party C flat.*

As shown with this example:

If those reasons for failure, that are related to links (such as unsettled because the instruction is stating a link WITH or AFTER another failed instruction), are not considered for the computation of penalties, the result of the penalties imposed would not be the same and will differ depending on whether the instruction analysed used links or not.

Moreover, it was agreed at the TF that not having the same result is not in line with the principles of the Regulation. According to the Technical Advice under the CSD Regulation- Final Report (pages 60-61):

- No modification of the calculation of penalties in the context of chain transactions shall occur;
- This approach ensures that counterparties that are acting as intermediaries in a chain remain effectively "flat" in terms of exposure.

On page 17 of the same document it is mentioned that: "Such a mechanism should be effective in targeting participants which fail to deliver the securities on ISD, and which should be fully subject to the penalty, but should also immunize participants that are failing because they are being failed in turn, because the penalty due would be offset by the penalty received".

Considering all the above, it was agreed that, as a general principle: reasons for settlement failure that are related to links as well as any other reason code (i.e. not only lack of securities and lack of cash) shall be considered for imposing a penalty as long as they are associated to the instruction and not to the counterpart's instruction.

With the agreed approach, both cases (instructions without links or with links) will have the same result in terms of penalties computed. I.e.:

*Net result of this chain independently on whether it is instructed in T2S using linkage functionality or not:*

*Party A pays;*

*Party B flat;*

*Party C receives.*