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General Information (Origin of Request)				
☐ User Requirements (UR	D)			
☐ Other User Functional or Technical Documentation (SYS)				
Request raised by: CSDR Task Force Institute: ECB Date raised: 14/09/2018			Date raised: 14/09/2018	
Request title: T2S Penalty Mechanism for non-T2S settlement flows Request ref. no: T2S 685 URD			Request ref. no: T2S 685 URD	
Request type: Specific Classification: regulatory compliance		Urgency:	Fast-track	
1. Legal/business importance parameter: High			2. Market	implementation efforts parameter: Low
3. Operational/Technical risk parameter: Low			4. Financi	al impact parameter: Very high
Requestor Category:			Status: W	ithdrawn

Reason for change and expected benefits/business motivation:

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

One of the core objectives of the CSDR is to promote settlement efficiency through a Settlement Discipline Regime, which, at the settlement layer, implies the payment of cash penalties for late settlement of transactions. Based on the Article 20 of the final RTS on Settlement Discipline¹, according to which CSDs that use a common settlement infrastructure shall "jointly establish [...] and manage the modalities for calculation, application, collection and redistribution of cash penalties [...]", it was decided at T2S Steering Level that the Eurosystem would offer a settlement penalty calculation mechanism.

In April 2018, the Market Infrastructure Board of the Eurosystem decided to support investigating a new facility to acquire information on settlement fails processed outside T2S with the aim to provide calculation and reporting of cash penalties for those settlement fails. One pre-condition to avoid setting up a new contractual framework is that the information for fails taking place outside T2S is channelled through T2S CSDs.

The intent with this CR is to provide a set of functionalities in line with the T2S Penalty Mechanism (CR-0654) for settlement fails processed within T2S, i.e.: the calculation, reporting, and additional functionalities for querying or ex post modifications of cash penalties follow the same principles as defined for the T2S Penalty Mechanism. Hence, most user requirements defined in the CR-0654 also prevail for this CR.

However, the provision of information on settlement fails processed outside T2S requires a new feed of dynamic data information from CSDs to T2S. In addition, a new functionality is also required regarding securities reference data management to ensure better decoupling of T2S and non-T2S activity.

The CSD in T2S requests computation of cash penalties on behalf of a CSD using a different <u>on another settlement platform</u>, where the fails occurred. The CSD of the external <u>settlement platform a.k.a. CSD-ESP might be an External CSD party in T2S (e.g..: a non-T2S (I)CSD defined by the CSD in T2S) but also a CSD in T2S which also has settlement in its legacy system (e.g. in cases of a layered model).</u>

Volumetric assumptions will directly depend on the volume of non-T2S settlement fails received, and hence on the information provided by the relevant CSDs. This information is a pre-condition to performing a detailed assessment of the CR.

¹ Link to published text in Official Journal of the European Union

Finally, the T2S penalty mechanism for non-T2S flows requires the implementation of the T2S Penalty Mechanism (CR-0654) and consequently all the CRs it requires as pre-requisite CR 600, CR 609, CR 621 and CR 640.

Description of requested change:

[Requirements defined for T2S CR-0654 that apply for CR-0685 are not repeated.

When CR-0654 / existing requirements need to be modified, modifications are shown as underlined in the document:

New requirements are also shown as underlines in the chapter where they belong]

Chapter 3 – Processing schedule and calendar

[No specific user requirements]

Chapter 13 – Messages and reports requirements

13.5.2.4 Cash penalty computation request for non-T2S flows

Upon request of T2S CSDs, T2S shall compute and report cash penalties for fails taking place outside T2S, i.e. on another settlement platform. In order to do so, T2S CSDs, on behalf of the CSD-ESP, shall provide the necessary information to T2S. The below section lays out the requirements for sending cash penalty requests to T2S.

A2A Format for computation requests

Reference ID	T2S.13.312

The Cash Penalty Computation Request file shall be transmitted in a flat file format, i.e. one file for all the requests sent by a T2S CSD for the request of computation of penalties on non-T2S settlement instructions.

The file shall contain the BIC of the CSD-ESP for which the CSD in T2S is requesting the computation. The BIC of the CSD-ESP must relate to:

- Either an External CSD party defined in T2S by the T2S CSD; or
- A CSD in T2S (in this latter case, the BIC of the CSD-ESP and the BIC of the T2S CSD are the same).

Cash Penalty Computation Request file information

Cash Fenalty Computation	n Request the information
Reference ID	T2S.13.314

The Cash Penalty Computation Request file shall contain the following information, for each request included in the file (for T2S to be able to compute and report cash penalties).

Table 13-5 - Cash Penalty Computation Request information

Table 13-5 – Cash Penalty Computation Request in	Officiation
Class of Information	Attributes
Type of cash penalty to be computed	SEFP or LMFP
Transaction details (i.e. details of the underlying	-CSD-ESP Actor reference
settlement instructions)	-CSD-ESP reference (MITI reference)
	-Instructing party BIC (that instructed the external settlement platform)
	-Intended Settlement Date (ISD)
	-Securities movement type
	-BIC of the CSD of the Delivering Party (i.e. the CSD-ESP)
	-Party BIC of the Delivering Party (i.e. the CSD participant delivering the securities in the CSD-ESP)
	-BIC of the CSD of the Receiving Party (i.e. the CSD-ESP)
	-Party BIC of the Receiving Party (i.e. the CSD participant receiving the securities in the CSD-ESP)

-ISIN

-Quantity (quantity of securities failed to be delivered)

- -ISO transaction code
- Place of Trade (MIC)
- -Payment type code
- -Credit/Debit indicator (if against payment)
- -Currency and amount (cash amount failed to be delivered)
- -Counterpart instruction details:
 - o -CSD-ESP Actor reference
 - -CSD-ESP reference (MITI reference)
 - o Place of Trade

-Unsettled reason code (must be a T2S reason code). The reason code(s) are mandatory for SEFPs, for LMFPs is optional and, in case it is fulfilled, the only reason code allowed will be LATE.

In case of LMFP:

- Flag indicating whether the instruction was received in the CSD-ESP as already matched, or it was matched in the CSD-ESP.
- Acceptance timestamps of both settlement instructions

Cash Penalty Computation Request validation

Reference ID

T2S.13.316

T2S shall provide a flat file response including, for each request (i.e. record) in the file sent to T2S, whether the request is accepted (T2S will compute the penalty in the next calculation process) or rejected. In the latter case, T2S shall provide the reason for rejecting the request.

13.5.2.5 Daily cash penalty list

Default data scope for penalties on T2S settlement instructions

Reference ID T2S.13.330

T2S shall allow the relevant T2S Actor to receive cash penalties information under its default data scope in T2S:

- In case of a CSD, the information shall include the cash penalties on T2S Settlement Instructions that are either imposed or credited to all the parties belonging to the CSD data scope
- In case of a CSD participant (or an External CSD), the information shall include the cash penalties on T2S Settlement Instructions that are either imposed or credited to the CSD participant (or the External CSD).

Consequently, in case a DCP is an active participant of several CSDs, the DCP would have to configure and receive a Daily Penalty List for each CSD where it is active / defined as participant. The DCP will receive, in a different flow/message, one Daily Penalty List for each CSD it is active with.

The same applies to the List of Modified Penalties.

Default data scope for penalties on non-T2S settlement instructions

Reference ID T2S.13.332

T2S shall allow the relevant T2S Actor to receive cash penalties information as follows:

- In case of a CSD, the information shall include the cash penalties on non-T2S instructions that this CSD requested for computation.
- In case of an External CSD, the information shall include the cash penalties on non-T2S instructions whose CSD-ESP is the External CSD.

In case a CSD in T2S provides computation services for several CSD-ESP, the CSD in T2S would have to configure and receive a Daily Penalty List for each CSD-ESP it is providing the service.

The same applies to the List of Modified Penalties.

Reporting cash penalties on T2S and non-T2S flows

Reporting each politication in the analysis in the second		
Reference ID	T2S.13.334	

T2S shall report the cash penalties per CSD related to the settlement platform where the fail occurred (i.e. the CSD in T2S or the CSD-ESP).

The same applies to the List of Modified Penalties.

Note: In general it means that the cash penalties on T2S flows and those on non-T2S flows are reported in different lists. In the specific scenario where the CSD in T2S is also the CSD-ESP, the Daily Penalty List will combine both, the penalties over T2S Settlement Instructions and penalties over the non-T2S flows.

Daily Cash Penalty List general Structure

Reference ID T2S.13.340

T2S shall report cash penalties sorted by currency and (non-)T2S party.

The Daily Cash Penalty List will transmit a cash penalty for a party when, during the computation process, it has been identified as either the failing or the non-failing party of the cash penalty, i.e. it has been imposed or credited with the cash penalty (as described in Chapter 22).

Additionally, T2S shall report cash penalties for a given currency and (non-)T2S party sorted by counterpart of the penalty.

Daily Cash Penalty List information

Daily Cash I charty List if	Hormation
Reference ID	T2S.13.350

The Daily Cash Penalty List shall contain the following non-exhaustive information described in the following table for each penalty reported for a given currency, (non-)T2S party, and counterpart.

Table 13-5 - Daily Cash Penalty List information

Class of Information	Attributes
Related transaction details (i.e. details of the underlying settlement instruction) For the reporting of penalties on non-T2S flows, the "References" will be reported but the "Other transaction details" will not be reported back to the CSD that requested the computation.	-Individual ID of the cash penalty -Common ID of the cash penalty -Type of cash Penalty (SEFP or LMFP) - Amount and debit/credit indicator of the cash penalty:

The Daily Cash Penalty List shall provide per currency, (non-)T2S party and counterpart, the aggregated net amount of all the penalties reported for the given business day. More precisely this bilateral net amount per party and counterpart will be:

• The sum of all cash penalties in this currency reported in the Daily Cash Penalty List that this party is entitled to receive (reported as credit) from the same counterpart (i.e. to be paid by this counterpart)

Minus

• The sum of all cash penalties in this currency reported in the Daily Cash Penalty List that are imposed to the party (reported as debit) and to be paid to the given counterpart

If the result is a positive amount, the daily bilateral net amount will be a credit for the party (i.e. an amount entitled from the counterpart) and if the result is a negative amount, the daily bilateral net amount will be a debit (i.e. an amount due to the counterpart).

Note: The daily aggregated net amount will be provided even in the case where the result of this bilateral net is zero. Nevertheless, T2S will provide the daily aggregated net amount per currency, (non-)T2S party and counterpart, only if there are penalties reported for this currency, (non-)T2S party and counterpart. Consequently, in case in the reporting of a given business day there are no penalties reported for a given currency, (non-)T2S party and counterpart, T2S will not provide the bilateral aggregated net amount.

A2A Format

Reference ID T2S.13.360

The Daily Cash Penalty List shall comply with the ISO 20022 standards. The Daily Cash Penalty List shall be reported in the relevant semt.xxx message format. Alternatively, for CSDs, the Daily Cash Penalty List may be reported in a flat file format i.e. CSDs shall be able to choose between semt.xxx and flat file reporting.

For the reporting of cash penalties on non-T2S flows, the Daily Cash Penalty List shall be reported in a flat file format only.

13.5.2.5 List of modified penalties

A2A Format

Reference ID	T2S.13.430

The List of Modified Penalties shall comply with the ISO 20022 standards. The List of Modified Penalties shall be reported in the relevant semt.xxx message format. Alternatively, for CSDs, the List of Modified Penalties may be reported in a flat file format i.e. CSDs shall be able to choose between semt.xxx and flat file reporting.

For the reporting of cash penalties on non-T2S flows, the List of Modified Penalties shall be reported in a flat file format only.

13.5.2.6 Monthly reporting of aggregated amounts of cash penalties

A2A Format

Reference ID	T2S 13 480

The reporting of monthly aggregated amounts of cash penalties shall comply with the ISO 20022 standards. The monthly aggregated amounts shall be reported in the relevant semt.xxx message format. Alternatively, for CSDs, the monthly aggregated amounts may be reported in a flat file format i.e. CSDs shall be able to choose between semt.xxx and flat file reporting.

For the reporting of cash penalties on non-T2S flows, the monthly aggregated amounts shall be reported in a flat file format only.

Chapter 14 – Queries requirements

14.8 Cash Penalty Queries

Processing of queries

Reference ID	T2S.14.990

When processing cash penalty queries, T2S will only return results where the relevant CSD has the right to access the underlying data (i.e. the penalty is in its data scope as described in T2S.13.330 and in T2S.13.335).

14.8.1 Cash penalties query

14.8.1.1 Query parameters

Cash penalty query by reference

Reference ID T2S.14.1000

This query shall allow CSDs to query cash penalties by the following references

- · Individual identification of the cash penalty,
- · Common identification of the cash penalty,
- T2S Actor Reference (or CSD-ESP Actor reference) of the underlying settlement instruction,
- T2S Reference (or CSD-ESP reference) of the underlying settlement instruction,
- T2S Matching Reference of the underlying settlement instruction.

This query shall require at least one of the above.

Cash penalty query by (non-)T2S Party

Reference ID

T2S.14.1020

T2S shall allow querying penalties that a party is imposed with or entitled to receive as of a specific date (i.e. computed on a given business day). For this purpose, the following parameters are allowed:

- · Business day
- Party BIC
- Party Parent BIC in T2S (or BIC of the CSD-ESP in case of penalties on non-T2S flows)
- Direction of the penalty (Debit, Credit or both)
- · Currency of the penalty
- Type of Penalty (SEFP, LMFP or both)
- Penalty status (active, removed or both) and reason ('re-included', 're-allocated', 'switched', 'updated' and the standard codes approved by ESMA for removal of a penalty)
- Counterpart BIC and parent BIC

This query shall require the Party BIC and the date as minimum search criteria.

When specifying the Business Day, it shall be allowed to specify a range/period (from/to).

Note: Limitations to the number of days will be provided in a second step at specifications phase depending on volumetric assumptions and performance impacts.

In order to determine the data scope of the query, T2S automatically considers the CSD associated to the user performing the query and return results according to the default data scope as described in T2S.14.990. Hence, the parameter Party Parent BIC is only relevant to query:

- <u>Either</u> those penalties <u>on T2S flows</u> where the CSD itself is reported as failing or non-failing party (e.g. in a LMFP for which the CSD was the Instructing Party of the underlying settlement instruction that was sent already matched);
- Or those penalties on non-T2S flows where the CSD-ESP BIC is used.

System entity wide cash penalty query

Reference ID

T2S.14.1040

T2S shall allow querying all the penalties in scope of a CSD as of a specific date (i.e. computed on a given business day). For this purpose, the following parameters are foreseen:

- Business day
- CSD BIC (either of a CSD in T2S or CSD-ESP) and system entity wide query flag
- Penalties on T2S flows (yes/no indicator)
- Direction of the penalty (Debit, Credit or both)
- Currency of the penalty
- Type of Penalty (SEFP, LMFP or both)

• Penalty status (active, removed, not computed or all) and reason ('re-allocated', 'switched', 'updated' and the standard codes approved by ESMA for removal of a penalty)

This query shall require, as minimum search criteria, the CSD BIC, the system entity wide query flag and the date (range will not be allowed in this query and a single business day must be provided).

Note: the Indicator for Penalties on T2S flows is only relevant for those CSDs in T2S where the CSD-ESP is the same entity (i.e. the BIC of the CSD in T2S is also the BIC of the CSD-ESP).

14.8.1.2 Query response

Cash penalties query response

Reference ID	T2S.14.1050
In respect of the paramete	rs used T2S shall return the relevant cash penalty(ies) information according to the

In respect of the parameters used, T2S shall return the relevant cash penalty(ies) information according to the CSD's default data scope.

The information provided for will depend on the number of cash penalties returned.

Table 14-8-12-2	2 – Cash pe	enalties query response						
Penalty Querie	S							
Single cash	nonalty							
returned	penalty	T2S shall provide the following information:						
		- Individual ID of the cash penalty						
		- Common ID of the cash penalty						
		- Type of cash Penalty (SEFP or LMFP)						
		- Business Day when the penalty was computed						
		- Amount and currency of the Penalty and also the direction (Debit or Credit)						
		 Party BIC and its Parent BIC² (the party is the failing or the non-failing party depending on the direction of the penalty i.e. if Debit it is the failing party; if Credit is the non-failing party). 						
		 Counterpart BIC and <u>its Parent BIC³</u> (counterpart is the failing or the non-failing party depending on the direction of the penalty i.e. if Debit it is the non-failing party if Credit is the failing party) 						
		- Status and reason of the penalty						
		- 'To be recalculated after being modified' flag						
		- Number of days for LMFP (for SEFP is always 1)						
		- The relevant calculation details:						
		 ISIN and classification details 						
		 Place of trade 						
		 Security and/or Cash Discount Penalty rate in basis points and quotation date 						
		 Foreign exchange details price and quotation date 						
		- Underlying settlement instruction details						
		o T2S Actor Reference / CSD-ESP Actor reference						
		 T2S Reference / CSD-ESP reference (MITI reference) 						
		 T2S matching reference (only for T2S settlement instructions)) 						
		 Reference of the computation request (only for penalties on non-T2S 						

² Parent BIC shall be understood as: i) the Parent BIC defined in T2S for T2S Parties in case of penalties on T2S settlement instructions, or ii) as the BIC of the CSD-ESP in case of penalties on non-T2S flows

³ Parent BIC shall be understood as: i) the Parent BIC defined in T2S for T2S Parties in case of penalties on T2S settlement instructions, or ii) as the BIC of the CSD-ESP in case of penalties on non-T2S flows

flows)

- o Common trade reference (<u>if available</u>, <u>and only for T2S settlement</u> instructions)
- o Corporate action ID (if available, and only for T2S settlement instructions)
- Instructing party BIC
- o ISO transaction code (only for T2S settlement instructions)
- Intended Settlement Date (ISD)
- Securities movement type
- Securities account number (only for T2S settlement instructions)
- Securities Account owner (only for T2S settlement instructions)
- Quantity (quantity of securities failed to be delivered)
- Payment type code
- o DCA number (if against payment and only for T2S settlement instructions)
- DCA's Owner BIC (if against payment <u>and only for T2S settlement</u> instructions)
- o Credit/Debit indicator (if against payment)
- o Currency and amount (cash amount failed to be delivered)
- Acceptance and matching timestamps (<u>only for T2S settlement</u> instructions)
- Information about the cut-off (only for T2S settlement instructions) and reason for the instruction not being settled in T2S for SEFPs or reason provided for the non-T2S flows

For more information on the related <u>T2S</u> settlement instruction, T2S shall provide the possibility to query it directly by the T2S reference.

Several cash penalties returned

T2S shall provide the following information:

- Individual ID of the penalty
- Common ID of the penalty
- Type of penalty (SEFP or LMFP)
- Business Day when the penalty was computed
- Status of the penalty
- ISIN
- Amount and currency of the Penalty and also the direction (Debit or Credit)
- Party BIC and <u>Parent BIC⁴</u> (the party is the failing or the non-failing party depending on the direction of the penalty as provided in the amount i.e. if Debit it is the failing party; if Credit is the non-failing party)
- Counterpart BIC and Parent BIC $^{\underline{5}}$ (counterpart is the failing or the non-failing party depending on the direction of the penalty as provided in the amount i.e. if Debit it is the non-failing party if Credit is the failing party)
- Related settlement instruction main references:
 - T2S Actor Reference of the Settlement Instruction (or CSD-ESP Actor reference)
 - T2S Reference of the Settlement Instruction (or CSD-ESP reference)

⁴ Parent BIC shall be understood as: i) the Parent BIC defined in T2S for T2S Parties in case of penalties on T2S settlement instructions, or ii) as the BIC of the CSD-ESP in case of penalties on non-T2S flows

⁵ Parent BIC shall be understood as: i) the Parent BIC defined in T2S for T2S Parties in case of penalties on T2S settlement instructions, or ii) as the BIC of the CSD-ESP in case of penalties on non-T2S flows

 T2S matching reference (only for T2S settlement instructions) 	
 Reference of the computation request (only for penalties on non-Tailows) 	<u>2S</u>
2S shall provide the possibility to query each single penalty from the list in order etrieve all its details.	er to

14.8.2 Monthly aggregated amounts query

Monthly aggregated amounts query by (non-)T2S Party

Refer	rence ID		60					
				 	 	 	•	

The monthly aggregated amounts query shall allow the retrieval of the monthly aggregated amounts of cash penalties for a given T2S party. For this purpose, the following parameters are allowed:

- Month (past 3 months)
- Party BIC
- Party Parent BIC in T2S (or BIC of the CSD-ESP in case of penalties on non-T2S flows)
- Counterpart BIC and parent BIC in T2S (or of the CSD-ESP in case of penalties on non-T2S flows)
- Currency

This query shall require, as minimum search criteria, the month and the Party BIC.

The query of monthly aggregated amounts of the last month shall be allowed only once the Monthly reporting of aggregated amounts of cash penalties (described in chapter 13.5.2.4) has been produced.

Note: In order to determine the data scope of the query, T2S automatically considers the CSD associated to the user performing the query as the Party Parent BIC. Hence, the parameter Party Parent BIC is only relevant to query the aggregated amounts of:

- <u>Either</u> those penalties <u>on T2S flows</u> where the CSD itself is reported as failing or non-failing party (e.g. in a LMFP for which the CSD was the Instructing Party of the underlying settlement instruction that was sent already matched)
- Or those penalties on non-T2S flows where the CSD-ESP is used.

Chapter 16 – Static data requirements

16.7.4 Securities CSD Link

Reference ID	T2S.16.460

The Securities CSD Link logical entity shall assign a Security to a CSD in T2S in order to define the eligibility of the instrument for settlement in that CSD <u>and/or the responsibility for a given CSD for the maintenance of the Security reference data</u>.

Table 16-6 - List of Attributes for the Securities CSD Link Entity in T2S

Table 10-0 - List of Attribu	ites for the Securities CSD Link Entity in 123
Attribute	Description
Security Identifier	This attribute shall define the unique technical identifier of a security in T2S. It shall link security CSD link to the instrument.
CSD Identifier	This attribute shall define the unique technical identifier of a CSD in T2S.
Link Type	This attribute shall define the type of relationship link between the instrument and the CSD. The link type shall specify an issuer link (Issuer CSD), investor link

	(Investor CSD) or technical issuer CSD; <u>alternatively, it can specify a</u> <u>maintenance-only link.</u>
Valid From	This attribute shall define the date from which the link between CSD and security is active.
Valid To	This attribute shall define the date to which the link between CSD and security is active.
Security Maintenance	This attribute shall specify if the CSD is responsible for maintaining the instrument defined by the link. Its value shall always be set to True in case of maintenance-only links.

Note: The Link Type maintenance-only shall cater for the cases where the CSD responsible for a security maintains it for the purpose of calculating cash penalties for settlement fails taking place outside T2S, but it does not intend to settle on the same security in T2S. This link type will not prevent an instrument from becoming eligible for T2S settlement for other CSDs.

Consistency of Maintenance Responsibility in Securities CSD Link

Reference ID	T2S.16.480	

Every security shall have no more than one CSDwith maintenance responsibility at any given point in time... The CSD with maintenance responsibility, be it declared in maintenance-only links or in an Issuer/Investor links, shall always have responsibility for maintaining the security. The maintenance facility for Securities CSD Link in T2S shall ensure the integrity and consistency of the information.

16.9 Cash Penalties Static Data Management

16.9.1 Securities Subject to Cash Penalties

Maintaining the cash discount penalty rate in T2S

Reference ID T2S.16.1020

The T2S Operator shall maintain the cash discount penalty rate for the euro and DKK in T2S.

Note: The source of this information will be ECB for Euro while as it should be the relevant central bank for other T2S settlement currencies, i.e. the Danish central bank for DKK

For non-T2S flows, additional currencies could be required to be covered: the cash discount rate shall be provided on an ad-hoc basis to the T2S Operator by the relevant T2S CSD.

16.9.6 Euro Foreign Exchange Reference Rate

Maintaining the Euro Foreign Exchange Reference Rate in T2S

Reference	e ID		Т	Γ2S.1	6.10)40											
		 	_					_	-		 		-		 	 _	

The ECB shall maintain the Foreign Exchange Reference for all relevant currencies against Euro in T2S according to ECB official exchange rates.

Note: for non-T2S flows, additional currencies for which the ECB does not provide an official exchange rate could potentially be required to be covered: the Euro Foreign Exchange Reference Rate for those currencies shall be provided on an ad-hoc basis to the T2S Operator by the relevant T2S CSD.

16.9.8 External Settlement Calendar

Definition

Reference ID	T2S.16.xxx

T2S shall be able to use external settlement calendars (calendar of the non-T2S CSD) for the computation of cash penalties for non-T2S flows. Each external settlement calendar includes the following attributes:

- External CSD system
- Closing day

Maintaining the External Settlement Calendar in T2S

Reference ID	T2S.16.xxx

The T2S Operator shall maintain the list of External Settlement Calendars in T2S. External Settlement Calendar information shall be provided on an ad-hoc basis to the T2S Operator by the relevant T2S CSD.

16.9.9 Authorised CSD-ESP BIC

Definition

Reference ID T2S.16.xxx

T2S shall use a list of BICs for each CSD Party in order to determine whether that CSD is authorised to submit computation requests for non-T2S flows, based on the BIC (i.e. BIC of the CSD-ESP). Each Authorised CSD-ESP BIC includes the following attributes:

- CSD Party Identifier
- BIC Identifier (i.e. a BIC11 code stored in the T2S BIC Directory)

Maintaining the Authorised CSD-ESP BICs in T2S

Reference ID T2S.16.xxx

The T2S Operator shall maintain the list of Authorised CSD-ESP BICs in T2S. Each T2S CSD will provide the necessary information to be loaded for their Party to the T2S Operator.

Summary of the various static data updates that the responsible T2S Actor can perform

Responsible	Class of Information	Attribute	Updatable
T2S Actor			
CSD (acting as SME)	Securities Subject to Penalties	ISIN	No
		Financial Instrument Type	Yes
		Liquidity	Yes
		Valid From	No
		Valid To	No
CSD (acting as SME)	Daily Price	ISIN	No
		Price Date	No
		Currency Code	Yes
		Price	Yes
T2S Operator	SME Growth Markets	MIC Identifier	Yes
T2S Operator	Securities Penalty Rate	Asset Type	No
		Daily Flat Penalty Rate	Yes
		Valid From	No
T2S Operator	Cash Discount Penalty Rate	Currency Code	No

Responsible	Class of Information	Attribute	Updatable
T2S Actor			
		Daily Flat Penalty Rate	Yes
		Valid From	No
ECB	Euro Exchange Reference	Currency Code	No
	Data		
		Daily Exchange Rate	Yes
		Exchange Rate Date	No
T2S Operator	External Settlement Calendar	External CSD System	<u>No</u>
		Closing Day	<u>No</u>
T2S Operator	Authorised CSD-ESP BIC	CSD Party Identifier	<u>No</u>
		BIC Identifier	<u>Yes</u>

Chapter 22 Computation and Maintenance of Cash Penalties

22.1 Introduction

The T2S penalty mechanism focuses on the daily calculation and reporting of cash penalties for settlement fails, as well as the queries and operational tools which are necessary for T2S Actors in this context.

The user requirements related to the necessary schedule and calendar, the reporting, the queries and the reference data of cash penalties are described in the chapters 3, 13, 14 and 16 of the URD respectively.

The chapter below focuses on the user requirements necessary for the daily computation of cash penalties:

- Identification of T2S settlement instructions eligible for cash penalties
- Calculation of cash penalties for those T2S settlement instructions <u>as well as for the computation request</u> received for non-T2S flows.

This chapter describes also the user requirements for the possible updates on already computed penalties.

22.3 Currency

Denomination Currency for Cash Penalties

	100 00000
Reference ID	T2S.22.060
- L 10	TOO 111 1 1 TOO 1 11 1 1 11 1 TOO 111 1

For cash penalties on T2S settlement instructions, T2S shall compute cash penalties in a T2S settlement currency:

- For settlement instructions against payment (cash settlement in a T2S settlement currency), the amount
 imposed by the cash penalty shall be denominated in the currency of the cash leg of the settlement
 instruction
- For free of payment settlement instructions (no cash is settled in T2S), the amount imposed by the penalty shall be calculated in either the currency of the underlying security if the Settlement Type stored in Static data is nominal, or in the currency of the daily reference price if the Settlement Type of the underlying security is units. If this is not a T2S Settlement currency, it should be calculated in EUR.

For the computation of cash penalties on non-T2S settlement flows, the following rules shall be applicable:

- For settlement instructions against payment, the amount imposed by the cash penalty shall be denominated in the currency of the cash leg of the settlement instruction.
- For free of payment settlement instructions, the amount imposed by the penalty shall be calculated in either the currency of the underlying security if the Settlement Type stored in Static data is nominal, or in the currency of the daily reference price if the Settlement Type of the underlying security is units.

Note: For cash penalties on non-T2S settlement flows, there shall be no further validation on the currency resulting from the above, except that this is an ISO currency code (that will be checked when validating the computation request).

Exchange rate for cash penalties

Reference ID

T2S shall apply the exchange rate (described in UR T2S.16.1030) in order to compute the amount of a cash penalty if the denomination price of the ISIN is different from the currency derived in T2S.22.060

For the computation of cash penalties for non-T2S flows, when both the denomination and settlement currencies are different than Euro, T2S shall first perform the foreign exchange conversion from the denomination currency to Euro and then the foreign exchange conversion from Euro to the settlement currency.

22.4 Computation

22.4.1 Settlement Fail Penalty (SEFP)

Settlement Fail Penalties penalise a non-execution or failure of settlement after the completion of the settlement processing of the relevant cut-off on or after ISD. It is calculated for each business day the settlement instruction fails in T2S (for T2S flows) or in the CSD-ESP for non-T2S flows. It does not matter whether a settlement instruction has failed to settle for e.g. lack of securities or lack of cash, or if it has not been submitted to a settlement attempt due to e.g. being on hold. Cash penalties shall apply independently of the reason for nonsuccessful settlement in T2S (for T2S flows) or in the CSD-ESP for non-T2S flows.

Eligibility for SEFP

I	Reference I	D	T2S.22.080

For T2S flows, T2S shall consider a settlement instruction eligible to a Settlement Fail Penalty (SEFP) for a business day if it fulfils all of the following conditions:

- It has reached its Intended Settlement Date (ISD) and;
- It is matched before the completion of the settlement processing of the relevant cut-off of the instruction on that business day, i.e. 16:00 for DVP, 17:40 for bilaterally agreed treasury management and monetary policy operations, and 18:00 for FOP settlement, and;
- It is unsettled, because it failed the eligibility/provision check with any reason associated to the instruction and not to the counterpart's instruction, by the end of the settlement processing of the relevant cut-off of the instruction on that business day and;
- It is not cancelled, by the end of the settlement processing of the relevant cut-off of the instruction on that business day.

For the computation of cash penalties on non-T2S flows, T2S shall compute a SEFP if it is specified as such in the Type of Penalty in the Cash Penalty Computation Request.

Relevant Status of the in	struction for computation of SEFF
Reference ID	T2S.22.110

For T2S flows, T2S shall consider the processing status and reason(s) of a settlement instruction that is eligible for SEFP at the end of the settlement processing of the relevant cut-off of the instruction.

Note: T2S shall not take into account previous statuses or reasons before the relevant cut-off, neither statuses nor reasons after the relevant cut-off, e.g. if the settlement instruction is cancelled after the relevant cut-off. T2S shall compute SEFP according to different parameters based on the type of settlement instruction:

For cash penalties on non-T2S flows, T2S shall use the reason code specified in the Cash Penalty Computation Request.

22.4.2 Late Matching Fail Penalty (LMFP)

Late Matching Fail Penalties penalise the late sending of settlement instructions that prevents timely settlement of a transaction. They Late Matching Fail Penalties on T2S flows are calculated only once by T2S, on the business day when they are matched, but considering all the previous days where the instruction did not settle due to the late matching of the instruction.

Eligibility of instructions "to be matched" in T2S for LMFP

Reference ID T2S.22.160

For T2S flows, T2S shall consider a settlement instruction that is "to be matched" in T2S eligible for a Late Matching Fail Penalty (LMFP) if it fulfils all of the following conditions:

- It is matched in T2S at a point in time when it is no longer possible to settle it on Intended Settlement Date;
- It has an accepted timestamp in T2S greater than its counterpart matched instruction.

For the computation of cash penalties on non-T2S flows, T2S shall compute a LMFP if it is specified as such in the Type of Penalty in the Cash Penalty Computation Request.

Number of days considered in the computation of LMFP for T2S flows

Reference ID T2S.22.200

In the computation of a LMFP, T2S shall consider each business day where the settlement instruction was due to settle according to the T2S calendar, i.e. all the business days where the LMFP is applicable.

The business days where the LMFP is applicable shall be:

- The business days as from the ISD until, and including, the business day where the instruction is matched (when the instruction is matched at a point in time of the business day which is after the end of the settlement processing of the relevant cut-off);
- The business days as from the ISD until, and excluding, the business day where the instruction is matched (when the instruction is matched at a point in time of the business day which is prior to the end of the settlement processing of the relevant cut-off)
- The LMFP shall be the sum of the amounts calculated for each applicable business day. The parameters and derivation logic for the computation is described in URs T2S.22.210, T2S.22.211, T2S.22.220, and T2S.22.230.

Note: The business day where the settlement instruction is matched shall be excluded when matching took place prior to the end of the settlement processing of the relevant cut-off, because if it does not settle on this business day, the instruction shall be then eligible for a SEFP.

Number of days considered in the computation of LMFP for non-T2S flows

Reference ID T2S.22.205

In the computation of a LMFP for non-T2S flows, T2S shall consider each business day where the settlement instruction was due to settle according to the relevant External Settlement Calendar stored in T2S for this purpose, i.e. all the business days where the LMFP is applicable.

The business days where the LMFP is applicable shall be:

- The business days as from the ISD until, and including, the business day where the instruction is matched, when the unsettled reason code provided to T2S in the Cash Penalty Request = 'LATE';
- The business days as from the ISD until, and excluding, the business day where the instruction is matched when the 'LATE' reason code is not provided to T2S in the Cash Penalty Request;
- The LMFP shall be the sum of the amounts calculated for each applicable business day. The parameters and derivation logic for the computation is described in URs T2S.22.210, T2S.22.211, T2S.22.220, and T2S.22.230.

Submitted annexes / related documents:

Change Requests for implementation of the T2S Penalty Mechanism:

-CR 654 - T2S Penalty Mechanism

Change Requests in relation with the Penalty Mechanism:

-CR 600 -T2S reporting functionality must be enhanced to allow the retrieval of the settlement instructions and their related SF1 (accepted) /SF2 (matched) timestamps via A2A/U2A in an efficient and standard way https://www.ecb.europa.eu/paym/t2s/progress/pdf/crg/t2s-0600 sys.pdf

-CR609 -T2S must be able to report settlement status 'Failing' for settlement instructions for which settlement at the Intended Settlement Date (ISD) is no longer possible https://www.ecb.europa.eu/paym/t2s/progress/pdf/crg/t2s-0609-sys.pdf

-CR 621 -Multiple pending reason codes (combination of lack of securities and lack of cash) https://www.ecb.europa.eu/paym/t2s/progress/pdf/crg/t2s 0621 sys.pdf

-CR 640 -Bilaterally Agreed Treasury Management (BATM) operations to be applied on bilateral basis only https://www.ecb.europa.eu/paym/t2s/progress/pdf/crg/t2s_0640_sys.pdf

Proposed wording for the URD Change request:

T2S Penalty Mechanism URs for non-T2S flows shall be integrated as sub-sections in the T2S URD at the level of the following chapters:

Chapter 13 - Messages and Reports requirements

Chapter 14 - Queries requirements

Chapter 16 - Static Data Requirements

Chapter 22 - New chapter describing the calculation of the penalty mechanism

Proposed wording:

- *** Provided the complexity of the CR, the first draft of the full set of SDD could be provided 10 weeks after Steering Level approval. The final wording will be provided 30 weeks after the start of the implementation phase of the CR. The pending first drafts are identified with three asterisks (***) in the "Impact on Major Documentation" section of the Change Request. ***
- * For the same reason stated above, the current wording proposal of the SDD drafts included below is not to be considered as final as it may be subject to changes/updates during the implementation phase of the Change Request. The final wording including the missing UHB illustrations will be provided 30 weeks after the start of the implementation phase of the CR. These first drafts already provided are identified with one asterisk (*) in their description below as well as in the "Impact on Major Documentation" section of the Change Request.*

GFS:

The following GFS sections should be included:

2.3.3.4 Penalty Mechanism (*)

The *Penalty Mechanism* module is responsible for daily calculation and reporting of penalties for settlement fails as well as the complementary features, which are necessary for T2S Actors in this context. The *Penalty Mechanism* module receives from the *Status Management* module the information on each failed *Settlement Instruction* in order to analyse it and compute the necessary penalties every business day. This module also <u>receives and validates bulk files for Penalty Computation requests from CSDs that, if successfully validated, trigger the computation of the necessary penalties.</u>

<u>Additionally, the *Penalty Mechanism* module</u> handles requests from CSDs to modify an existing *Penalty*, as well as the recalculation of already computed *Penalties* impacted by a static data change.

This module generates periodically (daily or monthly) the ad-hoc reports for penalties.

3.3.8.2 Description of the entities (*)

Footnote 38 to be amended as follows:

For each Security CSD link, a period of validity, the type of link (i.e. if the CSD is issuer, investor or technical issuer for the relevant security) and a Boolean value indicating if the CSD is responsible for maintaining the security must be specified (for each security one and only one CSD can be responsible for its reference data maintenance). Alternatively, a CSD can be responsible for the reference data maintenance of a security without defining itself as issuer, investor or technical issuer. Moreover, one or many issuance accounts can be defined within a given Security CSD Link.

Sections to be drafted during the implementation phase

3.4 Lifecycle Management and Matching

3.4.1 General Introduction (***)

Include references to the penalties on non-T2S flows.

3.4.2 Dynamic data managed by the domain (***)

Update descriptions for entities and attributes needed for penalties on non-T2S flows.

3.4.7 Penalty Mechanism (***) - section to be included with CR-0654

Include the description of the new service for non-T2S flows within the Penalty Mechanism Module

UDFS:

The following UDFS sections should be included, to be drafted during the implementation phase:

1.1.1.5 Penalty Mechanism (***)

New section introduced with CR-0654 will be updated to cater for non-T2S flows.

New section 1.2.7 "Static data for penalties" (***)

New section introduced with CR-0654, describing the relevant static data for penalties will be updated.

Section 1.4 "Settlement day" (***)

Add in the description for new processes for penalties for non-T2S flows

Section 1.5.1 "Business application configuration" (***)

List the T2SO responsibilities in setting up data for External Settlement Calendar.

1.6.1.14 Penalty Mechanism (***)

New section introduced with CR-0654 will be updated to cater for non-T2S flows.

New section 2.31 Send penalty computation requests (***)

Include new chapter to describe how to request A2A the requests for computation of penalties (bulk load of penalty computation requests through flat file).

Section 3.3.6.39 SecurityCSDLinkCreationRequestV01 (reda.045.001.01) (***)

Section 3.3.6.40 SecurityCSDLinkMaintenanceRequestV01 (reda.046.001.01) (***)

Amendment of message documentation to include the possibility of maintenance-only Security CSD links.

Section 4.1 "Index of business rules and error codes" (***)

Inclusion of amended business rules for maintenance-only Security CSD Links as well as for acceptance of penalties computation requests, modify penalties and query them.

<u>Update section 4.10. Specifications for the flat file for reporting of penalties (***)</u>

New section introduced with CR-0654 will be updated to cater for non-T2S flows

New section 4.11. Penalty Computation requests bulk file format specifications (***)

UHB:

The following UHB sections should be included, to be drafted during the implementation phase:

2.2.2.22 Penalty - Search/List Screen (***)

2.2.2.23 Penalty - Details Screen (***)

2.2.2.24 Monthly Aggregated Net Amounts – Search/List Screen (***)

3.15.6 Monitoring of Penalties (***)

Modify the above sections, introduced with CR-0654, to include changes needed for penalties on non-T2S flows

2.5.2.10 Security CSD Links - Search/List

2.5.2.11 Security CSD Link - Details

2.5.2.12 Security CSD Link - New/Edit

Inclusion of new possible value for Link Type "Maintenance only"

Inclusion of new validations to ensure a "Maintenance only" link always has Security Maintenance flag = True and that no Issuer/Investor link is created in the same CSD where a "Maintenance only" link exists; furthermore, a "Maintenance only" link cannot be created if any other link type exists under the same CSD.

2.5.5.3 Working/Closing Days - Search/List

Inclusion of additional search and list fields for new attribute "Component" to accommodate the definition of the External Settlement Calendar data. Non-T2S closing days will be defined by filling in this field with a reference to the relevant external system.

New section "Authorised CSD-ESP BIC – New/Edit" (T2S Operator only)

New section "Authorised CSD-ESP BIC – Search/List" (T2S Operator only)

New screens for the management of Authorised CSD-ESP BIC data.

6.3 List of Privileges (***)

New System Privilege for requesting the computation of penalties on non-T2S flows. New System Privilege for the operator to guery and modify the Authorised CSD-ESP BICs

Section 6.4 List of references for error messages (***)

High level description of Impact:		

Outcome/Decisions:

- * CRG on the 26 September 2018: The CRG agreed to recommend in principle, following a fast-track procedure (i.e. without prior preliminary assessment), that the T2S Steering Level should authorise this Change Request for ranking and allocation to a release.
- * CRG on 4 October 2018: The CRG agreed to recommend to the T2S Steering Level the authorisation of CR-685 for ranking and allocation to a release, following the fast track procedure.
- * AMI-SeCo on 9 October 2018: The AMI-SeCo agreed to the recommendations of the CRG to authorise this Change Request for ranking and allocation to a release, following a fast-track procedure (i.e. no preliminary assessment).
- * CSG meeting on 10 October 2018: The CSG agreed to authorise this Change Request.
- * RMSG on 17 October 2018 : The RMSG agreed to launch the detailed assessment of this CR.
- * NECSG on 19 October 2018 : The NECSG adopts the resolution to authorise this Change Request.
- * MIB on 25 October 2018: The MIB agreed to authorise CR-685 for ranking and allocation to a release.
- * CRG on 23 January 2019: The CRG had no functional questions on the detailed assessment of CR-685.
- * CSG on 6 January 2019: This Change Request was withdrawn by its initiator.

EUROSYSTEM ANALYSIS — GENERAL INFORMATION					
	St	atic data management	Int	terface	
	Х	Party data management		Communication	
	Х	Securities data management		Outbound processing	
		T2S Dedicated Cash account data		Inbound processing	
		management			
		Securities account data management			
	Х	reares and parameters data			
		management			
	Se	ettlement	Lie	 quidity management	
	X	Standardisation and preparation to		Outbound Information Management	
Impact On		settlement		Culbound Information Management	
T2S		Night-time Settlement		NCB Business Procedures	
		Daytime Recycling and optimisation		Liquidity Operations	
		Daytime Validation, provisioning &			
		booking	LC	CMM	
		Auto-collateralisation		Instructions validation	
				Status management	
	Op	perational services		Instruction matching	
		Data Migration		Instructions maintenance	
		Scheduling	Х	To the state of th	
		Billing	Sta	atistics, queries reports and archive	
		Operational monitoring		Report management	
			X	Query management	
			X	Statistical information	
		All	X	Legal archiving	
		All modules (Infrastructure request)			
	No modules (infrastructure request)				
	Business operational activities				
		Technical operational activities			

Impact on major documentation

^{*} For the same reason stated above, the current wording proposal of the SDD drafts included is not to be considered as final as it may be subject to changes/updates during the implementation phase of the Change Request. The final wording including the missing UHB illustrations will be provided 30 weeks after the start of the implementation phase of the CR. These already provided first drafts are identified with one asterisk (*) in the "Impact on Major Documentation" section of the Change Request. *

Document	Chapter	Change
	2.3.3.4 Penalty Mechanism (*) - section to be included with CR-0654	Include references to the computation requests and management penalties for non-T2S flows.
	3.3.8.2 Description of the entities	Include reference to the possibility of defining a maintenance-only Security CSD Link.
Impacted GFS chapter	3.4 Lifecycle Management and Matching 3.4.1 General Introduction (***)	Include references to the penalties on non-T2S flows.
	3.4.2 Dynamic data managed by the domain (***)	Update descriptions for entities and attributes needed for penalties on non-T2S flows.
	3.4.7 Penalty Mechanism (***) - section to be included with CR-0654	Include the description of the new service for non-T2S flows within the Penalty Mechanism

^{***} Provided the complexity of the CR, the first draft of the full set of SDD could be provided 10 weeks after Steering Level approval. The final wording will be provided 30 weeks after the start of the implementation phase of the CR. These pending first drafts are identified with three asterisks (***) in the "Impact on Major Documentation" section of the Change Request. ***

		Module	
	1.1.1.5 Penalty Mechanism (***) - section introduced with CR-0654	Include the description of the new service for non-T2S flows within the Penalty Mechanism	
	New section 1.2.7 "Static data for penalties" (***)	New UDFS chapter to be introduced with CR-0654. Chapter to be integrated with data on the External Settlement Calendar.	
	Section 1.4 "Settlement day" (***)	Add in the description for new processes for penalties for non-T2S flows	
	Section 1.5.1 "Business application configuration" (***)	List the T2SO responsibilities in setting up data for External Settlement Calendar.	
	1.6.1.14 Penalty Mechanism (***) - section to be included with CR-0654	Add in the UDFS chapter the processes penalties for non-T2S flows	
Imported LIDES	New section 2.31 Send penalty computation requests (***)	Include new chapter to describe how to request A2A the requests for computation of penalties (bulk load of penalty computation requests through flat file).	
Impacted UDFS chapter	Section 3.3.6.39 SecurityCSDLinkCreationRequestV01 (reda.045.001.01) (***)	Enhancement of the specific block to identify a Maintainer instead of an Issuer or Investor for the related Security.	
	Section 3.3.6.40 SecurityCSDLinkMaintenanceRequestV0 1 (reda.046.001.01) (***)	Enhancement of the specific block to identify a Maintainer instead of an Issuer or Investor for the related Security.	
	Section 4.1 "Index of business rules and error codes" (***)	New business rules for Maintenance-only Security CSD Links as well as for acceptance of penalties computation requests, modify penalties and query them.	
	Update section 4.10. Specifications for the flat file for reporting of penalties (***) - section introduced with CR-0654	Adjust description of the fields in order to cope with the needs for penalties for non-T2S flows.	
	New section 4.11. Penalty Computation requests bulk file format specifications (***)	New section describing the flat file format specifications for Penalty Computation requests.	
	2.2.2.22 Penalty – Search/List Screen (***) 2.2.2.23 Penalty – Details Screen (***) 2.2.2.24 Monthly Aggregated Net Amounts – Search/List Screen (***) 3.15.6 Monitoring of Penalties (***)	Modify following sections, introduced with CR-0654, to include changes needed for penalties on non-T2S flows	
UHB	2.5.2.10 Security CSD Links – Search/List (***) 2.5.2.11 Security CSD Link – Details (***) 2.5.2.12 Security CSD Link – New/Edit (***)	Inclusion of new possible value for Link Type "Maintenance only" Inclusion of new validations to ensure a "Maintenance only" link always has Security Maintenance flag = True and that no Issuer/Investor link is created in the same CSD where a "Maintenance only" link exists; furthermore, a "Maintenance only" link cannot be created if any other link type exists under the same CSD.	
	2.5.5.3 Working/Closing Days – Search/List (***) 2.5.5.4 Working/Closing Days – New/Edit	Inclusion of additional fields for new attribute "Component" to accommodate the definition of the External Settlement Calendar data.	

	New section "Authorise New/Edit" (T2S Operate New section "Authorise Search/List" (T2S Oper New screens for the ma Authorised CSD-ESP E	(T2S Operator only) (***) New section "Authorised CSD-ESP BIC – New/Edit" (T2S Operator only) (***) New section "Authorised CSD-ESP BIC – Search/List" (T2S Operator only) (***) New screens for the management of Authorised CSD-ESP BIC data. (***) Section 6.4 List of references for error messages (***)		New screens for the management of Authorised CSD-ESP BIC data.		
Other documentations	DMT File specifications	Chapter 3.1.2.10		ossible value f CSD Links must	for Maintenance t be added.	Only
Links with other re	equests					
Links	Reference	CR-0654	Title			

OVERVIEW OF THE IMPACT OF THE REQUEST ON THE T2S SYSTEM AND ON THE PROJECT

Summary of functional, development, infrastructure and migration impacts

The CR detailed assessment covers the volumes reported by CBF for its ICSD and EOC Finland for its legacy platform. However, for confidentiality reasons these volumes are not shown in the CR and they are kept internally considering the bilateral exchange formally agreed between the Eurosystem and the previously mentioned parties.

LCMM

A new set of functionalities will be created within the Penalty Mechanism Module to manage the calculation and reporting of cash penalties for settlement fails that are processed outside T2S.

The following new functionalities have to be created in T2S to acquire and process the relevant information needed for the calculation and reporting of penalties for non-T2S flows:

- A new inbound flat file "Penalty computation request for non-T2S flows" has to be developed to allow T2S CSDs to provide the information on non-T2S flows needed for the calculation and reporting of penalties. This new computation service will be used in two different scenarios:
 - T2S CSDs that request the computation of penalties on behalf of a non-T2S (I)CSD for the
 operations that failed outside T2S (i.e. the BIC of the CSD-ESP is different from the BIC of the T2S
 CSD). In this case, the (I)CSD must be defined as an External CSD party of the T2S CSD;
 or
 - o T2S CSDs that request the computation of penalties for their operations in a different settlement platform (the BIC of the CSD-ESP is also the BIC of the T2S CSD).

In both cases, T2S CSDs are responsible for providing the request for computation of penalties and, additionally, for the relevant reference data such as maintenance of the securities and BICs of the participant in the CSD of the External Settlement Platform (CSD-ESP) needed for the calculation of penalties on non-T2S flows. Additionally, if the penalty computation requests includes cross CSD instructions, the counterpart CSD and the participant in the counterpart CSD must also be defined in the BIC directory.

- A new validation process responsible for verifying the information provided in the request has to be designed. This new check will verify also if a penalty has to be computed or not.
- A T2S CSD would be able to send a file with penalty computation requests if it has been granted with the relevant system privilege and if the CSD-ESP BIC informed in the file is an "Authorised CSD-ESP BIC" for this T2S CSD (see access rights below).
 - Additionally, for each computation request in the file, T2S will check that either the <u>BIC of the Delivering CSD</u> (Delivering Depository BIC) informed in the request or the BIC of the Receiving CSD (Receiving Depository <u>BIC</u>) informed in the request is equal to the CSD-ESP BIC informed in the file. If none of the two BICs is the CSD-ESP BIC, the computation request will be rejected and the penalty will not be computed.
 - For cross-CSD non T2S flows (i.e. penalty over an instruction outside T2S where the Delivering CSD is different than Receiving CSD), in case that either the Delivering or the Receiving CSD is neither a T2S CSD nor the CSD-ESP of the file, the penalty will be reported only to the CSD-ESP, whereas for the other CSD (counterpart) the penalty will not be reported, i.e. the penalty will be reported only as a credit or as a debit, but not both.
- An outbound flat file "Penalty computation for non-T2S flows response" that aims to inform the T2S CSD whether the request has been accepted or rejected and, consequently, if a penalty has to be computed

(accepted) or not (rejected). In case of rejection, T2S will provide the reason for rejecting.

Once the "Penalty computation request for non-T2S flows" is correctly validated, the information is stored in T2S for further processing within the Penalty Mechanism (nevertheless the initial request must be stored separately from the data for penalties on T2S flows).

All core functionalities of the T2S Penalty Mechanism module will be reused for the calculation and reporting of non-T2S penalties. On top of that, all additional services (i.e. querying and ex post modifications of penalties) will be available for penalties on non-T2S flows.

The following functionalities of the T2S Penalty Mechanism module have to be adapted to be able to process the new information available for non T2S flows penalties:

- Computation of penalties for non-T2S flows:

Once it is determined that a penalty has to be computed (i.e. the computation request has been accepted), this function is responsible for the calculation of the penalty together for the penalties for T2S flows. A new flag at level of penalty will be stored to distinguish penalties on T2S and non-T2S flows in the data base.

Reporting of penalties for non-T2S flows:

It will be available only in flat file mode. Same as for T2S flows, it includes the following three reports:

- o Daily Penalty List,
- o List of Modified Penalties, and
- o Monthly Aggregated Amounts (or Monthly bilateral net amounts).

For the different types of reports defined above, the reporting will behave as follows:

- In the scenario of T2S CSD that acts on behalf of an (I)CSD not defined in T2S as a CSD (the BIC of the CSD-ESP is different from the BIC of the T2S CSD), the T2S CSD will receive two different reports of penalties:
- one report for the penalties of its activity in T2S
- one report for the penalties of the non-T2S flows of the (I)CSD it is acting on behalf. Additionally, in this scenario, in order to facilitate the billing process it will be possible to configure the flat file with recipient being the relevant external CSD instead of the CSD that defines it.
- In the scenario of a T2S CSD that requests the computation of penalties of its operations settled in a different platform (the BIC of the CSD-ESP is also the BIC of the T2S CSD), the T2S CSD will receive only one report including penalties on both T2S and non-T2S flows.
 - I.e. in the case where a penalty over non-T2S flows is computed, and the BIC of the relevant CSD of the penalty is the BIC of a T2S CSD, then the penalty computed will be reported together with the penalties for T2S flows that this CSD may have.

- Access Rights:

- A new system privilege will be defined for requesting the computation of penalties on non-T2S flows.

Additionally LCMM will check that the user sending the request belongs to a CSD that is allowed to request the computation of penalties of the relevant CSD-ESP.

For this purpose, a new entity will be defined in Static Data the relation that exists between a T2S CSD and a CSD-ESPs for which it can send computation requests. LCMM will verify if the BIC of the CSD-ESP is stored as an allowed BIC for which the CSD in T2S can request computation of penalties.

LCMM does not need to receive updates performed in this relationship stored in the object "Authorised CSD-ESP BIC". I.e. it is only used for checking the acceptance or rejection of a penalty computation request. Once a request is accepted, changes in the object "Authorised CSD-ESP BIC" will not affect the request (or related penalty if the latter has already been computed).

- For the modification of penalties on non-T2S flows, no additional privilege is needed. LCMM will check that the user sending the request belongs to a T2S CSD that is the T2S CSD that requested the computation of the penalty.
- For query of penalties on non-T2S flows, no additional privilege is needed.

 LCMM will check that the user sending the request belongs to a T2S CSD that is the T2S CSD that requested the computation of the penalty (stored as a new attribute in the penalty data model only for non-T2S penalties).
- Screens for Penalty Mechanism and Queries

For querying penalties a T2S CSD that can have penalties in T2S and penalties on non-T2S flows, a new search parameter should be implemented for the system entity wide to be able select whether the query refers to penalties in T2S or penalties on non-T2S flow.

Also, search criteria from CR-0654 is modified in order to use references and BICs of the participants form CSD-ESP.

SDMG:

Impacts listed in this CR are based on the assumption that CR-0654 is implemented in advance or together with CR-0685.

A new object "Authorised CSD-ESP BIC" will be added to the data model. Related backend and GUI IDFS to be drafted

A new Security CSD Link type "Maintenance only" will be implemented. This type of link should always have Security Maintenance set to True and cannot specify a technical issuer CSD. Its existence will prevent any other kind of Security CSD Link to be created for the same ISIN under the same CSD. Other CSDs will keep the possibility to create their own Issuer/Investor Links. As with the current implementation, only one CSD at any given point in time may set the Security Maintenance to True.

The Closing Day object will be extended to list the closing days for each external system by including an additional "Component" field referencing the external system. This data will be visible on the existing screen Working/Closing Days — Search/List screen. The T2S Calendar screen will not be changed; i.e. it will continue displaying data related only to T2S closing days. Also, to avoid impact on the A2A side, external closing days will not be queried via A2A. A calendar query received in A2A mode will always return only the T2S calendar data.

Attribute domain:

A new attribute domain structure for flat files has to be introduced to allow External CSDs party type (on top of CSDs) to be the final recipient of the flat file reports for cash penalties. Additionally, the setup of the configuration of these flat files should be defined via a pair of BICs (parent and party BIC) instead of using a system entity code to allow LCMM to cater for cash penalties for non-T2S flows (where the CSD is not in T2S)

Schedule of activities and volumes

The timings proposed have been defined according to the following principles:

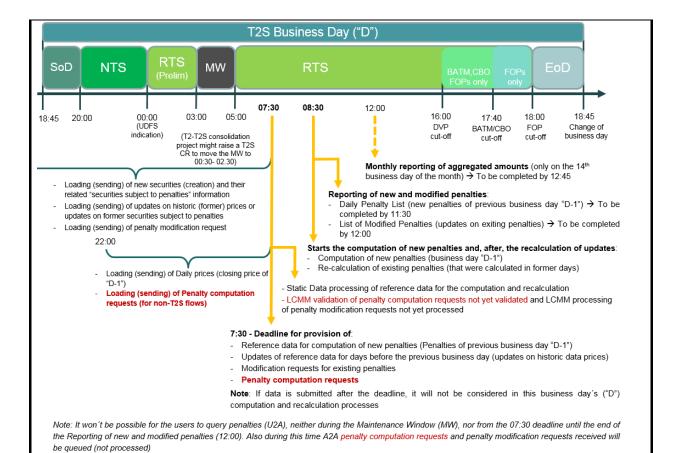
- 4CB have considered in this assessment i) the leanest approach i.e. the most suitable times and preferred windows according to the data distribution and existing volumetric assumptions; and ii) that it is in line with the schedule presented for CR-0654, and consequently is in line with the CSDR TF feedback and agreements.
- The 4CB assessment is based on the current daily T2S Maintenance Window (MW) between 3am and 5am. Nevertheless, time windows proposed take into account a possible post T2/T2S consolidation where URs foresees a Maintenance Window (MW) re-scheduled to 00:30- 2:30am. In any case, in order to achieve an optimal usage of resources, the final schedule of the MW after the T2/T2S consolidation might need to keep a similar timing than the current T2S daily Maintenance Window and will have to be analysed in the context of the related T2S CR.

T2S shall perform the activities in the proposed timeframes described as long as the volumes are in the boundaries of the foreseen volumes that are assumed for each activity according to the feedback received for CR-0654 (on T2S flows) and CR-0685 (on non-T2S flows).

In this respect, this assessment considers the volumes of non-T2S flows provided by Clearstream and Euroclear Finland. Due to confidentiality reasons, these volumes cannot be disclosed and are described as X1, X2....

The different activities and main processes are described in the following diagram.

In order to identify the activities that are introduced with CR-0685 from those already existing in CR-0654: New activities are highlighted in red, whereas existing activities in CR-0654 (where only difference after CR-0685 will be in volume processed) are not highlighted.



Detailed description of the activities and processes triggered daily:

- Daily loading (sending) of new securities and their related securities subject to penalties information (activity performed by the T2S Actor- loading of Reference Data)
- Volume:

It is assumed that the volumes to be received is the sum of the volumes for CR-0654 (15,000) and X1.

X1 is the volume for securities issued daily by the CSD-ESP that i) are not eligible for settlement in T2S and ii) where the participants of the CSD-ESP have a position.

Timings:

It is assumed that it will be done at the same time as the loading of new ISIN in T2S (i.e. along the day).

They can be provided at a different timing than the creation of the ISIN, nevertheless, in order to be considered in the next computation/recalculation process they have to be provided before 7:30.

- Daily loading (sending) of prices for penalties (activity performed by the T2S Actor- loading of Reference Data)
- Volume:

It is assumed that the volumes to be received is the sum of the volumes for CR-0654 (2,200,000) and X2.

X2 is the volume for the total number of securities issued by the CSD-ESP that i) are not eligible for settlement in T2S and ii) where the participants of the CSD-ESP have a position.

Timings:

Given that the prices are the closing trading price of the security CSDR TF feedback was that they will be provided after 22:00, but **main volume is expected between 6 and 7am.**

In order to be considered in the next computation process they have to be provided before 7:30.

- Loading (sending) of updates on historic (former) prices or updates on Securities subject to penalties (activity performed by the T2S Actor- loading of Reference Data)
- Volume:

This activity shall only occur if there were either missing or incorrect reference data of former

business days, which needs to be provided to T2S. Consequently, it is assumed that it will only occur if there are penalties computed using the missing or incorrect data, therefore the volumes to be received shall be a daily maximum of 15,000 + X4 (equivalent to correct all the new issued ISINs) Exceptional peak (not consider for normal business day schedule): half of the volume of a daily loading of process. This is assumed to be due of an issue on the sending of the prices (e.g. a major data provider cannot provide the prices on one day). In such a case it is expected that prices will be available long before 7:30am and they should be handled by an operational procedure along the day to avoid a performance issue at 7:30.

- Timings:

They can be provided at a different timing than the provision of the prices, nevertheless, in order to be considered in the next recalculation process they have to be provided before 7:30.

- Loading (sending) of penalty modification requests (activity performed by the T2S Actor- loading of Dynamic Data).
- Volume:

This activity shall only occur if ex-post corrections on already calculated penalties are needed. It is assumed that the volumes to be received shall be a maximum daily average of 10% of the penalties (below).

U2A requests are executed as soon as the request is sent in the screen, which has to be done penalty by penalty.

A2A allows several modification requests in a bulk file. The files will be processed as soon as it is received except for queued files during the MW and 7:30-12:00. Consequently, volumes are only relevant for this activity in case they will be received shortly before the deadline (7:30) as they have to be processed before the recalculation.

Exceptional peak: same volume of penalties computed on a given day (see computation process below). I.e. 80,000. In case of the exceptional peak, it is assumed that they would not be provided right before the deadline (7:30) but with enough time to process them (e.g. before the MW).

Timings:

They can be provided at a different timing along the day, nevertheless, in order to be considered in the next recalculation process they have to be provided before 7:30.

T2S shall finish the processing (execution) of the received request for modifying penalties by 8:30.

- Loading (sending) of penalty Computation requests (activity performed by the T2S Actor- loading of Dynamic Data).
- Volume:

It is assumed that the volumes to be received are X3 (this activity is only for non-T2S flows).

Timings:

They can be provided at a different timing along the day, however, in order to be considered in the next recalculation process they have to be provided before 7:30. Nevertheless, in line with the discussion at CSDR TF, main volume is expected between 6 and 7am.

As A2A will be validated (request for calculation will be accepted or rejected) as soon as the flat file is received, except for queued filed during the MW and 7:30-12:00, the timing is relevant because they will be received close to the deadline (7:30) and need to be validated by 8:30.

I.e.: T2S shall finish the validation of the received request for computing penalties by 8:30.

7:30- Deadline for provision of data in order to consider it in the next computation/recalculation of penalties.

I.e. if any of the Reference data or Dynamic data previously described is provided after this deadline, it will not be considered in the next computation/recalculation process and will have to wait until the following one (the business day after).

- Static Data processing of reference data (T2S Activity): Processing for extracting and preparing the reference data (received before deadline) for the computation and recalculation process. I.e. Creation of the new "Penalty reference data for securities".
- Volume: 2,200,000 +X2
- Timing: starts at 7:30 (with deadline) and shall be finished by 8:30.
- Dependency: It has to be finished in order to start the Computation of new penalties.
- Computation of new penalties (T2S activity)
- Volume:

It is assumed that the volume is the sum of the volumes for CR-0654 (90,000) and X3 (for non T2S flows).

- Timing:

Starts at 8:00

The end time expected is not provided for this process but in the last scheduled process (i.e. the Reporting of new penalties) where the deadline exists.

- Dependency:

It has to be finished in order to start the Reporting of new penalties as well as the Recalculation

- Reporting of new penalties (T2S activity) - Daily Penalty List

Volume:

It is assumed that the volume is the sum of the volumes for CR-0654 (225,000) and X4 (for non T2S flows).

X4 is two times X3 (because each penalty is reported to the failing and the non-failing party, i.e. 2 times).

Note: Contrary to T2S flows, given that there is no report sent by T2S to the participants of the CSD-ESP, there is no need to consider further DCP activity

All the volumes for the non-T2S flows are reported using flat file.

Timing:

Starts as soon as the Computation process has been performed.

- Recalculation of penalties (T2S activity)

Volume:

It is assumed an average equal to 10% of volume of a daily computation of new penalties I.e. the sum of the volumes for CR-0654 (9,000) and 10% of X3 (for non T2S flows).

Exceptional peak (not consider for normal business day schedule): same as volume of a daily computation

Timing:

Starts as soon as the Computation process has been performed.

The end time expected is not provided for this process but in the last scheduled process (i.e. the Reporting of modified penalties) where the deadline exists.

- Dependency: It has to be finished in order to start the Reporting of modified penalties.

Reporting of modified penalties (T2S activity)- List of Modified Penalties

Volume:

It is assumed that the volume is the sum of the volumes for CR-0654 (25,000) and X5 (for non T2S flows).

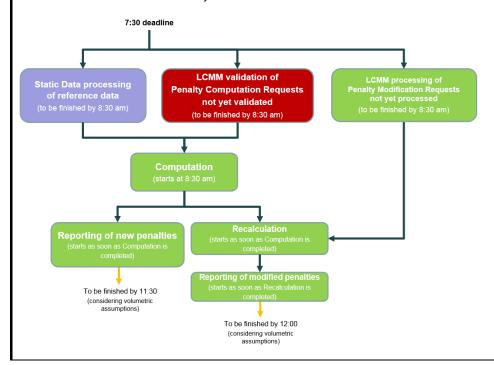
X5 is two times the 10% of X3 (because each modified penalty is reported to the failing and the non-failing party, i.e. 2 times)

All the volumes for the non-T2S flows are reported using flat file.

Timing

Starts as soon as the Recalculation process has been performed.

It has to be finished by 12:00.



Detailed description of the processes triggered only once a month:

- **Calculation of monthly aggregated amounts** (T2S Activity): This activity ensures that the monthly reporting is complete from the calculation performed on a daily basis.

Volume:

It is assumed that the number of bilateral net amounts is 50 times the number of participants in the T2S + in the CSD-ESP

- Timing:

As it relays on the data no longer changed since the recalculation made on the 12th, the process can be distributed in several parts.

The end time expected is not provided for this process but in the last scheduled process (i.e. the Monthly Reporting of penalties) where the deadline exists.

- Monthly reporting of penalties (T2S activity) Monthly Aggregated Amounts
- Volume:

It is assumed that the volumes reported are 20 times the daily reporting of new penalties (i.e. it is 20 business days in a month).

Note: For each item (penalty) reported less information is provided (i.e. calculation details of the penalty are not provided in the monthly).

All the volumes for the non-T2S flows are reported using flat file.

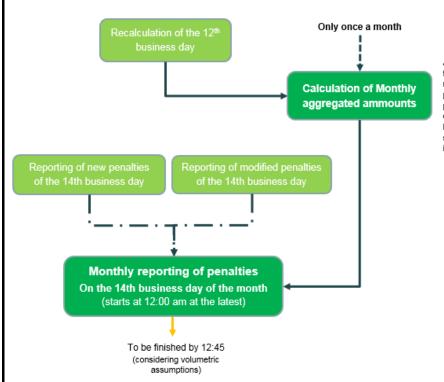
Timina:

Starts at 12:00 at the latest, but in case the daily reporting (reporting of new penalties and reporting of modified penalties) has finished before it will start as soon as the daily reporting has been performed.

It shall be finished by 12:45 of the 14th business day of the month.

Note: In case there are time constrains to reach the deadline, it can be foreseen to start already before the MW.

The dependencies on the monthly process described in CR-0654 are not affected by CR-0685, nevertheless, they are copied hereafter to ease the understanding:



As the Monthly calculation relays on the data no longer changed since the recalculation made on the 12th, the process can be distributed in several parts along the 13th and 14th business day (best timings will be defined at a later step in order find the most suitable in terms of avoiding any impact on performance)

SETT:

Settlement Day changes

The previously described new activities and processes needed for non-T2S flows require either new business or technical events to trigger them, or the modification of events created for CR-0654, e.g. the event to trigger (at

7:30) the deadline for provision of data will also serve as deadline for provision of computation requests.

Realignment Analysis: The "maintenance-only" Security CSD links must be ignored by realignment process.

QUM:

The new query "Authorised CSD-ESP BIC Query" has to be introduced throughout the different documentation. The query is for the T2S Operator only and used for the management of Authorised CSD-ESP BIC data.

The Cash Penalty List and Details Query will be updated with the new query response fields "Penalties on T2S flow (yes/no indicator)" and Reference of the computation request.

The Securities CSD Link Query will be updated with a new possible value for Link Type "Maintenance only" as search and response criteria.

The Closing Day Query will be updated with a field for "Component" as search and list criteria defining the External System for Closing days outside the T2S Calendar.

The T2S Calendar Query will be adapted in order to prevent the display of closing days of external systems. This means, that this guery will still only display the T2S calendar.

BIL:

The Billing is based on the Service Items already introduced with CR 654. No further changes with this CR are foreseen. For the billing of the reports this means that the price for the reports will be allocated to the receiving party (visible in the itemised billing data), this can also be an indirect connected participant, as long as he is setup in the Static Data of T2S.

We will not include a new Service Item for the new query, as the guery is only available for the T2S Operator

Main cost drivers: Creation of new functionalities for calculation and reporting of cash penalties for settlement fails on instructions that are processed outside T2S:

- Definition and development of new process for acceptance, validation and processing of non-T2S reference data and penalty computation requests
- Definition and development of a new inbound flat file "Penalty computation request for non-T2S flows"
- Definition and development of a new system privilege will be defined for requesting the computation of penalties on non-T2S flows.
- Definition and development of new queries, e.g. "Authorised CSD-ESP BIC Query"
- Definition and development of "Authorised CSD-ESP BIC" object. Change to Security CSD link and Closing Day creation function, messages and GUI.
- Preparation and execution of comprehensive internal functional and regression testing campaign.

Performance considerations:

The potential CSG CR for two additional partial settlement windows (one 0.00 - 0.30 hrs am CET and a second one 6.00 - 6.30 hrs am CET) could have impact on the resource consumption/performance during the foreseen time slots for the delivery of the reference data by the customers and the processing of data/calculation of penalties. The impact will be evaluated once CR-0654, CR-0685 and the potential CR for the two additional PSW are implemented. It might become necessary to move the PSW foreseen from 6am- 6.30am to 5.45 am-6.15 am and the time window foreseen to receive main volumes of price data from 6.00 – 7.00 hrs am CET to 6.15 – 7.15 hrs am CET and/or to purchase additional processing capacity.

Summary of project risk

None.

Security analysis

No adverse effect has been identified during security assessment.

DG - MARKET INFRASTRUCTURE & PAYMENTS

ECB-PUBLIC

21 December 2018

Cost assessment on Change Requests

T2S-685-SYS – T2S Penalty Mechanism for non-T2S settlement flows					
One-off	Assessment costs* - Preliminary	2,000.00	Euro		
One-on	- Detailed	10,000.00	Euro		
One-off	Development costs	962,946.70	Euro		
	Operational costs				
Annual	- Maintenance costs	84,360.75	Euro		
	- Running costs	976.25	Euro		

^{*}The relevant assessment costs will be charged regardless of whether the CR is implemented (Cf. T2S Framework Agreement, Schedule 7, par. 5.2.3).