General Information (Origin of Request)		
☒ User Requirements (URD)		
☒ Other User Functional or Technical Documentation (SYS)		
Request raised by: Deutsche Bundesbank on behalf of the German NUG	**Institute:** Central Bank	**Date raised:** 24/07/2015
Request title: Minimum amount for auto-collateralisation transactions		**Request ref. no:** T2S 0543 URD

Request type: Common	**Urgency:** Normal
1. Legal/business importance parameter: High	**2. Market implementation efforts parameter:** Medium
3. Operational/Technical risk parameter: Low	**4. Financial impact parameter:** High
Requestor Category: Central Bank	**Status:** Allocated to a release

Reason for change and expected benefits/business motivation:

When T2S auto-collateralisation is triggered T2S on the one hand automatically generates and immediately settles the opening leg of the auto-collateralisation transaction and on the other hand automatically generates the closing leg for the reimbursement of the auto-collateralisation transaction. The closing leg is put on party hold for the collateral provider in T2S. According to the repo and pledge procedure the pending reverse collateral instructions need to be released on the collateral providing account(s) of the CSD Participant either by the collateral provider (active release management) or automatically by T2S, e.g. at 16h30 CET (passive release management).

T2S does not foresee that Payment Banks can define a minimum amount for a single auto-collateralisation transaction to be transferred, which is a functionality available in some CSDs prior to their migration to T2S. This may result in the generation of many small auto- collateralisation transactions each time the cash provision check detects a lack of cash on the DCA and eligible collateral on flow or on stock is available when settling RvP instructions.

The definition of a minimum amount for auto-collateralisation transactions should help to reduce the number of auto-collateralisation transactions and therefore reduces the total costs for Payment Banks[1]. Moreover, the reduction of the number of auto-coll. transactions would decrease the operational risk stemming from the collateral fragmentation which may in some cases exceed the technical limits associated with a single collection (fixed at 2500 settlement transactions)[2]

Description of requested change:

Implement an optional functionality which allows to define on party level an individual minimum amount per Payment Bank to be transferred in an auto-collateralisation scenario. In case of using the new functionality, auto-collateralisation for the Payment Bank should always source at least the minimum amount specified, even if the missing cash amount to be covered by auto-collateralisation is lower than the defined minimum. This will provide some buffer liquidity on the DCA, which can be used to fund other RvP instructions with small cash counter values. Technically speaking, whenever auto-collateralisation is triggered, the amount of cash to be provided would be the maximum between the cash need and the minimum threshold set up for the Payment Bank, as long as it does not exceed the intraday auto-collateralisation limits configured for the affected CMB.

Note: In case a payment bank does not have a minimum amount for auto-collateralisation defined, the auto-collateralisation should work as before the implementation of this CR.

In case of insufficient securities or auto-collateralisation limit available to provide auto-collateralisation for the minimum amount, the behavior remains unchanged meaning that no auto-collateralisation will be triggered in that scenario.

Moreover the functionality of automated substitution of collateral should not be affected by this change request.

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[1] According to Schedule 7 of the Framework Agreement and the Currency Participation Agreement, the „Auto-collateralisation service with Central Bank" is currently priced with 0 eurocent. However, even with a zero price tag for the auto-collateralisation service, Payment Banks are confronted with messaging and monitoring costs arising from the use of auto-collateralisation. By avoiding (a high number of) low-value auto-collateralisation transactions, these messaging and monitoring costs could considerably be reduced.

[2] OMG issue of the maximum number of auto-collateral reimbursement instructions that can be processed by T2S
http://www.ecb.europa.eu/paym/t2s/progress/pdf/tg/crg/crg118/04.defragmentation_omg_presentation.pdf

In principle, the concept of minimum amount should also be implemented for client-collateralisation. However, the minimum amount used for client- collateralisation could be different to the amount defined for auto-collateralisation (i.e. it should be possible to have one single amount per payment bank for auto-collateralisation and one single amount per payment bank for client-collateralisation). Consequently, it will be possible to define one minimum amount per payment bank for client-coll. for all the customers of that payment bank. Client-collateralisation should always provide at least the minimum amount specified, even if the missing cash amount is lower than the defined minimum. Technically speaking, whenever client-collateralisation is triggered, the amount of cash to be sourced would be the maximum between the cash need and the defined minimum threshold, as long as it does not exceed the intraday client-collateralisation limit configured for the affected CMB.

Note: In case a payment bank does not have a minimum amount for client-collateralisation defined, the client-collateralisation should work as before the implementation of this CR.

To reduce the complexity of this new functionality the maximum credit percentage[3] configuration, which is currently a part of Party static data, should be decommissioned from T2S. The CBs have already established that this parameter is not to be used and is currently set to zero by all CBs. Its removal will simplify the settlement selection algorithms and slightly improve the performance of the settlement engine.

Note: It is not foreseen that an update of the minimum amount (neither for auto-coll. nor for client-coll.) should have an intraday effect. It is sufficient, that the update becomes valid as of the next business day.

The minimum amounts for auto-collateralisation and client-collateralisation will be part of the Party Auto-collateralisation Rule entity, and as such their definition will be, by default, under the responsibility of the related Central Bank. In addition, the data related to Minimum amounts for auto- and client-collateralisation for a specific Party will be displayed in the Party Details GUI Screen and be visible, by default, only to the Payment Bank itself and to the related Central Bank.

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[3] UDFS definition: The maximum credit percentage of intraday credit which can be provided in addition to the missing amount. For example, in case of lack of cash for EUR 10,000.00, if the maximum credit percentage is equal to 2%, then the maximum collateral countervalue taken to guarantee the credit cannot exceed EUR 10,200.00. And hence in such a case the actual intraday credit provided through central bank collateralisation shall value between EUR 10,000.00 and 10,200.00 depending on the actual countervalue of the collateral.

Submitted annexes / related documents:

Proposed wording for the Change request:
<u>The relevant requirement of URD should be updated as follows (revision marks are used):</u>

Section 7.1.2.2 Validation and provisioning and bookings (box 2.2)

The settlement process usually involves three different steps:

- validation consists of the validation of static data (e.g. securities exist and settlement accounts are valid);
- the provision check of cash and securities availability; and
- bookings, i.e. if the provision is successful, settlement will take place with bookings, i.e. the update of the securities and/or cash balance.

On successful static data validation and after the provision check and booking of securities and/or cash, the settlement process would send the settlement status message to LCMM. For provisioning (referred to below as the provision check), this function would read the available security and/or cash balances from their respective data stores, and would also be obtaining single or set of transactions stemming from optimisation procedures or as a result of an incoming settlement transaction for immediate settlement. If there is a cash shortfall, it would trigger the auto-collateralisation process for liquidity provision when applicable <u>(cash amount provided shall be the maximum between cash scarcity and minimum threshold defined for the T2S dedicated cash account)</u>. After the run of a settlement attempt the provision check and booking might show a need for T2S to trigger the recycling and optimisation functionality (depending on daytime/ night-time settlement).

Section 7.1.2.4 Auto/Client-collateralisation (Box 2.4)

T2S will provide auto-collateralisation services to facilitate the securities settlement to financial institutions that central banks have identified as eligible or clients that settlement banks have specified as eligible. T2S will trigger auto-collateralisation when a participant does not have sufficient cash to settle the underlying transaction(s). The auto-collateralisation operation will provide the cash amount required <u>(i.e. maximum between the cash need and the minimum threshold set up for the payment bank)</u> for the settlement of the initial transaction(s) when the participant does not have sufficient funds to settle the full amount of the transaction(s).

Reference ID T2S.07.274 (Provision check for the T2S dedicated cash account and auto-collateralisation)

…

When T2S performs the provision check for the cash leg of a settlement transaction and there is not sufficient cash to settle the instruction, T2S shall check whether the transaction is eligible for auto-collateralisation. If the transaction is eligible for auto-collateralisation and the available headroom for the auto-collateralisation limit on the T2S dedicated cash account is not sufficient to settle the transaction <u>(headroom must at least be equal to the minimum amount defined for the T2S dedicated cash account)</u>, then T2S shall exit both the provision check and the settlement process for the transaction.

Reference ID T2S.08.480 (Provision of auto-collateralisation functionality)

…

The auto-collateralisation functionality is available with central banks and with payment/settlement banks to eligible T2S parties as defined in T2S static data. T2S will trigger auto-collateralisation with central banks in case of lack of cash on the T2S dedicated cash account of the payment/settlement bank to which the settlement instruction is referring. T2S will trigger auto-collateralisation with a payment/settlement bank (client-collateralisation) in case of insufficient external guarantee headroom on the credit memorandum balance of a client of the payment/settlement bank, owner of the securities account to which the settlement instruction is referring. <u>In both cases the cash amount to be provided shall be at least the minimum threshold as defined for that T2S dedicated cash account, in order to avoid situations in which many auto-collateralisation transactions are generated, each only providing a small amount of liquidity.</u>

Reference ID T2S.08.560 (Additional provision check conditions applicable to the triggering of auto-collateralisation operations)

T2S shall generate auto-collateralisation operations only when they allow settling the underlying settlement transaction(s) and when sufficient headroom exists on the auto-collateralisation limit <u>(headroom must at least be equal to the minimum amount defined for the T2S dedicated cash account)</u>. When triggering auto-collateralisation, T2S shall

also consider the unsecured credit limit headroom available that could complement the auto-collateralisation operation in case of auto-collateralisation with payment/settlement banks (client-collateralisation).

Reference ID T2S.08.690 (Conditions for the selection of collateral)
When generating auto-collateralisation operations and based on the latest value of the eligible collateral, T2S must select securities that have no close link with the T2S party for which auto-collateralisation is triggered in such a way that the total amount of securities collateralised with central bank or payment/settlement bank:
- is at least equal to the amount of intraday credit provided; and
- ~~does not exceed a maximum percentage of the value of the credit granted, defined by the central bank or 15 the payment/settlement bank providing the credit.~~

Reference ID T2S.10.063 (Minimum amount for auto-collateralisation)
T2S shall allow to define and maintain a minimum threshold amount per Payment Bank to be provided in an auto-collateralisation scenario (for both central bank and client-collateralisation). The minimum threshold shall be defined within the auto-collateralisation limits, to optimise cash sourcing and decrease collateral transactions.

16.8.1 Hierarchical Party Model

Reference ID T2S.16.581 (Auto-collateralisation Rules)
This entity shall store for NCBs and payment/settlement banks the attributes to allow an NCB and payment/settlement banks to configure its auto-collateralisation rules for T2S. T2S shall allow and require the input of these data in party reference data for occurrences of party reference data, where the attribute Party Type in party reference data specifies "NCB" or "payment/settlement bank".

Table 16-14a – List of Attributes for an NCB Auto Collateralisation Rules Entity

Attribute	Description
Party Identifier	This attribute shall specify the unique technical identifier of the National Central Bank or payment/settlement bank as a party in T2S.
~~Maximum Credit percentage~~	~~This attribute shall specify the maximum percentage of credit that the NCB grants for collateralised securities. This attribute shall not be relevant for payment banks.~~
~~Use of Maximum Credit percentage~~	~~This attribute has a Boolean value and shall specify whether the NCB uses the Maximum Credit percentage for calculations in monetary policy operations. This attribute shall not be relevant for payment banks.~~
Collateralisation Procedure	This attribute shall specify the type of collateralisation procedure application for the NCB, as defined by requirement T2S.08.700. • Repo • Pledge • Pledge Subaccount For payment/settlement banks, this attribute shall always have the default value of "Repo"
Minimum amount for auto-collateralisation	This attribute shall specify the minimum amount to be sourced in an autocollateralisation operation. **This attribute will only be available for Payment Banks.**
Minimum amount for client collateralisation	This attribute shall specify the minimum amount to be sourced in a client collateralisation operation. **This attribute will only be available for Payment Banks.**

GFS should be updated as follows:

Section 3.3.7.3 Description of the entities

6 – Auto-Collateralisation Rule

Reference Id	*SDMG.PAR.ENT.6.1*

This entity includes all configuration data concerning auto-collateralisation rules required in T2S for each CB and payment banks offering auto-collateralisation **{T2S.16.581}.**

ATTRIBUTE	DESCRIPTION

Maximum Credit Percentage	It specifies the maximum percentage of credit that the CB or the payment bank grants for collateralised securities.
Use of Maximum Credit Percentage	Boolean attribute specifying whether the CB uses the Maximum Credit percentage for calculations in monetary policy operations. This attribute is not relevant for payment banks.
Collateralisation Procedure	It specifies the type of collateralisation procedure application for the CB. The exhaustive list of possible values is as follows: • Pledge • Pledge Sub-account • Repo For payment banks this attribute always equals "Repo".
Minimum amount for auto-collateralisation	This attribute shall specify the minimum amount to be sourced in an autocollateralisation operation. This attribute will only be available for Payment Banks.
Minimum amount for client collateralisation	This attribute shall specify the minimum amount to be sourced in a client collateralisation operation. This attribute will only be available for Payment Banks.

Section 3.5.9.3 Description of the functions of the module

3 – Lack of Cash Manager

Selection of the collateral securities

Reference Id	**SETT.ACO.LCM.2.1**

The *Lack of Cash Manager* function selects the collateral among the collateral flows and securities positions with an intraday credit capacity previously calculated in a way to fill in the lack of cash or to overcome the insufficiency of external guarantee headroom:

l   The function selects first collateral on flows and, if necessary, complements it with collateral on stock **{T2S.08.600}.**

l   If auto-collateralisation is possible on several eligible securities, the function seeks the one(s) which provides the lowest total amount of intraday credit, i.e. the minimum total collateral value **{T2S.08.040} {T2S.08.740}.**

The function ensures that the amount of the provided intraday credit:

l   Does not exceed the remaining headroom in the applicable auto-collateralisation limits: auto-collateralisation limit set by the Central Bank on the T2S Dedicated cash account [4] having the lack in case of CB collateralisation **{T2S.10.061},** or client-collateralisation limit set on the considered credit memorandum balance by the payment bank providing the intraday credit **{T2S.10.062};**

l   Is at least equal to the missing amount **{T2S.08.560} {T2S.08.750},** decreased by the headroom of the unsecured credit limit in case of client-collateralisation **{T2S.08.560} {T2S.08.755};** [5]

l   Does not exceed a maximum percentage of the missing amount defined by the considered credit provider **{T2S.08.690} {T2S.16.581}.**

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[4]   More exactly, the CB limit is set on a credit memorandum balance of the T2S Dedicated cash account. Only one credit memorandum balance of the T2S Dedicated cash account has the CB limit set on it.

[5]   Nevertheless, the function favours the selection of collateral versus the use of unsecured credit. The latter should be used only if the function cannot find enough collateral to fill in an insufficient external guarantee headroom.

Respect of Minimum amount for auto-collateralisation

Reference Id	**SETT.ACO.LCM.2.2**

The function ensures that the amount of the provided intraday credit per collateral Settlement Transaction:

I   Is at least equal to the minimum amount **for auto-collateralisation {T2S.08.480} {T2S.10.063};**

UDFS should be updated as follows:

1.2.3.1 Setup of auto-collateralisation eligibility, securities valuation and close links in T2S, page 81

The setup of the auto-collateralisation feature in T2S includes the configuration of static data for auto-collateralisation rules, auto-collateralisation eligibility, securities valuation and close links.

Central Banks and payment banks are responsible for defining the eligibility for auto-collateralisation purpose of the relevant securities and for providing prices for the valuation of securities positions for auto-collateralisation. Only Central Banks have the option to set up the relevant close links between parties and financial instruments. This information can be provided directly by the relevant actors, or indirectly via a collateral management system. The relevant T2S Actor can define in T2S information related to the eligibility for auto-collateralisation of a given security and to close links for a given party and security, and then update this information only when changes occur, i.e. without the need for feeding this information on a daily basis. Vice versa, the relevant T2S Actor must provide prices[44] for valuation purpose on a daily basis.

Each auto-collateralisation rule is defined by the ~~maximum credit percentage[45] that the CB grants for collateralised securities, the~~ type of collateralisation procedure (it can be "pledge", "pledge sub-account" or "repo" for CBs and only "repo" for payment banks) ~~and, in the case of CB auto-collateralisation rule, a Boolean information specifying whether the CB uses the maximum credit percentage for the implementation of auto-collateralisation operations. For payment banks, this Boolean information cannot be input as it is not relevant~~. The T2S Operator creates or updates auto-collateralisation rules when creating or updating the relevant CBs. A CB creates or updates auto-collateralisation rules when creating or updating one of its payment banks providing client-collateralisation.

It is possible to define minimum amounts to be provided in auto-collateralisation and client-collateralisation scenarios. For each Payment Bank it is possible to define one minimum amount for auto-collateralisation instructions (applicable to the Payment Bank) and one for client-collateralisation instructions (applicable to all clients of the Payment bank).

Changes to the minimum amounts are taken into account by the system as of the following business day at the latest. For details on how these values are used in the auto-collateralisation process, (see section Auto-collateralisation 1.6.1.9.4).

[45] ~~The maximum credit percentage of intraday credit which can be provided in addition to the missing amount~~

1.6.1.9.4 Auto-collateralisation, page 397

Concept

T2S offers to central bank and payment/settlement banks (hereafter also called credit providers) the capacity to provide to credit consumers intraday credit automatically secured in T2S with eligible collateral. This capacity is achieved through the auto-collateralisation which is technically available in all T2S settlement currencies.

The intraday credit provided through auto-collateralisation by a central bank (hereafter also called central bank collateralisation) aims at covering lacks of cash on the T2S dedicated cash account managed in its books. The intraday credit provided through auto-collateralisation by a payment/settlement bank (hereafter also called client-collateralisation) aims at covering insufficient external guarantee headroom for its client.

In addition the auto-collateralisation process allows automatic release of collateral and automatic substitution in order to cover lack of securities.

Overview

The automatic provision of intraday credit through auto-collateralisation in T2S is managed by the credit provider configuring the following parameters in the static data about:

- The accounts to be used;
- The procedure for the management of the collateral;

- The eligible collateral and its valuation;
- The maximum amount which can be provided per credit consumer;
- The minimum amount of intraday credit that a collateralisation instruction must provide[x].
- ~~The maximum credit percentage of intraday credit which can be provided by the central bank in addition 3 to the missing amount .~~

~~For example, in case of lack of cash for EUR 10,000.00, if the maximum credit percentage is equal to 2%, then the maximum collateral countervalue taken to guarantee the credit cannot exceed EUR 10,200.00. And hence in such a case the actual intraday credit provided through central bank collateralisation shall value between EUR 10,000.00 and 10,200.00 depending on the actual countervalue of the collateral.~~

[x]For example, in case of lack of cash for EUR 5,000, if the minimum amount for auto collateralisation is EUR 8,000, then the actual intraday credit provided must be at least EUR 8,000.

PARAMETER	FOR CENTRAL BANK COLLATERALISA-TION	FOR CLIENT-COLLATERALISATION
Collateral management procedure	Central banks are required to deter-mine in static data the collateralisation procedure for which they opt for all their central bank collateralisation operations in T2S among: l The REPO procedure, i.e. the selected collateral is transferred from the securities account where it is held to a securities account of the credit provider; l The PLEDGE procedure, i.e. the selected collateral is transferred from the securities account where it is held to another securities ac-count of the credit consumer pledged to the credit provider; l The PLEDGE SUB procedure, i.e. the selected collateral is restricted in the securities account where it is held – on a restricted position - without transfer to any other securities account.	No specific configuration is required since REPO procedure applies to all client-collateralisation operations.
Securities accounts for collateral management in REPO procedure (see section Links between securities accounts and T2S dedicated cash accounts [☐ 97])	In case of REPO procedure, central banks are required to determine for each T2S dedicated cash account held in their books, the securities account where the selected collateral has to be stored in case of intraday credit provision.	Payment/settlement banks are required to determine for each of their client allowed to use its T2S dedicated cash account (i.e. for which a Credit Memorandum Balance exists), the securities account where the selected collateral has to be stored in case of intraday credit provision.
Regular collateral securities accounts configuration for collateral relocation at the end of day	Central banks are required to deter-mine the securities account where the collateral corresponding to pending intraday credit rebalanced to the RTGS has to be retransferred at the end of the day. (See section End of Day Cash Management [☐ 570]).	No configuration is required since the pending intraday credit provided through client-collateralisation operation is not subject to a specific process in T2S.
accounts for intraday credit provision through auto-collateralisation	Central banks are required to deter-mine in static data the T2S central bank cash account debited to provide intraday credit through auto-collateralisation in T2S in a given currency.	No specific configuration is required.
Eligible collateral and collateral prices	Central banks and payment/settlement banks are required to provide to T2S the list of securities accepted as collateral and, each settlement day, the associated prices in the currency of the intraday credit (See configuration in section Securities static data [☐ 71]). The provision of these parameters may take place through collateral management systems.	
amount which can be provided per	Central banks are required to set in	For client-collateralisation,

credit consumer	the static data the maximum amount of intraday credit which can be provided to each T2S dedicated cash account held in their books for a settlement day. This cap is set through the central bank collateralisation limit. This limit is automatically set to zero at the creation of the T2S dedicated cash account (See section Limit Management [□ 555]).	payment/settlement banks are required to set in the static data the maximum amount of intraday credit which can be provided through client-collateralisation to each of their clients allowed to use its T2S dedicated cash account. This cap is set through the client-collateralisation limit. This limit is automatically set to zero at the creation of the link (set through a Credit Memorandum Balance) between the T2S dedicated cash account and the T2S Party (See section Limit Management [□ 555]).
~~Maximum credit percentage of the missing amount that the provided intraday credit cannot exceed 215~~	~~Central banks can set the maximum credit percentage of the missing amount that the provided intraday credit cannot exceed.~~ ~~Central banks can choose in the static~~	~~Not applicable to Payment/settlement banks~~
Minimum amount for auto-collateralisation that the intraday credit must provide[x]	Payments banks may have in their static data a minimum amount of intraday credit that must be provided in a central bank collateralisation instruction. The minimum amount is not mandatory. Distinct amounts are defined for central bank and client collateralisation.	Payments banks may have in their static data a minimum amount of intraday credit that must be provided in a client collateralisation instruction. The minimum amount is not mandatory. The unique minimum amount is valid for all payment bank clients. Distinct amounts are defined for central bank and client collateralisation.

~~[215]For example, in case of lack of cash for EUR 10,000.00, if the maximum credit percentage is equal to 2%, then the maximum collateral countervalue taken to guarantee the credit cannot exceed EUR 10,200.00. And hence in such a case the actual intraday credit provided through central bank collateralisation shall value between EUR 10,000.00 and 10,200.00 depending on the actual countervalue of the collateral.~~

[x]For example, in case of lack of cash for EUR 5,000, if the minimum amount for auto collateralisation is EUR 8,000, then the actual intraday credit provided must be at least EUR 8,000.

Collateral selection, page 404

If the calculated intraday credit capacity covers the lack of cash or the insufficient headroom, T2S selects the securities to take in guarantee, among the available collateral, using the rules below:
- Collateral on flow is selected first, complemented, if necessary, by collateral on stock;

- When several securities can be selected, the collateral providing the requested intraday credit with the lowest amount is selected first.

Last, T2S ensures that the selected collateral meets all the following conditions:

CONDITIONS	FOR CENTRAL BANK COLLATERALISATION	FOR CLIENT-COLLATERALISATION
Limit headroom fulfilled	The intraday credit actually provided does not exceed the headroom of the applicable central bank collateralisation limit.	The intraday credit actually provided does not exceed the headroom of the applicable client-collateralisation limit.
Missing resource coverage	The intraday credit actually provided is at least equal to the lack of cash on the T2S dedicated cash account.	The intraday credit actually provided is at least equal to the insufficient head-room of the external guarantee limit decreased by the headroom of the unsecured credit limit (See section Limit Management [□ 555]).
~~Maximum credit percentage fulfilled~~	~~The excess of intraday credit actually provided does not exceed the maxi-~~	~~Not applicable to Payment/settlement banks.~~

	mum credit percentage defined by the central bank, if applicable. For example, in case of lack of cash for EUR 10,000.00, if the maximum credit percentage is equal to 2%, then the maximum collateral countervalue taken to guarantee the credit cannot exceed EUR 10,200.00. And hence in such a case the actual intraday credit provided through central bank collateralisation shall value between EUR 10,000.00 and 10,200.00 depending on the actual countervalue of the collateral.	
Minimum amount for auto-collateralisation fulfilled	The intraday credit actually provided must be at least equal to the minimum amount. When the required intraday credit is below this condition, the minimum amount will be provided instead. Auto-collateralisation does not occur if the available collateral amount or central bank collateralisation headroom is below the minimum amount (even if the available collateral and central bank collateralisation headroom are sufficient to cover the lack).[x]	The intraday credit actually provided must be at least equal to the minimum amount. When the required intraday credit is below this condition, the minimum amount will be provided instead. Auto-collateralisation does not occur if the available collateral amount or client collateralisation headroom is below the minimum amount (even if the available collateral and client collateralisation headroom are sufficient to cover the lack).[x]

[x] When several securities are required for the collateral operation the minimum amount applies for each collateral settlement instruction.

Examples of an auto-collateralisation process, page 407

EXAMPLE 116 - CENTRAL BANK COLLATERALISATION

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Based on the selected collateral, the ultimate conditions for a central bank collateralisation process are checked:

CONDITIONS	CHECK RESULT	REASONS
Limit headroom fulfilled	OK	The central bank collateralisation headroom remains positive (+EUR 42,000.00) after the central bank collateralisation operation.
Missing resource coverage	OK	The identified lack of cash (-8,000.00) is covered by the provided intraday credit (8,000.00).
Maximum credit percentage fulfilled	OK	Since the intraday credit provided is equal to the lack of cash to be covered, the central bank collateralisation operation fulfils any maximum credit percentage defined by central bank1.
Minimum amount for auto-collateralisation fulfilled	OK	The intraday credit provided (8,000) is greater than the defined minimum amount for central bank collateralisation (minimum defined as EUR 5,000 for the purposes of this example).

Examples of an auto-collateralisation process, page 411

EXAMPLE 117 – CLIENT-COLLATERALISATION

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T2S selects the collateral on flow (85 of the purchased securities for a collateral valuation of EUR 6,800.00) and checks the ultimate conditions to resort a client-collateralisation process:

CONDITIONS	CHECK RESULT	REASONS
Limit headroom fulfilled	OK	The client-collateralisation headroom remains positive (+3,200.00) after the processed client-collateralisation operation.

Missing resource coverage	OK		The identified insufficient external guarantee headroom (-6,800.00) is covered by the provided intraday credit (6,800.00).
Minimum amount for auto-collateralisation fulfilled	OK		The intraday credit provided (6,800) is greater than the defined minimum amount for client collateralisation (minimum defined as EUR 1,000 for the purposes of this example).

Parameters synthesis, page 416
The following parameters are specified by the T2S Operator or by the T2S Actor.

CONCERNED PRO-CESS	PARAMETER	CREATED BY	UPDATED BY	MANDATORY/ OPTIONAL	POSSIBLE VALUES	STANDARD OR DEFAULT VALUE
Central bank collateralisation	Collateral management procedure	T2S Actor	T2S Actor	M	- REPO - PLEDGE - PLEDGE SUB	N/A
Central bank collateralisation and client collateralisation	Securities accounts for collateral management in REPO procedure	T2S Actor	T2S Actor	M	Valid securities ac-count Id	N/A
Central bank collateralisation	Securities accounts pledged for collateral management in PLEDGE procedure	T2S Actor	T2S Actor	M	Valid securities ac-count Id	N/A
Central bank collateralisation	Central bank cash accounts for intra-day credit provision	T2S Actor	T2S Actor	M	Valid central bank cash account Id	N/A
Central bank collateralisation and client collateralisation	Eligible collateral	T2S Actor	T2S Actor	M	N/A	N/A
Central bank collateralisation and client collateralisation	Collateral price per eligible collateral	T2S Actor	T2S Actor	M	Valuation in a given currency	N/A
Central bank collateralisation and client collateralisation	Close links	T2S Actor	T2S Actor	O	N/A	N/A
Central bank collateralisation	Central bank collateralisation limit	T2S Actor	T2S Actor	M	N/A	"0"
Client collateralisation	Client-collateralisation limit	T2S Actor	T2S Actor	M	N/A	"0"
~~Central bank collateralisation and client collateralisation~~	~~Maximum credit percentage of missing amount~~	~~T2S Actor~~	~~T2S Actor~~	~~O~~	~~N/A~~	~~N/A~~
Central bank collateralisation and client collateralisation	Links between securities account for collateral supply	T2S Actor	T2S Actor	M	N/A	N/A
Central bank collateralisation and client	Restriction type earmarking for auto-	T2S Operator	T2S Operator	M	Eeee	N/A

collateralisation	collateralisation					
Central bank collateralisation	Restriction type collateralised	T2S Operator	T2S Operator	M	COLL	N/A
Central bank collateralisation	Minimum amount for auto-collateralisation	T2S Actor	T2S Actor	O	N/A	N/A
Client collateralisation	Minimum amount for auto-collateralisation	T2S Actor	T2S Actor	O	N/A	N/A

1.6.2.3.3 EOD Cash Management Process, page 589

Relocation of collateral
For all T2S Dedicated Cash Accounts for which a negative final end of day amount is identified, T2S automatically applies a relocation of collateral. This collateral relocation aims at guaranteeing the credit extension processed in the RTGS to cover the missing cash.
T2S generates a collateral relocation for each reverse collateral Settlement Instruction which remains pending after the rebalancing. These collateral relocation Settlement Instructions contain the following information:

INFORMATION	DESCRIPTION
Debited Cash Account	Reference Id of the central bank cash account credited in the pending matched reverse collateral Settlement Instructions.
Credited Cash Account	Reference Id of the T2S Dedicated Cash Account debited in the pending matched reverse collateral Settlement Instructions
Settlement Amount	Missing amount to settle the pending matched reverse collateral Settlement Instructions. The minimum amount for auto-collateralisation is not considered during relocation.
Debited Securities Account	Reference Id of the securities account credited in the pending matched reverse collateral Settlement Instructions.
Debited Securities Position	Restriction Type Id of the securities position credited in the pending matched reverse collateral Settlement Instructions.
Credited Securities Account	Reference Id of the securities account previously set by the central bank in the static data as the regular collateral securities account.
Credited Securities Position	Restriction Type Id of the deliverable securities position of the credited securities account.
Securities	ISIN of the collateral released in the pending matched reverse collateral Settlement Instructions. When the reimbursed ISINs are unavailable alternative ISINs from those de-fined as eligible for collateral are used[244]. Relocation then occurs using the combination that most closely covers the missing cash.
~~Settlement Quantity~~	~~Quantity of securities necessary to cover the provided liquidity and calculated with the applicable collateral valuation and the maximum credit percentage.~~

UHB should be updated as follows:

Section 2.5.1.5 Party – Details Screen, page 627

Auto-Collateralisation Rules	
~~Maximum Credit Percentage~~	~~Shows the maximum percentage of credit that the national central bank grants to the party for collateralised securities. This field is only available for central banks.~~

~~Use of Maximum Credit Percentage~~	~~Shows whether the national central bank uses the maximum credit percentage for the implementation of auto-collateralisation operations from the possible values:~~
	  • ~~Yes~~
	  • ~~No~~
	~~This field is only available for central banks.~~

Minimum amount for auto-collateralisation	The field is visible only when the Party whose details are displayed is a Payment Bank. It shows the Minimum amount for auto-collateralisation that has been configured for the relevant Party.

Minimum amount for client collateralisation	The field is visible only when the Party whose details are displayed is a Participant Bank. It shows the Minimum amount for client-collateralisation that has been configured for the relevant party.

Section 2.5.1.6 Party – New/Edit Screen, page 633

Auto-Collateralisation Rules	
~~Maximum Credit Percentage~~	~~Enter the maximum percentage of credit that the national central bank grants to the party for collateralised securities. Required format is: max. 8 digits incl. decimal point (thereof max. 5 decimal places and decimal point) References for error messages:~~ • ~~DPC1303~~ • ~~DPC1306~~ • ~~DPU1005~~ • ~~DPU1303~~ • ~~DPU1306~~ • ~~DPU1308~~ ~~This field is only available if the party type is set to 'NCB'.~~
~~Use of Maximum Credit Percentage~~	~~Select whether the national central bank uses the maximum credit percentage for the implementation of auto-collateralisation operations from the possible values:~~ • ~~FALSE~~ • ~~TRUE~~ ~~References for error messages:~~ • ~~DPC1303~~ • ~~DPC1306~~ • ~~DPU1005~~ • ~~DPU1303~~ • ~~DPU1306~~ • ~~DPU1308~~ ~~This field is only available if the party type is set to 'NCB'.~~

Minimum amount for autocollateralisation	Input the minimum amount to be sourced in an autocollateralisation operation involving the Party. References for error messages: • DPC1303 • DPC1304 • DPC1306 • DPU1005 • DPU1303 • DPU1306 • DPU1308 This field is only relevant if the Party type is set to 'Payment bank'.
Minimum amount for client collateralisation	Input the minimum amount to be sourced in a client collateralisation operation involving the Party. References for error messages: • DPC1303 • DPC1304 • DPC1306 • DPU1005 • DPU1303 • DPU1306 • DPU1308 This field is only relevant if the Party type is set to 'Payment bank'.

Section 6.4.2.131 Party – New/Edit Screen, page 2135

Reference for error message	Field or Button	Error Text	Description
DPC1303	• Party Type field • ~~Maximum Credit~~	~~Use of Maximum Percentage~~ Minimum	When performing a party create request, ~~the~~ ~~use of~~

	~~Percentage field~~ • ~~Use of Maximum Credit Percentage field~~ • Minimum amount for autocollateralisation field • Minimum amount for client collateralisation field • Submit button	amounts are only ~~is not~~ allowed for Payment Bank	~~maximum credit percentage~~ minimum amount for autocollateralisation and minimum amount for client collateralisation ~~specified in~~ the autocollateralisation rule section must not be filled in if the party type is not ~~CB.~~ Payment Bank
DPC1306	• Party Type field • ~~Maximum Credit Percentage field~~ • ~~Use of Maximum Credit Percentage field~~ • Collateralisation Procedure field • Minimum amount for autocollateralisation field • Minimum amount for client collateralisation field • Submit button	Autocollateralisation Rule is allowed only for NCB or Payment Bank.	When performing a party create request, the autocollateralisation rule section must not be filled in if the party type is not CB or payment bank.
DPU1005	• BIC field • Party Long Name • Party Short Name • Street field • House Number field • Postal Code field • City field • State or Province field • Country Code field • Address Value field • ~~Maximum Credit Percentage field~~ • ~~Use of Maximum Credit Percentage field~~ • Collateralisation Procedure field • Minimum amount for autocollateralisation field • Minimum amount for client collateralisation field • Attribute Value field • Type field • Valid to field • Submit button	Unknown party	When performing a party update request, the update request of a 'minor' entity (such as party name, party code, party technical address, party address) must refer to an existing and active instance with a non-past Valid To, where applicable.
DPU1303	• Party Type field • ~~Maximum Credit Percentage field~~ • ~~Use of Maximum Credit Percentage field~~ • Minimum amount for autocollateralisation field • Minimum amount for client collateralisation field • Submit button	~~Maximum Credit Percentage is not~~ Minimum amounts are only allowed for Payment Bank	When performing a party update request ~~the market-specific party attribute value must be compliant with the values or rules defined in the relevant attribute domain. the Maximum Credit Percentage and the Use of Maximum Credit Percentage~~ minimum amount for autocollateralisation and minimum amount for client collateralisation specified in

			Autocollateralisation Rule section, must not be filled in ~~in case~~ if the Party Type is not ~~NCB~~ Payment Bank.
DPU1306	• Party Type field • ~~Maximum Credit Percentage field~~ • ~~Use of Maximum Credit Percentage field~~ • Collateralisation Procedure field • Minimum amount for autocollateralisation field • Minimum amount for client collateralisation field • Submit button	Auto-collateralisation Rule is allowed only for NCB or Payment Bank	When performing a party update request, the autocollateralisation rule section must not be filled in if the party type is not CB or payment bank.
DPU1308	• ~~Maximum Credit Percentage field~~ • ~~Use of maximum Credit Percentage field~~ • Minimum amount for autocollateralisation field • Minimum amount for client collateralisation field • Collateralisation Procedure field • Submit button	Autocollateralisation Rule already exists for the specified Party	When performing a party update request, the request for the creation of the autocollateralisation rule is not allowed in case rules have already been defined.

High level description of Impact:

The minimum amount for auto-collateralisation functionality must be added to T2S while the maximum credit percentage functionality is removed.

Minimum amount for auto-collateralisation:
- Must be made available within the Party Autocollateralisation Rule.. This will then be managed by the responsible Central Banks by default and be visible to the involved Payment Bank.
- The minimum amounts must be replicated within the settlement module and the auto- collateralisation functions must be updated to consider this amount when determining the provided intraday credit.

Maximum credit percentage:
- Party maintenance functions, along with the related GUI screens must be updated to remove the maximum credit percentage functionality
- The auto-collateralisation functions must be modified to remove the checks on the maximum credit percentage

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Outcome/Decisions:

*CRG meeting of 17-18 September 2015: The CRG agreed to put the Change Request on hold and indicated that the Change Request is a potential candidate for Release 2.

* CRG on 17 October 2016: During the written procedure from 10 - 17 October 2016, the CRG recommended to launch the preliminary assessment on the Change Request from 24 October 2016 to 15 November 2016 (batch 2).

* OMG on 08 November 2016: During a written procedure from 28 October - 08 November 2016, the Operations Managers Group did not identify any blocking operational impact of the Change Request.

* CRG telco on 16 November 2016: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment.

* CRG meeting on 12/13 December 2016: The CR initiator agreed to the updated version of the Change Request, which incorporated the 4CB proposal for decommissioning of the maximum credit percentage functionality in T2S.

* CRG meeting on 15 December 2017: The CRG agreed to have the Change Request updated and recommended the CR for detailed assessment.

* Advisory Group on 02 January 2018: In a written procedure from 21 December 2017 to 02 January 2018, the Advisory Group was in favour of launching the detailed assessment on the Change Request in view of the T2S release 3.0.

* CSD Steering Group on 03 January 2018: In a written procedure from 22 December 2017 to 03 January 2018, the CSD Steering Group was in favour of launching the detailed assessment on the Change Request in view of the T2S release 3.0.

* CRG on 26 March 2018: the CRG agreed to recommend to the T2S Steering Level the approval of these CRs and their inclusion in T2S release 3.0

* PMG/RMSG on 12 April 2018: the PMG proposed the allocation of the CR to T2S release 3.0

* OMG written procedure ended 26 April 2018: the OMG did not identify any operational impact in the Service Transition Plan 3.0 because of the inclusion of the CR.

* Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) on 30 April 2018: Following a written procedure from 23 to 27 April 2018, the AMI-SeCo was in favour of approving the Change Request and its inclusion in T2S Release 3.0

* CSD Steering Group on 30 April 2018: Following a written procedure from 23 to 27 April 2018, the CSG was in favour of approving the Change Request and its inclusion in T2S Release 3.0

* CRG on 2 October 2018: The CRG has agreed to recommend authorisation on the updated Change Request to the T2S Steering Level

* AMI-SeCo on 8 October 2018: The AMI-SeCo has agreed to the recommendations of the CRG to confirm authorisation of this Change Request detailed assessed in R3.0.

* CSG meeting on the 10 October 2018: The CSG took note that the CRG reviews and agreed to update this Change Request currently under implementation for R3.0.

* NECSG on 26 October 2018: The NECSG adopted the resolution to authorise the updated version of CR-543 included in the STP for R3.0.

* MIB on 5 November 2018: The MIB authorised the updated version of CR-543 included in the STP for R3.0.

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Preliminary assessment:

- **Impacted functionality / module:** U2A, SETT, LTSI, SDMG

No further functional, technical and risk related issues have been identified beyond the elements already described in the Change Request.

Impact On T2S	Static data management		Interface	
	X	Party data management		Communication
		Securities data management		Outbound processing
		T2S Dedicated Cash account data management		Inbound processing
		Securities account data management		
		Rules and parameters data management		
	Settlement		**Liquidity management**	
	X	Standardisation and preparation to settlement		Outbound Information Management
	X	Night-time Settlement		NCB Business Procedures
	X	Daytime Recycling and optimisation		Liquidity Operations
	X	Daytime Validation, provisioning & booking	**LCMM**	
	X	Auto-collateralisation		Instructions validation
				Status management
	Operational services			Instruction matching
		Data Migration		Instructions maintenance
		Scheduling	**Statistics, queries reports and archive**	
		Billing		Report management
		Operational monitoring	X	Query management
				Statistical information
				Legal archiving
	All modules (Infrastructure request)			
	No modules (infrastructure request)			
	Business operational activities			
	Technical operational activities			

Impact on major documentation		
Document	**Chapter**	**Change**
Impacted GFS chapter	: 3.5.9.3	Suppression of maximum credit percentage documentation. Inclusion of the description of a function regarding minimum amount for AC.
Impacted UDFS chapter	1.2.3.1 Setup of auto-collateralisation eligibility, securities valuation and close links in T2S 1.5.1 Business application configuration 1.6.1.9.4 Auto-collateralisation 1.6.2.3.3 EOD Cash Management Process	Suppression of maximum credit percentage documentation. Addition of minimum amount for auto-collateralisation parameter documentation.
Additional deliveries for Message Specification		
UHB	Section 2.5.1.6 Party – New/Edit Screen Section 6.4.2.130 Party – New/Edit Screen Section 2.5.1.5 Party – Details Screen	Removal of fields Maximum Credit Percentage and Use of Maximum Credit Percentage. Inclusion of new fields "Minimum amount for auto-collateralisation" and "Minimum amount for client collateralisation" with related business rules. Removal of Maximum Credit Percentage and User of

		Maximum Credit Percentage fields. Insertion of the two fields "Minimum amount for auto-collateralisation" and "Minimum amount for client collateralisation" with related business rules.
Impacted DTS chapter		
Internal training materials		
External training materials		
Other documentations	Configuration Guide	Inclusion of new error texts for DPC1303 and DPU1303.
Links with other requests		
Links	Reference	Title

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

Summary of functional, development, infrastructure and migration impacts

This CR has for objective to offer the possibility to define a Minimum Amount for auto-collateralisation per Payment Bank for each collateral T2SgSI. The Payment Bank may have a Minimum Amount value applicable for the CB collateralisation it would benefit and a Minimum Amount value for the client-collateralisation it would offer to all its clients. In case a Payment Bank does not have any Minimum Amount configured, the auto-collateralisation feature is not modified.
This Minimum Amount will not be considered by the relocation process.
It was also decided in this CR to decommission the maximum percentage feature which is not used by the Central Banks.

The Minimum Amount for auto-collateralisation will be stored in the Autocollateralisation Rule sub-table of the Party object. As such its creation and maintenance will be under the responsibility of the related Central Banks, and visible to the involved Payment Banks.
The implementation of this CR requires mainly reviewing the criteria to trigger auto-collateralisation and the way the pledged securities are selected.

The Party Reference Data Query will return the new field information in U2A (Party Details Screen).

Main cost drivers:

- Implement minimum auto-collateralisation feature in the RTS and NTS settlement algorithms
- Implement replication of minimum auto-collateralisation information from Static Data at SoD
- Amendment of business rule DPC1303 from Create Party and Update Party
- Addition and handling of the new fields for Minimum Amount for Auto-collateralisation and Client-Collateralisation in Party Reference Data Query.
- To test the changes in Interface and Query Management it is necessary to draft and execute test cases for U2A. The test cases will check the correct implementation of the two changed screens.
- Existing regression test cases need to be updated to incorporate the changes resulting from the implementation of the CR.

Summary of project risk

None

Security analysis

No potentially adverse effect was identified during the security assessment.

16 March 2018

Cost assessment on Change Requests

T2S-543-SYS – Minimum amount for auto-collateralisation transactions			
One-off	Assessment costs* - Preliminary - Detailed	2,000.00 10,000.00	Euro Euro
One-off	Development costs	624,278.99	Euro
Annual	Operational costs - Maintenance costs - Running costs	 53,670.59 0.00	 Euro 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).