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## T2S Auto-collateralisation

Author: Mehdi Manaa, T2S Programme Office, European Central Bank (ECB)

*The design of the T2S single settlement platform includes a state-of-the-art auto-collateralisation feature. This functionality is expected to significantly decrease banks' liquidity needs as well as the number of failed instructions, leading to savings in terms of liquidity and securities, as well as decreased borrowing costs for banks. It will be available not only to payment banks, but also to their clients. T2S will provide an array of tools facilitating the individual set-up of the auto-collateralisation feature, thus allowing for flexible adaptation to different users' needs, as well as to changes in the post-trade environment. In view of the significant positive externalities generated by auto-collateralisation, the function is offered by the Eurosystem to payment banks free of charge.*



## Introduction

The auto-collateralisation function is one of the key features of T2S. Auto-collateralisation is a credit operation that is triggered when a buyer does not have sufficient funds to settle a securities transaction, in order to improve its cash position. The credit provided can be secured using either the very same securities that are being purchased (“auto-collateralisation on flow”) or securities already held by the buyer (“auto-collateralisation on stock”). At the end of the day all auto-collateralisation operations are reimbursed to prevent the extension of overnight credit.

Auto-collateralisation is a means of obtaining credit to buy securities

Auto-collateralisation will be provided by T2S to payment banks at no extra cost. In the context of T2S, a payment bank is an entity that provides cash to participants of central securities depository (CSD) in order to support the settlement of securities. Moreover, T2S allows payment banks to offer this functionality to their clients – a completely new feature for the market.

Auto-collateralisation will be available for both payment banks and their clients

In its Economic Impact Assessment of 2008, the ECB conducted a survey of market participants who were asked to estimate the monetary value of the savings in collateral and liquidity that T2S would deliver. These were estimated at around € 50 million per year. Since 2008 and the deepening of the economic crisis, the importance of secured financing markets has increased immensely. Furthermore, the demand for collateral has grown as a result of the greater use of central clearing. Therefore, the opportunity cost of collateral has increased significantly. The value of the collateral and liquidity savings that T2S will deliver can easily be several times higher than estimated in the Economic Impact Assessment in 2008.

Auto-collateralisation in T2S will lead to major liquidity savings

Auto-collateralisation is one of the liquidity-saving features of T2S which will be offered in a fully harmonised way across all T2S markets. The most obvious benefit of auto-collateralisation is the reduction in the number of failed instructions, since payment banks can easily generate liquidity to settle pending transactions, which leads to a smoother settlement cycle. More timely delivery-versus-payment (DvP) transactions allow market participants to better plan the use of their resources while reducing the overall fees paid for failed deliveries. In addition, T2S auto-collateralisation will bring benefits to the market as a whole, not only because of its state-of-the-art technical implementation, but also because of its cross-border reach. Currently, auto-collateralisation is available in only a third of European markets, and the scope of functionalities varies greatly. It is therefore for the first time that many markets joining T2S will encounter the range of possibilities and benefits afforded by auto-collateralisation.

Auto-collateralisation is a new feature for many markets

Payment banks will be able to use a single cash account and a single securities account for all their auto-collateralisation operations in T2S, enabling the pooling of liquidity and securities at the European level. They will still have the option of using several accounts, however. Payment banks will make their choice according to their business needs and not as a consequence of fragmented market practices. The resulting pooling of liquidity and securities will allow for a more cost-efficient use of resources. Moreover, there will be a single schedule for the settlement day in all T2S markets, and hence no more disruptive time differences or time lags between those markets. As there will be a single standard framework for auto-collateralisation for all T2S markets, T2S participants will also be able to benefit from significant back-office savings. These effects of T2S will accumulate to allow for a more efficient use of collateral for cross-border transactions in Europe.

A single cash account can be used for all T2S markets...

...thus enabling the pooling of liquidity...

...while a single framework leads to back-office savings

This paper describes the auto-collateralisation feature offered by T2S, focusing on its use from a business perspective. To begin with, a brief description of the process and of the different types of auto-collateralisation is provided. Next, the general settings for the T2S auto-collateralisation function are described. The auto-collateralisation process is then explained in more detail. The conclusion summarises the main benefits of the feature.

[Plan of the paper](#)

## Auto-collateralisation in T2S

Auto-collateralisation in T2S is an automatic process which aims to facilitate smooth real-time DvP settlement in central bank money. It is, in essence, a credit operation that is or can be triggered when a buyer does not have sufficient funds to settle a securities transaction.

In T2S, the auto-collateralisation functionality applies to two types of credit:

1. credit from a central bank to a payment bank, also called central bank auto-collateralisation, as the central bank is the credit provider and the payment bank the credit consumer;
2. credit from a payment bank to one of its clients (CSD participant), also called client auto-collateralisation, in which case the payment bank is the credit provider and its client the credit consumer.

[Central bank auto-collateralisation](#)

[Client auto-collateralisation](#)

We can also distinguish between two types of collateral used for auto-collateralisation.

1. The securities which are about to be purchased. These can be used as collateral for obtaining the necessary credit to complete the purchase. In this case the auto-collateralisation is defined as on flow. The buyer needs to have sufficient cash to cover the possible "haircut" on that collateral.
2. Other securities already held by the buyer. When these are used as collateral, the auto-collateralisation is defined as on stock. T2S relies on both auto-collateralisation on flow and auto-collateralisation on stock, thus reducing liquidity needs for the purpose of settlement, and allowing for smoother settlement cycles.

[Auto-collateralisation on flow](#)

[Auto-collateralisation on stock](#)

In general, the credit obtained through auto-collateralisation is immediately used to settle a particular securities transaction. During the daytime, it is used solely to settle the transaction or group of transactions which initially triggered the auto-collateralisation operation.

[Credit is immediately used to settle the transaction](#)

Additionally, auto-collateralisation works closely together with other T2S settlement optimisation processes such as technical netting. Thus the credit obtained through auto-collateralisation during night-time settlement is used to cover the net settlement amount of all pending instructions rather than each transaction individually, thereby further optimising the collateral and liquidity requirements.

[Auto-collateralisation works together with other T2S settlement optimisation processes](#)

T2S auto-collateralisation will facilitate smooth settlement services, especially in situations in which it is difficult to predict actual liquidity needs, as it eases monitoring and reduces the requirement to inject liquidity, e.g. during night-time settlement.

In addition to euro transactions, T2S auto-collateralisation is supporting non-euro transactions. For this purpose, the credit provider is to maintain limits as well as static data (e.g. collateral valuation) denominated in a T2S participating currency, e.g. Danish kroner - DKK. Subsequently, T2S will enable auto-collateralisation in which the credit provider extends liquidity to its clients in non-euro currencies.

[All T2S participating currencies are supported by auto-collateralisation](#)

The auto-collateralisation functionality also provides for the reimbursement of credit at a later time, or at the end of the day at the latest.

## Set-up: flexibility and best risk-management practices

In order to manage the credit risk associated with the automatic credit provision of T2S auto-collateralisation, it is essential to have adequate monitoring and managing tools in place. Moreover, the eligible securities used for the auto-collateralisation feature need to be defined both by the credit consumer and by the credit provider. T2S offers three main tools for the fulfilment of these aims: the definition of static data, the Credit Memorandum Balance (CMB), and the setting of various limits.

Adequate managing and monitoring tools are provided by T2S

### a. Static data

#### Defined by the credit provider

For auto-collateralisation to be available in T2S, the credit provider has to define a certain number of parameters referred to as static data. For each currency intended to be used for the auto-collateralisation feature, the credit provider needs to indicate the following.

Static data to be provided by the credit provider

1. The securities account for receiving collateral and the cash accounts to be used for providing credit.
2. The list of eligible collateral.
3. The collateral valuation, that is, a daily price for each security that determines the amount of credit to be given for this security.
4. The close links that define whether a security can be used by the credit consumer for auto-collateralisation based on its proximity to the issuer. For example, if the credit consumer is a significant stakeholder in the underlying asset, or vice-versa, a close link can be defined in the static data and T2S will not allow this security to be used as collateral. The definition of close links is an optional feature, i.e. T2S will check the close links only if they are provided by the corresponding central bank. If they are not provided, T2S will skip the check.
5. The maximum amount which can be provided per credit consumer, determined through the setting of various limits (see below for more details).
6. If the credit provider is a central bank, the collateralisation procedure chosen, as T2S allows for different procedures in this case. For payment banks granting credit to their clients, only the “repo” collateral management procedure is available, since it enables the payment bank for maximum control of counterparty risks. But central banks providing credit to payment banks can choose which procedure they want to use for collateral management. Should they decide to use a “pledge” collateral management procedure, the collateral is not transferred but only “pledged” to the credit provider, either by moving it to a pledged account or by restricting it in the account in which it lies via the use of a sub-position.

#### Defined by the credit consumer

Similarly, credit consumers need to define the following.

1. Links that their CSDs will set up between the dedicated cash accounts (DCAs), i.e. the cash accounts associated with the cash leg of securities transactions in T2S, where liquidity will be received, and the securities account used to supply collateral.
2. Positions which can be used for auto-collateralisation. Credit consumers can choose between earmarking securities accounts or individual positions. When an entire securities account is earmarked, all securities in that account are made available for auto-collateralisation. When securities positions are earmarked, only the securities in those positions are made available for auto-collateralisation.

Static data defined by the credit consumer

The diagram below summarises static data objects to be configured by central banks, payment banks and their clients.

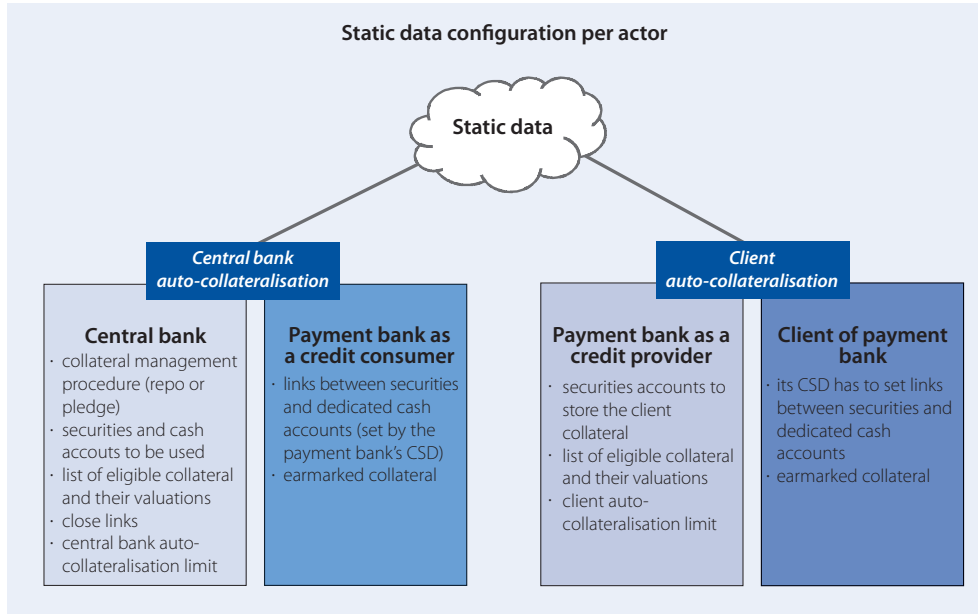


Diagram summarising the static data to be provided

## b. Credit Memorandum Balance (CMB)

The Credit Memorandum Balance (CMB) is a monitoring tool for credit consumers and credit providers alike which shows, at any point in time, the amount of credit provided by the credit provider to the credit consumer. The CMB can be of two different types:

The Credit Memorandum Balance is a monitoring tool for keeping track of the limits usage

1. the CMB of a payment bank shows the amount of credit it has been provided with by the central bank, and its remaining "headroom", i.e. the credit the payment bank can still provide without exceeding the central bank auto-collateralisation limit;
2. the CMB of a payment bank's client takes into account three different limits (the external guarantee limit, the client auto-collateralisation limit and the unsecured credit limit, described below), as well as the headroom corresponding to all three, presenting both credit consumer and credit provider with a clear picture of the current credit consumption.

## c. Flexible limits for managing credit efficiently

T2S limits are set by the credit provider. They serve as a tool to enable central banks and payment banks to manage the amount of credit they provide.

Limits are the main tools used to control the cash usage of the credit consumer

As already mentioned, limits can be set by a central bank for a payment bank, or by the latter for one of its clients.

The **central bank** auto-collateralisation limit is set by each central bank for each of the DCAs of a payment bank. This allows national central banks to control the amount of credit granted to each of their payment banks.

The central bank auto-collateralisation limit

In turn, the **payment bank** can set three different types of limit for each of its clients or group of clients, as listed below. Only the second one concerns auto-collateralisation in T2S, the other two being caps on the cash in the payment bank's DCA that can be used by its client.

1. The **external guarantee limit** is used by the payment bank to cap the amount of liquidity provided to clients and is secured outside T2S. This capped liquidity is used before any client auto-collateralisation is triggered in T2S. The external guarantee limit
2. The client **auto-collateralisation limit** caps the credit provided to the client of the payment bank via auto-collateralisation in T2S. It is only utilised once the external guarantee limit has been reached. The client auto-collateralisation limit
3. The headroom of the **unsecured credit limit** is used after both the external guarantee limit and the client auto-collateralisation limit have been reached. The unsecured credit limit

The figure below shows the four different types of limit described above:

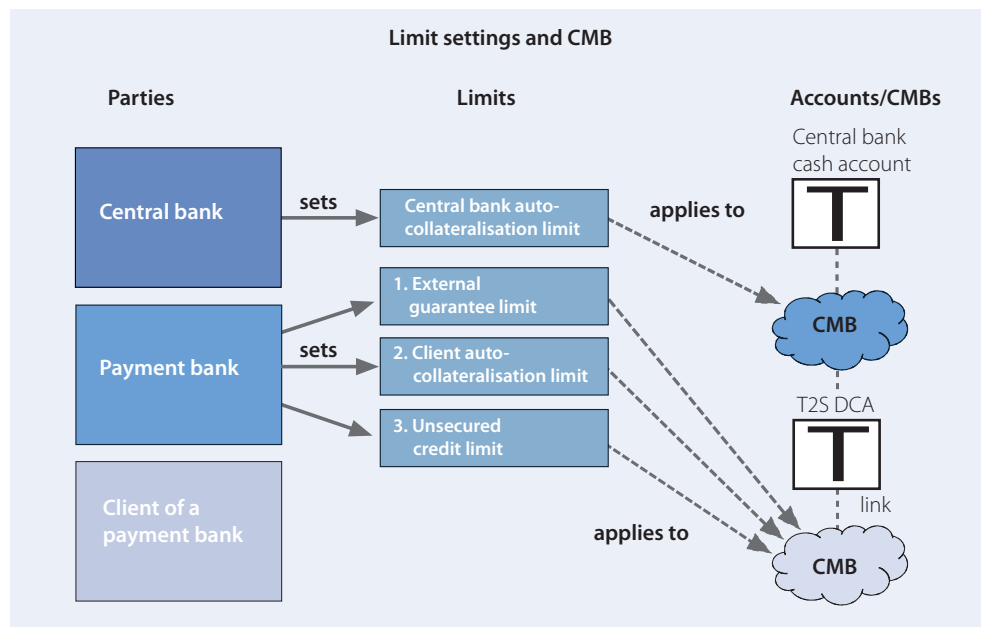


Diagram showing the four limits and the actors they apply to

Limits in T2S allow for flexibility. For each currency and each credit consumer, different limits can be set. Hence, limits can be tailored to each type of credit consumer. Any central bank setting a limit for a particular payment bank, or any payment bank setting a limit for one of its clients, can readily increase or decrease the limit at any point in time.

Limits are very flexible and useful tools

For example, a payment bank can decide to increase a limit applying to one of its clients to further ease the settlement process for this client during the day. After each limit increase, T2S will automatically re-process all settlement instructions that are pending owing to insufficient limit headroom.

Because payment banks are free to set three different limits, they are able to tailor the access to auto-collateralised credit in T2S to each of their clients. Indeed, the limits set by a payment bank are likely to vary according to the business needs of the client, as well as its credit-worthiness, resulting in a varied use of the

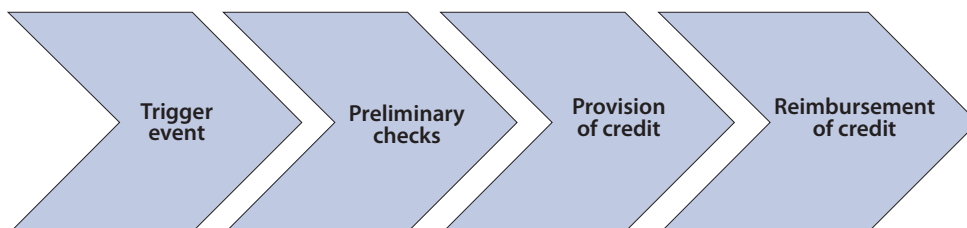
auto-collateralisation facility. For example, in the event that a payment bank agrees to provide a large amount of credit to a given client and to secure it outside T2S, the payment bank should set a high external guarantee limit for this client. Its client will thus only use the T2S auto-collateralisation function on the rare occasions when its funding needs go beyond that limit. In another example, a payment bank could grant a client a low external guarantee limit and a high client auto-collateralisation limit. As a result, this client would use T2S auto-collateralisation more often in order to secure its collateral inside T2S.

From the perspective of a payment bank's client, it could be that the credit obtained through auto-collateralisation in T2S might be less expensive than that obtained outside T2S within the external guarantee limit. The T2S auto-collateralisation function would thus reduce client's financial and administrative cost of accessing liquidity for the purpose of securities settlement.

Auto-collateralisation could give rise to lower credit costs

## The auto-collateralisation process

### 1 The mechanism of credit provision



From a technical perspective, the auto-collateralisation functionality leads to the automatic generation of additional settlement instructions for both the credit consumer and the credit provider, in order to achieve:

- the debit and credit of cash on the relevant DCAs;
- the delivery of collateral earmarked for auto-collateralisation.

Auto-collateralisation generates two settlement instructions...

Simultaneously, the reverse collateral settlement instructions, corresponding to the credit reimbursement, are created and put on hold. T2S will not try to settle these transactions until they are released by the payment bank, either as a credit consumer or as a credit provider.

...as well as reverse settlement instructions, which are put on hold

The cash obtained through this credit operation is immediately used to settle the transaction that triggered auto-collateralisation. Hence, auto-collateralisation allows a smoother DvP real-time settlement in the system: ultimately, there will be fewer failed instructions compared with markets for which auto-collateralisation is currently not available.

The cash can be used immediately

It is expected that T2S auto-collateralisation will significantly reduce the need for pre-funding of cash accounts during both daytime and night-time settlement. Night-time settlement will be able to run successfully for several hours, even without any liquidity on the cash accounts, because of the auto-collateralisation functionality.

Auto-collateralisation reduces the need for cash both for daytime and night-time settlements

## 2 Trigger event

The event triggering auto-collateralisation differs depending on the credit consumer:

- **If the payment bank is the credit consumer**, it is a lack of cash to settle a transaction on the payment bank's DCA which prompts T2S to use the auto-collateralisation function.
- **If a client of a payment bank is the credit consumer**, it is this client's lack of external guarantee headroom which triggers auto-collateralisation.

The event triggering auto-collateralisation depends on the credit consumer

## 3 Preliminary checks

### A) First checks

Prior to the execution of auto-collateralisation T2S performs a number of checks. These checks ensure that the settlement instruction triggering auto-collateralisation can be settled following the credit provisioning. When this settlement instruction is linked to other instructions on an "all-or-none" basis, T2S checks if all these linked instructions can indeed be settled using auto-collateralisation.

T2S performs a number of checks prior to the execution of auto-collateralisation.

- **If a payment bank is the credit consumer**, T2S first checks if the payment bank has enough headroom with respect to its central bank auto-collateralisation limit.
- **If a client of a payment bank is the credit consumer**, T2S checks if the headroom of all three limits detailed above would allow for settlement of the pending transaction, also using auto-collateralisation.

In both cases, when the first preliminary check is positive, T2S:

- validates the eligibility of available collateral based on the credit provider's static data feeds;
- checks that the appropriate links between cash and securities accounts are present;
- checks that there are no close links between the credit consumer and the securities it provides as collateral.

### B) Automatic selection of the collateral to be used

To compute the cash provided against any given collateral, T2S relies on the collateral valuation as defined by the credit provider. The payment bank as credit provider is thereby able to value the securities in accordance with its business strategy and risk appetite. Additionally, the payment bank is in a position to extend or reduce the eligible securities list according to its needs.

As already mentioned, in order to secure credit, T2S relies on auto-collateralisation on flow and auto-collateralisation on stock within the same process. Since with auto-collateralisation on flow the securities being bought can immediately be used as collateral, collateral selection can be optimised.

T2S relies on auto-collateralisation on flow and on stock

For example, if a buyer of securities does not have sufficient cash to settle the transaction, T2S automatically checks if the securities involved in the purchase can be used as collateral. If so, and if the valuation provides sufficient limit headroom to settle the trade, T2S will identify the purchased securities as potential collateral and then select the optimal securities position for auto-collateralisation on stock or on flow. If the securities being bought are not eligible for auto-collateralisation, or if they do not provide sufficient headroom to settle the trade, then collateral on stock will be used to obtain the missing cash amount.

T2S automatically selects the optimal collateral to use



In the event that multiple securities can be used as collateral, T2S chooses the set of securities that provides the requested credit while at the same time providing the smallest liquidity surplus. This ensures that no more than the necessary securities are bound as collateral.

### C) Final checks

After selecting the collateral, T2S performs the final checks. T2S ensures that the credit that will be granted against the selected collateral:

Final checks are performed

- respects the headroom of the applicable limit(s);
- allows the instruction, or all the instructions linked on an “all-or-none” basis, to settle.

## 4 Reimbursement of auto-collateralisation

Whenever auto-collateralisation is triggered, the reverse settlement instructions are automatically generated and put on hold by T2S. All auto-collateralisation operations can be reimbursed during the day, and at the latest by the end of the day.

### a) Reimbursement during the day

Reimbursement of credit can be initiated at any time during the day by the payment bank, either in the role of the credit provider (in the case of client auto-collateralisation) or in the role of the credit consumer (in the case of central bank auto-collateralisation). In both scenarios the payment bank releases the held reverse settlement instructions generated by T2S, triggering the reimbursement of auto-collateralisation. The released instructions are handled like any other settlement instructions, hence they may in turn trigger auto-collateralisation.

Reimbursement can be triggered by the payment bank at any time...

In the role of credit provider, payment banks are given the opportunity to define their own business strategy concerning the reimbursement of credit, and to initiate T2S reimbursement accordingly. In the role of credit consumer, payment banks can choose the optimal timing for credit reimbursement. For example, a payment bank can initiate reimbursement in order to have the securities at its disposal for another trade. This prevents securities that may be useful for other purposes from being blocked by auto-collateralisation. Here as well, the reimbursement instructions are handled like any other instructions, and may therefore trigger another auto-collateralisation operation.

...which allows it to define its own reimbursement strategy

Another concept that is relevant in the context of reimbursement is automatic substitution. When a settlement instruction needs securities that have already been provided as collateral for auto-collateralisation, T2S automatically releases the reverse collateral settlement instruction. If this operation leads to further auto-collateralisation operations, it is referred to as automatic substitution. Efficient automatic substitution is an integrated feature of the auto-collateralisation function. The payment bank does not have to release the instruction itself when the collateral is needed for another T2S operation, which allows for smoother collateral management.

Dynamic reimbursement

### b) Reimbursement at the end of the day

At the end of the day, all credit provided to payment banks by means of central bank auto-collateralisation has to be reimbursed. If there are pending auto-collateralisation operations, T2S triggers the automatic reimbursement. If the payment bank has insufficient liquidity to reimburse the pending auto-collateralisation operations, they are converted to credit and handed over to the collateral management system (CMS) of the central bank.

However, with respect to client auto-collateralisation, it is entirely up to the payment bank to ensure that all reimbursements take place. There is no automatic reimbursement for client auto-collateralisation at the end of the day.

## Conclusion

As illustrated throughout this document, the auto-collateralisation functionality is likely to generate significant collateral and liquidity savings, facilitate smoother settlement cycles, and reduce failed settlement instructions.

Main benefits of auto-collateralisation

In addition, the use of auto-collateralisation will become wider, both geographically and in terms of the number of actors involved. T2S will bring auto-collateralisation to markets where no such functionality is currently in place. It will also harmonise existing auto-collateralisation practices for all CSDs in T2S and bring more transparency, thus allowing for savings in back-office operations. In addition, T2S will make auto-collateralisation available to payment banks' clients, which constitutes a new feature for many markets.

Reach of T2S auto-collateralisation and associated benefits

Furthermore, the auto-collateralisation feature will help market participants to actively shape and optimise their collateral, liquidity and risk management practices, with a positive impact on the European securities settlement landscape. Useful tools such as the definition of static data, the CMB and the setting of different limits will enable participating central banks and payment banks to follow risk-management best practices and tailor the auto-collateralisation function to their individual needs. It will provide payment banks with flexible tools to create tailor-made offers for their clients, thereby fully supporting the need for flexibility in the changing post-trade environment. What is more, the full automation of the auto-collateralisation process is likely to result in a smoother and, overall, cheaper credit provisioning, facilitating securities settlement.

State-of-the-art technical implementation

All things considered, the T2S auto-collateralisation feature offers significant benefits for market participants, especially for payment banks and their clients. It is expected that the functionality, once actively used by the markets, will have strong positive effects on settlement efficiency and lead to increased systemic stability in Europe.

T2S auto-collateralisation will have a considerable impact on tomorrow's landscape

## For further reading about T2S auto-collateralisation:

Business Process Description version 1.0 (Section: 3.4 Auto-collateralisation):  
[http://www.ecb.int/paym/t2s/pdf/Business\\_Process\\_Description\\_v1\\_0.pdf](http://www.ecb.int/paym/t2s/pdf/Business_Process_Description_v1_0.pdf)

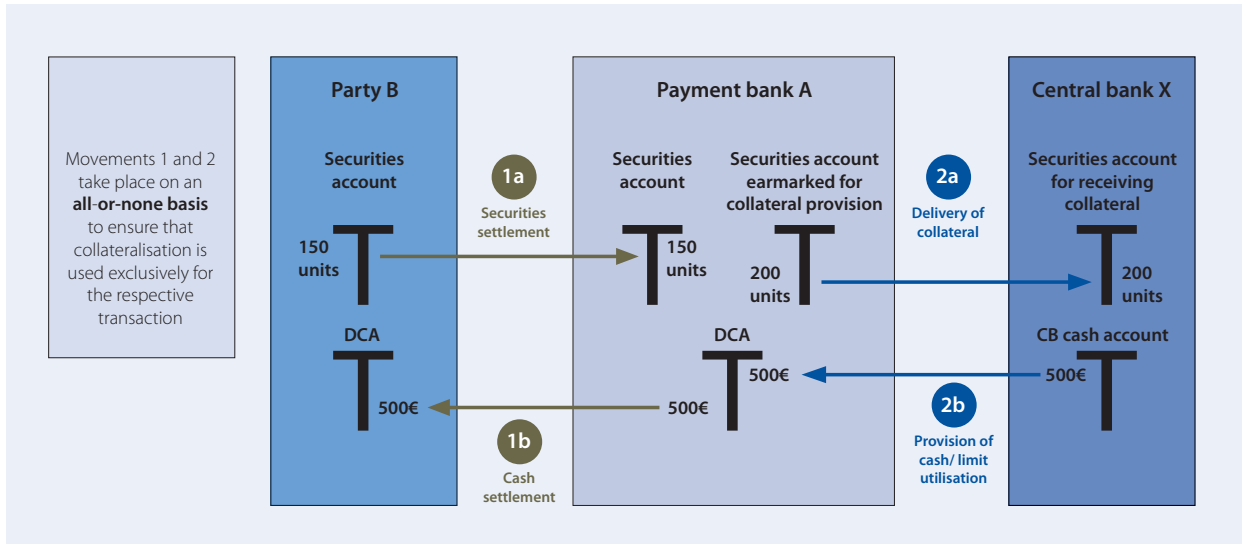
For further reading

User Requirements Document version 5.02 (Section: 8.2 Auto-collateralisation & Annex: Glossary):  
[http://www.ecb.europa.eu/paym/t2s/pdf/URD\\_v5\\_02.pdf](http://www.ecb.europa.eu/paym/t2s/pdf/URD_v5_02.pdf)

User Detailed Functional Specification version 1.2.1 (Section 1.6.1.9.4 - Auto-collateralisation):  
[http://www.ecb.europa.eu/paym/t2s/pdf/UDFS\\_v1\\_2\\_1.pdf](http://www.ecb.europa.eu/paym/t2s/pdf/UDFS_v1_2_1.pdf)

T2S Technical Dialogue "Implementing the relationship between Payment Banks and their clients in T2S":  
<http://www.ecb.int/paym/t2s/governance/sessions/html/mtg17.en.html>

## Annex 1: Central bank auto-collateralisation: an example



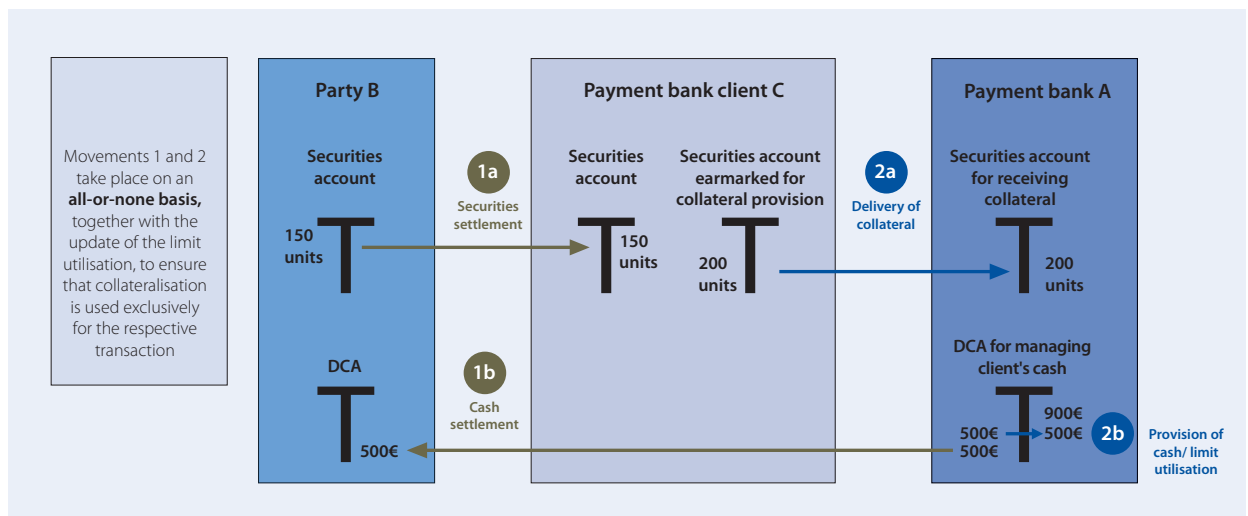
### Scenario description:

- Central bank X is offering auto-collateralisation to its clients via the T2S platform.
- Central bank X maintains the relevant static data, limits and CMBs.
- Payment bank A participates in central bank auto-collateralisation.
- Payment bank A has earmarked a securities account as a collateral pool.
- Payment bank A purchases 150 securities units against payment of 500€ from party B.
- During the settlement attempt of the related transaction (1), no liquidity is available on the payment bank's DCA (Dedicated Cash Account).
- Both the payment bank's securities account (i.e. collateral account) and central bank's securities account for receiving collateral are in the same CSD.

### Auto-collateralisation process:

- Due to lack of liquidity on payment bank A's DCA during the settlement attempt of the above transaction (1) the auto-collateralisation process is triggered.
- T2S ensures that the transaction (1) can be settled following the credit provision out of auto-collateralisation while respecting payment bank A's central bank auto-collateralisation limit headroom which is higher than 500€.
- T2S selects 200 units of securities (on stock) which:
  - are kept in the payment bank A's securities account earmarked for collateral provision;
  - are identified as eligible collateral by central bank X;
  - represent 500€ according to the collateral valuation by central bank X.
- T2S generates an auto-collateralisation transaction (2) delivering 200 securities units to central bank X's securities account (2a) defined for receiving collateral against payment of 500€ on payment bank A's DCA (2b).
- T2S settles both transactions (1 and 2) on an all-or-none basis, hereby crediting party B's DCA with 500€ and settling 150 units of securities in payment bank A's securities account.
- Additionally, T2S generates a reverse auto-collateralisation transaction which is kept on hold for the payment bank leg (i.e. credit receiver leg). The reimbursement transaction is released by payment bank A during the day or automatically by T2S at the end of day.

## Annex 2: Client auto-collateralisation: an example



### Scenario description:

- Payment bank A is offering auto-collateralisation to its clients via the T2S platform.
- Payment bank A maintains the relevant static data, limits and CMBs.
- Payment bank client C participates in client auto-collateralisation of payment bank A.
- Payment bank client C has earmarked a securities account as a collateral pool.
- Payment bank client C purchases 150 securities units against payment of 500€ from party B.
- During the settlement attempt of the related transaction (1), payment bank client C exceeds its external guarantee limit.

### Auto-collateralisation process:

- Due to insufficient external guarantee limit headroom during the settlement attempt of the above transaction (1), the auto-collateralisation process is triggered.
- T2S ensures that the transaction (1) can be settled following the credit provision out of auto-collateralisation while respecting payment bank client C's client auto-collateralisation limit and unsecured limit headroom which is higher than 500€.
- T2S selects 200 units of securities (on stock) which:
  - are kept in payment bank client C's securities account earmarked for collateral provision;
  - are identified as eligible collateral by payment bank A;
  - represent 500€ according to the collateral valuation by payment bank A.
- T2S generates an auto-collateralisation transaction (2) delivering 200 securities units to payment bank A's securities account defined for receiving collateral (2a) against payment of 500€ on payment bank A's DCA for managing client C's cash (2b).
- T2S settles both transactions (1 and 2) on an all-or-none basis, hereby crediting party B's DCA with 500€ and settling 150 units of securities in payment bank client C's securities account.
- Additionally, T2S generates a reverse auto-collateralisation transaction which is kept on hold for the payment bank leg (i.e. credit provider leg). The reimbursement transaction is to be released by payment bank A during the day.