A Discussion Paper on Cash and Collateral Aspects related to TARGET2-Securities

This discussion paper has been prepared by the Eurosystem with the objective of providing interested parties with an update on current developments concerning cash and collateral aspects in view of T2S.

I. Legal aspects for dedicated cash accounts (DCAs) and auto-collateralisation

I.1 DCA related aspects

I.1.1 DCAs within the perimeter of TARGET2

It is envisaged that both RTGS Payment Module (PM) accounts and Dedicated Cash Accounts (DCAs) will fall within the legal perimeter of TARGET2 and the terms and conditions in respect of both types of accounts will be governed by the Guideline on a Trans-European Automated Real-time Gross settlement Express Transfer system (TARGET2 Guideline).

I.1.2 Eligibility to open a DCA

It is expected that the eligibility criteria for DCAs will be similar as for TARGET2 PM accounts. Accordingly, the entities that are eligible to open a PM account should also be eligible to open a DCA.

I.1.3 Contractual parties for opening DCAs

It is expected that, during the registration process, a contract will be signed between the DCA holder and the Central Bank in the books of which the DCA will be held.

I.1.4 Differences between DCAs and PM accounts

DCAs will be special purpose accounts opened specifically to handle all the cash transactions arising from T2S, such as the cash leg associated with the settlement of securities transactions, corporate actions, etc. Thus DCAs do not replace a TARGET2 PM account for making cash payments not related to T2S operations.

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1 Note that the terms TARGET2 RTGS account and TARGET2 Payment Module (PM) account are used interchangeably in this document.
I.1.5 Opening a DCA without holding a PM account

It is expected that an eligible entity can choose to open a euro-denominated DCA without holding its own TARGET2 PM account. However, should this be the case, a PM account in TARGET2 of a third party would be required for the end of day sweep (see I.1.6). In the event that a DCA holder wants to access liquidity via auto-collateralisation (see the dedicated section on auto-collateralisation) the DCA holder would need to hold its own PM account with the same central bank and have access to TARGET2 intraday credit (see I.2.1).

I.1.6 Link between a DCA and a PM account

Each euro-denominated DCA must be linked, via static data, to a TARGET2 RTGS PM account, which is referred to as a “main PM account”. This PM account will be needed in case funds remain on the DCA towards the end of the T2S day – in which case, these funds will be automatically swept to the main PM account. The possibility that the main PM account and its linked DCA(s) may belong to different entities and may even have been opened with different Central Banks is foreseen. It is envisaged that the holder of the main PM account will be liable for the charges billable to the DCA holder for the use of T2S in accordance with Schedule 7 of the T2S Framework Agreement.

I.2 Auto-collateralisation related aspects

I.2.1 Requirements to benefit from auto-collateralisation

In order to obtain access to auto-collateralisation in the euro currency, the DCA holder must (1) hold a PM account in TARGET2, which will not need to be the “main” PM account, but will need to be registered with the same central bank through which the respective DCA has been registered, (2) have access to intraday credit in euro and (3) is not subject to restrictive measures adopted by the Council of the European Union or Member States pursuant to Article 65(1)(b), Article 75 or Article 215 of the Treaty, the implementation of which, in the view of the Central Bank where the DCA is held.

I.2.2 Granting of auto-collateralisation to branches of financial institutions by the local National Central Bank

It is envisaged that the same conditions will apply for granting auto-collateralisation for branches (or subsidiaries) of financial institutions as for granting TARGET2 intraday credit. The conditions will be laid out in the TARGET2 Guideline.

I.2.3 Types of securities envisaged to be acceptable for use in auto-collateralisation

The Eurosystem Single List will be the basis for making assets available/eligible for auto-collateralisation. Differences across Eurosystem NCBs will arise, however, as the list of eligible assets per individual NCB will depend on the assets that can be held with the local CSD(s) as issuer CSD or investor CSD, the latter only via eligible Eurosystem links. Furthermore, to support
local counterparties in managing assets for which close links may exist, individual Eurosystem NCBs may exclude assets / asset classes from auto-collateralisation eligibility.

I.2.4 Differences between auto-collateralisation and intraday credit in TARGET2

Both intraday credit and autocollateralisation are collateralised credit granted by central banks to participants. The difference between the two reside in the fact that the provision of auto-collateralisation is triggered only when a DCA holder does not have sufficient funds to settle a securities transaction and the credit will be provided directly on the DCA used for the cash leg of securities settlement.

I.2.5 Requirements for a DCA holder to provide client collateralisation

Eurosystem requirements for a DCA holder to provide client collateralisation are not envisaged. In the event that a DCA holder chooses to provide client collateralisation, it will have the responsibility to set up all the necessary T2S static data such as the list of assets it accepts and the prices it applies. Further information can be found in the UDFS of T2S: http://www.ecb.europa.eu/paym/t2s/about/keydocs/html/index.en.html.

I.3 Specifics for European System Central Banks (ESCB) not yet having introduced the euro as legal tender

I.3.1 Opening of euro-denominated DCAs and granting auto-collateralisation in euro by non-Eurosystem TARGET2 Central Banks (i.e. connected central banks)

It is foreseen that central banks connected to TARGET2 can open DCAs under the same conditions as Eurosystem Central Banks. This will be irrespective of whether or not the local CSD has migrated to T2S and upon the discretion of the respective NCB. The connected central banks may also grant auto-collateralisation in euro within the maximum amount of credit of 1 billion euro (intraday credit and auto-collateralisation) granted to a participant.

I.3.2 Opening of euro-denominated DCAs and granting auto-collateralisation in euro by central banks not connected to TARGET2

It is envisaged that euro-denominated DCAs can only be opened by central banks within the European System of Central Banks (ESCB) that are connected to TARGET2. Other central banks will not be able to open euro-denominated DCAs.

II Liquidity management and reporting

II.1 DCA related

II.1.1 Possibility of negative balances on DCAs

It is anticipated that debit balances will not be allowed on DCAs held by market participants.
II.1.2 Overnight balances on DCAs

It is foreseen that DCAs need to have a zero balance at the beginning and the end of the operational day in T2S. All auto-collateralisation positions will need to be repaid and all liquidity on DCAs will need to be returned to PM accounts before the end of day (see I.1.6). In the event that the credit balance of a DCA is not transferred manually by the DCA holder before 17:45 CET, it will automatically be swept from the DCA to the main PM account. See also the operational day under the operational framework.

II.1.3 Cash forecast function

Using the T2S Graphical User Interface (GUI) or the Application-to-Application (A2A) mode, it is foreseen that a DCA holder will be able to query liquidity forecasts for DCAs and to obtain cash forecast reports from T2S (current settlement day cash information report, following settlement day cash forecast report). The cash forecast will take into account the cash needs and proceeds of a party on all of its DCAs related to pending instructions to be settled during the current or following business day as well as the liquidity that can be obtained through auto-collateralisation. For further details, see the T2S User Handbook V2.0, 2.3.1.1 or the T2S UDFS v2.0, 1.6.4.2 and 1.6.4.3.

II.1.4 Expected reporting and query functionalities to be available in T2S for DCA holders

There will be multiple reporting and query functionalities available as it concerns the management of liquidity on DCAs. Using the T2S GUI, there are also search functionalities that could provide details on DCA balances. For further details, see T2S UDFS v2.0, 1.6.4.

II.1.5 TARGET2 value-added services

TARGET2 value-added services will be a set of optional services offered to TARGET2 PM account holders with access to TARGET2 via SWIFT (value-added services will not be available to internet-based RTGS account holders). Should a user opt for the value-added services of TARGET2, information on DCA intraday balances would be available on its ICM² (in U2A mode or in A2A mode using the T2S XML standard). The ICM will show the balance of individual DCAs linked to the RTGS accounts as well as the sum of all account balances. This feature will enable direct participants to easily monitor the overall liquidity positions on both types of accounts. In addition to these reporting features, the value-added services will also allow participants to initiate liquidity transfers in push and pull mode using its ICM. Lastly, a number of conversion services for participants that are not yet in a position to handle the ISO20022 standards required for the communication with T2S will be available. For information about the value-added services, which will be subject to specific fees, please refer to the UDFS of TARGET2: http://www.ecb.europa.eu/paym/t2s/about/keydocs/html/index.en.html.

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² ICM: Information and Control Module of TARGET2
II.1.6 Account statements for DCAs

It is foreseen that DCA holders having a direct connection to T2S (“Cash-DCPs”) will be able to query balances at any time via the T2S GUI (in U2A mode) and may then print-off or download (csv-file) the respective information. It is further envisaged that additional pre-defined reports may be subscribed to in T2S. It is not expected that T2S will automatically send out reports if they have not been previously requested via the “T2S Report Configuration” static data set-up. All reports that are offered by T2S are available both in A2A and U2A mode. In A2A mode the specific report is pushed, if the communication channel is chosen with the push preference for the report. With the pull preference, a report query for the specific report has to be sent either via the U2A mode or via A2A mode. Kindly note that all reports and queries (push and pull mode) sent from T2S to the DCA holders (either in U2A or A2A mode) will be charged by T2S via the T2S pricing list depicted in Schedule 7 of the T2S Framework Agreement.

In case of an indirect connection to T2S via the TARGET2 value-added services for T2S, a PM account holder will have the possibility to view in real-time, via the ICM, the balances of all those DCAs which are linked to its PM account. As a standard functionality of the ICM, this information may be printed too. In this case though, T2S costs will arise for each query and will be charged to the relevant PM account holder.

It should be noted that participants using just the TARGET2 value-added services for T2S will not receive Statements of Account for their DCAs. National Central Banks will not provide DCA Statements of Account via the TARGET2 value-added services for T2S either. Statements of Account can be only provided to participants having a direct connection to T2S, provided they have configured such report reception via the “T2S Report Configurations” static data set-up.

II.1.7 DCA numbering

All euro-denominated DCAs will be numbered in accordance with the following rule:

<table>
<thead>
<tr>
<th>Part A</th>
<th>Format</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account type</td>
<td>1 char. exactly</td>
<td>‘C’ for cash account</td>
</tr>
<tr>
<td>Country code of the Central Bank</td>
<td>2 char. exactly</td>
<td>ISO country code 3166-1</td>
</tr>
<tr>
<td>Currency code</td>
<td>3 char. exactly</td>
<td>EUR</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part B</th>
<th>Format</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account holder</td>
<td>11 char. exactly</td>
<td>BIC Code</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part C</th>
<th>Format</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-classification of the account</td>
<td>Up to 17 char.</td>
<td>Free text (alphanumeric)</td>
</tr>
</tbody>
</table>

The free text referred to in Part C is to be provided by the DCA holder.
II.2  Liquidity transfer related

II.2.1  Possibilities for liquidity transfers between DCAs and RTGS (PM) accounts

Euro-denominated liquidity transfers can be made from any DCA to any PM account in TARGET2 and vice-versa.

II.2.2  Restrictions for the liquidity transfers among DCAs

Liquidity transfers will only be possible between two DCAs that are “linked” to the same main PM account or DCAs that belong to the same legal entity (and to the extent that they share the same BIC 11 and parent BIC). These so called internal liquidity transfers can only be initiated in T2S.

II.2.3  Liquidity transfers between DCAs and RTGS accounts and the ability to push and pull liquidity

Using the core services of TARGET2 (respectively the T2S GUI), it will only be possible to push the liquidity from TARGET2 to T2S (respectively from T2S to TARGET2). However, using the value-added services of TARGET2, participants will be able to also pull liquidity from a DCA back to their T2 PM account, provided that the two accounts are linked.

III  Pricing and billing aspects

III.1  Changes to the existing TARGET2 core pricing scheme

After the launch of T2S, it is expected that a new TARGET2 fee will be applied to TARGET2 participants holding PM accounts designated as “main PM accounts”. Every month, as part of the monthly TARGET2 invoicing, the holder of a main PM account will be charged a fee, the level of which will be set according to the number of DCAs linked to that PM account. The final level of the fee will be communicated to the PM account holders before the launch of T2S.

III.2  The pricing scheme applied to the (optional) TARGET2 value-added services

It is envisaged that PM account holders opting for the TARGET2 value-added services will be charged a fixed monthly fee of € 50/month for participants with pricing option A and €625/month for participants with pricing option B.

III.3  Fees billed to the participants

It is anticipated that TARGET2 participants will be billed according to the current TARGET2 pricing scheme, complemented by: i) the new TARGET2 fee for main PM account (applicable to holders with the DCAs linked to their PM account); and ii) the fee for optional TARGET2 value-added services for the participants that are opting for that service. Moreover, DCA holders will be subject to the pricing of T2S services in accordance with the T2S pricing policy set forth in Schedule 7 of the T2S Framework Agreement (the most relevant items for DCA holders are the...
liquidity transfers among DCAs, the T2S transmission fees or the usage of query/response services in U2A or A2A mode). For that purpose, it is envisaged that a separate invoice will be issued and presented to the main PM account holder, who will be liable for the T2S fees of the DCA holders.

III.4 Pricing of liquidity transfers

It is anticipated that both liquidity transfers from a PM account to a DCA and from a DCA to a PM account will be billed to the respective PM account holder (the PM account holder debited, in the first case, and the PM account holder credited, in the second case) and priced according to the TARGET2 pricing scheme (in line with the pricing option selected by the participant). DCA to DCA liquidity transfer orders will be priced according to the T2S pricing scheme and billed as a part of the T2S invoice.

IV Technical aspects

IV.1 Ability of a DCA holder to connect to T2S

DCA holders will be able to technically connect directly to T2S by using one of two Value-added Network providers (VANs) of T2S or indirectly by using the value-added services of TARGET2 (see II.1.5). It is anticipated that each DCA holder should choose (at least) one of these connection types, which are, however, not mutually exclusive.

IV.2 Services provided by TARGET2 to manage the liquidity on DCAs

The services provided by TARGET2 to manage the liquidity on DCAs will be divided in two categories: services that are available as part of the TARGET2 core services, and optional services that are available as TARGET2 value-added services.

Summary of features to be offered under TARGET2 core services

- Standing orders (via ICM/U2A or A2A): TARGET2 participants will be able to have the possibility to create/view/amend/delete standing order liquidity transfer to T2S via TARGET2 ICM. The A2A option is foreseen to only be available to participants who use the new version of cash management standards (camt5). After the execution of the standing order, an optional debit notification will be received.

- Liquidity transfers (via ICM/U2A or A2A): TARGET2 participants will be able to initiate liquidity transfers to T2S. The A2A option will only be available to participants who use the new version of cash management standards (camt5). After the execution of a liquidity transfer, a confirmation will be received.

- Submission of liquidity transfers by third parties: A third party will be able to submit current orders on behalf of an RTGS account owner. This refers to liquidity transfers from PM
accounts to DCAs and requires a camt5 message. After the execution of the liquidity transfer, an optional debit notification could be received by the PM account holder.

- Credit transfer notification: upon receipt of a liquidity transfer from T2S to TARGET2, the relevant PM account holder will be able to receive a notification in the form of a camt5 message or a MT202 message on an optional basis.

Summary of features to be offered under TARGET2 value-added services

- Intraday balances of DCAs: TARGET2 participants will be able to monitor the balances of DCAs linked to their PM accounts intraday via the ICM. This service will be available in both U2A and A2A mode.

- Initiating push/pull liquidity transfers via MT202: TARGET2 participants will be able to make use of an MT202 to initiate a liquidity transfer from TARGET2 to T2S (push) and from T2S to TARGET2 (pull).

- Initiating pull liquidity transfers (via ICM/U2A or A2A): TARGET2 participants will be able to initiate liquidity transfers from DCAs to PM accounts. The A2A option will only available to participants who use the new version of cash management standards (camt5).

V DCA registration and opening procedures

V.1 Procedures for opening a DCA and associated deadlines, in particular when considering the migration by waves

It is envisaged that registration forms will have to be completed by the applicant DCA holder and be submitted to the Central Bank where the DCA will be opened. In addition, DCA holders wishing to be directly connected to T2S (via a VAN provider) will have the obligation to inform the central bank where the DCA will be opened of their intention: i) 1 year before the respective start of Community testing at the latest, if they intend to connect in A2A mode; or ii) 3 months before the respective start of Community testing at the latest, if they intend to connect to T2S in U2A mode. Central banks may set earlier deadlines at their discretion.

The latest deadlines (assuming earlier deadlines have not be set by the local National Central Bank) for market participants to inform their National Central Bank of their intention to open a DCA with a direct connection to T2S via a VAN provider are as follows:

<table>
<thead>
<tr>
<th>Wave</th>
<th>A2A mode</th>
<th>U2A mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wave 1</td>
<td>3 March 2014</td>
<td>3 December 2014</td>
</tr>
<tr>
<td>Wave 2</td>
<td>19 September 2014</td>
<td>19 June 2015</td>
</tr>
<tr>
<td>Wave 3</td>
<td>16 February 2015</td>
<td>16 November 2015</td>
</tr>
<tr>
<td>Wave 4</td>
<td>9 October 2015</td>
<td>11 July 2016</td>
</tr>
</tbody>
</table>
V.2 DCA registration forms
As euro-denominated DCAs fall within the perimeter of TARGET2, it is envisaged that the respective registration forms will be paper-based, as is currently the medium used when opening TARGET2 PM accounts. The Eurosystem is in the process of defining all registration requirements and a respective registration guide, which is expected to be published in of the fourth quarter of 2014. The Central Banks will customise the standard forms to their needs and, if required, translate them.

V.3 Number of DCAs possible per single entity
Limits to the number of DCAs that can be opened by a single entity are not foreseen. Parties will be able to centralise their liquidity in one single DCA, but it will be up to the party itself to decide how many DCAs are needed for its own or its clients’ business.

V.4 The “Main PM Account”
As it is foreseen that DCA accounts must have a zero balance at the end of the operational day in T2S, each euro-denominated DCA account will need to be linked to a “main PM account” in TARGET2. Should the credit balance on a DCA not be transferred manually by 17:45 CET, an “automated liquidity sweep” will be executed in T2S in which the entire liquidity balance on the DCA will be transferred to the main PM account. In addition, the main PM account holder will be liable for any fees or penalties levied on the DCA linked to its main PM account.

V.5 Requirements relating to:
- the main PM account and the linked DCA, and;
- linking DCAs to PMs belonging to different legal entities.
From a functional perspective, it is envisaged that a DCA will be able to be linked to any PM account. A DCA holder will need to be aware that the automatic sweep at the end of the day will result in the transfer of all funds held on the DCA to this main RTGS account. Internal liquidity transfers (i.e. liquidity transfers between DCAs) will only be possible for DCAs that are “linked” to the same main PM account or DCAs that belong to the same legal entity (and to the extent that they have the same BIC 11). It should be noted that the link from each DCA to its main PM account will be subject to a fee and that the holder of the main PM account will be liable for the payment of any respective fees (see III.1).

V.6 Credit Memorandum Balance (CMB)
The CMB is a tool T2S uses to track the provision of credit from a Central Bank to market participants via the primary CMB (for central bank auto-collateralisation) and from market participants to their clients via the secondary CMB (for client collateralisation). The primary CMB will be set up by the central banks and will link the DCAs of a market participant with the relevant collateral receiving securities accounts where the NCB receives the securities. A CMB
will be a necessary static data element for each DCA even if intraday credit will not be provided as it also provides the necessary link between a securities account and a DCA for settlement. Market participants will need to set up their own CMBs for client collateralisation.

V.7 Linking of DCAs to securities accounts – and vice versa
In order to settle securities against cash in T2S, a DCA will need to be linked via the primary CMB to a securities account by the CSD. Should a securities account not be linked to a DCA, no cash settlement could be made against this securities account (i.e. only settlement instructions without any exchange of cash could be settled (Free of Payment (FOP) Settlement Instructions)).

V.8 Linking of DCAs to multiple securities accounts and limitations in view of auto-collateralisation
A single DCA will be able to be linked to multiple securities accounts. These multiple securities accounts will not necessarily need to be opened in the books of the same CSD. It is further anticipated that securities held on these securities accounts could be used for auto-collateralisation if a Eurosystem eligible link exists between the CSDs where the securities accounts are held and the local CSD of the respective central bank (with the exception of cross-border auto-collateralisation during the migration period, see VI.4.).

V.9 Linking of a single securities account to multiple DCAs
It is envisaged that a securities account will be able to be linked to one or more DCAs. When a securities transaction is submitted to T2S, the settlement instruction would indicate which DCA should be used for the cash settlement. Alternatively, if the transaction does not refer to any specific DCA, a default DCA, which would have been previously set in the static data by the CSD, would be used for the settlement of the cash leg.

V.10 Management of a DCA by a third party - delegated by means of Power of Attorney
It is foreseen that a DCA holder will have the possibility to provide access to its account to third parties (Power of Attorney). In that case, all actions carried out by the third party benefiting from the Power of Attorney, will be deemed to be carried out by the DCA holder itself. However, should arrangements with third parties be in place, the DCA holder or its liquidity providing RTGS holder should nevertheless be in a position to manage its own DCA and therefore maintain a connection either via a VAN provider or through the value added services offered by TARGET2.

V.11 Acceptance of a BIC assigned to a DCA differing from the BIC of the legal account owner
It is envisaged that, for the opening of a DCA, only one single BIC (Party BIC) will be required, along with the DCA number. The participant will need to be the legal entity owning the DCA.
Although, technically speaking, any BIC could be assigned to a DCA, the BIC will need to reflect this legal ownership.

V.12 Technical limitations e.g. in terms of BICs regarding a DCA benefiting from auto-collateralisation and the PM account used in case of automatic reimbursement

No technical limitations are envisaged in terms of BICs although a limitation in terms of ownership is foreseen. Please refer to the first issue in section I.2.

VI Auto-collateralisation and client collateralisation

VI.1 Central Banks and auto-collateralisation services

It is foreseen that all Eurosystem central banks could offer auto-collateralisation as soon as this is requested by their market participants and as soon as their respective local CSD(s) have migrated to T2S. Furthermore, some Eurosystem central banks will offer auto-collateralisation prior to the migration of their local CSD, but this is upon discretion of the respective NCB.

VI.2 Provision of auto-collateralisation during the CSD migration period and cross-border limitations

Auto-collateralisation will be provided from the start of T2S. However, there may be limitations to this service with regard to its provision on a cross-border basis during the T2S migration period. NCBs of markets in which the CSD has not yet migrated may provide auto-collateralisation on a cross-border basis at their discretion and depending on local demand.

VI.3 Auto-collateralisation services provided by Central Banks - title transfer arrangements and pledge arrangements

Within T2S, it is foreseen that central banks will be required to determine the technical collateralisation procedure (which may be different than the collateralisation procedure defined in legal terms) for which they opt, given the following possibilities in T2S:

- 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;
- The PLEDGE procedure, i.e. the selected collateral is transferred from the securities account where it is held to another securities account of the credit consumer pledged to the credit provider;
- The PLEDGE SUB procedure, i.e. the selected collateral is restricted in the securities account where it is held – on a restricted position - without the possibility of transferring it to any other securities accounts.
VI.4 Possibility of auto-collateralisation on a cross-border basis

Auto-collateralisation on a cross-border basis, i.e. providing liquidity for securities transactions on securities accounts in a CSD in another country, will be possible. The provision of liquidity will only be available from the NCB in the TARGET2 component of which the DCA has been opened. Eligible securities held or obtained from securities transactions on securities accounts in a CSD in another country may be used for auto-collateralisation, provided that the respective securities accounts are linked to the DCA and a Eurosystem eligible link exists between the cross-border CSD and the respective local CSD. Cross-border auto-collateralisation during the migration period and involving participants holding a DCA with an NCB of a non-migrated market will operate slightly differently – the list of eligible assets will be determined in relation to the assets issued in the cross-border CSD and/or held there as investor CSD via eligible links.

VI.5 Auto-collateralisation and client collateralisation

Auto-collateralisation will entail the provision of credit, triggered when a buyer does not have sufficient funds to settle a securities transaction. In this case, the central bank is the credit provider and the payment bank the credit consumer. Client collateralisation will entail the provision of credit from a payment bank to one of its clients, triggered when there is an insufficient external guarantee limit. In this scenario, the payment bank will be the credit provider and its client will be the credit consumer.

VI.6 Possibility of auto-collateralisation on stock and on flow

The credit provided in auto-collateralisation can be secured using securities already held by the buyer ("collateral on stock") or the securities that are being purchased ("collateral on flow"). It is foreseen that both auto-collateralisation as well as client collateralisation work on stock and on flow.

VI.7 Eligible ISINs for T2S auto-collateralisation

The Eurosystem Single List is the basis for making assets available/eligible for auto-collateralisation. The number of ISINs eligible for auto-collateralisation may be reduced at individual NCB level in order to avoid issues with close links and/or because of the absence of eligible links between the local CSD of the NCB providing credit via auto-collateralisation and other CSDs that are on the T2S platform.

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3 Client collateralisation envisages the set-up of three types of limits, i.e. external guarantee limit, client-collateralisation limit and unsecured credit limit. The external guarantee limit is the cap on credit secured outside T2S that the payment/settlement bank sets for its client. The client-collateralisation limit is the cap of the intraday credit provided by the payment/settlement bank to its clients and secured in T2S. This limit is used once the external guarantee limit is fully used. The unsecured credit limit is the cap of the intraday credit provided by a payment/settlement bank to its clients, and secured outside T2S. This limit is used once the client-collateralisation limit is fully used.
VI.8 Possibility to use collateral issued outside of T2S (e.g. Eurobonds issued in the ICSDs) for auto-collateralisation

For auto-collateralisation purposes, the securities will need to be available in the counterparties securities (“collateral providing”) account of a CSD that has already migrated to T2S. For example, CSDs having a Eurosystem eligible link with an ICSD will be able to receive Eurobonds that could be used under certain conditions in auto-collateralisation transactions.

VI.9 Use of securities held in a securities account of a foreign branch – possibility for use in accessing auto-collateralisation on a cross-border basis

This version of cross-border auto-collateralisation, whereby the securities account of a foreign branch opened in T2S is used for securities transaction settlement while using the DCA of the head office for the cash part of the transaction, is possible in T2S. The ‘head office’ has to be entitled to receive intraday credit from the credit providing central bank.

VI.10 Checking of close links in the context of auto-collateralisation and client collateralisation

In principle, T2S will provide the functionality for ex-ante checks on close links, which will be used for auto-collateralisation as well as for client collateralisation - once the respective close link information will be available in T2S. However, it is not foreseen that close links information will be uploaded by NCBs (neither on their own behalf nor on behalf of payment banks offering client collateralisation) in the first release of T2S. A future T2S release may allow separating close links information into distinctive databases.

With regard to auto-collateralisation, as the close links information will not be uploaded in the T2S close links database for the first release of T2S, central banks will rely on current procedures. In this regard, assets will be checked for close links on an ex-post basis and/or NCBs will ex-ante exclude assets/classes of assets which are subject to close links (it is reminded that the onus is on the counterparty not to provide assets vis-à-vis which it has a close link).

VI.11 The case of pending auto-collateralisation towards the end of the day

It is foreseen that the cut-off time for DVP is 16:00. DCA holders should reimburse auto-collateralisation positions early or ensure sufficient liquidity on the DCA before 16:30. In the event that DCA holders have not yet reimbursed their auto-collateral positions before 16:30, pending (i.e. non-reimbursed) auto-collateralisation transactions will be automatically processed by T2S with the so-called automatic reimbursement at 16:30. After the liquidity rebalancing of the potential available liquidity between DCAs of the credit consumer and in the event that the DCA balances will not be sufficient, this process will lead to a “relocation of collateral”: T2S processes the settlement of all the outstanding reverse collateral Settlement Instructions linked to CB collateralisation by sourcing the necessary liquidity from its Central Bank through the creation of collateral relocation settlement instructions and transferring collateral to the collateral account of the central bank. In turn, the central bank will provide the liquidity to reimburse the
outstanding auto-collateralisation and will, without undue delay, debit the PM account of the DCA holder. A penalty fee of EUR 1,000 will apply for each day where one or more recourses to collateral relocation occur.

VII Testing and migration

VII.1 Certification and authorisation

VII.1.1 Certification and authorisation testing procedures for DCA holders

It is envisaged that DCA holders will need to pass certification and authorisation tests. Certification testing will consist of a limited number of test cases for directly connected DCA-holders that provide the Eurosystem with the confidence that the participants can connect properly to T2S, while authorisation testing for all DCA holders lies within the competence of central banks and will focus more on functional testing.

VII.1.2 Harmonisation among TARGET2 Central Banks for the certification and authorisation of DCAs

It is foreseen that the certification and authorisation testing for DCAs will be harmonised at Eurosystem level. It is planned that the concept of “passport”, which is already applicable in TARGET2, will also be valid for DCA holders (see VII.1.5). The certification test cases are already published under the following link: http://www.ecb.europa.eu/paym/t2s/progress/pdf/2013-11-07-eurosystem-certification-test-cases-v1_0.pdf?b74b5a18f11646748cbb65550dfa8a61. The authorisation tests are expected to be published in September 2014.

VII.1.3 Timing of certification and authorisation testing procedures for DCA holders

It is foreseen that DCA holders will need to plan their certification testing during the first two to four weeks of the Community testing stage in which they open their DCA. The detailed timeframe for authorisation testing will be defined by the Central Bank where the DCA will be published in due time before the start of Community testing of the respective wave.

VII.1.4 Reporting by DCA holders on their certification and authorisation tests

It is envisaged that the results of both tests have to be reported to the Central Bank of the DCA holder in which the account has been opened.

VII.1.5 Taking certification and authorisation tests for market participants operating in multiple countries and procedures concerning interactions with central banks

It is anticipated that tests successfully passed and reported to one Central Bank would be recognised by other Central Banks as well. Therefore, the DCA holder would not be asked to
repeat them with another Central Bank. This practice is known and used in TARGET2 as the “passport concept” and is planned to also apply to euro-denominated DCA holders.

VII.2 Migration related

VII.2.1 Significance of T2S migration for central banks
Central banks will not migrate to T2S in the same manner as CSDs. It is envisaged that a central bank will stand ready to open DCAs for the market participants/payment banks from the first migration wave onwards and irrespective of the wave in which the “local CSD” will migrate to T2S.

VII.2.2 Opening DCAs in the T2S production environment - timing
It is foreseen that all static data required to open a DCA and to set up the CMB will be collected from participants using specific registration forms. It is anticipated that the respective data will be input by the Central Banks in the production environment of T2S ahead of the go-live of the corresponding migration wave during the so-called pre-migration phase. This will allow directly-connected DCA holders to check the correctness and completeness of the static data ahead of their migration weekend and to ask for any necessary adjustments or corrections. The finalisation of the CMB is carried out by the CSD when inputting the securities account linked to the DCA.

VII.2.3 Migration testing
It is anticipated that the migration will be tested in the same way that it will occur in the production environment. Several migration weekends will be foreseen where DCA holders or their respective liquidity providers will have to process liquidity transfers from their PM accounts to feed their DCAs with liquidity for the first night-time settlement of its respective wave. It is planned that the central banks will provide the necessary information about migration testing in due time.

VII.3 Test environments

VII.3.1 T2S testing environments for directly connected DCA holders
In order to ensure an orderly process, the Eurosystem will provide four T2S test environments, which have the following titles: Interoperability, Migration, Community, and Pre-Production. Before the migration to T2S, it is envisaged that there will be one test environment for market participants, which will be the so-called “Community Test Environment” of T2S. Testing in the Community Test Environment will be organised per migration wave: all T2S actors of a given wave will be testing in the Community Test Environment with the actors of the previous waves in the slot corresponding to their migration wave. A dedicated pre-production test environment will be set-up for testing of those communities that are already operating on T2S.
VII.3.2 Test&Training Environment of TARGET2 (CUST)

From the start of the Community testing stage of the migration wave 1, it is envisaged that the Test&Training Environment of TARGET2 (CUST) will be connected to the Community Test Environment of T2S for the purpose of the certification/authorisation and end-to-end testing. After all migration waves have completed, it is foreseen that CUST will be connected to the Pre-Production test environment of T2S.

VII.3.3 Test Environments: operational schedules (i.e. opening, cut-off, closing times)

The T2S and TARGET2 operational day schedules for testing will be synchronised in order to optimise the end-to-end testing activities in euro. It is envisaged that, during the T2S community testing phase, mainly the “T2S synchronised standard day” operational schedule will apply. In this schedule, a day-trade phase (real time settlement) will take place from 07:00-15:30 and night-time settlement from 17:00-19:00. On Fridays, the night-time settlement phase will be finished earlier and the test environment will be closed at 17:30, which will allow the deployment of new releases to this test environment on Friday evenings. It is planned that the “T2S Live Timing” with a real time settlement phase from 07:00-18:00, and a night-time settlement from 19:30-22:30, will be applied during the Business Day testing stage, which will last for 2 to 4 weeks per wave (exact periods will be communicated to the DCA holders by their NCB).

VII.3.4 Identification of T2S parties on the testing environments

The production BIC (and not the test BIC) will be used as the T2S Party identifier during user testing with communities as well as during other multilateral tests.

VII.4 Other testing issues

VII.4.1 General approach for testing applicable to all DCA holders

It is envisaged that directly connected DCA holders will perform their testing activities in the T2S Community testing environment, during the so-called Community testing stage and Business Day testing stage. The DCA holder will perform the certification testing and mandatory authorisation testing as defined by the Central Banks as well as testing activities related to the migration of its wave and end-to-end testing as defined by the Central Banks and CSDs in their waves.

VII.4.2 Information on connectivity testing

Information on connectivity testing can be found in the T2S website using the following link: Connectivity Testing Guide

VII.4.3 Requirement of additional testing in conjunction with client collateralisation

It is not foreseen that central banks will require additional tests from DCA holders intending to provide client collateralisation. It will be up to the DCA holder to define scenarios and to carry out tests with its clients.
VIII Operational topics

VIII.1 Operational manual available to the public related to cash operations in view of T2S

It is foreseen that operational issues covering T2S related cash impacts from a TARGET2 perspective will be available in the Information Guide for TARGET2 users, which currently covers the TARGET2 RTGS operational framework for market participants. Amendments to procedures are currently being drafted and the revised version will be published before T2S goes live.

Contingency procedures and business continuity arrangements are currently being reviewed and complemented by the Eurosystem and are expected to be available in the Information Guide for TARGET2 users as a guide for reacting to exceptional adverse operational events.

VIII.2 Expected timeline for the various liquidity management activities during the T2S business day - with a focus on the EOD period from 16:00 to 18:00

In both TARGET2 and T2S, the business day commences on the evening of the last business day before the respective calendar day. It is foreseen that TARGET2 participants provide liquidity for the night time settlement via standing orders from PM accounts to DCAs just after 19:30.

During night time settlement up until 07:00, it is envisaged that liquidity interactions between DCAs and PM accounts will be possible via current orders and liquidity transfers. Also the multiple liquidity provider reimbursement, which is an optional feature that can be used for the automatic retransferring of the liquidity remaining at the end of the night-time settlement period on the T2S Dedicated Cash Account of a T2S Actor to the RTGS accounts of its liquidity providers, is foreseen to take place in the last night time cycle of T2S. During the maintenance windows of TARGET2 and T2S, transfers can be initiated in the respective system but would be queued until the maintenance window is closed in the receiving system.

At the end of the day, there are several key milestones that market participants should be aware of as it concerns euro liquidity in T2S as follows:
<table>
<thead>
<tr>
<th>Time (CET)</th>
<th>T2S Settlement day events/processes</th>
<th>TARGET2 aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:00</td>
<td>DVP cut-off/auto-collateralisation cut-off</td>
<td>DCA holders are recommended to pay back autocollateral earlier or to provide sufficient liquidity on DCA for 16:30 reimbursement; relocation as last measure</td>
</tr>
<tr>
<td>16:00</td>
<td>Cash restriction cut-off</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Release of unused cash restriction</td>
<td></td>
</tr>
<tr>
<td>16:30</td>
<td>Automatic reimbursement of auto-</td>
<td>Possible relocation may lead to a TARGET2 intraday credit</td>
</tr>
<tr>
<td></td>
<td>collateralisation positions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Optional cash sweep 1 (standing liquidity transfers)</td>
<td>To facilitate liquidity management and to concentrate liquidity on TARGET2 RTGS accounts</td>
</tr>
<tr>
<td>17:40</td>
<td>Bilaterally agreed treasury</td>
<td>Afterwards settlement of unsecured money market transactions supported for 20 minutes longer</td>
</tr>
<tr>
<td></td>
<td>management transactions (BATM) cut-off</td>
<td></td>
</tr>
<tr>
<td>17:40</td>
<td>Central Bank Operations cut-off</td>
<td></td>
</tr>
<tr>
<td>17:45</td>
<td>Inbound liquidity transfer cut-off</td>
<td>Afterwards no transfers from T2 RTGS accounts to DCAs</td>
</tr>
<tr>
<td></td>
<td>Automated cash sweep 2</td>
<td>All liquidity is upon concentrated on TARGET2 accounts</td>
</tr>
<tr>
<td>18:00</td>
<td>Securities restriction cut-off</td>
<td></td>
</tr>
<tr>
<td>18:00</td>
<td>FOP cut-off</td>
<td></td>
</tr>
</tbody>
</table>

**VIII.3 NCBs’ TARGET2 service desk capacity for handling additional client requests related to the DCAs in T2S**

Each CB will ensure that it has the capacity to adequately service its DCA holders.

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