



<b>General Information (Origin of Request)</b>		
<input checked="" type="checkbox"/> User Requirements (URD) <input checked="" type="checkbox"/> Other User Functional or Technical Documentation (SYS)		
<b>Request raised by:</b> Working Group on TARGET2 (WGT2)	<b>Institute:</b> Central Bank	<b>Date raised:</b> 11/09/2015
<b>Request title:</b> Overnight liquidity balance on the T2S Dedicated Cash Account in case of contingency scenario		<b>Request ref. no:</b> T2S 0562 URD
<b>Request type:</b> Common	<b>Urgency:</b> Normal	
<b>1. Legal/business importance parameter:</b> High	<b>2. Market implementation efforts parameter:</b> Low	
<b>3. Operational/Technical risk parameter:</b> Low	<b>4. Financial impact parameter:</b> Medium	
<b>Requestor Category:</b> Central Bank	<b>Status:</b> Authorised at steering level	

**Reason for change and expected benefits/business motivation:**

At the end of the T2S business day, the DCAs in the T2S platform should have a zero balance and, therefore, all euro liquidity should have been returned to the RTGS. To ensure this, the T2S platform automatically transfers the DCAs' balances to the RTGS accounts specified for each DCA with a so-called automated cash sweep, scheduled to be executed after 17:45 CET. If the automated cash sweep is successfully executed, there will be no remaining liquidity on the DCAs at the EoD. Different situations (for instance, a problem with the automated cash sweep or other problems with T2S, RTGS or the interface between T2S and the RTGS) could require the closure of T2S business day without transferring the liquidity back to the RTGS accounts. One such situation which can prevent the proper execution of the automated cash sweep is the existence of a case 2 intraday restrictions on a DCA.

In such situation the current design of T2S envisages that the cash balances in T2S are held with one record per business day and the SoD balance of business day D+1 is not initialized with the EoD balance of business day D, but is programmed to start at zero every business day. Consequently, even if the DCA statements produced at the EoD show an EoD balance different from zero the DCA will not have the same balance at the SoD of the following business day.

The fact that the SoD balance in business day D+1 is not equal to the EoD balance in business day D raises several issues if liquidity on DCAs (including the RTGS transit accounts) was not successfully swept to the RTGS. This might in particular raise accounting, operational and, potentially, legal issues.

Besides the reconciliation problem for payment banks (i.e. discontinuity in the reported balance between D and D+1), this forcing of the DCA balances to zero is also leading to problems in the accounting of the Central Banks and requires complex adjustments e.g. remuneration of accounts, calculation of minimum reserves, usage of standing facilities. When the business case of DCAs (including the RTGS transit accounts) being set to 0 at the SoD occurs, the following activities need to be performed by the CBs holding the T2S transit account in the RTGS systems (as the cash sweep did not move it to the RTGS accounts, the liquidity will still be on the T2S transit account) :

- Identification of the amounts for single liquidity transfers
- Identification of the DCA sending the liquidity transfer
- Identification of the receiving RTGS account

Until the above-mentioned steps are executed, the liquidity at stake will not be available to the payments banks.

Another situation which could cause issues in the execution process of the outbound liquidity transfers is a missing response from the RTGS system. A possible implication of a missing reply could be that the "RTGS leg" of the transfer is not executed, while the "T2S leg" was successfully executed. Currently such situation results in liquidity being blocked on the RTGS transit account in T2S. It is foreseen that such situation is managed manually, involving contacts between operating teams of T2S and of the respective RTGS to secure the resolution process.

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**Description of requested change:**

In exceptional circumstances, when a DCA balance cannot be swept to the RTGS, the T2S EoD can be started and start of the next business day can occur as usual.

It should be possible that liquidity remains on the DCAs overnight with appropriate reporting (the addition of all the postings are summed up to 0) and on the next business day the DCA starts with the balance of the previous day.

In the occasion of not receiving any RTGS answer the technical monitoring should ensure that the T2S operator is alerted after 15 minutes. This should be valid for all outbound liquidity transfers to any RTGS system, throughout the whole business day. Following the alert the T2S operator shall inform the responsible Central Bank (and the RTGS transit account holder in case it differs from the responsible Central Bank) about the details of the transfer which is missing a response (e.g. T2S Reference, sending and receiving party/account). The alert might be raised in any tool available to the T2S operator (e.g. the technical monitoring) and the consecutive procedure should be part of the operational procedures.

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**Submitted annexes / related documents:**

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**Proposed wording for the Change request:**

The proposed changes will be included in URD v5.05

**1. The requirement T2S.03.180 (Transfer of liquidity in the end-of-day period ) should be updated as follows:**

Reference ID	T2S.03.180
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The "EOD" period shall include the automated liquidity transfer from the T2S dedicated cash accounts to the relevant RTGS accounts in the relevant RTGS systems.

In case of a contingency scenario when a T2S dedicated cash account balance cannot be swept to the RTGS system, T2S shall close the end-of-day period with liquidity remaining on the cash account. On the next business day the T2S dedicated cash account shall start with the end-of-day balance of the previous business day.

## 2. The requirement T2S.10.110 (Cash Account balances) should be updated as follows:

Reference ID	T2S.10.110
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Cash balances track the amount of funds in a T2S dedicated cash account at a specific point in time. Cash positions shall support the tracking of historic balances. Cash balances in T2S dedicated cash accounts change through a transfer of funds to/from RTGS system from/to the T2S dedicated cash account, through the settlement of the cash leg of a securities settlement instruction, or a corporate action payment. Section 6.1.4 in chapter 6 of the user requirements provides details as to the type of transactions that change the balances in T2S dedicated cash accounts. Generally, an occurrence of a cash balance should be zero at the end of the day for previous business days, since T2S transfers the liquidity back to the relevant RTGS account. In case of a contingency scenario when a T2S dedicated cash account balance cannot be swept to the RTGS system, T2S shall close the end-of-day period with liquidity remaining on the cash account. On the next business day the T2S dedicated cash account shall start with the end-of-day balance of the previous business day. An occurrence stores the intraday balance for the current settlement day, but again, at the end of that day the balance will be zero generally because of the transfer of the remaining liquidity to the RTGS account.

The proposed changes will be included in UDFS v2.3  
§1.1.2.1 Liquidity Transfers, page 24f

Finally, at the end of the business day all T2S Dedicated Cash Accounts must have a balance of zero<sup>x</sup>. Therefore, T2S automatically transfers the remaining liquidity at the end of the business day to an External RTGS account which has to be mandatorily specified for each T2S Dedicated Cash Account. It is also not possible to have overnight credit within T2S. Thus, T2S triggers forced reimbursements to close the pending intraday credits provided by central banks in T2S through auto-collateralisation. For further information, see section End of Day Cash Management [□□579].

<sup>x</sup> In contingency scenarios, when a T2S dedicated cash account balance cannot be swept to the RTGS system, T2S shall close the end-of-day period and change the business day with liquidity remaining on the respective cash accounts. On the next business day the T2S dedicated cash accounts shall start with the end-of-day balance of the previous business day.

§ 1.6.2.3.2 Overview, page 580

At the realtime settlement closure period T2S considers two cash aspects on a T2S Dedicated Cash Account, whether there are still pending credits to be reimbursed and if there is available cash on the T2S Dedicated Cash Account.

The situation on the accounts at the end of a settlement day can be one of the following:

- No intraday credit was provided by an CB during the settlement day;
- Intraday credit was provided by an CB during the settlement day and the cash on the T2S Dedicated Cash Account is sufficient to fully reimburse the pending intraday credit provided by the CB;
- Intraday credit was provided by a CB during the settlement day but there is insufficient or no cash on the T2S Dedicated Cash Account to reimburse the pending intraday credit provided by the CB.

As all T2S Dedicated Cash Accounts must have a balance of zero<sup>x</sup> at the end of any settlement day, via the EOD Cash Management process (“automated cash sweep”):

- All the unused cash restrictions (i.e. blocking, CoSD blocking or reservation) are released;
- All pending intraday credits provided by a central bank are reimbursed;
- If there is a balance deviating from zero on the T2S Dedicated Cash Account the balance is transferred to the respective RTGS accounts. T2S Central Bank cash accounts may have a negative balance<sup>243</sup>.

<sup>x</sup> In contingency scenarios, when a T2S dedicated cash account balance cannot be swept to the RTGS system, T2S shall close the end-of-day period and change the business day with liquidity remaining on the respective cash accounts. On the next business day the T2S dedicated cash accounts shall start with the end-of-day balance of the previous business day.

§2.17.2.4 End of Day Liquidity Transfers page 910 ff

**[Balance deviating from zero]<sup>x</sup>**: In case the remaining balance is deviating from zero Liquidity Transfers are generated and processed within T2S (debiting the T2S Dedicated Cash Account and crediting the RTGS account which is linked to this T2S Dedicated Cash Account).

<sup>x</sup> In contingency scenarios, when a T2S dedicated cash account balance cannot be swept to the RTGS system, T2S shall close the end-of-day period and change the business day with liquidity remaining on the respective cash accounts. On the next business day the T2S dedicated cash accounts shall start with the end-of-day balance of the previous business day.

§4.1 Index of Business Rules and Error Codes, page 1730

Amendment of BR LLCI009

Text of business Rule should be amended in the following way:

Any Liquidity Transfer arriving in T2S after the Business date change and prior to the Liquidity Transfer cut-off is pro-cessed, otherwise the incoming Liquidity Transfer will be rejected. This business rule is not applicable for internal Liquidity Transfers between a RTGS Dedicated Transit Account and a Dedicated Cash Account. In case of de-lays in the Start of Day incoming Inbound Liquidity Transfers will be parked until the new business date is reached.

The proposed change will be included in UHB v2.3

§6.4.2.92 Immediate Liquidity Transfer Order – New Screen, page 2107

Any Liquidity Transfer arriving in T2S after the Business date change and prior to the Liquidity Transfer cut-off is pro-cessed, otherwise the incoming Liquidity Transfer will be rejected. This business rule is not applicable for internal Liquidity Transfers between a RTGS Dedicated Transit Account and a Dedicated Cash Account. In case of de-lays in the Start of Day incoming Inbound Liquidity Transfers will be parked until the new business date is reached.

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### High level description of Impact:

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#### Outcome/Decisions:

\* CRG meeting of 15 December 2015: The CRG decided to put the Change Request on hold for T2S Release 2 potentially

\* CRG meeting of 6/7 July 2016: The CRG recommended the Change Request for preliminary assessment.

\* OMG on 15 July 2016: During the OMG written procedure from 11 to 15 July 2016, the Operations Managers Group did not identify any blocking operational impact of the Change Request.

\* CRG meeting of 06 September 2016: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment.

\* CRG meeting of 12/13 December 2016: The CRG recommended to add the reduced scope of CR563 (Automatic Internal liquidity transfer between RTGS Transit Account and the T2S Dedicated Cash Account in case of RTGS rejection) to CR562 and to withdraw CR563 afterwards.

In addition the CRG discussed whether case 2 intraday restrictions on a DCA should be skipped during the EOD cash sweep process. It was agreed not to add a skipping to the scope of CR562.

\* CRG meeting on 24 January 2017: The CRG recommended to launch the detailed assessment of the Change Request and asked the 4CB to check the feasibility to deliver the Change Request in the T2S Release 2.0.

\* Advisory Group on 02 February 2017: In a written procedure from 26 January 2017 to 02 February 2017, the Advisory Group was in favour of launching the detailed assessment on the Change Request.

\* CSD Steering Group on 03 February 2017: In a written procedure from 26 January 2017 to 03 February 2017, the CSD Steering Group was in favour of launching the detailed assessment on the Change Request.

\* Operational Mangers Group on 29 May 2017: Following a written procedure from 22 - 29 May 2017, the Operations Managers Group reconfirmed that the Change Request does not have any blocking operational impact.

\* CRG meeting on 07 June 2017: The CRG recommended the approval of the Change Request and its inclusion in T2S Release 2.0. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement'.

\* Operational Mangers Group on 19 June 2017: Following a written procedure from 9 to 19 June 2017, the Operations Managers Group was in favour of adding the Change Request to the T2S Release 2.0.

\* PMG on 21 July 2017: During a written procedure from 19 to 21 July 2017, the Project Managers Group was in favour of adding the Change Request to Release 2.0 from a planning perspective based on their endorsement of the Service Transition Plan v.0.7 for Release 2.0.

\* Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) on 27 July 2017: Following a written procedure from 21 to 27 July 2017, the AMI-SeCo was in favour of approving the Change Request and its inclusion in T2S Release 2.0

\* CSD Steering Group on 28 July 2017: Following a written procedure from 21 to 27 July 2017, the CSG adopted the resolution to approve the Change Request and its inclusion in T2S Release 2.0

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**Preliminary assessment:**

- Impacted functionality/module: SETT, LTSI.
- Financial impact parameter: Medium (preliminary assessed)

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

## EUROSYSTEM ANALYSIS – GENERAL INFORMATION

<b>Impact On T2S</b>	<b>Static data management</b>		<b>Interface</b>		
		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			
		<b>Settlement</b>		<b>Liquidity management</b>	
	X	Standardisation and preparation to settlement	X	Outbound Information Management	
		Night-time Settlement		NCB Business Procedures	
		Daytime Recycling and optimisation	X	Liquidity Operations	
		Daytime Validation, provisioning & booking		<b>LCMM</b>	
		Auto-collateralisation		Instructions validation	
				Status management	
		<b>Operational services</b>		Instruction matching	
		Data Migration		Instructions maintenance	
		Scheduling		<b>Statistics, queries reports and archive</b>	
		Billing	X	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				

<b>Impact on major documentation</b>		
<b>Document</b>	<b>Chapter</b>	<b>Change</b>
Impacted GFS chapter		
Impacted UDFS chapter	§1.1.2.1 Liquidity Transfers, page 24f §1.6.2.3.2 Overview, page 580 §2.17.2.4 End of Day Liquidity Transfers page 910ff  4.1 Index of Business Rules and Error Codes, page 1730	Footnotes added to describe non zero balance situations for contingency scenarios.  Amendment of BR LLC1009
Additional deliveries for Message Specification		
UHB	§6.4.2.92 Immediate Liquidity Transfer Order – New Screen, page 2107	Amendment of BR LLC1009
External training materials		

Other documentations		
Links with other requests		
Links	Reference	Title
<b>OVERVIEW OF THE IMPACT OF THE REQUEST ON THE T2S SYSTEM AND ON THE PROJECT</b>		
Summary of functional, development, infrastructure and migration impacts		
<p>Currently, it is not foreseen for a cash balance amount to be different from zero in T2S at the end of day. Furthermore, the cash balance amount is always set to zero at the start of day.</p> <p>Once the CR will be implemented, in case of contingency scenario leading to have some remaining non-zero balances at EoD, the non-zero balances will be kept at next SoD.</p> <p><b>Report and Query Management:</b>                  Due to this change, the possibility of having Cash Balances at SoD NOT being zero has to be introduced throughout all reports and queries dealing with cash balances at SoD:</p> <ul style="list-style-type: none"> <li>• T2S Dedicated Cash Account Balance Query</li> <li>• Statement of Accounts</li> <li>• Following Settlement Day Cash Forecast Report (Reports configured for event EESR must extract the current cash balance in order to retrieve possible non-zero cash balances which will lead to the opening balance not being zero for the following business day)</li> </ul> <p><b>Liquidity Management:</b>                  Include a check if the RTGS status is still in RTGS status 'not executed' after 15 Minutes. If this is the case, raise alarm to Technical Monitoring</p> <p>Amend Business Rule to allow internal Liquidity Transfers between Dedicated Transit Account and Dedicated Cash Accounts after Liquidity Transfer cut-off</p>		
Summary of project risk		
None		
Security analysis		
No potentially adverse effect was identified during the security assessment.		



19 May 2017

## Cost assessment on Change Requests

T2S-0562-SYS – Overnight liquidity balance on the T2S Dedicated Cash Account in case of contingency scenario			
One-off	Assessment cost*		
	- Preliminary	2,000.00	Euro
	- Detailed	10,000.00	Euro
One-off	Project phase costs	233,146.40	Euro
Annual	Operational costs	23,604.65	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).