

# T2-T2S CONSOLIDATION

## USER REQUIREMENTS DOCUMENT

FOR

T2 - RTGS COMPONENT ~~FUTURE RTGS (RTGS)~~

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# 1 HIGH VALUE PAYMENTS SETTLEMENT (HVP)

## 1.1 OVERVIEW

### 1.1.1 Context Diagram

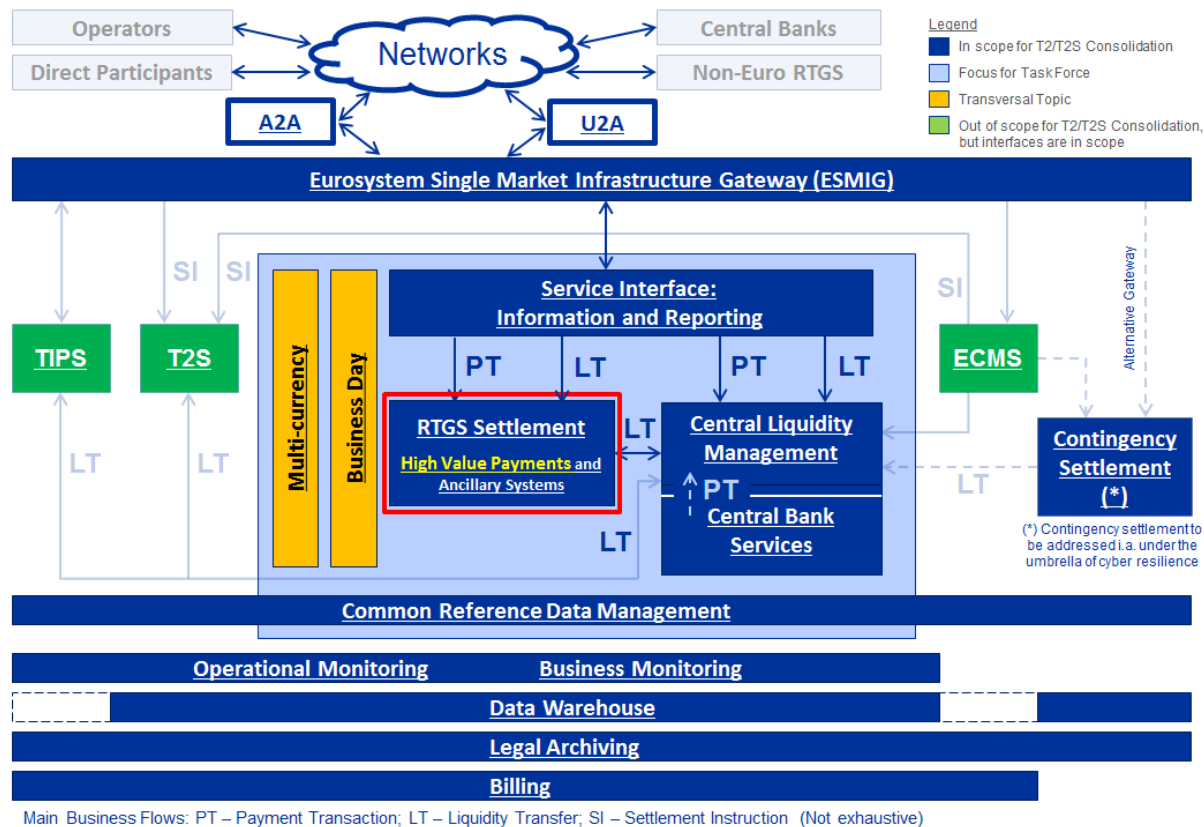


Figure 1: Context diagram for High Value Payments Settlement

This section describes the services offered for High Value Payments (HVP). The RTGS for High Value Payments processes payment orders on the participants' RTGS account holders' Dedicated Cash Accounts (DCA).

This includes the entry disposition, the settlement and the queue management.

As a general rule, it is intended to keep most features almost unchanged or enhanced compared to TARGET2. Nevertheless, the introduction of a Central Liquidity Management component feature in order to centralise the liquidity management for RTGS, T2S and TIPS, and to settle all Central Bank Operations, including credit line updates, on CLM as well as the migration to ISO20022, will lead to some changes to the current settlement processes for high value payments in TARGET2. As a consequence, this URD gives the full picture of all ~~the~~ requirements for RTGS. More details will be provided during the realisation phase within the UDFS for RTGS.

The description of the processes in this document does not differentiate whether the orders are submitted to the component Service in U2A or A2A mode.

## 1.1.2 Business Processes

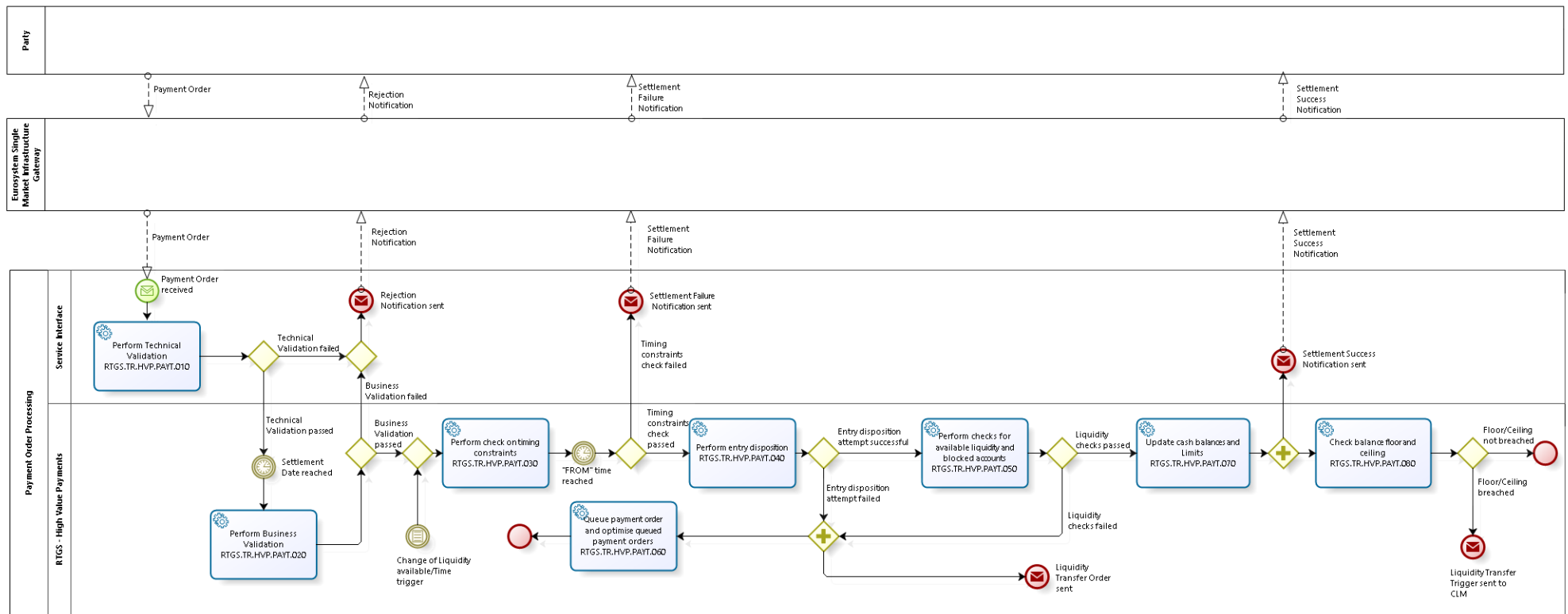
Business Process Name	BP Reference	Business Process Description
Payment Order Processing	RTGS.BP.HVP.PAYT	Processing of a payment order, which can be: <ul style="list-style-type: none"> <li>• A credit transfer; or</li> <li>• A direct debit;</li> </ul> The credit transfer can also be warehoused or processed as a backup payment
Queue Management/Payment Order Amendment	RTGS.BP.HVP.PAYA	Amendment of a payment order previously submitted with respect to a predefined set of interventions, including Queue Management.
Queue Management/Payment Order Cancellation	RTGS.BP.HVP.PAYC	Cancellation of a payment order previously submitted, including Queue Management.
Liquidity Reservation	RTGS.BP.HVP.LIQR	Execution of a liquidity reservation (increase and decrease).
Intra-RTGS Liquidity Transfer	RTGS.BP.HVP.LIQT	Intra-RTGS liquidity transfer for the settlement of a liquidity transfer <u>order</u> between RTGS DCAs (including sub accounts) within the same Liquidity Transfer Group.
Process inter-service liquidity transfer order from MCA to DCA - RTGS part	RTGS.BP.HVP.LTRCV	Second part of the CLM <u>business process for inter-service liquidity transfer order from MCA to DCA (CLM.BP.CLM.LTRCV)</u> , and similar to <u>CLM business process for inter-service liquidity transfer order from DCA to MCA (CLM.BP.CLM.LTRCV)</u>
Process inter-service liquidity transfer order from DCA to MCA - RTGS part	RTGS.BP.HVP.LTSEN	First part of the CLM <u>business process for inter-service liquidity transfer order from DCA to MCA (CLM.BP.CLM.LTRCV)</u> , and similar to <u>CLM business process for inter-service liquidity transfer order from MCA to DCA (CLM.BP.CLM.LTSEN)</u>
Process liquidity transfer order between two DCAs in different settlement services - RTGS part	RTGS.BP.HVP.LTDCA	This process is the RTGS part of the related CLM process. Within this process, RTGS could be <ul style="list-style-type: none"> <li>- either the sending <u>settlement</u> service, and the process is similar to RTGS.BP.HVP.LTSEN</li> <li>- or the receiving <u>settlement</u> service, and the process is similar to RTGS.BP.HVP.LTRCV</li> </ul>

Table 1: Business Processes for High Value Payments

## 1.2 PAYMENT ORDER PROCESSING

Business Process Ref: RTGS.BP.HVP.PAYT

### 1.2.1 Business Process Model



Business Process Model 1: Payment Order Processing

## 1.2.2 Process Overview

### Process goal:

This business process describes the processing of a payment order. An RTGS account holder/participant will initiate the process by sending the respective message containing a payment order to RTGS, which will process the payment order. If the message content is either invalid or would fail the reference data checks, it will be rejected and a rejection notification with the appropriate error code(s) will be sent to the sender of the message. If the message content is valid and reference data checks have been passed, RTGS the Service will perform a series of operations according to the content of the message.

These core settlement operations of a payment order include various checks on timing, e.g. has the predefined latest execution time been reached. As a result of these checks, the core settlement operation may not be successful and a settlement failure notification is sent to the sender.

Furthermore, there will be checks on blocked accounts/Parties. If these checks are not passed (i.e., one of the accounts/Parties involved is blocked), the payment order will be earmarked and its processing suspended (until possible approval/rejection by the CB or continuation after unblocking).

Additionally, the core settlement operation also includes provision checks on available liquidity on the account to be debited, whether any Limits are possibly breached, whether any liquidity reservations/segregation are possibly breached as well as specific offsetting checks. If, on the one hand, these provision checks fail and all the aforementioned checks succeeded, the payment order will be queued for a re-attempt for settlement. The queue will then be dissolved through offsetting with new incoming liquidity and optimisation algorithms, payment order amendment (e.g. change the order of payments in the queue) or through payment order cancellation or through time-induced rejection (e.g. start of End of Day process, Reject Time reached). If, on the other hand, these provision checks succeed, the core settlement operation will result in a success and RTGS the Service will finally and irrevocably book the payment order on the debit and credit accounts involved. In that case, RTGS the Service can optionally send a settlement success notification to the sender of the order. All in all, the sender will receive - as long as no additional instructions are sent affecting the settlement of the original payment order - at maximum one notification related to the payment order from RTGS the Service through push-mode: either a rejection (negative validation), or a failure (no settlement, e.g. Reject Time reached), or a cancellation, or a success notification.

The payment order settlement process described in this section is as generic as possible, i.e. the description aims at capturing the essential user requirements imposed by the different RTGS functionalities/services: High Value Payments (HVP) and Ancillary Systems (AS). While main features of the settlement process are described in this section, the discrepancies with and specifics for settlement of Ancillary System transfer transactions can be found in section 2 of this User Requirements Document.

### Process context:

- ▶ This generic process is valid for all types of payment orders.

### Pre-conditions:

- ▶ Appropriate privileges have been granted to the sender

**Time constraints:**

- ▶ The processing has to be executed within the opening hours of HVP (see section 3.4 on Availability of ~~S~~services in the User Requirements Document for Common Component Shared Services), i.e. from the opening of ~~RTGS~~the Service until the End of Day process starts, and outside the maintenance window, taking into account the different cut-offs depending on the payment type)

**Expected results:**

RTGS shall either:

- ▶ Settle the payment order,
- ▶ Queue the payment order,
- ▶ Reject (if validation fails) / Cancel the payment order,
- ▶ Send a failure notification for:
  - the Reject Time reached, or
  - the 'not settled' payment order (at the End of Day ~~rejection~~revocation, since no failure notification is sent after each unsuccessful settlement attempt), or
- ▶ Send an optional (according to subscription) settlement success notification.

**Triggers:**

- ▶ This process is triggered by an RTGS account holder~~participant~~/Central Bank sending the payment order.

**1.2.3 User Requirements**

1.2.3.1 PERFORM TECHNICAL VALIDATION

Task Ref: **RTGS.TR.HVP.PAYT.010**

<b>Id</b>	RTGS.UR.HVP.PAYT.010.005
<b>Name</b>	File management
<b>Description</b>	Where the messages are sent packaged in a file, RTGS shall check the validity of the file and split it into single messages. Each message should keep track of the original file reference, notably for monitoring purposes.

<b>Id</b>	RTGS.UR.HVP.PAYT.010.010
<b>Name</b>	Technical Validation - Syntax/Schema checks
<b>Description</b>	RTGS shall parse the message and perform a field level validation - e.g. on



	<p>correct data type, size. RTGS shall check whether all mandatory fields are populated.</p> <p>If the validation fails, a rejection notification with appropriate <u>error reason</u> code(s) must be sent to the sender of the message (depending on the submission channel, a <u>notificationmessage</u> in A2A mode or an error message <u>is displayed</u> on the screen in U2A mode).</p>
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Id	RTGS.UR.HVP.PAYT.010.020
Name	Technical validation - duplicate checks
Description	The <u>componentService</u> interface shall ensure that the same message has not already been received on the same business day.

### 1.2.3.2 PERFORM BUSINESS VALIDATION

**Task Ref:** RTGS.TR.HVP.PAYT.020

Id	RTGS.UR.HVP.PAYT.020.005
Name	Check for duplicate payment order
Description	<p>RTGS shall carry out a duplicate submission control for incoming payment orders. This control shall include the following fields:</p> <ul style="list-style-type: none"> <li>• Sender of the message;</li> <li>• Message Type;</li> <li>• Receiver;</li> <li>• Transaction Reference Number;</li> <li>• Related Reference;</li> <li>• Value Date;</li> <li>• Amount.</li> </ul>

<b>Id</b>	RTGS.UR.HVP.PAYT.020.010
<b>Name</b>	Business Validation - Process specific authorisation checks
<b>Description</b>	<p>RTGS shall ensure that the sender of a payment order <del>is either</del> can be:</p> <ul style="list-style-type: none"> <li>• The <del>holderowner</del> of the <u>RTGS</u> account to be debited;</li> <li>• The <del>holderowner</del> of the <u>RTGS</u> account to be credited (in the case of a direct debit and if there is a contractual arrangement between <u>the</u> creditor and <u>the</u> debtor to do so);</li> <li>• A third <u>P</u>party which is neither <u>the</u> debtor nor <u>the</u> creditor (in the case of a mandated payment or if there is a contractual arrangement between the third <u>P</u>party and both <u>the</u> creditor and <u>the</u> debtor to do so, e.g., an Ancillary System); or</li> <li>• A Central Bank acting on behalf of a credit institution.</li> </ul> <p>The check has to be performed as soon as the message has passed the technical validation.</p>

<b>Id</b>	RTGS.UR.HVP.PAYT.020.020
<b>Name</b>	Business Validation - Check on value date for non-warehouse <u>d</u> payment <u>orders</u>
<b>Description</b>	<p>Excluding warehouse<u>d</u> payment <u>orders</u>, RTGS shall only accept a payment order that specifies a value date as of current business date, except when the CB has activated the back-valued payments for one <u>RTGS account holderparticipant</u>. In such a case, the value date check is de-activated.</p>

Note: RTGS will send non-warehoused payment orders having passed all the checks described above, immediately to the business validation step described below.

<b>Id</b>	RTGS.UR.HVP.PAYT.020.025
<b>Name</b>	Business Validation - Check on value date for warehouse <u>d</u> payment <u>orders</u>
<b>Description</b>	<p>RTGS shall only accept a warehouse<u>d</u> payment order that specifies a value date that is not later than ten calendar days from the business day on which RTGS received the payment order. Nonetheless, RTGS shall perform the authorisation checks described above as soon as the message has passed the technical validation, in particular, before the value date.</p>

Note: Once the value date is reached and ~~RTGS the Service~~ opens for payments (see [section 3.4 on Availability of services in the User Requirements Document for Common Components Shared Services – / Business Day](#)), RTGS will send the warehoused payment order automatically and immediately to the business validation step described below.

RTGS will perform the checks described below in one step in order to capture all the possible breaches; the checks therefore must not stop after the first breach occurring, as there could be further breaches in the subsequent checks. If the validation failed overall, RTGS must send rejection notifications with appropriate errorreason codes for all breaches which occurred, to the sender.

<b>Id</b>	RTGS.UR.HVP.PAYT.020.030
<b>Name</b>	Business Validation - Payment type specific checks
<b>Description</b>	RTGS shall check consistency versus a to-be-defined set of rules which depend on the message type. Customer payment <u>orders</u> will have to pass specific checks, whereas interbank payment <u>orders</u> will have to pass different checks.

<b>Id</b>	RTGS.UR.HVP.PAYT.020.050
<b>Name</b>	Business Validation - field and reference data checks
<b>Description</b>	RTGS shall perform the following field and reference data checks: <ul style="list-style-type: none"> <li>• Field value validation - codes are valid, domain values are within allowed range;</li> <li>• Cross-field validation - e.g. currency of the accounts involved is the same as the amount currency etc.;</li> <li>• Database checks - e.g. existence of <u>P</u>parties and accounts</li> </ul>

<b>Id</b>	RTGS.UR.HVP.PAYT.020.070
<b>Name</b>	Business Validation - direct debit check
<b>Description</b>	RTGS shall check whether a Direct Debit Mandate exists between the account to be debited and the payee Party, and that the maximum amount <del>(s)</del> granted in the Mandate <u>areis</u> not exceeded. <u>I.e. If defined for the account to be debited, then neither</u> <ul style="list-style-type: none"> <li>• <u>The maximum amount allowed to be debited by the payee Party during the business day nor</u></li> <li>• <u>The maximum amount of a direct debit order allowed to be debited by the payee Party</u></li> </ul> <u>is exceeded.</u> <p><u>In addition, RTGS shall check that the maximum amount for direct debit order allowed to be debited for the account based on direct debit orders per business day is not exceeded.</u></p>

<b>Id</b>	RTGS.UR.HVP.PAYT.020.080
<b>Name</b>	Business Validation - Check of backup payment <u>orders</u>
<b>Description</b>	Backup payment <u>orders</u> are accepted only where the CB has activated the feature for its <u>RTGS account holderparticipant</u> .

<b>Id</b>	RTGS.UR.HVP.PAYT.020.090
<b>Name</b>	Business Validation - mandated payment <u>order</u> check
<b>Description</b>	The mandated payment <u>order</u> is sent by a Central Bank on behalf of its direct <u>RTGS account holderparticipant</u> , in <del>the</del> case of contingency situations. It can be either a credit transfer or a direct debit.

<b>Id</b>	RTGS.UR.HVP.PAYT.020.100
<b>Name</b>	Business Validation - Account checks
<b>Description</b>	The system should identify the accounts to be debited and to be credited from the BIC11 indicated in the message. In CRDM, each BIC11 is mapped to only one <u>RTGS DCACash Account</u> , may it be for the direct <u>RTGS account holderparticipant</u> itself (including multi-addressee) or its indirect participants.

### 1.2.3.3 PERFORM CHECK ON TIMING CONSTRAINTS

**Task Ref:** RTGS.TR.HVP.PAYT.030

The RTGS account holdersparticipants have the possibility to determine the execution time of their paymentstransactions, through From Time and either Till Time or Reject Time.

<b>Id</b>	RTGS.UR.HVP.PAYT.030.010
<b>Name</b>	From Time
<b>Description</b>	RTGS shall ensure that a payment order can only be submitted to settlement if its From Time, if indicated, has been reached.

The payment order may specify an earliest time at which RTGS~~the Service~~ shall submit the payment order for settlement. When RTGS checks the eligibility of a payment order for settlement, then it shall verify whether the current date and time is greater than or equal to the earliest time for settlement specified in the payment order.

<b>Id</b>	RTGS.UR.HVP.PAYT.030.020
<b>Name</b>	Reject Time / Till Time
<b>Description</b>	<p>RTGS shall ensure that a payment order can only be submitted to settlement if its Reject Time, if indicated, has not yet been reached. As soon as the Reject Time is reached and if the payment order has not been settled, the payment order will be rejected and a settlement failure notification will be sent out.</p> <p>If Till Time has been specified instead, the payment order shall not be rejected when this time is reached and the payment order has not been settled, and RTGS shall allow it to be submitted for settlement beyond this time.</p> <p>At 15 minutes before the indicated Reject Time / Till Time and if the payment order has not been settled, RTGS shall send out a warning notification to the <u>holder of the RTGS account</u><del>party</del> to be debited.</p>

The payment order may specify a latest time by which ~~RTGS~~the Service has to submit the payment order for settlement. When RTGS checks the eligibility of a payment order for settlement, then it shall verify whether the current date and time is less than or equal to the latest time for settlement specified in the payment order.

<b>Id</b>	RTGS.UR.HVP.PAYT.030.030
<b>Name</b>	End of Day - specific cut-off times
<b>Description</b>	<p>RTGS shall ensure that a new payment order can only be submitted to settlement if the relevant cut-off time is not yet reached. RTGS has to settle:</p> <ul style="list-style-type: none"> <li>• New customer payment <u>orders</u> by a predefined customer payment cut-off time;</li> <li>• New interbank payment <u>orders</u> by a predefined interbank payment cut-off time.</li> </ul>

Note: both payment and interbank cut-offs could depend on the currency. This has not been decided yet, and will be further discussed during the realisation phase. See section 3.4 on Availability of services in the User Requirements Document for Common Components~~Shared Services / Business Day~~).

<b>Id</b>	RTGS.UR.HVP.PAYT.030.040
<b>Name</b>	End of Day - <u>rejection</u> <del>revocation</del> of queued orders
<b>Description</b>	RTGS shall ensure that a queued payment order can only be settled until the relevant cut-off time is reached, and the last optimisation algorithm has run

(see SHRD.UR.BD.OPER.000.030 on Cut-off in section 3.4 on Availability of services chapter Business day in the User Requirements Document for Common Components Shared Services). RTGS shall reject/revoke:

- Queued customer payment orders not yet settled before a predefined customer payment cut-off time;
- Queued interbank payment orders not yet settled before a predefined interbank payment cut-off time.

#### 1.2.3.4 PERFORM ~~EE~~ENTRY ~~DD~~ISPOSITION

**Task Ref: RTGS.TR.HVP.PAYT.040**

Through this activity, RTGS will check whether the payment order settlement can be attempted (notably including offsetting). This is possible only if no queued payment order of the same priority or higher exists. There are two exceptions to this rule:

- ▶ Normal payment orders (so called "FIFO by-pass principle" for normal payment orders, which means that the submission time for normal payment order is meaningless); and
- ▶ Offsetting bringing additional liquidity to the debited account.

<b>Id</b>	RTGS.UR.HVP.PAYT.040.010
<b>Name</b>	Priority classification
<b>Description</b>	<p>RTGS shall process payment <u>orders</u> according to their priority classification. The <u>componentService</u> shall support three priority classes:</p> <ul style="list-style-type: none"> <li>• <del>Highly</del>-Urgent (HU)</li> <li>• <del>High</del>Urgent (UH)</li> <li>• Normal (N)</li> </ul> <p>If no priority class is selected, RTGS shall handle payment <u>orders</u> as normal payments.</p>

<b>Id</b>	RTGS.UR.HVP.PAYT.040.020
<b>Name</b>	Conditions for settlement attempt of <del>highly</del> -urgent and <del>highurgent</del> payment <u>orders</u>
<b>Description</b>	RTGS shall ensure that an <del>n highly</del> -urgent or <del>highurgent</del> payment <u>order</u> can, apart from the exception described below, be submitted to settlement only if no payment <u>order</u> with a higher or the same priority is queued on the same account to be debited. RTGS shall use the FIFO principle based on submission timestamp to sequence.

<b>Id</b>	RTGS.UR.HVP.PAYT.040.030
<b>Name</b>	Conditions for settlement attempt of normal payment <u>orders</u> - so called "FIFO by-pass principle" for normal payment <u>orders</u>
<b>Description</b>	RTGS shall ensure that a normal payment <u>order</u> can, apart from the exception described below, be submitted to settlement only if no payment <u>order</u> with a higher priority is queued on the same account to be debited.

**Note:** This means that the submission time for normal payment order is meaningless.

<b>Id</b>	RTGS.UR.HVP.PAYT.040.040
<b>Name</b>	Exception for settlement attempt – offsetting with liquidity increase
<b>Description</b>	Even if the conditions described above are not fulfilled, RTGS shall nevertheless attempt settlement for the payment <u>order</u> if bilateral offsetting between the debited and credited accounts brings additional liquidity to the debited account. In the event that this optimisation feature does not improve the debited <del>RTGS account holder's participant</del> -liquidity, RTGS shall queue the payment order.

Id	RTGS.UR.HVP.PAYT.040.050
Name	Offsetting for settlement attempt
Description	<p>When RTGS has submitted a payment order to settlement, offsetting is required in order to reduce the liquidity needed for its settlement, in any case.</p> <p>RTGS can select other payment <u>orders</u> together with the payment <u>order</u> submitted to settlement if those former are:</p> <ul style="list-style-type: none"> <li>• Payment <u>orders</u> on top of the receiver's queue ("offsetting position 1"); and</li> <li>• Payment <u>orders</u> not on top of the receiver's queue, but bringing liquidity to the receiver ("extended offsetting").</li> </ul>

### 1.2.3.5 PERFORM CHECKS FOR AVAILABLE LIQUIDITY AND ~~B~~BLOCKED ~~A~~ACCOUNTS

**Task Ref:** RTGS.TR.HVP.PAYT.050

RTGS shall settle a payment order only when it fulfils all of the following conditions (see [further details in section 2 on Common Reference Data Management and section 9 on Business Data Definitions in the User Requirements Document for Common Components](#)~~Shared Services URD / CRDM and Business Data Definitions~~):

- ▶ The debit account is not blocked for debit.
- ▶ The credit account is not blocked for credit.
- ▶ The RTGS account holder~~party~~ whose account is subject to the credit is not blocked.
- ▶ The RTGS account holder~~party~~ whose account is subject to the debit is not blocked.
- ▶ The bilateral or multilateral Limits are not breached for normal payment orders.
- ▶ The available liquidity is sufficient.

**Note:** For a EURO-CB, this check is not relevant since a EURO-CB Account can be negative. For a non-CB Pparty, the credit line is managed within CLM, so the balance on the debit account cannot be negative.

- ▶ The reservation is sufficient:
  - Two reservations are available: one for ~~highly~~urgent (~~H~~U) payment orders, and one for highurgent (H) payment orders;
  - At the Start of Day, reservations are set according to the standing orders, and up to the available balance. The amount that cannot be reserved is called the Pending Value and is queued. Following any incoming credit, the Pending Value is updated and the Defined Value (i.e. the reserved amount minus the related debits) of the related reservation is increased;
  - After each debit of ~~H~~U and HU payment order, the Defined Value of the related reservation is updated



- The condition for drawing liquidity depends on the priority of the payment order. As described hereafter, a payment order can draw liquidity from its own reservation and from lower level reservations.

<b>Id</b>	RTGS.UR.HVP.PAYT.050.010
<b>Name</b>	Blocked accounts validation
<b>Description</b>	RTGS shall check whether the credited accounts <u>isare</u> eligible (i.e. not blocked) for being credited and <u>the</u> debited accounts <u>isare</u> eligible for debiting. If the check fails, RTGS shall earmark the payment order and shall, for the time being, take it out of the processing. The payment order can be re-released or rejected through authorisation by the Central Bank of the blocked account.

<b>Id</b>	RTGS.UR.HVP.PAYT.050.020
<b>Name</b>	Blocked <u>Pparties</u> validation
<b>Description</b>	RTGS shall check whether the credited <u>Pparties areis</u> eligible (i.e. not blocked) for being credited and <u>the</u> debited <u>Pparties areis</u> eligible for <u>being</u> debiting. If the check fails, RTGS shall earmark the payment order and shall, for the time being, take it out of the processing. The payment order can be re-released or rejected through authorisation by the Central Bank of the blocked <u>Pparty</u> .

<b>Id</b>	RTGS.UR.HVP.PAYT.050.030
<b>Name</b>	Limit check
<b>Description</b>	<p>RTGS shall perform a check toward bilateral and multilateral Limits, only for normal payment <u>orders</u>.</p> <p>First, RTGS shall check whether a bilateral Limit exists between the debited account and the credited account. Where the amount of the normal payment <u>order</u> is less than the free bilateral limit position, the check is positive. If the check fails, RTGS shall queue the order.</p> <p>Where no bilateral Limit is defined, RTGS shall check the multilateral Limit. Where the amount of the normal payment <u>order</u> is less than the free multilateral limit position, the check is positive. If the check fails, RTGS shall queue the order.</p>

<b>Id</b>	RTGS.UR.HVP.PAYT.050.040
<b>Name</b>	Balance check for <del>highly</del> -urgent payment <u>orders</u>
<b>Description</b>	<p>RTGS shall ensure that an <del>highly</del>-urgent payment <u>order</u> will, if any, draw liquidity from:</p> <ol style="list-style-type: none"> <li>1. The <del>HU</del> reservation;</li> <li>2. If this is not enough, then additionally from the non-reserved liquidity (balance of the account minus the <del>HU</del> and <del>HU</del> reservations); and</li> <li>3. If this is still not enough, then additionally <u>from</u> the <del>UH</del> reservation</li> </ol> <p>Where not enough liquidity is available, RTGS shall queue the payment <u>order</u> and then check whether the user has configured a <del>ruleEvent</del>-based <del>LI</del>liquidity <del>Transfer</del> <del>Order</del> for the event where there is a of lack of cash for <del>HU</del> payment <u>orders</u>, to draw liquidity from the MCA linked to its RTGS DCA (through the associated liquidity transfer account link).</p>

<b>Id</b>	RTGS.UR.HVP.PAYT.050.050
<b>Name</b>	Balance check for <del>highurgent</del> payment <u>orders</u>
<b>Description</b>	<p>RTGS shall ensure that a <del>highurgent</del> payment <u>order</u> will, if any, draw liquidity from:</p> <ol style="list-style-type: none"> <li>1. The <del>HU</del> reservation</li> <li>2. If not enough, then additionally from the non-reserved liquidity (balance of the account minus the <del>HU</del> and <del>UH</del> reservations)</li> </ol> <p>Where not enough liquidity is available, RTGS shall queue the payment <u>order</u> and then check whether the user has configured a <del>ruleEvent</del>-based <del>LI</del>liquidity <del>Transfer</del> <del>Order</del> for the event where there is a lack of cash for <del>UH</del> payment <u>orders</u>, to draw liquidity from the MCA linked to its RTGS DCA (through the associated liquidity transfer account link).</p>

<b>Id</b>	RTGS.UR.HVP.PAYT.050.060
<b>Name</b>	Balance check for normal payment <u>orders</u>
<b>Description</b>	<p>RTGS shall ensure that a normal payment <u>order</u> will, if any, draw liquidity from the non-reserved liquidity (balance of the account minus the <del>HU</del> and <del>UH</del> reservations)</p> <p>Where not enough liquidity is available, RTGS shall queue the payment <u>order</u>.</p>

1.2.3.6 QUEUE ~~P~~PAYMENT ~~O~~ORDER AND OPTIMISE QUEUED ~~P~~PAYMENT ~~O~~ORDERS

Task Ref: RTGS.TR.HVP.PAYT.060

If the entry disposition fails, this activity includes the identification of the related queue where the payment order is to be located

<b>Id</b>	RTGS.UR.HVP.PAYT.060.010
<b>Name</b>	Identification of the queue
<b>Description</b>	<p>RTGS shall manage queued payment <u>order</u>s according to the priority of the payment <u>order</u>:</p> <ul style="list-style-type: none"> <li>• <del>Highly u</del>Urgent queue;</li> <li>• <del>High</del>Urgent queue; and</li> <li>• Normal queue</li> </ul>

<b>Id</b>	RTGS.UR.HVP.PAYT.060.020
<b>Name</b>	Order in the queues
<b>Description</b>	RTGS shall ensure that the payment orders are ordered, by default, according to the submission time, i.e. FIFO.

**Note:** This default order may be changed through amendment/cancellation of queued payment orders (see [section 1.3 on Queue Management/Payment Order Amendment](#) and [section 1.4 on Queue Management/Payment Order Cancellation processes](#)).

Optimisation has the objective to dissolve as soon as possible the queues. It can be either event-based, i.e. triggered when any event that can help settling a payment order occurs, such as new liquidity on an account or settlement of a payment order higher in a queue, or time-based, i.e. started regularly, to take into account all the events that occurred since the last optimisation.

Optimisation is aiming at resolving the reasons for non-settlement, i.e. either lack of liquidity through offsetting, or breach of a Limit which can be bilateral or multilateral. It is described in terms of objective (to increase the number of settled payments) and constraints (balances and limits, order in the queues). Optimisation is designed in a way to provide liquidity-saving features.

<b>Id</b>	RTGS.UR.HVP.PAYT.060.030
<b>Name</b>	Optimisation objectives
<b>Description</b>	<p>RTGS shall reduce the stock of unsettled payment <u>orders</u> and minimise the needed liquidity through optimisation.</p> <p>The constraints described before in the entry disposition (order in the queues, FIFO by-pass principle for normal payment <u>orders</u>, offsetting) need to be applied strictly.</p>

~~1.2.3.7 BOOKING~~

~~Task Ref: RTGS.TR.HVP.PAYT.070~~

1.2.3.7 UPDATE CCASH BBALANCES AND LIMIT

Task Ref: RTGS.TR.HVP.PAYT.070

<b>Id</b>	RTGS.UR.HVP.PAYT.070.010
<b>Name</b>	Update cash balance - Booking on a gross basis
<b>Description</b>	<p>RTGS shall post each and every payment order on a gross basis. This is without prejudice to the use of offsetting effects in the provision check when RTGS submits several payment orders together for settlement and they settle simultaneously on a gross basis within one legal and logical second.</p>

<b>Id</b>	RTGS.UR.HVP.PAYT.070.020
<b>Name</b>	Update reservation - Debiting <del>highly</del> urgent payment <u>order</u>
<b>Description</b>	<p>For each debiting <del>Highly U</del>urgent payment <u>order</u>, RTGS shall update the reservations according to the steps of the check:</p> <ol style="list-style-type: none"> <li>1. The available amount within the <del>H</del>U reservation is updated;</li> <li>2. Where the amount in the <del>H</del>U reservation is not enough, and the non-reserved liquidity for normal payment <u>orders</u> is not enough either, the remaining amount is deducted from the <del>H</del>U reservation.</li> </ol>

<b>Id</b>	RTGS.UR.HVP.PAYT.070.030
<b>Name</b>	Update reservation - Debiting <del>highurgent</del> payment <u>order</u>
<b>Description</b>	For each debiting <del>highurgent</del> payment <u>order</u> , RTGS shall update the <del>HU</del> reservation according to the available amount within the <del>HU</del> reservation.

<b>Id</b>	RTGS.UR.HVP.PAYT.070.040
<b>Name</b>	Update pending reservation
<b>Description</b>	Where there is a pending reservation, RTGS shall reduce the Pending Value in the case of a credit <del>ing</del> payment bringing liquidity to <u>the RTGS DCAa party</u> , first the pending <del>HU</del> reservation and then the pending <del>HU</del> reservation, by the same amount.

<b>Id</b>	RTGS.UR.HVP.PAYT.070.050
<b>Name</b>	Update Limit in the case of a debit payment <u>order</u>
<b>Description</b>	RTGS shall, for each normal payment <u>order</u> debiting an account, decrease the free bilateral or multilateral Limit by the same amount

<b>Id</b>	RTGS.UR.HVP.PAYT.070.060
<b>Name</b>	Update Limit in the case of a credit payment <u>order</u>
<b>Description</b>	RTGS shall, for each payment <u>order</u> (whatever its priority), increase the free bilateral or multilateral Limit.

At the Start of Day, limits are set according to the standing orders (so called Defined Limit), and are updated throughout the business day after each relevant credit and debit (so called Free Limit Position).

<b>Id</b>	RTGS.UR.HVP.PAYT.070.065
<b>Name</b>	Update maximum amount in the case of a direct debit
<b>Description</b>	RTGS shall, for each direct debit, increase the used amount related to the maximum amount <del>(s) defined for</del> of the Direct Debit Mandate <u>as well as the maximum amount of direct debit orders allowed to be debited from the account per business day</u> .

<b>Id</b>	RTGS.UR.HVP.PAYT.070.070
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<b>Name</b>	Update - All-or-none basis
<b>Description</b>	RTGS shall perform all of the specified updates above in one transaction on an all-or-none basis.

<b>Id</b>	RTGS.UR.HVP.PAYT.070.080
<b>Name</b>	Exclusive control over the settlement
<b>Description</b>	RTGS shall ensure that no credit or debit can take place on the RTGS DCA without being processed by the settlement process.

This requirement will prevent concurrency of different settlement processes for the same units of liquidity.

<b>Id</b>	RTGS.UR.HVP.PAYT.070.090
<b>Name</b>	Exclusive control over the update
<b>Description</b>	RTGS shall ensure that no update specified above can take place on the RTGS DCA without being processed by the settlement process.

<b>Id</b>	RTGS.UR.HVP.PAYT.070.100
<b>Name</b>	Final booking process
<b>Description</b>	RTGS shall ensure that, once booked on the cash accounts, cash debits and credits must be final, i.e. irrevocable and unconditional.

1.2.3.8 CHECK ~~B~~BALANCE ~~F~~FLOOR AND ~~C~~CEILING

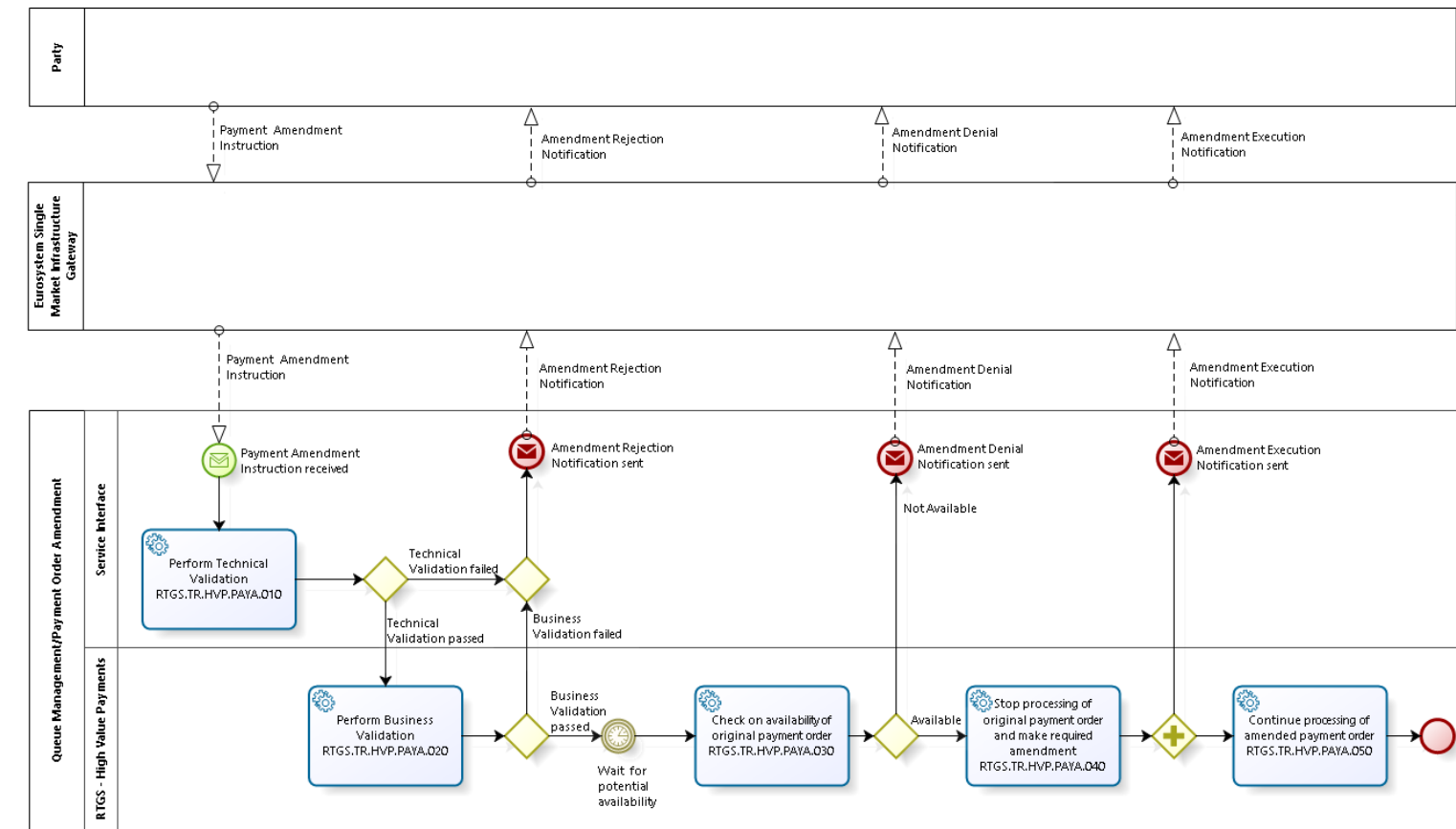
Task Ref: RTGS.TR.HVP.PAYT.080

Id	RTGS.UR.HVP.PAYT.080.010
Name	Floor and ceiling
Description	<p>Once the payment is final, RTGS shall check whether the account balance is below the floor balance that the <u>RTGS</u> account <del>holderowner</del> defined for the account or is above the ceiling balance that the <u>RTGS</u> account <del>holderowner</del> defined for the account. This check is performed only where the <u>RTGS</u> <del>account holder participant</del> has defined a floor and/or a ceiling for the account. The check is done both on the debited and credited accounts.</p> <p>If either is the case, then the second step is to check which action has been specified:</p> <ul style="list-style-type: none"> <li>• Notification to be sent in A2A and/or <u>an error message is displayed</u> <del>Notification to be sent</del> as an alert in U2A</li> <li>• <u>Creation of a rule</u><del>Event</del>-based <u>L</u>iquidity <del>t</del>ransfer <u>o</u>Order for submission to Central Liquidity Management to adjust the liquidity on the accounts involved so that the balance of the affected account reaches the specified target amount.</li> </ul> <p>The outcome of this final check does not affect the finality of the settlement of the payment.</p>

### 1.3 QUEUE MANAGEMENT/PAYMENT ORDER AMENDMENT

Business Process Ref: RTGS.BP.HVP.PAYA

#### 1.3.1 Business Process Model



**Business Process Model 2: Queue Management/Payment Order Amendment**



### 1.3.2 Process Overview

#### Process goal:

- ▶ This business process describes the amendment of a payment order. The process will be initiated by an RTGS account holder ~~party participating in the Service~~ via sending of the respective message to RTGS ~~the service~~. RTGS ~~The Service~~ will process the message. If the message content is either invalid or would result in reference data checks to fail, it will be rejected and a rejection notification with appropriate errorreason code(s) will be sent to the sender of the amendment. If the message content is valid and reference data checks have been passed successfully, RTGS ~~the Service~~ will perform an amendment attempt of the original payment order the amendment message is referring to. If the amendment operation fails, an amendment rejectiondenial notification with appropriate errorreason code(s) is sent to the sender of the amendment. Where the amendment operation succeeds, RTGS ~~the Service~~ will amend the original payment order accordingly and ~~the Service~~ will send an amendment success notification to both the sender of the amendment and to the initial sender of the original payment order<sup>1</sup>.
- ▶ The following control options are offered:
  - Change priority (not possible for highly urgent payment orders) (This does not change the submission time);
  - Move one or more payment orders to the top of the queue in which they are held. ~~The, for~~ re-ordering of the queued transactionpayment orders (triggersing their settlement attempt). Where several payment orders were selected they will be put on top of the queue according to their previous order. The default order is determined by the submission timestamp;
  - Move one or more payment orders to the bottom of the queue in which they are held. ~~The, for~~ re-ordering of the queued payment ordertransaction (possibly triggersing the settlement of another payment order). Where several payment orders were selected they will be put at the bottom of the queue according to their previous order. The default order is determined by the submission timestamp;
  - Change of execution time (including warehoused payment orders) (only if it was set before) (possibly triggering the settlement of another payment order).

#### Process context:

- ▶ This generic process is valid for all types of amendments of queued payment orders.

#### Pre-conditions:

- ▶ Respective privileges have been granted to the sender

#### Time constraints:

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<sup>1</sup> Where the sender of the amendment is the sender of the original payment order, only one notification will be sent.

- ▶ The processing has to be executed within the opening hours of HVP (see section 3.4 on Availability of ~~S~~services in the User Requirements Document for Common Components Shared Services), i.e. from the opening of RTGS~~the Service~~ until the End of Day process starts, and outside the maintenance window.

**Expected results:**

RTGS shall either

- ▶ Reject/~~Deny~~ the amendment instruction; or
- ▶ Accept and perform the amendment on the queued payment order;

**Triggers:**

- ▶ This process is triggered by a request from a RTGS account holder ~~participant~~/Central Bank sending the amendment instruction (via A2A or U2A).

### 1.3.3 User Requirements

#### 1.3.3.1 PERFORM TECHNICAL VALIDATION

**Task Ref:** RTGS.TR.HVP.PAYA.010

Same as RTGS.TR.HVP.PAYT.010 (Perform Technical Validation).

#### 1.3.3.2 PERFORM BUSINESS VALIDATION

**Task Ref:** RTGS.TR.HVP.PAYA.020

<b>Id</b>	RTGS.UR.HVP.PAYA.020.010
<b>Name</b>	Business Validation - Process specific authorisation checks
<b>Description</b>	<p>RTGS shall ensure that an amendment of a payment order can be sent:</p> <ul style="list-style-type: none"> <li>• By the <u>RTGS account holder</u> <del>participant</del> owning the account to be debited <del>or</del></li> <li>• <u>By the respective CB acting on its behalf</u> <del>or</del></li> <li>• <u>By any other authorised system user</u>.</li> </ul> <p>If the validation failed, a rejection notification with appropriate <del>error</del><u>reason</u> code(s) shall be sent to the sender of the payment <u>order</u> amendment instruction.</p>

**Note:** For direct debits, the debtor (=receiver) can initiate a reprioritisation and a reordering within the queue.

Additionally, RTGS.UR.HVP.PAYT.020.050 (Business Validation - field and reference data checks) and RTGS.UR.HVP.PAYT.020.005 (Check for duplicate payment order) apply.

Id	RTGS.UR.HVP.PAYA.020.020
Name	Amendment of payment orders
Description	<p>RTGS shall check the validity of amendment instructions. Only the following payment <u>order</u> amendment instructions are valid:</p> <ul style="list-style-type: none"> <li>• Change priority (not possible for <u>highly-urgent payment orders</u>) (This does not change the submission time).</li> <li>• Move one or more payment orders to the top of the queue in which they are held. <u>The, for</u> re-ordering <u>of</u> the queued <u>payment ordertransaction</u> (<u>triggering</u> their settlement attempt). Where several payment orders were selected they will be put on top of the queue according to their previous order. The default order is determined by the submission timestamp.</li> <li>• Move one or more payment orders to the bottom of the queue in which they are held. <u>The, for</u> re-ordering <u>of</u> the queued <u>payment ordertransaction</u> (<u>possibly triggering</u> the settlement of another payment order). Where several payment orders were selected they will be put at the bottom of the queue according to their previous order. The default order is determined by the submission timestamp.</li> <li>• Change of execution time (including warehoused payment <u>orders</u>) (only if it was set before) (possibly triggering the settlement of another payment order).</li> </ul> <p>If the validation failed, RTGS shall send a rejection notification with appropriate <u>errorreason</u> code(s) to the sender of the payment <u>order</u> amendment instruction.</p>

1.3.3.3 CHECKS ~~ONVS~~. AVAILABILITY OF ORIGINAL PAYMENT ORDER

Task Ref: RTGS.TR.HVP.PAYA.030

<b>Id</b>	RTGS.UR.HVP.PAYA.030.010
<b>Name</b>	Status of original payment order
<b>Description</b>	<p>The original payment order to be amended with the respective payment <u>order</u> amendment instruction has to be in an intermediate (i.e. not end) state (excluding blocked payment <u>orders</u>) to be eligible for amendment (e.g. queued and not considered in an ongoing optimisation simulation process, an order for which the From Time was not reached yet or a warehouse<u>d</u> payment <u>order</u>). Thus, amendment of payment orders is not feasible if they are already in an end state (settled, rejected or cancelled). The check for availability should also wait for a short period of time until a currently ongoing optimisation cycle is over, so that the payment orders not settled within this settlement attempt reached again an intermediate state</p> <p>The availability can be also dependent not only on the state, but also on the attribute to be changed itself. E.g., one can change the Till Time or Reject Time as long it has not passed, and only to a time which is in the future.</p>

1.3.3.4 STOP PROCESSING OF ORIGINAL PAYMENT ORDER AND MAKE REQUIRED AMENDMENT

Task Ref: RTGS.TR.HVP.PAYA.040

<b>Id</b>	RTGS.UR.HVP.PAYA.040.010
<b>Name</b>	Stop processing and <u>A</u> amendment of payment order
<b>Description</b>	<p>RTGS shall stop processing the original payment order from the general processing of payment orders before and while the requested amendment takes place. This means that RTGS shall remove a currently queued payment orders from its queue, if it is not considered in an ongoing optimisation simulation process.</p> <p>An original payment order for which the From Time is not reached yet or a warehouse<u>d</u> payment <u>order</u> will be directly amended according to the valid payment <u>order</u> amendment instruction.</p>

1.3.3.5 CONTINUE ~~P~~ROCESSING OF AMENDED PAYMENT ORDER

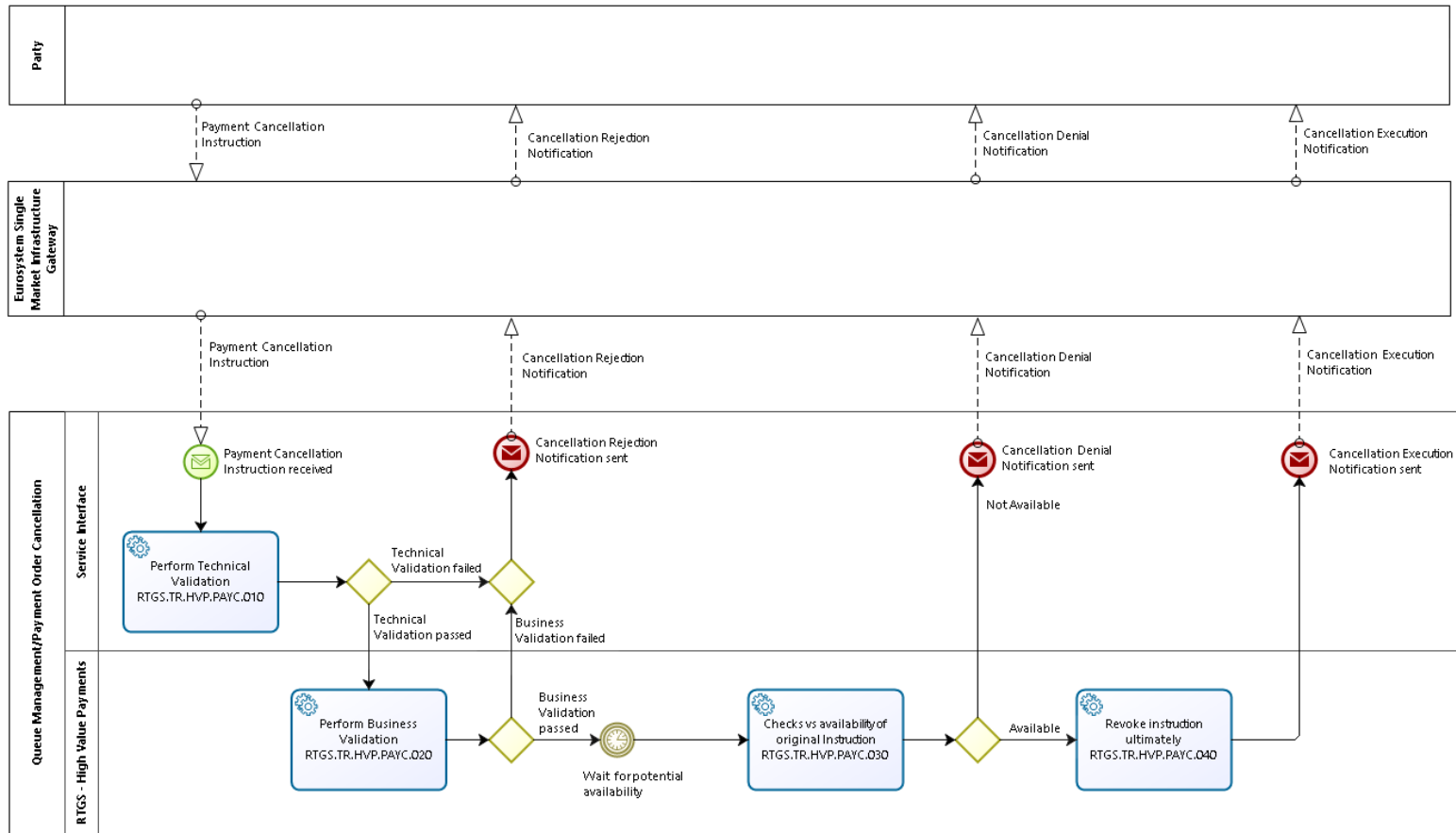
Task Ref: RTGS.TR.HVP.PAYA.050

<b>Id</b>	RTGS.UR.HVP.PAYA.050.010
<b>Name</b>	Continue processing of amended payment order
<b>Description</b>	Depending on the most recent state of the original payment order and the attribute or the order in the queue which was amended, RTGS shall process the amended payment order through the core settlement operations chain. If the queue order was changed, RTGS shall place the amended payment order at the respective position and the usual queue dissolution processes will capture it. If, on the other hand, the priority has changed, RTGS shall place the amended payment order in the queue according to the new priority and the original submission time of the original payment order (i.e., the amendment does not result in an update of that relevant timestamp; the position in the new queue is determined as if the original payment order has already been placed to that queue originally).

## 1.4 QUEUE MANAGEMENT/PAYMENT ORDER CANCELLATION

Business Process Ref: RTGS.BP.HVP.PAYC

### 1.4.1 Business Process Model



**Business Process Model 3: Queue Management/Payment Order Cancellation**

## 1.4.2 Process Overview

### Process goal:

This business process describes the cancellation of a payment order. The process will be initiated by an RTGS account holder ~~party participating in the Service~~ via sending of the respective message to ~~RTGS~~the service. ~~RTGS~~The Service will process the message. If the message content is either invalid or would result in reference data checks to fail, it will be rejected and a rejection notification with the appropriate error code(s) will be sent to the sender of the cancellation. If the message content is valid and reference data checks have been passed successfully, ~~RTGS~~the Service will perform a cancellation attempt of the original payment order the cancellation message is referring to. If the cancellation operation fails, a cancellation rejection/denial notification with appropriate ~~error/reason~~ code(s) is sent to the sender of the cancellation. Where the cancellation operation succeeds, ~~RTGS~~the Service will cancel the original message and ~~the Service~~ will send a cancel success notification to both the sender of the cancellation and the initial sender of the original payment order<sup>2</sup>.

### Process context:

- ▶ This generic process is valid for the cancellation of a queued payment order.

### Pre-conditions:

- ▶ Respective privileges have been granted to the sender

### Time constraints:

- ▶ The processing has to be executed within the opening hours of HVP (see section 3.4 on Availability of sServices in the User Requirements Document for Common Components/Shared Services), i.e. from the opening of ~~RTGS~~the Service until the End of Day process starts, and outside the maintenance window.

### Expected results:

- ▶ RTGS shall either
  - Reject/~~Deny~~ the cancellation instruction or
  - Accept and perform the cancellation on the queued payment order

### Triggers:

- ▶ This process is triggered by a request from an RTGS account holder ~~participant~~/Central Bank sending the cancellation instruction (via A2A or U2A).

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<sup>2</sup> Where the sender of the cancellation is the sender of the original payment order, only one notification will be sent.

### 1.4.3 User Requirements

1.4.3.1 **PERFORM** TECHNICAL VALIDATION

Task Ref: RTGS.TR.HVP.PAYC.010

Same as RTGS.TR.HVP.PAYT.010 ([Perform Technical Validation](#)).

1.4.3.2 **PERFORM** BUSINESS VALIDATION

Task Ref: RTGS.TR.HVP.PAYC.020

<b>Id</b>	RTGS.UR.HVP.PAYC.020.010
<b>Name</b>	Business Validation - Process specific authorisation checks
<b>Description</b>	<p>RTGS shall ensure that the cancellation instruction can be sent by the <a href="#">RTGS account holder</a><del>sending participant</del>, <del>or</del> the respective Central Bank acting on behalf <u>of</u> its credit institutions/customers <u>or by any other authorised system user</u>.</p> <p>If the validation failed, RTGS shall send a rejection notification with appropriate <del>error reason</del> code(s) to the sender of the cancellation.</p>

**Note:** For direct debits, the creditor (=sender) can initiate the cancellation.

Additionally, RTGS.UR.HVP.PAYT.020.050 ([Business Validation - field and reference data checks](#)) and RTGS.UR.HVP.PAYT.020.005 ([Check for duplicate payment order](#)) apply.



1.4.3.3 CHECKS ~~ONVS~~. AVAILABILITY OF ORIGINAL ~~PAYMENT ORDER~~ INSTRUCTION

Task Ref: RTGS.TR.HVP.PAYC.030

<b>Id</b>	RTGS.UR.HVP.PAYC.030.010
<b>Name</b>	Status of original payment order
<b>Description</b>	<p>The payment order to be cancelled with the respective instruction has to be in an intermediate (i.e. not end) state to be eligible for cancellation (e.g. queued). Thus, cancellation of payment orders is not feasible if they are already in an end state (settled, rejected or cancelled).</p> <p>RTGS must reject the cancellation of a payment order <del>RTGS</del><del>the Service</del> has already rejected, settled or cancelled and to which the payment <u>order</u> cancellation refers to.</p> <p>A payment order eligible for cancellation can either be a queued payment order, an order for which the From Time was not reached yet or a warehoused <u>payment order</u>.</p> <p>Payment orders which are captured in an optimisation cycle must also be treated as "potentially settled" and are therefore not available to an immediate cancellation. The check for availability should also wait for a short period of time until a currently ongoing optimisation cycle is over, so that the payment orders not settled within this settlement attempt reached again an intermediate state.</p>

1.4.3.4 REVOKE INSTRUCTION ULTIMATELY

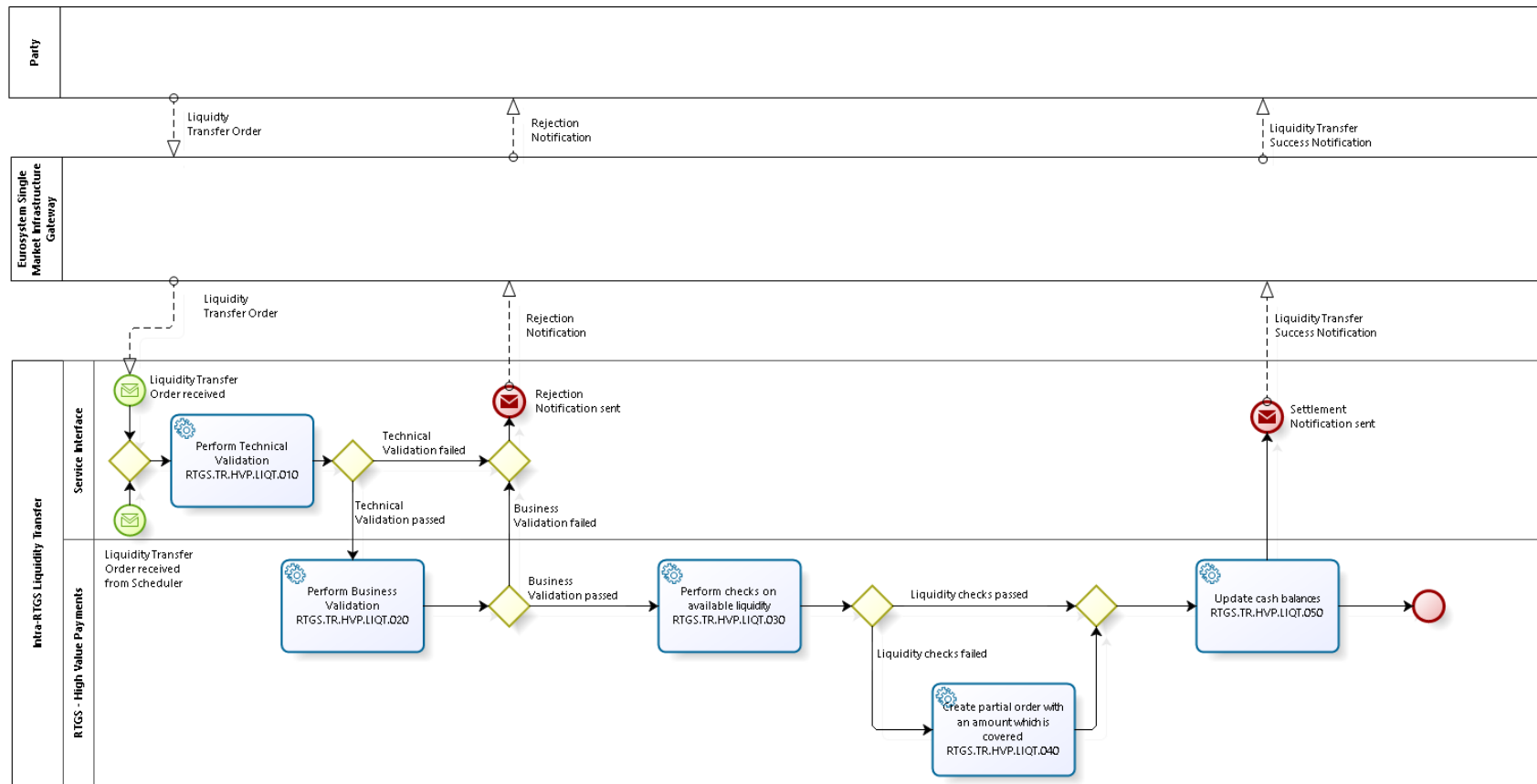
Task Ref: RTGS.TR.HVP.PAYC.040

<b>Id</b>	RTGS.UR.HVP.PAYC.040.010
<b>Name</b>	Revoke <del>I</del> nstruction ultimately
<b>Description</b>	RTGS shall cancel the original payment order according to the valid Payment Cancellation Instruction.

## 1.5 INTRA-RTGS LIQUIDITY TRANSFER

Business Process Ref: RTGS.BP.HVP.LIQT

### 1.5.1 Business Process Model



**Business Process Model 4: Intra-RTGS Liquidity Transfer**

## 1.5.2 Process Overview

### Process goal:

- ▶ This business process describes the processing of an intra-RTGS liquidity transfer order
  - ~~From a participant RTGS DCA to another RTGS DCA. This could be from an AS participant RTGS DCA for all payments to its RTGS DCA dedicated to one or several AS. This could as well be from one RTGS DCA to a sub account dedicated to one procedure 6 Interfaced AS (and vice-versa);~~
  - ~~From a participant RTGS DCA to the Technical Account related to an AS using procedure 6 Real Time (and vice-versa);~~
  - From one RTGS DCA to another RTGS DCA within the same Liquidity Transfer Group, or within the Whitelist if defined.
- ▶ Standing ~~order~~ Liquidity Transfer Orders, ~~Immediate~~ Liquidity Transfer orders and ~~rule~~ Event-based Liquidity Transfer orders are covered by this business process. The process will be initiated by either the RTGS account holder participant itself or by the AS on ~~the participants'~~ behalf of its settlement bank or by the CB on ~~the participants'~~ behalf of the RTGS account holder via sending the respective liquidity transfer order to RTGS. RTGS will process the liquidity transfer order. If the liquidity transfer order content is either invalid or would result in reference data checks to fail, it will be rejected and a rejection notification will be sent to the sender (depending on the channel, a proper notification with the error code(s) message in A2A mode or an error message on the screen in U2A mode). If the liquidity transfer order content is valid and certain reference data checks have been passed, RTGS will attempt to transfer (part of) the liquidity amount requested to the account referred to. Where the intra-RTGS liquidity transfer order (partly) succeeds, RTGS will transfer (part of) the amount requested and RTGS will send a (partly) transfer success notification to the ~~participants~~ Parties involved (where the ~~Party~~ participant opted for it).

### Process context:

- ▶ This generic process is valid for all types of intra-RTGS liquidity transfer orders.

### Pre-conditions:

- ▶ Both RTGS DCAs/sub accounts exist and are active
- ▶ Respective privileges have been granted to the sender

### Time constraints:

- ▶ The processing has to be executed within the opening hours of HVP (see section 3.4 on Availability of Services in the User Requirements Document for Common Components Shared Services), i.e. from the opening of RTGS the Service until the End of Day process starts, and outside the maintenance window.

### Expected results:

- ▶ Liquidity successfully transferred

**Triggers:**

- ▶ Liquidity transfer order (~~Immediate Liquidity Transfer Order~~ via A2A or U2A; or triggered by a ~~Standing order Liquidity Transfer Order~~ or an ~~ruleEvent-based Liquidity Transfer Order~~)

### 1.5.3 User Requirements

#### 1.5.3.1 PERFORM TECHNICAL VALIDATION

**Task Ref:** RTGS.TR.HVP.LIQT.010

Same as RTGS.TR.HVP.PAYT.010 (Perform Technical Validation).

#### 1.5.3.2 PERFORM BUSINESS ~~V~~VALIDATION

**Task Ref:** RTGS.TR.HVP.LIQT.020

The checks described below will be performed in one step in order to capture all the possible breaches; the checks therefore must not stop after the first breach occurring, if there could be further breaches in the subsequent checks. If the validation failed overall, a rejection notification with the appropriate ~~errorreason~~ codes for all breaches which occurred must be sent to the sender.

<b>Id</b>	RTGS.UR.HVP.LIQT.020.005
<b>Name</b>	Check for duplicate liquidity transfer <u>order</u>
<b>Description</b>	<p>RTGS shall carry out a duplicate submission control for incoming liquidity transfer <u>orders</u>. This control shall include the following fields:</p> <ul style="list-style-type: none"> <li>• Sender of the message;</li> <li>• Message Type;</li> <li>• Receiver;</li> <li>• Transaction Reference Number;</li> <li>• Related Reference;</li> <li>• Value Date; and</li> <li>• Amount.</li> </ul>

Id	RTGS.UR.HVP.LIQT.020.010
Name	Business Validation - Process specific authorisation checks
Description	<p>RTGS shall perform service specific authorisation checks. A liquidity transfer order from the <del>participant's</del> RTGS DCA <u>of the account holder</u> to the RTGS DCA <u>of the same account holder</u> dedicated to AS can be sent by the <u>RTGS account holder participant</u>, the AS, the AS on <del>the participant's</del> behalf <u>of its settlement bank, or</u> the respective CB acting on behalf its <u>RTGS account holder participants/AS or by any other authorised system user</u>.</p> <p>The liquidity transfer order can also be triggered by the scheduler in the case of <u>a standing orders</u>. The request for a liquidity retransfer from the RTGS DCA <u>of the account holder</u> dedicated to AS to the <del>participant's</del> RTGS DCA <u>of the same account holder</u> can be sent by the <u>RTGS account holder participant</u>, AS or the respective CB acting on behalf of its AS or triggered by a <u>Standing order</u> Liquidity Transfer Order set up by the <u>RTGS account holder participant</u>.</p>

Id	RTGS.UR.HVP.LIQT.020.025
Name	Business Validation - Liquidity Transfer Group
Description	<p>RTGS shall check whether both <u>RTGS DCAsaccounts</u> belong to <del>the same participant, or to participants within</del> the same Liquidity Transfer Group or not. If not, the order will be rejected.</p> <p>This check is not performed <u>if the debtor or the creditor is for a</u> CB Accounts.</p>

<b>Id</b>	RTGS.UR.HVP.LIQT.020.020
<b>Name</b>	Business Validation - Whitelist check
<b>Description</b>	<p>RTGS shall check if the sending account is on the Whitelist for liquidity transfer <u>orders</u> of the receiving account (if the receiving account has activated the Whitelist feature).</p> <p>RTGS shall check if the receiving account is on the Whitelist for liquidity transfer <u>orders</u> of the sending account (if the sending account has activated the Whitelist feature).</p> <p>If not, the order will be rejected.</p> <p>This check is not performed <del>for accounts belonging to the same participant, or where-on</del> the liquidity transfer <u>order that</u> involves one or more CB Accounts.</p>

Additionally, RTGS.UR.HVP.PAYT.020.050 (Business Validation - field and reference data checks) applies.

### 1.5.3.3 PERFORM ~~CG~~CHECKS ~~ONFOR~~ AVAILABLE ~~L~~LIQUIDITY

**Task Ref:** RTGS.TR.HVP.LIQT.030

<b>Id</b>	RTGS.UR.HVP.LIQT.030.010
<b>Name</b>	Check vs. amount to be transferred
<b>Description</b>	<p>RTGS shall check whether enough liquidity is available. Where there is a lack of liquidity <del>and the usual rules for</del> partial execution <del>is not allowed, the liquidity transfer order shall be rejected</del> apply (cf Table 6 "<u>Liquidity Transfer Types</u>" in <del>the section on Ancillary Systems</del>).</p>

1.5.3.4 CREATE ~~P~~P~~ARTIAL~~ ~~ORDER~~ORDER~~REQUEST~~ WITH AN AMOUNT WHICH IS COVERED

Task Ref: RTGS.TR.HVP.LIQT.040

<b>Id</b>	RTGS.UR.HVP.LIQT.040.010
<b>Name</b>	Partial <del>order</del> <u>order</u> <del>Request</del>
<b>Description</b>	If the liquidity transfer <del>order</del> is initiated either by an AS on <del>its participants'</del> behalf <del>of its settlement bank</del> or by an automatic trigger from the scheduler, RTGS shall settle the liquidity transfer <del>order</del> partially. For several standing orders, where the sum of all standing orders for intra-RTGS liquidity transfers of the <del>RTGS account holderparticipant</del> to be settled at the same event, is larger than the available liquidity; RTGS shall reduce all respective standing orders in a pro-rata mode.

1.5.3.5 UPDATE ~~C~~C~~CASH~~ ~~B~~B~~BALANCES~~

Task Reference RTGS.TR.HVP.LIQT.050

<b>Id</b>	RTGS.UR.HVP.LIQT.050.010
<b>Name</b>	Update Cash Balances
<b>Description</b>	RTGS shall book the liquidity transfer <del>order</del> finally and irrevocably on the two RTGS accounts <del>and shall update the defined value</del> . RTGS shall send a (partly) success notification to the sending <del>P</del> <u>P</u> party and to the <del>holderowner</del> of the debited <del>RTGS</del> account.

~~1.5.3.6~~ ~~CHECK ON FLOOR/CEILING~~

~~Task Reference~~ ~~RTGS.TR.HVP.LIQT.060~~

<b>Id</b>	<del>RTGS.UR.HVP.LIQT.060.010</del>
<b>Name</b>	<del>Check on Floor/Ceiling</del>
<b>Description</b>	<del>Similar to RTGS.UR.HVP.PAYT.080.010</del>

## 1.6 PROCESS INTER-SERVICE LIQUIDITY TRANSFER ORDER FROM MCA TO DCA - RTGS PART

This process is the second part of the CLM ~~"Process "inter-service liquidity transfer orderLT between from MCA CLM and to DCA RTGS"~~ (see section 1.2 in the User Requirements Document for [Central Liquidity Management, business process CLM.BP.CLM.LTSEN](#)), the part within RTGS.

It is similar to the process described within CLM "Process inter-service liquidity transfer order from DCA to MCA" ([see section 1.3 in the User Requirements Document for Central Liquidity Management, business process CLM.BP.CLM.LTRCV](#)). For the sake of simplicity, only the specific rules are described here.

The Whitelist check (see RTGS.UR.HVP.LIQT.020.020) applies to both the sender and the receiver sides. For inter-service checks (same comment for the next two processes), it will be decided during the realisation phase whether they are both performed in the first step (in CLM), or only on the sender in the first step, and on the receiver in the second step.



## 1.7 PROCESS INTER-SERVICE LIQUIDITY TRANSFER ORDER FROM DCA TO MCA - RTGS PART

This process is the first part of the CLM "~~Process "inter-service liquidity transfer orderLT between from DCARTGS toand MCACLM"~~" (see section 1.3 in the User Requirements Document for Central Liquidity Management, business process CLM.BP.CLM.LTRCV), the part within RTGS.

It is similar to the process described within CLM "Process inter-service liquidity transfer order from MCA to DCA" (see section 1.2 in the User Requirements Document for Central Liquidity Management, business process CLM.BP.CLM.LTSEN). For the sake of simplicity, only the specific rules are described here.

The only specific rule is for liquidity transfer orders triggered by a lack of cash in CLM. The rule for Partial Settlement is different from the standard one defined in RTGS.UR.HVP.LIQT.040 (Partial order).

<b>Id</b>	RTGS.UR.HVP.LTRCV.040.010
<b>Name</b>	Partial <u>orderRequest</u>
<b>Description</b>	<del>In the case of Automated</del> liquidity transfer <u>orders</u> triggered by a lack of cash in CLM, <del>they</del> can be partially settled. <u>RTGS shall confirm to CLM the settled amount A and create a new automated intra-service liquidity transfer order for the remaining part. The new inter-service liquidity transfer order should be queued (it will be decided during the realisation phase whether this queuing is done within RTGS or through the involvement of CLM with a second LT with a specific flag to indicate that it should be queued).</u> In such a case, the processing will be similar to payment orders as described in the process "Payment Order Processing" (see section 1.2 in this User Requirements Document), considering that those <u>automated liquidity transfer ordersLT</u> are <u>with Highly Urgent priority</u> . The <u>respective liquidity transfer order shall be placed on top of the queue of will be common forall pending payment orders and queued</u> liquidity transfer <u>orders</u> .
<b>Id</b>	<u>RTGS.UR.HVP.LTRCV.040.020</u>
<b>Name</b>	<u>Replacement of pending liquidity transfer order</u>
<b>Description</b>	<u>In case CLM sends a new intra-service liquidity transfer order to RTGS that is triggered by a lack of cash on MCA, while there is already a pending liquidity transfer order in RTGS that is triggered by a lack of cash on the same MCA, then RTGS shall cancel the pending intra-service liquidity transfer order and queue the new intra-service liquidity transfer order with the same conditions.</u>

## 1.8 PROCESS LIQUIDITY TRANSFER ORDER BETWEEN TWO DCAs IN DIFFERENT SETTLEMENT SERVICES - RTGS PART

This process is the RTGS part of the CLM process "Process liquidity transfer order between two DCAs in different settlement services" [\(see section 1.5 in the User Requirements Document for Central Liquidity Management\)](#).

Within this process, RTGS could be either:

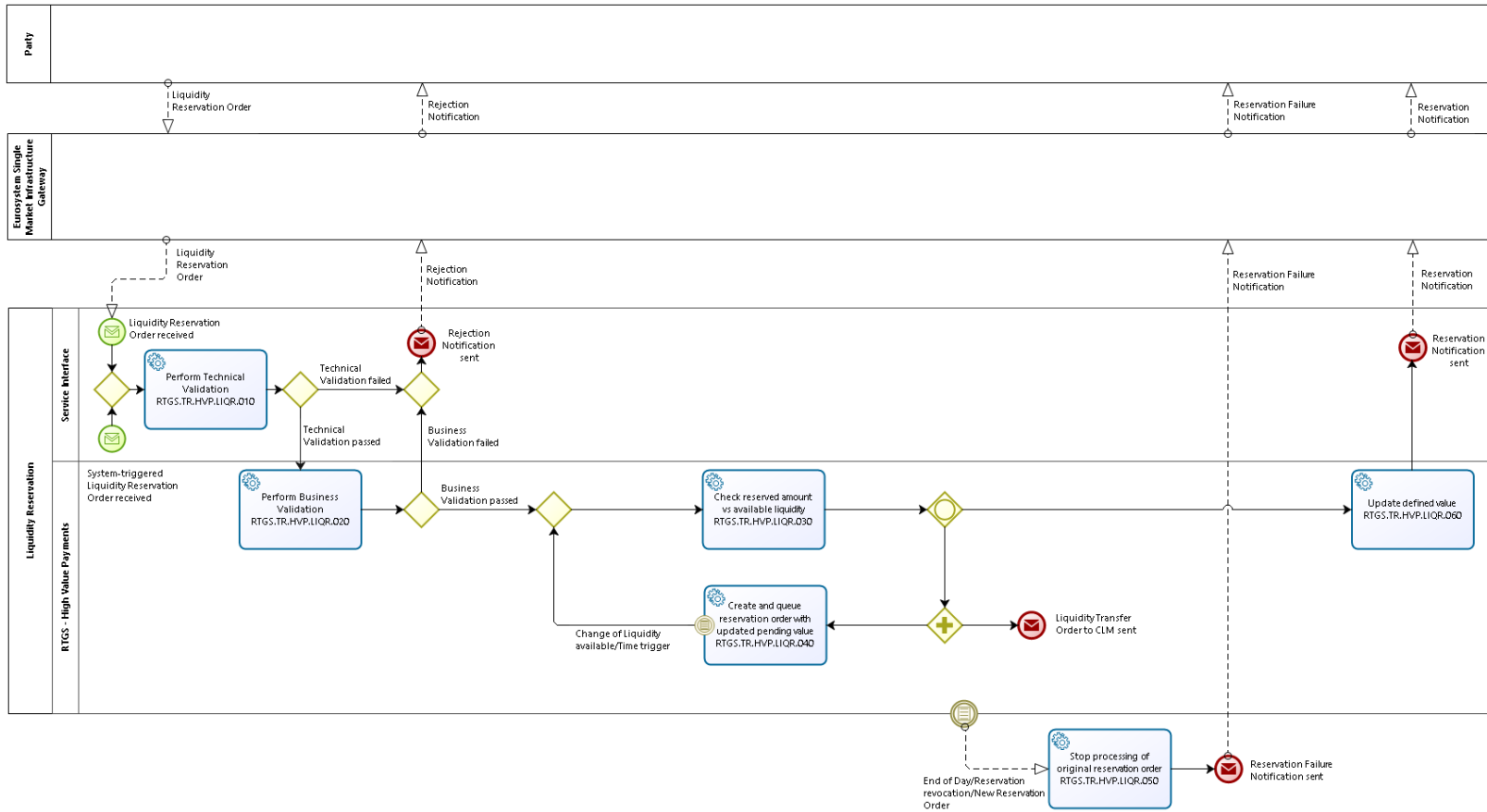
- the sending service, and the process is similar to "Process inter-service liquidity transfer order from DCA to MCA - RTGS part" [\(section 1.7 in this User Requirements Document\)above](#); or
- the receiving service, and the process is similar to "Process inter-service liquidity transfer order from MCA to DCA - RTGS part" [\(section 1.6 in this User Requirements Document\)above](#).

No specific rule has been identified for this process.

## 1.9 LIQUIDITY RESERVATION

Business Process Ref: RTGS.BP.HVP.LIQR

### 1.9.1 Business Process Model



Business Process Model 5: Liquidity Reservation

## 1.9.2 Process Overview

### Process goal:

- ▶ This business process describes the processing of a request to reserve liquidity. The initiation of this process takes place through the execution of a Start of Day standing order to reserve liquidity scheduled for at the Start of Day or through the receipt of a liquidity reservation order from the RTGS account holderowner or another entity that the RTGS account holderowner has authorised to act on its behalf.
- ▶ RTGS~~the Service~~ performs a technical validation of the liquidity reservation order and, if successful, it also performs a subsequent business validation of the liquidity reservation order. RTGS~~the Service~~ shall send a rejection notification with the appropriate error code(s) if either the technical validation or the business validation fails. If RTGS~~the Service~~ completes both the technical validation and the business validations without identifying any errors, then RTGS~~the Service~~ will attempt to reserve the requested amount on the account referred.
- ▶ Where the reservation operation (partly) succeeds, RTGS~~the Service~~ will reserve (part of) the amount requested and ~~the Service~~ will send a (partial) reservation success notice to the sender of the request and to the RTGS account holderowner<sup>3</sup>.
- ▶ The amount that cannot be reserved is called the Pending Value and is queued. Following any incoming credit, the Pending Value is updated if possible and the Defined Value (i.e. the reserved amount minus the related debits) of the related reservation is increased.

### Process context:

- ▶ This generic process is valid for all types of liquidity reservations.

### Pre-conditions:

- ▶ The RTGS DCA exists and is active
- ▶ Respective privileges have been granted to the sender

### Time constraints:

- ▶ The processing has to be executed within the opening hours of HVP (see section 3.4 on Availability of Services in the User Requirements Document for Common Components~~Shared Services~~), i.e. from the opening of RTGS~~the Service~~ until the End of Day process starts, and outside the maintenance window.

### Expected results:

- ▶ Liquidity successfully reserved

### Triggers:

---

<sup>3</sup> Where the sender of the reservation is the RTGS account holderowner, only one notification will be sent.

- ▶ A liquidity reservation order (via A2A or U2A)
- ▶ A Standing Order for Reservation

### 1.9.3 User Requirements

#### 1.9.3.1 PERFORM TECHNICAL VALIDATION

**Task Ref:** RTGS.TR.HVP.LIQR.010

Same as RTGS.TR.HVP.PAYT.010 (Perform Technical Validation).

#### 1.9.3.2 PERFORM BUSINESS VALIDATION

**Task Ref:** RTGS.TR.HVP.LIQR.020

<b>Id</b>	RTGS.UR.HVP.LIQR.020.010
<b>Name</b>	Business Validation - Process specific authorisation checks
<b>Description</b>	<p>RTGS shall ensure that the reservation request can be sent by the <u>sending participant, the participant-RTGS account holder</u><del>owning the account to be debited or</del>, the respective CB acting on behalf its credit institutions/customers, <u>or by any other authorised system user</u>. The request can also come from the scheduler in the case of a standing order.</p> <p>If the validation failed, a rejection notification with appropriate <u>error</u><del>reason</del> code(s) shall be sent to the sender.</p>

Additionally, RTGS.UR.HVP.PAYT.020.050 (Business Validation - field and reference data checks) and RTGS.UR.HVP.PAYT.020.005 (Check for duplicate payment order) apply.

#### 1.9.3.3 CHECK RESERVED AMOUNT VS AVAILABLE LIQUIDITY

**Task Ref:** RTGS.TR.HVP.LIQR.030

<b>Id</b>	RTGS.UR.HVP.LIQR.030.010
<b>Name</b>	Check <u>available liquidity</u> vs. amount to be pre-empted
<b>Description</b>	<p>RTGS shall check if the liquidity available covers the requested reservation amount. According to the check, RTGS shall create a partial reservation request with the amount which can be immediately covered. RTGS shall reserve this covered amount for the purpose indicated immediately.</p>

**Note:** The amount which is surpassing the available liquidity coverage is called Pending Value.

1.9.3.4 CREATE AND QUEUE RESERVATION ORDER WITH UPDATED PENDING VALUE

Task Ref: RTGS.TR.HVP.LIQR.040

<b>Id</b>	RTGS.UR.HVP.LIQR.040.010
<b>Name</b>	Create and queue reservation
<b>Description</b>	RTGS will queue the remaining (reduced) pending part and will process it in an event-oriented way. Whenever there is an increase in the available liquidity an asynchronous resolving process attempts to process the pending reservation order. Even if the increase of available liquidity is not sufficient for the complete processing, RTGS shall process the pending reservation partly (RTGS shall decrease the pending reservation and increase the defined value).

<b>Id</b>	RTGS.UR.HVP.LIQR.040.020
<b>Name</b>	Interventions on queued reservations
<b>Description</b>	RTGS shall allow for interventions on pending reservation requests. New reservation requests related to the <u>participant's RTGS DCA of the account holder</u> will either increase the pending amount, or decrease it. <u>When receiving a new reservation request, RTGS shall stop processing the pending reservation request for the respective reservation type and take into account only the latest request.</u>

**Note:** Due to the asynchronous processing incoming liquidity might be blocked and used by a parallel booking process before the attempt to increase the reservation has been performed.

1.9.3.5 STOP PROCESSING OF ORIGINAL RESERVATION ORDER

Task Ref: RTGS.TR.HVP.LIQR.050

<b>Id</b>	RTGS.UR.HVP.LIQR.050.010
<b>Name</b>	Stop Processing
<b>Description</b>	Upon receipt of <u>the</u> End of Day notification, <del>a reservation revocation</del> or a new reservation order, RTGS shall stop to process of the original reservation order.

1.9.3.6 UPDATE ~~D~~DEFINED ~~V~~VALUE

Task Ref: RTGS.TR.HVP.LIQR.060

<b>Id</b>	RTGS.UR.HVP.LIQR.060.010
<b>Name</b>	Update defined value
<b>Description</b>	RTGS shall book the reservations finally and irrevocably.

## 2 RTGS SERVICES FOR ANCILLARY SYSTEMS (AS)

### 2.1 OVERVIEW

#### 2.1.1 Context Diagram

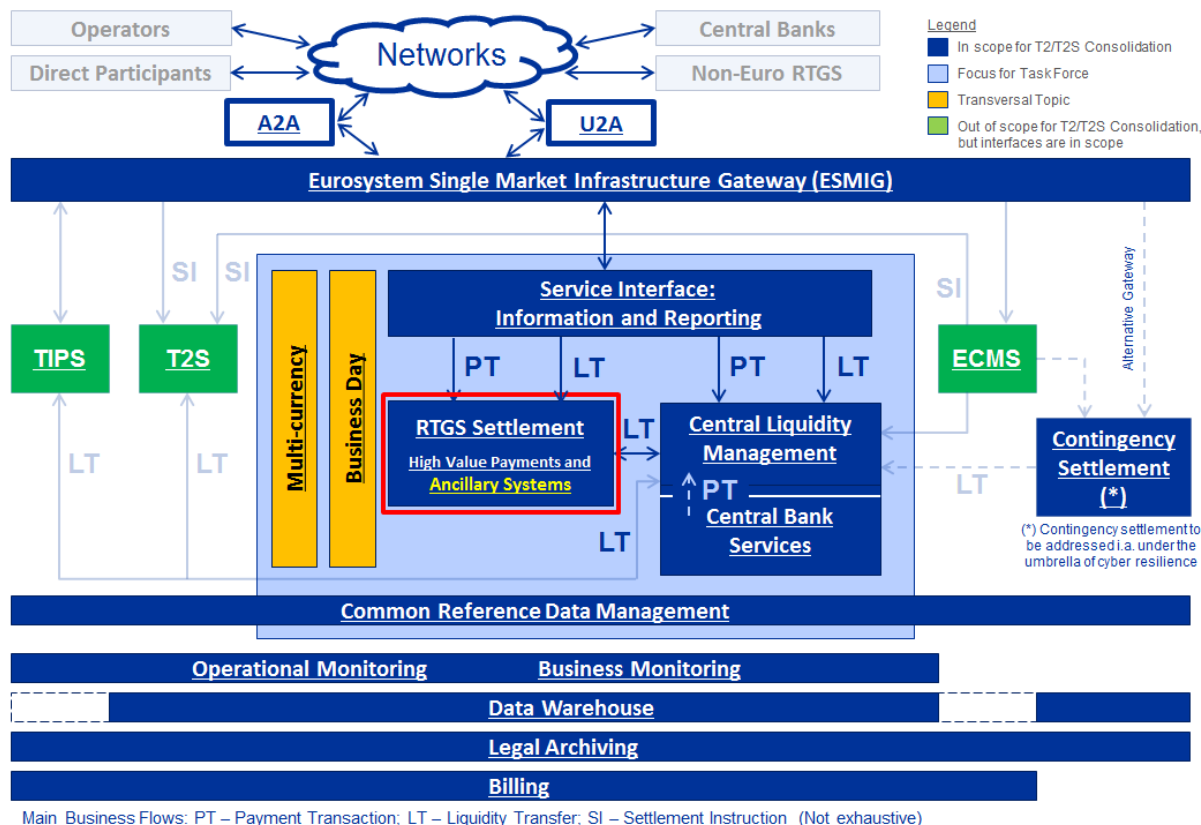


Figure 2: Context diagram for RTGS Services for Ancillary Systems

This section describes the RTGS services for Ancillary Systems (AS). It includes *Ancillary System Transfer Transaction Processing*. RTGS processes AS transfer transactions orders on the technical AS accounts of AS and the accounts of the AS settlement banks participants.

#### 2.1.2 Business Process

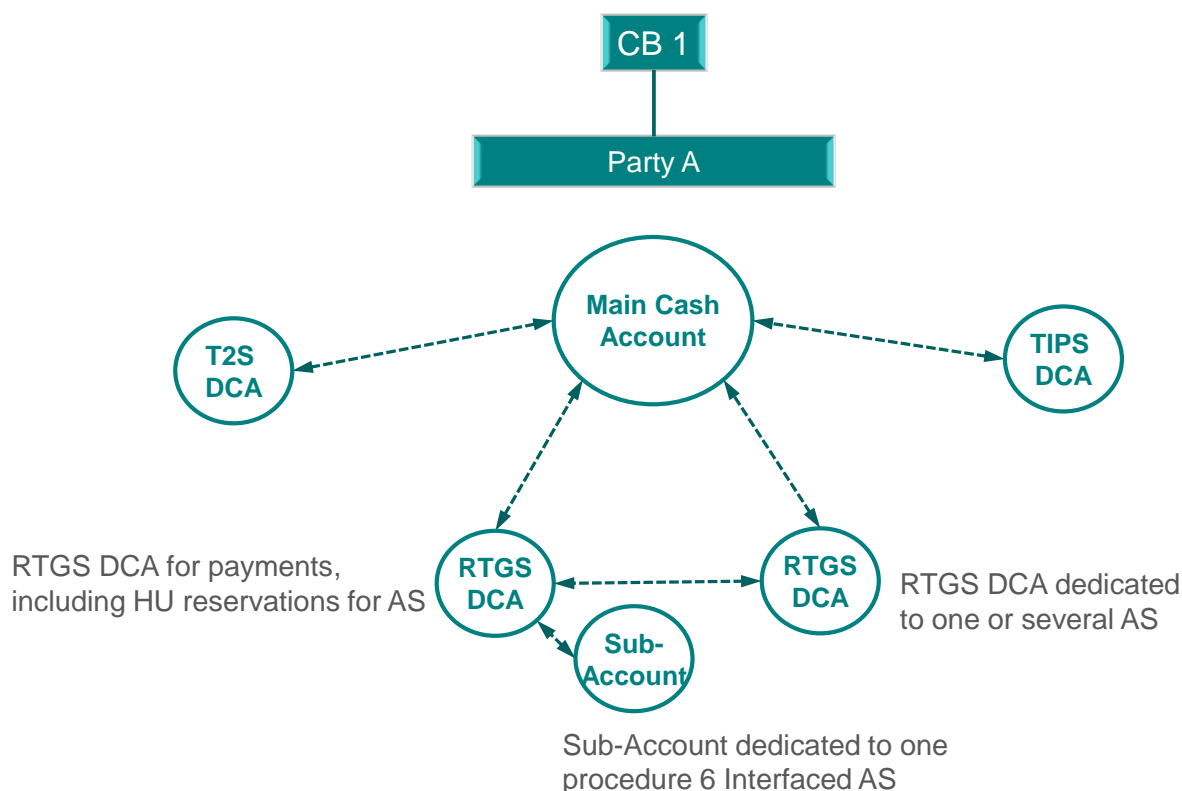
Business Process Name	BP Reference	Business Process Description
Ancillary System <u>Transfer Transaction Processing</u>	RTGS.BP.AS.AST	Settlement of an AS <u>transfer transaction</u> .

Table 2: Business Process for Ancillary Systems



### 2.1.3 Account types for Ancillary Systems **B**usiness

The following diagram depicts a generic account constellation for an AS **settlement bank participant** (Party A), e.g. a settlement bank with various types of settlement businesses and with accounts opened in the book of one Central Bank:



**Figure 3: Generic account constellation for an AS **settlement bank participant****

Besides DCAs for securities and instant payments settlement, it has an RTGS DCA for High Value Payments (with reserved amounts for **Highly-urgent AS related transfer transactions**) and two accounts for AS **transfer transactions**: one account (for AS procedure "Settlement on dedicated Liquidity Accounts (interfaced)"-) as a sub account of the RTGS DCA for High Value Payments, the second account (for other AS) as an RTGS DCA dedicated to one or several AS.

Account type	Ownership
RTGS DCA	Party A
Sub account	Party A
Guarantee Funds Account	Guarantor, CB or the AS
Technical Account	CB or the AS

**Table 3: Account Types and their ownership**

### 2.1.3.1 SEPARATION OF LIQUIDITY

Account type	Settlement Procedure	Shared among several AS?
RTGS DCA	<ul style="list-style-type: none"> <li>• direct settlement in the former TARGET2 PM account (e.g., Continuous Linked Settlement payment <a href="#">orders</a>);</li> <li>• "Real-Time Settlement";</li> <li>• "Bilateral Settlement";</li> <li>• "Standard Multilateral Settlement";</li> <li>• "Simultaneous Multilateral Settlement"; and</li> <li>• "Settlement on dedicated Liquidity Accounts (real-time)"<sup>4</sup></li> </ul>	Y
Sub account	"Settlement on dedicated Liquidity Accounts (interfaced)"	N

**Table 4: Separation of liquidity for different settlement procedures**

### 2.1.3.2 SOURCES OF LIQUIDITY

The following table provides a summary on the liquidity used for settlement and the respective accounts the liquidity stems from:

Liquidity source	Usage	Complementation	Segregation of liquidity
RTGS DCA	Usage of reservations for <del>H</del> U payment <a href="#">orders</a> .	Possibly complemented by other reservations/liquidity as outlined in <a href="#">section 1.9 on Liquidity Reservation in this User Requirements Document</a> <del>the reservations section on HVP settlement on the RTGS DCA.</del>	No further separation by AS procedure/AS possible.
RTGS DCA dedicated to AS	Usage of liquidity transferred from the MCA or the RTGS DCA to the RTGS DCA dedicated to AS.	By default, no automated complementation is set up. Complementation can be set up by the <a href="#">RTGS account holder participant</a> through <a href="#">Event-based standing order Liquidity Transfer Orders</a> .	Separation by AS procedure/AS possible.
Sub account	Usage of liquidity transferred from the RTGS DCA to the sub account.	By default, no automated complementation is set up. Complementation can be set up by the <a href="#">RTGS account holder participant</a> through <a href="#">Event-based standing order Liquidity Transfer Orders</a> .	Separation by AS using procedure 6 Interfaced mandatory.

<sup>4</sup> Liquidity for "Settlement on dedicated Liquidity Accounts (real-time)" can be transferred from the RTGS DCA to a technical account either held by the AS or the CB for prefunding purposes.

Liquidity source	Usage	Complementation	Segregation of liquidity
Guarantee Funds	Furthermore, a guarantee funds mechanism can be used for multilateral settlement procedures.	-	-

Table 5: Liquidity usage for AS settlement

#### 2.1.4 Liquidity Transfer Types for Ancillary System **B**usiness

In general, the following types of liquidity transfer orders are foreseen:

Liquidity Transfer Type	Initiator	Settlement	Amount
Immediate liquidity transfer	AS <u>settlement bank participant</u>	Only fully settable, if possible	Given in <u>Liquidity transfer order</u>
	AS (on behalf)	Partially settable, if necessary	Given in <u>Liquidity transfer order</u>
	CB (on behalf)	Only fully settable, if possible	Given in <u>liquidity transfer order</u>
Standing <u>order Liquidity transfer order</u>	AS <u>settlement bank participant</u>	Partially settable, if necessary	Given in <u>standing order liquidity transfer order</u>

Table 6: Liquidity Transfer Types

## 2.1.5 Ancillary System Settlement Procedures

The following former TARGET2 settlement procedures will be supported by ~~RTGS~~the service:

Procedure	Former ASI Procedure	Description
Direct settlement in the former TARGET2 PM account (e.g. Continuous Linked Settlement payment orders).	Participant interface	Usual real-time gross mode settlement of bilateral high value payments.
Real-time Settlement	2	Usual real-time gross mode settlement of bilateral high value payments.
Bilateral Settlement	3	Usual real-time gross mode settlement of bilateral high value payments.
Settlement on dedicated Liquidity Account (so-called technical account for procedure 6) (real-time)	6 Real-Time	Usual real-time gross mode settlement of bilateral high value payments.
Settlement on dedicated Liquidity Account (so-called sub accounts) (interfaced)	6 Interfaced	Usual real-time gross mode settlement of bilateral high value payments.
Standard Multilateral settlement	4	"Debits first", i.e. first all the debits are executed, then all the credits. If one of the <del>transfer</del> transactions fails, the others, probably already executed, are unwound.
Simultaneous multilateral settlement	5	"All or Nothing", i.e. debits and credits are simultaneously executed. If one of the <del>transfers</del> transactions fails, all the others are <del>n</del> ot executed neither.

**Table 7: Settlement Procedures**

Considering the migration to ISO20022, there will be no difference in RTGS between the ~~account holders'~~participant interface and AS interface. As a consequence, the functionality of the former procedures 2 and 3 will be provided using individual payment XML messages. ~~The settlement b~~Banks will be able to grant to ~~the~~ AS the right to debit the account of the bank for the AS settlement. ~~HU~~ priority will be used for AS ~~transaction~~transfers, and From Time / Information period / Settlement period can be defined (see ~~section 1.2 on Payment Order Processing~~HVP-URD / ~~Payment Order Processing~~ above). AS ~~transactions~~transfers can be sent in a file (see ~~section 1 on Eurosystem Single Market Infrastructure Gateway in the User Requirement Document for Common Components~~Shared Services / ESMIG).

For procedure 6 RT, one account being the so-called ~~T~~technical ~~A~~account for procedure 6 RT which will have an End of Day balance will be used per AS.

For procedure 6 Interfaced, the accounts to be used ~~by~~ for the settlement banks will be sub accounts and an AS can use a technical account.

The additional specific features for procedures 6 RT and Interfaced are described below.

For procedures 4 and 5, AS ~~transactions-transfers~~ will be sent by dedicated AS batch messages (ASTransferInitiation)files. ~~RTGS~~The Service will manage the links as formerly in TARGET2 ("Debits first" or "all or nothing"), according the parameters set for the AS in CRDM (which procedure is used, see section 9 on Business Data Definition in the User Requirements Document for Common Components). Information and settlement periods will be provided as they were formerly in TARGET2 as well, including the (optional) activation of the guarantee mechanism where there is a failure at the end of the settlement period.

### 2.1.5.1 SETTLEMENT ON DEDICATED LIQUIDITY ACCOUNTS (INTERFACED)

The features listed below ensure that the TARGET2 procedure known as "Settlement on dedicated Liquidity Accounts (interfaced)" can be almost fully mapped to ~~the consolidated~~ RTGS ~~service~~:

Feature	Mapping
Dedicated Liquidity	Liquidity on sub account (one sub account per AS)
Start of procedure / End of procedure <sup>5</sup>	Regular liquidity transfer <del>orders</del> (e.g. from RTGS DCA to sub account) at these business events can be set up through standing orders.
Blocking/control of liquidity by the AS	Whenever the AS using this interfaced procedure starts a cycle, the liquidity on the sub account involved will be controlled/blocked by the AS. The control is given back to the <del>settlement bank</del> <del>participant</del> through the end of cycle, meaning that liquidity increase on the sub account is possible between two cycles.
Liquidity increase during cycle initiated by the <del>settlement bank</del> <del>participant</del>	Always possible, either through an <del>immediate</del> liquidity transfer <del>order</del> or a payment <del>order</del> <sup>6</sup> .
Increase of <del>l</del> iquidity during cycle through Auto-collateralisation/redemption and coupon payments	Will not be supported anymore.

**Table 8: Features for "Settlement on dedicated Liquidity Accounts (interfaced)"**

### 2.1.5.2 SETTLEMENT ON DEDICATED LIQUIDITY ACCOUNTS (REAL-TIME)

In addition to the features described for "Settlement on dedicated Liquidity Accounts (interfaced)", the features listed below ensure that the TARGET2 ~~AS~~ procedure known as "Settlement on dedicated Liquidity Accounts (real-time)" can be almost fully mapped to ~~the consolidated~~ RTGS ~~service~~:

Feature	Proposal for mapping
<b>Cross-AS settlement</b>	Can be realised as <del>immediate</del> liquidity transfer <del>orders</del> between two different <del>AS</del> technical <del>AS</del> -accounts owned by ACHs. The Whitelist functionality ensures that only authorised ACHs can send Cross-AS <del>liquidity transfer orders</del> <del>payments</del> to a specific account.

**Table 9: Features for "Settlement on dedicated Liquidity Accounts (real-time)"**

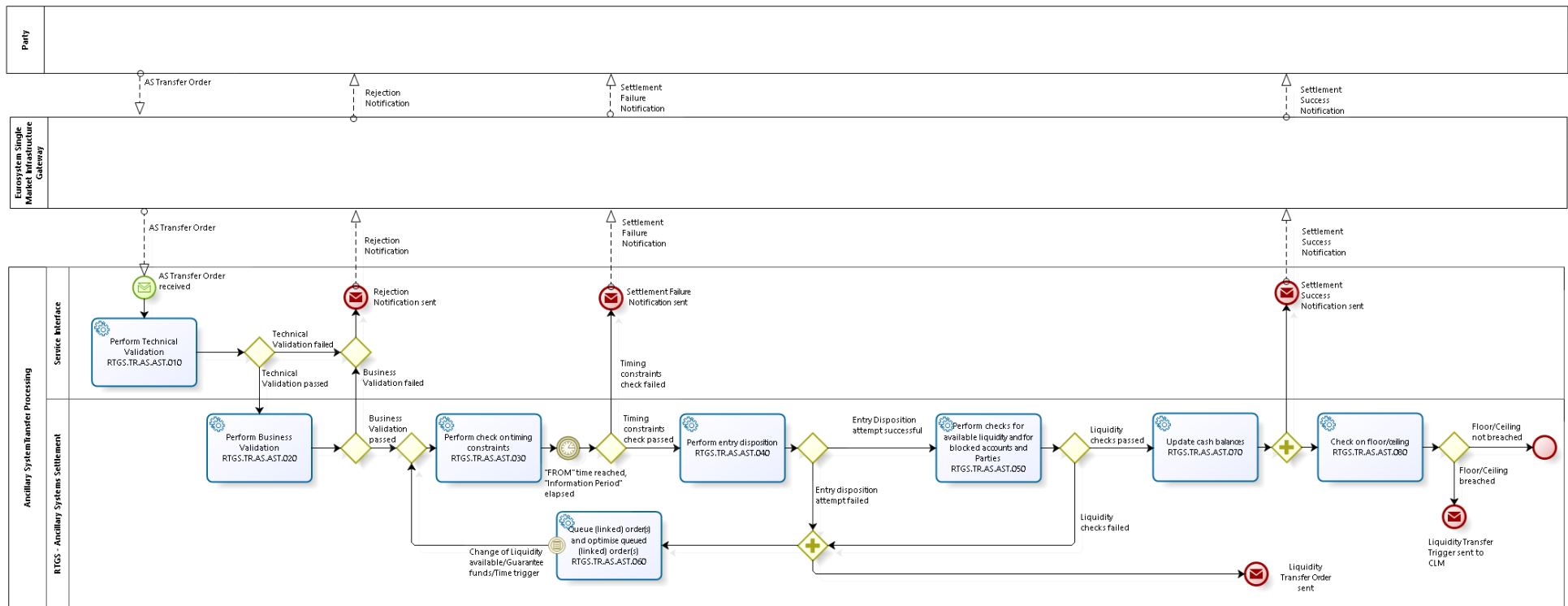
<sup>5</sup> It will be decided during the realisation phase whether one single procedure will be defined (~~no distinction between Night-Time and Day-Time~~) or two procedures as formerly in TARGET2, and whether they will be triggered by the system or by the AS.

<sup>6</sup> Further details regarding which messages are used and when exactly the respective liquidity increase is booked, will be provided in the UDFS.

## 2.2 ANCILLARY SYSTEM TRANSFER TRANSACTION PROCESSING

Business Process Ref: RTGS.BP.AS.AST

### 2.2.1 Business Process Model



Business Process Model 6: Ancillary System Transfer Transaction Processing

## 2.2.2 Process Overview

### Process goal:

- ▶ The Ancillary System ~~Transfer Transaction~~ Processing is similar to the High Value Payments processing, meaning that the processing of AS ~~transfer order transactions~~ has many similarities with the processing of HVP payment ~~order~~s, except the specificities described below.
- ▶ Specificities:
  - The process will be initiated by the Ancillary System participating in ~~RTGS the service~~, its ~~settlement banks participants~~ or the CB acting on behalf via sending of the respective request message to ~~RTGS the service~~;
  - The consideration of possible links between different AS ~~transaction transfer~~ orders sent in one "batch";
  - The usage of guarantee funds.
  - The information period.
  - The settlement period.
  - The common monitoring of different AS ~~transfer transaction~~ orders sent in one "batch".

### Process context:

- ▶ This generic process is valid for all types of Ancillary Systems ~~s transfers Transactions~~.

### Pre-conditions:

- ▶ The RTGS DCAs/sub accounts exist
- ▶ Respective privileges have been granted to the sender

### Time constraints:

- ▶ The processing has to be executed within the opening hours of AS ~~functionality~~ (see section 3.4 on Availability of ~~Ss~~services in the User Requirements Document for ~~Common Components Shared Services~~), i.e. from the opening of ~~AS functionality the Service~~ until the End of Day process starts, and outside the maintenance window.

### Expected results:

RTGS shall either

- ▶ Settle the AS ~~transfer order transaction~~ or
- ▶ Queue the AS ~~transfer order transaction~~ or
- ▶ Reject (if validation fails) / Cancel the AS ~~transfer order transaction~~ or
- ▶ Send a failure notification for
  - the Reject Time reached or



- the not settled AS transfer order transaction (at the End of Day rejection/revocation, since no failure notification are sent after each unsuccessful settlement attempt) -or

▶ Send an optional (according to subscription) settlement success notification.

**Triggers:**

- ▶ This process is triggered by a valid request from the Ancillary System/settlement bankparticipant/Central Bank

### 2.2.3 User Requirements

TransferRequest messages from the AS can be sent in "batch" mode, i.e. through files or batch messages, meaning that:

- for multilateral settlement procedures 4 and 5, the settlement should not break the links ("Debits first" or "all or nothing")
- for monitoring purposes, for all procedures 3 to 6, it should be possible to have a complete view on the status of all the payment orders in the file/batch message.

#### 2.2.3.1 PERFORM TECHNICAL VALIDATION

**Task Ref: RTGS.TR.AS.AST.010**

Same as RTGS.TR.HVP.PAYT.010 (Perform Technical Validation).

#### 2.2.3.2 PERFORM BUSINESS VALIDATION

**Task Ref: RTGS.TR.AS.AST.020**

<b>Id</b>	RTGS.UR.AS.AST.020.010
<b>Name</b>	Business Validation - Process specific authorisation checks
<b>Description</b>	<p>RTGS shall check if the Ancillary System is, indeed, authorised to debit/credit the settlement bank according to a list of settlement banks per Ancillary System.</p> <p>If the validation failed, rejection notifications with appropriate <u>errorreason</u> code(s) must be sent to the Ancillary System.</p>

Additionally, **RTGS.TR.HVP.PAYT.020** applies.

2.2.3.3 PERFORM ~~C~~CHECK ON TIMING ~~C~~ONSTRAINTS

Task Ref: RTGS.TR.AS.AST.030

Similar to RTGS.TR.HVP.PAYT.030 ([Perform check on timing constraints](#)) with the following additional requirements:

<b>Id</b>	RTGS.UR.AS.AST.030.010
<b>Name</b>	Settlement period
<b>Description</b>	<p>RTGS shall consider the following timing constraints with respect to settlement: The "<del>s</del>Settlement <del>p</del>Period" is a time period set by the sender.</p> <p>An AS <del>transfer order</del>transaction can only be submitted to settlement if its "<del>s</del>Settlement <del>P</del>period", if indicated, has not yet elapsed. Otherwise, it will be rejected.</p>

<b>Id</b>	RTGS.UR.AS.AST.030.020
<b>Name</b>	Information period
<b>Description</b>	<p>RTGS shall consider the following timing constraints with respect to settlement: The "<del>i</del>Information <del>p</del>Period" is a time period set by the sender.</p> <p>An AS <del>transfer order</del>transaction can only be submitted to settlement if its "<del>i</del>Information <del>P</del>period", if indicated, has already elapsed. If no "<del>i</del>Information <del>P</del>period" is indicated, no restriction applies in that respect. At the start of the information period, the system will be informing the settlement banks about the upcoming settlement via U2A broadcast.</p>

2.2.3.4 PERFORM ~~E~~ENTRY ~~D~~ISPOSITION

Task Ref: RTGS.TR.AS.AST.040

Similar to RTGS.TR.HVP.PAYT.040 ([Perform entry disposition](#)).

The main difference stems from the fact that single AS ~~transfer order~~transactions will be of ~~Highly U~~rgent priority by default. That means that the entry disposition follows the same pattern for each single AS ~~transfer order~~transaction. Either they are settled immediately or they are allocated to the ~~HU~~ queue. For ~~files~~batch messages of ~~AS transfer order~~transactions, the links have to be respected in the entry disposition. As for reservations, there will be a special reservation for AS ~~transfer orders~~transactions/~~HU~~ payment ~~order~~s in place.

2.2.3.5 PERFORM CHECKS FOR AVAILABLE LIQUIDITY AND FOR BLOCKED ACCOUNTS AND PARTIES INTRADAY RESTRICTIONS

Task Ref: RTGS.TR.AS.AST.050

Blocked accounts validation: see user requirement RTGS.UR.HVP.PAYT.050.010

~~and~~ Blocked ~~P~~parties validation: see user requirement ~~Same as~~ RTGS.UR.~~HVP~~RTGS.PAYT.050.0120 ~~and 020~~

Limit check: as all AS transfer order~~transactions~~ are of ~~highly~~ urgent priority, there is no check against bilateral or multilateral Limits.

Balance checks for ~~highly~~ urgent payment orders: ~~s~~similar to RTGS.~~UR~~TR.HVP.PAYT.050.040

<b>Id</b>	RTGS.UR.AS.AST.050.010
<b>Name</b>	Blocking for "Settlement on dedicated Liquidity Accounts (interfaced)"
<b>Description</b>	RTGS shall respect that during the settlement process of settlement procedure "Settlement on dedicated Liquidity Accounts (interfaced)" the sub account balance is exclusively reserved for the AS settlement in the case of a running cycle.

<b>Id</b>	RTGS.UR.AS.AST.050.020
<b>Name</b>	Balance check - First Step
<b>Description</b>	RTGS shall consider linkage constraints due to multilateral settlement.  For linked <u>AS transfer order</u> <del>transactions</del> , the check has to be successful for all linked <u>AS transfer order</u> <del>transactions</del> involved (possibly at different points in time for the standard multilateral settlement).

<b>Id</b>	RTGS.UR.AS.AST.050.030
<b>Name</b>	Balance check failure - Handling without guarantee funds
<b>Description</b>	If <u>balance check</u> <del>Provision Check III</del> fails for AS <u>transfer order</u> <del>transactions</del> , and no guarantee funds mechanism has been envisaged, RTGS shall queue order(s) until the end of the settlement period or End of Day, respectively.

<b>Id</b>	RTGS.UR.AS.AST.050.040
<b>Name</b>	Balance check failure - Handling with guarantee funds
<b>Description</b>	<p>RTGS shall consider usage of guarantee funds with respect to settlement:</p> <p>If the first balance check fails, where a guarantee mechanism has been envisaged for linked <del>AS transfer order</del>transactions, a guarantee fund usage request is sent out to the <del>P</del>party controlling the guarantee account when the intended settlement period has elapsed. The request can either be accepted or rejected by the AS.</p> <p>If it was accepted, the guarantee funds will be considered in a second step upon. That means, the accounts to be debited which lacked liquidity in the first step, will be replaced by the guarantee account.</p> <p>If then still one of the various linked <del>AS transfer order</del>transactions cannot be settled, the process for revoking the <del>batch message</del>file and unwinding <del>of linked AS transfer orders</del> (see <del>next</del> RTGS.UR.AS.AST.070.010) should be started. The system will <del>be informing</del> the settlement banks via U2A broadcast.</p>

2.2.3.6 QUEUE (LINKED) ~~Q~~ORDER(S) AND OPTIMISE QUEUED (LINKED) ~~Q~~ORDER(S)

**Task Ref:** RTGS.TR.AS.AST.060

Similar to RTGS.TR.HVP.PAYT.060 (Queue payment order and optimise queued payment orders). The main difference is the optimisation for linked ~~AS transfer order~~transaction described below.

<b>Id</b>	RTGS.UR.AS.AST.060.010
<b>Name</b>	Optimisation for linked <del>AS transfer order</del> transactions
<b>Description</b>	<p>RTGS shall consider linkage constraints within optimisation and due to multilateral settlement.</p> <p>For linked <del>AS transfer order</del>transactions, the optimisation has to ensure that all linked <del>AS transfer order</del>transactions are processed such that the links are not broken.</p>

2.2.3.7 UPDATE CCASH BBALANCES

Task Ref: RTGS.TR.AS.AST.070

Similar to RTGS.TR.HVP.PAYT.070 (Update cash balances and limit) with one additional requirement.;

Id	RTGS.UR.AS.AST.070.010
Name	Unwinding for linked <u>AS transfer order transactions</u> - standard multilateral settlement
Description	<p>RTGS shall consider linkage constraints due to multilateral settlement in the case of unsuccessful settlement attempts.</p> <p>For the standard multilateral settlement, if one of the debits fails, the debits already executed need to be unwound when the <u>batch messagefile</u> is revoked. The <u>batch messagefile</u> shall be revoked when, after the settlement period, not all debits have been settled or if the AS or Central Bank on behalf revokes the <u>batch messagefile</u> or at the End of Day, if a settlement period has not been defined.</p>

2.2.3.8 CHECK ON FFLOOR/CCEILING

Task Ref: RTGS.TR.AS.AST.080

Same as RTGS.TR.HVP.PAYT.080 (Check balance floor and ceiling).

### 3 NON-FUNCTIONAL REQUIREMENTS FOR SETTLEMENT OF HIGH VALUE PAYMENTS SETTLEMENT AND ~~RTGS SERVICES FOR ANCILLARY SYSTEM TRANSFERSS~~

#### 3.1 AVAILABILITY

<b>Id</b>	RTGS.UR.NFR.ALL.030
<b>Name</b>	Availability
<b>Description</b>	Availability, calculated on a quarterly basis, shall be at least 99.7%.

RTGS may be subject to incidents or failures, which may cause a temporary and unforeseen interruption of the availability of the component service. Regardless of the total number of such unplanned interruptions, the overall availability calculated on a quarterly basis shall be at least 99.7%. Payment orders not settled in the “entry disposition” are excluded. Warehoused payment orders are excluded. Payment orders stemming from batch procedures of AS are excluded. Start of the measurement period will be adapted to neutralise the “morning queuing effect”.

<b>Id</b>	RTGS.UR.NFR.ALL.040
<b>Name</b>	Planned Maintenance window
<b>Description</b>	RTGS will provide a maintenance window.

On component TARGET2 opening days a maintenance window of at max two hours is foreseen for any kind of technical or functional maintenance.

#### 3.2 DISASTER RECOVERY

<b>Id</b>	RTGS.UR.NFR.ALL.050
<b>Name</b>	Recovery Point Objective
<b>Description</b>	RTGS shall ensure a recovery point objective value of zero minutes in the event of site failures. Where there is a loss of a complete region the recovery point objective (RPO) shall not exceed two minutes.

The RPO is a point of consistency to which a user wants to recover or restart the service. It is measured as the amount of time between the moment when the point of consistency was created and the moment when the failure occurred.

RTGS ensures synchronous point of consistency creations and, as a consequence, no data loss in the event of failures, unless the component Service cannot be restarted in the same region and a

failover to the backup region has to be conducted. In this case a data loss of two minutes will be tolerated.

<b>Id</b>	RTGS.UR.NFR.ALL.060
<b>Name</b>	Recovery Time Objective
<b>Description</b>	RTGS shall ensure a recovery time objective value of one hour in the event of site failures. Where there is a loss of a complete region the recovery time objective (RTO) shall not exceed two hours.

The RTO is the maximum amount of time required for recovery or restart of the ~~Service~~ to a specified point of consistency. In the event of a site failure, RTGS shall ensure maximum time of unavailability of one hour starting from the time when the decision to restart the ~~componentService~~ is made up to the time the ~~componentService~~ is restored. In the event of a major failure or a regional disaster, RTGS shall ensure maximum time of unavailability of two hours starting from the time when the decision to restart the ~~componentService~~ is made up to the time the ~~componentService~~ is restored.

### 3.3 PERFORMANCE REQUIREMENTS

<b>Id</b>	RTGS.UR.NFR.ALL.070
<b>Name</b>	Response Time Goals
<b>Description</b>	RTGS shall process 95% of the transactions within 2 minutes and 100% of the transactions within 5 minutes.

<b>Id</b>	RTGS.UR.NFR.ALL.080
<b>Name</b>	Peak Workload per second
<b>Description</b>	RTGS shall be able to process 50 transactions per second, enduring the peak load for at least one hour.

<b>Id</b>	RTGS.UR.NFR.ALL.090
<b>Name</b>	Upward Scalability
<b>Description</b>	<p>RTGS shall be scalable to handle higher throughputs in order to cope with e.g. short-term market shocks and foreseeable increases:</p> <ul style="list-style-type: none"> <li>• A 20% higher workload within 15 minutes and</li> <li>• A double of the workload (but up to 200 transactions per second) within 365 days.</li> </ul>

In the course of the [component/service](#)'s lifecycle the number of transactions to be handled might change due to market changes or adapted business behaviour. To be able to cope with this, RTGS shall be able to handle higher throughputs.

### 3.4 INFORMATION SECURITY AND CYBER RESILIENCE

<b>Id</b>	RTGS.UR.NFR.ALL.100
<b>Name</b>	Information Security
<b>Description</b>	<p>RTGS shall be compliant with the Information Security Requirements and Controls.</p> <p><b>Note:</b> For details see the Market Infrastructure Security Requirements and Controls document.</p> <p>All requirements must be fulfilled in a central integrated way.</p>

<b>Id</b>	RTGS.UR.NFR.ALL.110
<b>Name</b>	Cyber Resilience
<b>Description</b>	<p>RTGS shall be compliant with Cyber Resilience Requirements.</p> <p><b>Note:</b> For details see Market Infrastructure Cyber Resilience Requirements document.</p> <p>All requirements must be fulfilled in a central integrated way.</p>



## 4 USER INTERACTION

The objective of this section is to provide the user requirements related to user interactions covering the usage of U2A or A2A mode. A Graphical User Interface (GUI) shall be provided for ~~component~~~~each service~~, offering functionality to access information in U2A mode. The GUIs shall be harmonised to the best possible extent.

These requirements do not imply any particular consideration with regard to design and the implementation of the actual screens.

### 4.1 GENERAL USER REQUIREMENTS FOR USER INTERACTION

#### 4.1.1 Query

<b>Id</b>	RTGS.UR.RTGS.UI.ALL.010
<b>Name</b>	Query Audit Trail
<b>Description</b>	<p>All <del>Services-components</del> shall provide the functionality to query through U2A and A2A interfaces the modified data at the attribute level, the user performing the change and the timestamp of the change made.</p> <p>It should be visible which attributes were changed, together with the new values.</p> <p>The query shall return relevant business attributes of the Audit Trail.</p>

<b>Id</b>	RTGS.UR.RTGS.UI.ALL.020
<b>Name</b>	Query System time
<b>Description</b>	<p>All <del>Services-components</del> shall provide the functionality to query system time to align the time of a connected application through an A2A interface.</p> <p>The query shall return the System time.</p>

#### 4.1.2 Action

<b>Id</b>	RTGS.UR.RTGS.UI.ALL.030
<b>Name</b>	Amend/Revoke Task(s)
<b>Description</b>	<p>All <del>Services-components</del> shall provide the functionality to amend or revoke task(s) through the U2A interfaces.</p>

<b>Id</b>	RTGS.UR.RTGS.UI.ALL.040
<b>Name</b>	Act on behalf
<b>Description</b>	All <del>Services-components</del> shall provide the functionality to act on behalf through U2A and A2A interfaces for: <ul style="list-style-type: none"> <li>• Central Banks, to act on behalf of any Party belonging to their banking community; and</li> <li>• The TARGET Service Desk, to act on behalf of any Party.</li> </ul>

<b>Id</b>	RTGS.UR.RTGS.UI.ALL.050
<b>Name</b>	Access rights
<b>Description</b>	All <del>Services-components</del> shall ensure that a user can only access functionality and data that is allowed by the access rights granted to the user through the Roles associated with the user.

<b>Id</b>	RTGS.UR.RTGS.UI.ALL.060
<b>Name</b>	Four-eyes (confirm, revoke, amend)
<b>Description</b>	All <del>Services-components</del> shall provide the functionality to use the four-eyes approval process through U2A interface, allowing the authoriser to confirm, revoke or amend.

## 4.2 USER INTERACTION FOR FUTURE RTGS

### 4.2.1 Query

The User Interaction section covers intraday queries. For intraday queries, the Value Date would by default be the current business day.

For U2A queries, the ~~P~~party BIC and the account number would be deduced from the data scope of the user. The data scope is described in ~~section 4.1 on the~~ [User RightsRoles](#) and Access ~~UR-/~~ Overview [in the User Requirements Document for Common Components](#).

The extended list of the selection criteria and the output of the queries shall be defined in the UDFS.

All described queries in this section shall be provided in U2A and A2A mode unless otherwise stated.

<b>Id</b>	RTGS.UR.RTGS.UI.010
<b>Name</b>	Query <del>cash transfers</del> payments/files
<b>Description</b>	RTGS shall provide the functionality to query the status and details of all <del>cash</del>

~~transferspayments~~ on any account. The user can query within his data scope, which is determined by the Party BIC and the DCA number (Party BICs and DCA numbers in case of a Central Bank as a user). In addition the query shall allow the user to specify any combination of the following optional selection criteria.

The following payment types can be queried:

- Payments
- Warehoused payments
- Liquidity transfers
- AS ~~Transfers~~Transactions

Optional selection criteria:

- Entry Time (from-to)
- Settlement Time (from-to)
- Payment type
- Priority
- Debit/Credit
- Sender BIC
- Receiver BIC
- Specific Amount or amount range (from - to)
- File Reference
- Status
- Either Party Name or Party BIC
- Transaction reference
- Counterpart country
- Currency code
- DCA number

The query shall return all business attributes of the ~~cash transferspayments~~ including the processing status. When a file is queried, the status of the file would be also provided with the remaining business attributes.

<b>Id</b>	RTGS.UR.RTGS.UI.020
<b>Name</b>	Query message
<b>Description</b>	RTGS shall provide the functionality to query any message in XML format. The user can query within his data scope, which is determined by the Party BIC and the DCA number (Party BICs and DCA numbers in case of a Central Bank as a user). In addition the query shall allow the user to specify any combination of the following optional selection criteria.

	<p><u>Optional selection criteria:</u></p> <ul style="list-style-type: none"> <li>• Entry Time (from-to)</li> <li>• Message type</li> <li>• Status</li> <li>• Amount</li> <li>• Inbound or outbound</li> <li>• Sender BIC</li> <li>• Receiver BIC</li> <li>• Either Party Name or Party BIC</li> <li>• Transaction reference</li> <li>• DCA number</li> </ul> <p>The query shall return the message in XML format, including the processing status.</p> <p>This query shall only be provided in U2A mode.</p>
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<b>Id</b>	RTGS.UR.RTGS.UI.030
<b>Name</b>	Query account balance
<b>Description</b>	<p>RTGS shall provide the functionality to query the balance on any account. The user can query within his data scope, which is determined by the Party BIC and the DCA number (Party BICs and DCA numbers in case of a Central Bank as a user). In addition the query shall allow the user to specify any combination of the following optional selection criteria. This query is also relevant to query liquidity on AS <span style="color: red;">L</span>level.</p> <p><u>Optional selection criteria:</u></p> <ul style="list-style-type: none"> <li>• DCA Number</li> <li>• Either Party BIC or Party Name</li> </ul> <p>The query shall return the current and projected account balance and all business attributes of the account(s).</p>

<b>Id</b>	RTGS.UR.RTGS.UI.040
<b>Name</b>	Query reservations
<b>Description</b>	<p>RTGS shall provide the functionality to query all reservations on any account. The user can query within his data scope, which is determined by the Party BIC and the DCA number (Party BICs and DCA numbers in case of a Central Bank as a user). In addition the query shall allow the user to specify any</p>

	<p>combination of the following optional selection criteria.</p> <p><u>Optional selection criteria:</u></p> <ul style="list-style-type: none"> <li>• DCA Number</li> <li>• Either Party BIC or Party Name</li> </ul> <p>The query shall return all business attributes of the reservations, including the defined value, which equals the reserved value minus all the debits, and the Pending Value where the original amount to be reserved was not entirely reserved</p>
--	---

<b>Id</b>	RTGS.UR.RTGS.UI.050
<b>Name</b>	Query Limits
<b>Description</b>	<p>RTGS shall provide the functionality to query all Limits (multilateral and bilateral Limit) on any account. The user can query within his data scope, which is determined by the Party BIC and the DCA number (Party BICs and DCA numbers in case of a Central Bank as a user). In addition the query shall allow the user to specify any combination of the following optional selection criteria.</p> <p><u>Optional selection criteria:</u></p> <ul style="list-style-type: none"> <li>• DCA Number</li> <li>• Either Party BIC or Party Name</li> </ul> <p>The query shall return all business attributes of the Limits.</p>

<b>Id</b>	RTGS UR.RTGS.UI.100
<b>Name</b>	Query Broadcast
<b>Description</b>	<p>All User Interaction relevant <u>components and</u> services shall provide the functionality to query detailed information on broadcasts through a U2A interface. Normal information provided in pull mode should be distinguished from alert broadcasts information provided in push mode.</p>

<b>Id</b>	RTGS.UR.RTGS.UI.110
<b>Name</b>	Query account statement
<b>Description</b>	RTGS shall provide the functionality to query on the account statement. The

user can query within his data scope, which is determined by the Party BIC and the DMCA number (Party BICs and DMCA numbers in case of a Central Bank as a user). In addition the query shall allow the user to specify any combination of the following optional selection criteria.

Optional selection criteria:

- DCA Number
- Either Party BIC or Party Name

The query shall return all business attributes of the account statement.

Note: More information about producing, sending and downloading a report can be found in section 5 on the Information and Reporting section of the User Requirements Document for Common Components Shared Services URD.

#### 4.2.2 Actions

<b>Id</b>	RTGS.UR.RTGS.UI.130
<b>Name</b>	Change order of payment <u>orders</u> in a queue
<b>Description</b>	RTGS shall provide the functionality to change the order of payment <u>orders</u> (including warehoused payment <u>orders</u> ) currently pending for settlement through U2A and A2A interface. The change should only be possible for payment <u>orders</u> not having reached a final status yet.

<b>Id</b>	RTGS.UR.RTGS.UI.135
<b>Name</b>	Create a payment <u>order</u>
<b>Description</b>	RTGS shall provide the functionality to create a payment <u>order</u> through U2A interface.  Note: The ability to enter payment <u>orders</u> would be subject to necessary rights, allowing an organisation to control the use of this feature.

<b>Id</b>	RTGS.UR.RTGS.UI.140
<b>Name</b>	<u>AmendModify</u> a payment <u>order</u>
<b>Description</b>	RTGS shall provide the functionality to <u>amendmodify</u> the priority and/or the execution time of a payment <u>order</u> (including warehoused payment <u>orders</u> )

	currently available in the system through U2A and A2A interface. The change should only be possible for payment <u>orders</u> not having reached a final status yet.
--	--

<b>Id</b>	RTGS.UR.RTGS.UI.150
<b>Name</b>	Cancel a payment <u>order</u>
<b>Description</b>	RTGS shall provide the functionality to <del>cancel</del> <del>revoke</del> a payment <u>order</u> (including warehoused payment <u>orders</u> ) currently available in the system through U2A and A2A interface. The cancellation should only be possible for payment <u>orders</u> not having reached a final status yet.

<b>Id</b>	RTGS.UR.RTGS.UI.160
<b>Name</b>	Revoke an AS <u>batch messagefile</u>
<b>Description</b>	RTGS shall provide the functionality to revoke an AS <u>batch messagefile</u> which has not reached a final status yet through U2A <del>and A2A</del> interface.

<b>Id</b>	RTGS.UR.RTGS.UI.180
<b>Name</b>	Create a liquidity transfer <u>order</u>
<b>Description</b>	RTGS shall provide a functionality to create a liquidity transfer <u>order</u> through U2A and A2A interface.

<b>Id</b>	RTGS.UR.RTGS.UI.190
<b>Name</b>	Create a back-up payment <u>order</u>
<b>Description</b>	RTGS shall provide a functionality to create a back-up payment <u>order</u> through U2A interface.  This action has to be activated by the CB on <u>RTGS account holder</u> <del>participant</del> level.

<b>Id</b>	RTGS.UR.RTGS.UI.200
<b>Name</b>	Create an immediate reservation order
<b>Description</b>	RTGS shall provide the functionality to create a reservation order through the U2A interface and the A2A interface.

<b>Id</b>	<del>RTGS.UR.RTGS.UI.210</del>
<b>Name</b>	<del>Amend an immediate reservation order</del>
<b>Description</b>	<del>RTGS shall provide the functionality to amend a reservation order through the U2A interface and the A2A interface.</del>

<b>Id</b>	<del>RTGS.UR.RTGS.UI.220</del>
<b>Name</b>	<del>Delete an immediate reservation order</del>
<b>Description</b>	<del>RTGS shall provide the functionality to delete a reservation order through the U2A interface and the A2A interface.</del>

<b>Id</b>	<u>RTGS.UR.RTGS.UI.230</u>
<b>Name</b>	<u>Amend the defined Limit value with an immediate effect</u>
<b>Description</b>	<u>RTGS shall provide the functionality to amend the defined Limit value, if previously set, with immediate effect through the U2A interface and the A2A interface. The change will be valid for the current business day only.</u>

The table below shows a summary of the above described queries and actions in U2A and A2A mode.

Functionality	Query/ Action	U2A	A2A
RTGS	Query <u>cash transferspayments/files</u>	x	x
RTGS	Query account balance	x	x
RTGS	Query reservation	x	x
RTGS	Query Limits	x	x
RTGS	Query message	x	
RTGS	Query Broadcast	x	



Functionality	Query/ Action	U2A	A2A
RTGS	Query account statement	X	X
RTGS	Change order of payment <u>orders</u> in a queue	X	X
<u>RTGS</u>	<u>Create a payment order</u>	<u>X</u>	
RTGS	<u>Create /Amend/Modify/Cancel a payment order</u>	X	X
RTGS	Revoke an AS <u>batch messagefile</u>	X	<del>X</del>
RTGS	Create a liquidity transfer <u>order</u>	X	X
RTGS	Create a back-up payment <u>order</u>	X	
RTGS	Create/ <del>Amend/Delete</del> an immediate reservation order	X	X
<u>RTGS</u>	<u>Amend the defined Limit value with an immediate effect</u>	<u>X</u>	<u>X</u>
Reference Data	Create/Amend/Delete a Standing Order for Limit <del>})</del>	X	X
Reference Data	Grant <u>a</u> Access rights to individual users	X	

**Table 100: Summary of queries and actions in U2A and A2A mode for ~~future RTGS services~~**

## 5 BUSINESS DATA DEFINITIONS

### 5.1 ENTITIES AND ATTRIBUTES

The following Entities are referred to within the User Requirements Document for Future RTGS but are defined in the User Requirements Document for Common Components~~Shared Services~~ as they are also referred to elsewhere:

- ▶ Party
- ▶ Party Name
- ▶ Limit
- ▶ Cash Account
- ▶ Payment
- ▶ Liquidity Transfer
- ▶ Standing Order
- ▶ Direct Debit Mandate
- ▶ Reservation
- ▶ Standing Order for Reservation
- ▶ Whitelist
- ▶ Currency
- ▶ Service
- ▶ User
- ▶ Role
- ▶ Privilege
- ▶ Access Rights

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