



General Information (Origin of Request) ☐ User Requirements (URD) ☑ Other User Functional or Technical Documentation (SYS)				
Request raised by: 4CB				
Request title: Enhancement of operational context	resilience in	multi-currency	Request ref. no: T2S 0648 SYS	
Request type: Common		Urgency: Normal		
1. Legal/business importance parameter: High		2. Market implementation efforts parameter: Low		
3. Operational/Technical risk parameter: Low		4. Financial impact parameter: No cost impact		
Requestor Category: 4CB		Status: Pending at Steering Level		

Reason for change and expected benefits/business motivation:

Due to the migration of the Danish market and the connection between T2S and the RTGS system of Danmarks Nationalbank (in addition to T2), it is required to amend the operational day during the real-time settlement cut-off period (RTS closure time: 16.00 – 18.00 hrs CET) in order to react more flexible and to have less dependencies between the different currencies.

During the testing campaign of a multi-currency scenario, it was identified that postponements or anticipations of currency dependent events of one currency, as stipulated in the UDFS 1.4.2 T2S schedule, could have an impact on events dedicated to other currencies, what in subsequence could lead to a delay of the next events (e.g. Cash sweep) of all currencies.

Therefore, the 4CB requested to define all currency dependent cut-off events separately for each currency instead of having the default configuration where one cut-off event is dedicated to all currencies. Accordingly, the costs of this CR will be borne by the 4CB.

This change of the configuration allows a flexibility of having a slightly different scheduling within the cut-off period, but with respect to the existing boundaries (Start of cut-off phase with delivery versus payment cut-off at 16:00 hrs CET and end of cut-off phase at 18:00 hrs CET with free of payment cut-off) and respecting the sequence, order and dependencies of the designed cut-off phase.

Furthermore the changes of this CR are valid for all currencies which intend to join T2S.

Description of requested showns

Description of requested change:

The description and configuration of the operational day for the cut-off phase has to be changed in that way that:

- All currency dependent cut-offs have to be configured for each currency instead of having the default value for all currencies (XXX) for all operating day types.
- Different cut-off times of currency dependent cut-offs are allowed under the following conditions:
 - There is a common start time of the cut-off period having all IDVPs (for all currencies) start at 16:00
 - The common end of the cut-off period at 18:00 has to be respected with the start of the Free of Payment cut-off. I.e. the last currency dependent cut-off event of a certain currency (Cash Sweep) has to start at 18:00 at the latest
 - The sequence and order of the cut-off events cannot be changed, meaning:
 - · No addition or removal of events
 - No change in the order of events
 - No change of dependencies between events

Since with the new configuration and having several IDVP cut-off events (even if scheduled at the same time), it is technically necessary to introduce a new (technical) event (e.g. "RTCL – Real Time Closure") to perform the system status change and to send out Return Business Day Information message (camt.019) status notification with status "RTMC" (real-time settlement closure) at the first occurrence of the IDVP event. In this way it is respected that T2S has only one system status.

Additionally for each IDVP T2S sends a status notification (camt.019) with status "RTMC" and sub status "IDVP-XXX" in which "XXX" represents the related currency for which the IDVP is triggered.

E.g. for IDVP-EUR, camt.019 contains status "RTMC" and sub status "IDVP-EUR", for IDVP-DKK, camt.019 contains status "RTMC" and sub status "IDVP-DKK".

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The different IDVPs can be identified by using of the currency field already present in the Settlement Day Screen.

The calculation of the congestion period will be connected to the newly created RTCL event.

The congestion period parameter is a configurable parameter that specifies the predefined number of minutes prior to the effective start timestamp of the "RTCL – Real Time Closure" event identifying the lower boundary of the billing congestion period.

Under the billing perspective, billable operations executed in this configurable timespan may be surcharged with an additional fee.

The customers will be informed about the effective timestamp of the "RTCL – Real Time Closure" event via camt.019 messages and consequently they can determine the congestion period of the T2S system.

Finally with the start of the End of Day phase at 18:00, all currency dependent sequences of events have to align. In conclusion the EoD can only be started when all events of the Real Time Closure Phase have been finished. In case of a blocking issue related to a certain currency, this can still block, respectively delay the End of Day processing.

Change in Report Configuration for specific reports:

A new "Currency" field is required in the GUI screens for Report Configuration. It will only be possible to define a Currency for a Report Configuration linked to a report for which a currency specific configuration is possible and a currency-dependent event.

The full list of reports for which a currency specific configuration is possible is below (<u>ISO-only reports</u>; equivalent flat-file reports are not currency-configurable):

- Statement of Accounts
- Statement of settled intra-position movements
- Statement of Transactions
- Statement of Pending Instructions
- Current Settlement Day Cash Information Report
- Following Settlement Day Cash Forecast Report
- Statement of settled intra-balance movements
- Statement of pending intra-balance movements
- Statement of pending amendment instructions for Intra-Balance Movements
- Statement of executed amendment instructions for Intra-Balance Movements
- Statement of pending cancellation instructions for Intra-Balance Movements
- Statement of executed cancellation instructions for Intra-Balance Movements

This change leads to following change in report management:

- Reports contained in list above configured for a currency specific event WITH currency are generated at the time this currency specific event for the configured currency is triggered
- Reports contained in the list above configured for a currency specific event WITHOUT currency are generated at the last occurrence of this event
- All reports NOT mentioned in the list above configured for a currency specific event are always generated at the last occurrence of this event

The choice of a currency only impacts the time of report creation - it does not impact the contents of the reports.

Remark: Based on the current design generally, event-triggered Reports are always generated as soon as Report Management receives the respective event trigger. This means, that in case an event trigger is not sent to Report Management, the respective Reports configured for that event are not generated. Consequently this is for instance the case on closing days for one or several currencies, where the respective currency-dependant events for currencies having a closing day will not be sent and subsequently reports configured for that event and currency are not generated.

Due to the change in the report configuration, the new introduced event for report generation at the end of IDVP (EDVP – CR635¹) has to be defined currency dependent accordingly.

¹ Change Request T2S-0635-SYS (Introduction of a new event at the end of cut-off of IDVP): http://www.ecb.europa.eu/paym/t2s/progress/pdf/crg/t2s_0635_sys.pdf

A change regarding DMT has to be done to manage the new Currency field for the currency in the Create Report configuration request.

It has to be considered that adding a new field to the table will change not only all the create/update/delete/restore/read functions of the Report Configuration but also change the STSI module accordingly. Consequently impacts for LTSI, LA or even other modules have to be assessed as well.

Submitted annexes / related documents:

Presentation "CR on operational resilience for multi-currency" of the CRG held in Frankfurt 12/12/2016. http://www.ecb.europa.eu/paym/t2s/progress/pdf/tq/crq/crq89/04.cr on operational resilience for multi-currency.pdf

Proposed wording for the SYS Change request:

For schedule of the settlement day:

UDFS 1.4.2 T2S schedule

The T2S schedule is under the control of the T2S operator, for creation of any new timelines, changing and/or deletion of existing time for a period or event. The T2S Operator has the necessary privileges by default to perform temporary or permanent changes to the T2S schedule. T2S ensures that the T2S schedule always conforms to the T2S operating day calendar by currency for any changes.

T2S manages the transition between the various periods (see section Settlement day high level schedule [an event. For each such event, T2S manages a planned time, a revised time and an effective time:

☐ 223]) as

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- The planned time corresponds to the standard schedule applied by default by T2S for every settlement day. The T2S Operator can update this planned time in case of a permanent change in the regular schedule;
- The revised time is the foreseen time for the current settlement day, which usually coincides with the planned time except when a delay has occurred. In contingency situations, the T2S Operator updates the revised time while the planned time remains unchanged;
- The effective time is the time of the actual occurrence of the event during the current settlement day.

Although—T2S foresees the maintenance of individual T2S settlement currency dependent cut-offs and events—in exceptional circumstances, however, the T2S operator manages the overall processing of a settlement day based on a common T2S schedule configured for each across allT2S settlement currenciesy—and CSDs. There is no schedule of a settlement day defined per currency in T2S, but distinct individual cut-offs and events per currency are defined, i.e. only one planned time for all currencies exists in T2S.

This multi-currency configuration allows for some flexibility within the boundaries of the real-time settlement closure (start of cut-off phase with DVP cut-off at 16:00 hrs CET and end of cut-off phase at 18:00 hrs CET with FOP cut-off).

The T2S Operator is entitled to change some cut-offs and events (deadlines for receiving Settlement Instructions/Settlement Restrictions for same day settlement) of a settlement day. This can be done independently for a T2S settlement currency, in exceptional circumstances or contingency situations, based on a request from the relevant T2S dependent external system (eg. RTGS, CSD platform, CMS). This exceptional procedure is to be defined in the T2S Manual of Operational Procedure (T2S MOP). These currency dependent cut-offs and events are specific events within the T2S daily schedule that have a cash component and are not a cut-off related to the T2S centralised processing such as the start of day and end of day. Such currency dependent cut-offs and events are:

- DVP cut-off (IDVP / EDVP) –remains harmonised for all currencies at 16h00;
- · Cash Settlement Restriction cut-off;
- Settlement restrictions release
- Reimbursement of intraday credit
- BATM (Bilaterally Agreed Treasury Management) cut-off;
- CBO (Central Bank Operation) cut-off .;
- Optional cash sweep;
- Inbound liquidity transfer cut off;
- Automated cash sweep.

This change in cut-offs and events are is valid only for the current T2S settlement day. When a currency dependent cut-off or event is extended for a currency, then the start of its dependent processes (e.g. cash sweep) is automatically extended for the same currency.

T2S allows such a change under the following conditions:

The sequence and order of events (predecessors and/or successors events) in T2S must remain unchanged
 _τ i.e. a currency dependent cut-off cannot be delayed beyond a successor scheduling event if this would have
 an impact on T2S processing (e.g. a CBO cut-off for Danish Krone cannot be extended beyond the EOD cut-

off for T2S, which is the successor in the scheduling) ÷. This includes no additions or removals of events, no changes in event ordering and no change in event dependencies;

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In the exceptional cases that T2S experiences a general issue across all currencies, it could be necessary
that the T2S Operator would need to extend the EOD cut-off (e.g. the T2S revised times would apply). In this
case, T2S ensures the sequence of currency independent cut-offs (securities Settlement Restriction cut-off
and FOP cut-off) is not changed. The procedures to apply in case of such an event are to be defined in the
T2S MOP.

UDFS 1.4.3.1 Settlement day high level schedule

The different times shown in the high-level diagram below and text for the start and end of a period are only indicative. T2S controls the execution of the periods that the start of a subsequent period starts, at the completion of the current period and/or the occurrence of a cut-off or event. All currency dependent cut-offs and events must be configured for each T2S settlement currency.

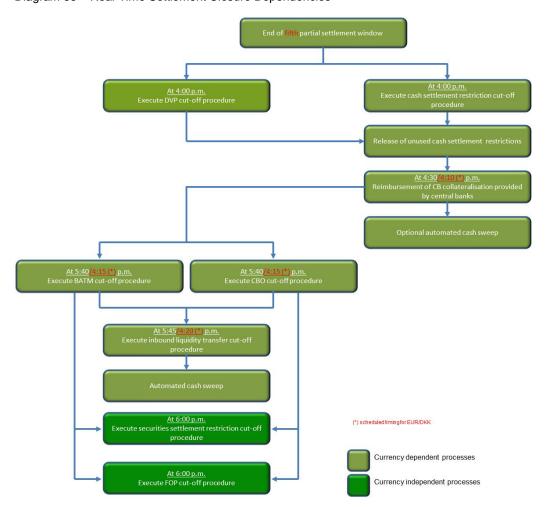
UDFS 1.4.4.4 Real-time settlement (RTS)

The previously unsettled Settlement Instructions and Settlement Restrictions from night-time settlement are attempted for settlement in the real-time settlement period with the arrival of new resources (securities for delivery, securities in positions earmarked available for collateral, cash). Additionally T2S performs a settlement attempt for any new intraday Settlement Instructions, Settlement Restrictions and liquidity transfers validated and accepted during real-time settlement period;

- The real-time settlement closure with different cut-offs and events for different Settlement Instructions, Settlement Restrictions and liquidity transfers categories:
- Some of these cut-offs and events may be currency dependent.

UDFS 1.4.4.4.6 Real-time settlement closure dependencies, page 262

Diagram 66 - Real-Time Settlement Closure Dependencies



Currency dependent processes relate to T2S settlement currency specific cut-offs and events as configured by the T2S

operator. These however must respect the currency independent processes defined for the real-time settlement closure.

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<u>Currency dependent processes are harmonised under the time mentioned in the diagram, under normal circumstances.</u> They may be altered as required by the T2S operator, for contingency situations.

The following table describes the different dependencies between processes occurring during the real-time 3 settlement closure of the real-time settlement period.

For report management:

UDFS 1.6.4.2.3 Report Generation Process

The following part in "Moment of Data Extraction" should be amended:

The creation of a report is always triggered at a certain point in time by T2S. This point in time can be a specific time, e. g. 10:00 am or a specific event of the T2S Settlement Day, e. g. End of Day. For the following list of reports for which a currency specific configuration is possible and that are configured for a currency-specific event the data extraction starts when the event for the currency specified in the report configuration is triggered.

Reports for which a currency specific configuration is possible are (ISO-only reports; equivalent flat-file reports are not currency-configurable):

- Statement of Accounts
- Statement of settled intra-position movements
- Statement of Transactions
- Statement of Pending Instructions
- Current Settlement Day Cash Information Report
- Following Settlement Day Cash Forecast Report
- Statement of settled intra-balance movements
- Statement of pending intra-balance movements
- Statement of pending amendment instructions for Intra-Balance Movements
- · Statement of executed amendment instructions for Intra-Balance Movements
- Statement of pending cancellation instructions for Intra-Balance Movements
- Statement of executed cancellation instructions for Intra-Balance Movements

In case no currency is specified in the report configuration or any other report not contained in the list above is configured for such an event, the data extraction starts when the last event of the configured type is triggered. In case a currency is specified, it only affects the time of data extraction, not the content of the report. Please refer to chapter T2S proprietary codes [-> 2020] for the list of configurable business events.(...)

UDFS 1.6.5.3.2 Overview

The following part should be amended:

The definition of an Event Type as "currency-specific" leaves the possibility, <u>e.g.</u> intended exclusively for contingency situations, to differentiate between occurrences of the same Event Type in the same business day schedule for different currencies.

Event Types may also be defined as currency-specific, meaning that the related scheduled events only apply to individual settlement currencies in T2S. During normal operations, the business day schedule is harmonised for the entire system; however, this feature allows the T2S Operator to change, in exceptional circumstances, the scheduled times for certain events of the current business day only for a specific currency, based on a request from the relevant Central Bank. For more details, see the section Event maintenance process below, and see section T2S calendar.

UDFS 1.6.5.7.6 Billing Data Collection Process

A footnote should be added to all service items that are related to the congestion period in the following tables:

Table 186 – Items charged to CSDs (Settlement Service Category)

Table 188 – Items charged to CSDs (Information Service Category)

Table 191 – Items charged to CBs (Information Service Category)

The footnote should be added to each service item referring to the congestion period in Table 186 and be added to the headline of the tables 188 and 191. "Queries and Reports during congestion period:"

Footnote wording is the following:

"The congestion period will be determined by the event RTCL."

UDFS 3.3.2.1.1 Overview and scope of the message (ReportQueryRequest (admi.005)):

Add a footnote to item "Business Event" in the list of selection parameters:

If the Business event specified is a currency specific event, all reports generated for that event are returned (regardless whether also a currency was specified or not).

UDFS 3.3.3.10.3 The message in business context (camt.019.001.04), page 1112

New Message usage for the related message described as follows:

Message usage: Currency Related Event Notification

This message usage notifies the receiver that a business event linked to a currency has been executed.

Specific Message requirements

A Currency Related Event notification contains information on the execution of the business event linked to a specific currency.

MESSAGE ITEM	DATA TYPE/CODE	UTILISATION
SystemDate Document/RtrBizDayInf/RptOrErr/BizRpt/BizDay OrErr/BizDayInf/SysDt	<u>ISODate</u>	Business date for the reported business event
Identification Document/RtrBizDayInf/RptOrErr/BizRpt/BizDay OrErr/BizDayInf/SysSts/Sts/Prtry/Id	Exact4AlphaNumericText STAT_T2S	Status of the System "RTMC"
ValidityTime Docu- ment/RtrBizDayInf/RptOrErr/BizRpt/BizDayOrEr r/BizDayInf/SysSts/VldtyTm	DateTimePeriodChoice	Time in which the current status became effective
SystemCurrency Document/RtrBizDayInf/RptOrErr/BizRpt/BizDay OrErr/BizDayInf/SysInfPerCcy/SysCcy	<u>ActiveCurrencyCode</u>	Currency linked to the reported business event
Identification Document/RtrBizDayInf/RptOrErr/BizRpt/BizDay OrErr/BizDayInf/SysInfPerCcy/Evt/Tp/Prtry/Id	Exact4AlphaNumericText	Business event linked to a currency
ScheduledTime Document/RtrBizDayInf/RptOrErr/BizRpt/BizDay OrErr/BizDayInf/SysInfPerCcy/Evt/SchdldTm	<u>ISODateTime</u>	Scheduled time for the reported business event

Message usage example: camt.019.001.04 Final NTS Message

In this example, assuming current business date is 2017-01-01, the recipient is informed that the IDVP event for Euro settlement has run at 16:00.

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UHB

It is necessary to improve the Daily Schedule - New/Edit Screen (T2S Operator only), because it will be necessary to allow the selection of a section of the Daily Schedule (e.g. the chain with same currency), but at this stage we are not able to identify the necessary changes in details.

UHB 2.5.7.6 Report Configurations - Search/List Screen

Olib 2.3.7.0 Report Configurations — Cearch/List Ocieen		
Report Configurations - Search Criteria		
Currency	Select the currency possibly linked to the event from the drop-down menu. The default value is 'all'. The field is enabled only if an Event Type Code is present. When the value 'all' is selected, items either related to Event Type Codes currency independent or to any currency are returned. References for error messages: I DRDV070	

Report Configuration	Report Configurations - List		
<u>Currency</u>	Shows the currency possibly linked to the event to which the single report configuration is linked to. References for error messages: I DRDV070		

Buttons

Restore	[] References for error messages [} 2253]: I DRDV001 I DRDV004 I DRDV005 I DRDV006 I DRDV007 I DRDV008 I DRDV030 I DRDV050 I DRDV050 I DRDV050 I DRDV070

UHB 2.5.7.7 Report Configurations - Details Screen

Report Configuration Party Links		

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<u>Currency</u>	Shows the currency possibly linked to the event to which the single Report Configuration
	Party Link is linked to.
	References for error messages:
	<u>I DRDV070</u>

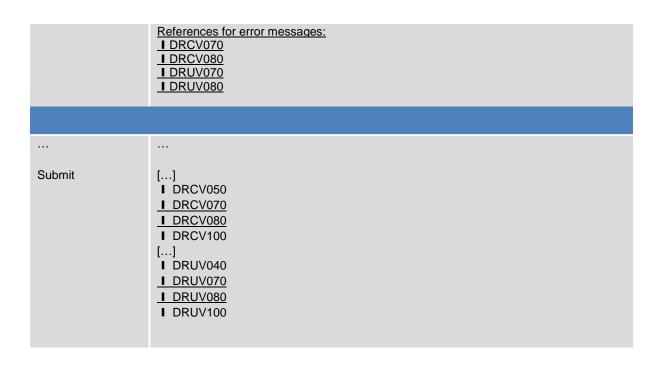
Buttons

Restore	[] References for error messages [} 2245]: I DRDV001 I DRDV004 I DRDV005 I DRDV006 I DRDV007 I DRDV008 I DRDV030 I DRDV050 I DRDV070 I DRDV070

UHB 2.5.7.8 Report Configuration – New/Edit Screen

Report Configuration		
Report Name	References for error messages: DRCV080 DRUV080	
Report Configuration Party Links		

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Report Configuratio	n Party Links
Event Type Code	References for error messages: I DRCV080 I DRUV080
Currency	Select the currency possibly linked to the event to which the single Report Configuration Party Link is linked to. This field can be selected only if an Event Type Code has been selected before, if the Event Type is currency-dependent and if the selected Report Name is one of the following: Statement of Accounts Statement of settled intra-position movements Statement of Transactions Statement of Pending Instructions Current Settlement Day Cash Information Report Following Settlement Day Cash Forecast Report Statement of settled intra-balance movements Statement of pending intra-balance movements Statement of pending amendment instructions for Intra-Balance Movements Statement of pending cancellation instructions for Intra-Balance Movements Statement of executed cancellation instructions for Intra-Balance Movements



UHB 6.4.2.135 Report Configuration – Details Screen (References for error messages)

Add the following business rule:

Reference for error message	Field or button	Error Text	Description
DRDV070	Currency field Restore button	Invalid currency	When performing a Report Configuration restore request, the specified Currency must refer to an existing T2S Currency.

UHB 6.4.2.136 Report Configuration - New/Edit Screen (References for error messages)

Add the following business rules:

Reference for error message	Field or button	Error Text	Description
DRCV070	Currency field Submit button	Invalid currency	When performing a Report Configuration create request, the specified Currency must refer to an existing T2S Currency.
DRCV080	Currency field Report Name field Event Type code field Submit button	Currency not relevant	When performing a Report Configuration create request, the Currency field can only be used in combination with a currency-dependent event and one of the currency-related report types listed in the T2S documentation.
DRUV070	Currency field Submit button	Invalid currency	When performing a Report Configuration update request, the specified Currency must refer to an existing T2S Currency.
DRUV080	Currency field Report Name field Event Type code field Submit button	Currency not relevant	When performing a Report Configuration update request, the Currency field can only be used in combination with a currency-dependent event and one of the currency-related report types listed in the T2S documentation.

UHB 6.4.2.137 Report Configurations – Search/List Screen (References for error messages)

Add the following business rule:

Reference for error message	Field or button	Error Text	Description
 <u>DRDV070</u>	Currency field Restore button	 Invalid currency	When restoring a Report Configuration, the specified Currency must refer to an existing T2S Currency.

DMT File specification Chapter 3.1.2.25 Report Configuration – NewThe table describing the Report Configuration file definition should be amended as follows

file		Column Name	Format	Description	Rules	per	per
Flat	Excel					Occurs Record	Occurs Group
2	В	Record Id	NUMERIC (10)	Unique identifier of the record.	Must occur in each line of the record.	1n	
Group	o "Repo	ort Configuration"				11	
3	С	Configuration Name	VARCHAR (35)	Name of the report configuration.			11
4	D	Configuration Description	VARCHAR (350)	Description of the report configuration.			11
5	ш	Delta Mode	BOOLEAN	true = The recipient gets the report in delta mode false = The recipient gets the report in full mode			11
6	F	Report Name	Possible values: Statement of Holdings Statement of Pending Instructions Statement of Pending Instructions Statement of Settlement Allegements Statement of Accounts Statement SD T2S DCA Statement SD Securities Accounts Statement SD Securities Statement SD Party Statement SD Party Statement Current Business Day Cash Forecast Next Business Day Cash Forecast Executed Al on Cash Executed Al on Cash Executed Cl on Cash Executed Cl on Cash Executed Cl on Cash Pending Al on Cash Pending Al on Cash Pending Cl on Cash Pending Cl on Cash Pending Cl on Cash	Name of the report type.			11

			Pending Restrictions on Cash Pending Restrictions on Securities Settled Restrictions on Cash Settled Restrictions on Securities				
7	G	System Entity Wide Reporting Flag	BOOLEAN	true = System entity wide reporting			11
Grou	p "Rep	ort Configuration Party Li	nk"			010	
8	Н	Parent BIC	CHAR (11)	Parent BIC of the linked party.			11
9	I	Party BIC	CHAR (11)	Party BIC of the linked party.			11
10	J	Push Mode	BOOLEAN	true = The recipient gets the report in push mode false = The recipient gets the report in pull mode			11
11	К	Execution Time	TIME	Time of the execution of			01
	K	Execution Time	TIVIL	the report.	Mandatory if Event Type is not specified. Not allowed otherwise.		01
12	L	Event Type	CHAR (4)	Code of the event type that triggers the report.	Mandatory if Execution Time is not specified Not allowed otherwise.		01
13	М	Valid From	DATE	Starting date for the validity period.	Must be equal or greater than the current date.		11
14	N	Valid To	DATE	Ending date for the validity period.	Must be greater than the Valid From date.		01
<u>15</u>	<u>O</u>	Currency	CHAR(3)	Currency linked to the Report Configuration			01

GFS:

GFS Chapter 3.3.11.6 Report configuration

UML class diagram from the conceptual data model must be updated introducing the optional link between a Report Configuration and a Currency.

The updated diagram will look as follows:

Entity description for Report Configuration should be amended as follows:

« Each Report Configuration is linked to the Party that owns the report configuration, to the relevant Report Type and Event Types (see section 3.3.11.8), to the currency for which the information are required, and to one or many parties entitled to get the same Report Type.

GFS Chapter 3.5.5.3 Description of the functions of the module

7 - Cut-Off Processing, page 361

Introduction

Reference Id SETT.SPS.COP.1.1

The Cut-off Processing function aims at preventing the settlement transactions' recycling within the Settlement domain.

It is triggered at the reception of the following events from the Scheduling module:

- The Events (Intraday DVP Cut-off);
- The Events (Intraday FOP Cut-off);
- The Events (Intraday BATM Cut-off);
- The Events (Intraday Cash Settlement Restrictions Cut-off);
- The Event (Intraday Securities Settlement Restrictions Cut-off);
- The Events (Intraday CBO Cut-off);
- The Events (Inbound Liquidity Transfer Cut-off).

Some of these events can be received many times, if they are currency-dependent: in this case, each event will be received once per currency open during the business day.

After receiving each of these events, the function carries out several actions in a coordinated and specific order.

End of auto-collateralisation availability, page 363

Reference Id SETT.SPS.COP.5.1

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At the reception of any Event (Intraday DVP Cut-off) whichever its currency, the function suspends the availability of the auto-collateralisation function for the currency of the Intraday DVP cut-off received.

8 - EOD/SOD Processing, page 364

During the End of Day and Start of Day periods, this function receives different events from the *Scheduling* module and starts actions according to each of them.

End of day cash restriction release information

Reference Id SETT.SPS.ESP.1.1

At the reception of an *Event (EOD Cash Restrictions Release)* from the *Scheduling* module, this function handles the release of any reserved/blocked *Cash Balance* that has not been used during the settlement day <u>and related to the currency of the EOD Cash Restrictions Release received</u> **{T2S.07.380}**.

GFS-Chapter 3.5.6.3 Description of the functions of the module

2 - Common Limit and Provision Checking

. . .

Lack and insufficient headroom management or partial settlement management, page 383

Introduction

Reference Id SETT.VPB.CLP.7.1

This function is performed after the provision-checking execution and consists in:

- A resolution of either lack of cash, lack of securities or insufficient external guarantee headroom concerning Settlement Transactions related to settlement instructions;
- A partial execution of Settlement Transactions related to Settlement Restrictions and liquidity transfer, if allowed for partial execution;
- A partial settlement, if need be, of Settlement Transactions related to Settlement Instructions, during a partial settlement window.

It checks the collection in order to determine the way to process it:

- If the collection contains only Settlement Transactions not eligible to auto-collateralisation (e.g. Settlement Restriction and liquidity transfer), the auto-collateralisation request for lacks of cash or securities or insufficient external guarantee headroom is bypassed. The Settlement Transactions (Settlement Restriction and liquidity transfer), if allowed to partial execution, are settled according to the resources available;
- Otherwise (i.e. the collection contains at least one Settlement Transaction eligible to auto-collateralisation {T2S.07.286}), the function checks that the conditions for requesting Auto-collateralisation module are met, i.e.:
 - In case of lack of securities, it checks if the securities position is earmarked for a collateral purpose,
 - In case of lack of cash, it checks:
 - If the DVP cut-off of the currency related to the T2S Dedicated Cash Account has not already been reached;
 - If the payment/settlement bank which owns the T2S Dedicated Cash Account is eligible for CB collateralisation.
 - If the headroom of the relevant auto-collateralisation limit set by the CB is sufficient to fill the lack {T2S.07.274} {T2S.10.061};
 - In case of insufficient external guarantee headroom, it checks:

If the client of the payment/settlement bank is eligible for client-collateralisation with this
payment/settlement bank;

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If the total amount of headroom for the credit memorandum balance (all types of limits included),is sufficient to cover the need of the settlement transaction(s) related to the client of the payment/settlement bank {T2S.07.286} {T2S.10.063} {T2S.10.064} {T2S.07.270};

GFS-Chapter 3.5.7.3 Description of the functions of the module

2 - Daytime Series Manager

. . .

Conditional resort to Auto-collateralisation, page 411

Reference Id

SETT.R&O.OAF.3.1

If the collection contains at least one Settlement Transaction eligible to auto-collateralisation {T2S.07.286}, the function checks that the conditions for requesting auto-collateralisation are met:

- No DVP cut-off for the currency of the business transaction has been received;
- In case of lack of securities, if the securities position is earmarked for a collateral purpose;
- In case of lack of cash, it checks:
 - If the DVP cut-off of the currency related to the T2S Dedicated Cash Account has not already been reached;
 - If the payment/settlement bank which owns the T2S Dedicated Cash Account is eligible for CB collateralisation:
 - If the headroom of the relevant auto-collateralisation limit set by the CB is sufficient to fill the lack {T2S.07.274} {T2S.10.061};
- In case of insufficient external guarantee headroom, it checks:
 - If the client of the payment/settlement bank is eligible for client-collateralisation with this payment/settlement bank;
 - o If the total amount of headroom for the credit memorandum balance (all types of limits included), is sufficient to cover the need for cash of the settlement transaction(s) related to the client of the payment/settlement bank {T2S.07.286} {T2S.10.063} {T2S.10.064}.

GFS- Chapter 3.5.9.3 Description of the functions of the module

5 - EOD CB Intraday Credit Reimbursement Manager, page 438

Introduction

Reference Id SETT.ACO.CRM.1.1

This function is triggered with an *EOD Intraday Credit Reimbursement* event as part of the real-time settlement closure at 4:30 pm and. It aims at reimbursing all pending intraday credit obtained from a Central Bank with all the available liquidity by submitting to settlement all the reverse collateral *Settlement Transactions* not yet settled, whose currency corresponds to the currency of the received *EOD Intraday Credit Reimbursement*, whether on hold or not **{T2S.08.850}.**

High level description of Impact:

The event management of T2S is affected by this change and subsequently the report management has to be adopted in order to support the generation of reports for the same event but having different currencies.

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Outcome/Decisions:

- * CRG meeting on 24 January 2017: The CRG agreed to make some changes and recommended to launch the detailed assessment of the updated Change Request and asked the 4CB to check the feasibility to deliver the Change Request in the T2S Release 2.0.
- * Advisory Group on 02 February 2017: In a written procedure from 26 January 2017 to 02 February 2017, the Advisory Group was in favour of launching the detailed assessment on the Change Request.
- * CSD Steering Group on 03 February 2017: In a written procedure from 26 January 2017 to 03 February 2017, the CSD Steering Group was in favour of launching the detailed assessment on the Change Request.
- * CRG on 10 February 2017: During a written procedure from 8 to 10 February 2017, the CRG agreed to update the Change Request and asked the 4CB to continue the detailed assessment on the basis of the updated Change Request.
- * OMG meeting on 6-7 March 2017: The Operations Managers Group did not identify any blocking operational impact.
- * CRG on 30 March 2017: The CRG agreed that the detailed assessment should be conducted on the updated version of the Change Request.
- * Operational Mangers Group on 29 May 2017: Following a written procedure from 22 29 May 2017, the Operations Managers Group reconfirmed that the Change Request does not have any blocking operational impact.
- * CRG on 07 June 2017: The CRG recommended the approval of the Change Request and its inclusion in T2S Release 2.0.
- * Operational Mangers Group on 19 June 2017: Following a written procedure from 9 to 19 June 2017, the Operations Managers Group was in favour of adding the Change Request to the T2S Release 2.0.
- * PMG on 21 July 2017: During a written procedure from 19 to 21 July 2017, the Project Managers Group was in favour of adding the Change Request to Release 2.0 from a planning perspective based on their endorsement of the Service Transition Plan v.0.7 for Release 2.0.
- * Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) on 27 July 2017: Following a written procedure from 21 to 27 July 2017, the AMI-SeCo was in favour of approving the Change Request and its inclusion in T2S Release 2.0
- * CSD Steering Group on 28 July 2017: Following a written procedure from 21 to 27 July 2017, the CSG adopted the resolution to approve the Change Request and its inclusion in T2S Release 2.0
- * CRG meeting on 15 December 2017: The CRG recommended the submission of an updated version of the CR to the Steering Level for approval.

EUROSYSTEM ANALYSIS – GENERAL INFORMATION

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

Impact on major d	Impact on major documentation					
Document	Chapter	Change				
Impacted GFS chapter	3.3.11.6 Report Configuration	Class diagram and Report Configuration entity description to be updated introducing the optional link with the currency				
	3.5.5 Standardisation and Preparation to Settlement	The currency-dependent events can be received many times.				
		Auto-collateralisation is suspended only when the IDVP of the concerned currency is received.				
		Currency filter to be added on the release of the reserved/blocked cash balances.				
	3.5.6 Daytime Validation, Provisioning and Booking	As long as the IDVP of the concerned currency is not reached, the auto-collateralisation for this currency is possible.				
	3.5.7 Daytime Recycling and Optimisation	As long as the IDVP of the concerned currency is not reached, the auto-collateralisation for this currency is possible.				
	3.5.9 Auto-collateralisation					
		Update of the selection of the reverse collateral settlement transactions with the currency for the Intraday Credit Reimbursement.				
Impacted UDFS	1.4.2 T2S schedule	Update of schedule and settlement day				
chapter	1.4.3 Overview description of the	documentation to account for currency dependent cut-offs and events.				

	settlement day		
	§1.4.4 Detailed description of the settlement day		
	§1.4.4.4.6 Real-time settlement closure dependencies		
	1.6.4.2.3 Report Generation Process	Add information to paragraph "Moment of Data Extraction" by adding currency specific event handling and the list of reports for which currency specific events can be used.	
	1.6.5.7.6 Billing Data Collection Process	Add a footnote that the congestion period is determined by the event RTCL	
	3.3.2.1 ReportQueryRequest (admi.005)	Add a footnote informing, that choosing a currency specific event will return all reports configured for that event, regardless of the currency	
	3.3.3.10.3 The message in business context (camt.019.001.04)	New message usage for reporting currency linked business events	
Additional deliveries for Message Specification			
- CP-CO-MICHINE	UHB 2.5.7.6 Report Configurations – Search/List Screen	Add Currency field in Search and List sections. Add new business rule for Currency existence check.	
	UHB 2.5.7.7 Report Configurations – Details Screen	Add Currency field. Add new business rule for Currency existence check.	
	UHB 2.5.7.8 Report Configuration – New/Edit Screen	Add Currency field. Add new business rules for Currency existence check. Add new business rules and cross-field validation for check of Currency-Report Name-Event Type combinations.	
UHB	UHB 6.4.2.135 Report Configuration – Details Screen (References for error messages)	Add new business rules.	
	UHB 6.4.2.136 Report Configuration – New/Edit Screen (References for error messages)	Add new business rules.	
	UHB 6.4.2.137 Report Configurations – Search/List Screen (References for error messages)	Add new business rules.	
	UHB for T2S Operator 2.4.1.25 Daily Schedule – New/Edit Screen (T2S Operator only)	Inclusion of a new field to allow shifting events of a single currency, in line with the changes foreseen for the related Screen IDFS.	
External training			
materials Other	DMT File Specification 3.1.2.25 Report Configuration – New	Add Currency field	
documentations	GFS Conceptual Data Model	Model must be updated to introduce the optional	

		k between a Report Con ırrency	figuration and a
	The CR impacts the insol within the MOP with regard of validity periods		
Links with other re	equests		
Links	Reference	Title	

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

Summary of functional, development, infrastructure and migration impacts

<u>Report Management:</u> For a set of reports for which a currency specific configuration is possible (see list below), a Currency can be defined for a Report Configuration in case a currency-dependent event is chosen.

- Statement of Accounts
- Statement of settled intra-position movements
- Statement of Transactions
- Statement of Pending Instructions
- Current Settlement Day Cash Information Report
- Following Settlement Day Cash Forecast Report
- Statement of settled intra-balance movements
- Statement of pending intra-balance movements
- Statement of pending amendment instructions for Intra-Balance Movements
- Statement of executed amendment instructions for Intra-Balance Movements
- Statement of pending cancellation instructions for Intra-Balance Movements
- Statement of executed cancellation instructions for Intra-Balance Movements

This change leads to following change in report management:

- Reports contained in list above configured for a currency specific event WITH currency are generated at the time this currency specific event for the configured currency is triggered
- Reports contained in the list above configured for a currency specific event WITHOUT currency are generated at the last occurrence of this event
- All reports NOT mentioned in the list above configured for a currency specific event are always generated at the last occurrence of this event

The choice of a currency only impacts the time of report creation - it does not impact the contents of the reports.

Additionally, the new report configuration parameter must be included in the query response for report configuration list/details queries.

For Billing a footnote will be added within the UDFS to all service items referring to the congestion period how the congestion period is determined.

Testing the 12 reports where currency specific configuration is possible with random based currency dependent events plus regressive testing of the other 11 reports without currency dependence. Additionally testing the impacted screens and messages.

Add the currency as additional search criteria for the Report Configurations List Query

LTSI:

Add the new event(s) to LTSI data dictionary (T2S_IDFS_BDF_SQRA_LSI_LDD). Update rules on business timeslots (T2S_IDFS_BDF_SQRA_LSI_REM_DWH).

SETT:

Once this CR is implemented, the system will be able to react efficiently to currency-dependent events in any cases. Cut-off management is enhanced to better answer in case cut-offs are not synchronized for all currencies. Specifically, the auto-collateralisation function will be allowed for currencies for which the cut-off DVP is not reached.

LCMM:

Cut-off management processes will be adapted to allow for the handling of different scheduling times for same, currency-dependent cut-off's events, whereas optimisations will also be applied to improve the treatment of delayed events in general.

SDMG:

Report Configuration functions have to be modified to accommodate the new Currency field and the related validations.

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OPSR

Internal processing of Scheduling functions has to be modified to adapt to the new multi-currency cut-off process. Standard currency values to be aligned to the actually implemented values 'XXX' and '000' (editorial).

Summary of project risk

Functionality has to be provided prior to the DKK migration in October 2018.

Security analysis

No potentially adverse effect was identified during the security assessment.