

<b>T2S CHANGE REQUEST FORM</b>		
<b>General Information (Origin of Request)</b>		
<input type="checkbox"/> User Requirements (URD) or GUI Business Functionality Document (BFD) <input checked="" type="checkbox"/> Other User Functional or Technical Documentation (SYS)		
<b>Request raised by:</b> Danmarks Nationalbank	<b>Institute:</b> Central Bank	<b>Date raised:</b> 23/02/2023
<b>Request title:</b> Submission of DWH cash-related data in any specific currency/CB system entity to a CB analytical platform		<b>Request No.:</b> T2S-0801-SYS
<b>Request type:</b> Common	<b>Classification:</b> Scope Enhancement	<b>Urgency:</b> Fast-track <sup>1</sup>
<b>1. Legal/business importance parameter<sup>2</sup>:</b> 'Medium'	<b>2. Market implementation efforts parameter<sup>3</sup>:</b> 'Low'	
<b>3. Operational/Technical risk parameter<sup>4</sup>:</b> 'Low'	<b>4. Financial impact parameter<sup>5</sup>:</b> Low	
<b>Requestor Category:</b> Central Bank		<b>Status:</b> Allocated to a release

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

This change request (CR) is raised in the context of the onboarding of DKK onto T2 and with a view to potential future onboarding of other non-euro currencies/system entities.

As per the implementation of the Change Request T2S-0753-SYS (Export of T2S cash transactional data from the Data Warehouse to a Eurosystem's analytical platform), the DWH will submit euro-denominated T2S cash transactional data from central banks every business day to a central bank (CB) analytical platform,

This change request aims at having a configurable currency-specific/system entity-specific cash-related data feed from the DWH to the AE.

In addition, a corresponding T2 CR (CSLD-0091-URD) has been raised since T2 cash transactional data and related reference data from non-euro currencies/system entities are also requested in the DWH feed to the CB analytical platform (similar to T2S-0753-SYS and CSLD-0043-URD<sup>6</sup>).

**Description of requested change:**

The DWH should be able to generate and submit separate csv files with T2S cash-related data per currency/CB system entity to a specific ECB technical address at the end of each business day. This should be configurable per currency/CB system entity so it can be selected to which currency/CB system entity the files should be generated and submitted.

<sup>1</sup> A fast-tracked approach is requested because from a planning viewpoint, the CR is needed for the migration of DKK to T2 in April 2025 and it will ease that the detailed assessment is performed in parallel to T2-CR-91-URD so that a common technical solution is provided for both change requests.

<sup>2</sup> Legal/business importance parameter was set to 'Medium' because this functionality will be used for the onboarding of DKK in T2 and for potential onboardings of additional non-euro currencies.

<sup>3</sup> Market implementation effort parameter was set to 'Low' because the T2S community will not have to perform extensive test campaigns for this change since the CSDs will not be impacted.

<sup>4</sup> Operational/technical risk parameter was set to 'Low' since this change is not expected to threaten the Service Level Agreement for Participating CSDs or CBs or to have significant operational impact on the Participating CSDs, CBs or 4CB.

<sup>5</sup> Low < 100kEUR < Low-Medium < 200 kEUR < Medium < 400kEUR < High < 700kEUR < Very high

<sup>6</sup> T2-T2S Consolidation Change Request CSLD-0043-URD (Interface from the Data Warehouse to the Analytical Environment) and T2S Change Request T2S-0753-SYS (Export of T2S cash transactional data from the Data Warehouse to a Eurosystem's analytical platform).

The solution should exclude CSD data and message-related table personal information.

In addition, the T2S DWH should deliver an initial load of historical T2S cash-related data per currency/CB system entity, in case there is any.

The CR needs to be delivered by June 2024 in PROD in view of the DKK go-live in April 2025. If the CR is not delivered by the go-live of DKK on T2/DWH, a migration of data must be foreseen (to ensure all DKK data in the DWH is available in the CB analytical platform).

Name	<b>Transactional data of the T2S Service</b>
Priority	Mandatory
Description	<p>The DWH shall provide at off-peak hours after the end of each business day the cash transactional data of the T2S Service (per currency/CB system entity selected) in comma-separated files to the CB analytical platform on best effort basis. The files shall include:</p> <ul style="list-style-type: none"> <li>• Liquidity transfer order executions and cancellations with time-stamps.</li> <li>• Intra-balance movement executions, amendments and cancellations with time-stamps.</li> <li>• Cash movements related to auto-collateralisation, reimbursement, substitution or relocation of collateral with time stamps.</li> <li>• Cash reservations executions with time stamps.</li> <li>• Cash blocking and unblocking execution information with time stamps.</li> <li>• All other cash movements on T2S DCAs not mentioned above with time stamps.</li> <li>• Limit modification order executions with time stamps.</li> <li>• Start-of-day and end-of-day balances data related to all T2S cash accounts (per currency/system entity).</li> </ul> <p>The files shall include cash transactional data of the last business day that the DWH copies into its core granular data model, i.e. a delta submission. The interface shall provide each entity (database table) in the DWH as an individual file and shall use the ETL (extract, transform and load) tool of the DWH.</p>

Name	<b>Reference data pertaining to the T2S Service</b>
Priority	Mandatory
Description	<p>The DWH shall provide at off-peak hours after the end of each business day the complete set of reference data (i.e. full submission) pertaining to the T2S Service in comma-separated files to the Analytical Environment on best effort basis. The files shall include:</p> <ul style="list-style-type: none"> <li>• Party reference data belonging to central bank's system entities.</li> <li>• Cash account reference data.</li> <li>• Credit limits (e.g. Credit Memorandum balance ID, T2S DCA of credit provider, limit types, amount, effective date).</li> <li>• Automated liquidity transfers (standing and predefined orders).</li> <li>• Business day event schedule (T2S events).</li> <li>• Calendar, currencies (and whether they are settlement currencies or not).</li> </ul> <p>The interface shall provide each entity (database table) in the DWH as an individual file and shall use the ETL (extract, transform and load) tool of the DWH.</p>

**Submitted annexes / related documents:**

**Documentation to be updated:**

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**Outcome/Decisions:**

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- \*CRG on 7 March 2023: the CRG agreed to launch the preliminary assessment of CR-801.
- \* CRG on 27 April 2023: The CRG agreed to recommend CR-0801 for authorisation by the T2S Steering Level, following a fast-track approach.
- \*AMI-SeCo on 9 May 2023: The AMI-SeCo agreed with the CRG recommendation of CR-801 for T2S Steering Level Authorisation
- \*CSG on 10 May 2023: the CSG agreed to authorise CR-801.
- \*NECSG on 10 May 2023: the NECSG agreed to authorise CR-801.
- \*MIB on 18 May 2023: the MIB authorised CR-0801.
- \*PMG on 1 June 2023: the PMG agreed to launch the detailed assessment of CR-0801 with a view of scoping in Release 2024.JUN.
- \*CRG on 6 September 2023: the CRG agreed to recommend to the PMG the inclusion of CR-0801 in the scope of R2024.JUN.
- \*OMG on 30 August 2023: the OMG identified no operational impact from the inclusion of CR-0801 in R2024.JUN.
- \*PMG on 7 September 2023: the PMG agreed to recommend the inclusion of CR-0801 in the scope of R2024.JUN.
- \*CSG on 13 September 2023: the CSG approved the inclusion of CR-0801 in the scope of R2024.JUN.
- \*NECSG on 13 September 2023: the CSG approved the inclusion of CR-0801 in the scope of R2024.JUN.
- \*MIB on 27 September 2023: the MIB approved the inclusion of CR-0801 in the scope of R2024.JUN.

**Preliminary assessment:**

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**Detailed assessment:**

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EUROSYSTEM ANALYSIS – GENERAL INFORMATION			
T2S Specific Components		Common Components	
<b>LCMM</b>			
	Instructions validation		
	Status management		
	Instruction matching		
	Instructions maintenance		
	Penalty Mechanism		
<b>Settlement</b>			
	Standardisation and preparation to settlement		
	Night-time Settlement		
	Daytime Recycling and optimisation		
	Daytime Validation, provisioning & booking		
	Auto-collateralisation		
<b>Liquidity Management</b>			
	Outbound Information Management		
	NCB Business Procedures		
	Liquidity Operations		
<b>T2S Interface</b>		<b>Eurosystem Single Market Infrastructure Gateway</b> (from R6.0 June 2022)	
	Communication		Communication
	Outbound Processing		Outbound Processing
	Inbound Processing		Inbound Processing
<b>Static Data Management (until June 2022)</b>		<b>Common Reference Data Management</b> (from R6.0 June 2022)	
	Party data management		Party data management
	Securities data management		Securities data management
	Cash account data management		Cash account data management
	Securities account data management		Securities account data management
	Rules and parameters data management		Rules and parameters data management
<b>Statistics and archive</b>		<b>Statistics and archive</b>	
	Statistical information (until June 2022)		Short term statistical information
	Legal archiving (until June 2022)		Legal archiving (from R6.0)
		X	Data Warehouse (from R6.0)
<b>Information (until June 2022 containing reference data)</b>		<b>CRDM business interface (from R6.0 June 2022)</b>	
	Report management		Report management
	Query management		Query management
			Communication
			Outbound Processing
			Inbound Processing
<b>Operational Services</b>			
	Data Migration (T2S DMT)		Data Migration (CRDM DMT, from R6.0)
	Scheduling (until June 2022)		Business Day Management (from R6.0)
			Business Day Management business interface (from R6.0)
	Billing (until June 2022)		Billing (from R6.0)
			Billing business interface (from R6.0)
	Operational Monitoring		Operational and Business Monitoring
	MOP Contingency Templates		
<b>Impact on major documentation</b>			

Document	Chapter	Change
Impacted GFS chapter		n.a.
Impacted UDFS chapter		n.a.
Additional deliveries for Message Specification (UDFS, MyStandards, MOP contingency templates)		n.a.
UHB		n.a.
External training materials		n.a.
Other impacted documentation (FA Sch. 05, FA Sch. 07)		n.a.
Impacted GDPR message/ screen fields		No GDPR impact
Links with other requests		
Links	Reference	Title

OVERVIEW OF THE IMPACT OF THE REQUEST ON THE T2S SYSTEM AND ON THE PROJECT
<p><b>Summary of functional, development, infrastructure and migration impacts</b></p> <p>In order to provide the AE (Analytical Environment) with static data as well as transactional data denominated in currencies other than EUR, following changes need to be made:</p> <p>Change specification document (DWH-AE File Specification) as follows:</p> <ul style="list-style-type: none"> <li>• Add chapter describing the multi-currency setup of DWH to AE interface</li> <li>• Add specification in chapter 3.3, how files can be separated by currency on AE side</li> <li>• Change existing chapters to outline multi-currency setup</li> <li>• Outline that files described in following chapters which refer to Minimum Reserve are not available in currencies other than EUR: <ul style="list-style-type: none"> <li>○ 4.6 Minimum Reserve Configuration Management</li> <li>○ 5.8 Minimum Reserve</li> </ul> </li> </ul> <p>Change filter specification document (DWH-AE Filter Specification) as follows:</p> <ul style="list-style-type: none"> <li>• Change filter definitions referring to the currency in order to allow selection of non-EUR currencies.</li> <li>• Define new table containing all currencies relevant for AE</li> </ul> <p>Change or add additional ETL processes to extract non-EUR static and transactional data from DWH Core tables and generate output files to be sent to AE segregated by currency</p> <p><b>Main cost drivers</b> Change and add new ETL processes</p>
<p><b>Impact on other TARGET Services and projects</b></p> <p>No impact on ECMS or TIPS. T2: see CR T2_0091_URD</p>
<p><b>Summary of project risk</b></p> <p>No risk has been identified</p>
<p><b>Security analysis</b></p> <p>No adverse effect has been identified during detailed assessment.</p>



15 August 2023

## Cost assessment on Change Requests

<b>T2S-801-SYS – Submission of DWH cash-related data in any specific currency/CB system entity to a CB analytical platform</b>			
One-off	Assessment costs*		
	- Preliminary	0.00	Euro
	- Detailed	10,000.00	Euro
One-off	Development costs	27,055.23	Euro
Annual	Operational costs		
	- Maintenance costs	2,122.90	Euro
	- Running costs	0.00	Euro

\*The relevant assessment costs will be charged regardless of whether the CR is implemented (Cf. T2S Framework Agreement, Schedule 7, par. 5.2.3).