

General Information (Origin of Request)		
<input type="checkbox"/> User Requirements (URD) <input checked="" type="checkbox"/> Other User Functional or Technical Documentation (SYS)		
Request raised by: Eurosystem	Institute: 4CB	Date raised: 20/09/2019
Request title: Common Reference Data Management for T2-T2S Consolidation – Reused Objects		Request ref. no: T2S-0721-SYS
Request type: Common	Classification: Maintenance	Urgency: Normal
1. Legal/business importance parameter: Medium		2. Market implementation efforts parameter: Low
3. Operational/Technical risk parameter: Medium		4. Financial impact parameter: No financial impact
Requestor Category: Eurosystem		Status: Implemented

This Change Request is one of the T2S Change Requests related to the T2-T2S Consolidation Project. The tentative distribution of these Change Requests per functional area and T2S release is summarised in the table below (as of 2 November 2020):

	R4.0 (Jun 2020)	R4.2 (Nov 2020)	R5.0 (Jun 2021)	R5.2 (Nov 2021)	R6.0 (Jun 2022)	R6.2 (Nov 2022)
					T2S>ESMIG	
ESMIG (Connectivity)					CR-701	
CRDM (Reference data)	CR-719	CR-721	CR-704 CR-696		CR-705	
BILL (Billing)				CR-697	CR-706	
BDM (Business day)		CR-698			CR-707	
DWH (Historical data)					CR-699	
LEA (Legal archiving)					CR-700	
T2-T2S communication		CR-702 (ICL) CR-703 (camt.050)	CR-729			CR-734
Liquidity management			CR-708 (Outbound LT) CR-709 (Cash sweep)			
Maintenance window			CR-710			

Reason for change and expected benefits/business motivation:

The T2-T2S Consolidation project envisions that in 2021 the Common Reference Data Management (CRDM) common component shall provide features to setup, maintain and query all reference data used by the different Eurosystem Market Infrastructure services. A first version of the CRDM, named CRDM^{TIPS}, was developed to support the maintenance of the reference data necessary for TIPS; CRDM^{TIPS} was built as an enhancement of today's T2S Static Data Management (SDMG). The impact on T2S stemming from these changes is described in T2S Change Request 674. Additional changes are required in order to accommodate the reference data requirements for the Central Liquidity Management (CLM) and Real-Time Gross Settlement (RTGS) components of the future T2 Service, as well as for the new Billing and Business Day Management common components that will replace respectively the current T2S Billing and Scheduling modules. This reference data will make use of the Service concept introduced with CRDM^{TIPS}. This concept allows to partition and reuse data based on the Service and component it is relevant for; for example, a Party needs only to be defined once, and linked to CLM and RTGS in order to be available in both CLM and RTGS. In order to ensure backwards compatibility with T2S, no specific link to T2S is foreseen for the time being.

The implementation of the fully-fledged CRDM and its impact on T2S will take place over three successive steps, each introducing a new set of reference data objects with their related maintenance functions and business interfaces to CRDM. Reference data objects are assigned to a specific lot depending on the type of impact on the T2-T2S Consolidation project and on the T2S side, reflecting agreements with market participants based on the following theoretical scenarios:

- scenario 1: impact on T2S, reuse in CSLD;
- scenario 2: no impact on T2S, reuse in CSLD;
- scenario 3: impact on T2S, integration (direct change) in CSLD;
- scenario 4: no impact on T2S, integration (direct change) in CSLD;
- scenario 5: impact on T2S, integration (clone) in CSLD;

- scenario 6: no impact on T2S, integration (clone) in CSLD;
- scenario 7: new development in CSLD;
- scenario 8: new development in T2S;
- scenario 9: impact on T2S, not in scope for CSLD;

Of the above, only scenarios 2, 4 and 7 occur in practice and are relevant for the purposes of this CR. Therefore, the set of CRDM reference data objects will be partitioned according to the following rationale:

1. Existing T2S objects that are modified in T2-T2S Consolidation (i.e. scenario 4, the subject of CR719);
 2. Existing T2S objects that are reused without any changes in T2-T2S Consolidation (i.e. scenario 2, the subject of this CR);
 3. New objects developed specifically for T2-T2S Consolidation, not used by T2S (i.e. scenario 7, the subject of CR696).
- In addition to this basic logic, each lot will also contain any additional reference data objects that are strictly necessary to allow the proper functioning of objects that are included in the lot.

As of the T2-T2S Consolidation go-live, objects that are specific to T2S and not used in T2-T2S Consolidation (notably the objects managed by CSDs and their participants) will still be exclusively available in T2S. The final step will entail the coverage of these objects in T2-T2S Consolidation and the decommissioning of the related interfaces from T2S.

To clarify the overall framework and the differences between the full scope of CRDM and the current T2S SDMG, this section first focuses on the scope of CRDM for the new Services/components, and then provides detailed information on the design and implementation approach that was adopted in order to identify all the detailed changes to be performed.

1. CRDM reference data for T2-T2S Consolidation

The new Services/components require a set of functions to setup, maintain and display their reference data. More in detail, users will need to setup, maintain and query the following reference data objects:

TABLE 1 – T2-T2S CONSOLIDATION REFERENCE DATA OBJECTS AND RESPONSIBLE ACTORS

AREA	OBJECT	RESPONSIBLE ACTORS ¹
Party	Party Party Service Link (<i>non-T2S</i>) Banking Group (<i>non-T2S</i>) Ancillary System Procedure (<i>non-T2S</i>) Ancillary System Bilateral Agreement (<i>non-T2S</i>)	Operator, CB Operator, CB CB CB CB
Cash account	Cash Account Liquidity Transfer Order Limit Authorised Account User (<i>non-T2S</i>) Account Monitoring Group (<i>non-T2S</i>) Liquidity Transfer Group (<i>non-T2S</i>) Settlement Bank Account Group (<i>non-T2S</i>) Direct Debit Mandate (<i>non-T2S</i>) Standing Order for Reservation (<i>non-T2S</i>)	CB CB, Payment Bank CB, Payment Bank CB, Payment Bank CB, Payment Bank CB CB CB, Payment Bank CB, Payment Bank
Access rights management	User Role Privilege Certificate DN User-Certificate DN Link	All Operator, CB Operator, CB (only granting) All All
Message subscription configuration	Message Subscription Rule Message Subscription Rule Set	CB CB
Network configuration	Routing Technical Address Network Service Link DN-BIC Routing (<i>non-T2S</i>)	CB CB CB, Payment Bank
Report configuration	Report Configuration	All
Restriction type management	Restriction Type	Operator, CB (only for T2S)
Billing configuration	Invoice Configuration (<i>non-T2S</i>) VAT (<i>non-T2S</i>)	CB CB

¹ "All" indicates that all types of T2S Actors (T2S Operator, CSDs, CBs, Payment Banks and CSD Participants) have the ability to manage the object type.

CLM and RTGS will receive the relevant data from CRDM in a daily propagation. A functionality for the Operator shall also be available in order to trigger the daily propagation of reference data upon request in case of contingency.

The propagation of reference data from CRDM to CLM/RTGS (and never vice versa) is the only operational link between the two services. This link is not expected to create any issue for either service. In fact:

- From a T2S viewpoint, the propagation process will be fully decoupled from all other processes and events of the T2S Settlement Day. Therefore, any possible issue concerning this process will not cause any stop or delay of T2S operations. Also, even in case of unavailability of CLM/RTGS, the propagation process on the CRDM side will complete successfully and without any impact on T2S operations.
- From a CLM/RTGS viewpoint, the unavailability of CRDM would prevent the possibility to propagate reference data to CLM/RTGS or may cause a delay in such propagation. In this scenario, there would be an operational impact on CLM/RTGS, consisting in the need to continue operations without new reference data or reference data changes that were supposed to become active in CLM/RTGS with the new business day.

2. Design and implementation approach

The design and the implementation of CRDM for T2-T2S Consolidation follows the same approach that was adopted for CRDM for TIPS.

In short, for each reference data object/function considered, one of the following implementation approaches is applied:

- Reuse: the *as-is* object/function can be fully reused to get to the *to-be* object/function (no software change is needed).
- Integration: the *as-is* object/function has to be enhanced to get to the *to-be* object/function.
- New development: the *to-be* object/function has to be developed from scratch.

Description of requested change:

As documented in section **1.6.3.3.1 – Static data objects** of the UDFS, the functional scope of SDMG can be conceptually partitioned into the following areas:

- Party
- Securities
- Securities Account
- T2S Dedicated Cash Account
- Access Rights Management
- Message Subscription Configuration
- Network Configuration
- Report Configuration
- Attribute Domain Management
- Scheduling Configuration
- Market-Specific Attribute Configuration
- Restriction Type Management
- Conditional Securities Delivery Configuration
- Billing Configuration
- Configuration Parameters

According to the above described high-level functional gap analysis and technical implementation analysis, CLM/RTGS require CRDM to cover the following subset of SDMG/CRDM areas:

- Party
- Cash Account
- Access Rights Management
- Message Subscription Configuration
- Network Configuration
- Report Configuration
- Restriction Type Management

Focusing on this limited subset of SDMG/CRDM areas and with specific reference to the static data objects falling in the scope of CRDM, the following table (see also **table 142** in section **1.6.3.3.1 – Static data objects** of the UDFS) provides the exhaustive list of relevant static data objects and the type of impact each of them will undergo:

Table 2 – T2-T2S Consolidation Reference Data Objects and impact relative to T2S

AREA	OBJECT	SCENARIO	TYPE OF IMPACT
Party	Party	4	Integration (Direct Change)
	Party Service Link (<i>non-T2S</i>)	4	Integration (Direct Change)
	Banking Group (<i>non-T2S</i>)	7	New
	Ancillary System Procedures (<i>non-T2S</i>)	7	New
	Ancillary System Bilateral Agreement (<i>non-T2S</i>)	7	New
Cash account	Cash Account	4	Integration (Direct Change)
	Liquidity Transfer Order	4	Integration (Direct Change)
	Limit	4	Integration (Direct Change)
	Authorised Account User (<i>non-T2S</i>)	4	Integration (Direct Change)
	Account Monitoring Group (<i>non-T2S</i>)	7	New
	Liquidity Transfer Group (<i>non-T2S</i>)	7	New
	Settlement Bank Account Group (<i>non-T2S</i>)	7	New
	Direct Debit Mandate (<i>non-T2S</i>)	7	New
	Standing Order for Reservation (<i>non-T2S</i>)	7	New
Access rights management	User	2	Reuse
	Role	2	Reuse
	Privilege	4	Integration (Direct Change)
	Certificate DN	2	Reuse
	User-Certificate DN Link	4	Integration (Direct Change)
Message subscription configuration	Message Subscription Rule	4	Integration (Direct Change)
	Message Subscription Rule Set	4	Integration (Direct Change)
Network configuration	Routing	4	Reuse ²
	Technical Address Network Service Link	2	Reuse
	DN-BIC Routing (<i>non-T2S</i>)	4	Integration (Direct Change)
Report configuration	Report Configuration	4	Integration (Direct Change)
Restriction management type	Restriction Type	4	Reuse ³
Billing configuration	Invoice Configuration (<i>non-T2S</i>)	7	New ⁴
	VAT (<i>non-T2S</i>)	7	New ⁵

3. Reference Data Objects coverage

Based on the above analysis, this Change Request aims at listing the T2S objects that are used in T2-T2S Consolidation but without any change.

Table 3 – Reference Data Objects reused in T2-T2S Consolidation

AREA	OBJECT
Network configuration	Routing
	Technical Address Network Service Link
Restriction type management	Restriction Type

In addition, the following reference data objects maintained exclusively by the T2S Operator will be included:

- Attribute Domain

² Initially flagged as a scenario 4 object, following detailed analysis no changes are necessary for Routing given those already implemented for CRDM-TIPS

³ Initially flagged as a scenario 4 object, following detailed analysis no changes are necessary for Restriction Type given those already implemented for CRDM-TIPS

⁴ New object introduced with T2-T2S Consolidation CR0016 (Billing common component).

⁵ New object introduced with T2-T2S Consolidation CR0016 (Billing common component).

- Service Item
- Network Service
- Event Type
- Operating Day Type
- Closing Day
- Country
- Currency
- System Entity
- BIC Directory
- Service
- Currency Service Link

4. Detailed Reference Data object details

The design and the implementation of CRDM for T2-T2S Consolidation follows the same approach that was adopted for CRDM for TIPS.

The following sections describe in detail the type of impact and any potential implication on the concerned T2S Actors.

Network configuration

New Network Services for CLM/RTGS will be defined. Default routing will be used to define the single Party technical address to be used by CLM/RTGS for sending push notifications. In addition, a single Conditional routing may be put in place to identify an additional technical address per party for the receipt of the General Ledger file.

Routing

Type of Impact	Reuse
Impact on the software	The Routing object was already modified by TIPS CR 0010 to introduce new business rules to allow, among other things, separate default and conditional routing configurations for each Service. The reference to the Service will be retrieved from the Network Service referenced in the Routing configuration. No additional changes to T2-T2S Consolidation are expected in addition to these.
Impact on the data	Existing Routing configurations in T2S are not impacted. Additional Routing configurations will be put in place for CLM/RTGS.
Concerned T2S Actors	Central Bank, Payment Bank
Implications for T2S Actors	The new Routing configurations defined for CLM/RTGS will not be visible in T2S.

Technical Address Network Service Link

Type of Impact	Reuse
Impact on the software	No impact.
Impact on the data	Technical Address Network Service Links already existing in T2S are not impacted. New Technical Address Network Services Links (related to CLM/RTGS) will be created.
Concerned T2S Actors	None
Implications for T2S Actors	The new Technical Address Network Service Links will not be visible in T2S.

Restriction Type management

New Restriction Types will be defined by the Operator and used for blocking CLM/RTGS cash accounts.

Restriction Type

Type of Impact	Reuse
Impact on the software	The Service attribute introduced for TIPS will be used for CLM/RTGS as well. This attribute will not be handled on T2S side, and the T2S functionality will continue functioning as before.
Impact on the data	Restriction Types already existing in T2S are not impacted and will not require any kind of migration operation (the Service attribute will simply not be used in T2S for the time being). New Restriction Types (related to CLM/RTGS) will be created by the Operator in order to allow blocking CLM/RTGS Cash Accounts.
Concerned T2S Actors	Central Bank, Payment Bank
Implications for T2S Actors	The new Restriction Types (related to CLM/RTGS) will not be visible in T2S.

Error messages

In addition, error messages explicitly referencing T2S will be made more general (and therefore more meaningful for all services). This editorial change is not expected to have any impact on the applications of T2S Actors or to reduce the intelligibility of the error messages.

Submitted annexes / related documents:**Proposed wording for the Change request:**

All objects described above are fully reused in T2-T2S Consolidation, therefore no change is foreseen on T2S.

High level description of Impact:

The CRDM common component will be enriched with additional objects and functions to manage data relevant for T2 in the T2-T2S Consolidation framework. The objects and functions listed in this CR exist in T2S, although no change is foreseen on them. Given the nature of CRDM as an enhancement of the T2S Static Data Management domain, the CRDM and T2S business interfaces will access the same objects in parallel. In any case, no impact on T2S users is foreseen due to these objects being not modified for T2-T2S Consolidation.

Outcome/Decisions:

- * CRG on 8 October 2019: The CRG agreed to recommend the CR for authorisation by the T2S Steering Level.
- * PMG on the 15 October 2019: The PMG proposed the allocation of the CR for R4.2.
- * AMI-SeCo on 16 October 2019: The AMI-SeCo agreed with the recommendation of the CRG.
- * CSG on 25 October 2019: The CSG authorised the CR for allocation to a T2S release.
- * NECSG on 28 October 2019: The NECSG authorised the CR for allocation to a T2S release.
- * MIB on 8 November 2019: The MIB authorised CR-721.
- * CRG on 22 January 2020: The CRG took note of the detailed assessment results and agreed to recommend the implementation of CR-721 in R4.2 to the PMG.
- * PMG on 23 January 2020: The PMG recommended the CR for approval by the T2S Steering Level and its inclusion in R4.2.
- * OMG on 30 January 2020: The OMG completed the operational assessment of the CR.
- * CSG on 5 February 2020: The CSG approved the inclusion of CR-721 in R4.2.
- * NECSG on 10 February 2020: The NECSG approved the inclusion of CR-721 in T2S R4.2.
- * MIB on 13 February 2020: The MIB approved the inclusion of CR-721 in the scope of T2S Release 4.2 without discussion.

EUROSYSTEM ANALYSIS – GENERAL INFORMATION

T2S Specific Components		Common Components	
LCMM			
	Instructions validation		
	Status management		
	Instruction matching		
	Instructions maintenance		
	Penalty Mechanism		
Settlement			
	Standardisation and preparation to settlement		
	Night-time Settlement		
	Daytime Recycling and optimisation		
	Daytime Validation, provisioning & booking		
	Auto-collateralisation		
Liquidity Management			
	Outbound Information Management		
	NCB Business Procedures		
	Liquidity Operations		
T2S Interface (as of June 2022 without Static Data Management, Communication for SDMG, Scheduler, Billing)			
	Communication		
	Outbound Processing		
	Inbound Processing		
Static Data Management (until Nov 2021)		Common Reference Data Management (from PROD R5.2 Nov 2021)	
	Party data management	X	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	X	Rules and parameters data management
Statistics and archive		Statistics and archive	
	Statistical information (until Nov 2021)		Short term statistical information
	Legal archiving (until Nov 2021)		Legal archiving (from PROD R5.2)
			Data Warehouse (from PROD R5.2)
Information (until June 2022 containing reference data)		CRDM business interface (from PROD R6.0 June 2022)	
	Report management		Report management
	Query management		Query management
			Communication
		X	Outbound Processing
		X	Inbound Processing
Operational Services			
	Data Migration (T2S DMT)		Data Migration (CRDM DMT, from PROD R5.2)
	Scheduling (until Nov 2021)		Business Day Management (from PROD R5.2)
			Business Day Management business interface (from PROD R6.0)
	Billing (until June 2022)		Billing (from PROD R5.2)
			Billing business interface (from PROD R6.0)
	Operational Monitoring		Operational and Business Monitoring

Impact on major documentation		
Document	Chapter	Change
Impacted GFS chapter		
Impacted UDFS chapter		
Additional deliveries for Message Specification		
UHB		
Links with other requests		
T2S-0696-SYS, T2S-0719-SYS, T2S-0704-SYS, T2S-0705-SYS		
OVERVIEW OF THE IMPACT OF THE REQUEST ON THE T2S SYSTEM AND ON THE PROJECT		
Summary of functional, development, infrastructure and migration impacts		
<p>No changes will be delivered for these objects and while they will be used in parallel on CRDM side. No impact is expected for T2S.</p> <p>In line with this, no change to the T2S scope-defining documentation is foreseen.</p> <p>ECMS is not impacted by this CR.</p>		
Summary of project risk		
Security analysis		
No adverse effect has been identified during security assessment.		