General Information (Origin of Request)
☐ User Requirements (URD)
☒ Other User Functional or Technical Documentation (SYS)

Request raised by: Migration Subgroup	Institute: ECB	Date raised: 8 March 2013
Request title: Clarifications to the "Data Migration Tool requirements and related procedures"		Request ref. no: T2S 0396 SYS
Request type: Common		Urgency: Normal
1. Legal/business importance parameter: Low		2. Market implementation efforts parameter: Low
3. Operational/Technical risk parameter: Low		4. Financial impact parameter: No cost impact
Requestor Category: T2S Subgroup		Status: Authorised at Steering Level

Reason for change and expected benefits/business motivation:

The amendment is required to update and streamline the baseline version of the "Data Migration Tool (DMT) requirements and related procedures" v 0.6 in order to clarify and complement the existing drafting based on the discussions in the Migration Subgroup forum.

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Description of requested change:

The purpose of the change is to implement some editorial changes aiming at clarifying the existing drafting of the baseline version of the "DMT requirements and related procedures" v0.6

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Submitted annexes / related documents:

T2S_0396_SYS_attachment ("DMT Requirements and related procedures" version 1.0.3)

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Proposed wording for the Change request:

The proposed changes are presented in revision marks in the attached document.

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High level description of Impact:

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Outcome/Decisions:

- MSG on 15 March 2013: The Migration Sub-group agreed, via a written procedure, to submit the Change Request and its attachment (i.e. Data Migration Tool requirements and related procedures v1.0.3) to the Change Review Group.

- CRG meeting of 25 March 2013: The CRG agreed to correct some minor typos of the CR's attachment and proposed that the CR 396 should be submitted to the Steering level for approval.

- CRG meeting on 25 March 2013: The CRG agreed to correct some minor typos of the CR's attachment and proposed that the CR 396 should be submitted to the Steering level for approval.

- CSG resolution on 5 April 2013: Following a written procedure, the CSG adopted the resolution to approve the Change Request.

- Advisory Group's advice on 5 April 2013: Following a written procedure, the AG was in favour of the Change Request.

Data Migration Tool ~~Specifications~~Requirements and Related Procedures

Version	~~V0.6 (baseline)~~V1.0.3.1
Date	~~27/6/201208~~28/03/2013

Table of Content

Preface

In T2S users can communicate with the platform in 2 ways: A2A and U2A. Some CSDs have indicated from the very beginning of the project, though, that those 2 channels would not be enough to cover their needs during the migration of their static and/or dynamic data to the new system. Especially in the last weekend preceding the migration it was considered crucial to have an efficient and an as safe as possible mode to load a potentially huge amount of data, minimizing the related risks, not least the operational risks stemming from the manual input of data. This is why already in the URD it was foreseen to have a Data Migration Tool (DMT) "to support the transfer of data from the CSD to T2S[1]". Nevertheless, it is important to emphasise that the standard A2A and U2A channels are available to migrate data to the T2S system, and should even be considered as the primary channels. The DMT is only an additional channel, to be used if the standard channels are considered suboptimal.

It is worth mentioning that no specific Key Performance Indicators are foreseen on the performance of the Data Migration Tool. However, procedures are described in Chapter 2 of this document in order to ensure a smooth usage of the tool for the needs of all the CSDs and the NCBs.

The document describes the scope of the Data Migration Tool (Chapter 1), the Operational Procedures (Chapter 2) and the Technical File Specifications (Chapter 3) related to the DMT.

This document is part of the T2S Scope Defining Set of Documents as defined in the Schedule 1 to the Framework Agreement and is added to the T2S list of Deliverables as defined in the Schedule 2 - Annex 8 (ID 73) to the Framework Agreement. As regards the applicable change management procedure, the document will follow the procedure described in the Schedule 9 to the FA.

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[1] Although DMT is built around CSDs requirements, NCBs are allowed to use the tool. This would be within the same functional scope as additional NCB requirements can not be provided.

1   Scope of the Data Migration Tool

The Data Migration Tool is an application aiming at supporting the migration of data from the CSDs' and NCBs' databases to T2S. It is an alternative to the standard A2A and U2A channels, whereby CSDs and NCBs will have the opportunity to perform bulk data upload. Therefore, they will need to prepare and submit pre-defined structured file via a web-based application, which will then be released by the T2S Operator for further processing and upload in the T2S database, as described in Chapter 2.2.2. After processing, enriched files containing the result of the upload and statistical information will be delivered back to the CSDs and the NCBs, for reconciliation purposes.

The main objective of the tool is to reduce the workload for uploading large volumes of data, as well as the operational risk during the pre-migration phase and the migration week-end. Therefore, CSDs and NCBs will be allowed to use the DMT already in the 3 months before their migration week-end in order to populate the environment with their static data. Afterwards, CSDs can use the DMT for, e.g., the creation of the cross-CSD links with the CSDs migrating in subsequent waves. In addition, irrespective of its own migration date, each CSD can use the tool to upload securities reference data for which it acts as Securities Maintaining Entity (SME). NCBs will be able to use DMT for each migration wave involving at least of their participants.

Beyond the migration on the production environment, the DMT will also be used to support and speed up the setup of testing environments during the various phases of User Testing. Therefore, the DMT will be available from the start of the User Testing phase. The DMT is not supposed to be used after the end of the migration period.

The DMT will allow creating and appending data sets. Modification and deletion of data sets will not be supported. Where required (e.g. wrong data upload), only an emergency last level intervention is foreseen. Also, functions like i) copying a data configuration from a T2S environment to another, ii) supporting maintenance of data or iii) supporting simulations on the system, are not covered by the DMT.

Related to this, it should be noted that any tool (like snapshot / backup facilities) which will be used purely for testing/simulation purposes are part of the related deliverables for User Testing. Also, it is important to note that a high-level description of further tools which are required to support the migration are out of scope of this document and will be addressed separately.

2 Procedural Aspects

2.1 Data Migration Processes based on Data Migration Tool

The communication process can be split into the 2 flows: the submission of files from the CSDs and the NCBs through the Web application (Chapter 2.1.1) and the subsequent communication sent back to the CSDs and the NCBs (Chapter 2.1.3).

The first three sections of this chapter describe the process in case of a successful migration of data, whereas in the last section (Chapter 2.1.4) there is a description of the possible problems and solutions.

The flows described here have no interdependency with the other ways of entering information in T2S, i.e. A2A and U2A: this means that it is technically possible to migrate different pieces of information at the same time using DMT in conjunction with A2A and U2A, unless there is any inconsistency detected by the system. Any detected error would follow the regular error handling foreseen for the related channel (e.g. Migration status KO for the record, A2A status advice, error display for U2A interaction).

In any case, the DMT will process the files without any further contemporary input from the DMT, in order to minimise the risk of errors, which is especially crucial on the migration weekends. Nevertheless, the U2A and A2A channels are available, even when DMT files are being uploaded or processed.

2.1.1 Submission of files to the Eurosystem

As explained in the overview, the Data Migration Tool provides a Web Application. The CSDs and the NCBs upload flat files or Excel files structured according to the technical specifications (chapter 2) using a secure HTTP channel: a browser with an HTML graphic user interface will be provided along with a DMT URL (to be specified at a later stage) which is onlywould be available during the migration period.windows to migrating CSDs and not migrated CSDs acting as SME.

The tool is developed to process separately the data coming from different CSDs and the NCBs: this means that in each file upload there can only be information related to one single CSD or NCB. All the security measures foreseen for T2S apply to DMT as well, including those related to the authentication of the users.

In [Placeholder: Privileges and roles to be assigned for the U2A users for the DMT uploading. To be further specified at a later stage.]

The processing of the tool has been designed in a wayorder to differentiate the records migrated by using the DMT from those migrated by using and to safely control the interaction with the Data

Migration Tool, a specific T2S System User (e.g. "CSDX-DMTUser" where CSDX would be the system entity code the A2Auser belongs to) has to be used by the interacting party.

Migrating party will assign this user the privilege to use the Data Migration Tool.

As the user identification will be propagated to back-end modules for processing, it will be also necessary to grant necessary privileges and U2A channels, by means of an audit trail/or roles to perform requested actions (e.g. creation of parties, etc).

Possible new role definition (e.g. "migrator") to group necessary privileges from the list provided within UDFS for migrating parties might be introduced in the general role description.

2.1.2   T2S Operator Services

The activities of CSDs and NCBs regarding submission of files to the Web application have to be planned well in advance and have to take place in a coordinated manner in accordance with a pre-agreed script. Such script will describe the time window available for each CSD and NCB during which it will be expected to upload the files containing the data records that need to be migrated to the T2S system. It will aim at both the 3-month period for the static data upload and the more crucial migration weekends.

Once a file has been uploaded by the CSD or the NCB, it becomes available to the operators of the T2S Service Desk who have access to the same Web Application with a different "privilege" from that of the CSDs or the NCBs. The T2S operator is not only able to read the file, but has also the task to "release" it to T2S for processing. The need for the intervention of the T2S operator stems basically from the desire to make the overall design of the DMT simpler e.g. to avoid implementing special measures which would protect the system from being overloaded, to avoid managing simultaneous usage by CSDs or NCBs.

The T2S operator will monitor the overall activity on the Web application in order to ensure a smooth subsequent processing of the files by the tool and subsequently in the T2S system. During the 3 months pre-migration period (i.e. prior to a migration date), the T2S Operator will ensure that files which have been uploaded by CSDs or NCBs within the pre-agreed time window will be released for processing within the timeframe of two hours. If a file cannot be released for further processing, (e.g. rescheduled activities, change of business date), the respective CSD or NCB will be informed within this timeframe.

During the migration weekend, all stakeholders have to act in accordance with the Detailed Migration Weekend Playbook, which is expected to specify time windows for the uploading of DMT files by specific CSDs or NCBs. In case a CSD or a NCB uploads files outside of the assigned time window the T2S operator will act on best effort basis and releases the files as soon as possible considering the higher priority for files uploaded by the CSD or the NCB which has been assigned the current time window. However, CSDs or NCBs acting outside of "their" time window will be informed about this situation immediately. Moreover, the CSDs or the NCBs will receive a confirmation of the reception of the file once it has been uploaded onto the T2S web application.

Some further pre-condition have to be considered:

- ~~The~~ If DMT channel is used, the files have been uploaded into web application ~~(= usage of the DMT channel), not valid if A2A and U2A channel is used~~

- Only ensured for CSDs and NCBs belonging to the respective migration wave, as well as for CSDs acting as Securities Maintaining Entity (SME)

- Other relevant static data have been correctly set-up, e.g. static data to be set-up by other T2S Actors (=data interdependencies)

Once the file has been released by the T2S operator the related T2S functions will be triggered (such as technical validations by DMT/Interface and business validations by backend modules).

The usage of the T2S audit trace will differentiate records migrated via DMT from those uploaded via A2A or U2A. The data migrated via the DMT will be distinguishable by a user which shall only be applied by the DMT (i.e. special "DMT-userIDs"). Therefore all activities performed by these DMT-userIDs can be identified via the U2A audit trail.

2.1.3 Communication from the Eurosystem to CSDs and NCBs

At the end of the processing, the stored file is enriched with the result at the level of the single records. The reply of the feedback (enriched file, etc.) will be managed by the DMT web application.

The enriched file will contain the ~~same information as the notifications/acknowledgements that result from U2A or A2A interactions. When creation of static~~submitted data ~~is only possible via U2A, the information in the enriched file is the only~~complemented with further notification~~/acknowledgement. When creation of static data~~ resulting out of the validations performed within the DMT module (i.e. migration status of the record, error code and ~~dynamic data is possible via A2A, the T2S application will send out the normal notifications via A2A~~description in case of unsuccessful migration) and statistical information.

The T2S operator will be in charge of checking the result of the file processing and triggers further actions (e.g. submit enriched file via Web application).

All the further notifications resulting from the normal processing and the return values of the "backend modules" are available to the users via a query function and a list screen. The list screen can be also exported into an Excel format.

At the end of each file processing a statistical feedback is added to the header of the enriched file: it will include information about the number of records submitted, the number of records correctly migrated and the number of records which could not be migrated due to an error.

2.1.4 Examples of problems and solutions

This section describes some possible problems along with the related solutions from a procedural point of view.

The main problem is the possible presence of "wrong" data or incomplete data in the system after the usage of the tool. An emergency procedure applies according to the different scenario:

Scenario n.1: a CSD or a NCB has sent an older version of a certain file and this differs from a newer updated version;

In this case the T2S Operator has no possibility to detect any problem and only the CSD or the NCB can initiate the emergency procedure by communicating with the Service Desk. The T2S Operator will open a ticket in the T2S trouble management system to ask for a Last Level intervention and keeps the CSD or the NCB informed accordingly. In very specific and rare cases, it could be decided to "clean" the database, i.e. to physically erase records from the database, while at the same time ensuring full data consistency. The activity is neither available to the T2S Actors, nor to the T2S Operational Team, and can only be performed by the Last Level Intervention Team. At the end of such intervention, that is once the database has been "cleaned" from the wrong data, the CSD or the NCB can send the correct file via the usual way.

- Scenario n.2: some of the records of a certain file might contain inconsistencies (either formatting errors or negative validation results);

In this case it could happen that some of the records are correctly entered in the system and others are not. The problem can be detected by the CSD, the NCB or by the T2S Operator, for example by checking the statistical report. The CSD, the NCB or the T2S operator detecting the problem is able to start the emergency procedure and the CSD or the NCB is at the end requested to send a "delta" file containing only the affected records.

- Scenario n.3: At the end of the whole process there is some inconsistency between the input file and the T2S database.

In this case the CSD or the NCB detects the issue by comparing the file it has sent with the result of the processing of the tool, and gets immediately in contact with the T2S Service Desk. The T2S Operator will check whether there is any real inconsistency or not (for example, due to negative results from CSD's or NCB's internal checks). In the first case the T2S Operator will open a ticket to immediately start the technical investigation on the issue, and at the end of it the same file can be resubmitted to the tool. In the second case, the CSD or the NCB is informed that the tool worked correctly and the situation could go ahead as in Scenario n.1.

3 Technical Specifications

3.1 Data sequence and interdependencies

This section aims at providing a description on the sequence of data to be migrated to the T2S system considering the respective interdependencies among the data.

A consistent data set-up in T2S is performed in two steps:
- Business application configuration
- Static and dynamic data creation by CSDs / NCBs

The complexity of static data but also dynamic data leads to dependencies among those entities. Dynamic data cannot be handled without a consistent static data set up. Furthermore, cross-CSD dependencies need to be taken into consideration by CSDs when introducing static and dynamic data.

3.1.1 Business application configuration

Business application configuration is a prerequisite for any actor to access T2S.
It is performed by the T2S Operator as an initial step for a consistent system wide data set-up.

Several tasks must be performed to fulfil a consistent business application configuration:
- System entities configuration
- Party reference data for system entities
- Access right configuration
- General restriction types
- General attribute domains (GFS chapter 3.3.11.7)
- Billing reference data
- Countries
- Currencies

For a detailed description of the business application configuration refer to UDFS Chapter 1.5.1

Once all this data is available CSDs and NCBs can start with the migration of their common and proprietary data.

3.1.2 Static data to be migrated

A complete and consistent set of static data shall be migrated from system entities systems to T2S.

Entities information is taken from conceptual data model as part of GFS. Static data are grouped in processes and activities. Each process identifies a data domain and is made up of activities. For each activity a different flow is needed.

For each activity the possible modes of communication are listed. Annex 1 contains an overview table of all static data entities and their maintenance modes.

In the following diagram dependencies and responsibilities are represented:
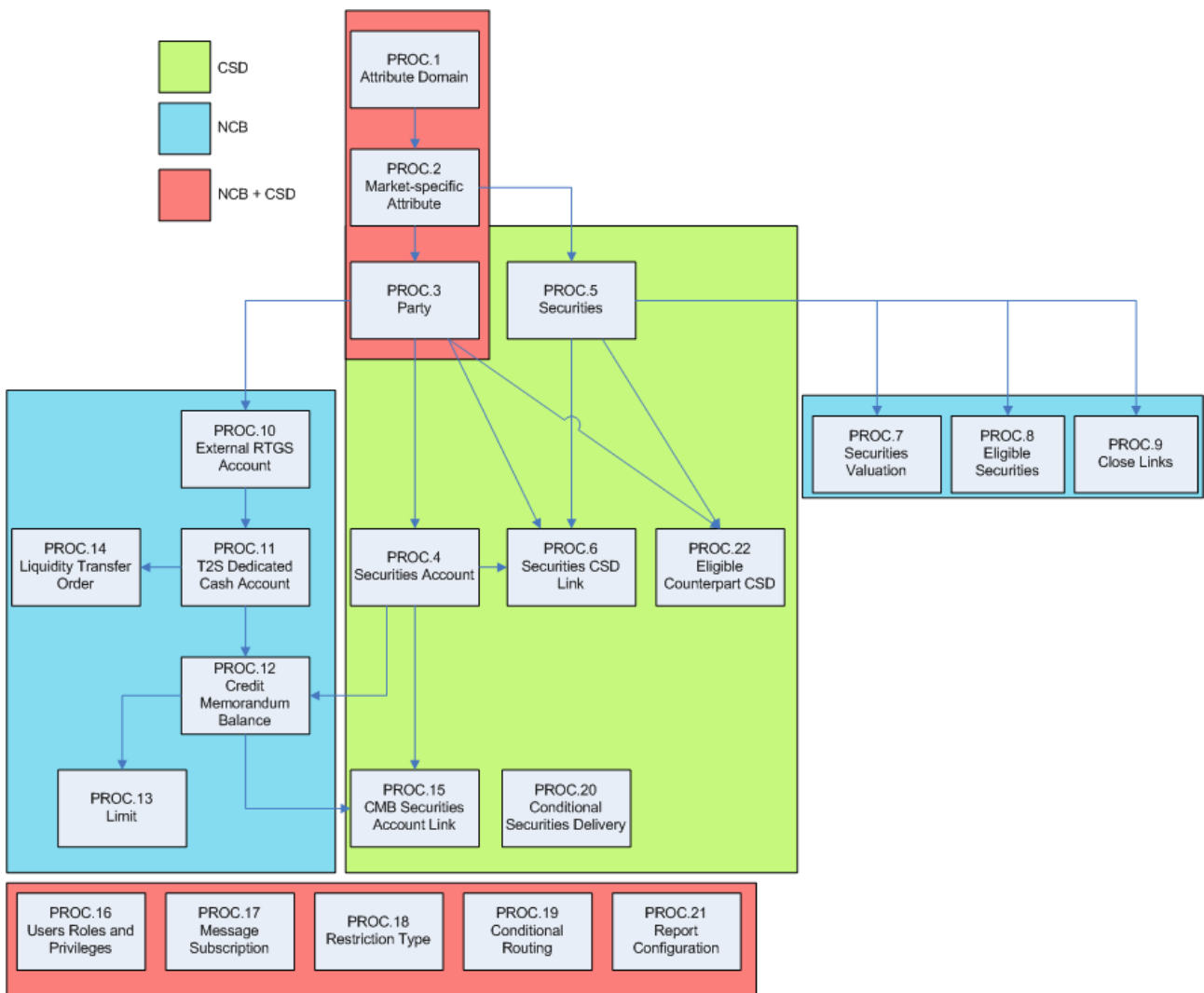
Processes to be performed are:

[PROC.1] Attribute domain

Pre-requisites: None
Parallel processes: None
Actor: CSD and NCB

This process is optional and includes two activities.
It is the basis for the configuration of market-specific attributes needed by the actor.

[ACT.1.1]
Mode: U2A

Creation of attribute domains and attribute values
Involved entities are:
- Attribute Domain
- Attribute Value

[ACT.1.2]
Mode: U2A

Creation of attribute references and reference values
Involved entities are:
- Attribute Reference
- Reference Value

[PROC.2] Market-specific Attribute
Pre-requisites: PROC.1
Parallel processes: None
Actor: CSD and NCB

This process is optional and includes one activity.
Proper attribute domain configuration is needed in order to request creation for market-specific attributes.
A new process on securities reference data context for security market specific attribute assignment has to be added, this will be done for the next version of the doc.
[ACT.2.1]
Mode: U2A

Creation of market-specific attributes
Involved entities are:
- Market-specific Attribute

[PROC.3] Party reference data
Pre-requisites: none
Parallel processes: PROC.5
Actor: CSD and NCB

This process includes three activities and can be performed independently from the creation of securities.

[ACT.3.1]
Mode: U2A – A2A - DMT

Creation of CSD Participants/Payment banks (whether system entities is a CSD or a NCB) and External CSDs.
Involved entities are:

- Party
- Party Code
- Party Address
- Party Name
- Party Technical Address
- Party Restriction
- Auto-Collateralisation Rule (NCB only)
- Market-Specific Party Attribute Value

[ACT.3.2]
Mode: U2A - DMT

CSDs and NCBs should link party technical addresses with available network services.
Involved entities are:

- Party Technical Address Network Service Link

[ACT.3.3]
Mode: U2A – A2A - DMT

Creation of additional market-specific attributes if limit on [ACT3.1] is exceeded.
Involved entities are:

- Market-Specific Party Attribute Value

[PROC.4] Securities Account
Pre-requisites: PROC3
Parallel processes: PROC.10 - PROC.11
Actor: CSD

This process includes three activities. Parties to which securities account belong must already exist.

[ACT.4.1]
Mode: U2A – A2A - DMT

Creation of securities accounts for itself and parties for which the CSD is responsible.
Involved entities are:

- Securities Account
- Party Securities Account Relationship
- Securities Account Restriction
- Market-Specific Securities Account Attribute Value

[ACT.4.2]
Mode: U2A – DMT

CSDs shall provide with CSD Account links.

Involved entities are:
- CSD Account Link

[ACT.4.3]
Mode: U2A – A2A - DMT

Creation of additional market-specific attributes if limit on [ACT.4.1] is excedeed.
Involved entities are:
- Market-Specific Securities Account Attribute Value

[PROC.5] Securities
Pre-requisites: PROC.2
Parallel processes: PROC.3
Actor: CSD

This process includes three activities.
Securities reference data can be uploaded independently from party reference data

[ACT.5.1]
Mode: U2A – A2A - DMT

Creation of securities
Involved entities are:
- Securities
- Securities Name
- Securities Code
- Deviating Settlement Unit
- Market-Specific Security Attribute Value
- Security Restriction

[ACT.5.2]
Mode: U2A – A2A - DMT

Creation of market-specific attributes by investor CSDs or by Issuer CSD if limit foreseen on [ACT5.1] is exceeded.
Involved entities are:
- Market-Specific Security Attribute Value

[ACT.5.3]
Mode: U2A – A2A - DMT

Creation of security restrictions by investor CSDs
Involved entities are:
- Security Restriction

[PROC.6] Securities CSD Link

Pre-requisites: PROC.3 – PROC.5 – PROC.4
Parallel processes: None
Actors: CSD

This process includes one activity.
Party and securities reference data definition must have been performed in advance.
Securities accounts to be used as issuance account for links must already exist.

[ACT.6.1]
Mode: U2A – A2A - DMT

CSDs shall provide with securities CSD links.
Involved entities are:
- Security CSD Link

[PROC.7] Securities valuations

Pre-requisites: PROC.5
Parallel processes: PROC.8 – PROC.9
Actors: NCB

This process includes one activity.
As data migration tool would be available for CSDs only, NCBs and payment banks should use message reda.024.001.01 via A2A as defined in UDFS Chapter 3.3.6.18.

 [ACT.7.1]
Mode: U2A – A2A

NCBs and payment banks might provide with securities valuations
Involved entities are:
- Securities Valuation
- Securities Valuation Party

[PROC.8] Eligible securities

Pre-requisites: PROC.5
Parallel processes: PROC.7 – PROC.9)
Actor: NCB

This process includes one activity and can be run in parallel with the creation of the securities valuation.
As data migration tool would be available for CSDs only, NCBs and payment banks should use message reda.025.001.01 via A2A as defined in UDFS Chapter 3.3.6.19.

[ACT.8.1]
Mode: U2A – A2A

NCBs and payment banks might define securities as eligible for collateralisation.
Involved entities are:
- Security Auto-collateralisation Eligibility

[PROC.9] Close links
Pre-requisites: PROC.5
Parallel processes: PROC.7 – PROC.8
Actor: NCB

This process includes one activity and can be run in parallel with the creation of the securities valuation and definition of the eligible securities.

[ACT.9.1]
Mode: U2A – A2A

NCBs might provide with close links for securities.
Involved entities are:
- Close Link

[PROC.10] External RTGS Account
Pre-requisites: PROC.3
Parallel processes: None
Actors: NCB

This process includes one activity and must be performed prior to creation of T2S Dedicated Cash Accounts.

[ACT.10.1]
Mode: U2A

Creation of External RTGS Accounts to which T2S Dedicated Cash Account must be linked upon creation.

Involved entities are:
- External RTGS Account
- External RTGS Account Restriction

[PROC.11] T2S Dedicated Cash Account
Pre-requisites: PROC.10
Parallel processes: None
Actors: NCB

This process includes one activity.
Parties to which accounts are created for must already exist.

External RTGS Account to link must already exist.

[ACT.11.1]
Mode: U2A – A2A

Creation of T2S Dedicated Cash Accounts for itself and parties for which the NCB is responsible.
Involved entities are:
- T2S Dedicated Cash Account
- T2S Dedicated Cash Account Restriction

[PROC.12] Credit Memorandum Balance
Pre-requisites: PROC.11 – PROC.4
Parallel processes: PROC.14
Actors: NCB

This process includes one activity.
Securities account to set as Receiving and Regular securities accounts must already exist.
T2S Dedicated Cash Account to set as NCB Account must already exist.

[ACT.12.1]
Mode: U2A

NCBs might provide with CMB definitions.
Involved entities are:
- Credit Memorandum Balance
- BIC Matching Rule
- NCB T2S Dedicated Cash Account
- Receiving Securities Account
- Regular Securities Account

[PROC.13] Limits
Pre-requisites: PROC.12
Parallel processes: None
Actors: NCB

This process includes one activity.
Credit memorandum balance to which limits are to be attached must be created in advance.
[ACT.13.1]
Mode: U2A – A2A

NCBs might provide with Limits.

Involved entities are:
- Limit

[PROC.14] Liquidity Transfer Order
Pre-requisites: PROC.11
Parallel processes: None
Actors: NCB

This process includes one activity.
T2S Dedicated Cash Account referenced in liquidity transfer orders must already exist.

[ACT.14.1]
Mode: U2A – A2A

NCBs might provide with Liquidity Transfer Order
Involved entities are:
- Liquidity Transfer Order
- Liquidity Transfer Order Link
- Liquidity Transfer Order Link Set

[PROC.15] CMB Securities Account links
Pre-requisites: PROC.4 – PROC.12
Parallel processes: None
Actors: CSD

This process includes one activity.
Securities account to which the link is created must be already existing.
NCBs must have created related Credit Memorandum Balances to attach the securities accounts.

[ACT.15.1]
Mode: U2A – A2A – DMT

CSDs might provide with CMB Securities Account links.
Involved entities are:
- CMB Securities Account Link

[PROC.16] Users, Roles and Privileges
Pre-requisites: PROC.3 - PROC.4 – PROC.5 – PROC.11
Parallel processes: All
Actors: CSD and NCB

This process includes four activities.

[ACT.16.1]
Mode: U2A - DMT

Creation of users

For user assignment to a party, related entity resulting from PROC.4, must be already set up.
Involved entities are:
- User

[ACT.16.2]
Mode: U2A - DMT

CSD or NCB might provide with new roles based on existing privileges.
Involved entities are:
- Role

[ACT.16.3]
Mode: U2A - DMT

CSD or NCB might create secured groups of entities.
For object level configuration of roles and privileges, related entities resulting from PROC.3, PROC.4, PROC.5 and PROC.11 must be already set up.
Involved entities are:
- Secured Group
- Secured Element Group

[ACT.16.4]
Mode: U2A - DMT

CSD or NCB might assign roles or privileges to parties for which they are responsible.
Involved entities are:
- Grantee Role
- Grantee System Privilege
- Privilege Party
- Role Party
- Grantee Object Privilege Scope

[PROC.17] Message Subscription
Pre-requisites: PROC.3 - PROC.4 – PROC.5 – PROC.11
Parallel processes: All
Actors: CSD and NCB

This process includes two activities.

[ACT.17.1]
Mode: U2A - DMT

Creation of message subscription rule sets
For message subscription rule set assignment, related party resulting from PROC.4, must be already set up.

Involved entities are:

- Message Subscription Rule Set
- Message Subscription Rule Set Party

[ACT.17.2]
Mode: U2A - DMT

Creation of message subscription rules
For proper message subscription rule configuration and accordingly to the type of parameter, related entities resulting from PROC.3, PROC.4, PROC.5 and PROC.11 must be already set up.
Involved entities are:

- Message Subscription Rule
- Message Subscription Rule Parameter

[PROC.18] Restriction Type
Pre-requisites: PROC.3 - PROC.4 – PROC.5 – PROC.11
Parallel processes: All
Actors: CSD and NCB

This process includes two activities.

[ACT.18.1]
Mode: U2A - DMT

Creation of proprietary restriction types
Involved entities are:

- Restriction Type

[ACT.18.2]
Mode: U2A - DMT

Creation of restriction type rules
For proper restriction type rule configuration and accordingly to the type of parameter, related entities resulting from PROC.3, PROC.4, PROC.5 and PROC.11 must be already set up.
Involved entities are:

- Restriction Type Rule
- Restriction Type Parameter

[PROC.19] Conditional Routing
Pre-requisites: None
Parallel processes: All
Actors: CSD and NCB

This process includes one activity.

[ACT.19.1]
Mode: U2A

Creation of conditional routings
Involved entities are:
- Routing
- Conditional Routing

[PROC.20] Conditional Securities Delivery
Pre-requisites: PROC.3 – PROC.4 – PROC.5
Parallel processes: All
Actors: CSD

This process includes two activities.

[ACT.20.1]
Mode: U2A - DMT

Creation of COSD rule sets
For COSD rule set assignment, the related party resulting from PROC.4 must be already set up.
Involved entities are:
- COSD Rule Set

[ACT.20.2]
Mode: U2A - DMT

Creation of COSD rules
For proper COSD rule configuration and accordingly to the type of parameter, related entities resulting from PROC.3, PROC.4, and PROC.5 must be already set up.
Involved entities are:
- COSD Rule
- COSD Rule Parameter

[PROC.21] Report Configuration
Pre-requisites: PROC.3
Parallel processes: All
Actors: CSD and NCB

This domain includes one activity.

[ACT.21.1]
Mode: U2A - DMT

Creation of report configurations

For report configuration assignment, the related party resulting from PROC.4 must be already set up.

Involved entities are;

- Report Configuration
- Report Configuration Party Link

[PROC.22] Eligible Counterpart CSD
Pre-requisites: PROC.3 – PROC.5
Parallel processes: All
Actors: CSD

This domain includes one activity.

[ACT.22.1]
Mode: U2A – A2A – DMT

Creation of eligible counterpart CSDs
For eligibility at securities level, the related security resulting from PROC.5 must be already set up.
Involved entities are;

- Eligible Counterpart CSD

3.1.3 Dynamic data to be migrated

Dynamic data are:

- Securities positions (s)
- Settlement instructions (SI)
- Settlement restrictions (SR):
  - Blocking
  - Earmarking
  - Reservation
- Maintenance instructions (MI):
  - Hold and release
  - Cancellation
  - Amendment

- Liquidity transfers

Due to the different nature of Dynamic data versus Static Data, Dynamic data will not be migrated to T2S during the three months before the weekend migration but only after the close of business of the last day in the CSDs legacy system.

Migration of dynamic data includes two high level activities:

[ACT.22.] Migration of securities position (including blocked positions)

[ACT.22.1] Securities Positions
Securities positions can be migrated by means of settlement instructions (FOP) having a settlement quantity equal to the securities position of the last business day.

[ACT.22.2] Blocked Positions
Restricted Securities positions (e.g. blocked positions) can be migrated by means of settlement restrictions having a settlement quantity equal to the securities position to be restricted.

[ACT.23] Migration of the remaining pending instructions

[ACT.23.1] Recycled Instructions
Recycled instructions can be migrated by means of settlement instructions.

[ACT.23.2] The migration of the Settlement instruction (SI) with ISD equal with the go-live date and beyond, Settlement Restriction (SR) and Maintenance instruction (MI)
All instructions with ISD beyond the go-live date should be migrated to T2S during the migration weekend.

3.2 Data coverage of the DMT

The static data coverage of the DMT includes the vast majority of static data information. In detail, it is as follows:

Party reference data:
- Party
- Party code
- Party Address
- Party Name
- Party Technical Address
- Market-Specific Party Attribute Value
- Party Technical Address Network Service Link
- Eligible Counterpart CSD

Securities account reference data:
- Securities account
- Party Securities Account Relationship
- CSD Account Link
- Market-Specific Securities Account Attribute Value
- CMB Securities Account Link

Securities reference data:
- Securities
- Securities Name

- Securities Code
- Deviating Settlement Unit
- Market-Specific Security Attribute Value
- Security CSD Link

User, Roles and Privileges:
- User
- Role
- Grantee Role
- Grantee System Privilege
- Privilege Party
- Role Party
- Grantee Object Privilege Scope
- Secured Group
- Secured Element Group
- Certificate DN
- User Certificate DN Link

Conditional Securities Delivery:
- COSD Rule Set
- COSD Rule
- COSD Rule Parameter

Message Subscription:
- Message Subscription Rule Set Party
- Message Subscription Rule Set
- Message Subscription Rule
- Message Subscription Rule Parameter

Report Configuration:
- Report Configuration
- Report Configuration Party Link

Restriction Type:
- Restriction Type
- Restriction Type Rule
- Restriction Type Parameter
- Restriction Type Parameter Specific Attributes

As regards the dynamic data the DMT covers the migration of the initial positions on the securities accounts via FOP instructions during the migration weekends. ~~The~~, the migration of pending settlement instructions, ~~,~~ and settlement restrictions ~~and~~[2].

The migration of maintenance instructions is essentially the same as the submission of these instructions as part of the normal T2S operations of CSDs. These instructions will therefore not be covered by the ~~DMT~~DMT.

3.3 Format of Input Files

~~The supported character set will be UTF-8. However, the characters must be compliant to the Restricted FIN charset due to coexistence of ISO15022 and ISO20022 as specified in the UDFS and DMT files must follow this rule: characters not compliant to Restricted FIN would lead to a rejection of records. The sending CSD or NCB will be informed which invalid characters caused the rejection of a record.~~

~~Example for party data management:~~

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[2] ~~Pending settlement instructions and settlement restrictions coverage has been requested with Change Requests 385 and 386 which have been not formally approved yet and currently under detailed assessment.~~

Type of Request	Create New Party			
Entry No	1			2
PartyCode.ValidFrom	25.03.2015			25.03.2015
PartyCode.PartyMnemonic	BKBANKCCXXX			ERNBADEMUXXX
PartyAddress.Street	Charles Drive Square			Viktualienmarkt
PartyAddress.HouseNumber	1			1
PartyAddress.PostalCode	100			80000
PartyAddress.City	Rome			München
PartyAddress.StateorProvince	Italy			Germany
PartyAddress.CountryCode	IT			DE
PartyAddress.ValidFrom	20.03.2015			20.03.2015
Party.PartyOpeningDate	25.03.2015			25.03.2015
Party.PartyCloseDate				
PartyTechnicalAddress.TechnicalAddress	ou=bkbankccxx,o=swift	cn=second,ou=bkbankccxx,o=swift		ou=erbademuxxx,o=swiftq
Market-SpecificPartyAttributeValue.Market-SpecificAttributeName	Legal Structure	Class	Notes	Legal Structure
Market-SpecificPartyAttributeValue.Value	LLC	Medium	Contract under discussion.	LLC
PartyName.ValidFrom	20.03.2015			20.03.2015
PartyName.PartyLongName	Black Knight Banking Corporation			Erste Bank München AG
PartyName.PartyShortName	BK Bank			Erste Bank
PartyRestriction.ValidFromTimestamp				
PartyRestriction.ValidToTimestamp				
PartyRestriction.RestrictionType				

3.4 Format of enriched Output Files

Example for party data management:

	Create New Party			
Type of Request				
Entry No	1			2
PartyCode.ValidFrom	25.03.2015			25.03.2015
PartyCode.PartyMnemonic	BKBANKCCXXX			ERNBADEMUXXX
PartyAddress.Street	Charles Drive Square			Viktualienmarkt
PartyAddress.HouseNumber	1			1
PartyAddress.PostalCode	100			80000
PartyAddress.City	Rome			München
PartyAddress.StateorProvince	Italy			Germany
PartyAddress.CountryCode	IT			DE
PartyAddress.ValidFrom	20.03.2015			20.03.2015
Party.PartyOpeningDate	25.03.2015			25.03.2015
Party.PartyCloseDate				
PartyTechnicalAddress.TechnicalAddress	ou=bkbankccxx,o=swift	cn=second,ou=bkbankccxx,o=swift		ou=erbademuxxx,o=swiftq
MarketSpecificPartyAttributeValue.MarketSpecificAttributeName	Legal Structure	Class	Notes	Legal Structure
MarketSpecificPartyAttributeValue.Value	LLC	Medium	Contract under discussion.	LLC
PartyName.ValidFrom	20.03.2015			20.03.2015
PartyName.PartyLongName	Black Knight Banking Corporation			Erste Bank München AG
PartyName.PartyShortName	BK Bank			Erste Bank
PartyRestriction.ValidFromTimestamp				
PartyRestriction.ValidToTimestamp				
PartyRestriction.RestrictionType				
Status	o.k.			error
Business Rule Short Name				DMTA999
Error Text				Field "PartyAddress.City" contains invalid characters.

~~The field named „Error Text" is a repetitive field.~~

Annex: overview of static data entities and their maintenance modes

Activity	U2A	A2A	DMT
1.1 Attribute domain	X		
1.2 Attribute reference	X		
2.1 Market specific attribute	X		
3.1 Party	X	X	X
3.2 Party technical address	X		X
3.3 Market-Specific Party Attribute Value	X	X	X
4.1 Securities account	X	X	X
4.2 CSD Account link	X		X
4.3 Market- Specific Securities Account Attribute Value	X	X	X
5.1 Securities	X	X	X
5.2 Market- Specific Security Attribute Value	X	X	X
5.3 Security Restriction	X	X	X
6.1 Securities CSD link	X	X	X
7.1 Securities valuation	X	X	
8.1 Eligible securities	X	X	
9.1 Close link	X	X	
10.1 External RTGS Account	X		
11.1 T2S Dedicated cash account	X	X	
12.1 Credit memorandum balance	X		
13.1 Limit	X		
14.1 Liquidity transfer order	X	X	
15.1 CMB Securities account link	X	X	X
16.1 User	X		X
16.2 Role	X		X
16.3 Secured Group	X		X
16.3 Role assignment	X		X
17.1 Message subscription rule set	X		X
17.2 Message subscription rule	X		X
18.1 Restriction type	X		X
18.2 Restriction type rule	X		X
19.1 Conditional routing	X		~~X~~
20.1 Conditional securities delivery rule sets	X		X
20.2 Conditional securities delivery rule	X		X
21.1 Report configuration	X		X

22.1 Eligible counterpart CSD	X	X	X

Annex 2: overview of dynamic data entities and their maintenance modes[3]

Activity	U2A	A2A	DMT
Free of Payment Settlement Instruction	X	X	X

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[3] Table will be updated upon Change Requests 385 and 386 formal approval.