

<b>General Information (Origin of Request)</b>		
<input type="checkbox"/> User Requirements (URD) <input checked="" type="checkbox"/> Other User Functional or Technical Documentation (SYS)		
<b>Request raised by:</b> 4CB	<b>Institute:</b>	<b>Date raised:</b> 24/04/2017
<b>Request title:</b> Long Term Statistical Information improvements and performance optimisation (Phase 1)		<b>Request ref. no:</b> T2S-0660-SYS
<b>Request type:</b> Common		<b>Urgency:</b> Normal
<b>1. Legal/business importance parameter:</b> High	<b>2. Market implementation efforts parameter:</b> Low	
<b>3. Operational/Technical risk parameter:</b> Low	<b>4. Financial impact parameter:</b> No cost impact	
<b>Requestor Category:</b> 4CB	<b>Status:</b> Authorised at steering level	

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

Since the first migration wave, users may encounter different types of issues related to performance when using the predefined queries and reports available for end users on the Long Term Statistical Information (LTSI) module.

When refreshing queries or reports the execution times can exceed those defined within the SLA and the results can take time to be displayed.

When launching the reports, the lists of values prompted for selection cannot be refreshed entirely. Indeed, the prompts appear as a list of business values which are not displayed in their entirety. As a result the user is not able to select the value he is looking for.

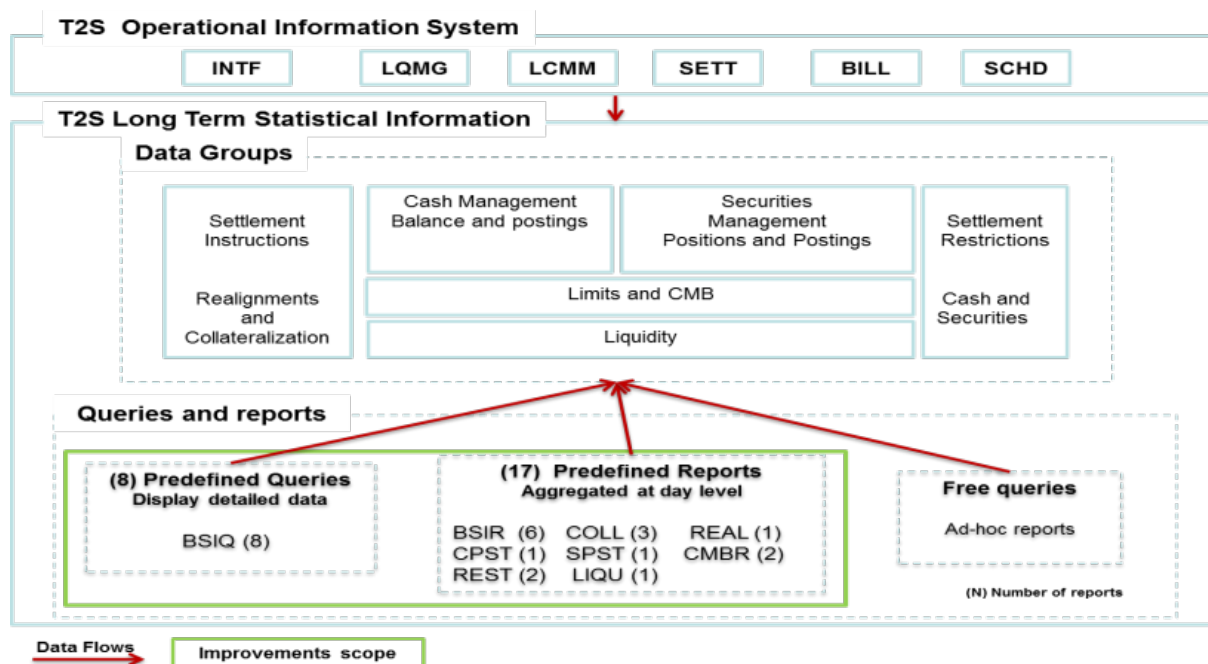
In addition, this list of values can take time to be refreshed during the selection phase prior to accessing the results. This can be adapted to improve the performance of the presentation of the list of values.

Moreover, queries or reports can retrieve very large numbers of records. These may result in very large reports that may contain hundreds of pages. This is also the case for advanced users creating new reports using the "free queries" service. This can lead to the generation of big queries resulting in performance issues on the business database and SAP BI server (the reporting platform).

The following improvements are proposed, focused on the reporting aspects (LTSI predefined queries and reports) in order to:

- Secure and stabilise the LTSI platform
- Enhance the user experience of the LTSI offering/services
- Improve the performance and reduce the delays as encountered today

The changes needed do not impact data extraction, data feeding or data staging which will remain unchanged.



**Description of requested change:**

The requested changes on the LTSI reporting are split into two distinct change requests. This allows, in a first phase, to respond to issues experienced by end users preventing them from fully exploiting the LTSI reporting service. The second phase concerns improvements to enhance the user experience which are of higher complexity and require a more substantial implementation effort.

This change request represents the first phase of the changes.

In order to reduce performance issues, improve the user experience level and the service offered to the end users the following types of improvements are proposed:

- **Report results:** Performance improvements will ensure that results are delivered in a timely manner allowing for the full exploitation of the resulting data
- **Simplification of report prompts:** Allow users to find the proper full business words (i.e. business values). Current prompts ask for technical identifier values that are not known by the users. Future prompts will be based on business values known by the users (e.g. Securities Technical Identifier -> ISIN). Includes the replacement of the related technical identifiers by business values within the corresponding report outputs.
- **Report content:** An alignment of wording used throughout the queries and reports
- **Report list review:** Alignment of UHB and LTSI Access Right Management

The table below describes the changes proposed in phase 1 as described in this 1<sup>st</sup> CR.

Item	Improvement Type	Description	Predefined Queries	Predefined Reports
1	Reports results	- Change report design by transposing row and columns to allow better use, data export (Excel, csv).	X	

2	Reports prompts simplification	<ul style="list-style-type: none"> <li>- Replace technical identifier by business code/reference for predefined queries and reports within report prompts and resulting output.</li> <li>- When list of value are used, modify the prompt to allow user to fill in or add new prompt in addition to List Of Values.</li> </ul>	X	X
3	Reports content	Unify terms used in reports	X	X
4	Reports list review	<ul style="list-style-type: none"> <li>- Remove reports from UHB not available to end users.</li> </ul>	N/a	N/a

#### Impacted Reports and Queries

The reports impacted by this change request are listed below:

Queries/Reports	Report	Description
Predefined Queries	BSIQ.00	Individual Settlement detailed Query
	BSIQ.01	Multi criteria search of a set of Settlement Instructions
	BSIQ.02	Individual Restriction detailed Query
	BSIQ.03	Multi criteria search of a set of Settlement Restrictions
	BSIQ.04	Multi criteria search of a set of Liquidity Transfers
	BSIQ.05	Multi criteria search of a set of Business Cancellations
	BSIQ.06	Multi criteria search of a set of Amendment Instructions
Predefined Reports	BSIQ.07	Multi criteria search of a set of Hold and Release Instructions
	BSIR.00	T2SDCA: Finalized Matched Instructions (drillable)
	BSIR.01	Securities Account: Finalized Matched Instructions (drillable)
	BSIR.02	T2SDCA: Detailed Finalized Matched Settlement Instructions (drillable)
	BSIR.03	Securities Account: Detailed Finalized Matched Settlement Instructions (drillable)
	BSIR.04	T2SDCA: Follow-up by time slot of Settlement activity (drillable)
	BSIR.05	T2SDCA: Comparison of Settlement activity between two time periods (not drillable)
	BSIR.06	Cash Settlement: Follow up of actual settlement date of Finalized Settlement Instructions
	CMBR.00	Journaling and Limits Utilisations of Primary CMB
	CMBR.01	Journaling and Limit Utilisation of Secondary CMB
	COLL.00	T2SDCA: Follow up by time slot of Settled Collateralization Instructions
	COLL.01	Securities accounts: Follow up by time slot of Settled Collateralization Instructions
	COLL.02	T2SDCA: Settled or Cancelled(user, system or manual) Collateralization instructions

CPST.00	T2SDCA: Follow-up by time slot of Cash Postings
LIQU.00	Liquidity Transfers
REAL.00	Detailed Realignment and Other Technical Instructions
REST.00	Detailed Cash Restrictions
REST.01	Detailed Securities Restrictions
SPST.00	Securities Account: Follow-up by time schedule of Securities Postings
XREP.00	T2SDCA: Matched Cancelled Settlement Instructions (drillable) (TC+PC)
XREP.01	Securities account: Matched Cancelled Settlement Instructions (drillable) (TC+PC)
XREP.02	Finalized Non Matched Cancellations (drillable)

**Submitted annexes / related documents:**

**Proposed wording for the SYS Change request:**

**UHB V2.3**

- 1. Report results:** Change the report design by transposing rows and columns to allow for better use, including for data exports (Excel, csv).

We propose to change the design of all predefined queries (BSIQ.XX, see Impacted Reports and Queries table below) by transposing the rows and columns in the query results. The corresponding business values will also replace the technical identifiers in the predefined queries.

This will allow an improved readability and visibility of the results and greater usability of the results when exported in Excel or csv format.

<b>Current BSIQ.xx design</b>	<a href="#">List of Settlement Instructions : 1701120071034382;1701110071010896</a>								
	<b>BSI Settlement Instruction Reference</b>			<b>1701110071010896</b>				<b>1701120071034382</b>	
	<b>Receiving Depository Technical Identifier</b>			200009340				606020	
	<b>Delivering Depository Technical Identifier</b>			200009386				606020	
	<b>T2S Delivering Party Technical Identifier</b>			200009387				200002840	
	<b>T2S Receiving Party Technical Identifier</b>			200009341				618205	
	<b>LCMM Sending Party Technical Identifier</b>			900000				900000	
	<b>LCMM Instructing Party Technical Identifier</b>			200009387				618205	
	<b>TRS Business Settlement Transaction External Identifier</b>			117000797946000				117000798303000	
<b>Future BSIQ.XX design</b>	<a href="#">List of Settlement Instructions : 1701120071034382;1701110071010896</a>								
	<b>BSI Settlement Instruction Reference</b>	<b>Receiving Depository Technical Identifier</b>	<b>Delivering Depository Technical Identifier</b>	<b>T2S Delivering Party Technical Identifier</b>	<b>T2S Receiving Party Technical Identifier</b>	<b>LCMM Sending Party Technical Identifier</b>	<b>LCMM Instructing Party Technical Identifier</b>	<b>TRS Business Settlement Transaction External Identifier</b>	<b>T F S I E I</b>
	<b>1701110071010896</b>	200009340	200009386	200009387	200009341	900000	200009387	117000797946000	<b>1</b>
	<b>1701120071034382</b>	606020	606020	200002840	618205	900000	618205	117000798303000	

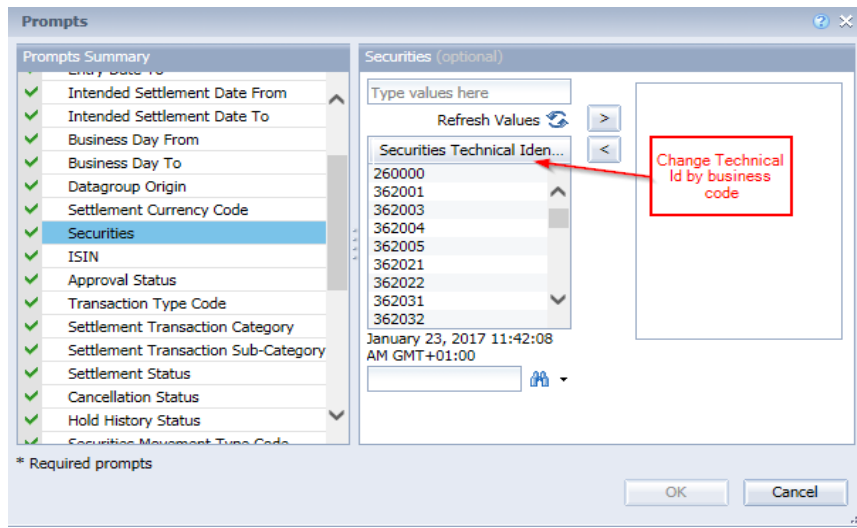
**UHB section 5.2.8. Querying**

List screen screenshots for all sub sections must be replaced.

- 2. Report prompts simplification:** Replace technical identifiers by business codes/references for predefined queries and reports.

We need to replace the prompts currently using technical identifiers by business codes (values known by users;

e.g. Securities Technical Identifier -> ISIN) for predefined queries and reports.



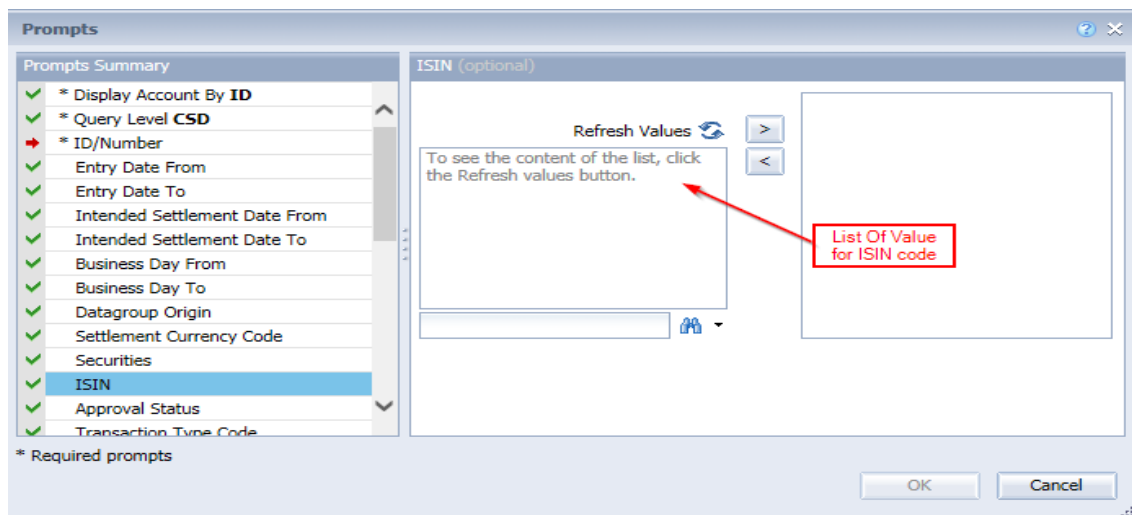
UHB sections “5.2.2 Cash Management” thru “5.2.11 Securities Management” (search screen sections).

**Report prompts simplification:** modify the prompts, when list of value are used, to allow users to fill in or add new prompts in addition to the List Of Values (LOV).

Prompts set up with list of values need to be enhanced due to technical performance (data volume) in predefined queries and reports. It can occur that the list proposed is not completely refreshed and users may not be able to select the value they are looking for. The corresponding business values will also replace the technical identifiers in the resulting report output.

In order to improve this situation, the LOV criteria will be modified as follows:

- Add a field to allow users to provide values in addition to the LOV
- Or completely remove the LOV and only allow users the ability to provide the values.



UHB document: sections “5.2.2 Cash Management” thru “5.2.11 Securities Management” (search screen sections).

3. **Report contents:** Harmonise terms used in reports

Harmonise the terms used in predefined queries and reports and throughout the UHB:

- “Data group” will replace “Data group origin”, “Data sub-group” and “subgroup”

- “Counterparty” will replace “Counterpart”

#### UHB sections

- 5.2.5.1 and 5.2.5.2 BSIR00
- 5.2.5.3 and 5.2.5.4 BSIR01
- 5.2.5.5 and 5.2.5.6 BSIR02
- 5.2.5.7 and 5.2.5.8 BSIR03
- 5.2.5.9 and 5.2.5.10 BSIR04
- 5.2.5.11 and 5.2.5.12 BSIR05
- 5.2.7.1 and 5.2.7.2 LIQU00
- 5.2.8.1 and 5.2.8.2 BSIQ00
- 5.2.8.3 and 5.2.8.4 BSIQ01
- 5.2.9.1 and 5.2.9.2 REAL00

4. **Report list review**: Remove reports not available to end users from the UHB

The following reports are specified in the UHB although they are not available to end users:

- TRAN00, TRAN01, TRAN02, TRAN03, TRAN04, TRAN05
- XREP03 and XREP04.

Reports of type TRAN are reports based on transactions. Users are not authorised to access information about transactions.

XREP03 and XREP04 are reports restricted for internal use and not for T2S participants. T2S participants only have access to their dedicated reports XREP.00/XREP.01/XREP.02.

Therefore these reports must be removed from the UHB.

UHB document: section “5.2.12 Transactions Entity Follow-up”

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#### **High level description of Impact:**

##### **Outcome/Decisions:**

\* CRG meeting on 24 April 2017: The CRG recommended the Change Request for detailed assessment and asked the 4CB to check the feasibility to deliver the Change Request as part of the T2S Release 2.0 in principle subject to a final check via the CRG in a written procedure.

\* CRG on 3 May 2017: During the CRG written procedure from 25 April to 3 May 2017, it was agreed to make some minor changes for completeness.

\* Operational Managers Group on 4 May 2017: During a written procedure from 26 April - 4 May 2017, the Operations Managers Group did not identify any blocking operational impact of the Change Request.

\* Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) on 12 May 2017: Following a written procedure from 8 to 12 May 2017, the AMI-SeCo was in favour of launching the detailed assessment on the Change Request.

\* CSD Steering Group on 15 May 2017: Following a written procedure from 8 to 15 May 2017, the CSD Steering Group was in favour of launching the detailed assessment on the Change Request.

\* CRG teleconference on 20 July 2017: The CRG recommended the approval of the Change Request and its inclusion in the T2S Release 2.0.

\* Operational Managers Group on 27 July 2017: Following a written procedure from 20 - 27 July 2017, the Operations Managers Group reconfirmed that the Change Request does not have any blocking operational impact

\* Project Managers Group meeting on 1 September 2017: The Project Managers Group was in favour of adding the Change Request to Release 2.0 from a planning perspective.

\* Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) on 7 September 2017: Following a written procedure from 4 to 7 September 2017, the AMI-SeCo was in favour of approving the Change Request and its inclusion in T2S Release 2.0.

\* CSD Steering Group on 8 September 2017: Following a written procedure from 4 to 8 September 2017, the CSG adopted the resolution to approve the Change Request and its inclusion in T2S Release 2.0.

**EUROSYSTEM ANALYSIS – GENERAL INFORMATION**

<b>Impact On T2S</b>	<b>Static data management</b>		<b>Interface</b>	
		Party data management		Communication
		Securities data management		Outbound processing
		T2S Dedicated Cash account data management		Inbound processing
		Securities account data management		
		Rules and parameters data management		
	<b>Settlement</b>		<b>Liquidity management</b>	
		Standardisation and preparation to settlement		Outbound Information Management
		Night-time Settlement		NCB Business Procedures
		Daytime Recycling and optimisation		Liquidity Operations
		Daytime Validation, provisioning & booking	<b>LCMM</b>	
		Auto-collateralisation		Instructions validation
				Status management
	<b>Operational services</b>			Instruction matching
		Data Migration		Instructions maintenance
		Scheduling	<b>Statistics, queries reports and archive</b>	
		Billing		Report management
		Operational monitoring		Query management
			x	Statistical information
			Legal archiving	
	All modules (Infrastructure request)			
	No modules (infrastructure request)			
	Business operational activities			
	Technical operational activities			

<b>Impact on major documentation</b>		
<b>Document</b>	<b>Chapter</b>	<b>Change</b>
Impacted GFS chapter		
Impacted UDFS chapter		
Additional deliveries for Message Specification		
UHB	- 5.2.6.7 XREP.03 - T2S instructions entities follow-up for Settlement Instructions – Search Screen - 5.2.6.8 XREP.03 - T2S instructions entities follow-up for Settlement Instructions – List Screen - 5.2.6.9 XREP.04 - Securities Account: T2S Instructions Entities follow-up for Settlement Instructions – Search Screen - 5.2.6.10 XREP.04 - Securities Account: T2S Instructions Entities follow-up for Settlement Instructions – List Screen - 6.4.4.51 TRAN.00 - T2SDCA: Percentage of numbers and original amounts of finalised internal T2S Transactions Entities - List Screen - 6.4.4.52 TRAN.00 - T2SDCA: Percentage of numbers and original	The chapters which reference the reports XREP03, XREP04, TRAN00, TRAN01, TRAN02, TRAN03, TRAN04, and TRAN05 have to be deleted from the UHB.

	<p>amounts of finalised internal T2S Transactions Entities - Search Screen          - 6.4.4.53 TRAN.01 - Securities Account: Percentage of numbers and original quantities of finalised internal T2S Transactions Entities - List Screen          - 6.4.4.54 TRAN.01 - Securities Account: Percentage of numbers and original quantities of finalised internal T2S Transactions Entities - Search Screen          - 6.4.4.55 TRAN.02 - T2SDCA: Follow-up of number of finalised T2S Transactions Entities - List Screen          - 6.4.4.56 TRAN.02 - T2SDCA: Follow-up of number of finalised T2S Transactions Entities - Search Screen          - 6.4.4.57 TRAN.03 - T2SDCA: Follow-up of original amount of finalised T2S Transactions Entities - List Screen          - 6.4.4.58 TRAN.03 - T2SDCA: Follow-up of original amount of finalised T2S Transactions Entities - Search Screen          - 6.4.4.59 TRAN.04 - Securities Account: Follow-up of number of finalised T2S Transactions Entities - List Screen          - 6.4.4.60 TRAN.04 - Securities Account: Follow-up of number of finalised T2S Transactions Entities - Search Screen          - 6.4.4.61 TRAN.05 - Securities Account: Follow-up of original quantities of finalised T2S Transactions Entities - List Screen          - 6.4.4.62 TRAN.05 - Securities Account: Follow-up of original quantities of finalised T2S Transactions Entities - Search Screen          - 6.4.4.69 XREP.03 - T2S Instructions Entities follow-up for Settlement Instructions – List screen          - 6.4.4.70 XREP.03 - T2S Instructions Entities follow-up for Settlement Instructions – Search screen          - 6.4.4.71 XREP.04 - Securities Account: T2S Instructions Entities follow-up for Settlement Instructions – List Screen          - 6.4.4.72 XREP.04 - Securities Account: T2S Instructions Entities follow-up for Settlement Instructions – Search Screen</p> <p>- 5.2.2.1 CPST - T2SDCA: Follow-up by time slot of Cash Postings - Search Screen          - 5.2.4.1 COLL.00 - T2SDCA: Follow-up by time slot of Settled Collateralisation Instructions - Search Screen          - 5.2.4.3 COLL.01 - Securities Accounts: Follow up by time slot of Settled Collateralisation Instructions - Search Screen</p>	<p>Changes for reports BSIR00, BSIR01, BSIR02, BSIR03, BSIR04, BSIR05, LIQU00, BSIQ00, BSIQ01, BSIQ02, BSIQ03, BSIQ04, BSIQ05, BSIQ06, BSIQ07, REAL00:</p> <ul style="list-style-type: none"> <li>▪ The Screenshots which contain T2S Internal References (technical identifier values) have to be replaced by new</li> </ul>
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	<ul style="list-style-type: none"> <li>- 5.2.4.5 COLL.02 - T2SDCA: Settled or Cancelled (user, system or manual) Collateralisation Instructions - Search Screen</li> <li>- 5.2.5.1 BSIR.00 - T2SDCA: Finalised Matched Instructions – Search Screen</li> <li>- 5.2.5.2 BSIR.00 - T2SDCA: Finalised Matched Instructions – List Screen</li> <li>- 5.2.5.3 BSIR.01 - Securities Account: Finalised Matched Instructions - Search Screen</li> <li>- 5.2.5.5 BSIR.02 - T2SDCA: Detailed Finalised Matched Settlement Instructions - Search Screen</li> <li>- 5.2.5.6 BSIR.02 - T2SDCA: Detailed Finalised Matched Settlement Instructions – List Screen</li> <li>- 5.2.5.7 BSIR.03 - Securities Account: Detailed Finalised Matched Settlement Instructions - Search Screen</li> <li>- 5.2.5.9 BSIR.04 - T2SDCA: Follow-up by time slot of Settlement Activity - Search Screen</li> <li>- 5.2.5.11 BSIR.05 - T2SDCA: Comparison of Settlement activity between two time periods - Search Screen</li> <li>- 5.2.7.1 LIQU.00 - Liquidity Transfers - Search Screen</li> <li>- 5.2.7.2 LIQU.00 - Liquidity Transfers – List Screen</li> <li>- 5.2.8.2 BSIQ.00 - Individual Settlement detailed Query - List Screen</li> <li>- 5.2.8.3 BSIQ.01 - Multi-criteria search of a set of Settlement Instructions - Search Screen</li> <li>- 5.2.8.4 BSIQ.01 - Multi-criteria search of a set of Settlement Instructions – List screen</li> <li>- 5.2.8.6 BSIQ.02 - Individual Restriction detailed Query - List Screen</li> <li>- 5.2.8.7 BSIQ.03 - Multi-criteria search of a set of Settlement Restrictions - Search Screen</li> <li>- 5.2.8.8 BSIQ.03 - Multi-criteria search of a set of Settlement Restrictions – List Screen</li> <li>- 5.2.8.9 BSIQ.04 - Multi criteria search of a set of Liquidity Transfers - Search Screen</li> <li>- 5.2.8.10 BSIQ.04 - Multi-criteria search of a set of Liquidity Transfers – List Screen</li> <li>- 5.2.8.11 BSIQ.05 - Multi-criteria search of a set of Business Cancellations - Search Screen</li> <li>- 5.2.8.12 BSIQ.05 - Multi-criteria search of a set of Business Cancellations - List</li> </ul>	<p>screenshots with the customer internal references</p> <ul style="list-style-type: none"> <li>▪ For each report, within the field description in the search screen chapter, the criterion “Display T2SDCA by” has to be deleted because only customer internal references will be available</li> <li>▪ The criterion “ID/Number” will be renamed to “Number”</li> <li>▪ “Counterpart” will be renamed to “Counterparty”.</li> <li>▪ “Data group” will be replaced by “Data group origin”</li> <li>▪ “Data sub-group” will be replaced by “subgroup”</li> </ul>
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	Screen - 5.2.8.13 BSIQ.06 - Multi-criteria search of a set of Amendment Instructions - Search Screen - 5.2.8.14 BSIQ.06 - Multi-criteria search of a set of Amendment Instructions - List Screen - 5.2.8.15 BSIQ.07 - Multi-criteria search of a set of Hold and Release Instructions - Search Screen - 5.2.8.16 BSIQ.07 - Multi-criteria search of a set of Hold and Release Instructions - List Screen - 5.2.9.1 REAL.00 - Detailed Realignment and Other Technical Instructions - Search Screen - 5.2.9.2 REAL.00 - Detailed Realignment and Other Technical Instructions - List Screen - 5.2.11.1 SPST.00 Securities Account: Follow up by time schedule of securities Postings - Search Screen	
External training materials		
Other documentations		
Links with other requests		
Links	Reference	Title
<b>OVERVIEW OF THE IMPACT OF THE REQUEST ON THE T2S SYSTEM AND ON THE PROJECT</b>		
Summary of functional, development, infrastructure and migration impacts		
The solution will be based on the modification of the predefined reports and queries: <ul style="list-style-type: none"> <li>• <b>Transposition:</b> The results of the execution of predefined queries will be displayed by row</li> <li>• <b>Simplification of the prompts:</b> Business codes/references will be proposed. Free input will be possible in addition to the list of values. The “Display account by” criterion will be deleted. Selection of “Query Level” criterion will be cascaded (according to hierarchy of party)</li> <li>• <b>Harmonisation of terms used in reports:</b> “Data group” will replace “Data group origin”, “Data sub-group” and “subgroup”. “Counterparty” will replace “Counterpart”</li> </ul> <b>Use of Business codes/references:</b> All technical references displayed in reports and predefined queries will be replaced by Business codes/references		
Summary of project risk		
None		
Security analysis		
No potentially adverse effect was identified during the security assessment.		