General Information (Origin of Request) ☐ User Requirements (URD) ☒ Other User Functional or Technical Documentation (SYS)		
Request raised by: 4CB	**Institute:**	**Date raised:** 24/04/2017
Request title: Long Term Statistical Information improvements and performance optimisation (Phase 2)		**Request ref. no:** T2S-0661-SYS
Request type: Common	**Urgency:** Normal	
1. Legal/business importance parameter: High	**2. Market implementation efforts parameter:** Low	
3. Operational/Technical risk parameter: Low	**4. Financial impact parameter:** No cost impact	
Requestor Category: 4CB	**Status:** Withdrawn by the initiator	

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.

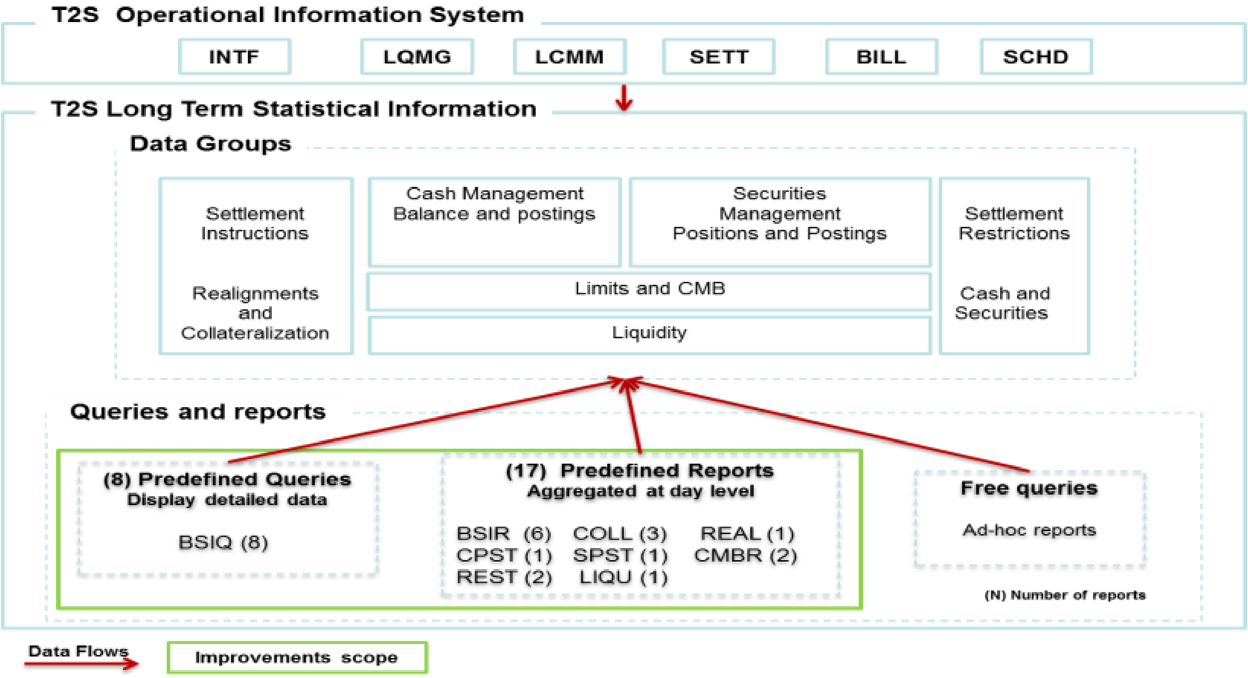
In addition, this list of values can take time to be refreshed during the selection phase prior to accessing the results. This can be adapted to improve the performance of the presentation of the list of values.

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 second and last phase of the changes.

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

- **Report results**: Ensure that results leverage the linked report functionality available on SAP BI (the reporting tool used for LTSI)
- **Simplification of report prompts**: Simplify the prompts for Time dimension and for the Participant Hierarchy
- **Report content**: Simplify error messages provided after prompt selection.

The table below describes the changes proposed in phase 2 as described in this 2nd CR.

Item	Improvement Type	Description	Predefined Queries	Predefined Reports
1	Report results	Ensure results to end users for predefined queries by using the functionality of Linked Reports.	X	

2	Report prompt simplification	Simplify the prompts for Time dimension	X	X
3	Report prompt simplification	Simplify the prompts for Participant Hierarchy	X	X
4	Report content	Simplify error messages provided after prompt selection.	X	X

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
	BSIQ.07	Multi criteria search of a set of Hold and Release Instructions
Predefined Reports	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 Change request:

UHB V2.3

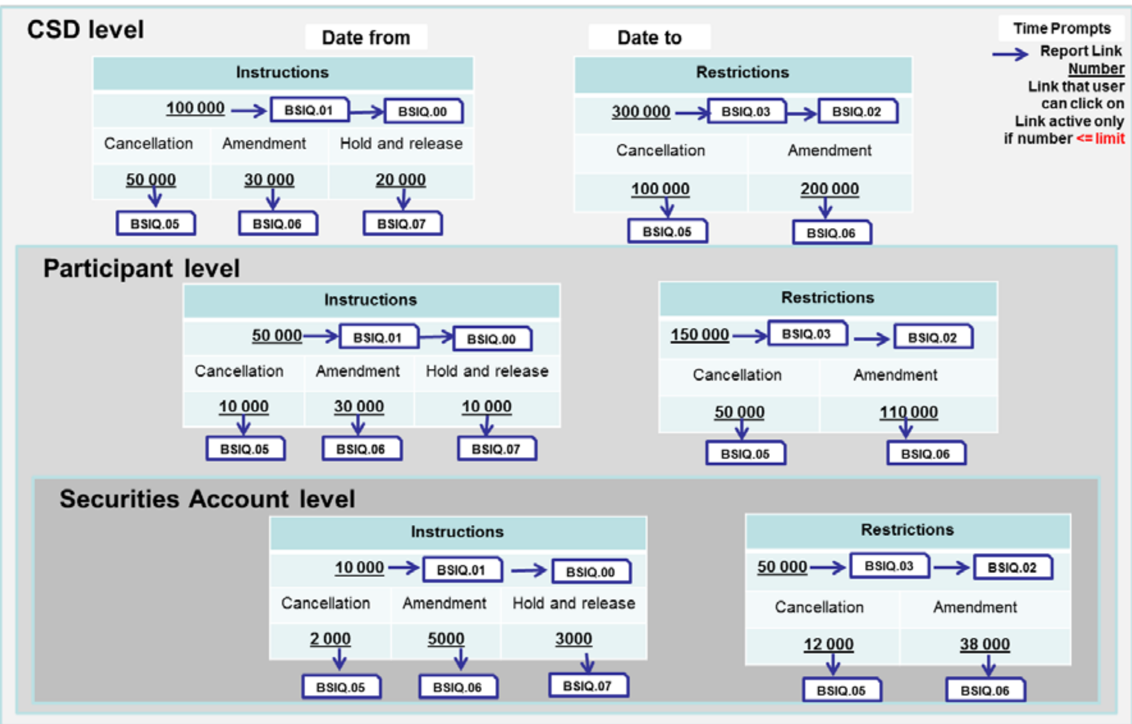
1. **Ensure results to end users for predefined queries (BSIQ.xx, see table below) by leveraging the functionality of Linked Reports**

One or more report(s) will be created and made available to end users as a new starting screen to access the results on predefined queries.

These report(s) will display the number of instructions or restrictions / liquidity and cancellation / amendment / hold and release for the chosen period and represented as a link.

- If the link is active, a click will provide direct access to BSIQ.01 / BSIQ.03 and to BSIQ.04 / BSIQ.05 / BSIQ.06 / BSIQ.07 predefined queries
- The link to the predefined queries will be active only if the number of records returned by this new report is less than a predetermined limit.

These new report(s) will reduce the time required for returning predefined queries results and limit the records retrieved thus avoiding the time lost in formatting, reworking or exporting results.



A new section will be added to UHB to describe this functionality.

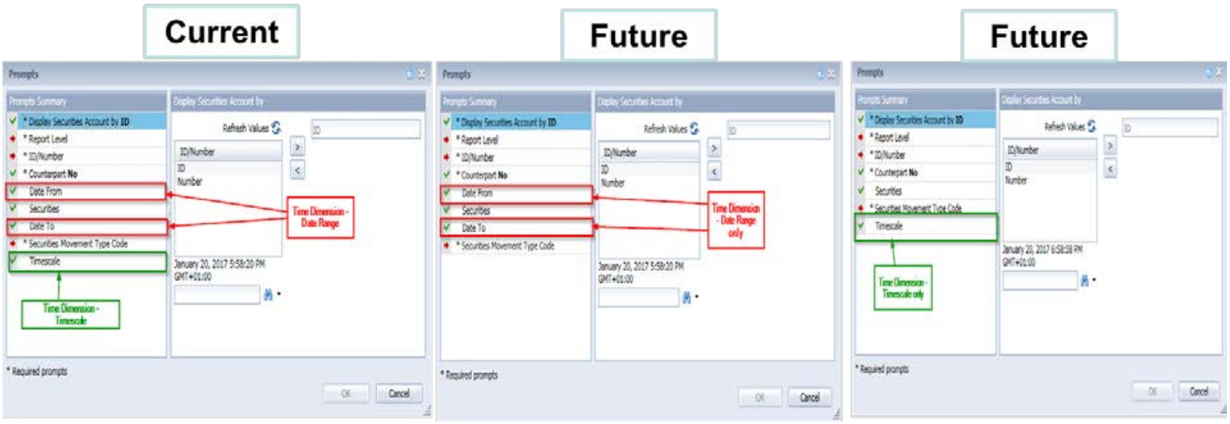
2. Simplify the prompts for the Time dimension

Currently two attributes are proposed to filter the Time dimension: Timescale and Date range.
This situation makes the predefined queries and reports:

- More complex and difficult to maintain from a technical point of view
- Produces lots of controls on both attributes

This situation will be improved by prompting with only one selection on the Time Dimension.
Reports that ask for more than one attribute for the time selection will be modified:

- Keeping only one attribute and removing the other (timescale or date range)
- Duplicating the report with the other time attribute.



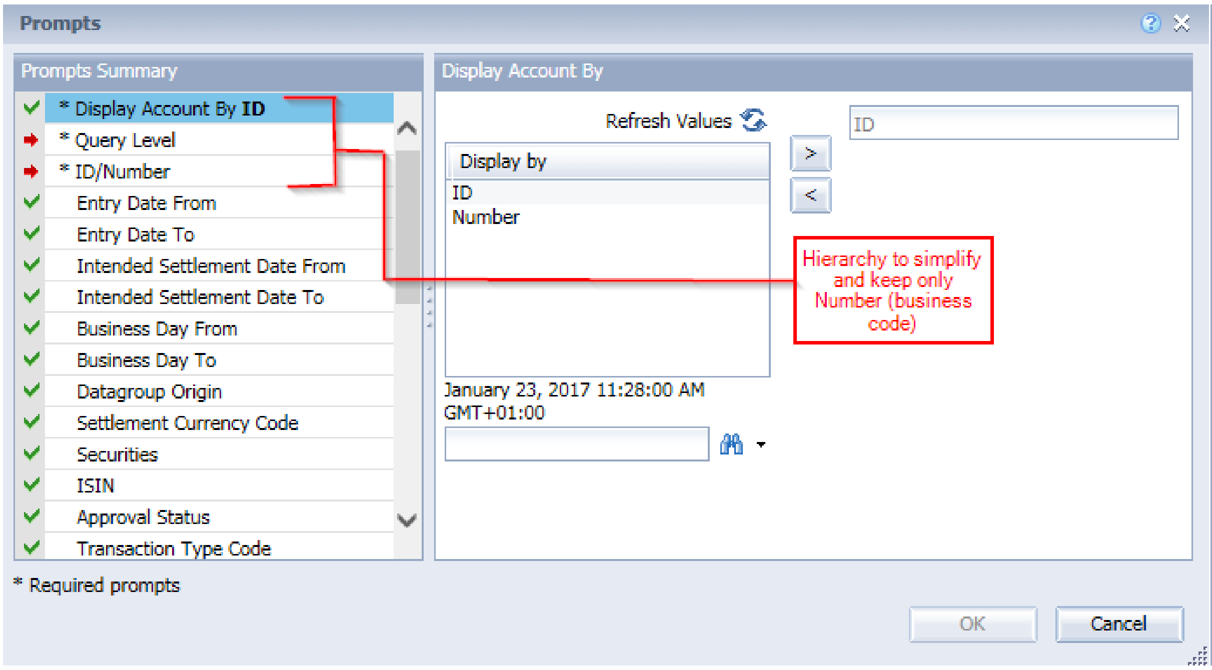
UHB document: sections "5.2.2 Cash Management" thru "5.2.11 Securities Management" (search screen sections).

3. Simplify the prompts for Participant Hierarchy

Currently, end users have the ability to choose which element to display (ID or Number) from the Party hierarchy in the predefined queries or reports.

This situation will be improved by prompting only one selection on the Party Hierarchy Dimension and displaying the business code for the selected level:

- Display [attribute] By ID/Number: currently, the user is prompted to whether to display the attribute by ID (technical identifier) or by Number (business code). This step will be removed
- Query Level: currently the user is prompted to select a hierarchical party. This step will be retained
- ID/Number: currently the user is prompted to select by technical identifier or business code. Only the business code will be requested and will be filled at the prompt Query Level



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

4. Simplify error messages provided after prompt selection

Today, error messages are technically managed on all prompts which adds complexity to the maintenance of the reports from a technical point of view. The criteria selected in the prompt generate distinct error messages.

These messages are displayed after the user prompt selection has occurred. Only one error message is displayed, the highest as per the defined priority rules. The intention is to simplify the error message management by keeping only error messages on mandatory criteria.

Example of error message which are subject to simplification:

- Currently when a "Timescale" but also a "Date From" and/or "Date to" is filled:
    - The system displays "ERROR - Date: Only one kind of time selection can be filled - Explicit period of time OR Predefined Timescale"
    - But the system handles internally all other error messages related to the other optional and mandatory fields thereby impacting the performance
- With the update:
    - The system displays "ERROR - Date: Only one kind of time selection can be filled - Explicit period of time OR Predefined Timescale"
    - And the system will handle internally only the error messages on mandatory criteria in this screen thereby improving performance.

All predefined queries and reports are impacted by this change.

High level description of Impact:

Outcome/Decisions:

* CRG meeting on 24 April 2017: The CRG agreed to put the Change Request on hold.
* 12 April 2018: the CR initiator informed the ECB team of the withdrawal of the CR