



EUROPEAN CENTRAL BANK  
EUROSYSTEM

T2S CHANGE REQUEST FORM		
<b>General Information (Origin of Request)</b> <input type="checkbox"/> User Requirements (URD) or GUI Business Functionality Document (BFD) <input checked="" type="checkbox"/> Other User Functional or Technical Documentation (SYS)		
<b>Request raised by:</b> OMG	<b>Institute:</b> 4CB	<b>Date raised:</b> 26/05/2021
<b>Request title:</b> T2S Settlement Optimisation Analysis		<b>Request No.:</b> T2S 0766 SYS
<b>Request type:</b> Common	<b>Classification:</b> Operational /Corrective Maintenance	<b>Urgency:</b> Normal
1. <a href="#">Legal/business importance parameter<sup>1</sup></a> : Low		2. <a href="#">Market implementation efforts parameter<sup>2</sup></a> : Low
3. <a href="#">Operational/Technical risk parameter<sup>3</sup></a> : Low		4. <a href="#">Financial impact parameter<sup>4</sup></a> :
<b>Requestor Category:</b> 4CB		<b>Status:</b> Registered

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

Since 2017, 4CB produces the Settlement Optimisation Analysis report quarterly. The aim of the report is to provide observations related to the global settlement fail rate in T2S together with an analysis of the associated background. The global settlement fail rate in T2S is measured for a given period taking into account all operations settled for all actors on the platform – It allows to follow globally the system performance indicator. This conforms to the definition of PSEI (Platform Settlement Efficiency Indicator) introduced in the CSG workshop for market settlement efficiency.

It seems actually that the interest for this report has lowered as the T2S platform is quite stable in terms of settlement efficiency while the production cost of the report on 4CB side is not negligible. Nevertheless, the market has requested to keep a light version of the report with a lower frequency, once a year and upon request should be sufficient.

The aim of this change request is to meet the market expectation by proposing a lighter and pre-formatted report generated in an automated way to reduce production cost on 4CB side. Production frequency could be once a year as well as upon request, for a T2S global view or also per CSD upon a request from a specific CSD.

<sup>1</sup> Legal/business importance parameter was set to [...] because [...]

<sup>2</sup> Market implementation effort parameter was set to [...] because [...]

<sup>3</sup> Operational/technical risk parameter was set to [...] because [...]

<sup>4</sup> Low < 100kEUR < Low-Medium < 200 kEUR < Medium < 400kEUR < High < 700kEUR < Very high

## Description of requested change:

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### Business Observations

The current Settlement Optimisation Analysis provides observations on the following indicators:

#### EOD/NTS fail rates and traffic trends

- T2S global average per day for EOD/NTS value and volume fail rates per business day/quarter/year
- T2S global average per day for EOD/NTS number/value of transactions submitted to settlement per day quarter/year

#### RTS daily settlement profile

- T2S global average per day for value fail rates each 15 minutes from the end of NTS (0h) to 7 am per quarter
- T2S global average per day for incoming/settled number of transactions each 15 minutes from the end of NTS (0h) to 7 am per quarter
- T2S global average per day for value fail rates each 15 minutes from 7 am to end of day (6 pm) per quarter

#### EOD/NTS unsettled transactions distribution (fails analysis)

- The percentage of the global number/value of unsettled transactions at the EOD/end of NTS per transaction seniority within the system (OLD/NEW/LATE) per quarter
- The percentage of the global number/value of NEW and OLD unsettled transactions at the EOD/end of NTS per reason for failure (SEC/CASH/OTHER) per quarter

#### Impact of useless transactions

- T2S global average per day for NTS value fail rate with “useless transactions” considered as settled per business day

#### NTS/RTS distribution

- The percentage of the global number/value settled during NTS/RTS per quarter/Year

#### Cash usage

- The global average per day of settled value per quarter/year
- The global average per day of cash transfer from T2 to T2S per quarter/year
- The percentage of average cash transfer (LQT) versus average settled value per quarter/year
- The global average per day of amount of NCB/Client intraday credit provided per quarter/year
- The percentage of average NCB/Client intraday credit provided versus average settled value
- The global average per day of amount (LQT + intraday credit) circulating in the platform per quarter/year
- The percentage of average intraday credit provided versus average total amount circulating in T2S per quarter/year

#### Auto-collateralisation usage

- The value ratio settled with cash only (from a DCA that has a configuration set-up for auto-collateralisation) per business day
- The value ratio of failed transactions at EOD due to a lack of cash, while auto-collateralisation is configured, per business day
- The percentage number of DCA configured for auto-collateralisation per business day
- The volume/value ratio settled associated to DCA configured for auto-collateralisation per business day

#### Partial Settlement

- The global and per CSD average percentage of number/value of transactions eligible to partial settlement per quarter/year
- The global and per CSD average percentage of number/value of transactions subject to at least one partial settlement during the business day per quarter/year

#### Partial Release

- The global and per CSD average number/value of transactions subject to at least one partial release during the business day per month

From that basis 4CB proposes to keep the following observations to make the report lighter:

- EOD/NTS fail rates and traffic trends
- EOD/NTS unsettled volume/value distribution (fails analysis)
- Cash usage (Split EOD/NTS)
- Auto-collateralisation usage (Split EOD/NTS)
- Partial settlement

4CB proposes to produce these observations in global and for CSDs requesting them.

#### **Report production process and format**

- Statistics are based on data extracted from STSI through SQL queries using SAS Enterprise Guide. SQL queries are executed manually on a quarterly basis and results (.csv files) are fetched through FTP connection.
- Extracted Data are used to generate figures and graphics through R scripts and Excel macros
- The report, which is a word document today, is updated manually with the appropriate figures, graphics and comments

4CB proposes to automate the following process:

- Automate STSI SQL queries execution and make the fetch of data easier
- Automate the graphics and figures generation with a unique R or Python script
- Automate the report generation in a Word, PDF or Excel format

The layout of this new annual SOA report shall be drafted during the Detailed assessment for validation at the approval of the change request for implementation.

#### **Submitted annexes / related documents:**

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

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\*CRG on 07 July 2021: the CRG agreed to launch the preliminary assessment of CR-766