



General Information (Origin of Request)						
User Requirements Document (URD)						
☐ User Detailed Functional Specification (UDFS)						
User Handbook (UHB)						
☑ Other User Functional or Technical Documentation (SYS)						
Request raised by: Danmarks Nationalbank	Institution:		Date raised: 28 April 2022			
Request title: Statistical indicators for DKK			Request ref. no: TIPS-0053-URD ¹			
Request type:						
1. Legal/business importance parameter: Medium		2. Market implementation efforts parameter – Stakeholder impact: Medium				
3. Operational impact: Medium		4. Financial impact parameter: Low				
5. Functional/ Technical impact: Medium		6. Interoperability impact: Low				
Requestor Category: NCB		Status: Detailed Assessment Started				

Reason for change and expected benefits/business motivation:

This change request is raised in the context of the on boarding of DKK community onto T2 and TIPS.

The high-level functional analysis of the TIPS features against the Danish Central Bank Feasibility Assessment on "TIPS Data and reports" identified a list of required changes to be implemented in TIPS for the provision of statistical data relating to the TIPS processing of payment transactions and liquidity transfers denominated in DKK.

Description of requested change:

An adaptation of the current statistical framework processing, introduced for non-Euro currencies with CR TIPS-0032, is required in order to foresee a segregation of indicators across different currencies. This change stems from the requirement of extending the applicable set of statistical indicators to DKK.

Besides the customization of the existing statistical indicators for non-euro currencies, a new set of DKK-specific statistical indicators shall be implemented.

The changes can be classified in two categories:

- 1. New indicators for DKK and raw data provision
- 2. Adaptation of existing non-euro currency indicators

For each of the above-mentioned categories, detailed requirements are listed in the following sections.

New indicators for DKK and raw data provision

This category of statistical indicators represents a gap compared to the current TIPS statistical framework. It shall be managed (i) by enriching the current reporting capabilities (e.g. by introducing a new flat-file report) and (ii) by providing raw data with a predefined schedule (e.g., on a daily or monthly basis).

Under this category, the following new indicators shall be produced:

- Number of settled IP transactions in DKK, aggregated by originator PSP BIC and per calendar day;
- Value of settled IP transactions in DKK, aggregated by originator PSP BIC and per calendar day;
- Number of unsettled IP transactions in DKK per calendar day, classified per the amount of the thresholds defined below:

 $^{^{1}}$ XXXX = ECMS /TIPS / CONS, NNNN = 9999, DDDD = URD/UDFS/UHB

² There is no need to segregate the unsettled IP transactions into failed, rejected or expired status.



- o <50,00 DKK
- o 50.00-99.99 DKK
- o 100,00-499,99 DKK
- o 500,00-999,99 DKK
- o 1 000,00-2 499,99 DKK
- o 2 500,00-4 999,99 DKK
- o 5 000,00-7 499,99 DKK
- o 7 500,00-9 999,99 DKK
- o 10 000,00-19 999,99 DKK
- o 20 000.00-99 999.99 DKK
- 0 100 000,00-199 999,99 DKK
- o 200 000,00-299 999,99 DKK
- o 300 000,00-399 999,99 DKK
- 400 000,00-499 999,99 DKK
- 500 000,00-599 999,99 DKK
- o 600 000,00-699 999,99 DKK
- o 700 000,00-799 999,99 DKK
- o 800 000,00-899 999,99 DKK
- o 900 000.00-999 999.99 DKK
- 1 000 000,00-1 999 999,99 DKK
- o 2 000 000,00-4 999 999,99 DKK
- o 5 000 000,00-7 499 999,99 DKK
- o >=7 500 000,00 DKK
- Value of unsettled⁶ IP transactions in DKK per calendar day, classified per the amount of the thresholds defined below:
 - o <50,00 DKK
 - 50,00-99,99 DKK
 - o 100,00-499,99 DKK
 - o 500,00-999,99 DKK
 - o 1 000,00-2 499,99 DKK
 - o 2 500,00-4 999,99 DKK
 - 5 000,00-7 499,99 DKK7 500,00-9 999,99 DKK
 - o 10 000,00-19 999,99 DKK
 - o 20 000,00-99 999,99 DKK
 - o 100 000,00-199 999,99 DKK
 - o 200 000.00-299 999.99 DKK
 - o 300 000,00-399 999,99 DKK
 - o 400 000,00-499 999,99 DKK
 - o 500 000,00-599 999,99 DKK
 - o 600 000,00-699 999,99 DKK
 - 700 000,00-799 999,99 DKK
 800 000,00-899 999,99 DKK
 - o 900 000,00-999 999,99 DKK
 - o 1 000 000,00-1 999 999,99 DKK
 - o 2 000 000,00-4 999 999,99 DKK
 - o 5 000 000,00-7 499 999,99 DKK
 - o >=7 500 000,00 DKK
- Number of settled IP transactions in DKK per calendar day, classified per the amount of the thresholds defined below:
 - o <50,00 DKK
 - o 50.00-99.99 DKK
 - o 100,00-499,99 DKK
 - o 500,00-999,99 DKK
 - o 1 000,00-2 499,99 DKK
 - 2 500,00-4 999,99 DKK
 - o 5 000,00-7 499,99 DKK

³ There is no need to split the unsettled into failed, rejected or expired status.



- o 7 500,00-9 999,99 DKK
- o 10 000,00-19 999,99 DKK
- o 20 000,00-99 999,99 DKK
- o 100 000,00-199 999,99 DKK
- o 200 000,00-299 999,99 DKK
- 300 000,00-399 999,99 DKK
- o 400 000,00-499 999,99 DKK
- o 500 000,00-599 999,99 DKK
- o 600 000,00-699 999,99 DKK
- o 700 000.00-799 999.99 DKK
- o 800 000,00-899 999,99 DKK
- 900 000,00-999 999,99 DKK
- o 1 000 000.00-1 999 999.99 DKK
- 2 000 000,00-4 999 999,99 DKK
- o 5 000 000,00-7 499 999,99 DKK
- o >=7 500 000,00 DKK
- Value of settled IP transactions in DKK per calendar day, classified per the amount of the thresholds defined below:
 - o <50,00 DKK
 - o 50,00-99,99 DKK
 - o 100,00-499,99 DKK
 - o 500,00-999,99 DKK
 - o 1 000,00-2 499,99 DKK
 - 2 500,00-4 999,99 DKK
 - 5 000,00-7 499,99 DKK
 - o 7 500,00 7 499,99 DKK
 - o 10 000,00-19 999,99 DKK
 - o 20 000.00-99 999.99 DKK
 - o 100 000,00-199 999,99 DKK
 - o 200 000,00-299 999,99 DKK
 - o 300 000,00-399 999,99 DKK
 - o 400 000,00-499 999,99 DKK
 - o 500 000,00-599 999,99 DKK
 - 600 000,00-699 999,99 DKK
 - 700 000,00-799 999,99 DKK
 800 000,00-899 999,99 DKK
 - o 900 000,00-999 999,99 DKK
 - o 1 000 000,00-1 999 999,99 DKK
 - o 2 000 000,00-4 999 999,99 DKK
 - o 5 000 000,00-7 499 999,99 DKK
 - o >=7 500 000,00 DKK
- Value of settled IP transactions in DKK per calendar day, per hour;
- Value of unsettled IP transactions in DKK per calendar day, per hour;
- Number of settled IP transactions in DKK per calendar day, per hour;
- Number of unsettled IP transactions in DKK per calendar day, per hour.

Domestic transactions:

- Number of unsettled national⁴ IP transactions in DKK;
- Value of unsettled national IP transactions in DKK;
- Value of settled national IP transactions in DKK.

Cross-border transactions:

- Number of *unsettled cross-border*⁵ IP transactions in DKK (originator PSP view⁶);
- Number of unsettled cross-border IP transactions in DKK (beneficiary PSP view⁷);
- Value of unsettled cross-border IP transactions in DKK (originator PSP view⁶);
- Value of unsettled cross-border IP transactions in DKK (beneficiary PSP view⁷);

⁴ National IP transactions are identified when the country codes of the BICs of the originator PSP and the beneficiary PSP are equal.

⁵ Cross-border IP transactions are identified when the country codes of the BIC of the originator PSP and beneficiary PSP are different.



- Value of settled cross-border IP transactions in DKK (originator PSP view⁶);
- Value of settled cross-border IP transactions in DKK (beneficiary PSP view⁷).

Additionally, the new **raw data extraction** shall contain granular data relating to inbound/outbound (LT to/from TIPS DCA from/to MCA, RTGS DCA and T2S DCA) and intra-service Liquidity Transfers (LT to/from TIPS DCA from/to AS technical account), including BICs, accounts, transaction identifier, timestamp (or date) and amount. Data should be on a transaction-transaction basis. The extraction shall be delivered to the Danmarks Nationalbank on a monthly basis, preferably via a procedure that avoid setup of an A2A channel (at least to avoid the A2A instant messaging protocol) only for this purpose. Danmarks Nationalbank prefers to receive the statistical indicators and raw data in the same way, if possible.

Adaptation of existing indicators:

Under this category, the following existing indicators shall be amended, e.g. to include the new currency or new thresholds:

- Number of positive confirmation messages in DKK per duration of the processing;
 - o ≤ 0.5 second
 - > 0.5 second and ≤ 1 second
 - o > 1 second and ≤ 2 seconds
 - > 2 seconds and ≤ 3 seconds
 - > 3 seconds and ≤ 4 seconds
 - o > 4 seconds and ≤ 5 seconds
 - o > 5 seconds and ≤ 10 seconds
 - > 10 seconds and ≤ 15 seconds
 - > 15 seconds and ≤ 20 seconds
 - o > 20 seconds and ≤ 25 seconds
 - > 25 seconds
- Number of negative confirmation messages in DKK per duration of the processing;
 - o ≤ 5 seconds
 - > 5 seconds and ≤ 10 seconds
 - > 10 seconds and ≤ 15 seconds
 - > 15 seconds and ≤ 20 seconds
 - > 20 seconds and ≤ 25 seconds
 - > 25 seconds
 - o no confirmation after 25 sec
- Number of Investigation requests for instant payments in DKK processed by TIPS.

Domestic transactions:

- Number of settled national⁴ IP transactions in DKK;
- Number of unsettled national IP transactions in DKK, grouped by error code;
- Number of national Recall request in DKK;
- Number of *national* Recall request in DKK, grouped by reason code;
- Number of national Request for Recall by the Originator in DKK.

Cross-border transactions:

- Number of settled cross-border⁵ IP transactions in DKK (originator PSP view⁶);
- Number of settled cross-border IP transactions in DKK (beneficiary PSP view⁷);
- Number of cross-border Recall request in DKK (originator PSP view⁶);
- Number of cross-border Recall request in DKK (beneficiary PSP view⁷);
- Number of cross-border Request for Recall by the Originator (originator PSP view⁶);
- Number of cross-border Request for Recall by the Originator (beneficiary PSP view⁷);
- Number of cross-border Recall request in DKK, grouped by reason code; (originator PSP view⁶);
- Number of cross-border Recall request in DKK, grouped by reason code; (beneficiary PSP view⁶);
- Number of unsettled cross-border IP transactions in DKK, grouped by reason code (originator PSP view⁶);
- Number of unsettled cross-border IP transactions in DKK, grouped by reason code (beneficiary PSP view⁷).

 $^{^{6}}$ Grouped by the country code of the originator BIC, following the same methodology of the EPC statistics.

⁷ Grouped by the country code of the beneficiary BIC, following the same methodology of the EPC statistics.



The above-mentioned statistical indicators, including the raw data for liquidity transfers, that include the figures relating to the month (M-1) shall be ready for delivery, on a monthly basis, at the latest on the 5th working day of the month M.

Moreover, the different statistical indicators have been classified as "mandatory" or "nice-to-have" during the detailed assessment according to the mapping table below. It would be beneficial for the outcome of the cost assessment to provide a separate quotation for 'mandatory' and 'nice-to-have' (i.e. optional) indicators to allow the decision-making bodies to take appropriate actions (e.g. acceptance of the full scope, reduction of the scope, postponement of optional requirements to a following release, etc.).

The identified statistical indicators should reflect the details and requirements specified in the Feasibility Assessment note.

Statistical indicator	Mandatory	Optional	Status
Number of settled IP transactions in DKK per calendar day, aggregated		-	
by originator PSP BIC	Х		New
Value of <i>settled</i> IP transactions in DKK per calendar day, aggregated by originator PSP BIC	Х		New
Number of unsettled IP transactions in DKK per calendar day, classified per the amount	x		New
Value of unsettled IP transactions in DKK per calendar day, classified per the amount	x		New
Value of settled IP transactions in DKK per calendar day, per hour		Х	New
Value of unsettled IP transactions in DKK per calendar day, per hour		Х	New
Number of <i>unsettled</i> IP transactions in DKK per calendar day, per hour		х	New
Number of unsettled national IP transactions in DKK		х	New
Value of unsettled national IP transactions in DKK		х	New
Value of settled national IP transactions in DKK		х	New
Number of unsettled cross-border IP transactions in DKK (originator PSP view)		х	New
Number of <i>unsettled cross-border</i> IP transactions in DKK (beneficiary PSP view)		х	New
Value of <i>unsettled cross-border</i> IP transactions in DKK (originator PSP view)		х	New
Value of <i>unsettled cross-border</i> IP transactions in DKK (beneficiary PSP view)		х	New
Value of <i>settled cross-border</i> IP transactions in DKK (originator PSP view)		х	New
Value of settled cross-border IP transactions in DKK (beneficiary PSP view)		х	New
Number of settled IP transactions in DKK per calendar day, classified per the amount	х		New
Value of settled IP transactions in DKK per calendar day, classified per the amount	х		New
Number of settled IP transactions in DKK per calendar day, per hour;		Х	New
Number of <i>positive confirmation</i> messages in DKK per duration of the processing		х	Change
Number of <i>negative confirmation</i> messages in DKK per duration of the processing		х	Change
Number of Investigation requests for instant payments in DKK processed by TIPS		х	Change
Number of settled national IP transactions in DKK		Х	Change
Number of unsettled national IP transactions in DKK, grouped by error code		х	Change
Number of national Recall request in DKK		Х	Change



Number of national Recall request in DKK, grouped by reason code		Х	Change
Number of national Request for Recall by the Originator in DKK		Х	Change
Number of settled cross-border IP transactions in DKK (originator PSP view)		X	Change
Number of settled cross-border IP transactions in DKK (beneficiary PSP view)		x	Change
Number of cross-border Recall request in DKK (originator PSP view)		Х	Change
Number of cross-border Recall request in DKK (beneficiary PSP view)		Х	Change
Number of <i>cross-border</i> Request for Recall by the Originator (originator PSP view)		х	Change
Number of <i>cross-border</i> Request for Recall by the Originator (beneficiary PSP view)		х	Change
Number of <i>cross-border</i> Recall request in DKK, grouped by reason code (originator PSP view)		x	Change
Number of <i>cross-border</i> Recall request in DKK, grouped by reason code (beneficiary PSP view)		x	Change
Number of <i>unsettled cross-border</i> IP transactions in DKK, grouped by error code (originator PSP view)		x	Change
Number of <i>unsettled cross-border</i> IP transactions in DKK, grouped by error code (beneficiary PSP view)		X	Change
Raw data extraction for LTs	x		New

Submitted annexes / related documents:	
Proposed wording for the Change request:	
High-level description of Impact:	
Impacts on other projects and products:	
Outcome/Decisions:	