

## Change Request form

General Information (Origin of Request)		
<input checked="" type="checkbox"/> User Requirements Document (URD) <input type="checkbox"/> Other User Functional or Technical Documentation (SYS) <input type="checkbox"/> Other TIPS Documentation (OTD)		
<b>Request raised by:</b> Riksbank	<b>Date raised:</b> 14/02/2020	
<b>Request title:</b> <b>TIPS adaptation stemming from Riksbank requirements – lot 3</b>	<b>Name of Central Bank:</b> Riksbank	<b>Request ref. no:</b> TIPS CR.0032.URD
Categorisation of changes		
<b>1. Functional/technical importance parameter:</b> TBD	<b>4. Legal importance parameter:</b> TBD	
<b>2. Operational importance parameter:</b> TBD	<b>5. Financial importance parameter:</b> TBD	
<b>3. Stakeholder importance parameter:</b> TBD		
<b>Status:</b> Allocated to a Release		

### Description of requested change:

The high-level functional analysis of all TIPS features (including the relevant common components and MPL) against the RIX-INST requirements identified a list of required changes to be implemented in TIPS.

In order to cater for the planning needs expressed by Riksbank and to reduce project risks, all changes should be implemented incrementally, taking advantage of the available releases in 2021 and 2022, i.e. R.3.1 (June 2021), R.4.0 (November 2021) and R.4.1 (May 2022).

For this reason, the full scope of the required changes is split into three separate change requests whose individual content is outlined below:

#### CR Lot 1:

- new settlement model based on a Single Instructing Party (SIP), with immediate settlement and no reservation of funds;
- customization of a sub-set of A2A messages for both settlement models;
- Common Reference Data Management (CRDM) adaptation and configuration.

#### CR Lot 2:

- customization of a sub-set of A2A messages for both settlement models;
- interactions between an external RTGS and TIPS;
- definition of a separate set of system parameters for the investigation process and the maximum amount in SEK currency.

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### CR Lot 3:

- new reconciliation process;
- provision of the daily consumption file in SEK and definition of an extended set of statistical indicators.

This change request copes with the changes envisaged in lot 3. The detailed scope of the proposed changes is described below.

### **New reconciliation process**

The information required for reconciliation during the day or at the End-of-Day shall be conveyed to participants by enhancing the Message Exchange Processing for TIPS (MEPT) protocol, which is used in the communication between TIPS and the Network Service Providers.

More in detail, TIPS shall use additional optional properties at transport level for each Payment Transaction (i.e., Instant Payment or Recall Answer) and Liquidity Transfer having a final status equal to "Settled".

The content of these properties shall be the following:

- Current RTGS Business date, i.e. the RTGS business date when the settlement took place;
- Sequence number, indicating the number of postings since the last business date change;
- Final balance of the TIPS account, after successful settlement of the underlying transaction.

An example for each different business scenario is provided below for reference:

#### **1) Settled instant payment between TIPS Account A and TIPS Account B using the standard TIPS settlement model:**

- TIPS sends a settlement confirmation message towards the Originator PSP (owner of TIPS Account A) which includes at MEPT level the following information:
  - RTGS Business date;
  - Sequence number of postings on TIPS Account A;
  - Final balance of (debited) TIPS Account A after successful settlement of the IP.
- TIPS sends a settlement confirmation message towards the Beneficiary PSP (owner of TIPS Account B) which includes at MEPT level the following information:
  - RTGS Business date;
  - Sequence number of postings on TIPS Account B;
  - Final balance of (credited) TIPS Account B after successful settlement of the IP.

#### **2) Settled instant payment between TIPS Account A and TIPS Account B using the SIP settlement model:**

- TIPS sends a settlement confirmation message towards the Single Instructing Party which includes at MEPT level the following information:
  - RTGS Business date;
  - Sequence number of postings on TIPS Account A;
  - Final balance of (debited) TIPS Account A after successful settlement of the IP;
  - Sequence number of postings on TIPS Account B;
  - Final balance of (credited) TIPS Account B after successful settlement of the IP;
- The Single Instructing Party conveys the relevant information to the Originator PSP (i.e. business date, plus sequence number and balance for A) and to the Beneficiary PSP (i.e. business date, plus sequence number and balance for B).

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### 3) Settled Recall Answer between TIPS Account A and TIPS Account B:

- TIPS sends a settlement confirmation message towards the Originator PSP (owner of TIPS Account A) which includes at MEPT level the following information:
  - RTGS Business date;
  - Sequence number of postings on TIPS Account A;
  - Final balance of (debited) TIPS Account A after successful settlement of the Recall Answer.
- TIPS sends a settlement confirmation message towards the Beneficiary PSP (owner of TIPS Account B) which includes at MEPT level the following information:
  - RTGS Business date;
  - Sequence number of postings on TIPS Account B;
  - Final balance of (credited) TIPS Account B after successful settlement of the Recall Answer.

### 4) Settled Incoming Liquidity Transfer between RTGS Account X and TIPS Account B:

- TIPS sends a camt.054 message towards the LT Beneficiary (owner of the TIPS Account B being credited) which includes at MEPT level the following information:
  - RTGS Business date;
  - Sequence number of postings on TIPS Account B;
  - Final balance of (credited) TIPS Account B after successful settlement of the Inbound LT.

### 5) Settled Outgoing Liquidity Transfer between Account A and RTGS Account X:

- TIPS sends a camt.025 message towards the LT Originator (owner of TIPS Account A being debited) which includes at MEPT level the following information:
  - RTGS Business date;
  - Sequence number of postings on TIPS Account A;
  - Final balance of (debited) TIPS Account A after successful settlement of the Outbound LT.

## Statistical indicators for SEK currency

An adaptation of the current EPC statistics processing for Euro 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, requested by the EPC for Euro, also to SEK.

For instance, for the same counted entity – like instant payments, recalls or investigation messages - different thresholds or values may be taken into account for the relevant statistical indicators, depending on the given currency.

Besides the customization of the existing EPC statistical indicators for Euro, a new set of SEK-specific statistical indicators shall be implemented. These indicators are classified in two categories:

1. General RIX-Inst
2. National transactions

The General RIX-INST category of indicators provides information about transactions in TIPS focusing on quantitative measures.

The following indicators belong to this category:

- Total number of IP transactions in SEK with a settled status;
- Total value of IP transactions in SEK with a settled status;

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- Number of IP transactions in SEK, per Amount;
- Number of IP transactions in SEK, per Hour;
- Number of positive confirmation messages, per duration of the processing;
- Number of negative confirmation messages, per duration of the processing;
- Total number of Investigation Requests for IP in SEK processed by TIPS;

The National Transaction category of indicators provides information about instant payment transactions and recall requests executed in the RIX-INST context. The following indicators belong to this category:

- Number of IP transactions in SEK with an unsettled status;
- Number of Recall Requests for IP transactions in SEK;
- Number of IP transactions in SEK with an unsettled status and grouped by reason code;
- Number of Recall Requests for IP transactions in SEK grouped by reason code;

The above-mentioned statistical indicators shall be provided on a monthly basis.

Furthermore, TIPS will provide the daily consumption file in SEK to Riksbank. The current structure of the daily consumption file (which may be impacted by TIPS CR-0022, expected to be deployed in production in November 2021) is as follows:

FIELD NAME	FIELD FORMAT	DESCRIPTION
BUSINESS DATE	DATE(YYYYMMDD)	RTGS business date on which the reported transaction was processed.
ORIGINATOR BIC	CHAR(11)	BIC11 specified in the "Debtor Agent" field of the pacs.008 of all the aggregated IP transactions and in the "Creditor Agent" field of the pacs.004 of all the aggregated RA transactions.
COUNTRY CODE	CHAR(2)	Country code of the Central Bank which the account belongs to.
ACCOUNT NUMBER	CHAR(34)	Identification number of the TIPS Account debited by all aggregated IP transactions and credited by all aggregated RA transactions.
SETTLED IP TRANSACTIONS	NUMERIC(10)	Number of settled IP transactions (i.e. with final status equal to "Settled").
UNSETTLED IP TRANSACTIONS	NUMERIC(10)	Number of unsettled IP transactions (i.e. with final status different from "Settled").
SETTLED RA TRANSACTIONS	NUMERIC(10)	Number of settled RA transactions (i.e. with final status equal to "Settled").
UNSETTLED RA TRANSACTIONS	NUMERIC(10)	Number of unsettled RA transactions (i.e. with final status different from "Settled").

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

All changes listed in the three lots described above are necessary for the smooth on-boarding of the Riksbank community in TIPS, for the settlement of Instant Payments in central bank money.

### Submitted annexes / related documents:

### Proposed wording update to the documentation to address the requested change:

#### TIPS UHB for Riksbank

#### 1) TIPS UHB v3.0.0 - §4.1.4.2 Query Payment transaction – Display screen

The screenshot should be amended to include the following new fields:

- Debited Account Postings;
- Debited Account Balance;
- Credited Account Postings;
- Credited Account Balance.

The fields should also be added to the Field description as follows:

Field description	Query Payment transaction: Result	
	[...]	[...]
Payment transaction amount	Shows the amount of the transaction	
<u>Debited Account Postings</u>	<u>Sequence number of postings on TIPS debited account from the start of the RTGS business day.</u>	
<u>Debited Account Balance</u>	<u>Debited Account Balance after the settlement.</u>	
<u>Credited Account Postings</u>	<u>Sequence number of postings on TIPS credited account from the start of the RTGS business day.</u>	
<u>Credited Account Balance</u>	<u>Credited Account Balance after the settlement.</u>	

#### 2) TIPS UHB v3.0.0 - §4.1.3.2 Liquidity Transfer status – Details screen

The screenshot should be amended to include the following new fields:

- Debited Account Postings;
- Debited Account Balance;
- Credited Account Postings;
- Credited Account Balance.

The fields should also be added to the Field description as follows:

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Field description	Query Liquidity Transfer: Result	
	[...]	[...]
Liquidity transfer amount	Shows the amount of the Liquidity transfer	
<u>Debited Account Postings</u>	<u>Sequence number of postings on TIPS debited account from the start of the RTGS business day.</u>	
<u>Debited Account Balance</u>	<u>Debited Account Balance after the settlement.</u>	
<u>Credited Account Postings</u>	<u>Sequence number of postings on TIPS credited account from the start of the RTGS business day.</u>	
<u>Credited Account Balance</u>	<u>Credited Account Balance after the settlement.</u>	

### TIPS UDFS for Riksbank

#### 3) TIPS UDFS v2.1.1 - §1.5.7 Statistical indicators

The header of the chapter has to be renamed as the section is relevant to all the statistical indicators for Euro currency envisaged for both (i) EPC and (ii) Operational Reports.

##### 1.5.7 Statistical indicators for Euro currency

[...]

#### 4) TIPS UDFS v2.1.1 – New section §1.5.8 Statistical indicators for NON-Euro currencies

##### 1.5.8 Statistical Indicators for non-Euro currencies

TIPS provides the TIPS Operator with the functionality for creating monthly and quarterly reports for statistical information on Instant Payment, Recall and Investigation transactions in a currency other than euro.

TIPS Operators are the only users allowed creating the reports. The TIPS operator, then, provides the report to the relevant CB.

The created reports remain available in the system for 12 months.

This section describes the statistical indicators provided by TIPS giving useful information about Instant Payment transactions. All the indicators described below rely on a time frame of a quarter of year or of a month, despite the data are collected on a daily basis.

The Indicators are divided into two main categories, taking SEK currency as reference:

1. General figures
2. National Transactions

Each indicator is referenced with a code. The reader can refer to [4.3.x “List of Indicators”](#) for additional details.

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### 1.5.8.1 General figures

This category of indicators provides general information about TIPS transactions denominated in a currency different from euro (e.g. SEK), not focusing on qualitative aspects (e.g. the country code of the BIC of the Originator or the Beneficiary) of the operations, but only on quantitative measures. Seven indicators belong to this category:

- Number of IP transactions in SEK, per Amount;
- Number of IP transactions in SEK, per Hour;
- Number of positive confirmation messages per duration of the processing;
- Number of negative confirmation messages per duration of the processing;
- Total number of Investigation Requests for IP in SEK, processed by TIPS;
- Total number of IP transactions in SEK with a settled status;
- Total value of IP transactions in SEK with a settled status.

#### 1.5.8.1.1 Number of IP transactions in SEK per Amount

This indicator (TIPS.stat.M1) gives the number of all the IP transactions in the period under analysis grouped by the amount of the operation and divided by currency (e.g. SEK). The final status of the transaction is irrelevant, therefore not only the settled, but also the unsettled operations ('rejected', 'failed' or 'expired') are involved into the calculation of the indicator.

In the table below there are the twelve amount ranges in which shall be divided the IP transactions:

**Table xx – Number of transactions in SEK per Amount**

<u>Amount</u>	<u>Indicator's reference</u>
<u>&lt; 100 SEK</u>	<u>TIPS.stat.M1.a</u>
<u>&gt;= 100 SEK and &lt; 500 SEK</u>	<u>TIPS.stat.M1.b</u>
<u>&gt;= 500 SEK and &lt; 1,000 SEK</u>	<u>TIPS.stat.M1.c</u>
<u>&gt;= 1,000 SEK and &lt; 5,000 SEK</u>	<u>TIPS.stat.M1.d</u>
<u>&gt;= 5,000 SEK and &lt; 10,000 SEK</u>	<u>TIPS.stat.M1.e</u>
<u>&gt;= 10,000 SEK and &lt; 50,000 SEK</u>	<u>TIPS.stat.M1.f</u>
<u>&gt;= 50,000 SEK and &lt; 100,000 SEK</u>	<u>TIPS.stat.M1.g</u>
<u>&gt;= 100,000 SEK and &lt;= 500,000 SEK</u>	<u>TIPS.stat.M1.h</u>
<u>&gt;= 500,000 SEK and &lt;= 1,000,000 SEK</u>	<u>TIPS.stat.M1.i</u>
<u>&gt;= 1,000,000 SEK and &lt;= 5,000,000 SEK</u>	<u>TIPS.stat.M1.j</u>
<u>&gt;= 5,000,000 SEK and &lt;= 10,000,000 SEK</u>	<u>TIPS.stat.M1.k</u>
<u>&gt; 10,000,000 SEK</u>	<u>TIPS.stat.M1.l</u>

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For every class - between TIPS.stat.M1.b and TIPS.stat.M1.k - only the left-side extremity is included in the range, whereby, if an IP transaction amounts whose amount is equal to 500 SEK, it will be part of the third range (500 – 1.000), while an IP transaction whose amount is equal to 1.000 SEK is classified into the fourth class (1,000 – 5.000).

### 1.5.8.1.2 Number of IP transactions in SEK per Hour

This indicator (TIPS.stat.M2) gives the number of all the IP transactions in the period under analysis grouped by the timestamp of execution. The final status of the transaction is irrelevant, therefore not only the settled, but also the unsettled operations ('rejected', 'failed' or 'expired'), are involved in the calculation of the indicator.

In the table below there are the twenty-four time ranges in which each IP transaction can be classified:

**Table xx – Number of transactions in SEK per timestamp**

<u>Hour</u>	<u>Indicator's reference</u>
<u>00h00 - 01h00 CET</u>	<u>TIPS.stat.M2.a</u>
<u>01h00 - 02h00 CET</u>	<u>TIPS.stat.M2.b</u>
<u>02h00 - 03h00 CET</u>	<u>TIPS.stat.M2.c</u>
<u>03h00 - 04h00 CET</u>	<u>TIPS.stat.M2.d</u>
<u>04h00 - 05h00 CET</u>	<u>TIPS.stat.M2.e</u>
<u>05h00 - 06h00 CET</u>	<u>TIPS.stat.M2.f</u>
<u>06h00 - 07h00 CET</u>	<u>TIPS.stat.M2.g</u>
<u>07h00 - 08h00 CET</u>	<u>TIPS.stat.M2.h</u>
<u>08h00 - 09h00 CET</u>	<u>TIPS.stat.M2.i</u>
<u>09h00 - 10h00 CET</u>	<u>TIPS.stat.M2.j</u>
<u>10h00 - 11h00 CET</u>	<u>TIPS.stat.M2.k</u>
<u>11h00 - 12h00 CET</u>	<u>TIPS.stat.M2.l</u>
<u>12h00 - 13h00 CET</u>	<u>TIPS.stat.M2.m</u>
<u>13h00 - 14h00 CET</u>	<u>TIPS.stat.M2.n</u>
<u>14h00 - 15h00 CET</u>	<u>TIPS.stat.M2.o</u>
<u>15h00 - 16h00 CET</u>	<u>TIPS.stat.M2.p</u>
<u>16h00 - 17h00 CET</u>	<u>TIPS.stat.M2.q</u>
<u>17h00 - 18h00 CET</u>	<u>TIPS.stat.M2.r</u>
<u>18h00 - 19h00 CET</u>	<u>TIPS.stat.M2.s</u>
<u>19h00 - 20h00 CET</u>	<u>TIPS.stat.M2.t</u>
<u>20h00 - 21h00 CET</u>	<u>TIPS.stat.M2.u</u>
<u>21h00 - 22h00 CET</u>	<u>TIPS.stat.M2.v</u>
<u>22h00 - 23h00 CET</u>	<u>TIPS.stat.M2.w</u>

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23h00 - 24h00 CET

TIPS.stat.M2.x

For every class, only the left-side extremity is included in the range; whereby, if an IP transaction is executed at 06h00 it will be part of the range (06h00 - 07h00 CET).

### 1.5.8.1.3 Number of positive confirmation messages per duration of the processing

This indicator (TIPS.stat.M3) provides the number of settled IP transactions divided by overall duration of the processing. In case of IP transaction with positive result, the duration of the processing is calculated as the time elapsed from acceptance timestamp to the settlement timestamp, i.e. with the reception of the positive confirmation messages.

In the table below there are the eleven time ranges in which an IP transaction can be classified:

**Table xx – Number of settled transactions in SEK per duration of processing**

<u>Receipt of confirmation message</u>	<u>Indicator's reference</u>
<u>≤ 0,5 second</u>	<u>TIPS.stat.M3.a</u>
<u>&gt; 0,5 second and ≤ 1 second</u>	<u>TIPS.stat.M3.b</u>
<u>&gt; 1 second and ≤ 2 seconds</u>	<u>TIPS.stat.M3.c</u>
<u>&gt; 2 seconds and ≤ 3 seconds</u>	<u>TIPS.stat.M3.d</u>
<u>&gt; 3 seconds and ≤ 4 seconds</u>	<u>TIPS.stat.M3.e</u>
<u>&gt; 4 seconds and ≤ 5 seconds</u>	<u>TIPS.stat.M3.f</u>
<u>&gt; 5 seconds and ≤ 10 seconds</u>	<u>TIPS.stat.M3.g</u>
<u>&gt; 10 seconds and ≤ 15 seconds</u>	<u>TIPS.stat.M3.h</u>
<u>&gt; 15 seconds and ≤ 20 seconds</u>	<u>TIPS.stat.M3.i</u>
<u>&gt; 20 seconds and ≤ 25 seconds</u>	<u>TIPS.stat.M3.j</u>
<u>&gt; 25 seconds</u>	<u>TIPS.stat.M3.k</u>

For every class the upper extremity is included in the range; whereby, if a message is received after exactly 10 seconds it will be part of the seventh class (i.e. > 5 seconds and ≤ 10 seconds).

### 1.5.8.1.4 Number of negative confirmation messages per duration of the processing

This indicator (TIPS.stat.M4) gives the number of unsettled IP Transaction (i.e. 'rejected', 'failed' or 'expired') divided by duration of the processing. In case of an IP transaction with negative result, the duration of the processing is calculated as the time elapsed from the acceptance timestamp and the timestamp by when the transaction reached its final status, e.g. with the reception of the negative confirmation message. Furthermore, if, neither positive nor negative confirmation message is received,

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the transaction is considered unsettled and counted in a specific time range (i.e. “no confirmation after 25 sec.”).

In the table below there are the seven ranges in which an IP transaction can be classified:

**Table xx – Number of unsettled IP transactions in SEK per duration of processing**

<u>Receipt of confirmation message</u>	<u>Indicator’s reference</u>
<u>≤ 5 seconds</u>	<u>TIPS.stat.M4.a</u>
<u>&gt; 5 seconds and ≤ 10 seconds</u>	<u>TIPS.stat.M4.b</u>
<u>&gt; 10 seconds and ≤ 15 seconds</u>	<u>TIPS.stat.M4.c</u>
<u>&gt; 15 seconds and ≤ 20 seconds</u>	<u>TIPS.stat.M4.d</u>
<u>&gt; 20 seconds and ≤ 25 seconds</u>	<u>TIPS.stat.M4.e</u>
<u>&gt; 25 seconds</u>	<u>TIPS.stat.M4.f</u>
<u>no confirmation after 25 sec</u>	<u>TIPS.stat.M4.g</u>

For every class the upper extremity is included in the range; whereby, if a message is received after exactly 5 seconds it will be part of the first class.

### 1.5.8.1.5 Number of Investigation Requests processed by TIPS

This indicator (TIPS.stat.M5) gives the total amount of investigations requested in TIPS. In this case, contrarily from the previous indicators, classes are not foreseen. This occurs because the information provided refers to all investigations processed by TIPS, regardless the time of the request and the type of actor who requested it.

**Table xx – Number of investigation requests relevant to IP in SEK**

<u>Number of Investigations</u>	<u>Indicator’s reference</u>
<u>Investigations</u>	<u>TIPS.stat.M5.a</u>

### 1.5.8.2 National Transactions

This category of indicators provides information about IP transactions, recall requests and request for recall by the originator executed in a national context in a given quarter/month of the year. Consequently, the operations taken into consideration refer to an Originator Bank and a Beneficiary Bank that belong to the same country and therefore hold the same country code of the BIC. Six Indicators belong to this category:

- Number of national IP transactions;
- Number of national IP transactions with an unsettled status;
- Number of national Recall Requests;

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- Number of national IP transactions with an unsettled status and grouped by reason code;
- Number of national Recall Requests grouped by reason code;
- Number of national Request for Recall by Originator

Each indicator provides the number of operations grouped by the country code of the actors. In other words, TIPS provides the exact number of transaction/recall carried out when the IP transaction or recall is operated by two banks from the same country.

Besides, TIPS analyses the unsettled IPs and the Recall Requests grouped by reason code. TIPS distinguishes the Reason codes into three categories:

- Internal Reason Code: Error code generated by TIPS;
- External Reason Code: Error code generated by other systems outside TIPS;
- TIPS reason code: Error code generated and defined only in TIPS.

The only reason codes by which the indicators can be grouped are those generated by TIPS. All the other operations are grouped inside the category “External Reason Code”.

For the list of error code generated by TIPS the reader can refer to section [4.2.1 “List of ISO Error codes”](#).

### 1.5.8.2.1 Number of national IP transactions

This indicator (TIPS.stat.M6) gives the number of all the national IP transactions in the period under analysis grouped by the common country code of the BIC of the actors (Originator Bank and Beneficiary Bank). The final status of the transaction is irrelevant, therefore not only the settled, but also the unsettled operations (‘rejected’, ‘failed’ or ‘expired’), are taken into account for the calculation of this indicator.

**Table xx – Number of national IP transactions in SEK**

<u>Transactions Per country</u>	<u>Indicator’s reference</u>
<u>[Country code]</u>	<u>TIPS.stat.M6.[Country code]</u>

The indicator returns a value for the country code (e.g. SE, if currency is SEK) related to the given currency whose BIC has executed a transaction in the period under analysis.

### 1.5.8.2.2 Number of national IP transactions with an unsettled status

This indicator (TIPS.stat.M7) gives the number of unsettled IP transaction in the period under analysis grouped by the common country code of the BIC of the actors (Originator Bank and Beneficiary Bank). As mentioned above ([1.5.8.2 “National Transactions”](#)), the data are divided by country code of the actors, and consequently the indicator shows, for the country code (e.g. SE, if currency is SEK) related to the given currency, the number of IP transactions with status different from “Settled”. Furthermore, there is no differentiation across the final status of each transaction (i.e. ‘rejected’, ‘failed’ or ‘expired’).

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**Table xx – Number of national Unsettled IP Transactions in SEK**

Unsettled Transactions per country	Indicator's reference
[Country code]	TIPS.stat.M7.[Country code]

### 1.5.8.2.3 Number of national Recall Requests

This indicator (TIPS.stat.M8) gives the number of Recall Requests sent on a selected period and grouped by the common country code of the BIC of the actors (Originator Bank and Beneficiary Bank). The Indicator does not take into consideration the outcome of the Recall, therefore is irrelevant if the answer message is negative or positive. In addition, only the Recall Requests successfully sent to the Beneficiary are taken in consideration for the calculation of the indicator.

**Table xx – Number of national Recall Requests**

Recall Requests per country	Indicator's reference
[Country code]	TIPS.stat.M8.[Country code]

### 1.5.8.2.4 Number of national Unsettled IP transactions grouped by reason code

This indicator (TIPS.stat.M9) gives the number of unsettled IP transaction of a selected period and grouped by (i) the common country code of the BIC of the actors and (ii) by Reason Code. The transactions taken into account are the same analysed in paragraph 1.5.8.2.2, i.e. the number of transactions with status different from "Settled", regardless of the final status of each transaction (i.e. 'rejected', 'failed' or 'expired'). Moreover, in addition to the country code of the BIC of the actors, all the transactions are classified based on the rejection Reason Code. Consequently, the total number of transactions counted by this indicator and the indicator from paragraph 1.5.8.2.2 shall be the same. The only Reason Codes taken in consideration are those generated by TIPS (Internal Reason Code, see 1.5.8.2). Therefore, all the IPs with status unsettled and with a Reason code not generated by TIPS, are grouped into a generic category, namely "External Reason Code".

**Table xx – National Unsettled IP Transaction in SEK per Reason Code**

Transactions per Reason Code	Indicator's reference
[Country code].[Reason code] <sub>v</sub>	TIPS.stat.M9.[Country code].[Reason code] <sub>v</sub>

### 1.5.8.2.5 Number of national Recall Requests grouped by reason code

This indicator (TIPS.stat.M10) gives the number of Recall Requests sent on a selected period and grouped by the common country code of the BIC of the actors and by Reason Code. The Recall Requests taken into account are the same analysed in paragraph 1.5.8.2.3, i.e. only those sent to the Beneficiary irrespective if the answer message is negative or positive. Moreover, in addition to the country code of the BIC of the actors, all the Recall Requests are divided by Reason Code.

The Reason codes taken in consideration are the following:

- DUPL: Duplicate Sending

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- FRAD: Fraudulent Origin
- TECH: Technical Problem

**Table xx – National Recall Requests per Reason Code**

<u>Recall per Reason Code</u>	<u>Indicator's reference</u>
[Country code].[Reason code] <sub>y</sub>	TIPS.stat.M10.[Country code].[Reason code] <sub>y</sub>

### 1.5.8.2.6 Number of national Request for Recall by Originator

This indicator (TIPS.stat.M11) gives the number of Requests for Recall sent on a selected period and grouped by the common country code of the BIC of the banks of the users. The Indicator does not take into consideration the outcome of the Recall, therefore is irrelevant if the answer message is negative or positive. In addition, only the Recall Requests successfully sent to the Beneficiary are taken in consideration for the calculation of the indicator. In order to distinguish a Recall Request from a Request for Recall, the latter shall be defined by the following parameters:

- Index 4.18 'Originator' shall be populated with AT-02 "The name of the Originator".
- Index 4.20 'Reason Code' shall be populated with ISO code "CUST" (Requested by Customer).
- Index 4.21 'Reason Proprietary' shall be populated with the proprietary codes "AM09" (Wrong amount) and "AC03" (Wrong IBAN).

**Table xx – National Requests for Recall**

<u>Requests for Recall per country</u>	<u>Indicator's reference</u>
[Country code] <sub>x</sub>	TIPS.stat.M11.[Country code] <sub>x</sub>

### 1.5.8.2.7 Overall monthly figures on payment transactions processed by TIPS

This category of indicators provides general information about volume and value of payment transactions<sup>1</sup> settled in TIPS for non-Euro currencies:

- Volume and value of national payment transactions settled.

The statistical indicators will provide, for the country code related to the given currency, the settled payment transactions. The relevant figures will be provided to the interested parties by means of an operational report generated on a monthly basis.

### 1.5.8.2.8 Volume of national payment transactions

This indicator provides the number of payment transactions settled grouped by the country code of the BIC of the Originator Bank.

---

<sup>1</sup> A payment transaction in this context includes Instant Payments and Positive Recall Answers successfully settled.

## Change Request form

**Table xx – Number of national settled payment transactions for NON-Euro currencies**

<u>Number of settled payment transactions per Originator country</u>	<u>Indicator's reference</u>
[Country code]	TIPS.stat.M24.[Country code]

### 1.5.8.2.9 Value of national payment transactions

This indicator provides the total value of payment transactions settled grouped by the country code of the BIC of the Originator Bank.

**Table xx – Value of national settled payment transactions for NON-Euro currencies**

<u>Value of settled payment transactions per Originator country</u>	<u>Indicator's reference</u>
[Country code] [Currency code]	TIPS.stat.M25.[Country code]

## 5) TIPS UDFS v2.1.1 - §1.5.6 Raw Data extraction

### **1.5.6 Raw Data extraction**

[...]

For performance reasons, TIPS does not produce the raw data immediately after the change of date but during the night. ~~The files are then sent to the shared services for Archiving and to TARGET2 for billing.~~

All of the timestamps included in the raw data are expressed in UTC.

TIPS applies compression to the raw data whenever possible by using industry standard algorithms.

The list of expected raw data sent daily to the common components is shown in the following table.

**Table 1 – Raw data**

<u>Raw data file</u>	<u>Related information</u>	<u>Receiving Component</u>
Raw data for billing	Information related to billable items	Billing
Raw data for archiving	Transactional data and authentication and security data	Archiving

Concerning data related to Payment Transactions in Swedish Krona, TIPS provides a file containing the consumption data to the RTGS system for SEK (i.e. RIX).

## 6) TIPS UDFS v2.1.1 - New section §1.5.6.4 TIPS Consumption file

### **1.5.6.4 TIPS Consumption file**

To support the billing of Payment Transactions in Swedish Krona, a consumption file is provided to the RTGS system for SEK (i.e. RIX) on a daily basis.

## Change Request form

### 7) TIPS UDFS v2.1.1 - New section §1.5.6.4.1 Structure

#### 1.5.6.4.1 Structure

The file is generated as a fixed length record flat file encapsulated in a XML envelope.

The structure of the records of the TIPS Consumption file is as follows:

O/M	FIELD No.	FIELD NAME	FORMAT	DESCRIPTION
M	1	<u>Business Date</u>	<u>DATE(YYYYMMDD)</u>	<u>RTGS business date on which the reported transaction was processed.</u>
M	2	<u>Originator BIC</u>	<u>CHAR(11)</u>	<u>BIC11 specified in the "Debtor Agent" field of the pacs.008 of all the aggregated IP transactions and in the "Creditor Agent" field of the pacs.004 of all the aggregated RA transactions.</u>
M	3	<u>Country Code</u>	<u>CHAR(2)</u>	<u>Country code of the Central Bank which the account belongs to.</u>
M	4	<u>Account Number</u>	<u>CHAR(34)</u>	<u>Identification number of the TIPS Account debited by all aggregated IP transactions and credited by all aggregated RA transactions.</u>
M	5	<u>Settled IP Transactions</u>	<u>NUMERIC(10)</u>	<u>Number of settled IP transactions (i.e. with final status equal to "Settled").</u>
M	6	<u>Unsettled IP Transactions</u>	<u>NUMERIC(10)</u>	<u>Number of unsettled IP transactions (i.e. with final status different from "Settled").</u>
M	7	<u>Settled RA Transactions</u>	<u>NUMERIC(10)</u>	<u>Number of settled RA transactions (i.e. with final status equal to "Settled").</u>
M	8	<u>Unsettled RA Transactions</u>	<u>NUMERIC(10)</u>	<u>Number of unsettled RA transactions (i.e. with final status different from "Settled").</u>

The name of the flat file that contains the Consumption data is as follows: TIPSCONFILEYYYYMMDD where YYYYMMDD specifies the year, month and day on which the reported transaction was processed.

### 8) TIPS UDFS v2.1.1 - New section §1.5.6.4.2 XML Envelope

#### 1.5.6.4.2 XML Envelope

TIPS Consumption file content is embedded into a XML Envelope.

The following is the XML schema used to embed the file into a message:

## Change Request form

```
<?xml version="1.0" ?>
<xs:schema xmlns="urn:TIPS:TIPSConsumptionfile"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace=" urn:TIPS:TIPSConsumptionfile"
elementFormDefault="qualified">
<xs:simpleType name="RestrictedFileType">
<xs:restriction base="xs:string">
<xs:pattern value="(.{95,95}\n)+" />
</xs:restriction>
</xs:simpleType>
<xs:element name="File" type="File"/>
<xs:complexType name="File">
<xs:simpleContent>
<xs:extension base="RestrictedFileType">
<xs:attribute name="fileId" type="xs:string" default="" />
</xs:extension>
</xs:simpleContent>
</xs:complexType>
</xs:schema>
```

The produced XML file should look as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<File fileId = "TIPSCONFILE20220523"
xmlns="urn:TIPS:TIPSConsumptionfile">Record1
Record2
...
Recordn
</File>
```

## Change Request form

### 9) TIPS UDFS v2.1.1 - §4.3 new annexes for non-Euro currency indicators

#### 4.3.4 List of general indicators for non-Euro currency

The table below contains the exhaustive list of general Indicators present in TIPS for non-Euro currencies. The detailed information about these measures is defined in paragraph [1.5.8.1 “General figures”](#).

<u>Label</u>	<u>Indicator's reference</u>
<u>Period (month or quarter)</u>	
<u>Instant payments</u>	
<u>Amount</u>	
<u>&lt; 100 SEK</u>	<u>TIPS.stat.M1.a</u>
<u>&gt;= 100 SEK and &lt; 500 SEK</u>	<u>TIPS.stat.M1.b</u>
<u>&gt;= 500 SEK and &lt; 1,000 SEK</u>	<u>TIPS.stat.M1.c</u>
<u>&gt;= 1,000 SEK and &lt; 5,000 SEK</u>	<u>TIPS.stat.M1.d</u>
<u>&gt;= 5,000 SEK and &lt; 10,000 SEK</u>	<u>TIPS.stat.M1.e</u>
<u>&gt;= 10,000 SEK and &lt; 50,000 SEK</u>	<u>TIPS.stat.M1.f</u>
<u>&gt;= 50,000 SEK and &lt; 100,000 SEK</u>	<u>TIPS.stat.M1.g</u>
<u>&gt;= 100,000 SEK and &lt;= 500,000 SEK</u>	<u>TIPS.stat.M1.h</u>
<u>&gt;= 500,000 SEK and &lt;= 1,000,000 SEK</u>	<u>TIPS.stat.M1.i</u>
<u>&gt;= 1,000,000 SEK and &lt;= 5,000,000 SEK</u>	<u>TIPS.stat.M1.j</u>
<u>&gt;= 5,000,000 SEK and &lt;= 10,000,000 SEK</u>	<u>TIPS.stat.M1.k</u>
<u>&gt; 10,000,000 SEK</u>	<u>TIPS.stat.M1.l</u>
<u>Hour</u>	
<u>00h00 - 01h00 CET</u>	<u>TIPS.stat.M2.a</u>
<u>01h00 - 02h00 CET</u>	<u>TIPS.stat.M2.b</u>
<u>02h00 - 03h00 CET</u>	<u>TIPS.stat.M2.c</u>
<u>03h00 - 04h00 CET</u>	<u>TIPS.stat.M2.d</u>
<u>04h00 - 05h00 CET</u>	<u>TIPS.stat.M2.e</u>

## Change Request form

<u>Label</u>	<u>Indicator's reference</u>
<u>05h00 - 06h00 CET</u>	<u>TIPS.stat.M2.f</u>
<u>06h00 - 07h00 CET</u>	<u>TIPS.stat.M2.g</u>
<u>07h00 - 08h00 CET</u>	<u>TIPS.stat.M2.h</u>
<u>08h00 - 09h00 CET</u>	<u>TIPS.stat.M2.i</u>
<u>09h00 - 10h00 CET</u>	<u>TIPS.stat.M2.j</u>
<u>10h00 - 11h00 CET</u>	<u>TIPS.stat.M2.k</u>
<u>11h00 - 12h00 CET</u>	<u>TIPS.stat.M2.l</u>
<u>12h00 - 13h00 CET</u>	<u>TIPS.stat.M2.m</u>
<u>13h00 - 14h00 CET</u>	<u>TIPS.stat.M2.n</u>
<u>14h00 - 15h00 CET</u>	<u>TIPS.stat.M2.o</u>
<u>15h00 - 16h00 CET</u>	<u>TIPS.stat.M2.p</u>
<u>16h00 - 17h00 CET</u>	<u>TIPS.stat.M2.q</u>
<u>17h00 - 18h00 CET</u>	<u>TIPS.stat.M2.r</u>
<u>18h00 - 19h00 CET</u>	<u>TIPS.stat.M2.s</u>
<u>19h00 - 20h00 CET</u>	<u>TIPS.stat.M2.t</u>
<u>20h00 - 21h00 CET</u>	<u>TIPS.stat.M2.u</u>
<u>21h00 - 22h00 CET</u>	<u>TIPS.stat.M2.v</u>
<u>22h00 - 23h00 CET</u>	<u>TIPS.stat.M2.w</u>
<u>23h00 - 24h00 CET</u>	<u>TIPS.stat.M2.x</u>
<u>Duration of processing (IP settled)</u>	
<u>≤ 0,5 second</u>	<u>TIPS.stat.M3.a</u>
<u>&gt; 0,5 second and ≤ 1 second</u>	<u>TIPS.stat.M3.b</u>
<u>&gt; 1 second and ≤ 2 seconds</u>	<u>TIPS.stat.M3.c</u>
<u>&gt; 2 seconds and ≤ 3 seconds</u>	<u>TIPS.stat.M3.d</u>
<u>&gt; 3 seconds and ≤ 4 seconds</u>	<u>TIPS.stat.M3.e</u>
<u>&gt; 4 seconds and ≤ 5 seconds</u>	<u>TIPS.stat.M3.f</u>

## Change Request form

<u>Label</u>	<u>Indicator's reference</u>
<u>&gt; 5 seconds and ≤ 10 seconds</u>	<u>TIPS.stat.M3.g</u>
<u>&gt; 10 seconds and ≤ 15 seconds</u>	<u>TIPS.stat.M3.h</u>
<u>&gt; 15 seconds and ≤ 20 seconds</u>	<u>TIPS.stat.M3.i</u>
<u>&gt; 20 seconds and ≤ 25 seconds</u>	<u>TIPS.stat.M3.j</u>
<u>&gt; 25 seconds</u>	<u>TIPS.stat.M3.k</u>
<u>Duration of processing (IP unsettled)</u>	
<u>≤ 5 seconds</u>	<u>TIPS.stat.M4.a</u>
<u>&gt; 5 seconds and ≤ 10 seconds</u>	<u>TIPS.stat.M4.b</u>
<u>&gt; 10 seconds and ≤ 15 seconds</u>	<u>TIPS.stat.M4.c</u>
<u>&gt; 15 seconds and ≤ 20 seconds</u>	<u>TIPS.stat.M4.d</u>
<u>&gt; 20 seconds and ≤ 25 seconds</u>	<u>TIPS.stat.M4.e</u>
<u>&gt; 25 seconds</u>	<u>TIPS.stat.M4.f</u>
<u>no confirmation after 25 sec</u>	<u>TIPS.stat.M4.g</u>
<u>Investigations</u>	
<u>[Number of Investigations]</u>	<u>TIPS.stat.M5.a</u>

### **4.3.5 List of National Transactions Indicators for non-Euro currencies**

The table below contains the exhaustive list of general National Transactions Indicators present in TIPS for non-Euro currencies (e.g. SEK). The detailed information about these measures is defined in paragraph [1.5.8.2 “National Transactions”](#).

<u>Label</u>	<u>Indicator's reference</u>
<u>Period (month or quarter)</u>	
<u>National transactions</u>	
<u>Transactions per country</u>	
<u>[Country code]</u>	<u>TIPS.stat.M6.[Country code] OR [empty]</u>
<u>Unsettled Transactions per country</u>	
<u>[Country code]</u>	<u>TIPS.stat.M7.[Country code] OR [empty]</u>

## Change Request form

<u>Label</u>	<u>Indicator's reference</u>
<u>Recall Request per country</u>	
[Country code]	TIPS.stat.M8.[Country code]OR [empty]
<u>Unsettled Transactions per reason code</u>	
[Country code].[Reason code] <sub>1</sub>	TIPS.stat.M9.[Country code].[Reason code] <sub>1</sub> ...
...[Country code].[Reason code] <sub>m</sub>	TIPS.stat.M9.[Country code].[Reason code] <sub>m</sub>
<u>Recall Request per reason code</u>	
[Country code].[Reason code] <sub>1</sub>	TIPS.stat.M10.[Country code].[Reason code] <sub>1</sub> ...
...[Country code].[Reason code] <sub>m</sub>	TIPS.stat.M10.[Country code].[Reason code] <sub>m</sub>
<u>Request for Recall per Country</u>	
[Country code]	TIPS.stat.M11.[Country code]OR [empty]
	TIPS.stat.M11.[Country code]OR [empty]
<u>Volume of national payment transactions</u>	
[Country code].[Currency code]	TIPS.stat.M24.[Country code]
<u>Value of national payment transactions</u>	
[Country code].[Currency code]	TIPS.stat.M25.[Country code]

---

**High level description of Impact:**

---

**Outcome/Decisions:**

## Change Request form

General Information	
Impact on TIPS	
<b>Business Interface</b>	
X	A2A Interface
X	U2A Interface
<b>Settlement Engine</b>	
	Payment Transaction
	Liquidity Transfer
	Recall
<b>Queries and Reports</b>	
X	Queries
	Reports
<b>Others</b>	
X	Testing tool
X	Contingency message application
<b>Common Components</b>	
	ESMIG
	CRDM
	Archiving
	Billing
	DMT
<b>Operational Tools</b>	
	SLA Reporting
	TMS
	Technical Monitoring
	Change Management
	Capacity Management
<b>Infrastructure request</b>	
	Application components impacted
	Application components not impacted
<b>Operational activities</b>	

## Change Request form

	Business activities impacted	
	Technical activities impacted	
<b>New functionalities</b>		
<b>Impact on documentation</b>		
<b>Document</b>	<b>Chapter</b>	<b>Change</b>
UDFS	§1.5.7 Statistical indicators §1.5.8 Statistical indicators for currencies other than Euro §1.5.6.4 TIPS Consumption file	Changes stemming from the Riksbank requirements envisaged in Lot 3
UHB	§4.1.4.2 Query Payment transaction – Display screen §4.1.3.2 Liquidity Transfer status – Details screen	Changes stemming from the Riksbank requirements envisaged in Lot 3
Training documentation		
Other documents		

Overview of the impact of the request on TIPS
Summary of functional, development, infrastructure, operational and security impacts
<p><u>Summary of functional impact:</u></p> <p>A substantial update of the TIPS functional documentation is required in the following areas:</p> <ul style="list-style-type: none"> <li>• TIPS UDFS (Statistical indicators for non-Euro currencies, consumption file, enriched reporting which includes reconciliation information)</li> <li>• TIPS UHB (new fields for reconciliation purpose)</li> </ul> <p><u>Summary of application development impact:</u></p> <p>To enhance the TIPS application adding the new statistical framework, the consumption file for billing and new data for reconciliation purposes added on outgoing messages, leads to the following changes:</p> <ul style="list-style-type: none"> <li>- New statistical framework for SEK currency: <ul style="list-style-type: none"> <li>o 1) Total number of IP transactions in SEK with a settled status</li> </ul> </li> </ul>

## Change Request form

- 2) New - Total value of IP transactions in SEK with a settled status;
  - 3) Number of IP transactions in SEK, per Amount
  - 4) Number of IP transactions in SEK, per Hour;
  - 5) Number of positive confirmation messages, per duration of the processing;
  - 6) Number of negative confirmation messages, per duration of the processing;
  - 7) Total number of Investigation Requests for IP in SEK processed by TIPS;
  - 8) Weekly National Transactions - Number of IP transactions in SEK with an unsettled status;
  - 9) Weekly National Transactions - Number of Recall Requests for IP transactions in SEK;
  - 10) Weekly National Transactions - Number of IP transactions in SEK with an unsettled status and grouped by reason code;
  - 11) Weekly National Transactions - Number of Recall Requests for IP transactions in SEK grouped by reason code;
- Consumption file:
- Calculation of items and store into and historical database
  - Daily sending of the consumption file via file-transfer (through ESMIG and NSP)
- New data for reconciliation:
- TIPS Settlement Core - Computation and new fields (account sequence and balance after settlement) and inclusion in the output journal
  - TIPS Message Router - New fields added to Settlement confirmation to Debtor
  - TIPS Message Router - New fields added to Settlement confirmation to Creditor
  - TIPS Message Router - New fields added to Settlement confirmation for SIP (it includes info for both Creditor and Debtor accounts)
  - TIPS Message Router - New fields added to Recall answer to Debtor
  - TIPS Message Router - New fields added to Recall answer to Debtor
  - TIPS Message Router - New fields added to Incoming Liquidity Transfer to Creditor
  - TIPS Message Router - New fields added to Outgoing Liquidity Transfer to Debtor
  - TIPS Message Router - New fields added to Investigation and Query
  - TIPS Additional Services - New fields to Informational database and LEA
  - Other components impacted: Operational Database and Informational databases (new data added)

Summary of infrastructure impact:

No infrastructure impact

Summary of operational impact:

A new overall coherence check will be put in place by the OT on selected statistical indicators for SEK currency, similarly to the one currently used for EURO currency.

At the beginning of each month / quarter, the OT will then send via mail the report to the Swedish CB.

No impact is envisaged for the other contents of this CR.

Summary of security impact:

**Change Request form**

See Change Request analysis.