

# **TARGET Instant Payment Settlement**

## **User Handbook**

**V0.3.0**

|         |            |
|---------|------------|
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# 1. Introduction to TIPS

This chapter serves as an **introduction to the TIPS service**, which is developed by the Eurosystem as a pan-European Instant Payment solution in central bank money. This chapter is intended as a general description which includes all the main features of TIPS, including those that are out of scope for this document, which is dedicated to the use of the Graphical User Interface.

Section 1.1 describes the features of the TIPS Settlement model and its architecture, whereas section 1.2 focuses on the communication between TIPS and the other Eurosystem market infrastructure services, which are crucial for the smooth functioning of TIPS.

## 1.1 TIPS Overview

TIPS is a harmonised and standardised pan-European service with common functionalities for the settlement of Instant Payments across different countries and jurisdictions. It is based on the Single Euro Payments Area (SEPA) Instant Credit Transfer scheme ~~and it is available for all payment service providers in Europe~~. It is designed to settle payments instantly with around the clock availability without scheduled service downtime, i.e. it is open for business 24 hours a day, every day of the year. No distinction is made between domestic and cross-border payments.

TIPS offers immediate settlement in central bank money.

TIPS Participants have a ~~s~~Settlement interface to send payment instructions and receive payment confirmations based on ISO 20022 standards and compliant with the SEPA Instant Credit Transfer scheme.

TIPS is designed to be currency agnostic, in order to provide settlement in non-euro central bank money if requested, connecting to other RTGS systems.

### 1.1.1 TIPS settlement service model

All the cash used to settle transactions in euro in TIPS comes from ~~A~~accounts opened in TARGET2, which is the RTGS for the euro currency. As such, TIPS can be considered as an additional service to TARGET2. Since TIPS operates 24/7/365, it does not have to ~~reinject-return~~ the liquidity to the RTGS at the end of TARGET2 operating day, but both the inbound and outbound ~~l~~iquidity transfers can take place only during TARGET2 operating hours. Therefore, participants to TIPS have to take into consideration their liquidity needs for the hours during which TARGET2 will be closed. Since TIPS account balances are taken into account on the minimum reserve calculation, a snapshot of the balance on the TIPS accounts is taken at the closing time of TARGET2.

TIPS processes payments in a strict FIFO (First In First Out) order, i.e. the instructions<sup>1</sup> are processed in a rigorously ordered sequence and no prioritisation is foreseen. TIPS processes every instant payment according to **two settlement stages**: the first notifies the beneficiary participant after having reserved the funds on the Originator Participant account by creating a cash posting (since no partial settlement is allowed,

<sup>1</sup> The term "instruction" refers not only to instant payments or liquidity transfers, but also to local reference data updates and any other type of request that leads to the update of reference or dynamic data in TIPS.

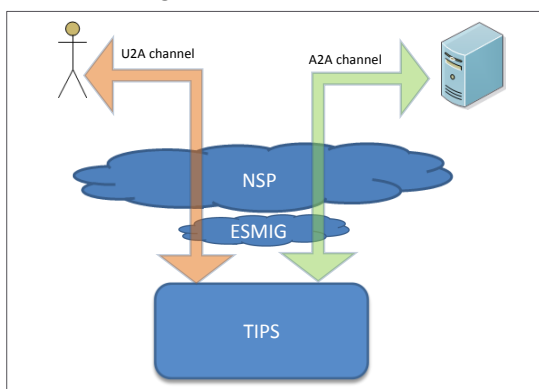
the full amount is reserved) and the second settles the reserved amount after TIPS has received the confirmation that the payment has been accepted by the Beneficiary Participant. In case of negative reply from the Beneficiary Participant<sup>2</sup>, the reserved sum is released and is again available to settle other instructions on the same account. TIPS rejects any payment that is not settled within the configured timeout<sup>2</sup> period ~~from its reception~~.

~~TIPS is designed to be currency agnostic, in order to provide settlement in non-euro central bank money if requested, connecting to other RTGS systems.~~

### 1.1.2 TIPS Access

TIPS Actors can access TIPS, via different Network Service Providers through the Eurosystem Single Market Infrastructure Gateway (ESMIG, see section 1.2.1) component, via U2A (User to Application) or A2A (Application to Application) mode.

Figure 1 – TIPS access



A2A communication relies, whenever possible, on ISO 20022 standard XML messages, for both inbound and outbound communication. When there is no ISO 20022 standard message available or when the usage of XML technology is not advisable for technical reasons (e.g. performance or network traffic constraints) flat data files may be used. At the current stage, there is no business case requiring flat data files to be used instead of ISO 20022 standard messages. All the exchanges are executed through a real-time transfer service, making it compulsory that both parties involved in a transaction are available when the message is sent (i.e. no Store and Forward service is foreseen). In case the message cannot be delivered, no retry mechanism is available.

U2A communication, which is available for a subset of TIPS functionalities whose description is the scope of this document, is based on a Graphical User Interface and enables physical users of directly connected TIPS Actors to access and make use of said subset of functions. Authorised users are able to access GUI functions based on their access rights profile (see sections 3.3 and 3.4).

For both A2A and U2A communication any individual or application interacting with TIPS is identified by a Distinguished Name (DN), which is a sequence of attribute-value assertions separated by commas, e.g.

<sup>2</sup> SCTInst Timestamp Timeout value is 20 seconds.

<cn=smith,ou=tips-ops,o=bnkacct,o=nsf-1>. The DN is uniquely linked to a digital certificate issued by the relevant NSP which TIPS Actors assign to their individuals (U2A) or applications (A2A).

The ESMIG carries out an authentication check~~s~~ to identify the DN and an authorisation check at service level, to verify whether the DN is enabled to submit requests to TIPS.

After the ESMIG authentication, TIPS carries out the authorisation of the sender at application level based on the DN's access rights profile, which is defined at Common Reference Data Management (CRDM, see section 1.2.2) level.

TIPS authorises requests from specific users (i.e. individuals or applications identified by means of a DN) based on their relevant access rights profile. Each interaction with TIPS that can be triggered in A2A or U2A mode by means of a message or a GUI screen (e.g. sending a query or blocking a TIPS Account) is defined as a TIPS user function. The capability to trigger a specific TIPS user function is granted by means of the related Privilege.

All Privileges that are relevant for TIPS are defined and stored within the CRDM, which also offers the possibility to group different Privileges into sets known as Roles. Each of these Roles will define a standard, specific business role for TIPS Actors to use to interact with TIPS. TIPS users will be assigned one or more roles in the CRDM depending on their requirements, and these roles will define their access rights configuration.

Roles are then granted to users identified by specific DNs. This allows the DN linked to the Role to trigger user functions in TIPS by exercising the Privileges contained within the Role.

## 1.2 Interactions with other services

TIPS is not a stand-alone service: in order to use it, TIPS Actors need to access other Eurosystem services, which are described in this section.

### 1.2.1 Eurosystem Single Market Infrastructure Gateway

The Eurosystem Single Market Infrastructure Gateway (ESMIG) authenticates TIPS Actors and gives them access to all authorised Eurosystem services, including TIPS. It also guarantees sanitisation of XML messages for security purposes and technical validation of the standard messages sent to the different services (schema validation and check of mandatory fields). If these checks are successful, the request and the sender's DN are forwarded to TIPS, which carries out the authorisation of the sender at application level based on the DN's access rights profile.

~~The ESMIG A2A interface is a gateway responsible for establishing the communication channel (e.g. https tunnel or other) with NSP and converting the NSP internal protocol and the XML format from/to the backend protocol of the different Eurosystem services, including TIPS.~~

The ESMIG U2A portal implements an authentication web page that shall authorise ~~the users~~ and let them reach the U2A interface URL of the relevant Eurosystem services, including TIPS.

### 1.2.2 Common Reference Data Management

The Common Reference Data Management (CRDM) is a centralised and harmonised reference data management component that allows authorised users to setup and maintain via a single dedicated interface

~~in a single point via its dedicated interface~~ all the data that is shared by more than one Eurosystem service, such as TIPS, TARGET2 and T2S.

For this reason, TIPS does not provide dedicated functions for the setup and most of the maintenance operations of its reference data (e.g. Participants, Accounts, Roles and Privileges).

Changes to TIPS Reference data fall into two categories:

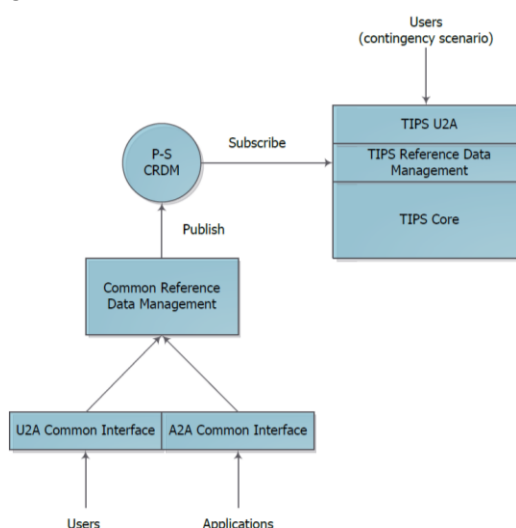
- Common reference data changes: carried out by authorised users in the CRDM interface and then propagated to TIPS on a daily basis. This also include the initial setup of all reference data required by TIPS (e.g. creation of a new Participant or of a new Account).
- Immediate reference data changes: some time-critical reference data changes need to be implemented in TIPS immediately, without waiting the following daily propagation from the CRDM service. They are carried out by authorised users directly in the TIPS interface and processed immediately, in order to update the relevant local reference data.

The access to CRDM is possible in U2A mode (for all functions) and in A2A mode (for a subset of functions) through the ESMIG component. U2A functions can also be triggered in 4-eyes mode, so that a final approval from a different user is required before the change come into effect.

As the CRDM service is available 5 days a week, 22 hours a day, the possibility to setup and maintain reference data for TIPS is only available during that time window. The data is propagated to TIPS asynchronously, on a daily basis, shortly before the business day change of TARGET2.

The following diagram describes the interaction between the CRDM service and TIPS.

**Figure 2 – Interaction with the CRDM**



The following table lists all the reference data management operations that will be available in the CRDM for TIPS, along with the corresponding responsible TIPS Actors and the expected U2A and A2A availability of each function.

**Table 1 – Responsible Actors for CRDM actions**

| Entity               | Possible operations    | Responsible Actors(s)                           | U2A availability | A2A availability |
|----------------------|------------------------|-------------------------------------------------|------------------|------------------|
| Actor                | Create, Update, Delete | TIPS Operator, CB                               | Yes              | Yes              |
| Account              | Create, Update, Delete | TIPS Operator, CB                               | Yes              | Yes              |
| CMB                  | Create, Update, Delete | TIPS Operator, CB, Participant                  | Yes              | Yes              |
| Report Subscription  | Create, Update, Delete | All TIPS Actors                                 | Yes              | No               |
| BIC                  | Create, Update, Delete | TIPS Operator                                   | Yes              | No               |
| BIC-DN Routing Table | Create, Update, Delete | CB, Participant                                 | Yes              | No               |
| Currency             | Create, Update, Delete | TIPS Operator                                   | Yes              | No               |
| System Settings      | Create, Update, Delete | TIPS Operator                                   | Yes              | No               |
| User                 | Create, Update, Delete | TIPS Operator, CB, Participant, Reachable Party | Yes              | No               |
| Role                 | Create, Update, Delete | TIPS Operator                                   | Yes              | No               |
| Role-User Grant      | Create, Update, Delete | TIPS Operator, CB, Participant, Reachable Party | Yes              | No               |
| RTGS Status          | Create, Update, Delete | TIPS Operator                                   | Yes              | Yes              |

| Entity               | Possible operations    | Responsible actors                              | U2A availability | A2A availability |
|----------------------|------------------------|-------------------------------------------------|------------------|------------------|
| Actor                | Create, Update, Delete | TIPS Operator, CB                               | Yes              | Yes              |
| Account              | Create, Update, Delete | TIPS Operator, CB                               | Yes              | Yes              |
| CMB                  | Create, Update, Delete | TIPS Operator, CB, Participant                  | Yes              | Yes              |
| Report Subscription  | Create, Update, Delete | All TIPS Actors                                 | Yes              | No               |
| BIC                  | Create, Update, Delete | TIPS Operator                                   | Yes              | No               |
| BIC-DN Routing Table | Create, Update, Delete | TIPS Operator, CB, Participant                  | Yes              | No               |
| Currency             | Create, Update, Delete | TIPS Operator                                   | Yes              | No               |
| System Settings      | Create, Update, Delete | TIPS Operator                                   | Yes              | No               |
| User                 | Create, Update, Delete | TIPS Operator, CB, Participant, Reachable Party | Yes              | No               |
| Role                 | Create, Update, Delete | TIPS Operator, CB                               | Yes              | No               |
| Role-User Grant      | Create, Update, Delete | TIPS Operator, CB, Participant, Reachable Party | Yes              | No               |
| RTGS Status          | Create, Update, Delete | TIPS Operator                                   | Yes              | Yes              |

### 1.2.3 TARGET2 and other RTGS systems

Liquidity in TIPS is provided from an external RTGS system (TARGET2 for the euro). TIPS can retain the liquidity when the RTGS system is closed, provided that it collects the balances of all its accounts into a “snapshot” and communicates it to the RTGS system at the end of the business day of the RTGS system.

~~In order to~~ it is possible to transfer liquidity to and from TIPS ~~each TIPS Account in euro must be related to a cash account opened in TARGET2<sup>3</sup>, but and~~ the owner of the TARGET2 Account does not need to be the same as the owner of the TIPS Account. TIPS foresees two types of Liquidity Transfers: Inbound (from an RTGS system to TIPS) and Outbound (from TIPS to an RTGS system). There are no internal liquidity transfers between TIPS Accounts. All Liquidity Transfers, whatever the type, are performed by moving the

<sup>3</sup> TIPS accounts in euro are legally opened in TARGET2 by the responsible Central Bank and have to be dedicated to the settlement of instant payments in TIPS.



liquidity through an RTGS Transit Account. TIPS has one and only one Transit Account defined for each currency, owned by the relevant Central Bank. The Transit Account for the euro is owned and maintained by the ECB. Liquidity transfers do not entail a reservation of funds, unlike instant payments, and are settled immediately.

An Inbound Liquidity Transfer moves liquidity from an RTGS account to a TIPS account in the same currency. Inbound Liquidity Transfer orders can be triggered only in the RTGS System and are received by TIPS (TIPS does not provide a functionality to pull liquidity from the relevant RTGS System).

Since TIPS can keep and move the liquidity in its accounts while TARGET2 is closed and considering that the balances of the TIPS accounts are, from a legal perspective, considered to be in the jurisdiction of TARGET2, TIPS prepares snapshots of the balances during the TARGET2 end of day procedure, ensuring that no liquidity transfers are pending confirmation from TARGET2. The same procedure is foreseen for any other RTGS system connected to TIPS.

## 2. Overview of the User Handbook

The TIPS User Handbook, hereinafter called UHB, aims at facilitating the use of the Graphical User Interface (GUI) of TIPS. It is intended for any TIPS user regardless of the focus of activities and describes the full range of functionalities available in user-to-application (U2A) mode. The GUI component includes all the necessary elements to provide the authorised users with the possibility to query transactional data (e.g. the balance of account or the status of an instant payment transaction) and to amend the local reference data that shall be maintained on a 24x7x365 basis.

There is only one handbook addressing all TIPS actors: TIPS Participants, Reachable Parties, Central Banks, the TIPS Operator. Updated versions of the UHB will be provided on a regular basis.

The UHB is part of the functional documentation and complements the User Detailed Functional Specifications (UDFS). The UDFS is particularly relevant for UHB readers willing to get more information on the general concepts described in the previous chapter. Although it is mainly focused on the application-to-application mode (A2A), chapter one of the UDFS contains a detailed description of the business concepts used in TIPS, which are also relevant when using the GUI.

### 2.1 UHB Methodology

Several symbols and methodological elements are used throughout the TIPS UHB to ease orientation and help the reader to find their desired information quickly. Every page of the main UHB parts has a similar page layout. The reader can find four different elements:

- the header, which shows the chapter and sub-chapter title
- the margin column on the left side of each page, which is used for subheadings and information signs
- the text column, which contains the main information, tables and screenshots
- the footer, which shows ~~the name and the release of the document as well as~~ the page number

## 2.2 UHB Structure

The UHB is structured in five parts:

- |               |                                                                                                                                                                                                                                                                                                                                                                                |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Part 1</b> | The <b>Introduction to TIPS</b> provides the reader with a general overview of the TIPS <u>solution-service</u> and its relation with the other Eurosystem market infrastructure services. An extensive description of the TIPS service can be found in the TIPS UDFS.                                                                                                         |
| <b>Part 2</b> | The <b>Overview of the User Handbook</b> explains the content and the approach of both the document and the GUI. While the first section explains how to use the UHB, the second section focuses on the design and common functionalities of the GUI.                                                                                                                          |
| <b>Part 3</b> | The <b>Initial Setup</b> gives the reader a rough guide about where to start with TIPS. It describes the reference data the user has to create in order to access and make use of the service. Since the actual creation of the reference data objects is performed on the CRDM, all the necessary steps to be taken in order to create the data are detailed in the CRDM UHB. |
| <b>Part 4</b> | The <b>Screen Reference guide</b> part describes all the screens contained in the GUI. Each description follows an identical structure which comprises detailed information on all screen fields. Readers may refer to this part if they need detailed and precise information on a screen, field or button.                                                                   |
| <b>Part 5</b> | The <b>Screen user guide</b> part provides the reader with a step-by-step description of the typical GUI workflows. Each description follows an identical structure. Readers may refer to this part if they need to know how to carry out an action using the GUI.                                                                                                             |

## 2.3 Overview of the Graphical User Interface

The GUI is a browser-based application for communication with TIPS in U2A mode. It is based on the ISO norm 9241 'Ergonomics of human system interaction'.

TIPS provides TIPS Actors with a Graphical User Interface offering basic functionalities to access information and controls (e.g. U2A queries, local reference data maintenance). The complete list of functions available 24/7/365 via the TIPS GUI is as follows:

**Table 1 – Functions available in TIPS GUI**

| Type                 | Description                          |
|----------------------|--------------------------------------|
| Query                | Account balance and status query     |
| Query                | CMB limit and status query           |
| Query                | Payment transaction and status query |
| Local reference data | Blocking/Unblocking of a Participant |
| Local reference data | Blocking/Unblocking of an Account    |
| Local reference data | Blocking/Unblocking of a CMB         |
| Local reference data | Increase/Decrease of a CMB limit     |

### 2.3.1 Setup and login process

Before entering the GUI, make sure that your workstation complies with the hardware and software requirements and implement all necessary preparations (e.g. firewall settings) described below.

#### Hardware requirements

*[to be specified]*

#### Software Requirements

*[to be specified]*

#### Supported Web-Browsers and Settings

*[to be specified]*

#### GUI Access

*[to be specified]*

### 2.3.2 GUI Structure

This chapter explains the basic elements of the TIPS GUI structure (i.e. structure of the menu and the screens) helping you to navigate through the system and to use it quickly and efficiently.

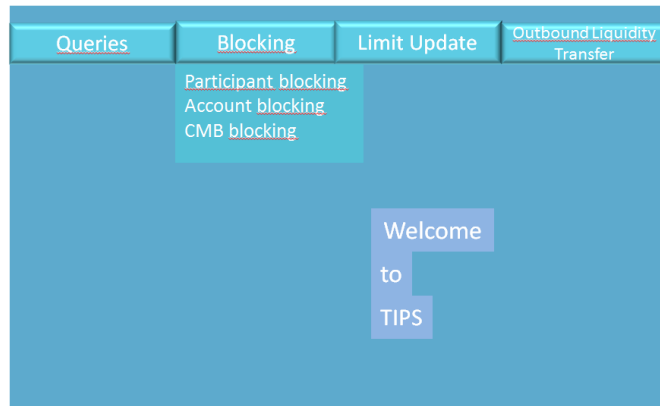
The first subsection describes the menu structure where screens are grouped hierarchically. Afterwards, the second subsection explains the layout structure common to each screen. The following subsections provide details on the different screen types and on recurring elements, such as common field types or buttons and icons.

#### 2.3.2.1 Menu Structure

The GUI menu is structured into two hierarchical menu levels. The first level is presented as a menu bar containing the four first-level menu items (Queries, Blocking, Limit Uppdate, Outbound Liquidity Transfers) which are always visible on top of each screen. The second menu level is accessible via mouse-over on the first level menu items.

Depending on your access rights, it is possible that not all menu entries are visible for you. Contact your system administrator to verify that you have the necessary roles to access all screens relevant to you. The roles are listed in each screen and business scenario description.

## Screenshot



### 2.3.2.2 Screen Structure

In general, each screen of the TIPS GUI follows the same layout containing a header and a content area.

**Header** The header appears at the top of every screen. It contains four main elements providing useful information and helping you to navigate between the different screens as shown in the illustration below

**Screenshot with header elements** *[the actual screenshot will be included when available]*

**Table 1 – GUI screen elements**

| Position | Element           | Description                                                                                                                                                            |
|----------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1        | TIPS logo button  | links to the welcome screen. While using the <i>new/edit</i> screens, the <i>TIPS logo</i> button is locked in order to ensure a safe and complete submission process. |
| 2        | Information panel | displays your login name, the <i>logout</i> and <i>help</i> buttons as well as date and time of last data access.                                                      |
| 3        | Menu bar          | presents the three main menu items and allows you to navigate to the screens.                                                                                          |
| 4        | TIPS Actor logo   | displays the respective logo in accordance with the chosen TIPS Actor in line with the white-labelling approach.                                                       |

**Content Areas** The content area is the part of the GUI where you can trigger all business actions. It is organised by five main elements which help you to interact properly with the GUI as shown in the illustration below.

**Screenshot** *[the actual screenshot will be included when available]*

The TIPS GUI consists of the following types of screens, each with a different function:

- Welcome screen
- Search/List screen
- Details screen

## I Enter screen

|                           |                                                                                                                                                                                                                                                                 |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Welcome screen</b>     | The <i>welcome</i> screen is the entrance into the TIPS GUI and allows you to choose your system user reference. It also contains a ticker line providing you with the latest information. The ticker is managed by the TIPS operator.                          |
| <b>Search/List screen</b> | The <i>search/list</i> screen allows you to query the TIPS database using a predefined set of search criteria. After executing a search, a list of data records matching your search criteria is displayed in a table.                                          |
| <b>Details screen</b>     | In contrast to the <i>search/list</i> screen, you can only access the <i>details</i> screens via other screens. You can find all possible ways of accessing the screen via other screens in the respective screen description within the screen reference part. |
| <b>Enter screen</b>       | Similar to the <i>details</i> screens, you can only access the <i>enter</i> screens through other screens                                                                                                                                                       |

### 2.3.2.3 Field types and properties

On *search/list* and *enter* screens, you-users can enter information via input fields and select fields. Pre-filled Information is displayed in read-only fields.

#### Input fields

In input fields you can enter text and/or numeric content. Make sure to comply with the format requirements, which are part of each field/screen description. Input-sensitive fields are input fields with an auto-complete mode that helps you to input data. As soon as you start typing the first characters of the respective data into an input-sensitive field, TIPS automatically proposes possible matching entries from which you can select the desired one.

#### Select fields

Select fields are either select boxes, radio buttons or check boxes.

**I Select boxes:** Functionally a select box is a way to enter data from a limited list of possible values. In TIPS you can find different types of select boxes: standard select box and auto-complete select box. You can select only one value at the same time.

**I Radio buttons:** Enable you to make exact selections using one value from a set of options. You can select only one value at the same time. Click on the icon corresponding to the option you would like to select.

**I Check boxes:** Enable you to select more than one value at the same time. Click on the boxes corresponding to the options you would like to select. Selected check boxes contain a check mark.

In addition to enter and select fields, the TIPS GUI has also read-only fields, which are pre-filled and do not allow data changes.

#### Field Properties

Following the SEPA Instant Credit Transfer specifications, the allowed character set is restricted to support the Latin characters which are commonly used in international communication. Data elements is restricted to the characters of the table below

**Table 2 – TIPS character set**

| Character | Description                                 |
|-----------|---------------------------------------------|
| a-z       | 26 small characters of the Latin alphabet   |
| A - Z     | 26 capital characters of the Latin alphabet |
| 0 - 9     | 10 numeric characters                       |
| /         | Solidus (slash)                             |
| -         | Hyphen                                      |
| ?         | Question mark                               |
| ;         | Semicolon                                   |
| (         | Opening parenthesis                         |
| )         | Closing parenthesis                         |
| .         | Full stop                                   |
| ,         | Comma                                       |
| '         | Apostrophe                                  |
| +         | Plus                                        |
|           | Space (blank)                               |

As additional rules, it is required that references, identifications and identifiers must not start or end with- '/' or contain '//'.

## 2.3.3 Validation

### Front-end validation

In TIPS all submission processes undergo various validations, which take place in the front-end and/or in the back-end. Only correct entries, fulfilling all predefined criteria, can be further processed. To indicate the status of the recently performed action, TIPS uses two different types of messages to indicate a successful or failed validation as described below.

In addition to the automatic validation carried out by TIPS, human validation can be imposed by using the 4-eyes mode.

As first part of the validation process, the front-end validation takes place without communication to the back-end. The front-end validation includes both the field validation and the cross-field validation. It is carried out after clicking on a button. The field validation verifies that all entries comply with the required format. The cross-field validation checks the data consistency between two or more fields/buttons in relation to each other.

### Back-end validation

The back-end validation is the second part of the validation process. After successful front-end validation, the user's request is submitted to the back-end and checked for compliance with the business validation rules. In case of failure an error message is displayed. You can find a detailed list of all error messages and their description in the annex of the UHB (list of references for error messages).

### Result

After each validation, the TIPS GUI informs the user about the result. There are two different message types available, the error message and the success message.

#### Error Message

Each error message is marked with a circle symbol and appears at the top of the content area and next to the field containing the error. In the case of a failed front-end or back-end validation, it indicates the source of the failure, the type of error and a short hint. This message is also shown as mouse-over text when you move the mouse cursor over the circle symbol next to the respective input field.

---

### Success message

If you are working in 4-eyes mode, the success message also provides you with the 4-eyes principle ID.

### 4-Eyes Mode

Depending on the access rights setup, you can use TIPS in 2-eyes or in 4-eyes mode. The 2-eyes mode and the 4-eyes mode apply for enter screens (new and edit mode) and for any kind of deletion processes. If you are a 4-eyes mode user, your actions have to be confirmed by a second user in order to be processed.

#### First user

In 4-eyes mode the first user enters, changes or deletes the data on a screen and afterwards submits the action by clicking on the submit button in the button bar. The success message appearing after successful validation includes a 4-eyes principle ID. For the final execution a second user is needed to confirm the action.

#### Second User

After the first user has entered, changed or deleted the data, a second user (with the required privilege) has to approve or revoke this action via the data changes screen either using the 4-eyes mode ID or the search functionality. An alert icon is shown on the active TIPS screen for those users with appropriate privileges to approve a pending action via the data changes screen. By clicking in the alert icon you are directed to the Data Changes - Search/List screen where you can first search and then approve/revoke the pending changes.

## 2.3.4 Communication Network and services

Refer to the TIPS Connectivity Guide document for details on the communication network and services.

## 2.3.5 User Administration

**Registration**     *[To be specified]*

## 2.3.6 Security and administration service

In order to guarantee a secure and safe handling of the information and to protect customer data provided via the GUI, various security elements have been put into place:

- ! Each action requires system or human validation as described in the validation
- ! The scope of available data and functions is controlled via the management of access rights
- ! The security features provided by the network providers and described in their respective user documentation prevent unauthorised access

## 3 Initial Setup

In order to use the TIPS Service, any Actor needs to create a series of Common Reference data that are used by TIPS but maintained and stored ~~on~~in a dedicated tool, the Common Reference Data Management (CRDM) component. The CRDM allows users to setup and maintain reference data that is shared by multiple Eurosystem services such as TIPS, T2 and T2S<sup>4</sup> and propagates such data to the relevant services. The description of the CRDM is out of scope ~~in~~of this document: the following paragraphs will be devoted to a general description of the objects that are created in the CRDM in order to understand how to use them in the TIPS service.

### 3.1 TIPS Actors

Legal entities or organisations that interact with the TIPS application either directly or indirectly (i.e. through an Instructing Party) are generically known as TIPS Actors in the Common Reference Data Management repository. The TIPS participation model envisions different types of Actors, with different roles and responsibilities, as outlined below. Each legal entity may play different roles in TIPS. Generally speaking, any legal entity playing multiple business roles in TIPS results in the definition of multiple parties.

Legal relationship between parties in TIPS determine a hierarchical party model based on a three-level structure. The TIPS Operator is the only party on the top level of the hierarchy and it is in a legal relationship with each party of the second level, i.e. each Central Bank in TIPS. Similarly, legal relationships exist between each party belonging to the second level (i.e. a Central Bank) and all of its community (i.e. Participants and Reachable Parties).

The possibility for users of each TIPS Actor to access their respective functions and fulfil their roles and responsibilities is enabled by setting up an adequate access rights configuration.

#### 3.1.1 TIPS operator

The TIPS Operator is the legal and organisational entity that operates TIPS. They are responsible for the initial setup and day-to-day operations of TIPS and act as a single point of contact for Central Banks and directly connected TIPS Actors<sup>5</sup>. They are responsible for monitoring the system and carrying out corrective actions in case of incidents or in the event of service unavailability. The TIPS Operator is also responsible for setting up and maintaining Central Banks reference data in the Common Reference Data Management repository and, if required, they may operate on behalf of any TIPS Actor. They have full access to all live and all archived reference data and transactional data in TIPS.

#### 3.1.2 Central Bank

<sup>4</sup> The reference data of T2S is not part of CRDM for the time being, until the approval of the relevant CR674.

<sup>5</sup> TIPS Actors different from Central Banks may contact the Service Desk only for connectivity-related incidents.



Central Banks are responsible for setting up and maintaining reference data for all the TIPS Actors belonging to their national community. Central Banks provide liquidity to Participants through Liquidity Transfers from the relevant RTGS. In addition, they can act on behalf of one of their Actors in case of need. ~~The European Central Bank owns and manages a single Transit Account in euro that must exist in TIPS, in order to allow the transfer of liquidity from TARGET2 to TIPS and vice versa. In order to allow the transfer of liquidity from TARGET2 to TIPS and vice versa, a single Transit Account must exist in TIPS. The European Central Bank owns and manages the single Transit Account in euro. With the same purpose, for each other settlement currency in TIPS, the relevant non-euro Central Bank shall define a single Transit Account for their currency. For any other settlement currency in TIPS, the relevant non-euro Central Bank shall define a single Transit Account for its currency.~~

In case a Central Bank is willing to make use of TIPS not only for the provision of liquidity to the Participants of its community, but also for the settlement of Instant Payments, it will have to open another Party as Participant.

### 3.1.3 Participant

Participants represent entities that are eligible for participation in TARGET2 (but do not necessarily own a TARGET2 PM account). They are identified by a BIC11 in TIPS and hold TIPS Accounts, which cannot have a negative balance. They can manage CMBs linked to their own accounts as well as Instructing Party roles for Actors acting on behalf of themselves or of Reachable Parties defined as users of their accounts or CMBs. In addition, they can restrict the access rights of ~~said those~~ Instructing Parties. They can also act as Instructing Parties.

Participants can hold TIPS Accounts, which are opened by their responsible Central Bank and used to settle Instant payment transactions and Liquidity Transfers in TIPS.

### 3.1.4 Reachable Party

Reachable Parties are also identified by a BIC11, but they cannot hold TIPS Accounts and ~~have to~~ rely on a Participant's account to settle payments in TIPS. They can also act as Instructing Parties, which allows them to interact directly with TIPS. ~~Reachable Parties do not have Users and are unable to directly perform any action in TIPS.~~

~~Participants can set CMBs on their accounts. CMBs represent credit limits defined for their individual customers (Reachable Parties). Reachable Parties can use Credit Memorandum Balances (CMBs), which represent credit limits defined for their individual customers.~~ CMBs offer the possibility to define limit management flexibly on a TIPS Account, without dedicating liquidity exclusively for each single customer.

### 3.1.5 Instructing Party

A distinction should be made for the role of the Instructing Party, which is a DN authorised to send settlement instructions on behalf of a specific BIC. Participants and Reachable Parties can act as Instructing Parties. Actors can act as Instructing Parties on behalf of other Participants or Reachable Parties, taking on the subset of functionalities that are available to the Participant or Reachable Party granted them in terms of access rights.

## 3.2 TIPS Accounts and CMBs

This entity represents data related to accounts that are held in TIPS and can be credited or debited during the processing of Instant payment transactions or Liquidity Transfers. Accounts can only be deleted from TIPS after their closing date and if their balance is zero. Once an Account is closed (i.e. its closing date has passed) only the responsible Central Bank can send instructions to modify its balance, ~~if present~~. If an Account is deleted while its balance is not zero, this deletion is rejected.

### 3.2.1 Types of Accounts

Accounts are opened in TIPS for the provision of liquidity and the settlement of instant payments. There are two types of Accounts: TIPS Accounts and Transit Accounts.

#### 3.2.1.1 TIPS Account

TIPS Accounts are accounts that are used by Participants for the settlement of Instant payment transactions and Liquidity Transfers. They cannot have a negative balance. Each TIPS Participants may own one or many TIPS Accounts and they may use them for their settlement activities or to give the possibility to settle to Reachable Parties or other Participants as well as authorising several BICs to operate on the account. They are ~~created~~ maintained by Central Banks for their Participants.

#### 3.2.1.2 Transit Account

Transit Accounts are accounts that are owned by and belong to Central Banks and they are used for liquidity transfers between RTGS and TIPS Accounts ~~for providing liquidity to TIPS Participants~~. Transit accounts can have a negative balance, but they are not usable for the settlement of Instant payment transactions. They are defined for carrying out the transfer of liquidity between the relevant RTGS system and TIPS. Only one transit account per settlement currency can exist in TIPS. The Transit Account for euro belongs to the European Central Bank.

### 3.2.2 Credit Memorandum Balance

Credit Memorandum Balances (CMBs) ~~represents~~ a credit limits defined for a Reachable party in TIPS. Each CMB is linked to one TIPS Account, but each TIPS Account can have any number of CMBs, each representing a credit line for a Reachable party in TIPS. CMB identifiers are in the same ISO-compliant format as the ones used for TIPS accounts.

CMBs offer the possibility to define limit management flexibly on a TIPS Account, without dedicating liquidity exclusively for each single customer. Specifically, the sum of all CMB limits on a TIPS Account can be higher than the balance of the same Account at any time. A CMB can be defined without a limit. In this case, the related Reachable Party can make full use of the capacity of the related Account without any limitation.

TIPS continuously keeps track of the ~~utilization~~ and available headroom for each CMB for which a limit is defined. Whenever an Instant payment transaction ~~or Liquidity Transfer~~ is settled against a given Originator or Beneficiary CMB, TIPS will debit/credit the TIPS Account and decrease/increase the relevant CMB headroom accordingly at the same time. It is possible for the headroom to exceed the limit as a result of crediting payments or liquidity transfers: in this case the ~~utilization~~ will be negative.

If an Instant payment transaction exceeds the current CMB headroom for the Originator Participant, it is rejected. If a CMB headroom reaches zero, no more instant payments can be addressed to it until additional funds are provided through an instant payment transaction. In other words, in order for a debiting instant payment transaction addressing a given CMB to settle, the amount to be debited must be lower or equal to ~~than~~ the current CMB headroom as well as the current balance on the TIPS Account. The CMB limit can be modified independently as a reference data update, which leads to the headroom being recalculated accordingly.

~~Unlimited CMBs:~~ For unlimited CMBs, the headroom must always be considered infinite and, conversely, the utilisation always zero. If a limit is set for a previously unlimited CMB, the headroom and utilisation are calculated starting from the moment the limit is set. In other words, the headroom is automatically set to the same value as the limit, while the utilisation remains zero. These values are then normally updated with each subsequent payment transaction, liquidity transfer and limit change as described above.

### 3.3 Users

~~There A user is~~ TIPS is an entity representing either a physical user or an application. They are linked to a single ~~Participant Actor~~ and can be assigned different Roles. They are identified by a DN used for authentication purposes. Both U2A and A2A Users are identified by a unique identifier which can never be assigned again to a different user.

A system user can be either a ~~p~~Party administrator or a standard user. The party administrator is a special user that is able to assign roles to the other users of its party.

### 3.4 Privileges and Roles

Each individual action that can be undertaken in TIPS, such as instructing a payment or modifying a CMB, is defined as a TIPS Function. Access to TIPS Functions is regulated by Privileges, being in one-to-one association with them: given a Privilege, it is possible to uniquely determine which is the TIPS Function allowed.

This means that a user UX owns the access right to trigger a given ~~T2S-TIPS~~ user function FY if and only if UX was previously granted with the privilege PY identifying the capability to trigger FY.

The Privileges are grouped in a set of Roles; thus, each Role covers one or more TIPS functions. Roles are additive, meaning that the TIPS Functions that a User can access are equal to the sum of the Functions allowed by each Role. Each User is linked to one or more Roles. Authori~~z~~ation for a User to carry out a specific action in TIPS is determined by the combination of the Roles assigned to the User and the TIPS Actor the User belongs to. For example, a User belonging to a certain Participant may be allowed to instruct instant payments (based on its assigned Roles). This means that ~~it-the user~~ will be able to instruct an instant payment on a TIPS Account belonging to that Participant, but not on an Account belonging to another Participant.

The set of objects on which a TIPS Actor can use different functions is known as their data scope and is not modifiable. The TIPS Operator users are granted with the entire pool of privileges. It is the TIPS Operator user who perform the initial configuration for Central Bank Parties. Privileges are propagated – grouped into Roles - to users of TIPS Actors ~~users~~ by the Central Bank party administrators.

Not all Roles can be assigned to all TIPS Actor types. For example, it is not possible ~~to enable for~~ a Central Bank or a Participant to create or update Currencies. Reachable Parties do not have Users and are unable to directly perform any action in TIPS.

### 3.4.1 Privileges

A TIPS Privilege represents the ability to access a given TIPS function~~ality~~. TIPS Privileges are set up and maintained by the TIPS Operator. They are assigned to Roles in order to create an organi~~zed~~ set of access profiles to be granted to the Users.

### 3.4.2 Roles

~~A TIPS Privilege represents the ability to access a given TIPS functionality. TIPS Privileges are set up and maintained by the TIPS Operator. They are assigned to Roles in order to create an organized set of access profiles to be granted to the Users.~~

They are assigned to Parties and Users for authori~~z~~ation purposes. The Users are authori~~z~~ed to access the TIPS functionality related to the set of Privileges the Role is linked to. CBs can configure specific roles to be granted to their own Participants and Reachable Parties, in order to grant them with proper access to functions. In turn, system administrators of Participants or Reachable Parties can use Roles granted by the relevant CB in order to assign proper access rights to their own system users.

Based on the granted set of roles, all system users are authorised to input their own Reference data objects and to access and maintain them, i.e. to create new objects or to update or delete already existing objects.

## 3.5 General reference data

Some reference data used in TIPS are maintained in the CRDM by the TIPS Operator.

### 3.5.1 Bank Identifier Code

Each TIPS actor is identified with a 11-character Bank Identifier Code (BIC11) which must be unique in TIPS. BICs in TIPS are normally based on the SWIFT BIC Directory but can be manually inserted, modified and deleted by the TIPS Operator in contingency situations.

### 3.5.2 Currency

The TIPS Operator is responsible for maintaining the data of all the currencies that are available for settlement in TIPS. They are defined using ISO-compliant codes. Currency data includes the maximum number of decimal positions that can be accepted in a TIPS payment instruction in a given currency.

### 3.5.3 RTGS System

The TIPS Operator is responsible for listing all the RTGS systems that interact with TIPS, along with the respective currency, status (i.e. whether they are open and ready to receive liquidity transfers or not), distinguished name and business date. This distinguished name is used by the RTGS to send any messages or queries to TIPS (e.g. to manage the transfer of liquidity from the RTGS to TIPS and to query the balances of the TIPS accounts linked to the RTGS account).

The status and the business date are updated automatically upon receiving a camt.019 message from the relevant RTGS system and can be modified manually by the TIPS Operator in contingency situations.

### 3.5.4 System parameters

The system parameters are configured by the TIPS Operator in the CRDM and propagated to TIPS once a day. They include the Retention Period, the SCTinst Timestamp Timeout, the Originator side Offset, the Beneficiary side Offset, the Sweeping Timeout, the Maximum Amount, the Acceptable Future Time Window, ~~and~~ the Investigation Offset and the RTGS Alert. Please refer to the UDFS section 1.7.1 Service configuration for a detailed description.

## 4 Screen Reference Guide

The TIPS Graphical User Interface provides the TIPS user with a number of U2A functions that must be available on a 24/7/365 basis. The GUI will be typically used to perform changes to local reference data that need to have immediate effect and to query the status of the accounts, the CMBs and the single payment transactions.

Within TIPS, local reference data maintenance instructions submitted in U2A mode can be triggered either in 2-Eyes or in 4-Eyes mode. In the second case, a final approval from a different user is required before the change comes into effect. When a 4-Eyes instruction is submitted, it is provisionally validated and put on hold until a second user, different from the initial submitter, confirms or revokes it. If the instruction is confirmed, it is submitted to TIPS as any other local reference data management instruction.

|                         |                                                                                                                                                                                                                             |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Context of Usage</b> | The context of usage explains what a screen displays, what you can do with the screen and which special features are available for the screen, for example the need for confirmation in 4-eyes mode or usage restrictions.  |
| <b>Screen Access</b>    | The screen access lists all possible ways to access the screen. This includes navigation via the menu and navigation via other screens.                                                                                     |
| <b>Roles</b>            | The Roles segment lists all necessary roles to access the screens and to use its functions. First, the roles to access a screen are mentioned, followed by the roles that are necessary to use all functions on the screen. |
| <b>Screenshot</b>       | You can use the screenshot as orientation for your work with the UHB. All screenshots are based on the maximum of access rights, so deviations are possible if you do not                                                   |

own all privileges which are necessary to use the screen in its full extent. In addition, deviations between the screenshot and the field/button description are possible in the case of mutually exclusive functions and based on a specific selection you have made. Values shown on the screenshot might also deviate from the default values indicated in the description.

## Field description

The field description provides all the relevant information related to the respective field name. It is structured in table format with a separate table for each frame. Sub-frames are indicated by subsection headings in the table. The following [illustration-table](#) explains the structure of a field description.

**Table 1 – Example of a Field description**

| Field description | Query Account balance and status: Results |                                                                                                             |
|-------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------|
|                   | Field name                                | Description                                                                                                 |
|                   | TIPS Participant Identifier               | Shows the BIC of the party which sent the transaction                                                       |
|                   | Account Identifier                        | Shows the ID of the Account                                                                                 |
|                   | Account status                            | Shows whether the Account is blocked for credit, blocked for debit, blocked for credit and debit, unblocked |
|                   | Currency                                  | Shows the currency under which the Account is denominated                                                   |
|                   | Timestamp of the reported balance         | Shows the timestamp at which the data was retrieved                                                         |
|                   | Current Account balance                   | Shows the the sum of unreserved and reserved balances                                                       |

| Position no. | Element           | Description                                         |
|--------------|-------------------|-----------------------------------------------------|
| 1            | Field name        | Indicates the respective name of each screen field  |
| 2            | Frame name        | indicates the respective name of each screen frame. |
| 3            | Field description | indicates the field type and required content       |

## 4.1 Queries

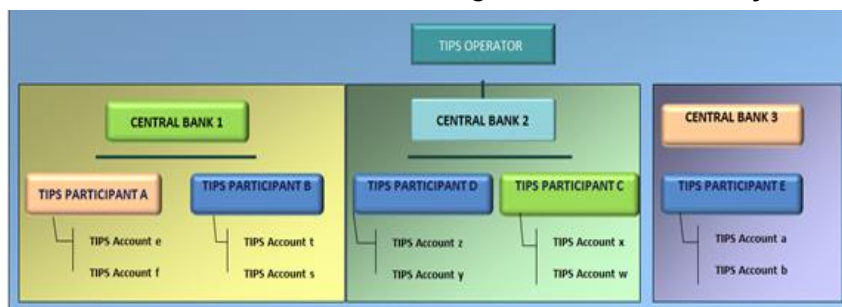
The Queries component provides the user with real-time information on production data (e.g. instant payment instructions, account balances). The queries are available during the operating hours of the TIPS service, i.e. 24/7/365 and they are not queued but processed immediately, using the most recent data available in the system.

Each query may be available in A2A mode and/or U2A mode. The Queries component generates A2A queries as XML messages and in compliance with the ISO 20022 standard, where applicable.

The Queries component provides different users with a different scope of data, depending on their access profiles. While Central banks have access to all accounts in their books (and subsequently to all transactions on these accounts) Participants can only access their own accounts. Access for Instructing parties is even further restricted to those accounts which they are permitted to instruct or on transactions they have

submitted. If a party does not have access to the underlying data the query returns an error code. The TIPS Operator has access to all the Accounts, CMBs and transactions data in TIPS.

**Figure 3 – TIPS hierarchy model**



### 4.1.1 Query Account balance and Status

The Account balance and status query allows the authorised actor to get detailed information for one account. TIPS does not foresee the usage of wildcards, therefore only one account per search can be retrieved.

#### 4.1.1.1 Query account balance and status – Search screen

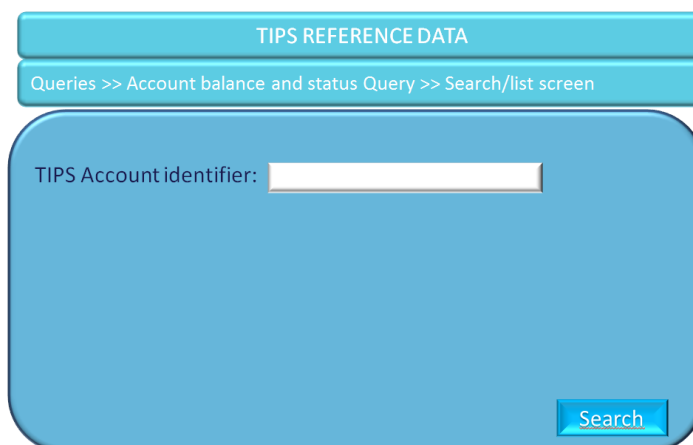
**Context of Usage** This screen contains the ID of the Account as the only available search field. By inputting the relevant data, you can search the detailed information on the balance and the status of the Account. Account data can only be viewed by users ~~belonging to~~ the Account Owner, the relevant Central Bank which created and maintains it and the relevant Instructing Party, if granted the necessary privileges to instruct using this Account. In case the user is not entitled to view the data on the searched Account an error code is returned.

**Screen Access** | Queries >> Account balance and status

**Roles** To use this screen, you need the following role:  
| Role [to be specified]



## Screenshot



## Field description

| Query Account balance and status: Search Criteria |                              |
|---------------------------------------------------|------------------------------|
| Object                                            | Required Format              |
| TIPS Account identifier                           | max. 34 characters (SWIFT-x) |

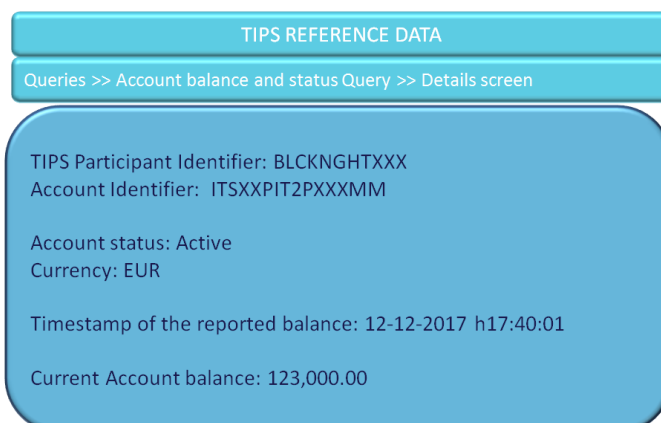
### 4.1.1.2 Query account balance and status – Details screen

**Context of Usage** This screen displays detailed information on the balance and the status of the Account. In case the user is not entitled to view the data on the searched Account an error code is returned.

**Screen Access** | Queries >> Account balance and status Query >>Details screen >> Click on the Search button

**Roles** To use this screen, you need the following role:  
| Role [to be specified]

## Screenshot





**Field description**

| Query Account balance and status: Results |                                                                                                             |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| TIPS Participant Identifier               | Shows the BIC of the party which owns the Account                                                           |
| Account Identifier                        | Shows the ID of the Account                                                                                 |
| Account status                            | Shows whether the Account is blocked for credit, blocked for debit, blocked for credit and debit, unblocked |
| Currency                                  | Shows the currency under which the Account is denominated                                                   |
| Timestamp of the reported balance         | Shows the timestamp at which the data was retrieved                                                         |
| Current Account balance                   | Shows <del>the</del> the sum of unreserved and reserved balances                                            |
|                                           |                                                                                                             |

## 4.1.2 Query CMB limit and Status

The CMB limit and status query allows the authorised actor to get the detailed information for one CMB. TIPS does not foresee the usage of wildcards, therefore only one CMB per search can be retrieved.

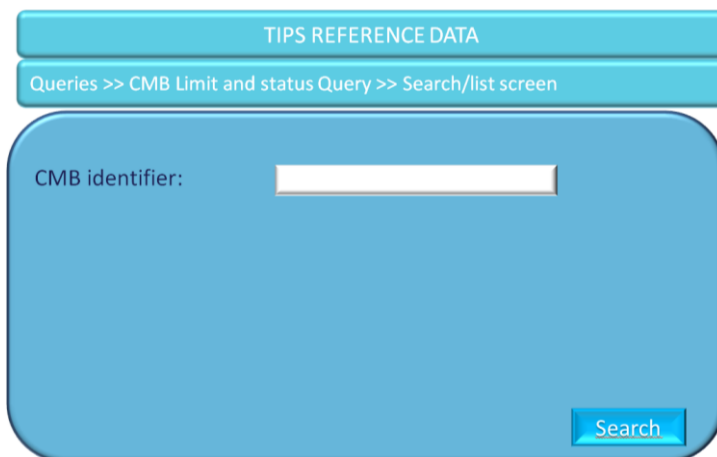
### 4.1.2.1 Query CMB limit and status – Search screen

**Context of Usage** This screen contains the ID of the CMB as the only available search field. By inputting the relevant data, you can search the detailed information on the limit utilisation and the status of the CMB. CMB data can only be viewed by users of the Account Owner, the relevant Central Bank which created and maintains it and the relevant Instructing Party, if granted the necessary privileges to instruct using this Account. In case the user is not entitled to view the data on the searched CMB an error code is returned.

**Screen Access** | Queries >>CMB limit and status Query

**Roles** To use this screen, you need the following role:  
| Role [to be specified]

**Screenshot**



**Field**

| Query Account balance and status: Search criteria |
|---------------------------------------------------|
|---------------------------------------------------|

| description | Object         | Required Format              |
|-------------|----------------|------------------------------|
|             | CMB identifier | max. 34 characters (SWIFT-x) |

#### 4.1.2.2 Query CMB limit and status – Details screen

**Context of Usage** This screen displays detailed information on the balance and the status of the CMB. Data can only be viewed by users ~~belonging to~~ the Account Owner, the relevant Central Bank which created and maintains it and the relevant Instructing Party, if granted the necessary privileges to instruct using this CMB. This function is available in both U2A and A2A mode. In case the user is not entitled to view the data on the searched CMB an error code is returned.

**Screen Access** | Queries >>CMB limit and status Query >> search/list screen >> Click on the Search button

**Roles** To use this screen, you need the following role:  
| Role [to be specified]

#### Screenshot

TIPS REFERENCE DATA

Queries >> CMB Limit and status Query >> Details screen

TIPS Participant Identifier: BLCKNGHTXXX  
 CMB Identifier: ITSXXCSPXXXXPM  
 Linked Account Identifier: ITSXXPIT2PXXXXMM

CMB status: Active  
 Currency: EUR

Timestamp of the reported limit: 12-12-2017 h17:40:01

Current CMB limit: 75,000.00  
 Current available Headroom : 15,025.00

#### Field description

| Query Account balance and status: Results |                                                                                                                                         |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| TIPS participant identifier               | Shows the BIC of the CMB user                                                                                                           |
| CMB identifier                            | Shows the ID of the CMB, which is unique in TIPS                                                                                        |
| Linked account identifier                 | Shows the ID of the Account to which the CMB is linked                                                                                  |
| CMB status                                | Shows whether the CMB is blocked for credit, blocked for debit, blocked for debit and credit, unblocked                                 |
| Currency                                  | Shows the currency under which the CMB is denominated                                                                                   |
| Timestamp of the reported limit           | Shows the timestamp at which the data was retrieved                                                                                     |
| Current CMB limit                         | Shows the maximum amount of liquidity reserved that can be used for settlement of Instant Payments attempting to debit the selected CMB |
| Current CMB available Headroom            | Shows the amount of liquidity still available for Instant Payments debiting the selected CMB                                            |

### 4.1.3 Query Instant payment transaction

The Payment transaction status query allows the authorised actor to get the detailed information for one payment transaction. TIPS allows actors to query payment transactions which are still available in the production system, i.e. before they are purged, after a data retention period set to five calendar days<sup>6</sup>.

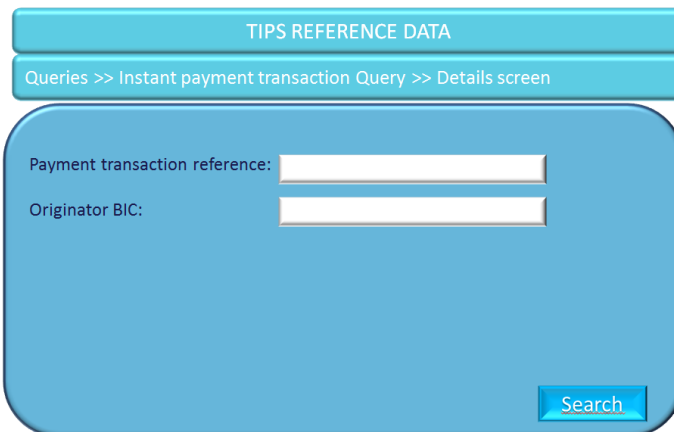
#### 4.1.3.1 Query Instant payment transaction – Search screen

**Context of Usage** This screen contains two search fields that must be inserted together to retrieve the relevant information. TIPS shall allow the Originator Participant, the Instructing Party acting on behalf of the Originator Participant, the Beneficiary Participant and the Instructing Party acting on behalf of the Beneficiary Participant to query the status of a payment transaction, which is identified by the combination of the ~~BIC of the Originator Participant or Reachable Party~~ Originator BIC and the payment transaction reference. This function is available in both U2A and A2A mode. In case the user is not entitled to view the data on the searched transaction an error code is returned.

**Screen Access** | Queries >> Instant payment transaction Query

**Roles** To use this screen, you need the following role:  
| Role [to be specified]

#### Screenshot



#### Field description

| Query Instant Payment transaction: Search criteria |                         |
|----------------------------------------------------|-------------------------|
| Object                                             | Required Format         |
| Payment transaction reference                      | pacs.008 transaction Id |
| Originator BIC                                     | BIC11                   |

<sup>6</sup> After the data retention period the information will be available through the Legal Archiving service, which collects and stores business transaction and reporting data from different Eurosystem services, including TIPS. The Legal Archiving service stores data in a secure manner and in its original content and format and makes it accessible throughout a predefined retention period.

#### 4.1.3.2 Query Instant payment transaction – Details screen

**Context of Usage** This screen displays detailed information on the status of the relevant payment transaction, showing whether the transaction was settled successfully. This function is available ~~in-only both in~~ U2A ~~and A2A~~ mode. In case the user is not entitled to view the data on the searched transaction an error code is returned.

**Screen Access** | Queries >> Instant payment transaction Query >> search/list screen >> Click on the Search button

**Roles** To use this screen, you need the following role:  
| Role [to be specified]

#### Screenshot

TIPS REFERENCE DATA

Queries >> Instant payment transaction Query >> Details screen

Originator BIC: BLCKNGHTXXX  
 Beneficiary BIC: LDZPPLN1XXX  
 Transaction reference: OrigID1

Transaction status: Settled  
 Reason code: /

Settlement Timestamp: 12-10-2017 h14:20:01

Payment transaction amount: 100,000.00

| Query Instant payment transaction: Result |                                                                                                    |
|-------------------------------------------|----------------------------------------------------------------------------------------------------|
| Originator BIC                            | Shows the BIC code of the Originator Bank                                                          |
| Beneficiary BIC                           | Shows the BIC of the beneficiary of the transaction                                                |
| Transaction reference                     | Shows the reference of the transaction                                                             |
| Transaction status                        | Shows whether the instruction was settled or not settled                                           |
| Reason code                               | Describes the reason of the unsettled status. Not filled in case the Transaction status is settled |
| Settlement timestamp                      | Shows the time at which the transaction was settled                                                |
| Payment transaction amount                | Shows the amount of the transaction                                                                |

## 4.2 Blocking

Due to the level of criticality entailed in the blocking of a TIPS Actor, Account or CMB, the function is made available in TIPS in real-time and on a 24/7 basis. These changes in the configuration of the said Reference Data objects are done using the same input stream of the instant payments.

## 4.2.1 Participant Blocking

The Actor can be blocked for crediting and/or debiting directly in TIPS and the relevant data changes will be taken into account in real-time on a 24/7 basis. These operations are carried out by authorised users directly in TIPS via the TIPS interface (available 24 hours a day) and processed in the same flow as instant payment instructions. The operations can be carried out by an authorised user of the Central Bank of the TIPS **Actor Participant** holding the relevant Account or by an authorised user of the TIPS Operator (only in contingency situations).

Blocking a TIPS Participant for debiting/crediting results in an equivalent blocking on all Accounts owned by that Participant and all the CMBs linked to that Account. The individual Account and CMB blocking status is not overwritten. When crediting or debiting a TIPS Account, TIPS also checks the Owner Participant blocking status. If this Participant is blocked, the whole payment operation is rejected. Unblocking the TIPS Participant means that all of its Accounts and CMBs revert back to their individual blocking status.

Blocking/Unblocking status are also available, with non-immediate effect, in the CRDM; any change that is propagated from the CRDM to TIPS does not overwrite these values if they have been changed within TIPS via an immediate change.

The possible values that an Actor can assume are:

- Unblocked
- Blocked for debiting
- Blocked for crediting
- Blocked for crediting/debiting

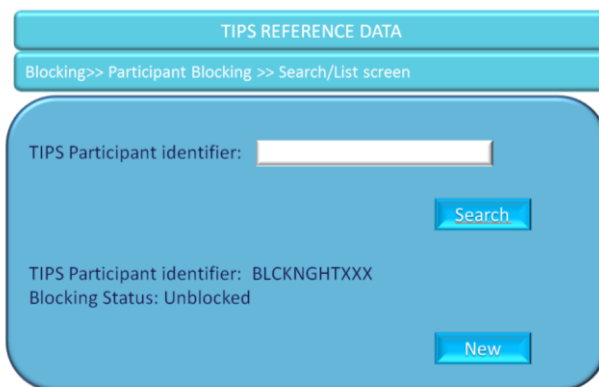
### 4.2.1.1 Participant Blocking – Search/List Screen

**Context of Usage** This screen contains the BIC of the Participant whose Blocking status has to be changed as the only available search field. Participant data can only be viewed by the relevant Central Bank which created and maintains it. In case the Actor is not entitled to view the data an error code is returned. You can use this screen either in 2-eyes or in 4-eyes mode. This function is available in both U2A and A2A mode.

**Screen Access** | Blocking >> Participant Blocking >> Search/List screen  
>> Click on the search button >>

**Role** To use this screen, you need the following role:  
| Role [to be specified]

#### Screenshot



#### Field description

| Participant Blocking: Search criteria |                 |
|---------------------------------------|-----------------|
| Object                                | Required Format |
| TIPS Participant identifier           | BIC11           |

| Participant Blocking: List  |                                                                       |
|-----------------------------|-----------------------------------------------------------------------|
| TIPS Participant Identifier | Shows the BIC of the Party whose Blocking status the user is checking |

|                 |                                                                                                                                                                |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Blocking Status | Shows the blocking status of the TIPS Participant. Possible values are: Unblocked, Blocked for Debiting, Blocked for Crediting, Blocked for Crediting/Debiting |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Buttons

|        |                                                                                                                 |
|--------|-----------------------------------------------------------------------------------------------------------------|
| Search | This function enables the user to Search the Blocking status of the selected Participant                        |
| New    | This function enables to access the New screen where to create or modify the Blocking status of the Participant |

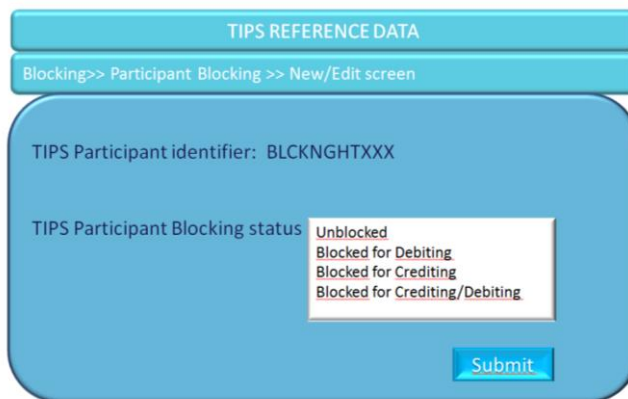
#### 4.2.1.2 Participant Blocking – New/Edit Screen

**Context of Usage** This screen contains a number of fields regarding the Actor Blocking. You can enter a blocking status, modify an existing blocking status or remove an existing blocking status. This function is available in both U2A and A2A mode. In case the Actor is not entitled to view the data on the searched Participant an error code is returned.

**Screen Access** | Blocking >> Participant Blocking  
>> Click on the New button >>

**Role** To use this screen, you need the following role:  
| Role *[to be specified]*

#### Screenshot



#### Field description

| TIPS Participant blocking: List |                                                                                                                                                                                  |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Object                          | Description                                                                                                                                                                      |
| TIPS Participant identifier     | Shows the BIC of the Party whose Blocking status the user is modifying                                                                                                           |
| Blocking Status                 | Drop-down menu where to choose the new value of the Blocking status. Possible values are: Unblocked, Blocked for Debiting, Blocked for Crediting, Blocked for Crediting/Debiting |

#### Buttons

|        |                                                                                               |
|--------|-----------------------------------------------------------------------------------------------|
| Submit | This function enables the user to Submit the desired Blocking status for the TIPS Participant |
|--------|-----------------------------------------------------------------------------------------------|

## 4.2.2 Account Blocking

The Account can be blocked for crediting and/or debiting directly in TIPS and the relevant data changes will be taken into account in real-time on a 24/7 basis. These operations are carried out by authorised users directly in TIPS via the TIPS interface (available 24 hours a day) and processed in the same flow as instant payment instructions. The operations can be carried out by an authorised user of the Central Bank of the TIPS Actor holding the relevant Account or by an authorised user of the TIPS Operator (only in contingency situations).

Blocking/Unblocking status are also available, with non-immediate effect, in the CRDM; any change that is propagated from the CRDM to TIPS does not overwrite these values if they have been changed within TIPS via an immediate change.

The possible values that an Account can assume are:

- Unblocked
- Blocked for debiting
- Blocked for crediting
- Blocked for crediting/debiting

The blocking status of an Account is not taken into account in case the Party holding the Account is blocked. Only once the TIPS Party is unblocked the blocking status of the related Account is taken into consideration. Blocking a TIPS Account for debiting/crediting results in an equivalent blocking on all CMBs linked to that Account. The individual CMB blocking status is not overwritten. When crediting or debiting a CMB, TIPS also credits or debits the related account. If this account is blocked, the whole payment operation is rejected. Unblocking the TIPS Account means that all linked CMBs revert back to their individual blocking status.

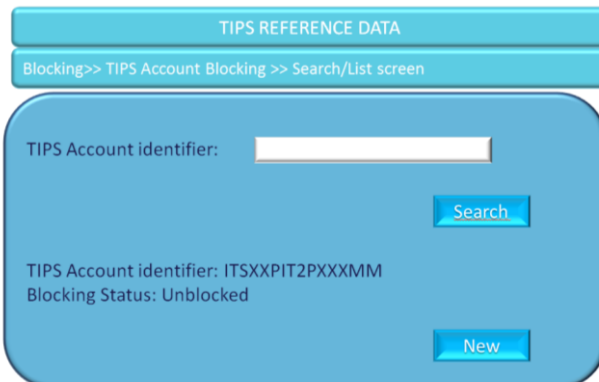
### 4.2.2.1 Account Blocking – Search Screen

**Context of Usage** This screen contains the ID of the TIPS Account whose Blocking status has to be changed as the only available search field. Account data can only be viewed by the relevant Central Bank which created and maintains it. In case the Actor is not entitled to view the data an error code is returned. You can use this screen either in 2-eyes or in 4-eyes mode. This function is available in both U2A and A2A mode.

**Screen Access** | Blocking >> TIPS Account Blocking >> Search/List screen  
>> Click on the search button >>

**Role** To use this screen, you need the following role:  
| Role [to be specified]

#### Screenshot



| Field description | Account Blocking: Search criteria |                 |
|-------------------|-----------------------------------|-----------------|
|                   | Object                            | Required Format |

|                         |                              |
|-------------------------|------------------------------|
| TIPS Account identifier | max. 34 characters (SWIFT-x) |
|-------------------------|------------------------------|

| Account Blocking: List  |                                                                                                                                                            |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TIPS Account Identifier | Shows the ID of the Account whose Blocking status the user is checking                                                                                     |
| Blocking Status         | Shows the blocking status of the TIPS Account. Possible values are: Unblocked, Blocked for Debiting, Blocked for Crediting, Blocked for Crediting/Debiting |

#### Buttons

|        |                                                                                                                  |
|--------|------------------------------------------------------------------------------------------------------------------|
| Search | This function enables the user to Search the Blocking status of the selected TIPS Account                        |
| New    | This function enables to access the New screen where to create or modify the Blocking status of the TIPS Account |

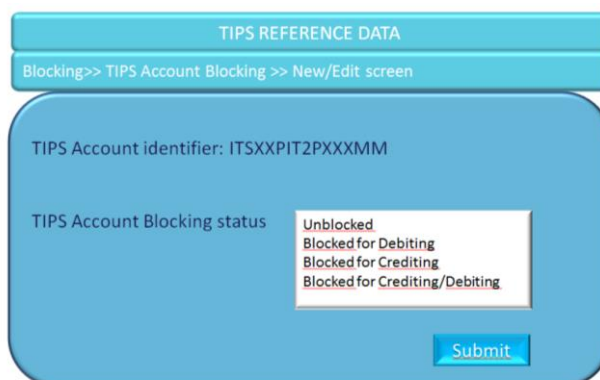
#### 4.2.2.2 Account Blocking – New/Edit Screen

**Context of Usage** This screen contains a number of fields regarding the TIPS Account Blocking. You can enter a blocking status, modify an existing blocking status or delete an existing blocking status. This function is available in both U2A and A2A mode. In case the Actor is not entitled to view the data on the searched Account an error code is returned.

**Screen Access** | Blocking >> TIPS Account Blocking  
>> Click on the New button >>

**Role** To use this screen, you need the following role:  
| Role [to be specified]

#### Screenshot



#### Field description

| TIPS Account Blocking: List |                                                                                                                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Object                      | Description                                                                                                                                                                      |
| TIPS Account identifier     | Shows the ID of the Account whose Blocking status the user is modifying                                                                                                          |
| Blocking Status             | Drop-down menu where to choose the new value of the Blocking status. Possible values are: Unblocked, Blocked for Debiting, Blocked for Crediting, Blocked for Crediting/Debiting |

#### Buttons

|        |                                                                                           |
|--------|-------------------------------------------------------------------------------------------|
| Submit | This function enables the user to Submit the desired Blocking status for the TIPS Account |
|--------|-------------------------------------------------------------------------------------------|



## 4.2.3 CMB Blocking

The CMB can be blocked for crediting and/or debiting directly in TIPS and the relevant data changes will be taken into account in real-time on a 24/7 basis. These operations are carried out by authorised users directly in TIPS via the TIPS interface (available 24 hours a day) and processed in the same flow as instant payment instructions. The operations can be carried out by an authorised user of the Central Bank of the TIPS Actor holding the relevant Account, by an authorised user of the TIPS Actor holding the Account or by an authorised user of the TIPS Operator (only in contingency situations).

Blocking/Unblocking status are also available, with non-immediate effect, in the CRDM; any change that is propagated from the CRDM to TIPS does not overwrite these values if they have been changed within TIPS via an immediate change.

The possible values that a CMB can assume are:

- Unblocked
- Blocked for debiting
- Blocked for crediting
- Blocked for crediting/debiting

The blocking status of a CMB is not taken into account in case the relevant Account or the Party holding the Account are blocked. Only once the TIPS Actor and the TIPS Account are unblocked the blocking status of the related CMBs is taken into consideration.

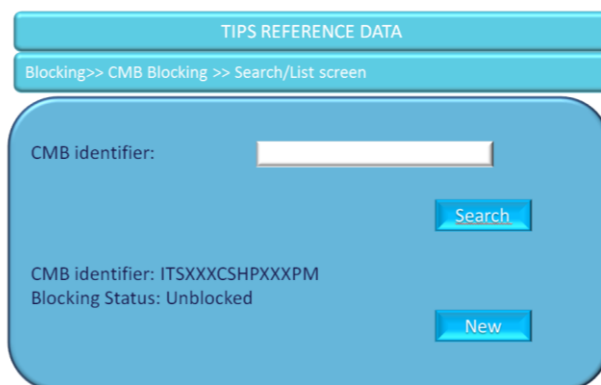
### 4.2.3.1 CMB Blocking – Search screen

**Context of Usage** This screen contains the ID of the CMB whose Blocking status has to be changed as the only available search field. In case the Actor is not entitled to view the data an error code is returned. You can use this screen either in 2-eyes or in 4-eyes mode. This function is available in both U2A and A2A mode.

**Screen Access** | Blocking >> CMB Blocking >> Search/List screen  
>> Click on the search button >>

**Role** To use this screen, you need the following role:  
| Role [to be specified]

#### Screenshot



#### Field description

| CMB Blocking: Search criteria |                              |
|-------------------------------|------------------------------|
| Object                        | Required Format              |
| CMB identifier                | max. 34 characters (SWIFT-x) |

| CMB Blocking: List |
|--------------------|
|--------------------|

|                 |                                                                                                                                                   |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| CMB Identifier  | Shows the ID of the CMB whose Blocking status the user is checking                                                                                |
| Blocking Status | Shows the blocking status of the CMB. Possible values are: Unblocked, Blocked for Debiting, Blocked for Crediting, Blocked for Crediting/Debiting |

#### Buttons

|        |                                                                                                         |
|--------|---------------------------------------------------------------------------------------------------------|
| Search | This function enables the user to Search the Blocking status of the selected CMB                        |
| New    | This function enables to access the New screen where to create or modify the Blocking status of the CMB |

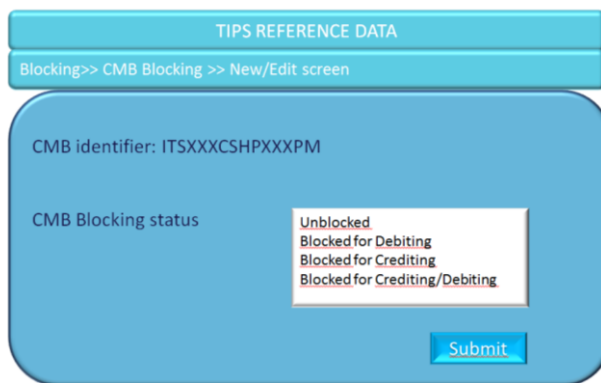
#### 4.2.3.2 CMB Blocking – New/Edit Screen

**Context of Usage** This screen contains a number of fields regarding the CMB Blocking. You can enter a blocking status, modify an existing blocking status or delete an existing blocking status. This function is available in both U2A and A2A mode. In case the Actor is not entitled to view the data on the searched CMB an error code is returned.

**Screen Access** | Blocking >> CMB Blocking  
>> Click on the New button >>

**Role** To use this screen, you need the following role:  
| Role [to be specified]

#### Screenshot



#### Field description

| CMB Blocking: List |                                                                                                                                                                                  |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Object             | Description                                                                                                                                                                      |
| CMB identifier     | Shows the ID of the CMB whose Blocking status the user is modifying                                                                                                              |
| Blocking Status    | Drop-down menu where to choose the new value of the Blocking status. Possible values are: Unblocked, Blocked for Debiting, Blocked for Crediting, Blocked for Crediting/Debiting |

#### Buttons

|        |                                                                                  |
|--------|----------------------------------------------------------------------------------|
| Submit | This function enables the user to Submit the desired Blocking status for the CMB |
|--------|----------------------------------------------------------------------------------|

## 4.3 Limit management

The limit is the maximum amount of liquidity available for a CMB. It is the sum of the utilisation (amount of cash used for that CMB) and the headroom (amount of cash still available for that CMB). It can be modified at all times directly in TIPS.

~~It is not a compulsory feature: a~~ CMB can be defined without a limit. In this case, it is possible to make full use of the capacity of the related Account without any limitation. For unlimited CMBs, the headroom must always be considered infinite and, conversely, the utilisation always zero.

CMBs offer the possibility to define limit management flexibly on a TIPS Account without dedicating liquidity exclusively for each single customer. Specifically, the sum of all CMB limits on a TIPS Account can be higher than the balance of the same Account at any time.

The CMB limit can be modified independently as a reference data update directly in TIPS (although the service is available also on the CRDM), which leads to the headroom being recalculated accordingly.

If a limit is set for a previously unlimited CMB, the headroom and utilisation are calculated starting from the moment the limit is set. In other words, the headroom is automatically set to the same value as the limit, while the utilisation remains zero. These values are then normally updated with each subsequent payment transaction, liquidity transfer and limit change.

When a CMB limit is modified, the headroom and utilisation are updated accordingly. ~~It is possible for a change in limit to lead the headroom to become negative, after which the CMB will only accept instant payments and liquidity transfers in credit until the headroom once again goes over zero. It is possible that a change in a limit leads the headroom to become negative, after which the CMB will only accept instant payments in credit until the headroom is again more than zero.~~

The increase and reduction of a CMB limit has no effect on the values of the other possible CMB limits linked with the same TIPS Account.

### 4.3.1 CMB Limit modification

The limit is the only other CMB feature, together with the blocking feature, that can be modified in U2A mode directly in TIPS.

The new limit is immediately taken into consideration after it is set, i.e. the headroom and the utilisation are calculated starting from the moment the limit is modified.

The limit can be modified directly in TIPS and the relevant data changes will be taken into account in real-time on a 24/7 basis. These operations are carried out by authorized users directly in TIPS and processed in the same flow as instant payment instructions. The operations can be carried out by the Central Bank of the TIPS Actor holding the relevant Account, by the TIPS Actor holding the Account, by an Instructing Party authorized by the TIPS Actor holding the account or by the TIPS Operator (only in contingency situations).

Limit update is also available, with non-immediate effect, in the CRDM; ~~any change that is propagated from the CRDM to TIPS does not overwrite these values if they have been changed within TIPS via an immediate change.~~

#### 4.3.1.1 CMB Limit Modification – Search screen

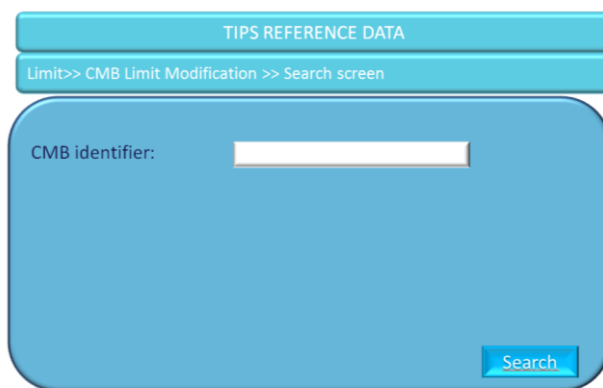
**Context** This screen contains the ID of the CMB as the only available search field. By inputting the

**of Usage** relevant data, you can add, modify or delete the limit of the searched CMB. CMB data can only be viewed by the Account Owner, the relevant Central Bank which created and maintains it and the relevant Instructing Party, if granted the necessary privileges to instruct. In case the Actor is not entitled to view the data on the searched transaction an error code is returned.

**Screen Access** | Limit >> Search screen  
>> Click on the search button >>

**Role** To use this screen, you need the following role:  
| Role [to be specified]

#### Screenshot



#### Field description

| CMB Limit Modification: Search criteria |                              |
|-----------------------------------------|------------------------------|
| Object                                  | Required Format              |
| CMB identifier                          | max. 34 characters (SWIFT-x) |

#### 4.3.1.2 CMB Limit Modification – Details Screen

**Context of Usage** This screen contains a number of fields regarding the CMB Limit. You can view the current value of the CMB Limit, if there is any.  
In case the Actor is not entitled to view the data on the searched transaction an error code is returned.

**Screen Access** | Limit >> Details  
>> Click on the search and/or details button >> User - details screen  
>> Click on the edit button

**Role** To use this screen, you need the following role:  
| Role [to be specified]

## Screenshot

TIPS REFERENCE DATA

Limit >> CMB Limit Modification >> Details screen

CMB Identifier: ITSXXCSPXXXXPM  
Linked Account: ITSXXPIT2PXXXXMM

Limit value: 10.000,00

Edit

## Field description

| CMB Limit Modification: Search criteria |                                                                                                     |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------|
| Object                                  | Description                                                                                         |
| CMB identifier                          | Shows the ID of the CMB, which is unique in TIPS and whose Limit the user wants to create or update |
| Linked Account                          | Shows the ID of the Account to which the CMB is linked                                              |
| Limit Value                             | Shows the current value of the CMB Limit                                                            |

## Buttons

| Edit | This function enables to access the Edit screen where to update the Limit |
|------|---------------------------------------------------------------------------|

### 4.3.1.3 CMB Limit Modification – New/Edit screen

## Context of Usage

This screen contains a number of fields regarding the CMB Limit. You can enter a new Limit or modify existing Limit. TIPS shall allow the Account Owner to modify the Limit of a CMB. This function is available in both U2A and A2A mode.  
In case the Actor is not entitled to view the data on the searched transaction an error code is returned.

## Screen Access

I Limit >> Modify Limit  
 >> Click on the search and/or details button >> User - details screen  
 >> Click on the edit button

## Role

To use this screen, you need the following role:  
I Role [to be specified]

## Screenshot

TIPS REFERENCE DATA

Limit >> CMB Limit Modification >> New/Edit screen

CMB Identifier: ITSXXCSPXXXXPM  
Linked Account: ITSXXPIT2PXXXXMM

Limit value:

Submit

| Field description | CMB Limit Modification: Search criteria |                                                                                                                          |
|-------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
|                   | Object                                  | Description                                                                                                              |
|                   | CMB identifier                          | Shows the ID of the CMB, which is unique in TIPS and whose Limit the user wants to create or update                      |
|                   | Linked Account                          | Shows the ID of the Account to which the CMB is linked                                                                   |
|                   | Limit Value                             | Field where to enter the amount of the Limit for the CMB. Leaving the value blank means that the CMB will have no limit. |
| Buttons           |                                         |                                                                                                                          |
|                   | Submit                                  | This function enables to create or modify a CMB Limit according to the information entered                               |

## 4.4 Liquidity Transfer

TIPS supports Central Bank Money transfers between accounts denominated in the same currency from TIPS to an RTGS System (Outbound) or vice versa from an RTGS System to TIPS (Inbound).

The Outbound Liquidity Transfer functionality can be triggered in U2A via a dedicated TIPS GUI screen and it is executed immediately. The process foresees that an authorised entity, e.g. a TIPS Participant, Instructing Party or Central Bank acting on behalf, triggers an Outbound Liquidity Transfer order towards the corresponding RTGS System, in the form of a Liquidity Transfer message. A target RTGS Account must be specified. No reservation of funds occurs in this scenario and settlement takes place immediately.

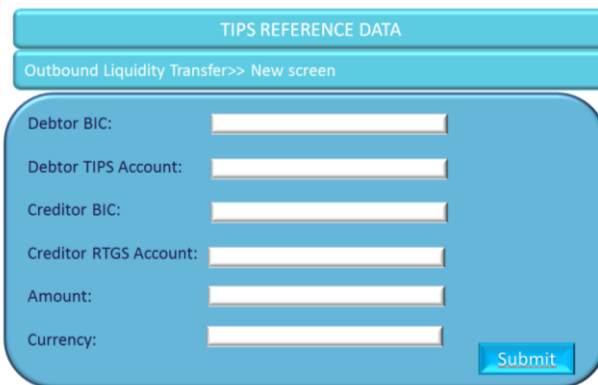
### 4.4.1 Liquidity Transfer functionality

This section describes the processing of an Outbound Liquidity Transfer order sent by a Central Bank, a Participant or an Instructing Party acting on behalf of the Participant in order to transfer liquidity from a TIPS Account to an RTGS Account. Central Banks shall be able to initiate an Outbound Liquidity Transfer even if the closing date of the TIPS Account is exceeded and regardless of the TIPS account's blocking status.

#### 4.4.1.1 Outbound Liquidity Transfer - New screen

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Context of Usage</b> | This screen contains a number of fields regarding immediate liquidity transfers. You can enter data to create a new outbound liquidity transfer. TIPS shall allow the TIPS Participant which is the owner of the TIPS Account to be debited or the Instructing Party (if granted the necessary privileges to instruct) or the relevant Central Bank to trigger this function. This function is available in both U2A and A2A mode. In case the Actor is not entitled to launch the transaction an error code is returned. |
| <b>Screen Access</b>    | <ul style="list-style-type: none"> <li>Outbound Liquidity transfer &gt;&gt; New screen</li> <li>&gt;&gt; Click on the Submit button &gt;&gt;</li> </ul>                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Role</b>             | <p>To use this screen, you need the following role:</p> <ul style="list-style-type: none"> <li>Role [to be specified]</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                          |

## Screenshot



## Field description

| CMB Limit Modification: Search criteria |                                                                                                                                                                                                                               |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Object                                  | Required Format                                                                                                                                                                                                               |
| Debtor BIC                              | Field where to enter the BIC11 of the owner of the TIPS Account to be debited. Format is BIC11                                                                                                                                |
| Debtor Account                          | Field where to enter the TIPS Account to be debited. Format is max. 34 characters (SWIFT-x)                                                                                                                                   |
| Creditor BIC                            | Field where to enter the BIC11 of the owner of the RTGS Account to be credited. Format is BIC11                                                                                                                               |
| Creditor Account                        | Field where to enter the RTGS Account to be credited. Format is max. 34 characters (SWIFT-x)                                                                                                                                  |
| Amount                                  | Field where to enter the amount to be transferred with the Liquidity Transfer. Format is max. 18 digit(s) including decimal points (thereof max. 5 decimal places)                                                            |
| Currency                                | Field where to enter the currency used for the amount of the Liquidity Transfer. It has to be the same as the currency of the Debtor and the Creditor Accounts. Required format is Required format is: 3 characters (SWIFT-x) |

## Buttons

| Submit | This function enables to Inject the Outbound Liquidity Transfer according to the information entered |
|--------|------------------------------------------------------------------------------------------------------|

## 5 Screen user guide

The Screen user guide part comprises business scenarios adapted from typical user workflows. Each business scenario represents a single workflow and consists of single action steps, intermediate results and a final result. In detail, each business scenario description has the same structure and contains the following elements.

### Context of Usage

The context of usage describes the aim of the business scenario and indicates whether this business scenario is mandatory or optional in order to fulfil the overall business package. It also contains the usage restrictions and the pre-requisites (excluding the privileges), if available.

### PrivilegesRoles

In this section, all the necessary ~~privileges-roles~~ to access and use the involved screens are listed. First the ~~privileges-role~~ to access the first screen are mentioned,

followed by the privileges\_role necessary to proceed with the business scenario. Afterwards, the privileges\_roles for the following screens are mentioned in the same order.

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reference</b>    | This section lists all references to the screens involved, in order of their appearance in the business scenario.                                                                                                                                                                                                                                                                                                               |
| <b>Instructions</b> | Each workflow is described from the start to the end, beginning with the access to the starting screen. The instructions involve a number of separate steps which lead you through a series of screens and actions. Each action step is focused on one single action. Intermediate results are included and the instructions end with a final result. Possible alternatives and repetitions are highlighted with a notice sign. |

## 5.1 Monitoring of Accounts, CMBs and Payments

### 5.1.1 Query Account Balance and Status

|                         |                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Context of Usage</b> | This business scenario describes how to view the Account balance details allowing you to monitor and manage your balances through queries.<br>To perform these queries and use these screens you must consult a party with existing TIPS accounts.                                                                                                       |
| <b>Roles</b>            | To carry out this business scenario, you need the following <b>Role</b> :<br><ul style="list-style-type: none"> <li>Role [to be specified]</li> </ul>                                                                                                                                                                                                    |
| <b>Reference</b>        | Further information on screens involved can be found in the screen reference part:<br><ul style="list-style-type: none"> <li>4.1.1 Query Account balance and Status</li> </ul>                                                                                                                                                                           |
| <b>Instructions</b>     | <ol style="list-style-type: none"> <li>Go to the Account Balance and Status Query screen<br/>Query &gt;&gt; Account Balance and Status</li> <li>Enter the TIPS Account identifier as Search criteria</li> <li>Click on the Search button</li> </ol> <p>➔ The <i>TIPS Account balance - details</i> screen containing the search results is displayed</p> |

### 5.1.2 Query CMB Limit and Status

|                         |                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Context of Usage</b> | This business scenario describes how to view the CMB Limit and Status allowing you to monitor and manage your Limit set on a Participant Account, for instruction investigations, through queries.<br>In order to monitor the Limit, you have to insert the CMB identifier, which is always unique in TIPS (no other CMB and no Account can have the same identifier). |
| <b>Role</b>             | To carry out this business scenario, you need the following role:<br><ul style="list-style-type: none"> <li>Role [to be specified]</li> </ul>                                                                                                                                                                                                                          |
| <b>Reference</b>        | Further information on screens involved can be found in the screen reference part:<br><ul style="list-style-type: none"> <li>4.1.2 Query CMB Limit and status</li> </ul>                                                                                                                                                                                               |
| <b>Instructions</b>     | <ol style="list-style-type: none"> <li>Go to the Query CMB Limit and Status screen<br/>Query &gt;&gt; CMB Limit and Status</li> <li>Enter the CMB identifier as Search criteria</li> </ol>                                                                                                                                                                             |



3. Click on the Search button
  - The CMB Limit and status details screen, containing search results is displayed on the screen.

### 5.1.3 Query Instant Payment transaction

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Context of Usage</b> | This business scenario describes how to get the detailed information for one Instant Payment transaction (which not expired its retention period) specified by the Payment transaction reference and the Originator BIC                                                                                                                                                                                                                                                                                                  |
| <b>Role</b>             | To carry out this business scenario, you need the following role:<br>  Role [to be specified]                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Reference</b>        | Further information on screens involved can be found in the screen reference part:<br>  4.1.3 Query Instant payment transaction                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Instructions</b>     | <ol style="list-style-type: none"> <li>1. Go to the Instant payment transaction Query screen</li> <li>Query &gt;&gt; Instant payment transaction</li> <li>2. Enter the Originator BIC and the transaction reference as Search criteria</li> <li>3. Click on the Search button</li> <li>→ A description of the payment instruction (Instructing Party identifier, Originator Participant identifier, Beneficiary participant of the transaction, Amount of the payment transaction) is displayed on the screen</li> </ol> |

## 5.2 Management of Local Reference Data

### 5.2.1 Blocking/Unblocking of Participants

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Context of Usage</b> | This business scenario describes how to modify the blocking status of a TIPS Participant allowing you to Unblock, block for crediting, block for debiting or block for debiting/crediting said Participant. When a Participant Blocking status is modified, payments involving the Participant are affected immediately.                                                                                                                                                                |
| <b>Role</b>             | To carry out this business scenario, you need the following role:<br>  Role [to be specified]                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Reference</b>        | Further information on screens involved can be found in the screen reference part:<br>  4.2.1 Participant Blocking                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Instructions</b>     | <ol style="list-style-type: none"> <li>1. Go to the Participant Blocking screen, Search screen</li> <li>2. Enter the TIPS Participant identifier as Search criteria</li> <li>3. Click on the Search button. The current Blocking status is shown</li> <li>4. Click on the New button</li> <li>5. Select the desired Blocking Status from the drop-down menu</li> <li>6. Click on the Submit button</li> <li>→ The TIPS Participant is displayed with the new Blocking status</li> </ol> |

## 5.2.2 Blocking/Unblocking of Accounts

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Context of Usage</b> | This business scenario describes how to modify the blocking status of a TIPS Account allowing you to Unblock, block for crediting, block for debiting or block for debiting/crediting said Account. When an Account Blocking status is modified, payments involving the Account are affected immediately.                                                                                                                                                    |
| <b>Role</b>             | To carry out this business scenario, you need the following role:<br><ul style="list-style-type: none"> <li>Role [to be specified]</li> </ul>                                                                                                                                                                                                                                                                                                                |
| <b>Reference</b>        | Further information on screens involved can be found in the screen reference part:<br><ul style="list-style-type: none"> <li>4.2.2 Account Blocking</li> </ul>                                                                                                                                                                                                                                                                                               |
| <b>Instructions</b>     | <ol style="list-style-type: none"> <li>Go to the TIPS Account Blocking screen, Search screen</li> <li>Enter the TIPS Account identifier as Search criteria</li> <li>Click on the Search button. The current Blocking status is shown</li> <li>Click on the New button</li> <li>Select the desired Blocking Status from the drop-down menu</li> <li>Click on the Submit button</li> </ol> <p>→ The TIPS Account is displayed with the new Blocking status</p> |

## 5.2.3 Blocking/Unblocking of CMBs

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Context of Usage</b> | This business scenario describes how to modify the blocking status of a CMB allowing you to Unblock, block for crediting, block for debiting or block for debiting/crediting said CMB. When an Account Blocking status is modified, payments involving the CMB are affected immediately.                                                                                                                                          |
| <b>Role</b>             | To carry out this business scenario, you need the following role:<br><ul style="list-style-type: none"> <li>Role [to be specified]</li> </ul>                                                                                                                                                                                                                                                                                     |
| <b>Reference</b>        | Further information on screens involved can be found in the screen reference part:<br><ul style="list-style-type: none"> <li>4.2.3 CMB Blocking</li> </ul>                                                                                                                                                                                                                                                                        |
| <b>Instructions</b>     | <ol style="list-style-type: none"> <li>Go to the CMB Blocking screen, Search screen</li> <li>Enter the CMB identifier as Search criteria</li> <li>Click on the Search button. The current Blocking status is shown</li> <li>Click on the New button</li> <li>Select the desired Blocking Status from the drop-down menu</li> <li>Click on the Submit button</li> </ol> <p>→ The CMB is displayed with the new Blocking status</p> |

## 5.2.4 CMB Limit Modification

|                         |                                                                                                                                                                   |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Context of Usage</b> | This business scenario describes how to maintain the CMB Limit allowing you to add, modify or delete a Limit value. When a CMB limit is modified, the headroom of |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|

the CMB is updated accordingly. The CMB headroom is updated (increased or decreased) on the basis of the difference between the old limit value of the CMB and the new limit value.

Creating a Limit is not mandatory in TIPS, a CMB can be used without a Limit.

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Role</b>         | To carry out this business scenario, you need the following role:<br><ul style="list-style-type: none"> <li>Role [to be specified]</li> </ul>                                                                                                                                                                                                                                                                                                                                                       |
| <b>Reference</b>    | Further information on screens involved can be found in the screen reference part:                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Instructions</b> | <ul style="list-style-type: none"> <li>4.3.1.2 CMB Limit Modification – New/Edit screen</li> <li>19. Go to the CMB Limit modification screen, Search screen</li> <li>20. Enter the CMB identifier as Search criteria</li> <li>21. Click on the Search button. The current Limit is shown</li> <li>22. Click on the Edit button</li> <li>23. Type the desired amount on the Limit field</li> <li>24. Click on the Submit button</li> <li>→ The CMB limit is displayed with the new amount</li> </ul> |

## 5.3 Liquidity Transfer

### 5.3.1 Inject Outbound Liquidity Transfer

|                         |                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Context of Usage</b> | This business scenario describes how to inject an Outbound Liquidity transfer from a TIPS Account to an RTGS Account opened in an RTGS System connected to TIPS. When a Liquidity transfer is instructed, the balance of the Debited TIPS Account is updated accordingly. Before you create a new immediate liquidity transfer order, check whether the account to be debited exists in TIPS. |
| <b>Role</b>             | To carry out this business scenario, you need the following role:<br><ul style="list-style-type: none"> <li>Role [to be specified]</li> </ul>                                                                                                                                                                                                                                                 |
| <b>Reference</b>        | Further information on screens involved can be found in the screen reference part:<br><ul style="list-style-type: none"> <li>4.4.1.1 Liquidity Transfer - New screen</li> </ul>                                                                                                                                                                                                               |
| <b>Instructions</b>     | <ul style="list-style-type: none"> <li>1. Go to the Liquidity Transfer, New screen</li> <li>2. Enter the Liquidity transfer information (Debtor BIC, Debtor Account identifier, Creditor BIC, Creditor Account identifier, Amount, Currency)</li> <li>3. Click on the Submit button</li> <li>→ The Liquidity Transfer is sent and the TIPS Account is debited</li> </ul>                      |