TARGET Instant Payment Settlement

User Handbook

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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, which makes the use of collateral no longer necessary. This function reduces to a minimum the systemic risk related to the daily exchange of millions of payments throughout Europe, which is one of the main scopes of the Eurosystem.

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

#### 1.1.1 TIPS settlement service model

All the cash used to settle transactions in euro in TIPS comes from Accounts opened in TARGET2. As such, TIPS can be considered as an additional service to TARGET2. Since TIPS operates 24/7/365, TIPS does not have to reinject the liquidity to TARGET2 the RTGS at the end of TARGET2 the operating-day of the latter, but both the inbound and outbound Liquidity 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 are processed in a rigorously ordered sequence and no prioritisation is foreseen. TIPS processes every 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, the full amount is reserved) and the second settles the reserved amount after TIPS has received the confirmation.

---

1 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.
that the payment has been **authorised** by the **beneficiary Participant**. In case of negative **beneficiary reply**, 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 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 **sS**ervice **pP**roviders 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.

![TIPS access diagram](image)

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 services, 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. `<cn=smith,ou=tips-ops,o=bnkacct,o=nsp-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 (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 Eurosysterm 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 user 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 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). 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.

![Diagram](image)

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.
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 to the RTGS system at the end of the business day.

In order to transfer liquidity to and from TIPS each TIPS Account in euro must be related to a cash account opened in TARGET2, but the owner of the TARGET2 Account does not need to be 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 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.

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Footnote 2: 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.
2 Overview of the User Handbook

The TIPS User Handbook, hereinafter called UHB, aims at facilitating the use of the Graphical User Interface 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:

**Part 1** The Introduction to TIPS provides the reader with a general overview of the TIPS solution and its relation with the other Eurosystem market infrastructure services. An extensive description of the TIPS service can be found in the TIPS UDFS.

**Part 2** The Overview of the User Handbook 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.

**Part 3** The Initial Setup 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.
Part 4  The Screen Reference guide 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.

Part 5  The Screen user guide 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>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Query</td>
<td>Account balance and status query</td>
</tr>
<tr>
<td>Query</td>
<td>CMB limit and status query</td>
</tr>
<tr>
<td>Query</td>
<td>Payment transaction and status query</td>
</tr>
<tr>
<td>Local reference data</td>
<td>Blocking/Unblocking of a Participant</td>
</tr>
<tr>
<td>Local reference data</td>
<td>Blocking/Unblocking of an Account</td>
</tr>
<tr>
<td>Local reference data</td>
<td>Blocking/Unblocking of a CMB</td>
</tr>
<tr>
<td>Local reference data</td>
<td>Increase/Decrease of a CMB limit</td>
</tr>
</tbody>
</table>

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
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.

2.3.3 Menu structure

The GUI menu is structured into two hierarchical menu levels. The first level is presented as a menu bar containing the three first-level menu items (Queries, Blocking, Limit update) 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.

2.3.4 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

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

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
- Enter screen

Welcome screen

The welcome 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.

Search/List screen

The search/list 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.

Details screen

In contrast to the search/list screen, you can only access the details 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.

Enter screen

Similar to the details screens, you can only access the enter screens through other screens.

2.3.5 Field types and properties

On search/list and enter screens, you can enter information via input fields and select fields. 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.

- **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.*

- **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.

- **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.

### Table 2 – TIPS character set

<table>
<thead>
<tr>
<th>Character</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-z</td>
<td>26 small characters of the Latin alphabet</td>
</tr>
<tr>
<td>A-Z</td>
<td>26 capital characters of the Latin alphabet</td>
</tr>
<tr>
<td>0-9</td>
<td>10 numeric characters</td>
</tr>
<tr>
<td>/</td>
<td>Solidus (slash)</td>
</tr>
<tr>
<td>-</td>
<td>Hyphen</td>
</tr>
<tr>
<td>?</td>
<td>Question mark</td>
</tr>
<tr>
<td>:</td>
<td>Semicolon</td>
</tr>
<tr>
<td>(</td>
<td>Opening parenthesis</td>
</tr>
<tr>
<td>)</td>
<td>Closing parenthesis</td>
</tr>
<tr>
<td>.</td>
<td>Full stop</td>
</tr>
<tr>
<td>;</td>
<td>Comma</td>
</tr>
<tr>
<td>’</td>
<td>Apostrophe</td>
</tr>
<tr>
<td>+</td>
<td>Plus</td>
</tr>
<tr>
<td></td>
<td>Space (blank)</td>
</tr>
</tbody>
</table>

### 2.3.6 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 customer/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 customer/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 [520] 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 [520] where you can first search and then approve/revoke the pending changes.

2.3.7 Communication Network and services

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

Registration  [To be specified]

2.3.9 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 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 Eurosysterm services such as TIPS, T2 and T2S and propagates such data to the relevant services. The description of the CRDM is out of scope in 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 the TIPS service.

3.1 TIPS Actors

Legal entities or organisations that interact with the TIPS application either directly or indirectly are generically known as TIPS Actors in the Common Reference Data Management repository. The TIPS participation model envision 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 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. 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 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

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. 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.

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 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.

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 by Central Banks for their Participants.

3.2.1.2 Transit Account

Transit Accounts are accounts that are owned by Central Banks 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 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 is TIPS is an entity representing either a physical user or an application. They are linked to a single Participant 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 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 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. Authorization 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 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 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 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 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.
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 authorization purposes. The Users are authorized 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 settings 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. 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.

Context of Usage

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.

Screen Access

The screen access lists all possible ways to access the screen. This includes navigation via the menu and navigation via other screens.

PrivilegesRoles

The privileges Roles segment lists all necessary privileges roles to access the screens and to use its functions. First, the privileges roles to access a screen are mentioned, followed by the privileges roles that are necessary to use all functions on the screen.

Screenshot

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 explains the structure of a field description.
### Field description

<table>
<thead>
<tr>
<th>Position no.</th>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Field name</td>
<td>Indicates the respective name of each screen field</td>
</tr>
<tr>
<td>2</td>
<td>Frame name</td>
<td>indicates the respective name of each screen frame.</td>
</tr>
<tr>
<td>3</td>
<td>Field description</td>
<td>indicates the field type and required content</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIPS Participant Identifier</td>
<td>Shows the BIC of the party which sent the transaction</td>
</tr>
<tr>
<td>Account Identifier</td>
<td>Shows the ID of the Account</td>
</tr>
<tr>
<td>Account status</td>
<td>Shows whether the Account is blocked for credit, blocked for debit, blocked for credit and debit, unblocked</td>
</tr>
<tr>
<td>Currency</td>
<td>Shows the currency under which the Account is denominated</td>
</tr>
<tr>
<td>Timestamp of the reported balance</td>
<td>Shows the timestamp at which the data was retrieved</td>
</tr>
<tr>
<td>Current Account balance</td>
<td>Shows the sum of unreserved and reserved balances</td>
</tr>
</tbody>
</table>

## 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 and 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. RTGS Systems have full access to all data for their currency; in particular, TARGET2 has access to all data for euro.
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. |
| Reference Data | Queries >> Account balance and status |
| Screen Access | Reference Data >> Queries >> Account balance and status |
| Roles | To use this screen, you need the following role: |
| Role | [to be specified] |
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 data. In case the user is not entitled to view the data on the searched transaction Account an error code is returned.

**Screen Access**
- Reference Data >> 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]
### Field description

<table>
<thead>
<tr>
<th>Field description</th>
<th>Query Account balance and status: Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIPS Participant Identifier</td>
<td>Shows the BIC of the party which sent the transaction on the Account</td>
</tr>
<tr>
<td>Account Identifier</td>
<td>Shows the ID of the Account</td>
</tr>
<tr>
<td>Account status</td>
<td>Shows whether the Account is open, blocked for credit, blocked for debit, blocked for credit and debit, unblocked, or closed for business</td>
</tr>
<tr>
<td>Currency</td>
<td>Shows the currency under which the Account is denominated</td>
</tr>
<tr>
<td>Timestamp of the reported balance</td>
<td>Shows the timestamp at which the data was retrieved</td>
</tr>
<tr>
<td>Current available Account balance</td>
<td>Shows the sum of unreserved and reserved balances amount currently available on the Account</td>
</tr>
<tr>
<td>Sum of reserved Account balance</td>
<td>Shows the amount of liquidity reserved for Instant Payment not yet finalized</td>
</tr>
</tbody>
</table>

### 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 utilization and the status of the CMB. 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 Account. In case the user is not entitled to view the data on the searched transaction CMB an error code is returned.

**Screen Access**

Reference Data >> Queries >> CMB limit and status Query

**Roles**

To use this screen, you need the following role:

Role [to be specified]
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. It 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 transaction an error code is returned.

Screen Access

Reference Data >> 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]
### Field description

<table>
<thead>
<tr>
<th>Field description</th>
<th>Query Account balance and status: Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIPS participant identifier</td>
<td>Shows the BIC of the CMB user</td>
</tr>
<tr>
<td>CMB identifier</td>
<td>Shows the ID of the CMB, which is unique in TIPS</td>
</tr>
<tr>
<td>Linked account identifier</td>
<td>Shows the ID of the Account to which the CMB is linked</td>
</tr>
<tr>
<td>CMB status</td>
<td>Shows whether the CMB is open or closed for business, blocked for credit, blocked for debit, blocked for debit and credit, unblocked</td>
</tr>
<tr>
<td>Currency</td>
<td>Shows the currency under which the CMB is denominated</td>
</tr>
<tr>
<td>Timestamp of the reported limit</td>
<td>Shows the timestamp at which the data was retrieved</td>
</tr>
<tr>
<td>Current CMB limit</td>
<td>Shows the maximum amount of liquidity reserved that can be used for IP settlement of Instant Payments insisting on attempting to debit the selected pointing to this CMB</td>
</tr>
<tr>
<td>Current CMB available Headroom</td>
<td>Shows the amount of liquidity still available for IP Instant Payments debiting the selected CMB</td>
</tr>
</tbody>
</table>

In case the user is not entitled to view the data on the searched transaction an error code is returned.

### 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.

#### 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 and the Originator Participant or Instruction Party reference 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**

- Reference Data >> Queries >> Instant payment transaction Query

**Roles**

To use this screen, you need the following role:

- Role [to be specified]
### Field description

<table>
<thead>
<tr>
<th>Field Description</th>
<th>Query Instant Payment transaction: Search criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Required Format</td>
</tr>
<tr>
<td>Payment transaction reference</td>
<td>pacs.008 transaction Id</td>
</tr>
<tr>
<td>Originator</td>
<td>Participant BIC</td>
</tr>
<tr>
<td></td>
<td>BIC11</td>
</tr>
</tbody>
</table>

#### 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 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**

- Reference Data >> 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]
### Query Instant payment transaction: Result

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TIPS Participant Identifier</strong></td>
<td>Shows the BIC of the party which sent the transaction</td>
</tr>
<tr>
<td><strong>Originator Participant BIC</strong></td>
<td>Shows the BIC of the party which owns the involved account on debiting side of the Originator Bank</td>
</tr>
<tr>
<td><strong>Beneficiary Participant BIC</strong></td>
<td>Shows the BIC of the beneficiary of the transaction</td>
</tr>
<tr>
<td><strong>Transaction reference</strong></td>
<td>Shows the reference of the transaction</td>
</tr>
<tr>
<td><strong>Transaction status</strong></td>
<td>Shows whether the instruction was settled or not settled</td>
</tr>
<tr>
<td><strong>Reason code</strong></td>
<td>Describes the reason of the unsettled status. Not filled in case the Transaction status is <strong>Settled</strong></td>
</tr>
<tr>
<td><strong>Settlement timestamp</strong></td>
<td>Shows the time at which the transaction was settled</td>
</tr>
<tr>
<td><strong>Payment transaction amount</strong></td>
<td>Shows the amount of the transaction</td>
</tr>
</tbody>
</table>

### 4.2 Blocking

#### 4.2.1 Actor Blocking

#### 4.2.2 Account Blocking

#### 4.2.3 CMB Blocking

### 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.
The increase and reduction of a CMB limit has no effect on the values of the other possible CMB limits insisting pointing to linked with on 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 of Usage | This screen contains the ID of the CMB as the only available search field. By inputting the 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 | Reference Data >> Limit >> Search screen >> Click on the search button >> |
| Role | To use this screen, you need the following role: Role [to be specified] |

<table>
<thead>
<tr>
<th>Field description</th>
<th>CMB Limit Modification: Search criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Required Format</td>
</tr>
<tr>
<td>CMB identifier</td>
<td>max. 34 characters (SWIFT-x)</td>
</tr>
</tbody>
</table>
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**
- Reference Data >> 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**
![Screenshot of the CMB Limit Modification - Details Screen]

**Field description**

<table>
<thead>
<tr>
<th>Object</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMB identifier</td>
<td>Shows the ID of the CMB, which is unique in TIPS and whose Limit the user wants to create or update</td>
</tr>
<tr>
<td>Linked Account</td>
<td>Shows the ID of the Account to which the CMB is linked</td>
</tr>
<tr>
<td>Limit Value</td>
<td>Shows the current value of the CMB Limit</td>
</tr>
</tbody>
</table>

**Buttons**

<table>
<thead>
<tr>
<th>Buttons</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edit</td>
<td>This function enables to access the Edit screen where to update the Limit</td>
</tr>
</tbody>
</table>

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**
- Reference Data >> 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:

- Role [to be specified]

Screenshot

![Screenshot of TIPS Reference Data](image)

Field description

<table>
<thead>
<tr>
<th>Object</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMB identifier</td>
<td>Shows the ID of the CMB, which is unique in TIPS and whose Limit the user wants to create or update</td>
</tr>
<tr>
<td>Linked Account</td>
<td>Shows the ID of the Account to which the CMB is linked</td>
</tr>
<tr>
<td>Limit Value</td>
<td>Field where to enter the amount of the Limit for the CMB. Leaving the value blank means that the CMB will have no limit.</td>
</tr>
</tbody>
</table>

Buttons

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit</td>
<td>This function enables to create or modify a CMB Limit according to the information entered</td>
</tr>
</tbody>
</table>

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.

Privileges

In this section, all the necessary privileges to access and use the involved screens are listed. First the privileges to access the first screen are mentioned, followed by the privileges necessary to proceed with the business scenario. Afterwards, the privileges for the following screens are mentioned in the same order.

Reference

This section lists all references to the screens involved, in order of their appearance in the business scenario.

Instructions

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
5.1 Monitoring of Accounts, CMBs and Payments

5.1.1 Query Account Balance and Status

**Context of Usage**
This business scenario describes how to view the Account balance details allowing you to monitor and manage your balances through queries.

In order to monitor the cash balances, you can query balances for a given Actor and then switch to the detailed view for a breakdown by restriction type or postings for a list of relevant instructions. To perform these queries and use these screens you must consult a party with existing TIPS accounts.

**Roles**
To carry out this business scenario, you need the following Role:

- Role [to be specified]

**Reference**
Further information on screens involved can be found in the screen reference part:

- 4.1.1 Query Account balance and Status

**Instructions**
1. Go to the Account Balance and Status Query screen
   Query >> Account Balance and Status
2. Enter the TIPS Account identifier as Search criteria
3. Click on the Search button
   ➔ The TIPS Account balance - details screen containing the search results is displayed

5.1.2 Query CMB Limit and Status

**Context of Usage**
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.

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).

**Role**
To carry out this business scenario, you need the following role:

- Role [to be specified]

**Reference**
Further information on screens involved can be found in the screen reference part:

- 4.1.2 Query CMB Limit and status

**Instructions**
1. Go to the Query CMB Limit and Status screen
   Query >> CMB Limit and Status
2. Enter the CMB identifier as Search criteria
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

**Context of Usage**
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 the creation or update of a CMB limit. A CMB limit is the amount of cash reserved for a specific customer working with a TIPS Account.

**Role**
To carry out this business scenario, you need the following role:
- Role [to be specified]

**Reference**
Further information on screens involved can be found in the screen reference part:
- 4.1.3 Query Instant payment transaction

**Instructions**
1. Go to the Instant payment transaction Query screen
   - Query >> Instant payment transaction
2. Enter the TIPS Account Originator BIC and the transaction reference as Search criteria
3. Click on the Search button
   - 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

5.2 Management of Local Reference Data

5.2.1 Blocking/Unblocking of Parties

5.2.2 Blocking/Unblocking of Accounts

5.2.3 Blocking/Unblocking of CMBs

5.2.4 CMB Limit Modification

**Context of Usage**
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.

**Role**
To carry out this business scenario, you need the following role:
- Role [to be specified]

**Reference**
Further information on screens involved can be found in the screen reference part:
4.3.1.2 CMB Limit Modification – New/Edit screen

Instructions
1. Go to the CMB Limit modification screen, Search screen
2. Enter the CMB identifier as Search criteria
3. Click on the Search button. The current Limit is shown
4. Click on the Edit button
5. Type the desired amount on the Limit field
6. Click on the Submit button

⇒ The CMB limit is displayed with the new amount