TARGET Instant Payment Settlement

User Handbook

V0.1.0

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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. It 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 Payment 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 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 an additional service to TARGET2. Since it operates 24/7/365, TIPS does not have to reinject the liquidity to TARGET2 at the end of 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[1] 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 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 the payment has been authorised by the beneficiary. In case of negative beneficiary reply, the reserved sum is released

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[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.

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 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.
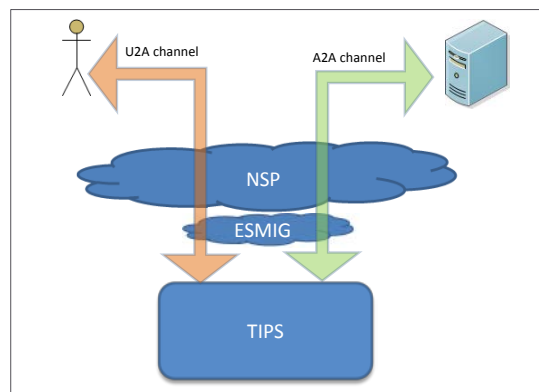
A2A communication relies whenever possible on ISO 20022 standard XML messages, for both inbound and outbound communication. All the exchanges are executed through a real-time transfer services, making it compulsory that both parties involved in a transaction are available when the message is sent (i.e. 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 checks (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 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.
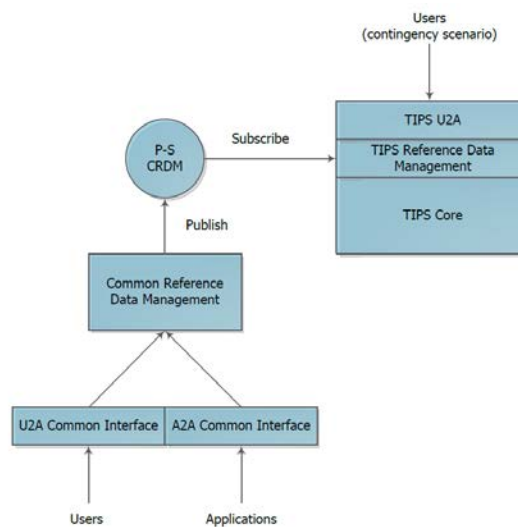
The following table lists all the reference data management operations that will be available in the CRDM for TIPS, along with the corresponding responsible TIPS Actors and the expected U2A and A2A availability of each function.

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

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.

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 your 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 via the TIPS GUI is as follows:

Type	Description	Availability
Query	Account balance and status query	24/7/365
Query	CMB limit and status query	24/7/365
Query	Payment transaction and status query	24/7/365
Local reference data	Blocking/Unblocking of a Participant	24/7/365
Local reference data	Blocking/Unblocking of an Account	24/7/365
Local reference data	Blocking/Unblocking of a CMB	24/7/365
Local reference data	Increase/Decrease of a CMB limit	24/7/365

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.

2.3.3 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.

Screenshot
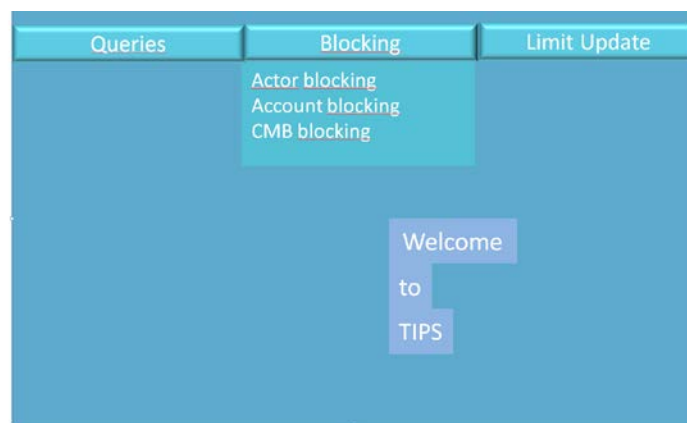
2.3.4 Screen structure

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*]

Position	Element	Description
1	*TIPS logo* button	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.
2	Information	displays your login name, the *logout* and *help*

	panel	buttons as well as date and time of last data access.
3	Menu bar	presents the five 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
❚ *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.

❙ **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.

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)

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'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 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 curser 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

3.1 TIPS Actors

3.1.1 TIPS operator

3.1.2 Central Bank

3.1.3 Participant

3.1.4 Reachable Party

3.2 TIPS Accounts and CMBs

3.2.1 Types of Accounts

3.2.1.1 TIPS Account

3.2.1.2 Transit Account

3.2.2 Credit Memorandum Balance

3.3 Users

3.4 Privileges and Roles

3.4.1 Privileges

3.4.2 Roles

3.5 General reference data

3.5.1 Bank Identifier Code

3.5.2 Currency

3.5.3 RTGS System

3.5.4 System settings

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 24x7x365 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.
Privileges	The privileges segment lists all necessary privileges to access the screens and to use its functions. First, the privileges to access a screen are mentioned, followed by the privileges 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.

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 submitted. If 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.

Table 1 – Queries data access according to data scope
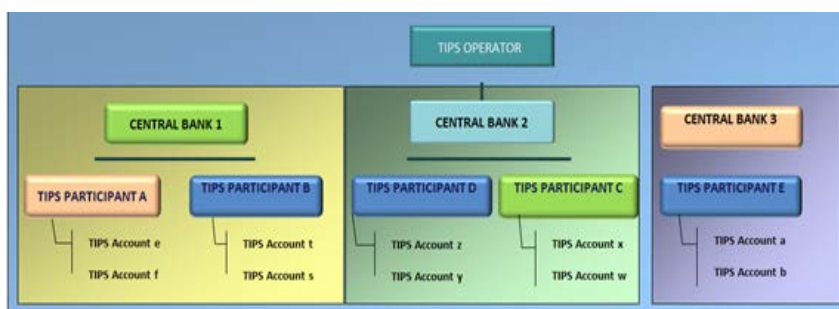
4.1.1 Query Account balance and Status

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.
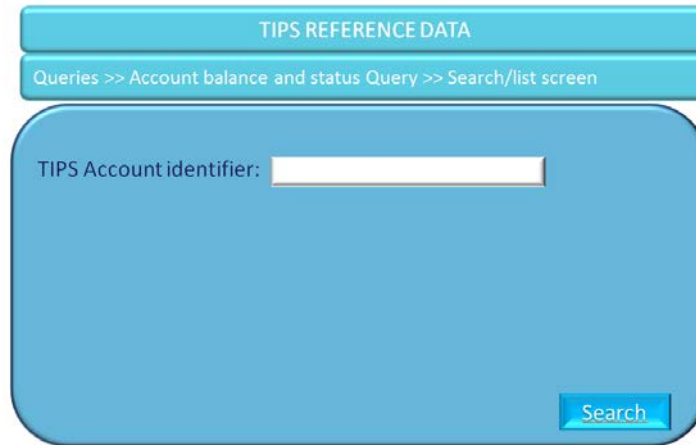
4.1.1.1 Query account balance and status – Search screen

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 transaction an error code is returned.
Screen Access	❙ Reference Data >> Queries >> Account balance and status
Roles	To use this screen, you need the following role: ❙ Role [*to be specified*]

Screenshot

Field description

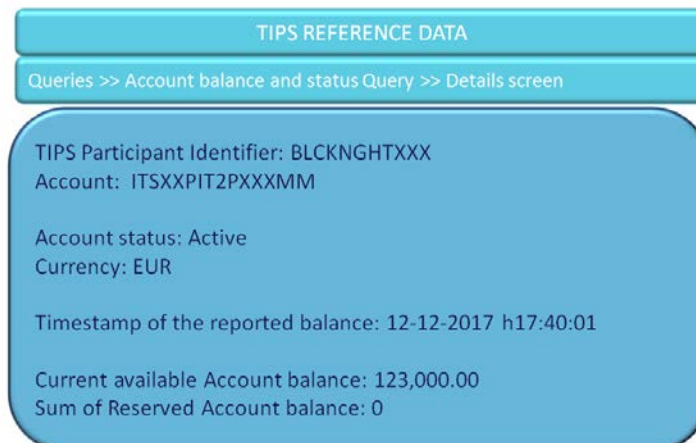| Query Account balance and status: Search Criteria	
Object	**Required Format**
TIPS Account identifier	max. 34 characters (SWIFT-x)

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 data. 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 >> 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 sent the transaction
	Account	Shows the ID of the Account
	Account status	Shows whether the Account is open or closed for business
	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 available Account balance	Shows the amount currently available on the Account
	Sum of reserved Account balance	Shows the amount of liquidity reserved for Instant Payment not yet finalised

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.
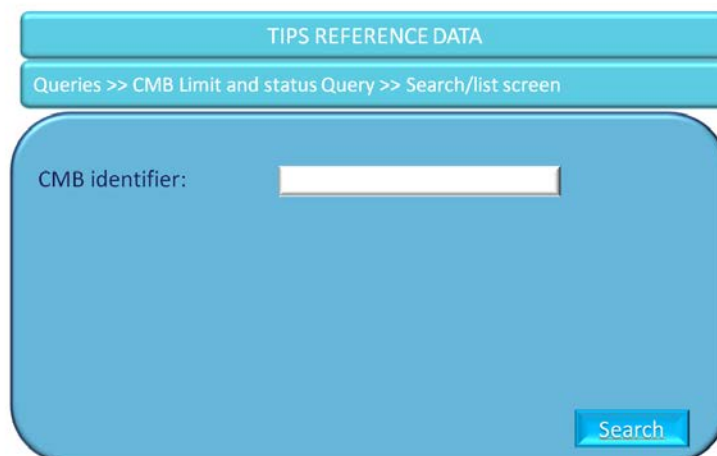
4.1.2.1 Query CMB limit and status – Search screen

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 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*]

Screenshot

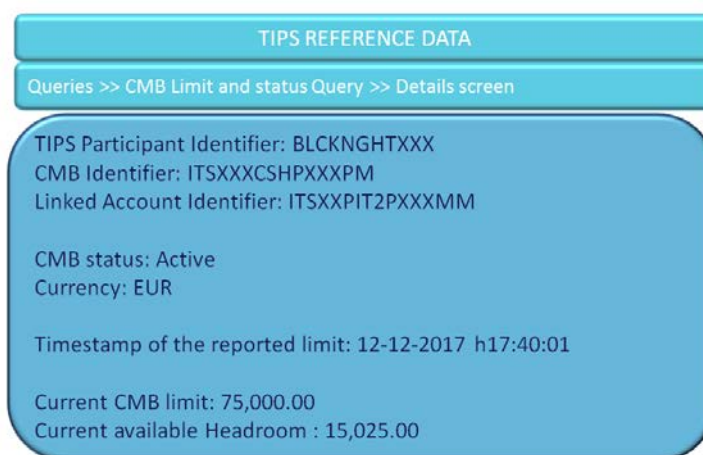| Field description	Query Account balance and status: Search criteria	
	Object	**Required Format**
	CMB identifier	max. 34 characters (SWIFT-x)

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 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*]

Screenshot

TIPS REFERENCE DATA

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

TIPS Participant Identifier: BLCKNGHTXXX
CMB Identifier: ITSXXXCSHPXXXPM
Linked Account Identifier: ITSXXPIT2PXXXMM

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 open or closed for business
	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 IP insisting on this CMB
	Current CMB available Headroom	Shows the amount of liquidity still available for IP debiting that CMB

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.
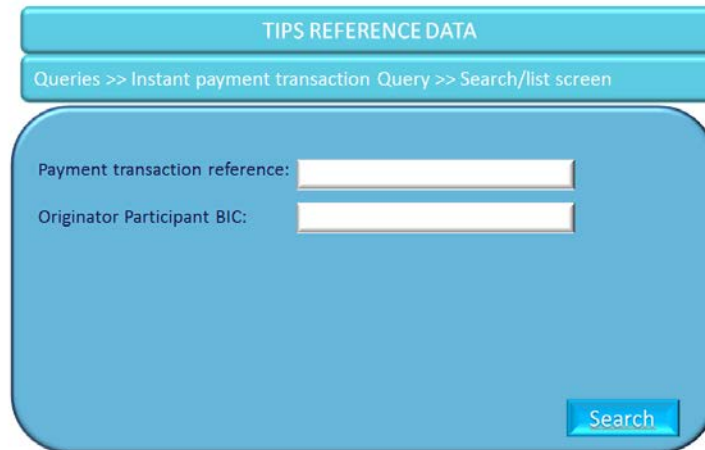This function is available in both U2A and A2A mode.
In case the user is not entitled to view the data on the searched transaction an error code is returned.

Screen Access ❙ Reference Data >> Queries >>Instant payment transaction Query

Roles To use this screen, you need the following role:
❙ R o l e [*to be specified*]

Screenshot

Field description

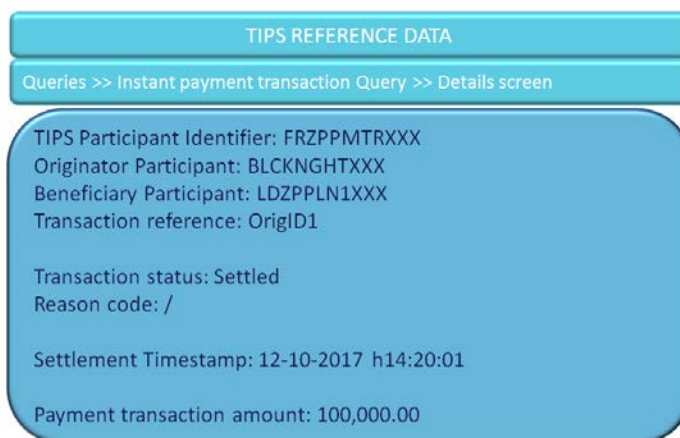| Query Instant payment transaction: Search criteria	
Object	**Required Format**
Payment transaction reference	pacs.008 transaction Id
Originator Participant BIC	BIC11

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*]

Screenshot

Query Instant payment transaction: Result	
TIPS Participant Identifier	Shows the BIC of the party which sent the transaction
Originator Participant	Shows the BIC of the party which owns the involved account on debiting side
Beneficiary Participant	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

4.2.1 Actor Blocking

4.2.2 Account Blocking

4.2.3 CMB Blocking

4.3 Limit management

4.3.1 CMB Limit modification

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 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

Context of Usage   This business scenario describes how to view the Account balance details allowing you to monitor and manage your balances, for instruction investigations, 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 view the Account balance details allowing you to monitor and manage your balances, for instruction investigations, 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.

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 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