Enhanced Contingency Solution II

User Handbook

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Author	4CB
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Terms and Abbreviations

The terms and abbreviations are shown in the table below. Below the terms with their description and the abbreviations, both in an alphabetical order.

Letter	Description
C	
Check box	Square box that can be filled with a checkmark by clicking on it with the mouse. In contrast to the radio button, the user can select more than one option with a check box.
D	
DD	Day (e.g. used within the timestamp, every letter stands for one digit)
d	Decimal number
E	
e.g.	For example (Latin: 'exempli gratia')
H	
hh	Hour (e.g. used within the timestamp, every letter stands for one digit)
I	
i.e.	That is (Latin: 'id est')
Incl.	Including
M	
Mouse-over	Additional information for some elements of the GUI is only shown when the user moves the mouse-pointer to these elements.
MM	Month (e.g. used within the timestamp, every letter stands for one digit)
mm	Minute (e.g. used within the timestamp, every letter stands for one digit)
min.	Minimum
max.	Maximum

Letter	Description
10m	10 million
N	
NRO	Non-repudiation of origin (NRO) provides the recipient (ECONS II) with the evidence NRO which ensures that the originator (ECONS II actor) will not be able to deny having sent the U2A instruction. The evidence of origin is generated by the originator and held by the recipient.
Q	
QQ	Quarter, indicates a time span of three months, e.g. Q2 stands for the second quarter of the year.
R	
Radio button 	A type of GUI element that allows the user to choose only one of a predefined set of options.
S	
Select box 	A select field in the GUI with an arrow on the right side. By clicking on the arrow, all possible input values are shown and can be selected with a mouse-click.
SS	Semester, indicates a time span of six months, e.g. S1 stands for the first semester.
ss	Second (e.g. used within the timestamp, every letter stands for one digit)
T	
10t	10 thousand
Timestamp	A sequence of characters, denoting the date and the time in ECONS II.
Y	
YYYY	Year (e.g. used within the timestamp, every letter stands for one digit)

1 Introduction

1.1 Overview of the User Handbook

The ECONS II User Handbook, hereinafter called UHB, aims at facilitating the use of the Graphical User Interface of the Enhanced Contingency Solution (ECONS II GUI). It is intended for any ECONS II user regardless of the focus of activities and describes the full range of functionalities available in user-to-application (U2A) mode. The UHB provides detailed reference information on all GUI screens and step-by-step instructions for typical workflows.

Target Audience

There is only one handbook addressing all actors: central banks (CBs) and payment banks/ancillary systems. By referring to the table of contents as well as to the usage indication list, each reader can easily identify the relevant parts.

Related documenta-tion

The UHB is part of the functional documentation and complements the UDFS. In particular, UDFS will contain a detailed description of the business concepts used in ECONS II, which are also relevant when using the GUI.

Updates

Updated versions of the UHB will be provided on a regular basis.

1.1.1 UHB Methodology

Several symbols and methodological elements are used throughout the ECONS II UHB to ease orientation and help the user to find the desired information quickly.

Page Layout

Every page of the main UHB parts has a similar page layout. The user 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

Links

Links are illustrated throughout the UHB with a little triangle followed by a page number within squared brackets. These links help the user to jump to related sections by clicking on them or turning to the relevant page.

Please find the information on page 6. [▶ 6]
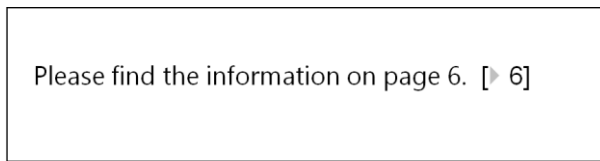
Illustration 1: Link illustration

Tables

Tables are used to present information in a clearly arranged format. They consist of a table head and a table body. The body is divided into a left and a right column. The left column contains keywords, for example field names, which are explained in the right column. Subsections within a table are preceded by a heading. The order of the description follows the appearance on the screen from left to right and from top to bottom.

Type Set

Regular text in the UHB is written in Arial Unicode MS font with a size of 11pt. Screen and button names are written in italic letters, GUI paths use the Courier New font. Field names and field values are put in quotation marks if they appear in a context other than their dedicated description.

Element	Format	Example
Screen name	Italic letters	*Select Participant – Search/List* Screen
Button name	Italic letters	*Submit* button
GUI path	PC code	Liquidity Management >> Select Participant >> Select Participant – Search Screen
Field name or value quotation	'...'	'Participant BIC' ; 'Active'

Screenshots

Screenshots are used to illustrate the corresponding text. Note that there might be minor deviations between the screenshot and the screen appearance, according to the user's access rights or a specific selection the user has made. In addition, some functions are mutually exclusive and cannot be represented in a single screenshot. In these cases, the screenshot illustrates the more prevalent use of the screen.

Values shown on a screenshot might also deviate from the default values indicated in the description. In these cases, the description is valid rather than the screenshot.
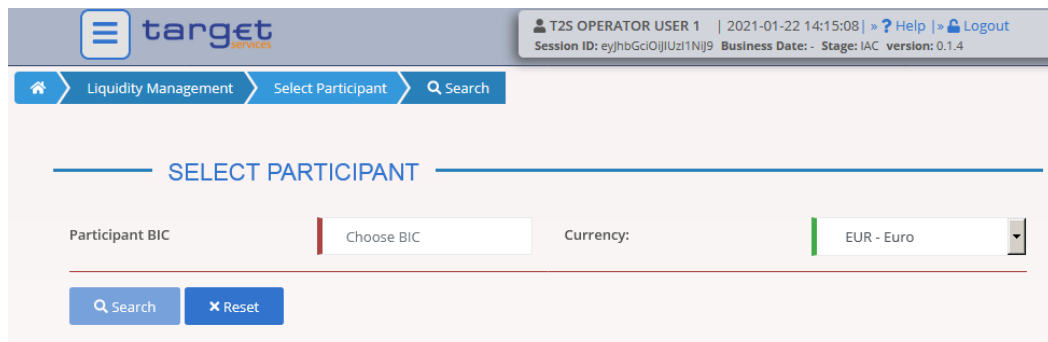
Illustration 2: Screenshot of Select Participant Search Screen

1.1.2 UHB Structure

The UHB is structured in three parts and is complemented by an annex.

Part 1

The **introduction** explains the aim, the content and the approach of both the UHB 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.

The overview of the UHB includes information about:

❙ The UHB methodology [▶]

❙ The UHB structure [▶]

The overview of the GUI consists of information about:

❙ Setup and login procedures [▶]

❙ GUI structure, including information about the menu structure, screen structure, field types and properties, and common icons [▶]

❙ Validation [▶]

❙ Communication network and services [▶]

❙ User administration [▶]

❙ Security and certification services [▶]

❙ Online help [▶]

The user can refer to this part if they need information on how to use the UHB or on common functionalities of the GUI.

Part 2

The **screen reference part** starts with a general section serving as a reader's guide for this part. It is followed by the screen descriptions of all screens contained in the GUI. Each description follows an identical structure which comprises detailed information on all screen fields.

The screen reference part is structured along the first and second GUI menu level, followed by the screens' description.

The user can refer to this part if they need detailed and precise information on a screen, field or button.

Annex

The **annex** supplies detailed information complementing the UHB:

❚ Annex Section 4.1 - Sitemap [▶]: Hierarchical, structured illustration of all screens and their interrelations

❚ Annex Section 4.2 - List of privileges [▶]: For each screen, all privileges and their corresponding description are listed

❚ Annex Section 4.3 - List of references for error messages [▶]: For each screen, all references for error messages, the error text and the corresponding description are listed

1.2 Overview of the Graphical User Interface

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

1.2.1 Setup and Login Procedures

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

Such requirements/preparations may be subject to periodical review/update to comply with changing technical/regulatory scenario.

Please refer to the "ESMIG U2A Qualified Configurations" annex of ESMIG UDFS.

Hardware requirements

Please refer to the "ESMIG U2A Qualified Configurations" annex of ESMIG UDFS .

Software requirements

Please refer to the "ESMIG U2A Qualified Configurations" annex of ESMIG UDFS .

Supported Web-Browsers and Settings

Please refer to the "ESMIG U2A Qualified Configurations" annex of ESMIG UDFS .

GUI Access   Users are directed to an initial page named ESMIG portal that ensures proper routing to the web applications the user has been granted to enter.

NRO specific requirements   Please refer to the "ESMIG U2A Qualified Configurations" annex of ESMIG UDFS.

1.2.2 GUI Structure

This chapter explains the basic elements of the ECONS II GUI structure (i.e. structure of the menu and the screens) helping the user 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 recurring elements, such as common field types [▶] or icons [▶].

1.2.2.1 Menu Structure

The GUI menu is structured into three hierarchical menu levels. The hamburger menu appears when the proper icon is selected. Then the menu can be further navigated - the second, and third menu levels are accessible via mouse-over on the first-level menu item - in order to select the desired functionality.

Hint   Depending on the user access rights, it is possible that not all menu entries are selectable. Contact the system administrator to verify that user has the necessary privileges to access all the relevant screens. The privileges are listed in each screen description.

Illustration 3: ECONS II menu levels

Position No.	Description
1	Menu level 1

| 2 | Menu level 2 |
| 3 | Menu level 3 |

All entries on the second menu level are structural subcategories. To access a screen, users have to click on the third menu level.

1.2.2.2 Screen Structure

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

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

Header
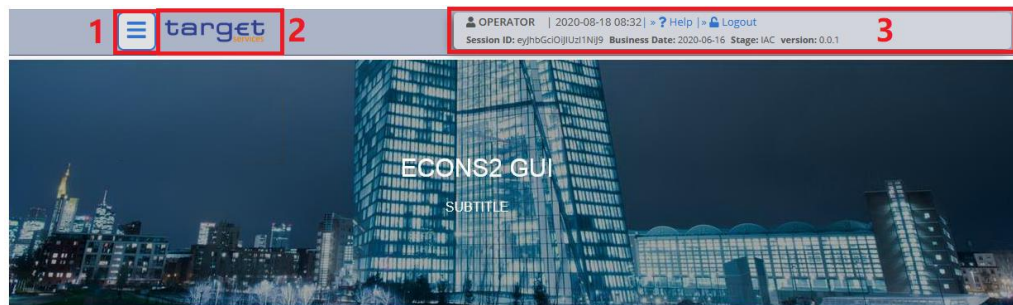
Illustration 4: Header elements

Position No.	Element	Description
1	Menu bar	... presents the main menu item and allows the user to navigate to the screens.
2	*Services logo* button	... links to the welcome screen.
3	Information panel	... displays the user's login name, the *logout* and *help* buttons as well as date and time of last data access.

Content Area

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

To structure large amounts of data, the content area is further separated into frames and sub-frames.
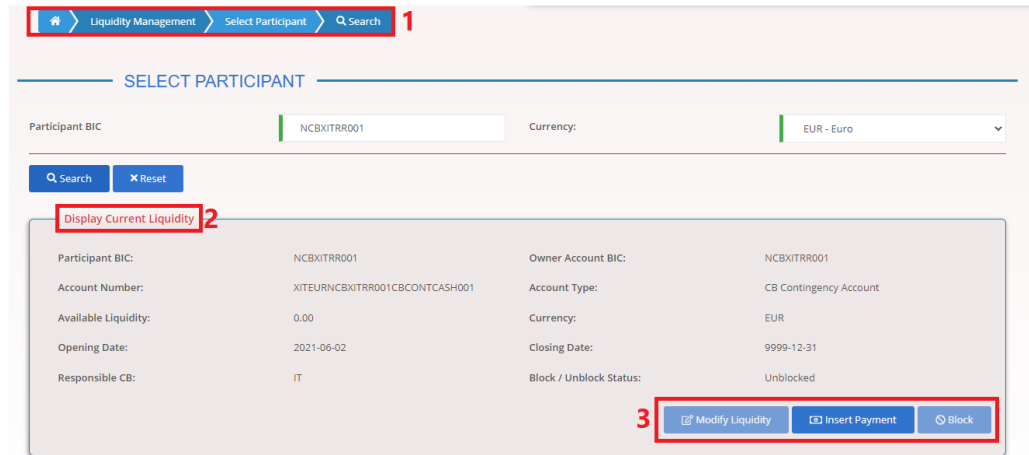
Illustration 5: Content area elements

Position No.	Element	Description
1	Breadcrumb	... shows the main path to the current screen.
2	Frame and sub-frame title	... groups related information as a structural function.
3	Button bar	…shows all available buttons for the current screen.

1.2.2.3 Field Types and Properties

Field Types

The description of the common field types with the proper descriptions follow.

Input Fields

In input fields the user can enter text and/or numeric content. Make sure to comply with the format requirements, which are part of each field/screen description.

ⓘ **Hint**

The user can use the tab key on the keyboard to navigate through the GUI fields.

Select Fields

Select fields are either select boxes or check boxes.

❙ **Select boxes**: Functionally a select box is a way to enter data from a limited list of possible values. In ECONS II the user can find different types of select boxes, standard select box and input-sensitive select box.

▌**The standard select box** enables the user to choose one entry from a predefined set of values. To select an entry, click on the little box with the arrow to open the menu. Then select the desired value by clicking on it.
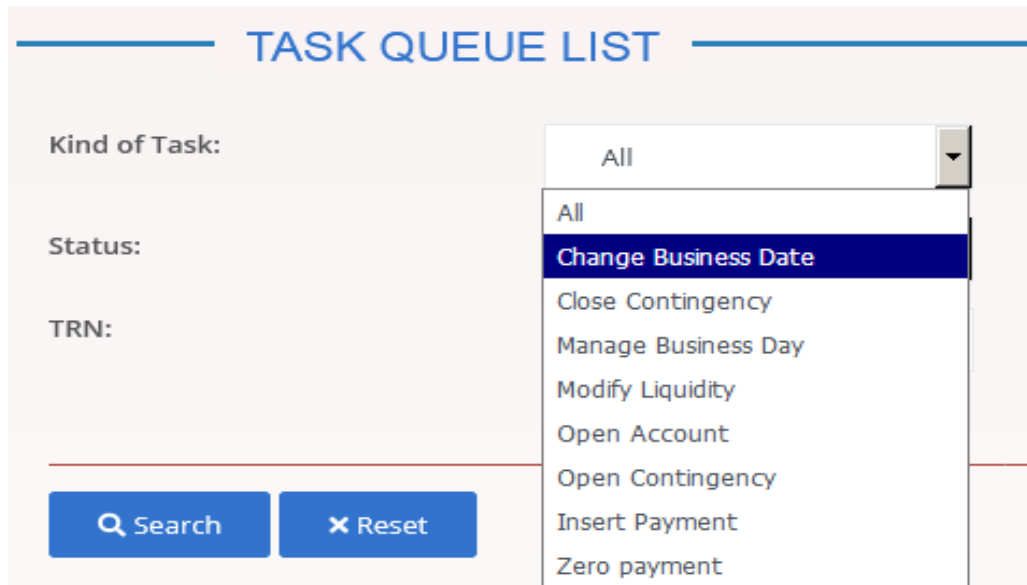
Illustration 6: Standard select box

▌**The input-sensitive select box** enables the user to enter the desired value manually, which will be used to reduce the possible set of values in the input-sensitive select box list, which provides the user with a drop-down menu that shows the 10 first entries of the set of values irrespective of what they might have entered in the text field.
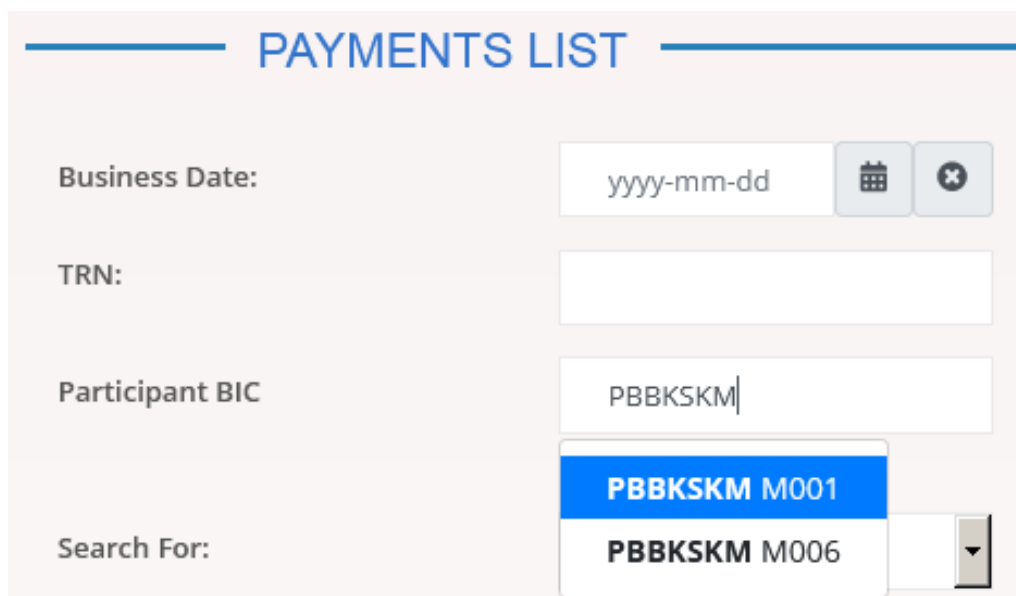
Illustration 7: Input-sensitive select box using the *input-sensitive select box* icon and *input-sensitive* select box with manually entered values.

Read-only Fields

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

Field Properties

All field types have specific properties with respect to possible character sets, and mandatory content.

Date

A Date type field has the following format: YYYY-MM-DD. There are four digits representing the year, two digits representing the month and two digits representing the day.

The default value of Date fields, unless differently specified, is BLANK.

The field Date is always linked to a calendar icon that opens a calendar where the user can select a day. It is possible to insert a date writing in the field or using the calendar.

Time[1]

The Time type field has the following format: HH:MM. There are two digits representing the hour and two digits representing the minute.

DateTime[1]

A DateTime type field has the following format: YYYY-MM-DD HH:MM. There are four digits representing the year, two digits representing the month, two digits representing the day, two digits representing the hour and two digits representing the minute. The field DateTime is always linked to a calendar icon that opens a calendar where the user can select a day. It is possible to insert a date writing in the field or using the calendar.

Amount

The GUI will show the amounts with all decimal points, English Format (the decimal separator will be a "." and the thousand separator is ",") and right alignment.

Amounts can be entered up to 18 figures, that is maximum 19 characters if the decimal separator is present.

When the amount field is in read-only mode or the amount field is not selected for typing, the amount shows the thousand separator.

When the user is typing the numbers, the amount is shown without the thousand separators.

The amount fields should allow shortcuts:

- enter "Xm" and the system will transfer this automatically into X,000,000.00[.00]

---

[1] The Time in the system refers to the CET/CEST zone.

❙ enter "Yt" and automatically translated into Y,000[.00].

The number of decimals is defined by the currency.

Negative amounts (shown by the system but not entered by the user) are written in red and marked with a "-" (This rule applies for all negative values).

According to the character set, only numerical characters (decimal – abbreviation "d") can be used for amounts plus the negative symbol.

Field	Description	Validation	Error Code
Amounts	Contains an Amount.	The Amount must be greater than or equal to 0.	The amount must be greater than or equal to 0.
Amounts	Number of Decimals of an amount	The Amount must have <number of decimals stored for the currency> decimals.	Wrong format in field <field name>. The correct format has to be xxx.xxx,<number of decimals stored for the currency>.
Amounts	Character set to be used	It is only possible to use a numerical character set.	Only numerical characters are allowed

Numeric

There are different type of numeric field. In general these fields, in edit mode, can contain only numbers and "-" symbol.

Field	Description	Edit mode	New mode
Numeric	Can contain only natural numbers (positive integer).	Only numbers are allowed.	The thousand separator is shown.
Integer	Can contain positive and negative integer values.	Numbers and char "-" are allowed.	The thousand separator is shown. When negative, the char "-" is shown and the string is in red.

Characters

ECONS II operates in British English and uses the SWIFT-x character set to enter data: if not described differently, the fields are intended to be based on the SWIFT-X character set. ECONS II can accept the UTF-8 character set with the exception of '<', '>' and '&' in specific fields; when this happens, this is explicitly reported.

The GUI does not differentiate between upper and lower case in terms of data input for input fields.

The SWIFT-x character set corresponds with the following content:

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
:	Colon
(	Opening parenthesis
)	Closing parenthesis
.	Full stop
,	Comma
´	Apostrophe
+	Plus
	Space (blank)
CR	Carriage return
LF	Line feed

Hint

ECONS II does not process fields (mandatory or optional), that are only filled with blanks. Blanks appearing at the beginning or at the end of a field entry are deleted automatically without any notification.

Fields in a *list* or *details* screen, where the dataset was saved without an entry, are filled with '---'.

Mandatory Content

In the GUI, mandatory fields are marked with a red line in the label. All marked fields have to be filled in before users are allowed to proceed. The red line is turned into green when the field contains a value or is selected.

Illustration 8: Mandatory fields

Position No.	Description
1	Mandatory input field
2	Mandatory select field

1.2.2.4 Common Icons

While working with the ECONS II GUI, users will find that some icons appear regularly. Table elements can be found below data record lists on *search/list.*

Table Elements

Illustration 9a: Table Elements – Sort icon

Illustration 9b: Table Elements - Supplementary filters in list objects

Position No.	Element	Description
1	*Sort* icon	... sorts the list in ascending or descending order by clicking on the up or down arrow.

2	*Supplementary filter*	… allows in-memory filtering, depending on the type of fields, of the displayed list of items according to additional criteria as shown below.

Data fields supplementary filter criteria:

❚ Equals

❚ Greater than

❚ Less than

❚ Not equal

❚ In range

Text fields supplementary filter criteria:

❚ Equals

❚ Not equal

❚ Starts with

❚ Ends with

❚ Contains

❚ Not contains

Predefined supplementary filter criteria:

It contains an adaptive list of values which is consistent with the related search criterion. E.g. for any Status field, the predefined supplementary filter contains the following values: 'All', 'Active', 'Deleted'.

When a supplementary filter criterion is used, the list is automatically filtered in memory without submitting the query to the back-end. When applied, any supplementary filter can be removed by individually resetting the corresponding filter.

If a supplementary filter is applied, a small icon near the column header is displayed, as shown in the following image.

1.2.3 Validation

In ECONS II GUI, 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, ECONS II 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 the GUI, human validation can be imposed by using the 4-eyes mode. Furthermore, non repudiation of origin (NRO) is implemented for a specific number of screens

Front-End Validation

As first part of the validation process, the front-end validation takes place without communication to the back-end. The front-end validation includes both the field validation and the cross-field validation. It is carried out after clicking on a button.

The field validation verifies that all entries comply with the required format.

The cross-field validation checks the data consistency between two or more fields/buttons in relation to each other.

Back-End Validation

The back-end validation is the second part of the validation process. After successful front-end validation, the user's request is submitted to the back-end and checked for compliance with the business validation rules. In case of failure an error message is displayed. Users 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 ECONS II GUI informs the user about the result. There are two different message types available, the **error message** and the **success message.**

Error Message

Each error message appears as a pop-up on the upper right corner of the screen. 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.
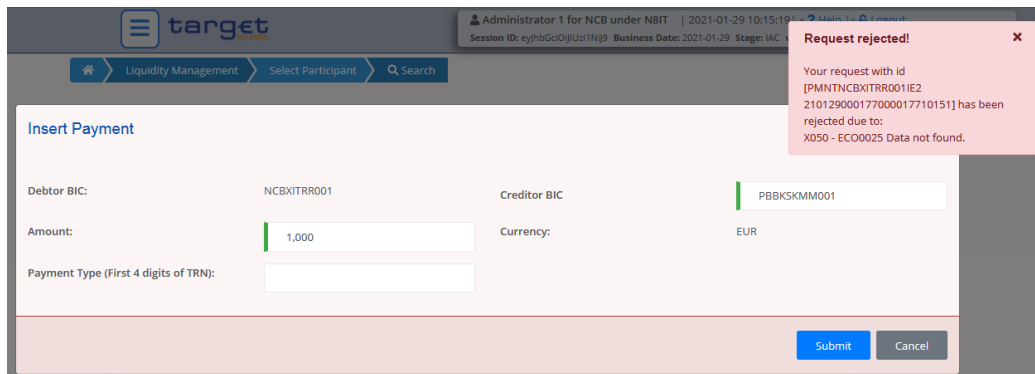
Illustration 10: Error message

Success Message

The success message appears as a pop-up on the upper right corner of the screen. It confirms that the data have been submitted successfully.

If the user is working in 4-eyes mode, the success message also provides them with the 4-eyes principle ID.
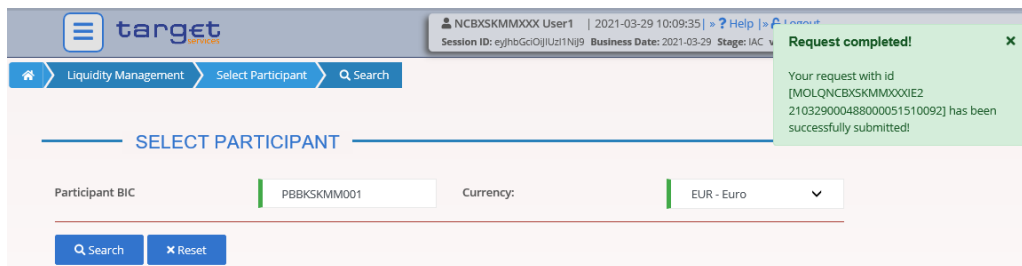
Illustration 11: Success message

4-Eyes Mode

Depending on the access rights setup, users can use ECONS II GUI in 2-eyes or in 4-eyes mode. The 2-eyes mode and the 4-eyes mode apply for *enter* screens and for any kind of deletion processes. If the user is a 4-eyes mode user, its actions have to be confirmed by a second user in order to be processed.

First User

In 4-eyes mode the first user enters or changes 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 confirm or revoke this action via the *Task Queue – Search/List Screen* [▶], either using the 4-eyes mode ID or the search functionality.

As soon as the data changes are positively approved, the GUI marks these data as approved and they are forwarded to further processing.

Digital Signature NRO

In order to ensure non-repudiation of origin (NRO) for critical transactions, the system foresees the use of a digital signature for specified screens: the user must enter a PIN code for signature purposes whenever a specific action is initiated. With the entry of the PIN, ECONS II attaches a digital signature to the instruction entered by the actor.

Please sign the request with your key

Action: Create User
User: T2S OPERATOR USER 1
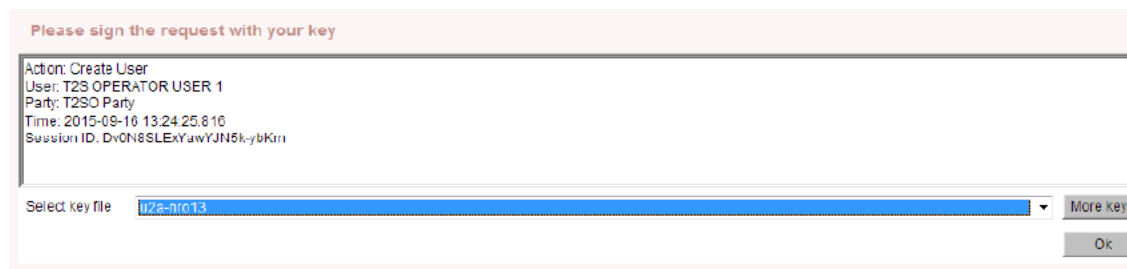Party: T2SO Party
Time: 2015-09-16 13:24:25.816
Session ID: Dv0N8SLExYawYJN5k-ybKrn

Select key file   u2a-nro13   More Key

Ok

Illustration 12: Display System Status

The following (exhaustive) list provides an overview of screens for which the NRO feature is implemented:

▎ Display System Status screen

▎ Open Contingency pop-up (Operator only)

▎ Change of Business Date pop-up (Operator only)

▎ Task Queue - List screen

▎ Task Queue - Details screen

▎ Open Account screen (Operator only)

▎ Select Participant - Display Current Liquidity - Modify Liquidity screen (CB only)

▎ Select Participant - Display Current Liquidity - Insert Payment screen

▎ Select Participant - Display Current Liquidity screen - Block/Unblock (CB only).

1.2.4 Communication Network and Services

Refer to the ESMIG UDFS document for details on the communication network and services.

1.2.5 User Administration

Registration

Only registered users have access to the ECONS II GUI, therefore registration in ECONS II reference data and to the network is necessary prior to the first GUI access. The Registration Guide provides information on how to fill in Registration Forms properly.

After registration, the system administrator is given the possibility to grant and revoke privileges to its users within the ECONS II GUI as described in both the screen reference part and the user instructions part.

1.2.6 Security and Certification Services

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:

❚ 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

1.2.7 Online Help

The content of the UHB can be accessed from the ECONS II GUI by clicking on the *help* button.

2 Screen Reference Part

2.1 General

The screen reference part offers a complete overview of all ECONS II GUI screens that are available in U2A mode. Each screen description focuses on a single screen and explains all fields contained therein.

In detail, every screen description has the same structure and contains the following elements.

Context of Usage

The context of usage explains what a screen displays, what the user 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.

Examples

Navigation via the menu:

Services >> Open Account >> *Open Account screen*

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. For further information, refer to the list of privileges [▶].

Reference

The reference lists all business scenarios containing the respective screen (reference to the user instructions part).

Screenshot

Users can use the screenshot as orientation for their work with the UHB. All screenshots are based on the maximum of access rights, so deviations are possible if users 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 users 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.

Open Account 2	
Participant BIC 1	Enter or select a participant by its BIC. 3
	Reference for error message: 4
	❚ ECO1007
	This field is mandatory. 5
	Required format is: max. 11x characters. 6

Illustration 12: Example of a screen description

Position No.	Element	Description
1	Field name	... indicates the respective name of each screen field.
		Input and select fields with no specific remark are always optional.
2	Frame name	... indicates the respective name of each screen frame.
3	Field description	... indicates the field type and required content. Each field description starts with a keyword, which illustrates the required activity:
		❚ 'Shows...' indicates a read-only field
		❚ 'Select...' indicates a select field
		❚ 'Enter...' indicates an input field
		❚ 'Enter or select...' indicates an input sensitive select box or an input field with suggestions
		If there is an exhaustive list of possible values, these are listed.

4	References for error messages	... indicates the code of all possible errors applying to the field during the back-end validation. The corresponding error text and error description is listed in the annex (list of references for error messages) [ ]. For further details on the validation process, refer to validation [ ].
5	Additional information	... indicates the useful information that is for filling in the field.
6	Required/Displayed format	... indicates all field format requirements related to the fields. If there is more than 1 format requirement, they are separated with a comma. In read-only fields the displayed format is only mentioned, if the field content is ambiguous. This applies especially to date fields. The following keyword is used for the format requirements: ▍ 'Character' indicates a character from the SWIFT-x character set

Buttons

All buttons specific to the screen are listed and described in a table at the end of the screen description. The following illustration explains the structure of a button description.

Illustration 13: Example of a button description

Position No.	Element	Description
1	Button name	...indicates the respective name of each button.
2	Button description	...indicates the action that is triggered when clicking on the button. Each button description starts with 'This function enables the user...'
3	References for error messages	...indicates the code of all possible errors applying to the button during the back-end validation. The corresponding error text and error description is listed in the annex (list of references for error messages) [▶]. For further details on the validation process, refer to validation [▶].

2.2 Services

2.2.1 Display System Status

2.2.1.1 Display System Status – Details Screen

Context of Usage

This screen allows the users to display the status of ECONS II. Moreover, the Service Operator only can manage the Business day, accessing the relevant function (Open/Close contingency session, activate or disable the Agree/Disagree functionality, Start/Stop the Maintenance Windows and Change the Business Date). Service Operator can use this screen either in 2-eyes or in 4-eyes mode.
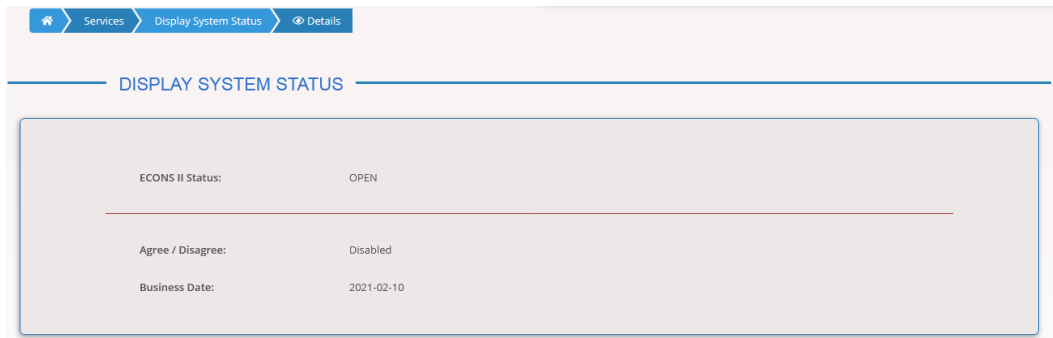
Screen Access

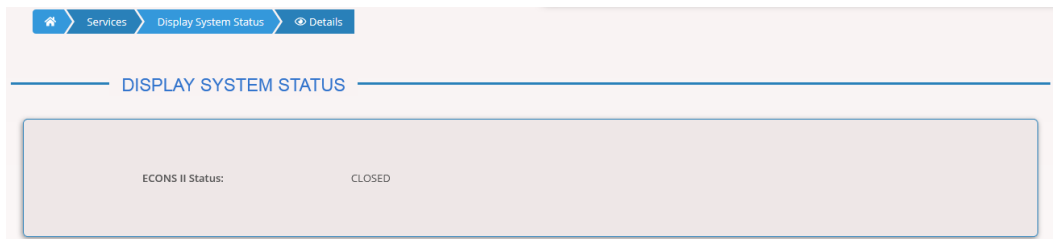▌ *Services >> Display System Status >> Display System Status – Details Screen*

Privileges

To use this screen, the following Privileges are needed [▶]:
▌ Query ECONS II Business Day Information

Screenshots

DISPLAY SYSTEM STATUS

ECONS II Status:	OPEN
Agree / Disagree:	Disabled
Business Date:	2021-02-10

User different from Service Operator in case of status "OPEN"

DISPLAY SYSTEM STATUS

| ECONS II Status: | CLOSED |

User different from Service Operator in case of status "CLOSED"

Illustration 14: Display System Status – Details screen

Fields Description

Display System Status	
ECONS II Status	Shows the status of ECONS II. Possible displayed values are: ❚ "OPEN" (ECONS II is open) ❚ "CLOSING" (ECONS II is closing) ❚ "LOCK" (the closing procedure has not succeeded and ECONS II is locked) ❚ "MAWI" (Maintenance windows) ❚ "CLOSED" (ECONS II is closed)
Business Date	Shows the Business Date. In combination with status "OPEN" and "MAWI", the field shows the current business date. In combination with status "CLOSED", the field shows the last CRDM import date visible only for the Service Operator.

Agree/Disagree	Shows the status of the Agree/Disagree functionality in combination with status "OPEN" only.
	Possible displayed values are:
	❚ Active (default status - all payments inserted by a participant different from a Central Bank have to be agreed/disagreed by the relevant Central Bank)
	❚ Disabled (all payments will be immediately sent to the back end module in order to be settled, in case of 4–eyes transactions only after the final confirmation).

2.2.2 Task Queue

2.2.2.1 Task Queue – Search/List Screen

Context of Usage

This screen allows the users to search for information about requests previously submitted by users, in their explicit area of responsibility, both in A2A and U2A mode and, for the latter, both in 4-eyes and 2-eyes role.

Moreover, users are allowed to select only one task for displaying details and, in the following details screen, confirm/revoke the task or agree/disagree payments (for Central Banks' users only), according to the data scope.

Central Banks users are also allowed to select one or more tasks to agree or disagree payments in one shot directly in the Task Queue screen.

Screen Access
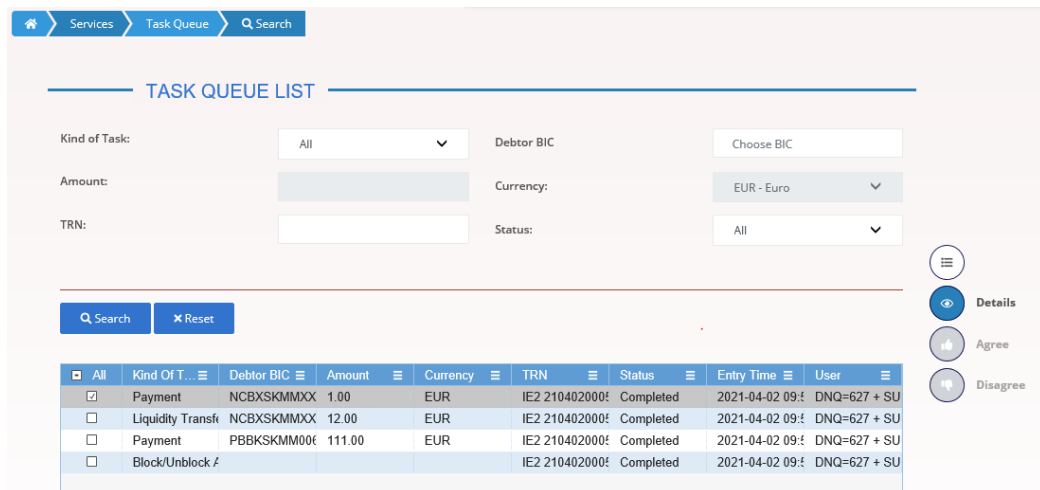
❚ *Services >> Task Queue >> Task Queue – Search/List Screen*

Privileges

To use this screen, the following Privileges are needed [▶]:

❚ Query Task List

❚ Agree/Disagree transaction (for CBs only)

Screenshot

Illustration 15: Task Queue – Search/List screen

Fields Description

Task Queue – Search Criteria	
Kind of Task	Select the kind of task from the possible values: ❚ All (default value) ❚ Open Contingency (only for Service Operator) ❚ Close Contingency (only for Service Operator) ❚ Change Business Date (only for Service Operator) ❚ Start Maintenance Window (only for Service Operator) ❚ Stop Maintenance Window (only for Service Operator) ❚ Open Account (only for Service Operator) ❚ Liquidity Transfer ❚ Payment ❚ Agree/Disagree functionality (only for Service Operator) ❚ Block/Unblock account (only for Service Operator and responsible Central Bank)
Debtor BIC	Enter or select the Debited Contingency Account BIC. Reference for error message [ ]: ❚ ECO1005 Required format is: max. 11x characters.

Amount	Enter a specific amount as searching criteria.
	If the selected Kind of Task is different from "Liquidity Transfer" or "Payment", this field is disabled.
	Required format is: Amount.
Currency	Select the currency code.
	If the user selects a task with type different from "Liquidity Transfer" or "Payment", this field is disabled.
	This field is blank as for default value.
TRN	Enter the TRN of the specific transaction to be selected.
	Required format is: 34x characters.
Status	Select the status of the transaction to be searched from the possible values:
	▌ All (default value)
	▌ To confirm (first leg of 4-eyes transaction)
	▌ Completed
	▌ Rejected (raised due to an error or for "Disagree" action)
	▌ Revoked (i.e. transaction revoked in the second step of 4-eyes and CB unblock)
	▌ Failed
	▌ Cancelled (for transactions not in a final status during Change of Business Date or Closing session)
	▌ Waiting for CB approval (payment inserted by participant different from Central Bank, in combination with task "Payments")
	▌ Waiting for CB unblock (in case a blocked account is detected in a payment inserted by a participant different from Central Bank, in combination with task "Payments")
	▌ Suspended Approve (related to a first step of 4 eyes action for transaction in status "Waiting for CB unblock")
	▌ Suspended Revoke (related to a first step of 4 eyes action for transaction in status "Waiting for CB unblock")

Task Queue – List	
All	Select one task to display its details. Central Banks users are also allowed to select one or more tasks to agree or disagree payments, with status "Waiting for CB approval", in one shot directly in the Task Queue screen. Reference for error message[▶]: ▌ECO1011
Kind of Task	Shows the kind of task.
Debtor BIC	Shows the Debited Contingency Account BIC related to the task.
Amount	Shows the amount of the transaction, if available.
Currency	Shows the currency code related to the task.
TRN	Shows the TRN of a specific transaction.
Status	Shows the status of the task.
Entry Time	Shows the entry timestamp.
User	Shows the username of the last logical user who entered or managed the task.

Buttons

Search	This function enables the user to start a search according to the entered criteria. Reference for error message [▶]: ▌ECO0022 ▌ECO1005
Reset	This function enables the user to set default search criteria and blanks out all optional criteria.
Details	This function enables the user to move to the Details screen. The access to the Details screen is only possible when a single task has been selected. Reference for error message[▶]: ▌ECO1011

Agree	This function enables the user to agree the selected task(s) in status "Waiting for CB approval". The button is only available for Central Banks' users and the task is executed in 2-eyes mode, when at least one task has been selected. Reference for error message [▶]: ❚ ECO0022 ❚ ECO1001
Disagree	This function enables the user to disagree the selected task(s) in status "Waiting for CB approval". The button is only available for Central Banks' users and the task is executed in 2-eyes mode, when at least one task has been selected. Reference for error message [▶]: ❚ ECO0022 ❚ ECO1001

2.2.2.2 Task Queue – Details Screen

Context of Usage This screen displays the details of the selected task, also allowing the user to confirm/revoke the task in status "To confirm" or agree/disagree, for Central Banks' users only, the task in status "Waiting for CB approval".

Screen Access ❚ *Services >> Task Queue >> Task Queue – Search/List Screen >>* click on the *Details* button

Privileges For a complete use of this screen, the following Privileges are needed [▶]:

❚ Query Task List

❚ Modify Liquidity (for CBs only)

❚ Insert Payment

❚ Agree/Disagree transaction (for CBs only)

❚ Block/Unblock Contingency Account (for CBs only)

The latter privilege includes the possibility to Confirm or Revoke a blocked payment if a blocked account is involved.

Screenshot

Details of selected Task

First User:	C=IT, O=Banca	Second User:	
Kind of Task:	Liquidity Transfer	Status:	To confirm
Error Code:		Error Description:	
Amount:	1,111.00	Currency:	EUR
Debtor BIC:	NCBXSKMMXXX	Creditor BIC:	PBBKSKMM001
Participant BIC:		Business Date:	
TRN:	IE2 230328002921		

✔ Confirm   ⊘ Revoke   👍 Agree   👎 Disagree   Cancel

Illustration 16: Task Queue – Details screen

Fields Description

Task Queue	
First User	Shows the username of the first logical user who previously inserted the task.
Second User	Shows the username of the last logical user who modified the task (i.e. Approve/Revoke, Agree/Disagree).
Kind of task	Shows the type of the selected operation.
Status	Shows the status of the task.
Error Code	Shows the error code (in case of failed transactions).
Error Description	Shows the error description (in case of failed transactions).
Amount	Shows the transaction amount. This field is filled for the following tasks: ▌ Liquidity Transfer ▌ Payment
Currency	Shows the currency code of the selected operation. This field is filled for the following tasks: ▌ Liquidity Transfer ▌ Payment

Debtor BIC	Shows the Debited Contingency Account BIC. This field is filled for the following tasks: ❚ Liquidity Transfer ❚ Payment
Creditor BIC	Shows the Credited Contingency Account BIC. This field is filled for the following tasks: ❚ Liquidity Transfer ❚ Payment
Participant BIC	Contingency Account BIC of the participant chosen in the first step of the 4 eyes action Note: this field is filled for the following task: • "Block/Unblock account" (only for Operator and responsible CB)
Business Date	Format: YYYY-MM-DD Note: this field is filled for the following tasks: • in case of Open Contingency (only for Operator) – field "Business Date" will be filled in with the Business Opening Date inserted in the first step of the 4 eyes action • in case of Close Contingency performed in 4 eyes mode (only for Operator) – field "Business Date" will be filled in with the business date of the ECONS II session to be closed • in case of Change Business Date (only for Operator) – field "Business Date" will be filled in with the New Business Date inserted in the first step of the 4 eyes action
TRN	Shows the Transaction Reference Number.

Buttons

Confirm	This function enables the user to confirm the task in status "To confirm" , "Waiting for CB unblock", "Suspended Approve" or "Suspended Revoke" and in the last three cases, the button is only available for Central Bank users.

	Reference for error message [ ]: ❚ ECO0022 ❚ ECO1001 ❚ ECO1003 ❚ ECO1010
Revoke	This function enables the user to revoke the task in status "To confirm" , "Waiting for CB unblock", "Suspended Approve" or "Suspended Revoke" and in the last three cases, the button is only available for Central Bank users. Reference for error message [ ]: ❚ ECO0022 ❚ ECO1001 ❚ ECO1003 ❚ ECO1010
Agree	This function enables the user to agree the selected task(s) in status "Waiting for CB approval". The button is only available for Central Banks' users and the task is executed in 2-eyes mode. Reference for error message [ ]: ❚ ECO0022 ❚ ECO1001
Disagree	This function enables the user to disagree the selected task(s) in status "Waiting for CB approval". The button is only available for Central Banks' users and the task is executed in 2-eyes mode. Reference for error message [ ]: ❚ ECO0022 ❚ ECO1001
Cancel	This function enables the user to cancel the process and return to the previous screen.

2.3 Liquidity Management

Context of Usage   This menu allows the users to receive online information about participant data, available liquidity and block/unblock status, in their explicit area of responsibility.

All users, with the relevant privilege, are allowed to instruct payments for themselves. Central Banks are allowed also to modify the liquidity of the participants and to instruct payments on behalf of their ones.

Moreover, block/unblock status of the participants' contingency accounts is also visible and the Central Banks are allowed to modify the block/unblock status of a contingency account.

All actions can be performed in 2-eyes and 4-eyes mode.

2.3.1 Select Participant

2.3.1.1 Select Participant – Search Screen

**Context of Usage**   This screen allows users to select a participant by its Contingency Account BIC and the relevant currency.

Screen Access   ❚ *Liquidity Management >> Select Participant >> Select Participant – Search Screen*

Privileges   To use this screen, the following Privileges are needed [▶]:
❚ Query Contingency Account and Balance

Screenshot
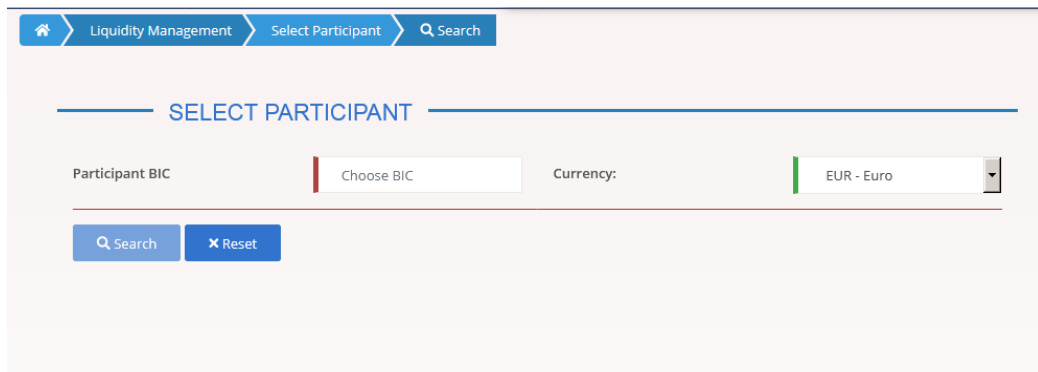
Illustration 17: Select Participant – search screen

Fields Description

Select Participant – Search Criteria	
Participant BIC	Enter or select the Contingency Account BIC of the participant to be searched.
	Reference for error message [ ]:
	▌ ECO1005
	This field is mandatory.
	Required format is: max. 11x characters.
Currency	Select the currency of the account related to the participant from the drop-down menu.
	The default value is "EUR - Euro".

Buttons

Search	This function enables the user to start a search according to the entered criteria.
	Reference for error message [ ]:
	▌ ECO0015
	▌ ECO1005
Reset	This function enables the user to set default search criteria and blanks out all optional criteria.

2.3.1.2 Display Current Liquidity

Context of Usage

This screen displays the details of the selected Contingency Account, the available liquidity and the block/unblock status.

All users, with the relevant privilege, are allowed to instruct payments for themselves, the Central Banks are allowed also to modify the liquidity of the participants and to instruct payments on behalf of their participants.

Contingency Technical Account are not allowed in any transaction payment with the exception of the Contingency Transit Account that can be managed by European Central Bank.

All actions can be performed in 2-eyes and 4-eyes mode.

Screen Access

▌ *Liquidity Management >> Select Participant >> Select Participant – Search Screen >>* click on the *Search* button

Privileges

To use this screen, the following Privileges are needed [▶]:

▌ Query Contingency Account and balance

▌ Modify liquidity (for CBs only)

▌ Insert Payment

▌ Block/Unblock Contingency Account (for CBs only)

Screenshot
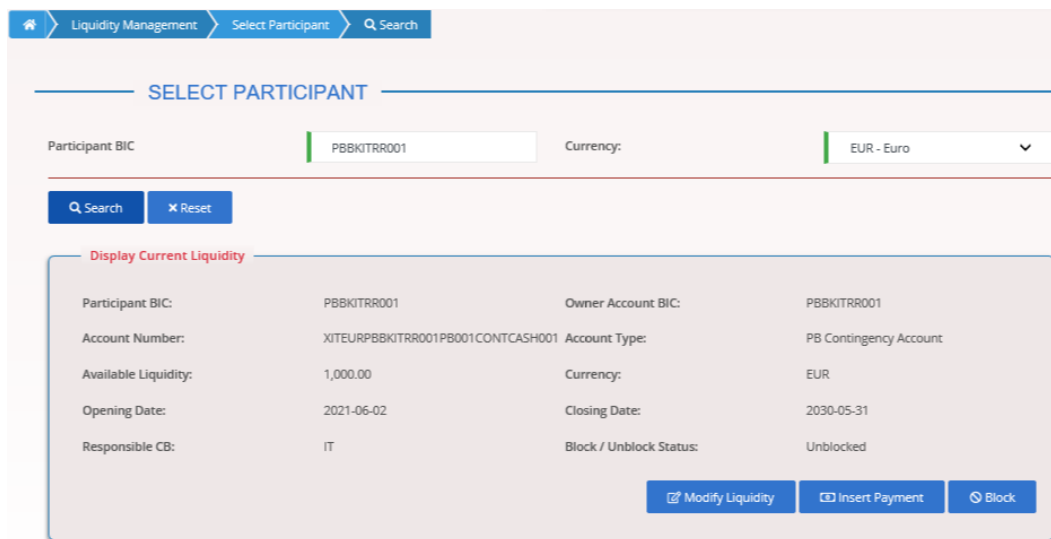
Illustration 18: Display Current Liquidity

Display Current Liquidity	
Participant BIC	Shows the Contingency Account BIC of the previously selected Participant.
Owner Account BIC	Shows the account owner party BIC.
Account Number	Shows the account number related to the previously selected Participant.

Fields Description is the label to the left of the table above.

Account Type	Shows the account type related to the previously selected Participant.
Available Liquidity	Shows the liquidity amount on the account. It can be negative only for Central Banks' accounts. This field is blank for Ancillary Systems' technical accounts.
Currency	Shows the currency code previously selected.
Opening Date	Shows the opening date of the selected account.
Closing Date	Shows the closing date of the selected account.
Responsible CB	Shows the country code of the responsible Central Bank of the selected Contingency Account.
Block/Unblock Status	Shows the selected account status.

Buttons

Modify Liquidity	This function allows the user to open the "Modify Liquidity" screen and it is enabled for Central Banks only. It is also disabled in case the account is "CB Contingency Account" and when the status is different from "OPEN". Reference for error message [▶]: ❚ ECO1004
Insert Payment	This function allows the user to open the "Insert payment" screen. It is disabled when the status is different from "OPEN". Reference for error message [▶]: ❚ ECO1004
Block/Unblock	This function allows the Central Bank user to block or unblock the selected account. It is disabled in case the account is "CB Contingency Account" and when the status is different from "OPEN". Reference for error message [▶]: ❚ ECO1001 ❚ ECO1004

2.3.1.3 Modify Liquidity

Context of Usage

This screen allows Central Bank users to modify the liquidity of the selected Contingency Account.

Screen Access

▌ *Liquidity Management >> Select Participant >> Select Participant – Search Screen >> click on the Search button >> Display Current Liquidity >> click on the Modify Liquidity button*

Privileges

To use this screen, the following Privileges are needed [▶]:

▌ Query Contingency Account and balance

▌ Modify liquidity (for CBs only)

Screenshot
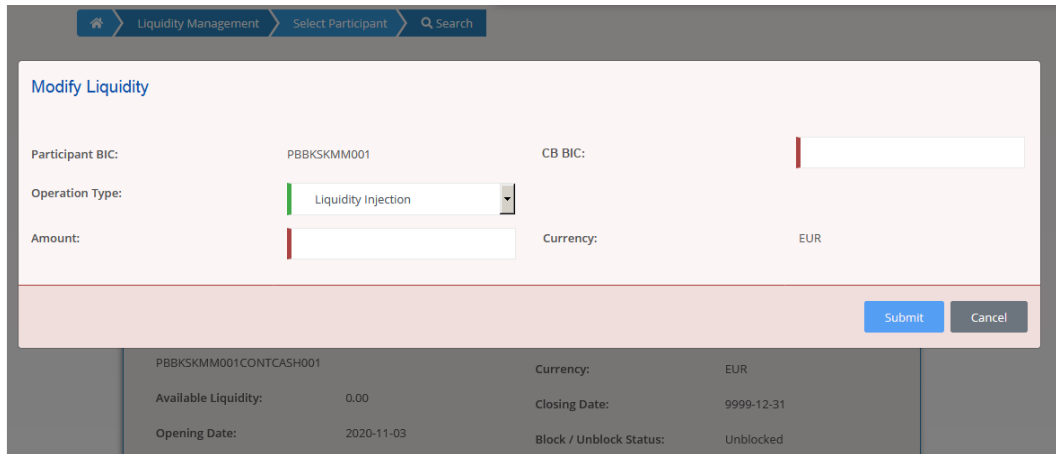
Illustration 19: Modify Liquidity

Fields Description

Modify Liquidity	
Participant BIC	Shows the Contingency Account BIC of the previously selected Participant.

CB BIC	Enter or select a Central Bank Contingency Account BIC, picking it among one of those linked to the user data scope. This field is filled in with the Contingency Account BIC of the responsible Central Bank, if it can be uniquely recognised by the System (i.e. Central Bank with only one CB contingency account opened in ECONS II). Otherwise, this is an empty field where a Central Bank Contingency Account BIC shall be selected: ❚ The Operator will see all the possible Central Bank Contingency Account BIC values; ❚ A Central Bank user will have the possibility to select one of the Central Bank Contingency Account BIC linked to his data scope. This field is mandatory. Required format is: max. 11x characters.
Operation Type	Select the type of operation from the possible values: ❚ Liquidity Injection (default value) ❚ Liquidity Drain Reference for error message [▶]: ❚ ECO0025 (in case of injection operation) ❚ ECO0027 (in case of drain operation)
Amount	Enter the amount of the liquidity injection or drain. Reference for error message [▶]: ❚ ECO0027 (in case of drain operation) This field is mandatory. Required format is: Amount different from 0.00 (decimals according to the currency).
Currency	Shows the currency code previously selected.

Buttons

Submit	This function allows the user to accept the settings and return to the updated Display Current Liquidity screen. It is disabled in case the status is different from "OPEN". Reference for error message [▶]: ❚ ECO0007 ❚ ECO0025 (in case of injection operation) ❚ ECO0027 (in case of drain operation) ❚ ECO1004
Cancel	This function enables the user to cancel the process and return to the previous screen.

2.3.1.4 Insert Payment

Context of Usage

This screen allows all users to instruct payments for themselves, while the Central Banks users are allowed also to instruct payments on behalf of their participants.

Screen Access

❚ *Liquidity Management >> Select Participant >> Select Participant – Search Screen >> click on the Search button >> Display Current Liquidity >> click on the Insert Payment button*

Privileges

To use this screen, the following Privileges are needed [▶]:

❚ Query Contingency Account and balance

❚ Insert Payment

Screenshot
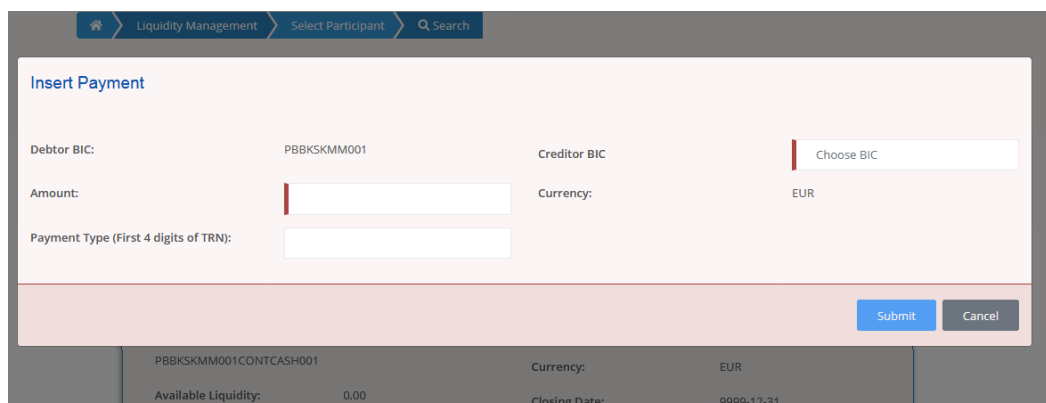
Illustration 20: Insert Payment

Fields Description

Insert Payment	
Debtor BIC	Shows the Contingency Account BIC of the selected Participant to be debited.
Creditor BIC	Enter or select the Contingency Account BIC to be credited. This field is mandatory. Required format is: max. 11x characters.
Amount	Enter the amount of payment. Reference for error message [▶]: ▎ECO0027 This field is mandatory. Required format is: Amount different from 0.00 (decimals according to the currency).
Currency	Shows the currency code previously selected.
Payment Type (First 4 digits of TRN)	Enter the type of payment. If used, the content of this field will be reported in the first 4 characters of the TRN. Required format is: max. 4x alphanumeric characters.

Buttons

Submit	This function allows the user to accept the settings and return to the updated Display Current Liquidity screen. It is disabled in case the status is different from "OPEN". Reference for error message [▶]: ▎ECO0007 ▎ECO0025 ▎ECO0027 ▎ECO1004
Cancel	This function enables the user to cancel the process and return to the previous screen.

2.3.2 Liquidity Monitoring

2.3.2.1 Liquidity Monitoring – Search/List Screen

Context of Usage

The screen enables the Central Banks' users to monitor the overall liquidity on all accounts of their participants. It also allows to export the searched data[2] (i.e. in .xlsx or .csv format).

Screen Access
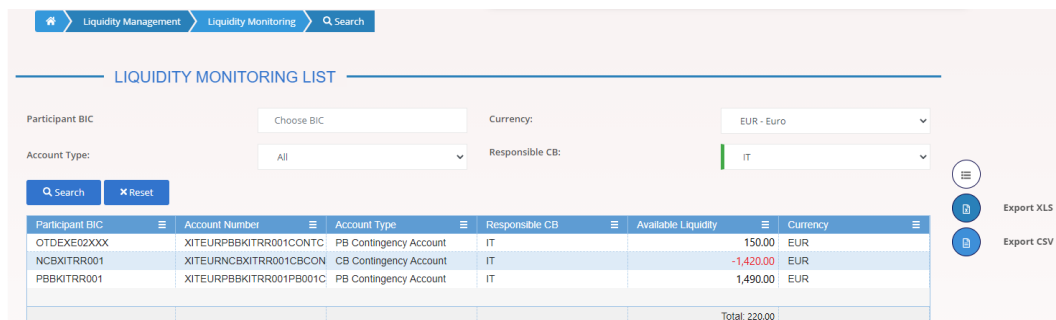
❚ *Liquidity Management >> Liquidity Monitoring >> Liquidity Monitoring – Search/List Screen*

Privileges

To use this screen, the following Privileges are needed [▶]:

❚ Query Liquidity Monitoring on CB Level

Screenshot

Illustration 21: Liquidity Monitoring – Search/List screen

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[2] Possible limitations on the number of occurrences to be downloaded can be applied.

Fields Description

Liquidity Monitoring – Search Criteria	
Participant BIC	Enter or select the Contingency Account BIC of a participant. Reference for error message [▶]: ❙ ECO1005 Required format is: max. 11x characters.
Currency	Select the currency of the account related to the participant from the drop-down menu. The default value is "EUR - Euro".
Account Type	Select the account type from the possible values: ❙ All (default value) ❙ PB Contingency Account ❙ CB Contingency Account ❙ Contingency Technical Account ❙ Contingency Transit Account
Responsible CB	Select the country code of the responsible CB. . Default value is: ❙ Blank (for the Service Operator) ❙ The relevant Central Bank country code (for Central Bank users)

Liquidity Monitoring – List	
Participant BIC	Shows the previously searched Contingency Account BIC of the Participant.
Account Number	Shows the account number of the corresponding participant BIC.
Account Type	Shows the account type of the corresponding participant BIC.
Responsible CB	Shows the country code of the responsible CB.
Available Liquidity	Shows the amount of the liquidity on the corresponding account of the participant BIC. It can be negative only for CBs Contingency Accounts or Transit Contingency Accounts.
Currency	Shows the selected currency code.
Total	Shows the sum of all the available liquidity displayed.

Buttons		
Search	This function enables the user to start a search according to the entered criteria. Reference for error message [▶]: ▌ ECO1005	
Reset	This function enables the user to set default search criteria and blanks out all optional criteria.	
Export XLS	This function allows the user to export in XLS format the displayed payments (e.g. in case the user filter the returned data only the displayed data will be exported).	
Export CSV	This function allows the user to export in CSV format the displayed payments (e.g. in case the user filter the returned data only the displayed data will be exported).	

2.4 Payments

Context of Usage This menu allows participants to retrieve the list of the transactions sent in ECONS II by means of special criteria.

The users are allowed also to export the data[3] (i.e. in .xlsx or .csv format).

2.4.1 Search Payments

2.4.1.1 Payments – Search/List Screen

Context of Usage This screen allows the users to select payments by means of special criteria, according to the data scope, that can be used in combination to get transaction/s of one day or of a time range.

Screen Access ▌ *Payments >> Search Payments >> Payments – Search/List Screen*
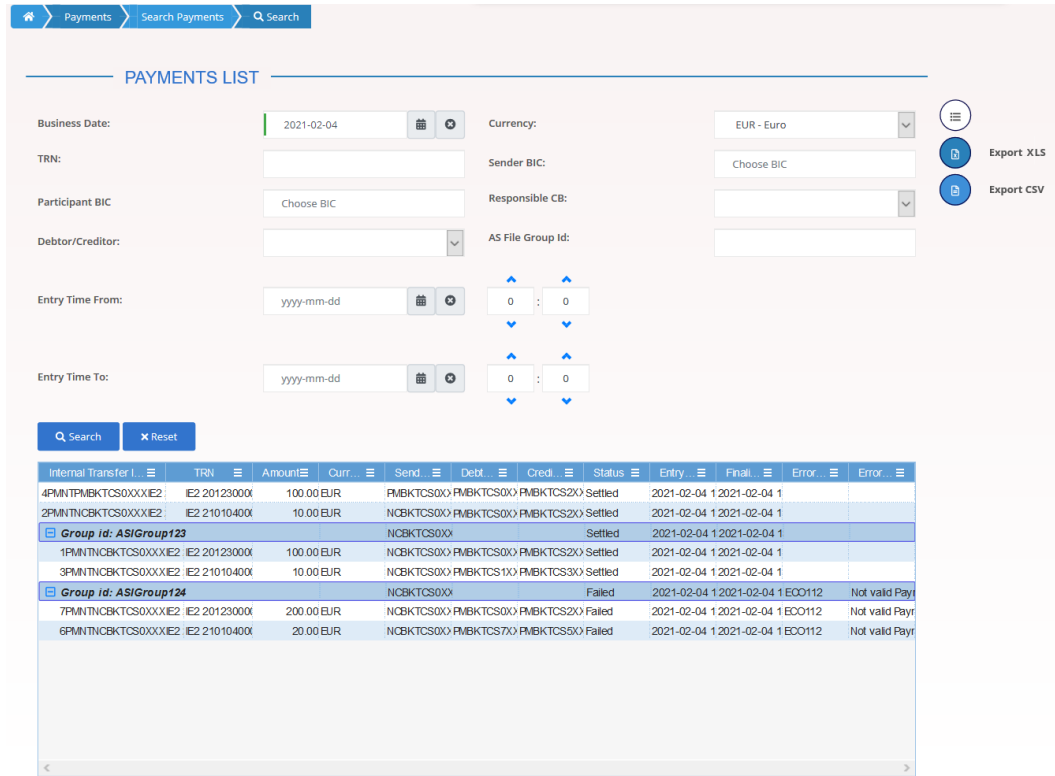
Privileges To use this screen, the following Privileges are needed [▶]:
▌ Query Payments

---

[3] Possible limitations on the number of occurrences to be downloaded can be applied.

Screenshot

Illustration 22: Payments – Search/List screen

Fields Description

Payments – Search Criteria	
Business Date	Enter or pick the Business Date. This field is mandatory. Required format is: Date.
Currency	Select a specific Currency Code from the drop-down menu. This field is mandatory. The default value is "EUR - Euro" but the user can select a different one.
TRN	Enter the Transaction Reference Number (TRN) of the specific transaction to be searched. Required format is: 34x characters.

Sender BIC	Enter or select the Party BIC of the user who submitted the transaction to be selected. Reference for error message [▶]: ▌ECO1005 Required format is: max. 11x characters.
Participant BIC	Enter or select the Contingency Account BIC of the Participant to be selected. Reference for error message [▶]: ▌ECO1005 Required format is: max. 11x characters.
Responsible CB	Select the country code of the responsible Central Bank from the drop-down menu.
Debtor/Creditor	Selects from the possible values, either "Debtor" or "Creditor".
Entry Time From	Enter or select the lower timestamp of arrival in the ECONS II of the transactions to be searched. Reference for error message [▶]: ▌ECO1012 Required format is: Datetime.
Entry Time To	Enter or select the upper timestamp or arrival in the ECONS II of the transactions to be searched. Reference for error message [▶]: ▌ECO1012 Required format is: Datetime.
AS File Group Id	Enter the Group Id of the specific file to be selected. Required format is: 34x characters.

Payments – List	
Internal Transfer Identifier	Shows the unique transaction identifier assigned by ECONS II
	In order to identify the transaction type specific prefixes will be used to mark:
	❙ Liquidity Transfers (MOLQ) – valid for U2A transactions only
	❙ Payments (PMNT)
	❙ Zeroing transactions after the ECONS II final balances have been communicated to CLM during the closing process (ZERO)
	❙ AS transactions (ASIP) – AS transactions will be grouped under the AS file Group Id:
	- compressed in case of search for Business date, Sender BIC, Participant BIC, Responsible CB, Entry Time From, Entry Time to, AS File Group Id
	- each single transaction inside a file shown in case of a search for TRN, Debtor/Creditor
TRN	Shows the Transaction Reference Number of the single transaction Related reference of the original message according the following rules:
	❙ A2A transaction – original Business Message Identifierinserted by the user in the A2A message, the "Groud Id" of a AS file or the "Instruction Id" inserted in each "InstrId" field of the AS file
	❙ U2A transaction – code-word "IE2 " plus internal reference automatically generated by ECONS II if "Payment Type" field was not used
	❙ U2A transaction – 4 characters inserted in the "Payment Type" field plus internal reference automatically generated by ECONS II
Amount	Shows the amount of the transaction.
	This field is empty in case of the row related to the label of an AS file.
Currency	Shows the Currency code selected in the search criteria.
Sender BIC	Shows the Party BIC of the user who submitted the transaction both via U2A or A2A (e.g. transaction via A2A - it is the Central Bank Party BIC).
	In case of AS File and Transaction included inside an AS file shows the Central Bank Party BIC.
Debtor BIC	Shows the Debited Contingency Account BIC.
	Shows the BIC inserted in the First Agent field inside an AS file.

	This field is empty in case of the row related to the label of an AS file.
Creditor BIC	Shows the Credited Contingency Account BIC.
	Shows the BIC inserted in the Final Agent inside an AS file.
	This field is empty in case of the row related to the label of an AS file.
Status	Shows the status of the transaction and it is present for each type of transaction and AS files.
	Possible values are:
	▌Pending (only in case of zeroing transaction)
	▌Settled
	▌Failed
Entry time	Shows the date and time when the transaction arrived in ECONS II and it is present for each type of transaction and AS files.
Finality time	Shows the date and time at which the transaction has been settled in ECONS II and it is present for each type of transaction and AS files.
Error code	Shows the Error Code (in case of failed transactions).
	It is present for each type of transaction including the transaction(s) inserted in the AS files.
Error Description	Shows the Error description (in case of failed transactions).
	It is present for each type of transaction including the transaction(s) inserted in the AS files.

Buttons

Search	This function enables the user to start a search according to the entered criteria.
	Reference for error message [ ]:
	▌ECO1005
	▌ECO1012
Reset	This function enables the user to set default search criteria and blanks out all optional criteria.

Export XLS	This function allows the user to export in XLS format the displayed payments (e.g. in case the user filter the returned data only the displayed data will be exported).
Export CSV	This function allows the user to export in CSV format the displayed payments (e.g. in case the user filter the returned data only the displayed data will be exported).

3 User Instructions Part

3.1 General

The user instructions part comprises scenarios adapted from typical user workflows. They are grouped into related activities, called business packages, which are further grouped into categories.

Furthermore, the user can find business scenarios dedicated only to the Service operator highlighted by the adding 'Service operator only' in the title.

Categories

The categories are a structural element and do not contain any information.

List of Business Scenarios

This section contains a list of all business scenarios belonging to the business package.

The list is unordered if the business scenarios represent alternative ways to achieve the aim of the business package. It is ordered if the business scenarios have to be carried out sequentially. Sequential business scenarios do not necessarily have to be carried out directly after each other. The sequence only implies that one business scenario is a prerequisite for the following ones.

Business Scenarios

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 the user through a series of screens and actions. Each action step is focused on 1 single action. Intermediate results are included and the instructions end with a final result. Possible alternatives and repetitions are highlighted with a notice sign.

> ⚠ *Example*
>
> 1. *Action step 1*
> 2. *Action step 2*
> ⇨ *Intermediate result*
> 3. *Action step 3*
> ➡ *Result*

3.2 Services

3.2.1 Display the System Status

Context of Usage	This business package describes all activities the authorised user can perform for displaying the System Status.
Privileges	To carry out this business scenario, the user needs the following privilege: ❚ Query ECONS II Business Day Information
Reference	Further information on screens involved can be found in the screen reference part: ❚ *Display System Status – Details* screen [▶]

Instructions

1. Go to the *Display System Status – Details* screen:

   Services >> Display System Status >> Display System Status – Details Screen
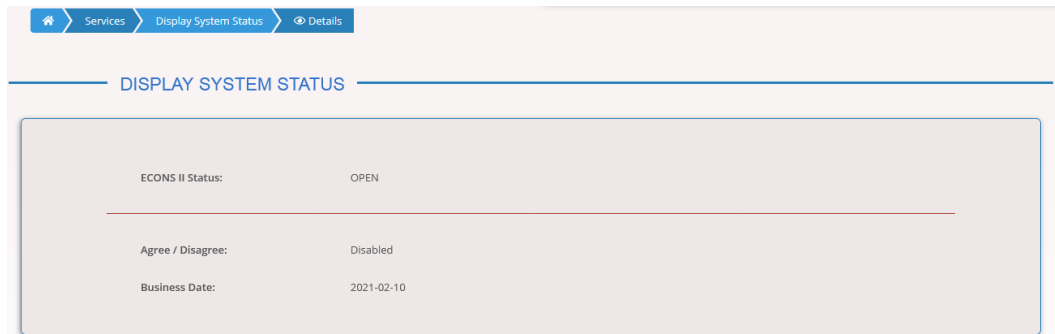
➡ The *Display System Status – details* screen is displayed.

3.2.2 Manage the Task Queue

Context of Usage

This business package describes all activities the authorised user can perform in order to search for information about requests, previously submitted by users, and to agree/disagree a particular task with status "Waiting for CB approval" (for Central Banks' users only). The following scenario is related to a 2-eyes application.

Privileges

To carry out this business scenario, the user needs the following privilege:

❚ Query Task List

❚ Agree/Disagree transaction (for CBs only)

Reference

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

❚ *Task Queue – Search/List screen* [▶]

❚ *Task Queue – Details screen* [▶]

Instructions

1. Go to the *Task Queue – Search/List* screen:

   Services >> Task Queue >> Task Queue – Search/List Screen.

   ⇨ The *Task Queue – Search/List* screen is displayed.

2. Enter all the relevant information, choosing whether to specify one or more field. In the following example, it was set *Payment* as for the 'Kind of Task' and PBBKSKMM006 as the 'Debtor BIC'.

3. Click on the *Search* button.
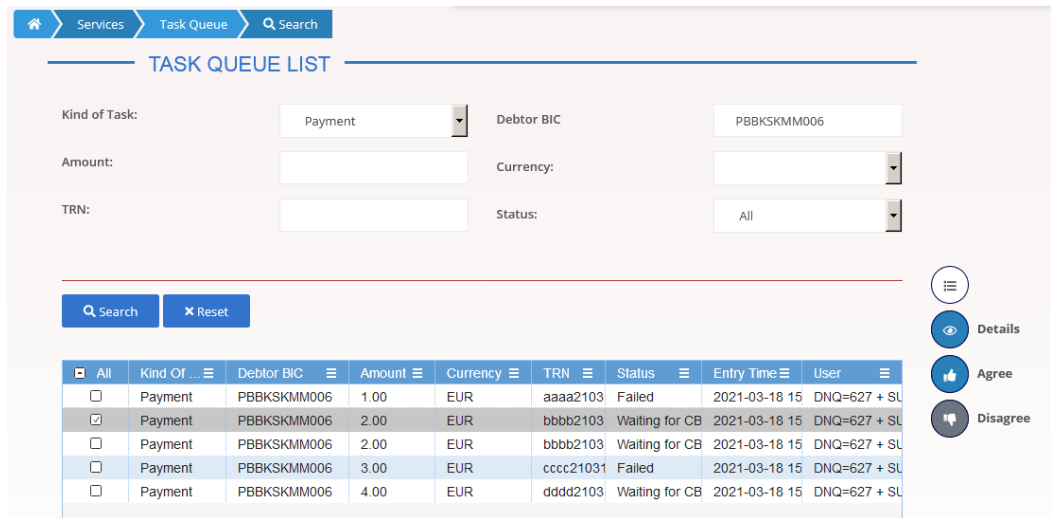
⇨ The Task Queue List is displayed.

4. Select the payment of interest and click on the *Details* button.
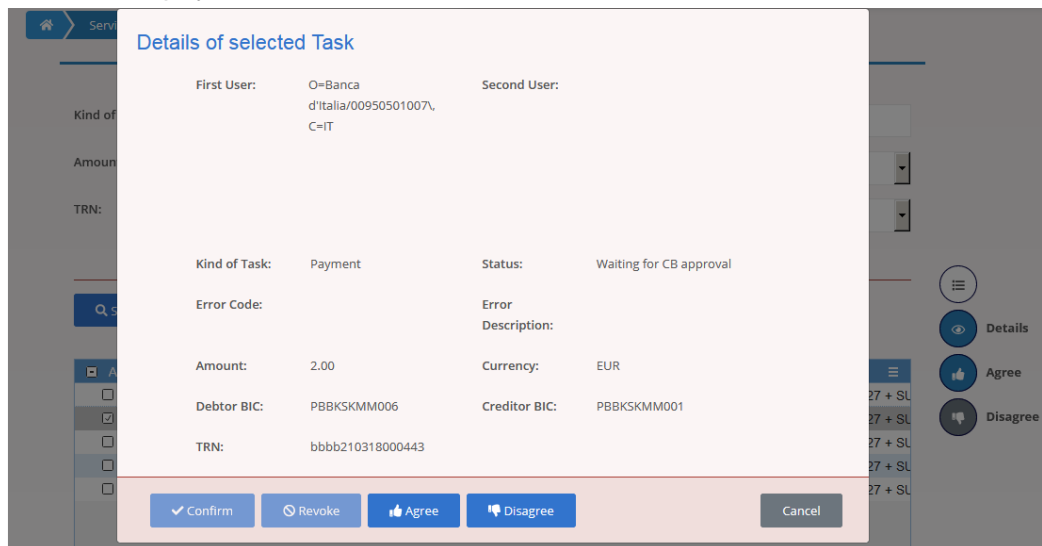
⇨ The Task Queue Details are displayed.

5. Finally, only Central Banks' users can Agree or Disagree the displayed task, clicking on the relevant buttons both in the details screen than in the list screen.

⇨ The Task is agreed/disagreed.

6. Alternatively, only Central Banks' users can choose to select more than a row from the Task Queue List screen directly, and then Agree or Disagree all the ones selected by clicking on the relevant buttons.

➡ The Tasks are agreed/disagreed.

3.3 Liquidity Management

3.3.1 Select a Participant and Display the Current Liquidity

Context of Usage

This business package describes all activities the authorised users can perform in order to check online information about participant data, available liquidity and block/unblock status, in their explicit area of responsibility. Central Banks' users only can also block/unlock a selected account and use the "Modify Liquidity" button, whose business case is described further.

Privileges

To carry out this business scenario, the user needs the following privilege:

❚ Query Contingency Account and Balance

❚ Block/Unblock Contingency Account (for CBs only)
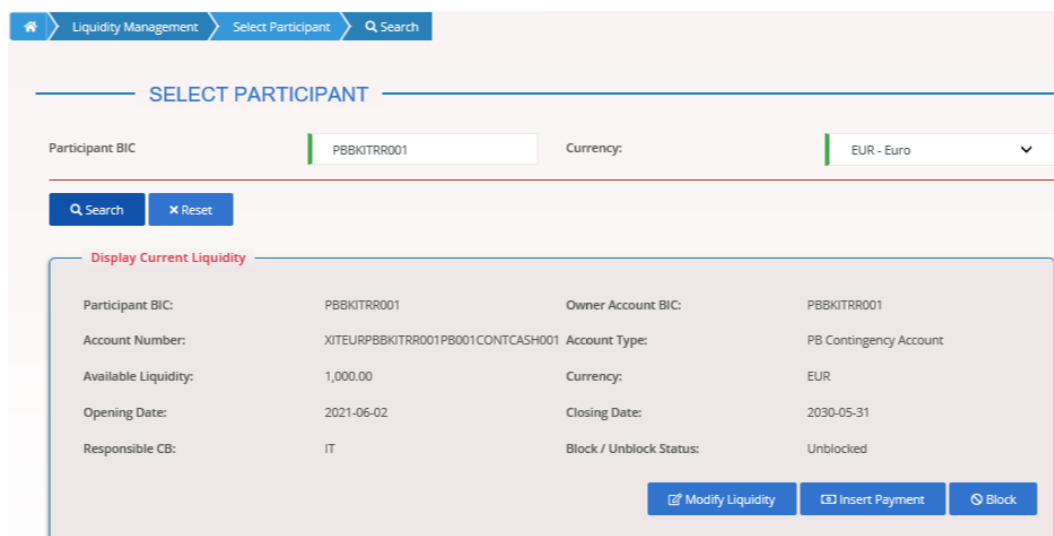
Reference

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

❚ *Select Participant – Search/List screen* [▸]

❚ *Display Current Liquidity* [▸]

Instructions

1. Go to the *Select Participant – Search/List* screen:
   Liquidity Management >> Select Participant >> Select Participant – Search Screen.

   ⇨ The *Select Participant – Search/List* screen is displayed.

2. Enter or select the 'Participant BIC' of interest for the user. In the following example, this field was set to PBBKITRR001.
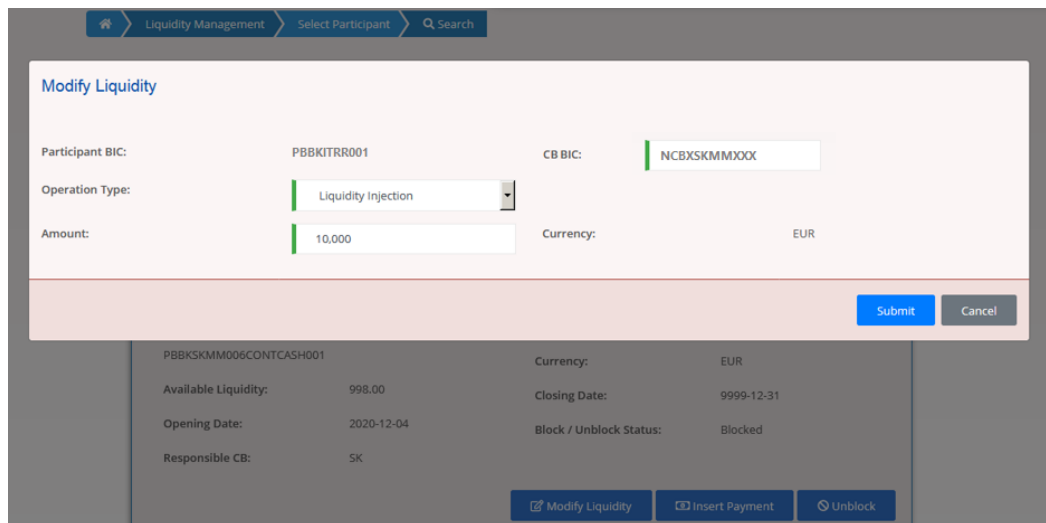
3. Click on the *Search* button.

⇨ The Display Current Liquidity screen is displayed.

4. Finally, Central Banks' users only can Block or Unblock the account displayed, clicking on the relevant button.

➡ The Account is blocked/unblocked.

3.3.2 Modify the Participant Liquidity

Context of Usage
This business package describes all activities the authorised users can perform in order to modify the liquidity of a participant. This scenario is only relevant for Central Banks' users.

Privileges
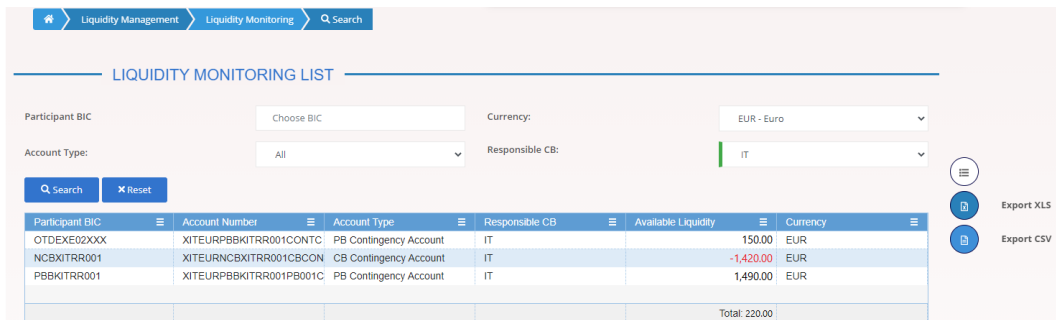To carry out this business scenario, the user needs the following privilege:

❚ Query Contingency Account and balance

❚ Modify liquidity (for CBs only)
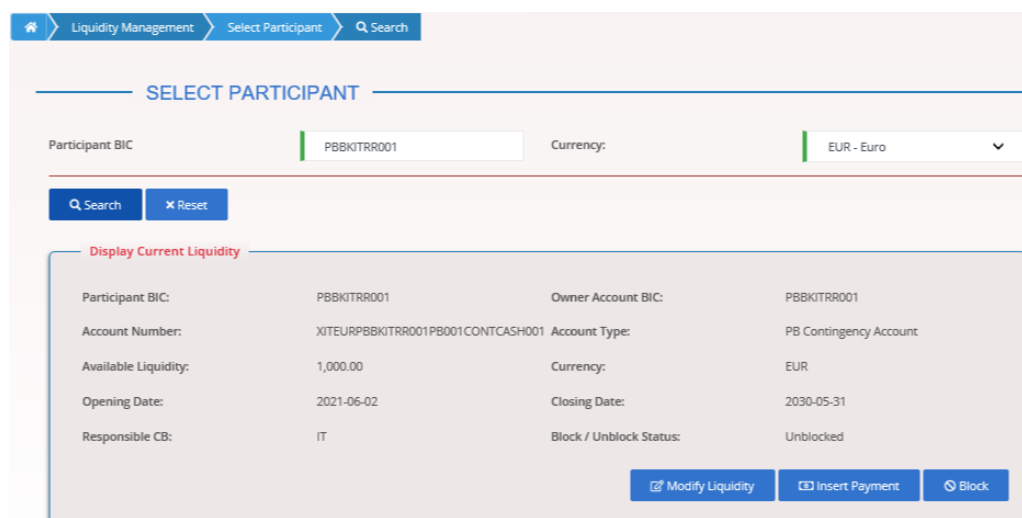
Reference
Further information on screens involved can be found in the screen reference part:

❚ *Modify Liquidity* [▶]

Instructions
1. Go to the *Select Participant – Search/List* screen:
   Liquidity Management >> Select Participant >> Select Participant – Search Screen.

   ⇨ The *Select Participant – Search/List* screen is displayed.

2. Enter or select the 'Participant BIC' of interest for the user. In the following example, this field was set to PBBKITRR001.

3. Click on the *Search* button.

⇨ The Display Current Liquidity screen is displayed.

4. Click on the *Modify Liquidity* button.

⇨ The Modify Liquidity screen is displayed.

5. Select the 'Operation Type' of interest and enter the required 'Amount'. In the example above, these fields were set to Liquidity Injection and 10.000 respectively.

6. Click on the *Submit* button.

➡ The action is performed.

3.3.3 Insert a Payment for the Participant

Context of Usage This business package describes all activities the authorised users can perform in order to insert a payment for a participant. All users are allowed to instruct payments for themselves, while the Central Banks' users are also allowed to instruct payments on behalf of their participants.

Privileges To carry out this business scenario, the user needs the following privilege:

❚ Query Contingency Account and balance

❚ Insert Payment

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

❚ *Insert Payment* [▶]

Instructions 1. Go to the *Select Participant – Search/List* screen:
Liquidity Management >> Select Participant >> Select Participant – Search Screen.

⇨ The *Select Participant – Search/List* screen is displayed.

2. Enter or select the 'Participant BIC' of interest for the user. In the following example, this field was set to PBBKITRR001.

3. Click on the *Search* button.

⇨ The Display Current Liquidity screen is displayed.

4. Click on the *Insert Payment* button.

⇨ The Insert Payment screen is displayed.

5. Enter the 'Creditor BIC' of interest and the required 'Amount'. In the example above, these fields were set to PBBKSKMM006 and 15.000 respectively.

6. Click on the *Submit* button.

➡ The action is performed.

3.3.4 Monitor the Liquidity

Context of Usage

This business package describes all activities the authorised CB users can perform in order to monitor the overall liquidity on all accounts of their participants. It also allows to export the searched data (i.e. in .xlsx or .csv format). This scenario is only relevant for Central Banks' users.

Privileges

To carry out this business scenario, the user needs the following privilege:

❚ Query Liquidity Monitoring on CB Level

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

❚ *Liquidity Monitoring – Search/List screen* [▶]

Instructions 1. Go to the *Liquidity Monitoring – Search/List* screen:

Liquidity Management >> Liquidity Monitoring >> Liquidity Monitoring – Search/List Screen

⇨ The *Liquidity Monitoring – Search/List* screen is displayed.

2. In the following example, the 'Responsible CB' field is already set to IT for the related Central Bank user. It also possible to then select the 'Currency, the 'Account Type' and enter a 'Participant BIC'.

3. Click on the *Search* button.

⇨ The Liquidity Monitoring List is displayed.

4. Users can now export the searched data in .xlsx or .csv format, by clicking on the relevant buttons.

➡ The data is exported.

3.4 Payments
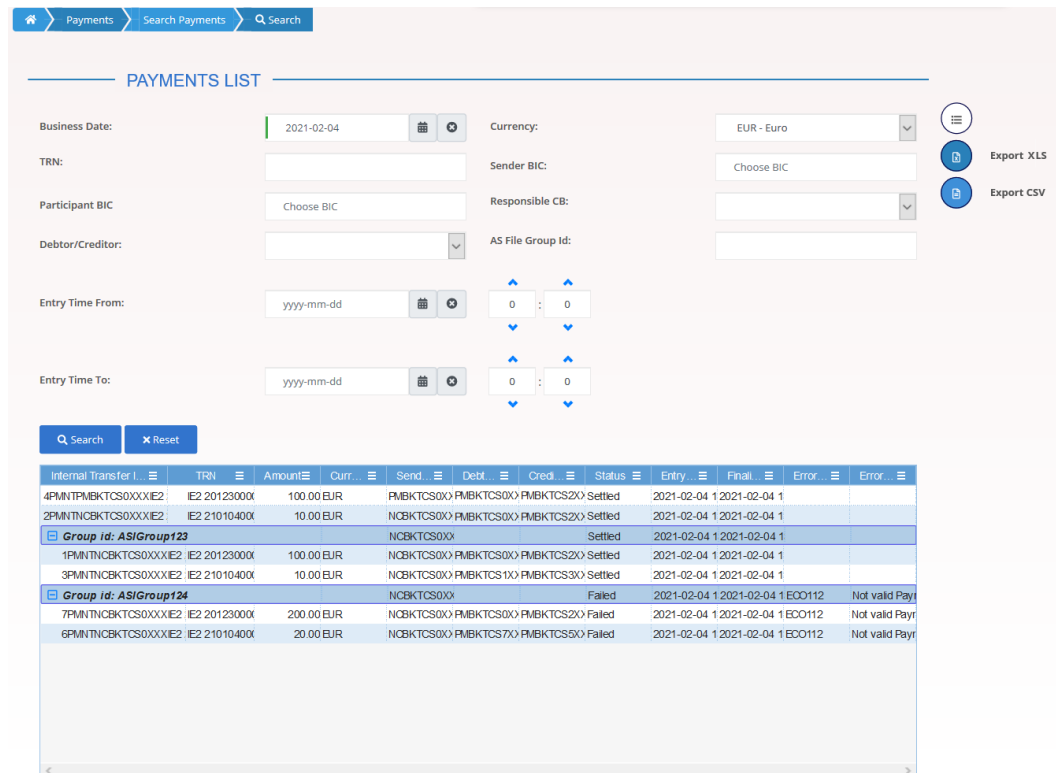
3.4.1 Querying Payments

Context of Usage

This business package describes all activities the authorised user can perform for displaying the list of the Payments.

Privileges

To carry out this business scenario, the user needs the following privilege:

❙ Query Payments

Reference

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

❙ *Payments – Search/List screen* [▶]

Instructions

1. Go to the *Payments – Search/List* screen:

   Payments >> Search Payments >> Payments – Search/List Screen

   ⇨ The *Payments – Search/List* screen is displayed.

2. Enter or pick the 'Business Date' of interest for the user.

3. Click on the *Search* button.

⇨ The List of Payments is displayed.

4. Finally, users can export the Payments, clicking on the relevant buttons.

   ➡ The list of Payments is exported.

3.5 Digital Signature (NRO)

Overview

This business section describes in a general way the interaction of the actors with the Digital Signature.

Application of a Digital Signature is applicable for the following GUI screens when performing the listed actions:

Digital Signature	
Display System Status screen	▍ Close Contingency (Operator Only) ▍ Start Maintenance Window (Operator Only) ▍ Stop Maintenance Window (Operator Only) ▍ Disable (Agree/Disagree functionality) (Operator Only) ▍ Activate (Agree/Disagree functionality) (Operator only)
Open Contingency pop-up (Operator only)	▍ Submit
Change Business Date pop-up (Operator only)	▍ Submit
Task Queue - List screen	▍ Agree (CB Only) ▍ Disgree (CB Only)
Task Queue - Details screen	▍ Confirm ▍ Revoke ▍ Agree (CB Only) ▍ Disgree (CB Only)
Open Account screen (Operator only)	▍ Submit
Select Participant - Display Current Liquidity - Modify Liquidity screen (CB only)	▍ Submit
Select Participant - Display Current Liquidity - Insert Payment screen	▍ Submit

| Select Participant - Display Current Liquidity screen - Block/Unblock (CB only) | ❙ Block
❙ Unblock |

Business Scenario

The actor that is performing a business scenario linked to the screens and the buttons listed above must consider these steps as part of the specific business scenario.

1. Select the needed item or input the desired values, then click on the action button.

2. Once prompted with the request of inserting the PIN associated with the digital identity, insert the PIN and click the OK button.
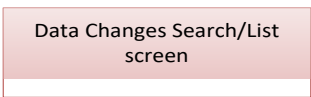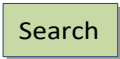
➔ ☐ The action initiated by the actor is concluded and the request is digitally signed.

4 Annex

4.1 Sitemap

In the following sub-sections the reader may find the hierarchical, structured illustration of all the ECONS II screens and their interrelations.

The user can find below the legend which explains the meaning of each object, i.e. screen, button, dotted (blue) arrow, solid (red) arrow illustrated in the following diagrams.

| Object in the diagram	Description
Data Changes Search/List screen	The object represents a screen.
---------------->	When a button is displayed on the screen, a dotted blue arrow is shown as a link between the screen and the corresponding button.
Search	The object represents a button which is shown in the relevant screen.
⬅————	After a button is pressed, the result can be displayed either on the same screen or in a different screen (e.g. the details screen).

4.1.1 Display Current Liquidity
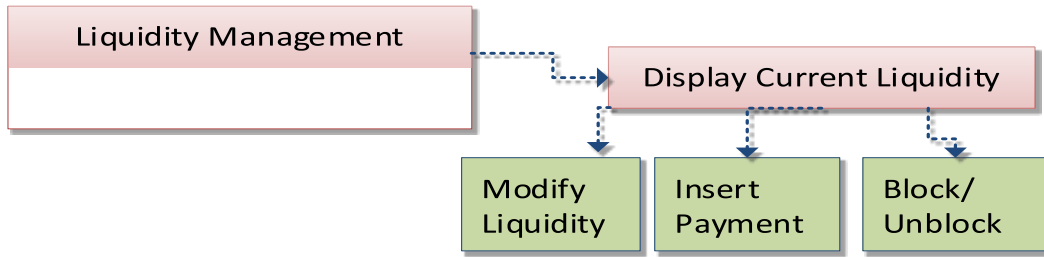
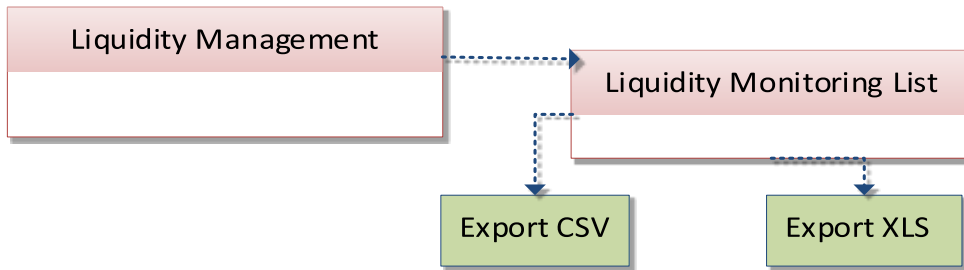### 4.1.2 Display System Status – Details Screen
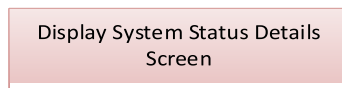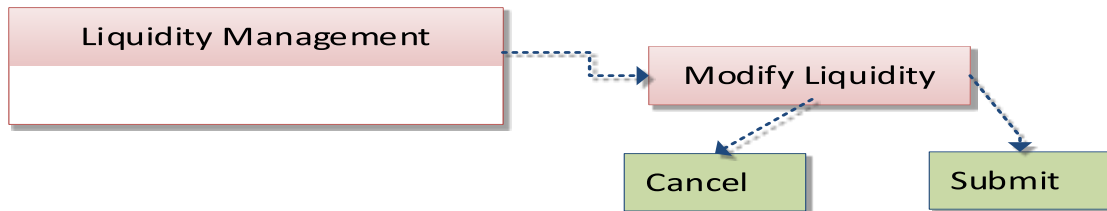

4.1.3 Insert Payment
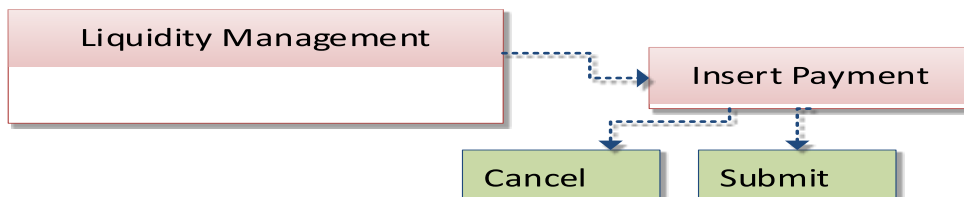
4.1.4 Liquidity Monitoring – Search/List Screen

```
Liquidity Management ----> Liquidity Monitoring List
        |                           |
        v                           v
   Export CSV                  Export XLS
```

4.1.5 Modify Liquidity

```
Liquidity Management ----> Modify Liquidity
                           /            \
                          v              v
                      Cancel          Submit
```

4.1.6 Payments – Search/List Screen

```
            Payments Search/List Screen
           /        |        |        \
          v         v        v         v
       Reset     Search   Export CSV  Export XLS
```

4.1.7 Select Participant – Search Screen

```
Liquidity Management ----> Select Participant
                           /            \
                          v              v
                       Reset          Search
```
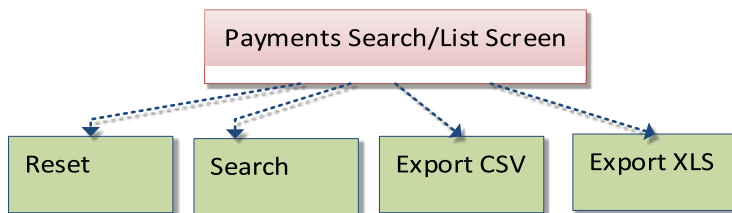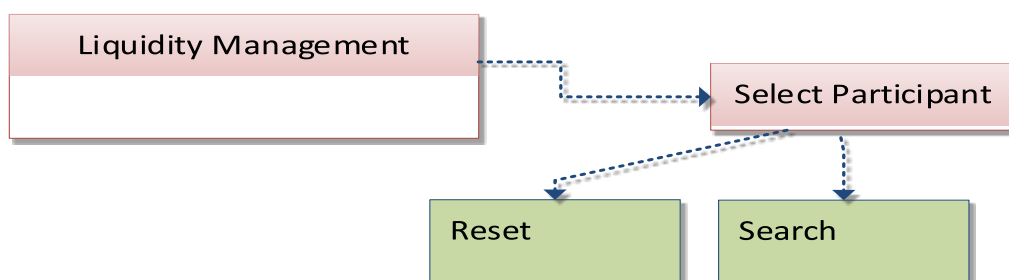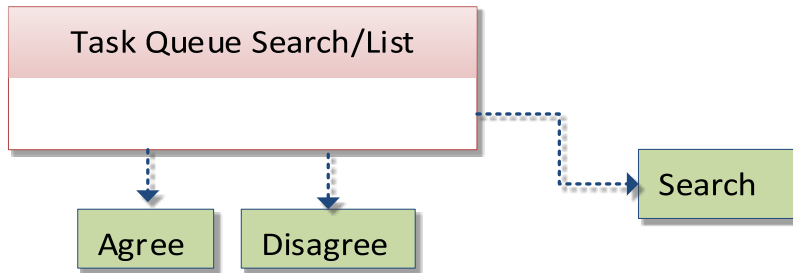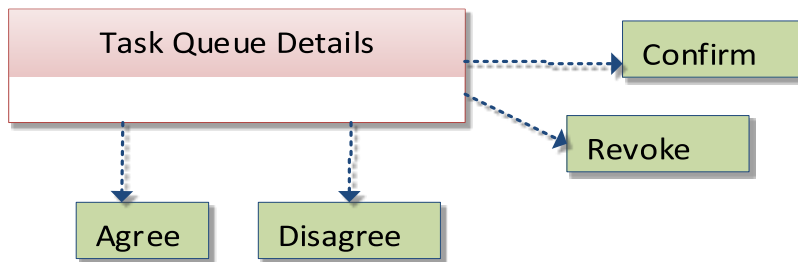
4.1.8 Task Queue – Search/List Screen

4.1.9 Task Queue – Details Screen

4.2 List of Privileges

4.2.1 Reader's Guide

Reader's Guide
The list of privileges is structured in accordance with the alphabetical screen order and provides detailed information on privilege code, privilege type, object type and screen criteria related to each privilege.

4.2.2 Privileges for GUI Screens

4.2.2.1 Display Current Liquidity

Privilege	Privilege Code	Screen Criteria
Query Contingency Account and Balance	ECO_QueryContingencyAccBalance	n/a
Block/Unblock Contingency Account (for CBs only)	ECO_BlockContAccount	Block/Unblock button (for CBs only)

| Modify liquidity (for CBs only) | ECO_ModifyLiquidity | Modify Liquidity button (only for CBs) |
| Insert Payment | ECO_InsertPayment | Insert Payment button (not for Ancillary System) |

4.2.2.2 Display System Status – Details Screen

Privilege	Privilege Code	Screen Criteria
Query ECONS II Business Day Information	ECO_QueryBusDayInfo	n/a

4.2.2.3 Insert Payment

Privilege	Privilege Code	Screen Criteria
Query Contingency Account and Balance	ECO_QueryContingencyAccBalance	n/a
Insert Payment	ECO_InsertPayment	Insert Payment button (not for Ancillary System)

4.2.2.4 Liquidity Monitoring – Search/List Screen

Privilege	Privilege Code	Screen Criteria
Query Liquidity Monitoring on CB Level	ECO_QueryAggregatedLiquidity	n/a

4.2.2.5 Modify Liquidity

Privilege	Privilege Code	Screen Criteria
Query Contingency Account and Balance	ECO_QueryContingencyAccBalance	n/a
Modify liquidity (for CBs only)	ECO_ModifyLiquidity	Submit button

4.2.2.6 Payments – Search/List Screen

Privilege	Privilege Code	Screen Criteria
Query Payments	ECO_QueryPayments	n/a

4.2.2.7 Select Participant – Search Screen

Privilege	Privilege Code	Screen Criteria
Query Contingency Account and Balance	ECO_QueryContingencyAccBalance	n/a

4.2.2.8 Task Queue – Search/List Screen

Privilege	Privilege Code	Screen Criteria
Query Task Queue	ECO_QueryTaskList	n/a
Agree/Disagree transaction (for CBs only)	ECO_AgreeDisagreeTransaction	Agree/Disagree button

4.2.2.9 Task Queue – Details Screen

Privilege	Privilege Code	Screen Criteria
Query Task Queue	ECO_QueryTaskList	n/a
Modify liquidity (for CBs only)	ECO_ModifyLiquidity	Confirm/Revoke button
Insert Payment	ECO_InsertPayment	Confirm/Revoke button
Block/Unblock Contingency Account (for CBs only)	ECO_BlockContAccount	Confirm/Revoke button
Agree/Disagree transaction (for CBs only)	ECO_AgreeDisagreeTransaction	Agree/Disagree button

4.3 List of References for Error Messages

4.3.1 Reader's Guide

Reader's Guide	This section includes a list of references for error messages for all screens. The list of references for error messages consists of a general section, which lists overall error codes that apply to all GUI screens, and a section listing all error codes relevant for using the 4-eyes mode in GUI screens. For all sections, these are followed by specific sections for individual screens, which are organised in alphabetical screen order and specify the respective error codes applicable for each screen. Each error code table entry includes the error text and the description.

4.3.2 References for error messages for GUI screens

4.3.2.1 Display Current Liquidity

Reference for error message	Field or Button	Error Text	Description
ECO1001	▌Block/Unblock button	Double input	Action performed shall not be in conflict with other pending action already performed in parallel by other users (i.e. confirmation of 4-eyes task).
ECO1004	▌Modify Liquidity button ▌Insert Payment button ▌Block/Unblock button	Operation not Allowed	ECONS II must be in status "OPEN".

4.3.2.2 Displayed System Status

No references for error messages.

4.3.2.3 Insert Payment

Reference for error message	Field or Button	Error Text	Description
ECO0007	▌Submit button	Operation not allowed	Creditor and/or Debtor BIC and/or Contingency Account inserted in the relevant field(s) must refer to allowed Contingency Account Type (e.g. Contingency Technical Account not allowed)
ECO0009	▌Submit button	Operation not allowed	Creditor BIC/Account and Debtor BIC/Account cannot be equals
ECO0025	▌Submit button	Data not found	In case the mandatory fields <CdtrAcct> and <DbtrAcct> are populated with creditor and debtor Contingency Accounts, then these accounts must be active in ECONS II. In case they are populated with codeword "NONREF", then BICs, active in ECONS II, must be present in optional fields <Cdtr> and <Dbtr>.
ECO0027	▌Amount field ▌Submit button	Insufficient Liquidity	The inserted amount must be lower or equal than the balance of the debited Contingency Account.
ECO1004	▌Submit button	Operation not Allowed	ECONS II must be in status "OPEN".

4.3.2.4 Liquidity Monitoring – Search/List Screen

Reference for error message	Field or Button	Error Text	Description
ECO1005	❚ Participant BIC field ❚ Search button	Operation not Allowed	Selection not Allowed (i.e. Participant not included in the data scope).

4.3.2.5 Modify Liquidity

Reference for error message	Field or Button	Error Text	Description
ECO0007	❚ Submit button	Operation not allowed	Creditor and/or Debtor BIC and/or Contingency Account inserted in the relevant field(s) must refer to allowed Contingency Account Type (e.g. Contingency Technical Account not allowed)
ECO0025	❚ Operation Type field (injection operation) ❚ Submit button	Data not found	In case the mandatory fields <CdtrAcct> and <DbtrAcct> are populated with creditor and debtor Contingency Accounts, then these accounts must be active in ECONS II. In case they are populated with codeword "NONREF", then BICs, active in ECONS II, must be present in optional fields <Cdtr> and <Dbtr>.
ECO0027	❚ Operation Type field (drain operation) ❚ Amount field ❚ Submit button	Insufficient Liquidity	The inserted amount must be lower or equal than the balance of the debited Contingency Account.
ECO1004	❚ Submit button	Operation not Allowed	ECONS II must be in status "OPEN".

4.3.2.6 Payments – Search/List Screen

Reference for error message	Field or Button	Error Text	Description
ECO1005	❚ Search button ❚ Sender BIC field ❚ Participant BIC field	Operation not Allowed	Selection not Allowed (i.e. Participant not included in the data scope).
ECO1012	❚ Search button ❚ Entry Time From field ❚ Entry Time To field	Wrong selection	Wrong selection in "Entry Time" selection

4.3.2.7 Select Participant – Search Screen

Reference for error message	Field or Button	Error Text	Description
ECO0015	❙ Search button	Operation not Allowed	ECONS II must be in status "OPEN", "LOCK" or "CLOSING".
ECO1005	❙ Participant BIC field ❙ Search button	Operation not Allowed	Selection not Allowed (i.e. Participant not included in the data scope).

4.3.2.8 Task Queue – Search/List Screen

Reference for error message	Field or Button	Error Text	Description
ECO0022	❙ Search button ❙ Agree button ❙ Disagree button	Operation not Allowed	ECONS II shall be in status "OPEN".
ECO1001	❙ Agree button ❙ Disagree button	Double input	Action performed shall not be in conflict with other pending action already performed in parallel by other users (i.e. confirmation of 4-eyes task).
ECO1005	❙ Debtor BIC field ❙ Search button	Operation not Allowed	Selection not Allowed (i.e. Participant not included in the data scope).
ECO1011	Selection All Details button	Operation not Allowed	Selection not Allowed (e.g. Selection not included in the data scope or more than one task has been selected).

4.3.2.9 Task Queue – Details Screen

Reference for error message	Field or Button	Error Text	Description
ECO0009	❙ Debtor BIC field ❙ Creditor BIC field	Operation not allowed	Creditor BIC/Account and Debtor BIC/Account cannot be equals.
ECO0022	❙ Confirm button ❙ Revoke button ❙ Agree button ❙ Disagree button	Operation not Allowed	ECONS II shall be in status "OPEN".
ECO1001	❙ Confirm button ❙ Revoke button ❙ Agree button ❙ Disagree button	Double input	Action performed shall not be in conflict with other pending action already performed in parallel by other users (i.e. confirmation of 4-eyes task).
ECO1003	❙ Confirm button	Invalid Requestor (must be different	Both in case of approval or revocation request (4-eyes second step), the

Reference for error message	Field or Button	Error Text	Description
	❙ Revoke button	from the first requestor)	requestor must be different from the requestor of the first step.
ECO1010	❙ Confirm button ❙ Revoke button	Record not found	In case of approval request (4-eyes second step), the request must refer to an existing instruction.