General Information (Origin of Request)
☒ User Requirements Document (URD)
☐ Other User Functional or Technical Documentation (SYS)
☐ Other TIPS Documentation (OTD)

Request raised by:	Date raised:
TIPS Consultative Group	January 2020 (request of reassessment: November 2022 and May 2023) [Updated 19.12.2024 to amend the scope of the CR (reduced scope: U2A implementation only)]

Request title:	Name of Central Bank:	Request ref. no:
TIPS Broadcasts – U2A implementation	European Central Bank	TIPS CR.0014.URD

Categorisation of changes	
1. Functional/technical importance parameter: Medium	4. Legal importance parameter: Low
2. Operational importance parameter: High	5. Financial importance parameter: Low
3. Stakeholder importance parameter: Medium	
Status: DA approved by TIPS-WG	

Description of requested change:

TIPS shall allow the Operator, Central banks and L3 Parties[1] to create and send broadcasts through the User-to-Application (U2A) channel. The Operator shall have the possibility to decide whether to send Broadcast messages to all parties or to parties belonging to users of a specific currency. Central banks and L3 Parties shall have the possibility to decide whether to send Broadcasts to all parties or to parties using the same currency as them.

Reason for change and expected benefits/business motivation:

TIPS participants need prompt notice in case of insolvency or unavailability of a party, but there is currently no broadcasting mechanism covering TIPS on a 24/7/365 basis.

The objective of change request TIPS-0014-URD (in reduced scope) is to introduce the possibility for TIPS Actors to create, send and receive Broadcasts in TIPS. They can either be general notifications or operational notifications regarding the suspension/unavailability either planned or due to an incident of a party in TIPS.

In the latter case, the same Broadcast mechanism would be used by TIPS Actors to send a subsequent broadcast message to inform on the availability or the lifting of the suspension of that party.

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[1] The party model of CRDM is based on a hierarchical three-level structure. The CRDM Operator is the only party on the top level of the hierarchy and it is responsible for the setup of each party of the second level, i.e. each Central Bank. Similarly, each party belonging to the second level (i.e. a Central Bank) is responsible for the setup of all parties of its community (i.e. Payment Banks), represented by parties of the third level (L3). A Payment Bank can participate in TIPS as a TIPS Participant or as a reachable Party.

The Broadcast mechanism shall be available in TIPS on a 24/7/365 basis.

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Submitted annexes / related documents:

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Proposed wording for the Change request:

TIPS UDFS R2023.NOV

1) §1.2.5 Graphical user interface (Amendment of Table 1 – TIPS U2A Functions)

Table 1 – TIPS U2A functions

Function	Actor
[…]	[…]
Initiate Outbound Liquidity Transfer	TIPS Participant, Instructing Party[3], CB, TIPS Operator
Query Broadcast	TIPS Participant, Ancillary System, Instructing Party, CB, TIPS Operator
Create Broadcast	TIPS Participant, Ancillary System, Instructing Party[4], CB, TIPS Operator

2) **§2.3 Overview of the Graphical User Interface (Amendment of Table 2 – Functions available in TIPS GUI)**

Table 2 – Functions available in TIPS GUI

Type	Description
Query	Account balance and status query
Query	CMB limit and status query
Query	Payment Transaction status query
Query	Liquidity Transfer status query
Query	Payment Transaction Advanced status query
Query	Liquidity Transfer Advanced status query
Query	Broadcast
Local reference data	Blocking/Unblocking of a Participant
Local reference data	Blocking/Unblocking of an Account
Local reference data	Blocking/Unblocking of a CMB
Local reference data	Increase/Decrease of a CMB limit
Task Management	Task List
Liquidity management	Enter Liquidity transfer Order[5]
Broadcast	Enter Broadcast

3) **§2.3.1 SITEMAP (AMENDMENT OF THE ILLUSTRATION OF GUI SCREENS UNDER §2.3.1.1 HOMEPAGE)**

The new illustration will include an additional screen related to the Broadcast functionality.

4) **§2.3.1 SITEMAP (NEW ILLUSTRATION UNDER NEW SECTION §2.3.1.7 BROADCAST)**

The new illustration will show the Broadcast GUI screen following its business logic, starting with search/list screen, following with details and enter functions.

5) **§2.3.3.1 MENU STRUCTURE**

The screenshot included in this section will be updated

6) **§2.3.3.2 SCREEN STRUCTURE**

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

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[5] Outbound liquidity transfers are allowed during the operating times of the respective RTGS.

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

The screenshot "Screenshot with header elements" will be updated.

Table 3 – GUI header elements

Position	Element	Description
1	*TIPS logo* button	The element 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 panel	It displays the login name, the *logout* and *help* buttons as well as date and time of last data access.
3	Menu bar	It presents the menu items and allows the user to navigate to the screens.
4	Broadcast box	It displays a preview of the most recent unread broadcast and the Broadcast button indicating the number of unread broadcasts.

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. It also contains a ticker line providing the user with the latest information. The ticker is managed by the TIPS Operator.

[…]   […]

Enter screen   Similar to the *details* screens, the user can only access the *enter* screens through the main menu. This type of screen is used to enter reference data modification, inject an Outbound Liquidity Transfer, ~~and~~ Approve/Revoke tasks and send broadcasts.

7) (NEW SECTION) §4.1.5 QUERY BROADCAST

The Broadcast query allows the authorised actor to search for broadcasts, which are still available in the system.

8) (NEW SECTION) §4.1.5.1 BROADCAST – SEARCH/LIST SCREEN

Context of Usage	This screen contains a number of search fields. By inputting the relevant data, the user can look up and display the list of broadcast messages that are currently available in TIPS. The search results will be displayed in a list, which is sorted by the values of the Timestamp related to the creation of the broadcast in descending order. Users belonging to Central Banks, TIPS Participants, TIPS Ancillary Systems and Reachable Parties are entitled to view broadcasts addressed to all users and to users of their currency. The Operator can view all broadcasts.
Screen Access	❙ Broadcast box >> Click on the *Broadcast* button >> *Search/List* Screen
Privileges	To access this screen, the following Privilege is needed: • Display TIPS Broadcast
Screenshot	(The screenshot of the Broadcast – Search/List screen will be included)

Field description

Broadcast: Search criteria	
Status	Select the status of the broadcast from the possible values: ❙ All; ❙ Unread (Default Value); ❙ Read.
Timestamp of creation from	Enter the lower bound of the date and time from which the broadcast was created or use the calendar icon. Required format is: YYYY-MM-DD hh:mm:ss (References for error messages will be included)
Timestamp of creation to	Enter the upper bound of the date and time from which the broadcast was created or use the calendar icon. Required format is: YYYY-MM-DD hh:mm:ss (References for error messages will be included)
Sender	Enter or select the BIC of the sender. Format is BIC11. (References for error messages will be included)
Recipients	Select the recipients of the broadcast from the possible values: ❙ All (Default Value) ❙ All Users; ❙ Users by currency.
Currency	Select the currency from the list of settlement currencies available in TIPS. This search criterion is enabled only when 'Users by currency' is selected in the Recipients field. It is disabled in all the other scenarios. Default value is EUR.

Broadcast Type	Select the type of broadcast from the possible values: ❙ All (Default Value) ❙ Immediate Downtime Start ❙ Immediate Downtime End ❙ Planned Downtime ❙ Insolvency ❙ Free Text
Party BIC	Enter or select the BIC of the party to which the broadcast refers. Format is BIC8 or BIC11. (References for error messages will be included)

Broadcast: List	
Status	Shows the status of the broadcast. Possible values are: ❙ Unread; ❙ Read.
Timestamp of creation	Shows the timestamp at which the broadcast was created. Displayed format is: YYYY-MM-DD hh:mm:ss
Sender	Shows the BIC of the sender. Displayed format is: BIC11
Recipients	Shows the recipients of the broadcast. Possible values are: ❙ All Users; ❙ Users by currency.
Currency	Shows the currency to which the broadcast refers to. The field is empty if the Broadcast has been dispatched to 'All Users'.
Broadcast Type	Shows the type of broadcast. Possible values are: ❙ Immediate Downtime Start ❙ Immediate Downtime End ❙ Planned Downtime ❙ Insolvency ❙ Free Text
Party BIC	Shows the BIC of the party to which the broadcast refers. Displayed format is: BIC8 or BIC11

Buttons		
	Search	This function enables the user to start a search according to the criteria entered. The results are displayed in a list on the same screen. If the search retrieves a single record, the details screen is displayed. (References for error messages will be included)
	Reset	This function enables the user to set all fields to default value and blanks out all optional fields.
	Details	This function enables the user to display the details of the selected broadcast.
	New	This function enables the user to access the Broadcast – New screen.

9) (NEW SECTION) §4.1.5.2 BROADCAST – DETAILS SCREEN

Context of Usage   This screen allows the authorised actor to get detailed information on the selected broadcast. The status of the broadcast is updated automatically when details are displayed to the user. The broadcast status is then set to 'Read'.

Screen Access   ▌ Broadcast box >> Click on the *Broadcast* button >> *Search/List* Screen >> *List* screen
>> Click on the *Details* button
▌ Broadcast box >> Click on the preview of the unread broadcast displayed in the Broadcast box.

Privileges   To access this screen, the following Privilege is needed:
- Display TIPS Broadcast

Screenshot

(The screenshot of the Broadcast – Details screen will be included)

Broadcast - Details	
Object	**Description**
Status	Shows the status of the broadcast. Possible values are: ▌ Unread (Default Value); ▌ Read
Timestamp of creation	Shows the timestamp at which the broadcast was created. Displayed format is: YYYY-MM-DD hh:mm:ss
Sender	Shows the BIC of the sender. Displayed format is: BIC11
Recipients	Shows the recipients of the broadcast. Possible values are: ▌ All Users; ▌ Users by currency
Currency	Shows the currency to which the broadcast refers to.

Field description

	The field is empty if the Broadcast has been dispatched to 'All Users'.
Broadcast Type	Shows detailed information about the type of broadcast. Possible values are: ▎ Immediate Downtime Start ▎ Immediate Downtime End ▎ Planned Downtime ▎ Insolvency ▎ Free Text
Party BIC	Shows the BIC of the party to which the broadcast refers. Displayed format is: BIC8 or BIC11
Planned Downtime Start	If the type of the selected broadcast is 'Planned Downtime', the field shows the timestamp as of which the downtime is expected to start, expressed in UTC format. Displayed format is: YYYY-MM-DD hh:mm:ss
Planned Downtime End	If the type of the selected broadcast is 'Planned Downtime', the field shows the timestamp as of which the downtime is expected to terminate, expressed I UTC format. Displayed format is: YYYY-MM-DD hh:mm:ss
Text	Shows the text content of the broadcast.

10) (NEW SECTION) §4.7 BROADCAST

Broadcasts are information messages that TIPS simultaneously provides to users through the U2A interfaces. The Broadcast functionality is used by a TIPS Actor to send general notifications or operational notifications. It enables a TIPS Actor to inform other participants in TIPS about the suspension or the unavailability of a party.

11) (NEW SECTION) §4.7.1 BROADCAST – FUNCTIONALITY

12) (New Section) §4.7.1.1 Broadcast – New screen

Context of Usage	This screen contains a number of fields regarding broadcasts. The user can enter new data. Afterwards the user can proceed further by clicking on the buttons below and send manual broadcasts to all TIPS Actors or to those using the same currency

The screen allows the user to enter a message and to broadcast it to all TIPS Actors or to those using a specific currency.

Screen Access

❚ Broadcast box >> Click on the *Broadcast* button >> *Search/List* Screen >> Click on the *New* button

Privileges

To access this screen, the following Privilege is needed:

- New TIPS Broadcast

Screenshot

(The screenshot of the Broadcast – New screen will be included)

Field description

Broadcast - New	
Object	**Required Format**
Sender	This field is read-only and is automatically filled with the BIC of the party the user belongs to.
Recipients	Select the recipients of the broadcast from the possible values: ❚ All Users (Default Value); ❚ Users by currency. This field is mandatory. (References for error messages will be included)
Currency	Select the currency from the list of settlement currencies available in TIPS. The field is enabled only when 'Users by currency' is selected in the Recipients field. It is disabled in all the other scenarios. Default value is EUR.
Broadcast Type	The field enables the user to specify the type of broadcast. Possible values are: ❚ Immediate Downtime Start ❚ Immediate Downtime End ❚ Planned Downtime ❚ Insolvency ❚ Free Text This field is mandatory. (References for error messages will be included)
Party BIC	Enter the BIC of the Party to which the broadcast refers. Possible format is: BIC8 or BIC11. The field is disabled when the user selects "Free Text" as Broadcast Type. It is enabled and mandatory in all other cases. (References for error messages will be included)

Planned Downtime Start	Enter the starting timestamp of the planned downtime expressed in UTC format. Required format is: YYYY-MM-DD hh:mm:ss The 'Planned Downtime Start' must be equal or greater than the current timestamp. The field is enabled and mandatory if the user selects "Planned Downtime" in Broadcast Type field. It is disabled otherwise. (References for error messages will be included)
Planned Downtime End	Enter the ending timestamp of the planned downtime expressed in UTC format. Required format is: YYYY-MM-DD hh:mm:ss The 'Planned Downtime End' must be equal to or greater than the 'Planned Downtime Start' and equal to or greater than the current timestamp. The field is enabled and mandatory if the user selects "Planned Downtime" in Broadcast Type field. It is disabled otherwise. (References for error messages will be included)
Text	Enter the message content of the broadcast. If the user selects "Free Text" as Broadcast Type, the field is mandatory.

Buttons

Submit	This function enables the user to create a new broadcast. Upon clicking on the submit button the user will be asked to enter their PIN for digital signature purposes (NRO). With the entry of the PIN, TIPS attaches a digital signature to the instruction entered by the TIPS actor. Once submitted, the broadcast will be sent to the intended recipients through the U2A interfaces. The preview of the broadcast is displayed in the broadcast box on GUI screens of the recipient users. (References for error messages will be included)
Reset	This function enables the user to set all fields to default value and blanks out all optional fields.
Cancel	This function enables the user to cancel the process

13) (New Section) §5.5 Broadcast

14) (New Section) §5.5.1 Enter Broadcast

Context of Usage	This business scenario describes how to enter a message and broadcast it to all TIPS Actors. This functionality is needed every time a TIPS Actor needs to inform other participants about the suspension or unavailability of a party.
Privileges	To carry out this business scenario, the following Privilege is needed: • New TIPS Broadcast
Reference	Further information on screens involved can be found in the screen reference part: ❚ 4.7.1.3 Broadcast - New screen
Instructions	1. Go to the *Broadcast - new* screen 2. Enter the broadcast data (Recipients, Currency, Broadcast Type, Party BIC, Text, Planned Downtime Start/End Timestamp – if needed) 3. Click on the *Submit* button ➔ The Broadcast is sent

15) (New Section) §5.5.2 Query Broadcast

Context of Usage	This business scenario describes how to search and get detailed information regarding broadcasts that are currently available in TIPS.
Privileges	To carry out this business scenario, the following Privilege is needed: • Display TIPS Broadcast
Reference	Further information on screens involved can be found in the screen reference part: ❚ 4.7.1.1 Broadcast – Search/List screen ❚ 4.7.1.2 Broadcast – Details screen
Instructions	1. Go to the Broadcast – Search/List screen 2. Enter the Recipients, Currency, Broadcast Type or Party BIC as Search criteria 3. Click on the Search button ➔ The list, containing the search result, is displayed on the same screen. 4. Select the broadcast of interest. 5. Click on the *Details* button ➔ The *Broadcast – Details* screen, containing the message content, is displayed on the screen.

16) §6.1.1 Error Codes

The list of references for error messages will be updated with all the necessary entries related to Broadcast.

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17) §1.2.2.1.2 Privilege

Inclusion of two new privileges in table "Other":

PRIVILEGE	USER FUNCTION	DATA SCOPE
[…]		
New TIPS Broadcast	Allows submit a new Broadcast message	n/a
Display TIPS Broadcast	Allows to look up for Broadcasts and display the relevant details	n/a

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[6] All the remaining EPC scheme-related messages for TIPS, e.g. Recalls, Negative Recall Answers, Beneficiary Replies.

High level description of Impact:

The new broadcast functionality implies the creation of a new U2A functionality.

New privileges have to be defined in CRDM and propagated to TIPS in order to allow the sending of the broadcast.

Impacts on other projects and products:

No impact is foreseen on other TARGET services:

- T2: no impact
- ECMS: no impact
- T2S: no impact

Outcome/Decisions:

Following the TIPS-WG September 2024 meeting, the change request TIPS-0014-URD is being updated to amend the change request towards the new (reduced) scope, namely U2A functionality only. This updated change request has been allocated to TIPS R2025.JUN.

A new TIPS change request will be raised for A2A functionality, subject to further assessment of the need to also introduce it.

General Information	
Impact on TIPS	
Business Interface	
	A2A Interface
x	U2A Interface
Settlement Engine	
	Payment Transaction
	Liquidity Transfer
	Recall
Queries and Reports	
x	Queries
	Reports
Other functions	
x	Local Reference Data Management
	Statistics
	Complex Queries and Reports
	Mobile Proxy Look-up
	Testing Tool
	Contingency message application
Common Components	
	ESMIG
	CRDM
	Archiving
	Billing
	DMT
Operational Tools	
	SLA Reporting
	TMS
	Technical Monitoring
	Change Management
	Capacity Management

Infrastructure request	
x	Application components impacted
	Application components not impacted
Operational activities	
	Business activities impacted
	Technical activities impacted
New functionalities	
x	Broadcaster (new component)

Impact on documentation		
Document	**Chapter**	**Change**
TIPS UDFS	• §1.2.5 Graphical user interface	• Update of Table 1 – TIPS U2A Functions
CRDM UDFS	• §1.2.2.1.2 Privilege	• New privileges
TIPS UHB	• §2.3 Overview of the Graphical User Interface • §2.3.1 Sitemap • §2.3.3.1 Menu Structure • §2.3.3.2 Screen Structure • §4.1.5 Query Broadcast • §4.1.5.1 Broadcast – Search/List screen • §4.1.5.2 Broadcast – Details screen • §4.7 Broadcast • §4.7.1 Broadcast - Functionality • §4.7.1.1 Broadcast – New screen • §5.5 Broadcast • §5.5.1 Enter Broadcast • §5.5.1 Query Broadcast	• Update of Table 2 – Functions available in TIPS GUI • Update of the illustration of GUI screens under §2.3.1.1 Homepage) • New section related to Broadcast functionality • Inclusion of the Broadcast box in the header of the related screenshot. Amendment of the Table 3 – GUI header elements. • Update of the description of the Header and Enter screen • New section for Query Broadcast

	• §6.1.1 Error Codes	• New section for Broadcast – Search/List screen • New Section for Broadcast – Details screen • New section for Broadcast functionality • New section for Broadcast New screen • New sections for Broadcast screen user guide • New section for Broadcast screen user guide on how to enter a broadcast message • New section for Broadcast screen user guide on how to query broadcast messages • Update of the list of references for error messages related to broadcast
Training documentation	• 02. FN.010_TIPS overview_v1.2_0 – FINAL • 08. FN.070_Queries, reports and notifications_v1_2_1 - FINAL	• Update of available functionalities • Update to describe broadcast functionality
Other documents		

Overview of the impact of the request on TIPS
Summary of functional, development, infrastructure, operational and security impacts

Summary of functional impact:

The new broadcast functionality implies the creation of a new U2A functionality.

New privileges have to be defined in CRDM and propagated to TIPS in order to allow the look up and the sending of the broadcast.

An update of the TIPS functional documentation is required in the following areas:

- TIPS UDFS (general description);
- TIPS UHB (broadcast U2A functionality);
- CRDM UDFS (new privileges);
- TIPS Training material (adaptation of the current presentations).

Summary of application development impact:

The broadcast functionality as assessed in this CR is supposed to be "self-consistent" and it does not rely on any implementation in common with the other Target services, as the CSLD-CR-0008 is not supposed to be implemented anymore.

Impacted components:

- TIPS-GUI (for broadcast notification):
  - Every main screen of the TIPS GUI (not including the ESMIG portal) will be amended to have a section (banner) dedicated to the broadcast preview. Such a section will show the first part of

Level	Scope	U2A
Operator	All	All users see the message
Operator	Currency XXX	All users belonging to the community identified by currency XXX see the message
NCB	All	All users see the message
NCB	Currency XXX	All users belonging to the community identified by currency XXX see the message
Payment bank	All	All users see the message
Payment bank	Currency XXX	All users belonging to the community identified by currency XXX see the message

Change Request form

- o Push notification to GUI:
  When a broadcast message changes its status, i.e. it becomes active or it expires, the TIPS- GUI have to be notified in order to refresh the preview accordingly.

Summary of infrastructure impact:

Since CR-0042 TIPS RACE (Resilience And Continuity Enhancements) already introduced the new database Cockroach, then some additional configurations is required. Nodes (hypervisors, VMs, storage, …) have already been implemented with CR-0042, thus the infrastructural capacity is already there. Capacity post-CR-0042 is adequate. CR-0014 would then focus on configuration only.

Summary of operational impact:

Amendment of MOP (Manual Of Procedures) and MIP (Manual of Internal Procedures).

Summary of security impact:

See Change Request Analysis.