Change Request form

<table>
<tr>
<td colspan="5">General Information (Origin of Request)</td>
</tr>
<tr>
<td colspan="5">☒ User Requirements Document (URD)</td>
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<tr>
<td colspan="5">☐ User Detailed Functional Specification (UDFS)</td>
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<tr>
<td colspan="5">☐ User Handbook (UHB)</td>
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<tr>
<td colspan="5">☐ Other User Functional or Technical Documentation (SYS)</td>
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<tr>
<td colspan="5">(to be filled in by CoG)</td>
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<tr>
<td colspan="2">Request raised by:
TSWG</td>
<td colspan="3">Date raised: 01/03/2019</td>
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<tr>
<td colspan="2">Request title:
Outbound Liquidity Transfer Notifications</td>
<td colspan="2">Name of Central Bank:
Banco de España</td>
<td>Request ref. no:
TIPS 0013 URD</td>
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<tr>
<td colspan="5">Request category: Market participants.</td>
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<tr>
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<td colspan="2">4. Legal importance parameter: High</td>
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<td colspan="3">2. Operational importance parameter:</td>
<td colspan="2">5. Financial importance parameter: High</td>
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<td colspan="3">3. Stakeholder importance parameter:</td>
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<td colspan="5">Status: Allocated to a Release</td>
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Description of requested change:

- **Outbound Liquidity Transfer (from TIPS to RTGS):**
  - ○ **U2A:** A receipt (camt.025) keeps its current behaviour. TIPS will always forward the receipt to the distinguished name of the sender (who initiated the LT in U2A). The receipt is sent to the queue towards the GUI which shows the status of the LT. Moreover, the debtor account holder will receive a BankToCustomerDebitCreditNotification message (camt.054), if previously subscribed. This notification will be sent to the Party Technical Address for the account holder, that can contain the participant distinguished name or an instructing party distinguished name**.**
  - ○ **A2A:** A receipt (camt.025) keeps its current behaviour. TIPS will always forward the receipt to the distinguished name of the sender. Moreover, the debtor account holder will receive a BankToCustomerDebitCreditNotification message (camt.054), if previously subscribed. This notification will be sent to the Party Technical Address for the account holder, that can contain the participant distinguished name or an instructing party distinguished name**.**

    The same logic described for A2A scenario shall also apply to the Outbound Liquidity Transfer requested by the RTGS in 'pull' mode.

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Reason for change and expected benefits/business motivation:

Since TIPS go-live, participants and instructing parties have shown their need for receiving information on the debited TIPS DCA account in case of an outbound liquidity transfer in order to be able to reconcile their operations when they own or manage several DCAs.

In those cases, a receipt (camt.025) is generated, but no identification of the debited DCA is included. The aim of this change request is to provide the account holder with a BankToCustomerDebitCreditNotification message (camt.054) in both, U2A and A2A, modes, which includes the identification of the debited DCA account.

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Submitted annexes / related documents:

None

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Proposed wording update to the documentation to address the requested change:

The following wording changes are to be planned for this Change Request:

1) TIPS UDFS v2.0.0: §1.3.2.4 Reference data for accounts and CMBs in TIPS – Table 5

Table 1 – Account reference data

Attribute	Description
[…]	[…]
Credit Notification Flag	Boolean attribute specifying whether the account owner must receive a credit notification after the settlement of any inbound Liquidity Transfer from the relevant RTGS system.
Debit Notification Flag	Boolean attribute specifying whether the account owner must receive a debit notification after the settlement of any Outbound Liquidity Transfer to the relevant RTGS system.

Attribute	Description
Blocking Status	Blocking status for the TIPS account. Exhaustive list of possible values: - Blocked for credit; - Blocked for debit; - Blocked for credit and debit; - Unblocked.

[…]

2) TIPS UDFS v2.0.0: §2.5.2 Outbound Liquidity Transfer

[…]

The following Actors are involved in the outbound liquidity transfer business process:

- The Central Bank, the TIPS Participant or Instructing Party as instructor of the Liquidity Transfer;

- TIPS that receives and confirms the request from the instructor;

- The RTGS System that receives and confirms the request from TIPS.

- TIPS Account owner (or the default DN configured as receiver) which is duly informed if the account balance goes below the configured threshold. Additionally, if they subscribed to the debit notification, they will receive a debit notification after successful settlement confirmation from the RTGS.

The following messages are involved in the Outbound Liquidity Transfer business process:

- Liquidity Credit Transfer: the message which enables the sender to instruct the transfer liquidity from the TIPS Account to an RTGS account;

- Receipt: the message sent by TIPS to the TIPS Participant or Instructing Party or by the RTGS System to confirm/reject the execution of a Liquidity Transfer;

- BankToCustomerDebitCreditNotification: the message sent by TIPS to report the settlement of a Liquidity Transfer to the TIPS Account owner (or the default DN configured as receiver). The notification is sent out only if previously configured by the Account owner.

- ReturnAccount: the message sent by TIPS to notify the owner of the debited TIPS Account that the floor threshold is exceeded. The notification is generated for the Account owner only if the floor threshold is configured.

[…]

3) TIPS UDFS v2.0.0: §2.5.2 Outbound Liquidity Transfer – Figure 80

The diagram shall be updated in order to include the debit notification being sent to the account owner after successful settlement confirmed by the RTGS. This will imply the addition of the step 17p.

4) TIPS UDFS v2.0.0: §2.5.2 Outbound Liquidity Transfer – Table 43

New step for the delivery of the debit notification to the TIPS account owner.

Step	Involved messages	Involved actors	Description
[…]	[…]	[…]	[…]
16p	ReturnAccount	TIPS as sender TIPS Account owner as receiver	Once the status of the Outbound Liquidity Transfer Order is set to "*Settled*", TIPS checks the "Floor notification amount" configured for the involved Account to be debited. If the account balance is lower than the "floor notification amount", TIPS sends a ReturnAccount to the Account owner (or the default DN configured as receiver) involved in the transaction. The message is sent to the sender DN.
17p	BankToCustomerDebitCreditNotification	TIPS as sender TIPS Account Owner as receiver	TIPS sends a notification to the TIPS Account owner in order to report the settlement of the liquidity transfer. The message is sent to the sender DN.
[…]	[…]	[…]	[…]

5) TIPS UDFS v2.0.0: §2.5.2.1 Examples – Figure 81
Data constellation on figure 81 has to be amended. Debit Notification flag has to be inserted. Additionally, the DN <ou=dept_123, o=prtyabmmxxx, o=a2anet> shall be classified as "Party Technical Address".

6) TIPS UDFS v2.0.0: §2.5.2.1.1 Outbound LT order settled in TIPS and RTGS System

[…]

- The TIPS Participant or Instructing Party is notified by the Output Dispatcher component with a positive message (Receipt).

- The system verifies if in table "Accounts", the Debit Notification Flag related to the Account to be credited is set to "True"; if so, it retrieves the Account Owner DN from the "Routing Configuration" in combination with the "Party Technical Address" (<ou=dept_123, o=prtyabmmxxx, o=a2anet>) to be notified with a positive message (Bank To Customer Debit Credit Notification) by the Output Dispatcher component.

Figure xx – Successful Outbound Liquidity Transfer order debit notification

7) TIPS UDFS v2.0.0: §3.3.2.2.10 BankToCustomerDebitCreditNotification (camt.054.001.06)

The Bank To Customer Debit Credit Notification message is used in TIPS in order to report the settlement of a liquidity transfer credited <u>or debited</u> on an own TIPS account.

8) TIPS UDFS v2.0.0: §3.3.2.2.10 – Table 72

Table 2 – BankToCustomerDebitCreditNotification (camt.054.001.06)

Field Name	Description	XML path	Mand.	TIPS Usage
[…]	[…]	[…]	[…]	[…]
Credit Debit Indicator	Specifies if the Amount has been credited or debited	BkToCstmrDbtCdtNtfctn/Ntfctn/Ntry/CdtDbtInd	Yes	~~As notification is generated f~~For credit movements ~~only~~, this field will be "CRDT"<u>.</u> <u>For debit movements this field will be "DBIT".</u>
Status	Status of the underlying payment	BkToCstmrDbtCdtNtfctn/Ntfctn/Ntry/Sts	Yes	As notification is generated for settled ~~credit~~ movements only, this field will be "BOOK"
[…]	[…]	[…]	[…]	[…]
Bank Transaction Family Code	Bank Transaction Family Code of	BkToCstmrDbtCdtNtfctn/Ntfctn/Ntry/BkTxCd/Domn/Fmly/Cd	Yes	<u>If a credited Liquidity Transfer is reported, this field will be "RCDT".</u>

Field Name	Description	XML path	Mand.	TIPS Usage
	the underlying transaction			<ins>If a debited Liquidity Transfer is reported, this field will be "ICDT".</ins> ~~Only credited Liquidity Transfers are reported. This field will be "RCDT"~~
Bank Transaction SubFamily Code	Bank Transaction SubFamily Code of the underlying transaction	BkToCstmrDbtCdtNtfctn/Ntfctn/Ntry/BkTxCd/Domn/Fmly/SubFmlyCd	Yes	Only ~~credited~~ <ins>Financial Insitution Credit Transfers</ins> ~~Liquidity Transfers from Financial Institutions~~ are reported. This field will be "FICT"
[…]	[…]	[…]	[…]	[…]
Credit Debit Indicator	Specifies if the Amount has been credited or debited	<ins>BkToCstmrDbtCdtNtfctn/Ntfctn/Ntry/NtryDtls/TxDtls/CdtDbtInd</ins>~~BkToCstmrDbtCdtNtfctn/Ntfctn/Ntry/CdtDbtInd~~	Yes	~~As notification is generated f~~<ins>F</ins>or credit movements only, this field will be "CRDT"<ins>.</ins> <ins>For debit movements this field will be "DBIT".</ins>
[…]	[…]	[…]	[…]	[…]

9) TIPS UDFS v2.0.0: XSD of camt.054.001.06

Schema to be updated to reflect changes proposed in the abovementioned table 72.

10) TIPS URD - §4.1 Oveview – Update of BPMN diagram on figure 6

Optional debit notification shall be added as an output message forwarded to the Account owner.

11) TIPS URD - §4.1 Oveview – Update of Table 6

Table 6: List of messages for outbound liquidity transfers

Message	Description
Liquidity Transfer	An order to transfer liquidity from TIPS to an RTGS account. This message is forwarded by TIPS to the corresponding RTGS, after successful settlement in TIPS. Further details can be found in TIPS.UR.08.210.
RTGS Reply	A reply sent by the RTGS to TIPS accepting or rejecting the liquidity transfer. Further details can be found in TIPS.UR.08.220.
Liquidity Transfer Negative Receipt	Negative receipt message sent by TIPS to the Participant in case an error occurred (e.g. RTGS is closed or the RTGS rejected the liquidity transfer). Further details can be found in TIPS.UR.08.230.
Liquidity Transfer Positive Receipt	A positive receipt notifying the Participant about the successful execution of the liquidity transfer in the RTGS. Further details can be found in TIPS.UR.08.240.
<u>Liquidity Transfer Credit Confirmation</u>	<u>A message notifying the RTGS about the successful debit of a TIPS account. Further details can be found in TIPS.UR.08.251.</u>

12) TIPS URD - §5.3.1 Accounts – Update of requirement TIPS.UR.05.100

ID	**TIPS.UR.05.100**
Name	Account level reference data
Requirement	TIPS shall maintain at least the following data for an account: • Type: Transit account or Participant account. • Identifier: The ISO compliant account identifier. • Currency: The account's currency, which is an eligible TIPS settlement currency. • Owner: The Participant or Central Bank who owns the account. • Users: A list of BICs of entities (Participants and Reachable Parties) which are allowed to use that account for instant payments (on the originator and beneficiary side). • Opening date: The date as of which a TIPS account is legally opened. • Closing date: The date as of which a TIPS account is legally closed. • Status: Current blocking status of the account; TIPS differentiates between unblocked, blocked for debiting, blocked for crediting or both.

	• Floor: A lower threshold amount which triggers the sending of a notification message if it is undercut from above. Used for receiving warnings if the accounts is running low. • Ceiling: An upper threshold amount which triggers the sending of a notification message if it is exceeded from below. Used for receiving warnings if the account traps too much liquidity; • Credit notification: A flag which indicates whether the owner of the account wishes to be informed in case a liquidity transfer is settled which credits this account. • Debit notification: A flag which indicates whether the owner of the account wishes to be informed in case a liquidity transfer is settled which debits this account.

Different account types might use different account characteristics; the ISO message for the envisaged optional debit/credit notification will be specified in the UDFS (it could be a camt.054). Multiple BICs can be linked to one account as users, allowing a configuration where different entities use funds on the same account for their instant payments business

13) TIPS URD - §6.5 Notification subscription – Update of requirement TIPS.UR.06.210

ID	TIPS.UR.06.210
Name	Notification subscription
Requirement	TIPS shall allow Participants and Instructing Parties acting on behalf of Participants to enable and maintain the following notifications for accounts or CMBs linked to accounts owned by the Participant: • Account floor notification (accounts/CMBs) • Account ceiling notification (accounts/CMBs) • CMB headroom floor notification (accounts/CMBs) • CMB headroom ceiling notification (accounts/CMBs) • Inbound liquidity transfer (accounts only) • Outbound liquidity transfer (accounts only) These notifications shall be configurable on an account/CMB level.

14) TIPS URD - §6.6 Notifications – New requirement

ID	TIPS.UR.06.271
Name	Liquidity transfer debit notification
Requirement	TIPS shall notify the configured entity if an outbound liquidity transfer has been settled.

15) TIPS URD - §8.3.5 Liquidity Transfer Messages – New requirement

ID	**TIPS.UR.08.251**
Name	Liquidity Transfer Debit Confirmation message
Requirement	TIPS shall send liquidity transfer confirmation messages which are ISO 20022 compliant and confirm the successful debit of a TIPS account

The used ISO message could be a camt.054 and will be further detailed in the UDFS. These messages are used as liquidity transfer debit confirmations sent to the owner of the debited TIPS account after successful transfer of funds confirmed by the RTGS.

16) CRDM^{TIPS} UDFS - §1.2.3.1 Message subscription configuration

Central Banks can configure, for payment banks they are responsible for, the subscription for credit/debit notifications for liquidity transfers occurring on selected TIPS Accounts owned by the payment banks.

Each message subscription rule set is defined by the following elements:

l The name and the description of the message subscription rule set;

l A validity period, specified by a mandatory initial date of validity and an optional final date of validity.

l The payment bank to which TIPS sends all the messages matching the rule set.

l A set of rules defining the TIPS accounts for which TIPS sends the credit/debit notifications. Each rule is assigned a validity period, specified by a mandatory initial date of validity and an optional final date of validity. The validity period of a rule cannot exceed the validity period of the message subscription rule set it belongs to, i.e. the validity period of a rule cannot start before or end after the validity period of the relevant message subscription rule set.

l A positive/negative parameter which for TIPS shall always be set to Positive, as only positive message subscription rule sets are propagated from CRDM to TIPS.

If deemed necessary, CBs can decide to hand over the control to their DCPs by granting them the privilege for message subscription configuration (for more information on privilege granting see section **Error! Reference source not found.**).

17) CRDM^{TIPS} UDFS - §1.2.3.2 Message subscription parameter types

The table below describes the exhaustive list of parameter types that Central Banks can use for configuring their message subscription rule sets.

TABLE 1 - MESSAGE SUBSCRIPTION PARAMETER TYPES

PARAMETER TYPE	DESCRIPTION
Message Type	It specifies the type of message (i.e. BankToCustomerDebitCreditNotification).
Cash Account	It specifies the TIPS account for which credited/debit notifications shall be sent.
Debit/Credit indicator	It specifies whether the notification should be sent for Liquidity Transfers which debit or credit the TIPS Account.

18) CRDM^{TIPS} UDFS - §1.2.3.3 Message subscription examples

[…]

The rule that payment bank A needs to specify for itself in order to fulfil the requirements described before is as follows:

TABLE 20 – DEFINITION OF THE RULES FOR A NEW MESSAGE SUBSCRIPTION RULE SET

RULE SET	VALID FROM	VALID TO	MESSAGE TYPE	TIPS ACCOUNT	DEBIT/CREDIT INDICATOR
Rule 1	2019-07-01	-	BankToCustomerDebitCreditNotification	ACCOUNT A	CRDT

19) CRDM^{TIPS} UDFS - §1.3.5 Message subscription configuration, subsection 4 (Message Subscription Rule Parameter Type)

This entity defines all message subscription rule parameter types.

ATTRIBUTE	DESCRIPTION
Rule Parameter Type	It specifies a classification for the message subscription rule parameters. The exhaustive list of possible values is as follows: l Message Type l Cash Account Number l Debit/Credit Indicator

20) CRDM^{TIPS} UDFS - §3.5.3.8 Message subscription Rule -New

Data migration tool file specifications for the creation of new Message Subscription Rules must be amended to include the new Parameter Type to receive Credit or Debit notifications for the specified TIPS Account.

Group "Message Subscription Rule Parameter"					Each Message Subscription Rule may have up to 10 Message Subscription Rule Parameters.	1..10	
7	G	Group	VARCHAR (35)				1..1
8	H	Parameter Type Name	Name of the parameter type to be set for the rule. Allowed values are: • CASH (TIPS Account) • CRDB (Credit/Debit Indicator)				1..1
9	I	Parameter Type Value	VARCHAR (35)	Value for the parameter type	This field is used when Parameter Type Name is "CRDB". Possible values are: CRDT – Credit DBIT - Debit		0
[..]	[..]	[..]	[--]	[..]	[..]	[..]	[..]

21) TIPS User Training material - FN.030_TIPS Actors and account structure_v1.2_0 (slide 26)

Complement the account structure with the debit notification flag.

22) TIPS User Training material - FN.050_Liquidity management_v1.2_0 (slide 29)

Business case to be added on the camt.054 and related to debit notification.

High level description of Impact:

Impacts on other projects and products:

In order to align TIPS, T2S and T2-T2S Consolidation notifications when sending liquidity transfers this change request should be taken into account in order to extend it to the T2-T2S Consolidation project (both intra and inter-services liquidity transfers). This could avoid adaptation costs in the future after the T2-T2S Consolidation go-live.

Additionally it should be taken into account possible links with the CR TIPS–0010–SYS: Routing enhancements, which allows each party to define two different Party Technical Addresses, one to be used for notifications and one to be used for reports.

Outcome/Decisions:

L3 analysis - General Information	
Impact on TIPS	
Business Interface	
X	A2A Interface
X	U2A Interface
Settlement Engine	
	Payment Transaction
X	Liquidity Transfer
	Recall
Queries and Reports	
	Queries
	Reports
Common Components	
	ESMIG
X	CRDM
	Archiving
	Billing
X	DMT
Operational Tools	
	SLA Reporting
	TMS
	Technical Monitoring
	Change Management
	Capacity Management
Infrastructure request	
	Application components impacted
	Application components not impacted
Operational activities	
	Business activities impacted
	Technical activities impacted
New functionalities	

Impact on documentation		
Document	**Chapter**	**Change**
UDFS	TIPS UDFS §1.3.2.4 Reference data for accounts and CMBs in TIPS §2.5.2 Outbound Liquidity Transfer §2.5.2.1 Examples §2.5.2.1.1 Outbound LT order settled in TIPS and RTGS System §3.3.2.2.10 BankToCustomerDebitCreditNotification (camt.054.001.06) Annex: XSD of camt.054.001.06 CRDM^{TIPS} UDFS §1.2.3.1 Message subscription configuration §1.2.3.2 Message subscription parameter types §1.2.3.3 Message subscription examples §1.3.5 Message subscription configuration, subsection 4 (Message Subscription Rule Parameter Type) §3.5.3.8 Message subscription Rule -New	Update of Table 5 Wording alignment Update of Figure 80 Update of Table 43 Update of Figure 81 Wording alignment and update of the diagram Update of text and Table 72 Schema to be updated Wording alignment Update of Table 18 Update of the Debit/Credit indicator New Rule parameter type Update of DMT section to include the new parameter type
UHB	n/a	n/a
Training documentation	FN.030_TIPS Actors and account structure_v1.2_0 FN.050_Liquidity management_v1.2_0	Update of slide 26 Update of slide 29
Other documents	TIPS URD §4.1 Oveview §5.3.1 Accounts §6.5 Notification subscription §6.6 Notifications §8.3.5 Liquidity Transfer Messages	Update of BPMN diagram on figure 6 Update of Table 6 Update of requirement TIPS.UR.05.100 Update of requirement TIPS.UR.06.210 New Requirement New Requirement
Overview of the impact of the request on TIPS (L2 view)		

Summary of functional, operational, development, infrastructure and security impacts

Summary of functional impact:

TIPS URD, TIPS UDFS, CRDM^{TIPS} UDFS and TIPS Qualification training material shall be updated in order to include the new business case related to delivery of Debit Notification when an Outbound Liquidity Transfer is settled.

Summary of operational impact:

No operational impact.

Summary of application development impact:

1. CRDM-U2A: add new fields to collect new information needed to allow customers to subscript for debit notification;

2. CRDM Backend: add new functions to read and maintain new information. Allow the extraction of new data and distribution to TIPS nodes;

3. CRDM Extraction for TIPS: change the production of "account and CMB" data to include, for each row, the new information;

4. DMT: enhance message subscription message to convey new subscription;

5. TIPS backend: enhancement the management of CRDM data to upload into memory the new information;

6. TIPS backend: enhance the Liquidity Transfer processing functionality in order to make it use the new information to drive camt.054 notifications;

7. TIPS testing tool: enhance to collect new notification message;

All TIPS changes must be designed, implemented and tested in such a way that they could be deployed without any service disruption, i.e. old and new version of software and database will coexist for a period of time.

Summary of infrastructure impact:

No infrastructure impact.

Summary of security impact:

No security impact.