

TIPS CERTIFICATION TEST CASES

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0 INTRODUCTION

This document contains the certification test approach and a detailed description of test cases for the certification testing of TIPS participants.

1 CERTIFICATION TEST APPROACH

The set of test cases in this document are mandatory for the certification of TIPS Participants.

TIPS Participants must run the following tests:

- PSPs already in Production that will commence funding an Ancillary System must only perform the test related to participants of an Ancillary System (i.e. one case only, in section 2.2)
- A new PSP who will not have a relationship with an Ancillary System must only perform the cases envisaged for TIPS DCA owners, all gathered in section 2.1
- New PSPs that will use an Ancillary System must perform the complete set of PSP certification tests (all cases of section 2.1, plus one case of section 2.2).
- Ancillary Systems must perform the set of AS tests (e.g. defunding of the AS Technical Account), all gathered in section 2.2

Participants must progress logically through the tests and attach all the evidence gathered in the certification testing template.

These tests are not an exhaustive set of test cases for participants. In some cases, the National Central Bank (NCB) may provide a set of authorisation test cases to be carried out. The tests must be carried out in the TIPS Certification Test environment.

Participants may carry out the tests and submit the evidence at any stage during their testing period. During this period the participants may be asked to report on their progress.

The certification must be completed before the end of User Testing in order for the participant to either progress to TIPS production (new participant) or use a new feature in Production (already existing participant).

The Participants will submit the evidence (screenshots and files) to their National Service Desk, which will issue the TIPS certificate after the successful evaluation of the provided evidence.

2 CERTIFICATION TEST CASES

Test ID	System	Connectivity Mode	Test Case name	Relevant for
1	TIPS	U2A	Blocking of a TIPS CMB	TIPS Participant (PSP)
2	TIPS	U2A	Send a liquidity transfer from TIPS to TARGET 2	TIPS Participant (PSP)
3	TIPS	A2A	Send an instant payment message (pacs.008); show a payment success message (pacs.002)	TIPS Participant (PSP)
4	CRDM	U2A	Set up a report configuration and receive the report	TIPS Participant (PSP)
5	TIPS	A2A	Accept an instant payment (pacs.002); show updated balance (camt.004)	TIPS Participant (PSP)
6	TIPS	A2A	Send a Recall (camt.056)	TIPS Participant (PSP)
7	TIPS	A2A	Accept a Recall (pacs.004); show updated balance (camt.004)	TIPS Participant (PSP)
8	TIPS	A2A	Send an Investigation (pacs.028); show payment success message (pacs.002)	TIPS Participant (PSP)
9	TIPS	U2A	Update Limit	TIPS Participant (PSP)
10	TIPS	A2A	Update Limit	TIPS Participant (PSP)
11	TIPS	A2A/U2A	PSP funding AS technical account	TIPS Participants having a business relationship with an Ancillary System
12	TIPS	A2A/U2A	Ancillary System defunding AS technical account	Ancillary System
13	TIPS	A2A/U2A	Processing of instant payment between two participants of two different Ancillary Systems	Ancillary System
14	CRDM	A2A/U2A	Processing of instant payment between a participant of an Ancillary System and a TIPS participant	Ancillary System

15	TIPS	A2A/U2A	Processing of recall answer between two participants of two different Ancillary Systems	Ancillary System
16	TIPS	A2A/U2A	Processing of recall answer between a participant of an Ancillary System and a TIPS participant	Ancillary System

2.1 Test cases where no AS Technical Account is involved

Test ID	TIPS_CERT_01
Test case name	Blocking of a TIPS CMB
Applicable to	TIPS Participant (PSP)
Application	TIPS
Connectivity mode	U2A
Description	The CMB can be blocked for crediting and/or debiting directly in TIPS and the relevant data changes will be taken into account in real-time on a 24/7/365 basis. The operations can be carried out by an authorised user of the TIPS Actor holding the Account, of the Central Bank of the TIPS Participant holding the Account, of the Instructing Party authorised by the TIPS participant or by an authorised user of the TIPS Operator (only in contingency situations).
Prerequisite	The relevant Account or the Party holding the Account are not blocked. The CMB has been set up in CRDM and already propagated to TIPS.
Expected results	Depending on the chosen option, the CMB status takes one of the values: Blocked for debiting; Blocked for crediting; Blocked for crediting/debiting.
Test evidence	Screenshot
Relevant documentation	User Handbook 4.2.3.2

Test ID	TIPS_CERT_02
Test case name	Send a liquidity transfer from TIPS to TARGET 2
Applicable to	TIPS Participant (PSP)
Application	TIPS
Connectivity mode	U2A
Description	TIPS supports Central Bank Money liquidity transfers between accounts denominated in the same currency from TIPS to an RTGS System.
Prerequisite	The Actor is entitled to launch the Outbound Liquidity Transfer.
Expected results	The submitted Liquidity Transfer is settled and the balance of the concerned account is adjusted accordingly.
Test evidence	Screenshots
Relevant documentation	User Handbook 4.4.1.1, 4.1.1.1

Test ID	TIPS_CERT_03
Test case name	Send an instant payment message (pacs.008); show a payment success message (pacs.002)
Applicable to	TIPS Participant (PSP)
Application	TIPS
Connectivity mode	A2A
Description	<p>The settlement process begins with an Instant Payment transaction message (pacs.008) submitted by the Originator side to TIPS. After several validity checks, if no errors are detected the beneficiary side shall respond to TIPS with a beneficiary reply, confirming the payment (pacs.002)</p> <p>Consequently, TIPS will settle the reserved amount, removing the cash posting and updating the cash balances of the Originator and Beneficiary Participant accounts.</p> <p>The payment confirmation (pacs.002) is sent to the originator participant.</p>
Prerequisite	The originator participant has the necessary cash balance on the account to be debited.
Expected results	The Originator has successfully sent an instant payment message (pacs.008) and has received from TIPS the confirmation message (pacs.002) sent back by the Beneficiary when accepting the payment.
Test evidence	A copy of pacs.008 and pacs.002 messages
Relevant documentation	UDFS 3.3.2.1.3; 3.3.2.1.1

Test ID	TIPS_CERT_04
Test case name	Set up a report configuration and receive the report
Applicable to	TIPS Participant (PSP)
Application	CRDM
Connectivity mode	U2A
Description	Create a new report to receive specific information about dynamic or reference data through a predefined report. Each report is periodically created.
Prerequisite	The report configuration was not set up already.
Expected results	The system confirms the creation of the configuration
Test evidence	Screenshot of the configuration setup and of the report
Relevant documentation	CRDM User Handbook 2.3.4.7, 2.3.4.6

Test ID	TIPS_CERT_05
Test case name	Accept an instant payment (pacs.002); show updated balance (camt.004)
Applicable to	TIPS Participant (PSP)
Application	TIPS
Connectivity mode	A2A
Description	<p>Once the instant payment transaction was forwarded by TIPS to the Beneficiary participant, the last one should reply with a confirmation message (pacs.002) within a standard, configurable timeout period.</p> <p>After receiving an Instant Payment (pacs.002), the Beneficiary can query the system (camt.003) to get updated information on the account balance.</p>
Prerequisite	The Participant has sent the Get Account message (camt.003) to TIPS.
Expected results	Participant has received a camt.004 message showing the updated balance.
Test evidence	A copy of pacs.002 and of camt.004
Relevant documentation	UDFS 3.3.2.1.1; 3.3.2.2.2

Test ID	TIPS_CERT_06
Test case name	Send a Recall (camt.056)
Applicable to	TIPS Participant (PSP)
Application	TIPS
Connectivity mode	A2A
Description	The Originator Participant or Instructing Party of a previously settled Instant Payment transaction (the Recall Assigner) can send to TIPS a specific recall message in order to request the return of funds previously settled.
Prerequisite	The Assigner has previously settled an Instant Payment.
Expected results	TIPS has forwarded the recall request related to a formerly settled Instant Payment transaction to the relevant recipient.
Test evidence	A copy of camt.056
Relevant documentation	UDFS 3.3.2.2.11

Test ID	TIPS_CERT_07
Test case name	Accept a Recall (pacs.004); show updated balance (camt.004)
Applicable to	TIPS Participant (PSP)
Application	TIPS
Connectivity mode	A2A
Description	<p>In case a Recall is accepted by the Assignee, the system determines the accounts and CMBs that TIPS has to use for settlement of the recall. If the settlement attempt is successful, the instruction is set to “Settled” status.</p> <p>The Assignee can query the system to get information on the account balance or status (camt.003)</p>
Prerequisite	A Recall has been sent from an Originator party who previously settled an Instant Payment.
Expected results	<p>The Payment Return message (pacs.004) is received by the original Assigner Participant who accepts the recall request</p> <p>After querying the system (camt.003), the interested Participant or Reachable Party receives from TIPS a message showing the Account Balance and Status (camt.004)</p>
Test evidence	A copy of pacs.004 message and camt.004
Relevant documentation	UDFS 3.3.2.1.2; 3.3.2.2.2

Test ID	TIPS_CERT_08
Test case name	Send an Investigation (pacs.028); show payment success message (pacs.002)
Applicable to	TIPS Participant (PSP)
Application	TIPS
Connectivity mode	A2A
Description	The Participant can start the investigation process on a previously instructed Instant Payment Transaction. The Payment Status Request message (pacs.028) allows instructing TIPS for retrieving the status of a previously submitted Instant Payment Transaction.
Prerequisite	An Instant Payment transaction has been already submitted and processed by TIPS.
Expected results	The participant is able to initiate an investigation process and the system will return a payment status report message (pacs.002).
Test evidence	A copy of pacs.028 and of pacs.002
Relevant documentation	UDFS 3.3.2.1.4; 3.3.2.1.1

Test ID	TIPS_CERT_09
Test case name	Update Limit
Applicable to	TIPS Participant (PSP)
Application	TIPS
Connectivity mode	U2A
Description	Participants can update the limit related to CMB falling under their data scope. When a CMB limit is modified, the headroom of the CMB is updated accordingly.
Prerequisite	The Participant is allowed to adjust the CMB limit.
Expected results	The CMB limit is displayed with the new amount.
Test evidence	Screenshot
Relevant documentation	CRDM User Handbook 2.3.2.2

Test ID	TIPS_CERT_10
Test case name	Update Limit
Applicable to	TIPS Participant (PSP)
Application	TIPS
Connectivity mode	A2A
Description	Participants can request an immediate change (camt.011) to the allowed Limit on a specific account for a CMB user.
Prerequisite	The Participant is allowed to adjust the CMB limit.
Expected results	The new limit was applied to CMB and the Participant has received a Modify Limit message (camt.025).
Test evidence	A copy camt.011 and camt.025 message
Relevant documentation	UDFS 3.3.2.2.3

2.2 Test cases where an AS Technical Account is involved

Test ID	TIPS_CERT_11
Test case name	PSP funding AS technical account (Intra-service liquidity transfer from a TIPS DCA to an AS Technical account)
Applicable to	TIPS Participants who have a business relationship with an Ancillary System
Application	TIPS
Connectivity mode	A2A/U2A
Description	<p><u>U2A</u></p> <p>In the TIPS GUI the user accesses the screen Liquidity Transfer and fills out the mandatory fields in order to transfer liquidity from its TIPS DCA (debited) to the AS technical account (credited).</p> <p><u>A2A</u></p> <p>A Liquidity Credit Transfer message (camt.050) is sent to TIPS in order to transfer liquidity from the participant's TIPS DCA to the AS technical account. This liquidity transfers from the TIPS DCAs to the AS Technical accounts can be instructed by the Ancillary Systems who are allowed to send the LT from the TIPS DCA on behalf of the PSP.</p>
Prerequisite	<p>There is balance on the TIPS DCA.</p> <p>TIPS DCA and the AS Technical account are denominated in the same currency.</p> <p>The PSP subscribed for the receipt of camt.054 – BankToCustomerDebitCreditNotification message for debit notification.</p> <p>PSPs who wish to have an AS perform this test on their behalf must ensure that they have granted the liquidity manager role to the AS.</p>

	<p>In this case, the Ancillary System is acting on behalf of the PSP who funds the AS Technical Account. The user must have the relevant privileges to transfer liquidity from its TIPS DCA to the AS technical account via TIPS GUI, and to query the Liquidity Transfer status. Information on privileges can be found in the UDFS.</p>
<p>Expected results</p>	<p>The TIPS DCA is debited as the AS technical account is credited by the amount specified on the TIPS GUI or on the camt.050 message.</p> <p><u>U2A</u></p> <p>The user can verify that the TIPS DCA balance has decreased in the TIPS DCA screen in the TIPS GUI.</p> <p><u>A2A</u></p> <p>The PSP, or the AS technical account owner if he instructed the LT on behalf of the PSP, receives a camt.025 – Receipt message reporting a “RCON” Status Code confirming the execution of the LT. The PSP receives also a camt.054 as debit notification.</p>
<p>Test evidence</p>	<p><u>U2A</u></p> <p>Screenshot of the TIPS GUI Liquidity Transfer status (via Query Liquidity transfer status screen), showing that the Liquidity Transfer has been successfully executed.</p> <p><u>A2A</u></p> <p>Attachment of the camt.025 – Receipt message in xml format.</p>
<p>Relevant documentation</p>	<p>TIPS UHB v3.1. – 4.4.1 Liquidity Transfer functionality</p> <p>TIPS UHB v3.1. – 5.1.1 Query Account Balance and Status</p> <p>TIPS UHB v3.1. – 4.1.3 Query Liquidity transfer status</p>

Test ID	TIPS_CERT_12
Test case name	Ancillary System defunding AS technical account (Intra-service liquidity transfer from an AS Technical account to a TIPS DCA)
Applicable to	Ancillary System
Application	TIPS
Connectivity mode	A2A/U2A
Description	<p><u>U2A</u></p> <p>In the TIPS GUI the user accesses the screen Liquidity Transfer and fills out the mandatory fields in order to transfer liquidity from an Ancillary System technical account (debited) to a TIPS DCA (credited).</p> <p><u>A2A</u></p> <p>A Liquidity Credit Transfer message (camt.050) is sent to TIPS in order to transfer liquidity from the Ancillary System technical account to a participant's TIPS DCA.</p>
Prerequisite	<p>There is a balance on the AS Technical account.</p> <p>TIPS DCA and the AS Technical account are denominated in the same currency.</p> <p>The Ancillary System subscribed for the receipt of camt.054 – BankToCustomerDebitCreditNotification message for debit notification.</p> <p>The user of the Ancillary System has the relevant role to transfer liquidity from the Ancillary System technical account to a TIPS DCA, and to query the Liquidity Transfer status. Information on privileges can be found in the UDFS.</p>
Expected results	The TIPS DCA is credited as the Ancillary System technical account is debited by the amount specified on the TIPS GUI or on the

	<p>camt.050 message.</p> <p><u>U2A</u></p> <p>The AS user can verify that the AS Technical Account balance has decreased in the Query Account balance screen in the TIPS GUI.</p> <p><u>A2A</u></p> <p>A camt.025 – Receipt message reporting a “RCON” Status Code confirming the execution of the LT is received by the Ancillary System together with a camt.054 - BankToCustomerDebitCreditNotification message as debit notification.</p>
<p>Test evidence</p>	<p><u>U2A</u></p> <p>Screenshot of the TIPS GUI Liquidity Transfer status (via Query Liquidity transfer status screen), showing that the Liquidity Transfer has been successfully executed.</p> <p><u>A2A</u></p> <p>Attachment of the camt.025 – Receipt message in xml format.</p>
<p>Relevant documentation</p>	<p>TIPS UHB v3.1. – 4.4.1 Liquidity Transfer</p> <p>TIPS UHB v3.1. – 5.1.1 Query Account Balance and Status</p> <p>TIPS UHB v3.1. – 4.1.3 Query Liquidity transfer status</p>

Test ID	TIPS_CERT_13
Test case name	Processing of instant payment between two participants of two different Ancillary Systems
Applicable to	Ancillary System
Application	TIPS
Connectivity mode	A2A / U2A
Description	<ol style="list-style-type: none"> 1. PSP A sends a SCT Inst instruction to the Ancillary System A (A2A). The instant payment's beneficiary is PSP B, operating via Ancillary System B. 2. After internal checking, Ancillary System A sends the instant payment to TIPS.
Prerequisite	<p>PSP A is a participant in Ancillary System A and uses its technical account for settling instant payments.</p> <p>PSP B is a participant in Ancillary System B and uses its technical account for settling instant payments.</p> <p>PSP A has funds in the Ancillary System A technical account.</p> <p>PSP A is allowed to send instant payments.</p> <p>User of PSP A has necessary privileges for querying on the instant payment status in the TIPS GUI (if the user plans to use the TIPS GUI for the providing of evidences). Information on privileges can be found in the UDFS.</p>
Expected results	<p>Instant payment is successfully settled.</p> <p>Ancillary System A's technical account is debited.</p> <p>Ancillary System B's technical account is credited.</p> <p>The Ancillary Systems receive the pacs.002 from TIPS confirming the</p>

	settlement on their technical accounts.
Test evidence	<p><u>U2A</u></p> <p>Screenshot of the TIPS GUI instant payment screen, showing the details of the instant payment between the technical accounts with status “settled”.</p> <p><u>A2A</u></p> <p>Attachment of the Payment Status Report message (pacs.002) from TIPS to the Ancillary System, in xml format.</p>
Relevant documentation	<p>TIPS UHB v3.1. – 4.1.4 Query Payment transaction</p> <p>TIPS UDFS v3.0 – 3.3.2.1.2 FIToFICustomerCreditTransferV02 (pacs.008.001.02)¹</p> <p>TIPS UDFS v3.0 – 3.3.2.1.1 FIToFIPaymentStatusReport (pacs.002.001.03)</p>

¹ If PSP A plans to use pacs.008 for the SCT Inst instruction

Test ID	TIPS_CERT_14
Test case name	Processing of instant payment between a participant of an Ancillary System and a TIPS participant
Applicable to	Ancillary System
Application	TIPS
Connectivity mode	A2A / U2A
Description	<ol style="list-style-type: none"> 1. PSP A sends an SCT Inst instruction to the respective Ancillary System (Ancillary System A) in A2A. The instant payment's beneficiary is PSP B. 2. After internal checking, Ancillary System A sends the instant payment to TIPS.
Prerequisite	<p>PSP A is a participant in Ancillary System A and uses its technical account for settling instant payments.</p> <p>PSP B is a TIPS Participant with a TIPS DCA and settles its instant payments through their own TIPS DCA.</p> <p>PSP A has funds in the Ancillary System A technical account.</p> <p>PSP A is allowed to send instant payments.</p> <p>User of PSP A has necessary privileges for querying on the instant payment status in the TIPS GUI (if the user plans to use the TIPS GUI for the providing of evidences). Information on privileges can be found in the UDFS.</p>
Expected results	<p>Instant payment is successfully settled.</p> <p>Ancillary System A's technical account is debited.</p> <p>PSP B's TIPS DCA position is updated (credited).</p> <p>Ancillary System A and PSP B receive a Payment Status Report</p>

	message (pacs.002) from TIPS stating the successful settlement of the instant payment.
Test evidence	<p><u>U2A</u></p> <p>Screenshot of the TIPS GUI instant payment screen, showing the details of the instant payment between the technical account and the TIPS DCA with status “settled”.</p> <p><u>A2A</u></p> <p>Attachment of the Payment Status Report message (pacs.002) received by the Ancillary System from TIPS, in xml format.</p>
Relevant documentation	<p>TIPS UHB v3.1. – 4.1.4 Query Payment transaction</p> <p>TIPS UDFS v3.0 – 3.3.2.1.2 FIToFICustomerCreditTransferV02 (pacs.008.001.02)²</p> <p>TIPS UDFS v3.0 – 3.3.2.1.1 FIToFIPaymentStatusReport (pacs.002.001.03)</p>

² If PSP A plans to use pacs.008 for the SCT Inst instruction

Test ID	TIPS_CERT_15
Test case name	Processing of recall answer between two participants of two different Ancillary Systems
Applicable to	Ancillary System
Application	TIPS
Connectivity mode	A2A / U2A
Description	<ol style="list-style-type: none"> 1. PSP A sends a recall request to the respective Ancillary System (Ancillary System A) in A2A 2. After internal checking, Ancillary System A sends the recall request to TIPS. 3. After validation, TIPS sends the recall request to Ancillary System B. 4. After internal checking, Ancillary System B sends the recall request to PSP B for answering. 5. PSP B answers positively to the recall request to Ancillary System B, agreeing upon the refund. 6. Ancillary System B sends pacs.004 to Ancillary System A and Technical account B is debited and A credited
Prerequisite	<p>PSP A is a participant in Ancillary System A and uses its technical account for settling instant payments.</p> <p>PSP B is a participant in Ancillary System B and uses its technical account for settling instant payments.</p> <p>PSP A is the originator of a previously settled instant payment with PSP B.</p> <p>PSP B has funds in the Ancillary System B technical account.</p>
Expected results	The Instant payment (refund) is successfully settled.

	<p>Ancillary System A's technical account is credited.</p> <p>Ancillary System B's technical account is debited.</p> <p>Ancillary System A receives pacs.004 and Ancillary System B receive a Payment Status Report message (pacs.002) stating the successful settlement of the instant payment.</p>
<p>Test evidence</p>	<p><u>U2A</u></p> <p>Screenshot of the TIPS GUI instant payment screen, showing the details of the instant payment from Ancillary System B Technical account to Ancillary System A Technical account with status "settled".</p> <p><u>A2A</u></p> <p>Attachment of the payment return pacs.004 message received by Ancillary System A, in xml format.</p>
<p>Relevant documentation</p>	<p>TIPS UHB v3.1. – 4.1.4 Query Payment transaction</p> <p>TIPS UDFS v3.0 – 3.3.2.2.11 FIToFIPaymentCancellationRequest (camt.056.001.01)³</p> <p>TIPS UDFS v3.0 – 3.3.2.1.1 FIToFIPaymentStatusReport (pacs.002.001.03)</p>

³ If PSP A plans to use camt.056 for the recall request

Test ID	TIPS_CERT_16
Test case name	Processing of recall answer between a participant of an Ancillary System and a TIPS participant
Applicable to	Ancillary System
Application	TIPS
Connectivity mode	A2A / U2A
Description	<ol style="list-style-type: none"> 1. PSP A sends a recall request to the respective Ancillary System (Ancillary System A) in A2A. 2. After internal checking, Ancillary System A sends recall request to TIPS. 3. After validation, TIPS sends the recall request to PSP B. 4. PSP B answers positively to the recall request, agreeing upon the refund. 5. The recall is settled
Prerequisite	<p>PSP A is a participant in Ancillary System A and uses its technical account for settling instant payments.</p> <p>PSP B has a TIPS DCA for settling instant payments.</p> <p>PSP A is the originator of a previously settled instant payment with PSP B.</p> <p>PSP B has funds in its TIPS DCA.</p>
Expected results	<p>The Instant payment (refund) is successfully settled.</p> <p>Ancillary System A's technical account is credited.</p> <p>PSP B's TIPS DCA is debited.</p> <p>Ancillary System A receives the payment return message pacs.004 and PSP B receive a Payment Status Report message (pacs.002) stating the successful settlement of the instant payment.</p>

<p>Test evidence</p>	<p><u>U2A</u></p> <p>Screenshot of the TIPS GUI instant payment screen, showing the details of the instant payment between the PSP B TIPS DCA and the Ancillary System A Technical account with status “settled”.</p> <p><u>A2A</u></p> <p>Attachment of the Payment return message (pacs.004) received by Ancillary System A from TIPS, in xml format.</p>
<p>Relevant documentation</p>	<p>TIPS UHB v3.1. – 4.1.4 Query Payment transaction</p> <p>TIPS UDFS v3.0 – 3.3.2.2.11 FIToFIPaymentCancellationRequest (camt.056.001.01)⁴</p> <p>TIPS UDFS v3.0 – 3.3.2.1.1 FIToFIPaymentStatusReport (pacs.002.001.03)</p>

⁴ If PSP A plans to use camt.056 for the recall request