



TESTING ACTIVITIES FOR THE SSP RELEASE V12.0 (2ND REV)

1. Introduction

With reference to the Eurosystem communication on the [Final content of the SSP release 12.0](#) as published on the ECB/TARGET2 Website on 22 Jan 2018, the present document specifies the testing requirements as well as the testing procedures. While it specifies the testing activities on the TARGET2 side (including TARGET2 interactions with TIPS), it does not aim at covering the testing activities on TIPS itself, which will be covered by a separate publication.

The TARGET2 release 12.0 contains one new major change request dedicated to TIPS (divided in further 3 other sub change requests) and 3 change requests dedicated to the SWIFT Standards 2018 and ISO, all affecting users and requesting testing certification.

2. Changes as part of the release 12.0 related to the introduction of TIPS

- CR-789: TIPS interface in TARGET2 – core services
- CR-793: TIPS interface in TARGET2 – Liquidity Monitoring and setting up of LM links
- CR-794: TIPS interface in TARGET2 – Pull liquidity functionality
- CR-796: TIPS invoicing in TARGET2

3. Changes as part of the SWIFT standards 2018 and ISO

- CR-788: New ISO20022
- CR-790: Update of ISO 9362 – BIC structure
- CR-797: SWIFT standards MT release 2018

4. Requirements applicable to the testing activities for release 12.0, scheduled from 10 September until 26 October 2018

The Eurosystem defined the following test requirements for existing TARGET2 users as part of their recertification for the new release:

- *Connectivity test*: no new test for existing participants.
- *Interoperability tests*: the Eurosystem defined which of these test cases are mandatory or conditional usages (cfr annex).
- *Business day tests*: a 3-week slot is foreseen to run business day testing tests. This slot will be used in particular to verify the billing adaptation to TIPS, operational test scenario affecting or not the users and to run regression scenarios on Reserve management and Standing facilities due to the adaptation to TIPS. Central Banks may also decide to organise specific Business day testing scenarios.
- *Free testing*: users will have the possibility to run free tests in uncontrolled mode from the 3 Sep 2018 till the go live.

5. Bugs planned to be fixed

The Eurosystem is also planning to fix a number of pending bugs. The list of bugs which has an impact on users is provided below and should be seen as preliminary. Users will receive confirmation in due time of the correction of these bugs when the necessary tests have been successfully concluded.

Internal reference	Module ¹	Bug description
PBI000000202772	Multiple	For a return payment originated from a MT103 payment from RTGS to CB Customer, different consistency check in PM and HAM triggers non completion of the return payment

6. Test procedures: reminder

In general the structure of the tests, their organisation, the applicable procedures as well as the reporting lines will be kept identical to those previously in place for testing. In particular this means that:

- Users are invited to contact their respective Central Bank for any query related to their certification, to clarify the test requirements relevant to them and to report on their test results.
- Volume limitations exist in term of numbers of FIN or XML messages that users can send to the SSP.

¹ PM=payment module, SD=Static data, ASI=Ancillary system interface, RM= Reserve management, IBP=Internet based participant, SF=Standing facilities, HAM=home account module, UHB=User handbook, CN =Contingency Network

- The test & training system follow either a restricted operating time (i.e. test timing) or an extended operating time (i.e. live/live20 timing). Information about the operating times is provided together with the testing calendar.
- Users will run their certification activities in future SWIFTNet FIN mode.
- Before being delivered to the users' community, the new SSP release will be thoroughly tested by the Eurosystem to ensure its compliance with the release specification.

For further information on the test procedures, please refer to the "Guide for TARGET2 User Testing".

ANNEX 1: TEST CALENDAR RELEASE 12.0

Week number/dates	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	
Phase	20-24/8	27-31/8	03-07/9	10-14/9	17-21/9	24-29/9	1-5/10	8-12/10	15-19/10	22-26/10	29/10-2/11	5-9/11	12-16/11	19-21/11	24-28/11	3/12	
Acceptance test (other CR than TIPS interface related) by CBs	[Orange]													19 Nov T2 12.0 go- live		30 Nov TIPS go- live	
Acceptance test on T2 R12.0 (TIPS CR interface) by CBs			[Orange]														
User Certification on T2 (except TIPS interface CR)				[Blue]													
User Certification on T2 ² (TIPS interface CR)			[Blue]	[Blue]	[Blue]	[Blue]											
Business day testing							[Light Blue] TARGET2 testing			[Light Blue] TIPS testing							
Monthly Billing periods ³	[Green]		[Light Green] 3-28 Sept				[Green] 1-31 Oct					[Light Green] 1-30 Nov					
Intermediary billing periods ⁴							[Light Green] 1-5	[Light Green] 1-12									
Reserve Mgmt. periods					[Yellow] 12-18	[Yellow] 19-25	[Yellow] 26-2	[Yellow] 3-9	[Yellow] 10-16	[Yellow] 17-23	[Yellow] 24-30	[Yellow] 31-6					
Free testing ⁵																	
Operating time/Mode (Current CU, Future FU)	CUST/FU	CUST/FU	CUST/FU	CUST/FU	CUST/FU	CUST/FU	CUST/FU	CUST/FU	CUST/FU	CUST/FU	Live20 ⁶ /FU	CUST/FU	CUST/FU	CUST/FU	CUST/CU	CUST/CU	

² TIPS available to TARGET2 users and CB already from 3 Sep 2018 for static data definition and for connectivity testing. Testing the interface is possible by TARGET2 users but without the interface certified.

³ Valid for T2S, TARGET2 and TIPS consumption all together

⁴ Limited to TIPS and TARGET2 consumption

⁵ Unchecked testing

⁶ With the exception of Fri-5October and 26 October 2018 that will run in Friday's timing (cut-off Interbank payments at 15:30, AS Night-time settlement from 17:00 till 19:00)

Annex 2: List of interoperability test cases applying to TARGET2 users

As part of their certification to the new SSP release, existing users need to consider the test cases⁷ listed in the two tables below. While mandatory test cases always have to be run, conditional test cases only have to be run if applicable to the user.

The first table lists the new interoperability test cases, which were created or modified in the context of the new SSP release 12.0 (related to the GPI initiative new CUG and ASI procedure 6 real-time).

Test case	Function	Test category	Applicable to ⁸
Test cases linked to GPI initiative phase 2			
IOP-PM-110	Sending of a customer payment by non-gpi TARGET2 participant (MT103) to a direct participant using the routing information of the TARGET2 directory (with gpi field 121 UETR)	COUS	DP, MAP
IOP-PM-110a	Sending of a customer payment by gpi TARGET2 participant (MT103) to a direct participant using the routing information of the TARGET2 directory (with gpi fields 111 & 121 UETR)	COUS	DP, MAP
IOP-PM-115a	Receipt of a customer payment	COUS	DP, MAP, IBP

⁷ A further description of the interoperability test cases can be found in the Annex 2 of the Guide to TARGET2 User Testing, published on the TARGET2 Website of the ECB.

⁸ DP: Direct participant
 MAP: Multi Adresse participant
 HAMP : HAM participant
 CBC : CB Customer
 AS: Ancillary system
 SB: Settlement Bank in an ancillary system using ASI
 GoA Mgr: Group of Account Manager
 Co Mgr: Co-manager

	(MT103) from a direct participant containing gpi fields (field 121 UETR and/or field 111)		
IOP-PM-120	Sending of a customer payment by non gpi and TARGET2 participant (MT 103+ or equivalent ICM payment) to a direct participant using the routing information of the TARGET2 directory (with gpi field 121 UETR)	COUS	DP, MAP, IBP
IOP-PM-120a	Sending of a customer payment by gpi and TARGET2 participant (MT 103+ or equivalent ICM payment) to a direct participant using the routing information of the TARGET2 directory (with gpi fields 111 & 121 UETR)	COUS	DP, MAP, IBP
IOP-PM-125a	Receipt of a customer payment (MT103+) from a direct participant containing (field 121 UETR and/or field 111)	COUS	DP, MAP
IOP-PM-130	Sending of an interbank payment by non-gpi and TARGET2 participant (MT202 or equivalent ICM payment) to a direct participant using the routing information of the TARGET2 directory (with gpi field 121 UETR)	MAN for non gpi/T2 users	DP, MAP
IOP-PM-130a	Sending of an interbank payment by gpi and TARGET2 participant (MT202 or equivalent ICM payment) to a direct participant using the routing information of the TARGET2 directory (with gpi fields 111 & 121 UETR)	MAN for gpi/T2 users	DP, MAP

IOP-PM-131	Sending of an Interbank transfer from RTGS to HAM account via ICM with gpi fields	COUS	DP, MAP
IOP-PM-135	Receipt of an interbank payment (MT202) from a direct participant containing gpi field (field 121 UETR and/or field 111)	MAN	DP, MAP
IOP-PM-136	Sending of an interbank payment by non gpi and TARGET2 participant (MT202COV or equivalent ICM payment) to a direct participant in PM using the routing information of the TARGET2 directory (with gpi field 121 UETR)	MAN for non gpi/T2 users	DP, MAP
IOP-PM-136a	Sending of an interbank payment by gpi and TARGET2 participant (MT202COV or equivalent ICM payment) to a direct participant in PM using the routing information of the TARGET2 directory (with gpi fields 111 & 121 UETR)	MAN for gpi/T2 users	DP, MAP
IOP-PM-137a	Receipt of an interbank payment (MT202COV) from a direct participant in PM (field 121 UETR and/or field 111)	MAND	DP, MAP
IOP-PM-138	Receipt of an interbank payment (MT202 simplified) from a HAM participant (other CB) (field 121 UETR and/or field 111)	COUS	DP, MAP
IOP-PM-139	Receipt of an interbank payment (MT202COV) from a CB Customer (other CB) (field 121 UETR and/or field 111)	COUS	DP, MAP

IOP-PM-210	Sending of a customer payment (MT103 or equivalent ICM payment) by non gpi and TARGET2 participant to an indirect participant using the routing information of the TARGET2 directory (with gpi field 121 UETR)	COUS	DP, MAP
IOP-PM-210a	Sending of a customer payment (MT103 or equivalent ICM payment) by gpi and TARGET2 participant to an indirect participant using the routing information of the TARGET2 directory (with gpi fields 111 & 121 UETR)	COUS	DP, MAP
IOP-PM-215	Receipt of a customer payment (MT103) from an indirect participant (field 121 UETR and/or field 111)	COUS	DP, MAP
IOP-PM-220	Sending a customer payment (MT103+ or equivalent ICM payment) by non gpi and TARGET2 participant to an indirect participant using the routing information of the TARGET2 directory	COUS	DP, MAP
IOP-PM-220a	Sending a customer payment (MT103+ or equivalent ICM payment) by gpi and TARGET2 participant to an indirect participant using the routing information of the TARGET2 directory	COUS	DP, MAP
IOP-PM-225	Receipt of a customer payment (MT103+) from an indirect participant (field 121 UETR and/or field 111)	COUS	DP, MAP
IOP-PM-230	Sending an interbank payment	MAN for non	DP, MAP

	(MT202 or equivalent ICM payment) by non gpi TARGET2 participant to an indirect participant using the routing information of the TARGET2 directory (with gpi field 121 UETR)	gpi/T2 users	
IOP-PM-230a	Sending an interbank payment (MT202 or equivalent ICM payment) by gpi TARGET2 participant to an indirect participant using the routing information of the TARGET2 directory (with gpi fields 111 & 121 UETR)	MAN for non gpi/T2 users	DP, MAP
IOP-PM-235	Receipt of an interbank payment (MT202) from an indirect participant (field 121 UETR and/or field 111)	MAN	DP, MAP
Test cases linked to the introduction of TIPS			
IOP-TIPS-100a	Liquidity transfer from RTGS to TIPS DCA linked with LM, made via ICM/U2A	COUS	DP, MAP
IOP-TIPS-100b	Liquidity transfer from RTGS to TIPS DCA not linked with LM, made via ICM/U2A	COUS	DP, MAP
IOP-TIPS-110	Liquidity transfer from RTGS to TIPS DCA linked with LM or not, made via A2A	COUS	DP, MAP
IOP-TIPS-111	Liquidity transfer from RTGS to TIPS DCA linked with LM or not, made via U2A (insufficient liquidity on RTGS account)	COUS	DP, MAP

IOP-TIPS-112	Liquidity transfer from RTGS to TIPS DCA linked with LM or not, made via U2A sent to an invalid DCA	COUS	DP, MAP
IOP-TIPS-120a	Liquidity transfer from RTGS to TIPS DCA linked with LM or not, made via A2A (insufficient liquidity on RTGS account during and until the end of the daylight phase).	COUS	DP, MAP
IOP-TIPS-120b	Liquidity transfer from RTGS to TIPS DCA linked with LM or not, made via A2A during Night-time settlement (insufficient liquidity on RTGS account, message rejected immediately).	COUS	DP, MAP
IOP-TIPS-130	Invalid Liquidity transfer from RTGS to TIPS DCA linked with LM or not, made via A2A during Night-time settlement (message rejected by TIPS).	COUS	DP, MAP
IOP-TIPS-140	Reception of Optional Debit notification following successful execution of a current liquidity transfer from TARGET2 to TIPS, or resulting from a standing order liquidity transfer made via A2A	COUS	DP, MAP
IOP-TIPS-150	Set up of Standing order Liquidity transfer from RTGS to TIPS DCA, made via ICM/U2A	COUS	DP, MAP
IOP-TIPS-160	Reception of Incoming Liquidity transfer from TIPS DCA	COUS	DP, MAP
IOP-TIPS-170a	Pull liquidity transfer from TIPS DCA linked with LM link initiated in U2A	COUS	DP, MAP

IOP-TIPS-170c	Pull liquidity transfer from TIPS DCA linked with LM link initiated in A2A (positive test case)	COUS	DP, MAP
IOP-TIPS-170d	Pull liquidity transfer from TIPS DCA linked with LM link initiated in A2A <u>validated on TARGET2 (including valid LM link) but failing validation on TIPS</u> (negative test case)	COUS	DP, MAP
IOP-TIPS-170e	Pull liquidity transfer from TIPS DCA in A2A, with invalid RTGS account (negative test case)	COUS	DP, MAP
IOP-TIPS-170f	Pull liquidity transfer from TIPS DCA linked with LM link initiated in A2A (negative test case, invalid DCA)	COUS	DP, MAP
IOP-TIPS-170g	Pull liquidity transfer from TIPS DCA linked with LM link initiated in A2A (negative test case, DCA not linked to RTGS via LM link)	COUS	DP, MAP
IOP-TIPS-170h	Pull liquidity transfer from TIPS DCA linked with LM link initiated in A2A (negative test case, response from TIPS contains a non SWIFT character)	COUS	DP, MAP
IOP-TIPS-170i	Pull liquidity transfer from TIPS DCA linked with LM link initiated in A2A (negative test case, invalid funds on TIPS DCA)	COUS	DP, MAP
IOP-TIPS-200	TIPS DCA monitoring of available liquidity (U2A)	COUS	DP, MAP
IOP-TIPS-210	Monitoring of the TIPS DCA account(s) linked to an RTGS	COUS	DP, MAP

	account from TARGET2 ICM/U2A		
IOP-TIPS-220	Monitoring of the TIPS DCA account(s) linked to an RTGS account via A2A (positive test case)	COUS	DP, MAP
IOP-TIPS-230	Monitoring of the TIPS DCA account(s) linked to an RTGS account via A2A (negative test case)	COUS	DP, MAP

The second table lists all the existing interoperability test cases (i.e. those set up in the context of the TARGET2 migration), which have to be repeated in the context of each new SSP release as regression tests.

Test case	Function	Test category	Applicable to
IOP-PM-040	ICM consultation of a TARGET2 entry	MAND	DP, MAP
IOP-PM-115	Receipt of a customer payment (MT103) from a direct participant	MAND	DP, MAP
IOP-PM-125	Receipt of a customer payment (MT103+) from a direct participant	MAND	DP, MAP
IOP-PM-140	Sending of a direct debit message (MT204) to a direct participant using the routing information of the T2 directory	COUS	DP, MAP
IOP-PM-145	Receipt of a direct debit message (MT204) from a Central Bank	COUS	DP, MAP
IOP-PMB-120	Back-up contingency payment in favour of EURO1	COUS	DP involved in EURO1 settlement
IOP-T2SI-010	Sending of a T2/T2S Liquidity transfer via ICM from RTGS account to DCA	COUS	DP, MAP
IOP-T2SI-015	Sending of a T2/T2S Liquidity transfer via ICM from RTGS account to a non-existing DCA	COUS	DP, MAP

IOP-T2SI-020	Sending of a Liquidity transfer via XML from RTGS account to DCA	COUS	DP, MAP
IOP-T2SI-040	Sending of a Liquidity transfer via MT202 from RTGS account to DCA	COUS, MAND for VAS	DP (VAS), GoA Manager (VAS)
IOP-T2SI-050	Pull of a Liquidity transfer via ICM from T2S DCA account to T2 RTGS account	COUS, MAND for VAS	DP (VAS), GoA Manager (VAS)
IOP-T2SI-060	Pull of a Liquidity transfer via XML from T2S DCA to T2 RTGS account	COUS; MAND for VAS	DP (VAS), GoA Manager (VAS)
IOP-T2SI-070	Pull of a Liquidity transfer via MT202 from T2S DCA to T2 RTGS account	COUS; MAND for VAS	DP (VAS), GoA Manager (VAS)
IOP-PMB-130	Back-up contingency payment in favour of STEP2	COUS	DP involved in STEP2 pre-funding
IOP-PML-110	Reservation of liquidity for highly urgent payments during the day (current)	COUS	DP, MAP
IOP-PML-120	Reservation of liquidity for urgent payments during the day	COUS	DP, MAP
IOP-PML-130	Cancellation of liquidity reserved for highly urgent payments during the day	COUS	DP, MAP
IOP-PML-140	Cancellation of liquidity reserved for urgent payments during the day	COUS	DP, MAP
IOP-PML-810	Reservation of liquidity for highly urgent payments during the day (virtual account)	COUS	GoAMgr for virtual account
IOP-PML-820	Reservation of liquidity for urgent payments during the day (virtual	COUS	GoAMgr for virtual account

	account)		
IOP-PML-830	Cancellation of liquidity reserved for highly urgent payments during the day (virtual account)	COUS	GoAMgr for virtual account
IOP-PML-840	Cancellation of liquidity reserved for urgent payments during the day (virtual account)	COUS	GoAMgr for virtual account
IOP-PMQ-010	Get a list of transactions (A2A mode) (PM)	COUS	DP, MAP
IOP-PMQ-020	Get a delta set of transactions “new matching items” (A2A mode) (PM)	COUS	DP, MAP
IOP-PMQ-030	Get a delta set of transactions “modified items” (A2A mode) (PM)	COUS	DP, MAP
IOP-PMQ-040	Get a delta set of transactions “deleted items” (A2A mode) (PM)	COUS	DP, MAP
IOP-HAM-810	Sending of an customer payment (MT103) to another CB customer (same CB)	COUS	CBC
IOP-HAM-830	Sending of an interbank payment (MT202) to another CB customer (different CB)	COUS	CBC
IOP-HAM-840	Sending of an interbank payment (MT202) to PM (different participant, same CB)	COUS	CBC
IOP-HAM-850	Receipt of a customer payment (MT103+) from another CB customer (same CB)	COUS	CBC
IOP-HAM-860	Receipt of a customer payment (MT103) from a PM participant (same CB)	COUS	CBC
IOP-HAM-870	Receipt of an interbank transfer	COUS	CBC

	(MT202) from another CB customer (same CB)		
IOP-AS-200	Real Time Settlement (no optional mechanism)	COUS	AS (SP2)
IOP-AS-210	Real Time Settlement – bilateral balances	COUS	AS (SP2)
IOP-AS-220	Real Time Settlement - multilateral balances	COUS	AS (SP2 with technical account)
IOP-AS-300	Liquidity Transfer initiated by AS	COUS	AS (SP3 with RTGS accounts)
IOP-AS-310	Bilateral Settlement (batch)	COUS	AS (SP3 with RTGS accounts)
IOP-AS-320	Bilateral Settlement (batch) multilateral balances	COUS	AS (SP3 with technical account)
IOP-AS-325	Bilateral Settlement (batch) unsuccessful settlement – multilateral balances	COUS	AS (SP3 with technical account)
IOP-AS-330	Bilateral Settlement (batch) – bilateral balances	COUS	AS (SP3 with mirror account)
IOP-AS-410	Standard Multilateral settlement (batch) interfaced model	COUS	AS (SP4 with/without guarantee account)
IOP-AS-510	Simultaneous multilateral settlement (batch)	COUS	AS (SP5 (with/without guarantee account)
IOP-AS-610	Settlement with dedicated liquidity - interfaced model	COUS	AS (SP6 daylight)

			interfaced settlement
IOP-AS-620	Settlement with dedicated liquidity - interfaced model	COUS	AS (SP6 night-time interfaced model).
IOP-AS-670	Cross-AS settlement from interfaced AS to interfaced AS	COUS	AS1 proc.6 using Cross-DVP settlement interfaced to interfaced