

# **TARGET Services Test Guidelines**

# Authorisation for new participants

Test guidelines for participants via the Deutsche Bundesbank

esponsible: Deutsche Bundesba	ank
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# National Service Desk TARGET Services

target

#### **TARGET Services Test Guidelines**



# List of versions

Version	Date	Author	Description of change
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TARGET Services Test Guidelines

# 1 Purpose of the document

This document describes the framework and conditions for test activities relating to the authorisation procedure for TARGET participants via the Deutsche Bundesbank. The test cases described are those which must be completed as a precondition for certification as a new participant in the relevant TARGET service (T2, T2S or TIPS). A detailed description of all the test cases can be found in the document "T2 Mandatory Test Cases" published on our <u>website</u>.

# 2 Organisation of the test phase

#### 2.1 Contacts

The following <u>contacts</u> are available at the Bundesbank.

Participants are each requested to designate a contact as "test manager" using the registration form "New"; that contact will be saved in the TARGET master data.

#### 2.2 Reporting and certification

Participants must document all successfully run tests and provide evidence in the form of a screenshot. Please add your screenshots to the designated Excel spreadsheet entitled "Certification test template for T2 participants" and email them to targetservices-test@bundesbank.de, stating your BIC. You will find this spreadsheet on the Bundesbank's website.

Once the mandatory tests have been successfully completed, test participants will receive a certificate of completion of the test cases in the form of a PDF document.

#### 2.3 Test times

The test environment (UTEST) is generally available on all T2 business days (Mondays – Thursdays) during the *T2-T2S Synchronised Standard Day Schedule* from 06:30 to 19:00 CE(S)T. On Fridays, the *T2-T2S Synchronised Release Day Schedule* applies, with the UTEST environment only being available until 17:30 CE(S)T.

A detailed overview of how the individual phases of a business day in the test environment are scheduled can be found in the T2 User Testing Conditions: <u>T2 User Testing Terms of</u> <u>Reference (UT TOR)</u> and the associated <u>T2-T2S – CLM/RTGS testing schedules UTEST</u>.



# **TARGET Services**





#### 2.4 Available BICs

A dedicated T2 directory is provided for routing payments.

Each direct participant is registered in this directory with its own BIC.

Furthermore, the UTEST T2 Directory contains the following Bundesbank BICs (see table) that customers can use as addressees to complete their test cases.

BIC	BIC addressee	Description
ZYELDEFFXXX	ZYELDEFFXXX	Direct participant test bank 1
ZYEEDEFFXXX	ZYEEDEFFXXX	Direct participant test bank 2
ZYBLDEFFXXX	ZYBLDEFFXXX	Direct participant (used as a customer simulator)

The T2 Single Shared Platform uses the following technical BICs:

BIC	Description
TRGTXEPMCLM	Technical BIC of the CLM component
TRGTXEPMRTG	Technical BIC of the RTGS component
TRGTXE2SXXX	Technical BIC of the ECONS II component
TRGTXE2SXXX	Technical BIC of the BILL component
TRGTXE2SXXX	Technical BIC of the T2S Service
TRGTXETTTIP	Technical BIC of the TIPS Service
TRGTECMXXX	Technical BIC of the ECMS Service

### 2.5 Test simulator

Test simulator for **T2**:

The Bundesbank's customer simulator is available for receiving SWIFT MX messages. The customer simulator "echoes" messages addressed to the BIC ZYBLDEFFXXX and sends them back to the submitter.

For this to happen, the "remittance information" field has to be populated with the codeword:

ECHORTGSn (replace "n" with a number from 1 to 9 for the number of echoes).

#### Test simulator for **TIPS**:

When sending a pacs.008 message, the submitting customer can trigger certain simulator functions by populating the "/RmtInf/Ustrd" field. The "Instructed Party" field of the pacs.008 message has to quote the BIC ZYBLDEFFXXX. The "/RmtInf/Ustrd" field must begin with the string "ECHOTIPS", immediately followed by a single-digit number indicating the number of echoes (1-9). It is not possible to trigger more than nine echoes. The message is echoed in the "Debtor" and "Creditor" blocks of the pacs.008 message. If only the string "ECHOTIPS" is stated, the message will not be echoed; instead, only the positive confirmation will be sent to TIPS in the form of a pacs.002 message. If the sender does not populate the "/RmtInf/Ustrd" field with "ECHOTIPS", the message will not be echoed, nor will any response be sent.





# 3 Tests for new participants

### 3.1 General information

To ready new participants for direct participation in T2 via the Bundesbank, the test activities described below are carried out to check whether:

- any software that has been developed by the direct participant itself or provided by a third party functions properly;
- outgoing payment messages from the direct participant can be generated in and sent from the participant's own back-office application without error;
- incoming messages for the direct participant can be processed by the participant's own back-office application without error;
- the participant's access via each TARGET Service's GUI functions correctly.

New direct participants are only admitted to T2 live operations if the specifications laid down in the T2 User Detailed Functional Specifications (UDFS) have been met and the procedural requirements have been fulfilled in both technical and specialist terms. To this end, a two-stage test procedure is carried out. The connectivity tests must have first been successfully completed before the technical tests can begin. This prevents infrastructure problems from hindering the technical tests. The technical tests encompass the payment settlement process.

When recording payments to other direct or to addressable participants, we ask that you note the respective test ID in the payment references for the test case shown.

Certification is granted once the entire test programme has been completed. You are nonetheless strongly advised to replicate and test all the business cases that will be required and used in live operations, alongside the mandatory test cases.

### 3.2 Useful documents

This section lists the main useful documents that will help you with your onboarding process and test operations:

- TARGET Services Registration and Onboarding Guide: <u>TARGET Services Registration</u> and Onboarding Guide v1.2
- TARGET Services Connectivity Guide: <u>TARGET Services Connectivity Guide v2.0</u>
- Information on NRO software: <u>ESMIG U2A Qualified Configurations v1.3/Information on</u> <u>Ascertia GoSignDesktop version 6.9.0.9</u>
- T2 Starting Guide: <u>T2 Starting Guide incl. DWH</u>



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• T2 User Testing Terms of Reference: <u>T2 User Testing Terms of Reference (UT TOR)</u>

# 3.3 Participation via SWIFT or NEXI/SIA

Participation via SWIFT or NEXI/SIA services is the access route for direct participation. Communication via the network service provider's network and the ESMIG's online interface allows all the Bundesbank's TARGET Services to be used. To facilitate this, the NSP creates and manages closed groups of users (CGUs) for both the live (PROD) and test (UTEST) environments for each Eurosystem market infrastructure (T2, T2S, TIPS, ECMS and possible future services).

Before starting the testing phase, please make sure you have carried out the following:

- SWIFT e-ordering
- NEXI/SIA e-ordering

Contact your NSP for further details.

#### 3.4 Scope of testing

Concerning authorisation as a new participant in **T2**, please refer to the **T2 Mandatory Test Cases**, which you can also find on our website: <u>T2 Mandatory Test Cases</u>

Please note the following points:

- If you are a CLM/RTGS participant and have opted for A2A connectivity, you must attach the A2A messages as proof of testing (submission of RTGS test cases ID4 to ID7 as evidence is compulsory).
- We will only accept submission of U2A test evidence (without A2A evidence for the corresponding test case) or non-submission of evidence in general on justified grounds → e.g. A2A functionality not intended for use in live operations.

The test cases for the ECONS II module are mandatory for critical participants or participants with critical payments. More on this can be found in the <u>Information Guide for TARGET</u> <u>participants: Part 1 – Fundamentals</u>.



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The mandatory tests for certification comprise the following test cases.

Connectivity tests:

Test ID	Description
CON-T2-ESMIG	Access the ESMIG landing page
CON-T2-A2A	Send a T2 A2A message
CON-T2-ECONS II	Access ECONS II via GUI

Technical tests for MCA and/or RTGS account holders in T2:

These tests should follow the T2 Mandatory Test Cases defined for the Eurosystem, which you can find on our website: <u>T2 Mandatory Test Cases</u>.

#### Technical tests for DCA holders in T2S:

Technical tests for DCA holders in T2S consist of two parts:

- 1. Please carry out the following certification test cases from Section 1.3 of the ECB document "Certification Testing Test Cases": CERT\_07, CERT\_12, CERT\_13 and CERT\_17. This document can be found <u>here</u> on the ECB's website.
- 2. Please carry out the IOP-T2SI test cases 010 to 040 that we have defined in <u>Section 4.2</u> of this document:

Test ID	Description
IOP-T2SI-010	Send a liquidity transfer from T2 to T2S via GUI
IOP-T2SI-020	Send a liquidity transfer from T2 to T2S via A2A
IOP-T2SI-030	Send a liquidity transfer from T2S to T2 via CLM
IOP-T2SI-040	Set up a standing order to transfer liquidity to T2S (CRDM GUI)

Technical tests for the use of TIPS can be found in Section 4.3:

Test ID	Description
IOP-TIPS-100a	Send a liquidity transfer from T2 to TIPS via CLM
IOP-TIPS-150	Set up a standing order to transfer liquidity to TIPS via CRDM
IOP-TIPS-170a	Initiate a liquidity transfer from TIPS via CLM

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	TARGET Services Test Guidelines	BUNDESBANK

IOP-TIPS-200	Monitor available liquidity on the TIPS DCA
IOP-TIPS-210	Monitor TIPS DCAs via CLM

#### Technical tests for the use of ECONS II can be found in Section 4.4:

Test ID	Description
IOP-ECONSII- ID1	Send a payment in ECONS II to a direct participant
IOP-ECONSII- ID2	Download list of payments when using ECONS II over several days

Technical tests for the use of the Data Warehouse can be found in Section 4.5:

Test ID	Description
IOP-DWH-STA01	Request a statement of account
IOP-DWH-TRN01	Request payment details
IOP-DWH-MIR01	Request minimum reserve details

## 4 Test content

#### 4.1 Connectivity tests

The connectivity tests check whether the technical connection to the ESMIG and the individual modules is correct.

#### Test ID: CON-T2-ESMIG

Function:	Access the ESMIG landing page
Time:	Available permanently

- TARGET registration completed
- Accessing user has the requisite roles
- Contents: The accessing user proceeds to the ESMIG landing page and can select the various TARGET services.

Test ID:	CON-T2-A2A
Function:	Send a T2 A2A message (e.g. camt.003, camt.050)
Туре:	Optional (mandatory for A2A participants)
Time:	Available permanently

target		National Service Desk TARGET Services	DEUTSCHE	
		TARGET Services Test Guidelines	EUROSYSTEM	
Contents:	Partic	pipant sends an XML file.		
Result:	The r a con	nessage is successfully sent to T2; the sende firmation.	r receives	
Test ID: Function: Type: Time:	CON Demo Mand Whils betwe	<b>T2-ECONSII</b> onste connectivity to the ECONS II GUI (see 0 atory for critical T2 participants or participants t ECONS II is activated (usually open in UTES een 10:00 and 12:00)	Connectivity tests) s with critical payments ST on Wednesdays	
Contents:	In ES and c	SMIG, the T2 participant selects ECONS II under the menu item "T2" calls up the system status by going to "Display system status".		

Result: The participant is shown the correct system status ("open").



# 4.2 Technical tests for T2S DCAs

Test ID: IOP-T2SI-010

Function: Send a liquidity transfer from T2 (CLM/RTGS) to T2S (DCA) via CLM-U2A

Last updated: 01/05/2024

target		National Service Desk TARGET Services TARGET Services Test Guidelines		DEUTSCHE BUNDESBANK EUROSYSTEM
Type: Time:	Mand 07:00	atory for T2S participants (settlement of AS night-time pr	ocessing) up t	o 15:15
Contents:	Partici	pant enters a liquidity transfer fi	rom T2 to T2S	in the GUI.
targe	tes T2	Central Liquidity Manage USER TEST   Business Day 2023-05-31	ement	
	New Liqu	Indity Transfer		
	Debit A Account Liquidit Amount	ccount CNUMBER*  Display Liquidity  Transfer Details  *  EUR BIC	Credit Account Account Number* Di Di End To End ID* Creditor BIC	splay Liquidity
Result:	The N Depe receiv are di to the	ACA has been debited and the nding on the settings configured ves a confirmation or notification fferences between the way the latest T2S UDFS for details.	Γ2S DCA has J in the master ι (e.g. camt.02 TARGET Serv	been credited. data, the participant 5/camt.054). Since there vices work, please refer
Test ID: Function: Type: Time:	IOP-1 Send (camt Mand 17:00	<b>T2SI-020</b> a liquidity transfer from T2 to T2 .050) atory for T2S participants <b>(only</b> (settlement of AS night-time pr	2S by means o r <b>in the case c</b> rocessing) up t	of XML messages of <b>A2A connection)</b> to 15:15
Contents:	Partic	ipant sends a LiquidityCreditTra	ansfer (camt.0	50) from T2 to T2S.
Result:	The N Depe receiv there refer	ACA has been debited and the nding on the settings configured ves a confirmation or notification are differences between the wa to the latest T2S UDFS for deta	Γ2S DCA has d in the master n (e.g. camt.02 ny the TARGE <sup>*</sup> ils.	been credited. <sup>-</sup> data, the participant 25/camt.054). Since T Services work, please



Test ID:	IOP-T2SI-030 (pull)
Function:	Send a liquidity transfer from T2S to T2 via CLM-U2A
Туре:	Mandatory for T2S participants
Time:	17:00 (settlement of AS night-time processing) up to 15:15

Contents: Participant enters a liquidity transfer from T2S to T2 in the GUI.

target	T2
--------	----

Central Liquidity Management USER TEST | Business Day 2023-05-31

≣ 1	New Liquidity Transfer	
	Liquidity Transfer Account Information	
	Debit Account	Credit Account
	Account Number*	Account Number*
		٩
	Display Liquidity	Display Liquidity
	Liquidity Transfer Details	
	Amount*	End To End ID*
		EUR
	Debtor BIC	Creditor BIC

Result: The amount has been debited to the DCA and the MCA has been credited. Depending on the settings configured in the master data, the participant receives a confirmation or notification (e.g. camt.025/camt.054). Since there are differences between the way the TARGET Services work, please refer to the latest T2S UDFS for details.

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taraft	TARGET Services	DEUTSCHE
	TARGET Services Test Guidelines	BUNDESBANK EUROSYSTEM
	[28] 040	

TESTID.	10F-1231-040
Function:	Set up a standing order to transfer liquidity to T2S in CRDM
Туре:	Mandatory for T2S participants
Time:	Daytime or night-time processing

Contents: Participant creates a standing order liquidity transfer from the MCA or RTGS DCA to the T2S DCA via the CRDM GUI.

2 🔊 👫 🔪 Common 🔪 Cash 🔪	Standing/Predefined Liquidity Trans	sfer Order 💙 🕇 Nev	N.	8		
STANDING/PR		TRANSFER	ORDER NEW			_
Order Reference:	1					$\sim$
Valid From:	yyyy-mm-dd	<b>m</b> O	Valid To:	yyyy-mm-dd	<b> O</b>	
Amount:	1		Currency:			$(\cdot)$
Dedicated Amount:	•		All Cash:	0		9
Order Type:	Standing	~				×
Event Type:		~	Execution Time:	00 : 00		
Creditor Account Type:		~		× ×		

Result: If set up correctly, T2 executes the standing order and supplies the specified DCA with liquidity.

### 4.3 Technical tests for the use of TIPS

### 4.3.1 U2A connection

Test ID:	IOP-TIPS-100a (push)
Function:	Send a liquidity transfer from T2 to the TIPS DCA via CLM
Туре:	Mandatory for T2S participants
Time:	07:15 to 14:00

- Access to the CLM GUI confirmed through successful test
- Sufficient funds on the MCA

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#### Contents: Participant generates a liquidity transfer to the TIPS DCA via the CLM GUI.

ta	rg	Central USER TEST	Liquidity Management	
		New Liquidity Transfer		
		Liquidity Transfer Account Inf	ormation	
		Debit Account	Credit Account	
		Account Number*	Account Number*	
			Q.	Q.
		Displa	y Liquidity Display I	Liquidity
		Liquidity Transfer Details		
		Amount*	End To End ID*	
			EUR	
		Debtor BIC	Creditor BIC	

Result: The MCA has been debited and the DCA has been credited. Depending on the settings configured in the master data, the participant receives a confirmation or notification (e.g. camt.025/camt.054). Since there are differences between the way the TARGET Services work, please refer to the latest TIPS UDFS for details.

Test ID:	IOP-TIPS-150
Function:	Set up a standing order to transfer liquidity to TIPS via CRDM
Туре:	Optional for TIPS participants
Time:	07:15 to 14:00

Requirements:

- Access to the CRDM GUI confirmed through successful test
- Sufficient funds on the MCA

Contents: Participant creates a standing order liquidity transfer from the MCA to the TIPS DCA via CRDM.



= target			Session ID: eyjhbGcl0][Uz11N][9 Business Da Parent BIC: TRGTXE2S00X BIC: MARKDEFF00	te: 2023-05-31 Stage: UTEST version: 3.0.	10 NRO Enabled	
23 🛪 🔪 Common 🔪 Cash 🔪	Standing/Predefined Liquidity Tran	sfer Order 🔪 🕇 Nev	w	đ	e.	
STANDING/PRE		TRANSFER	ORDER NEW			-0-0
Order Reference:	1					0
Valid From:	yyyy-mm-dd		Valid To:	yyyy-mm-dd	<b>m</b> 0	
Amount:			Currency:			(+) Submit
Dedicated Amount:	0		All Cash:	0		S Reset
Order Type:	Standing	~				× Cancel
Event Type:		¥	Execution Time:	00 : 00 V V		
Creditor Account Type:		~				
Creditor Cash Account Number:	Choose		Debited Cash Account Number:	Choose		

Test ID:	IOP-TIPS-170a (pull)
Function:	Initiate a liquidity transfer from TIPS via CLM
Туре:	Mandatory for TIPS participants
Time:	07:15 to 14:00

- Access to CLM confirmed through successful test
- Contents: Participant transfers liquidity from the TIPS DCA to the MCA.
- Result: The correct TIPS DCA can be selected in CLM and the liquidity transfer can be processed.



#### Central Liquidity Management target T2

USER TEST | Business Day 2023-05-31

= 💌	New Liquidity Transfer	
	Liquidity Transfer Account Information	
	Debit Account	Credit Account
	Account Number*	Account Number*
	Display Liquidity	Display Liquidity
	Liquidity Transfer Details	2 V 10 11
	Amount*	End To End ID*
	Debtor BIC	Creditor BIC

#### Test ID: **IOP-TIPS-210**

Function:	Monitor TIPS DCAs via CLM
Туре:	Mandatory for TIPS participants
Time:	07:15 to 14:00

- Access to the CLM GUI confirmed through successful test
- At least one TIPS DCA is linked with the MCA that the participant is monitoring
- Participant selects the view "Query Dashboard Liquidity Overview" and then Contents: picks out its MCA and TIPS DCA.
- Result: Participant can view the current balance of the TIPS and T2S DCAs.

target	National Servic TARGET Ser	DEUTSCHE BUNDESBANK		
	TARGET Services Tes	t Guidelines	EUROSYSTEM	
target T2 Cent USER	tral Liquidity Management TEST   Business Day 2023-06-26	User: Release: 5.1.	5.1 DEUTSCHE BUNDESBANK EUROSYSTEM	
Display Dashboard Services	d Liquidity Overview Account Selection grou	ped by	公 ? 🌣 🖰	
+ Search Criteria - Results		100 c + 100 c	Last Refresh: 2023-06-23 15:41:21 CEST Refresh	
- CLM	3,000,014,664.11 EUR	Aggregated View		
Liquidity Information CLM		Available Liquidity in C	CLM 3,000,014,664.11 EUR	
- MDEEURZYELDEFFXXX		Liquidity in TIPS	0.00 EDR	
Current Balance	14,664.11 EUR	Liquidity Overall	3,000,014,664.11 EUR	
Credit Line	3,000,000,000.00 EUR	Current Liquidity Over	all 3,000,014,664.11 EUR	
Seizure of Funds	0.00 EUR			
Available Liquidity	3,000,014,664.11 EUR			
Queued Debit Cash Transfer	Orders 0.00 EUR			
Queued Credit Cash Transfe	r Orders 0.00 EUR			
Earmarked Debit Cash Trans	fer Orders 0.00 EUR			
Earmarked Credit Cash Tran	sfer Orders 0.00 EUR			
Projected Liquidity	3,000,014,664.11 EUR			
- TIPS	0.00 EUR			
Liquidity Information TIPS				
- IDEEURZYELDEFFXXX				
Current Balance	0.00 EUR			

### 4.3.2 A2A connection

Test ID:	IOP-TIPS-110
Function:	Send a liquidity transfer from T2 to TIPS DCA via A2A
Туре:	Optional for TIPS participants
Time:	07:15 to 14:00

- There is sufficient liquidity on the MCA
- Contents: Participant sends a LiquidityCreditTransfer camt.050 from T2 to the TIPS DCA.
- Result: The MCA has been debited and the TIPS DCA has been credited. Depending on the settings configured in the master data, the participant receives a confirmation or notification (e.g. camt.025/camt.054). Since there are differences between the way the TARGET Services work, please refer to the latest TIPS UDFS for details.



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Test ID:	IOP-TIPS-170c
Function:	Initiate a liquidity transfer from TIPS via A2A
Туре:	Optional for TIPS participants
Time:	07:15 to 14:00

#### Requirements:

- There is sufficient liquidity on the MCA
- Contents: Participant sends a liquidity transfer to T2 using camt.050, which is forwarded to TIPS for settlement after validation.
- Result: The TIPS DCA has been debited and the T2 account has been credited. Depending on the settings configured in the master data, the participant receives a confirmation or notification (e.g. camt.025/camt.054). Since there are differences between the way the TARGET Services work, please refer to the latest TIPS UDFS for details.

#### Test ID: IOP-TIPS-220

Function:	Monitor TIPS DCAs via A2A
Туре:	Optional for TIPS participants
Time:	07:15 to 14:00

#### Requirements:

- Access to CLM confirmed through successful test
- At least one TIPS DCA is linked with the MCA that the participant is monitoring

Contents: Participant checks the TIPS account balance of the linked TIPS accounts via T2's A2A interface by sending a GetAccount message (camt.003).

Result: Participant can check information about the current balance of one or more TIPS DCAs.

T2 will separate the request for several DCAs and send individual account balance requests to TIPS.

The individual responses from TIPS are grouped in T2 and transferred to the participant as a single response via ReturnAccount (camt.004).

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## 4.4 Technical tests for the use of ECONS II

Test ID:	IOP-ECONS-ID1
Function:	Send a payment from one ECONS II participant to another ECONS II
Type:	Optional for T2 participants
Time:	Whilst ECONS II is activated

Contents: T2 participant sends a contingency payment to another T2 participant in ECONS II.

= target	Session ID: eyjhbGciOijIUz1Nij9 Business Date: 2023-07-18	14:44:07   » ? Help  » & Logout 7-14 Stage: UTEST version: 1.0.4 NRO Enabled	
希 🔪 Liquidity Management 🔪 Select Participant 🔪 Q. Search			
Participant BIC ZYELDEFFXXX	Currency:	EUR - Euro 🗸	
Q Search X Reset			

Result:	The contingency payment has been settled successfully in ECONS II (upon
	confirmation by the central bank).

Test ID: Function: Type: Time:	IOP-ECONS-ID2 Download transaction activity from ECONS II as a .xlsx/.csv file Optional for T2 participants After completion of an ECONS II procedure
Contents:	T2 participant downloads its transactions in ECONS II from the GUI as a .xlsx or .csv file after completion of contingency procedure. (ECONS II closing day up to a maximum of ten business days after ECONS II opens.)
Result:	Participant receives a statement of account listing its ECONS II transactions.





#### 4.5 Technical tests for the use of the DWH

Test-ID:	IOP-DWH-STA01
Function:	Request a statement of account
Туре:	Optional for T2, T2S and TIPS participants
Time:	Anytime

- Contents: Participant selects the "Data Warehouse" service in ESMIG. The menu button at the top left leads to the "Content" option. The path "Team Content/Predefined Reports" takes the user to the "STA – Statement Reports" selection. Once there, select "STA01 – Statement of account (single account)". Complete the required fields listed and click "Finish".
- Result: The statement of account is displayed to the participant and can be downloaded in a variety of formats.

arget			STA01 - Stater	STA01 - Statement of account (single account)					
ARKDEFFXXX - BBK									
Itters Date From 2023-07-04 Date To 2023-07-04 Party BIC 2YELDEFFXXX - Account number: RDEEURZYELDE	NSD Testbank 1 EFFXXXDCA1								
National Sorting Code Account Type RDCA	C	urrency EUR arty Address Wilhelm-Epstein-	Str. 14 60431 Frankfurt am Main						
Flace and Date Flankfult an Ma	am 2023-00-03 C	reated by MARKDEFFAAA	- DDK						
Account Number: RDEEURZYELDEFFX	XXDCA1								
Date: 2022 07 04									
Date: 2023-07-04			4.77	2.4-1.5					
			Debit	Credit	Balance				
					SOD 92,832.96				
Reference Id1				2.50	92 835 46				
Reference Id2	-1			(0000)					
Settlement timestamp	2023-07-03 1	7:02:00.325							
Counterpart country code DE									
Counterpart party BIC ZYELDEFFXXX									
Counterpart account BIC	ZYELDEFFE	HY							
Counterpart Service	T2_RTGS								
Total number of cash transfers	1	Total sum of cash transfers		2.50	EOD 92,835.46				
Overall number of cash transfers	1	Overall sum of cash transfers		2.50					

Test-ID:	IOP-DWH-TRN01
Function:	Request payment details
Туре:	Optional for T2, T2S and TIPS participants
Time:	Anytime
Contents:	Participant selects the "Data Warehouse" service in ESMIG. The menu
	button at the top left leads to the "Content" option. The path "Team
	Content/Predefined Reports" takes the user to the "TRN – Transaction





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Reports" selection. Once there, select "TRN01 – Cash transfer (order) search and details". Complete the required fields listed and click "Finish".

Result: Participant is shown all payments that meet the search criteria. The payment details for each individual payment can be downloaded in various formats.

target			TRN01 - Cash transfer (order) search
MARKDEFFXXX - BBK			
Filters Date From Debited / Credited party BIC	2023-07-04 ZYELDEFFXXX NSD Testbank 1	Date To : 2023-07-04	

Transaction search at : Jul 4, 2023 Currency : EUR

#### ZYELDEFFXXX as Credited Party

Transaction Reference Number	Sender Message Reference	Message Type	Service Type	Sender BIC	Receiver BIC	Status	Debited Account Number	Debited Account BIC	Credited Account Number	Credited Account BIC	Amount
0312447	Not provided	Not provided	RTGS	ZYELDEFFXXX	ZYELDEFFXXX	Settled	MDEEURZYELDEFFXXX	ZYELDEFFXXX	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	50.00
0313424	Not provided	Not provided	RTGS	ZYELDEFFXXX.	2YELDEFFXXX	Settled	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	RDEEURZYELDEFFXXXDCA2	ZYELDEFFEHX	5.00
0313420	Not provided	Not provided	RTOS	ZYELDEFFXXX.	2YELDEFFXXX	Settled	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	RDEEURZYELDEFFXXXDCA1	ZYELDEFFXXX	2.50
6313429	Not provided	Not provided	RTGS	ZYELDEFFXXX.	ZYELDEFFXXX	Settled	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	UDEEUR2YELDEFFXXXDE1	Not provided	1.50
6313433	Not provided	Not provided	RTGS	ZYELDEFFXXX.	ZYELDEFFXXX	Settled	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	UDEEURZYELDEFFXXXDE2	Not provided	1.50
6313438	Not provided	Not provided	RTGS	ZYELDEFFXXX.	ZYELDEFFXXX	Settled	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	UDEEURZYELDEFFXXXDE2	Not provided	1.50
6313444	Not provided	Not provided	RTGS	ZYELDEFFXXX	ZYELDEFFXXX	Settled	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	UDEEURZYELDEFFXXXDE1	Not provided	1.50
0314740	EGP3070317030703	camt.021	RTGS	ZYELDEFFXXX	ZYELDEFFXXX	Settled	UDEEURZYELDEFFXXXDE2	Not provided	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	3.00
6314807	SCP3070317071479	came.021	RTGS	ZYELDEFFXXX	ZYELDEFFXXX	Settled	UDEEURZYELDEFFXXXDE1	Not provided	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	3.00

#### ZYELDEFFXXX as Debited Party

Transaction Reference Number	Sender Message Reference	Message Type	Service Type	Sender BIC	Receiver BIC	Status	Debited Account Number	Debited Account BIC	Credited Account Number	Credited Account BIC	Amount
6312447	Not provided	Not provided	CLM	ZYELDEFFXXX	ZYELDEFFXXX	Settled	MDEEURZYELDEFFXXX	ZYELDEFFXXX	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	50.00
6313424	Not provided	Not provided	RTOS	ZYELDEFFXXX	ZYELDEFFXXX	Settled	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	RDEEURZYELDEFFXXXDCA2	ZYELDEFFEHX	5.00
6313426	Not provided	Not provided	RTGS	ZYELDEFFXXX	ZYELDEFFXXX	Settled	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	RDEEURZYELDEFFXXXDCA1	ZYELDEFFXXX	2.50
6313429	Not provided	Not provided	RTGS	ZYELDEFFXXX	ZYELDEFFXXX	Settled	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	UDEEURZYELDEFFXXXDE1	Not provided	1.50
0212423	Not provided	Not provided	RTGS	ZYELDEFFXXX	ZYELDEFFXXX	Settled	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	UDEEURZYELDEFFXXXDE2	Not provided	1.50
6213438	Not provided	Not provided	RTGS	ZYELDEFFXXX	ZYELDEFFXXX	Settled	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	UDEEURZYELDEFFXXXDE2	Not provided	1.50
0313444	Not provided	Not provided	RTGS	ZYELDEFFXXX	ZYELDEFFXXX	Settled	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	UDEEURZYELDEFFXXXDE1	Not provided	1.50
6314746	ECP3070317030703	camt.021	RTGS	ZYELDEFFXXX	ZYELDEFFXXX	Settled	UDEEURZYELDEFFXXXDE2	Not provided	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	3.00
6314907	SCP3070317071470	camt.021	RTGS	ZYELDEFFXXX	ZYELDEFFXXX	Settled	UDEEURZYELDEFFXXXDE1	Not provided	RDEEURZYELDEFFXXXDCA3	ZYELDEFFEHY	3.00

#### Test-ID: IOP-DWH-MIR01

Function:	Request minimum reserve details
Туре:	Optional for T2, T2S and TIPS participants
Time:	Anytime

Contents: Participant selects the "Data Warehouse" service in ESMIG. The menu button at the top left leads to the "Content" option. The path "Team Content/Predefined Reports" takes the user to the "MIR – Minimum Reserve Reports" selection. Once there, select "MIR01 – Minimum Reserve Information". Complete the required fields listed and click "Finish".

Result: A report is generated and displayed to the participant. It can be downloaded in a variety of formats.