TIPS
Guide for the on-boarding of new customers

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0. **INTRODUCTION**

This document outlines the principles for the on-boarding of new participants in TIPS, with a focus on detailing the steps towards participation in the TIPS production environment.

New participants can connect to TIPS as soon as they are certified (i.e. have completed the connectivity and interoperability testing activities required by the responsible National Central Bank) and ready to send instant payments to and from TIPS, pending an agreement between the NCB and the TIPS Service Desk on the production connection date.

The present guide aims at providing an overview of all the available information to support the on-boarding and testing of new TIPS participants. It describes the main information available and all relevant documents (listed below) can be found on the ECB – TIPS webpages.

- TIPS Connectivity Guide
- Connectivity - Technical requirements
- NSP Compliance check procedure
- Message exchange processing for TIPS
- TIPS Connectivity - Hosting terms and conditions
- TARGET2 - Reference and Static Data Registration User guide
- TIPS User Testing Terms of Reference
- TIPS Certification test cases
- TIPS User Detailed Functional Specifications (UDFS) and User Handbook (UHB)
- TIPS messages schema files
- CRDM User Detailed Functional Specifications (UDFS) and User Handbook (UHB)
- ESMIG UDFS
- Information Guide for TARGET2 users
- TIPS ACH Milestones
- TIPS PSP Checklist

Further documents could be available on the NCB websites. Contact your NCB for further guidance.
1. **TIPS AS PART OF THE EUROSYSTEM FMI**

TARGET Instant Payment Settlement (TIPS) is a harmonised and standardised pan-European service with common functionality across different countries and jurisdictions for settling payments instantly in Central Bank Money, with high capacity and around-the-clock availability.

The participants (i.e. ACHs or PSPs) or their Instructing Parties have a settlement interface to send Instant Payment transactions and receive payment confirmations or any other payment related messages based – when possible – on ISO 20022 standards and in accordance with the SEPA Instant Credit Transfer (SCTInst) scheme.

TIPS accounts in euro are legally opened in TARGET2 (under the legal framework) by the responsible NCB and have to be dedicated to the settlement of Instant Payments transactions in TIPS. In the specific scenario of the RTGS for euro (i.e. TARGET2), the TIPS account balances are taken into account for the calculation of the minimum reserve and marginal lending facility.

For ACHs Ancillary System (AS) Technical Accounts are opened by their NCB to fund/defund the guarantee to provide instant finality and to settle instant payments and recall answers. TIPS services are billed via TARGET2.
2. ESMIG, CRDM AND TIPS
The Eurosystem Single Market Infrastructure Gateway (ESMIG) provides the single access point for the external communication to the Common Reference Data Management (CRDM) and to TIPS. This means it is in charge of A2A and U2A traffic management providing authentication of all inbound traffic (U2A and A2A) as well as sender (i.e. external party sending communication) authentication and identification.

The TIPS connectivity guide referred to in the section below provides information about how to connect to ESMIG.

The Common reference data module (CRDM) reduces the effort required to create and maintain multiple copies of reference data and centralizes the management of user access rights. The configuration of TIPS reference data is done in the CRDM GUI.
3. CONNECTIVITY TO TIPS

3.1. TIPS CONNECTIVITY GUIDE
The aim of the Connectivity Guide is to explain how to establish a technical connection to TIPS and to describe the process to be followed to register to TIPS and to select a Network Service Provider (NSP). The TIPS connectivity guide is available on the ECB TIPS website.

3.2. USEFUL INFORMATION FOR U2A/A2A CONNECTIVITY
TIPS participants who will use the services of an Instructing Party must make clear with their provider whether they will need to connect to TIPS in U2A mode in order to perform administration services e.g. update of a CMB limit. Some Instructing Parties will connect in U2A mode on behalf of the TIPS participant while others do not provide this service. Roles and privileges must be configured by either the participant or its Instructing Party and as such U2A mode is mandatory.

3.3. PARTICIPANTS REGISTRATION
The TIPS participant (including participants who act as ACH) must contact its NCB to request the relevant registration forms. The Reference and Static Data Registration User Guide that is available on the ECB – TIPS website - including registration forms and Roles and privileges for Payment Banks (T2, TIPS, T2S) - can be consulted in order to complete the forms. The participant is responsible for the completion and submission of its forms and those of its reachable parties. All administrational and contractual activities will be explained by the relevant TIPS National Service Desk (NSD). The NCB will insert the static data in the CRDM and the TARGET2 ICM in accordance with the registration forms and the participant must check the correctness of the data as soon as it becomes effective.

3.4. NETWORK SERVICE PROVIDERS (NSP)
The list of NSPs is available on the ECB website. Currently, SWIFT and SIA provide this service.

3.4.1. SWIFT
TIPS registration at SWIFT consists of two steps:

1. Participants register their user Distinguished Names (DNs) in TIPS static data in CRDM (via their NCB)

2. Participants register with SWIFT to enable access to TIPS (using an e-order page on www.swift.com )
For the second step, the participant must complete and submit the relevant eMSSF on swift.com

Once logged in to swift.com, the order form is listed under "Order Products and Services":

There are different forms to subscribe to TIPS CERT environment (for testing purposes) and the TIPS PROD environment (live usage).

For every submitted order, SWIFT automatically requests approval from:

- the NCB (as selected on the form)
- and the TIPS Operator

Once both approvals have been received by SWIFT, SWIFT activates the participant on the network which can take up to two weeks.

SWIFT provides confirmations by email to the participant during this process.

SWIFT's Solution for TIPS is documented in the TIPS/ESMIG service description which will be made available to the participant once the registration is complete.

3.4.2. SIA

3.4.2.1. User Registration

Once the contractual relationship is established between SIA and the Customer, SIA registers the Customer in the SIAnet.XS Portal.

The customer is requested to provide SIA with the User Administrator Appointment Letter to register the initial Customer user in the Portal.

This user represents the initial user administrator and its main duty is to create other Customer’s users in the Portal.
3.4.2.2. Domain Joining, i.e. subscription to TIPS Closed Group of Users (CGUs)

Adhering to the TIPS Connectivity Guide, the Domain Join workflow enables TIPS Actors to join TIPS CGU. The request is initially verified by SIA, and then it is authorized by the relevant NCB (if applicable) and, in the end, approved by the TIPS Operator. A Domain Join is requested for each CGU, i.e. for Message/File/U2A for each environment (CERT/PROD).

During this phase, the TIPS Actor defines and provides its Business User address (BU), i.e. the Technical Address used for exchange of A2A messages.

This Technical Address should match the value reported in the Form 8000 for registering TIPS Party.

3.4.2.3. Configuration Phase

Once the CGU request has been approved by the TIPS Operator, SIA implements the A2A/U2A addressing configuration. The addressing configuration is then made available over the SIAnet.XS network nodes.

3.4.2.4. Certificates Management

A2A certificates: The Customer Security Officer requests - through SIAnet.XS Portal - the digital certificates used for authentication and non-repudiation by the SIAnet.XS network gateway to exchange traffic. The enrolment procedure is fully automated and the certificates are stored in HSM module embedded in SIAnet.XS network gateway.

U2A certificates: Customer Security Officer requests - through SIAnet.XS Portal - the digital certificates used for authentication and non-repudiation by Customer end users accessing the TIPS web portal (GUI, CRDM...). The enrolment procedure is managed by Customer Security Officer, and the certificates are stored in USB tokens. The End User Certificate Distinguished Name should match the value reported in the Form 8200.

TLS certificates: The Customer Security Officer requests - through SIAnet.XS Portal - TLS certificates to secure the communication channels between SIA and Customer infrastructure according to SIA security guidelines.

3.4.2.5. LAU Key Management

This is the configuration of the security keys used to secure the communication between Customer messaging interface and SIAnet.XS network gateway.
3.5. ACCESS TO ESMIG VIA NSP

The access to the ESMIG is provided by the NSP. Once access has been established the NSP configuration can be considered successful. Any issues resulting in not accessing the ESMIG should first be addressed to the NSP. If it is detected that the connectivity issue is not originating from the NSP, the TIPS Service Desk is ready to assist on any connectivity issues. This means also that once ESMIG has been successfully accessed, should any connectivity issues appear, TIPS actors can contact the TIPS Service Desk directly.

For U2A users the ESMIG portal is accessed. This is a landing page which leads to the subscribed TARGET services.

Depending on the roles and privileges granted to the user in ESMIG, CRDM and/or TIPS should be accessible to them. See the document: Reference and Static Data Registration User Guide - including registration forms and Roles and privileges for Payment Banks (T2, TIPS, T2S).
4. CONFIGURATION OF TIPS REFERENCE DATA

The TIPS reference data set-up guide with step by step descriptions is available on the ECB website. The guide is intended as an additional aid for the CRDM GUI user to configure the static data under their responsibility but is not intended to replace the CRDM UHB.

4.1. TIPS ROLES AND PRIVILEGES

The description of the TIPS roles and underlying privileges can be found in the TARGET2 Reference and Static Data Registration User Guide that is available on the ECB – TIPS website. The linked document provides the necessary information to complete the user configuration and to ensure that the necessary access privileges to both CRDM and TIPS for U2A/A2A users are in place.

4.2. CONFIGURING AN INSTRUCTING PARTY

Detailed instructions for how to set up an Instructing Party can be found in the TIPS reference data set-up guide which is available from the relevant TIPS NSD.

4.3. CONFIGURATION OF REPORTS IN TIPS

4.3.1. TIPS directory

The TIPS directory is available to TIPS participants from the moment they are registered in TIPS. Users can subscribe by following the steps in the TIPS reference data set-up guide. The directory can be received in push or pull mode and in a full or delta version.

4.3.2. Message subscription

The description of how to define a message subscription rule is found in the TIPS reference data set-up guide.
5. TESTING

Participants in the TIPS Certification tests activities are:

- the ECB
- The TIPS Service Desk
- The Eurosystem Central Banks
- TIPS Participants (TIPS DCA Holders, including Ancillary Systems i.e. TIPS AS Technical Account holders)
- TIPS Reachable Parties (TIPS participants are responsible for their RPs)

The TIPS User Testing Terms of Reference¹ (ToR) outlines the principles for the preparation, organisation and execution of User Testing for prospective participants in TIPS, with a focus on detailing the testing activities which will be carried out in the TIPS Certification test environment and in the CRDM Pre-production test environment.

¹ Please refer to the ECB – TIPS website
6. CERTIFICATION

Participants (including Ancillary Systems) must be certified by the responsible NCB in order to access TIPS and CRDM production. The link to the TIPS certification test cases (including a detailed description of the test cases and the certification approach) is in the introduction. Certification evidence will be checked by the relevant NCB in cooperation with the TIPS Service Desk.

PSPs who intend to settle instant payments on an Ancillary System (AS) Technical Account in TIPS must also perform the related certification tests. Ancillary Systems must perform the dedicated AS certification tests.
7. SUPPORT GUIDELINES (RAISING ISSUES)

7.1. TIPS PARTICIPANTS

TIPS customers may raise an issue with their NSD on production and testing matters. If it is further referred to the TIPS Service Desk, the NSD will receive an incident number to track the issue. Further details of this process are available in the User Testing ToR (please refer to section 5. TESTING).

7.2. INSTRUCTING PARTIES & REACHABLE PARTIES

As Reachable Parties and Instructing Parties do not have a formal business relationship as concerns TIPS with a specific NCB, below case-by-case set-up will be applied to ensure that instructing parties are provided with the necessary business support:

i. Functional questions:

   For *instructing parties*, questions related to the functionality of TIPS could be directed by the instructing party to a NSD, either to the NSD of the country where the instructing party is located or to the one which is having a business relationship with a TIPS DCA holder using the instructing party.

   Alternatively, such questions could also be addressed by a TIPS DCA holder using the instructing party. In this case, the TIPS DCA holder will submit the questions to the NSD of the NCB with which it is having a contractual relationship. The NSD will either be able to clarify the question on its own or, if not, will involve the TIPS service desk.

   For *reachable parties*, questions related to the functionality of TIPS should be addressed to the TIPS DCA holder they have a relationship with and the TIPS DCA holder can contact the responsible NSD in case of need.

ii. Enquiries related to individual TIPS DCAs or TIPS DCA holders:

   In situations where an instructing party needs to obtain information about an individual TIPS DCA holder which is using the instructing party (e.g. the instructing party might have a question concerning a specific transaction), with the TIPS DCA holder’s consent in writing (submission of side letters which give third parties a power of attorney), its home NCB can provide the instructing party with the required information about the TIPS DCA holder itself and/or its reachable parties.

   In case of instructing parties enquiring, it is implied that the TIPS DCA holder has obtained consent also from its reachable parties (if any) that such information can be provided to the instructing party.
iii. Technical connectivity issues:

If an instructing party is experiencing a technical connectivity problem, it is allowed to contact the TIPS Service Desk directly and the TIPS Service Desk will provide information that is connectivity related if the contacting instructing party is authorised by a NCB to receive such information (e.g. Distinguished Names, Party Technical Addresses).

If the TIPS service desk is approached in relation with other issues than connectivity, the request from the instructing party will be rejected and, depending on the specific situation, the instructing party should proceed in accordance with the procedures outlined in case i. above.