

TARGET Instant Payment Settlement

TIPS Connectivity Guide

TIPS Contact Group #1

Summary

- The aim of the Connectivity Guideline is to provide the TIPS actors with the relevant guidelines for establishing a technical connection to TIPS.
- Addressees of the document:
 - TIPS Actors
 - NSP (via TIPS actors)

How to connect to TIPS

- TIPS will be a network agnostic service
- TIPS Participants will decide the Network Vendor they intend to use, as long as the NSP (Network Service Provider) solution is compliant with the connectivity requirements

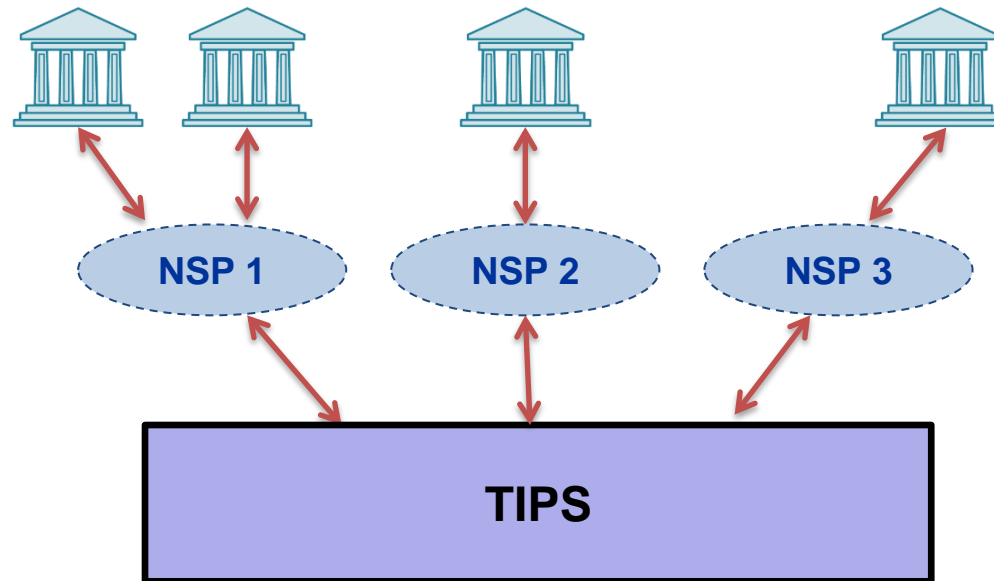


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Global Connectivity Overview

- Central Banks
- TIPS Participants
- Reachable Parties
- Instructing Parties

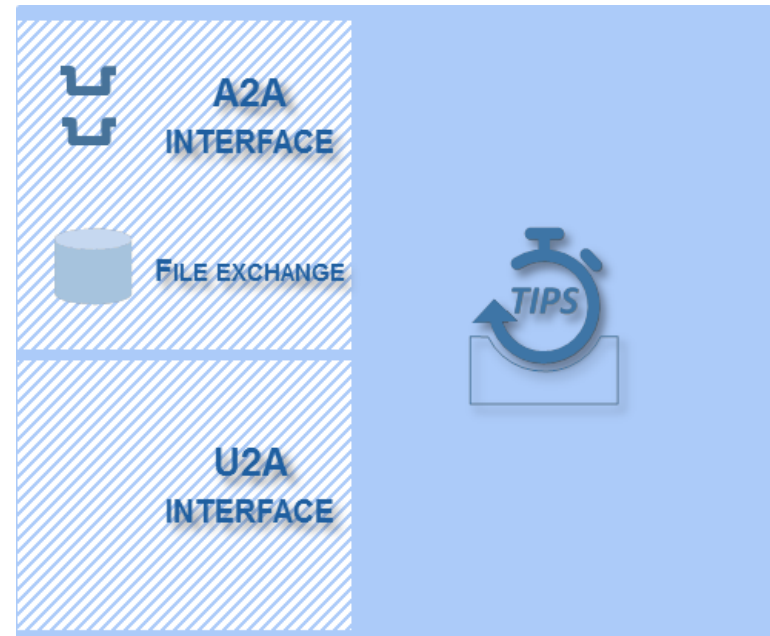


Global Connectivity Overview

1. The NSPs shall provide the following services:
 - Network connectivity;
 - Messaging services in U2A and A2A mode;
 - Security services: PKI and Closed Group of Users (CGU) management;
 - Operational services: Support and incident management.

Global Connectivity Overview

- The TIPS Actor applications and the end-users can communicate with TIPS with two different modes: Application to Application (A2A) or User to Application (U2A).
- For the A2A instant messaging mode, TIPS communicates with the participants only using “stateless” messages in ISO 20022 format and with no support of “store-and-forward”
- File transfer mode is used by TIPS only for outgoing reports
- The U2A interface between TIPS and the NSP is based on the standard HTTPs protocol



TIPS Registration and Compliance check processes

1 Global Connectivity Overview

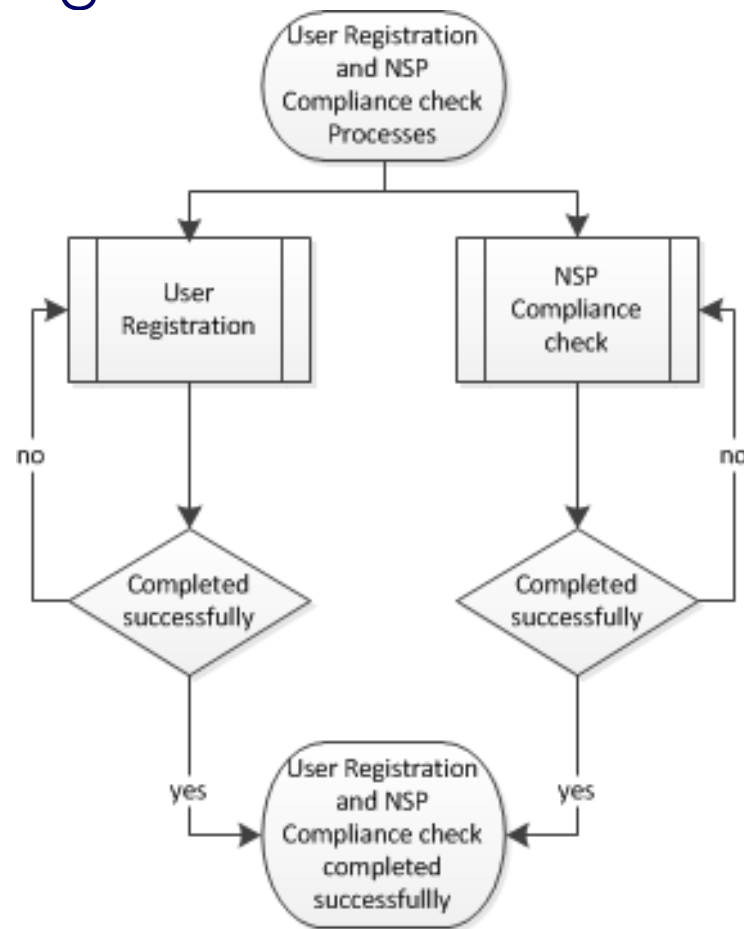
2 **TIPS Registration and Compliance check processes**

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4 Business Continuity

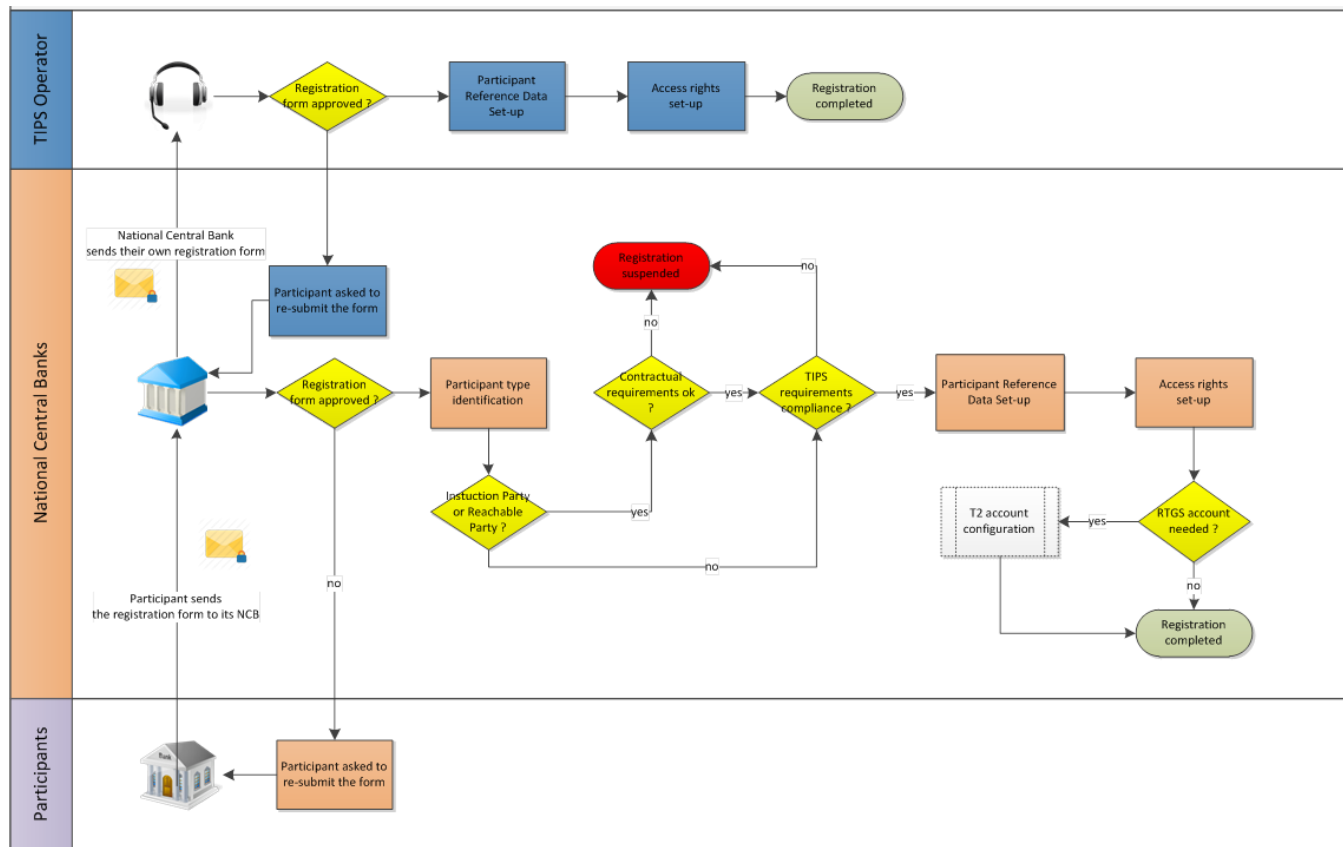
TIPS Registration and Compliance check processes

- Two sub-processes: User Registration and NSP Compliance check
- Participants, Reachable Parties, Instructing Parties or Central Banks acting as Participants have to apply for a registration process before starting to use TIPS services
- Sponsored NSP have to pass a compliance check process in order to offer their services to their TIPS users



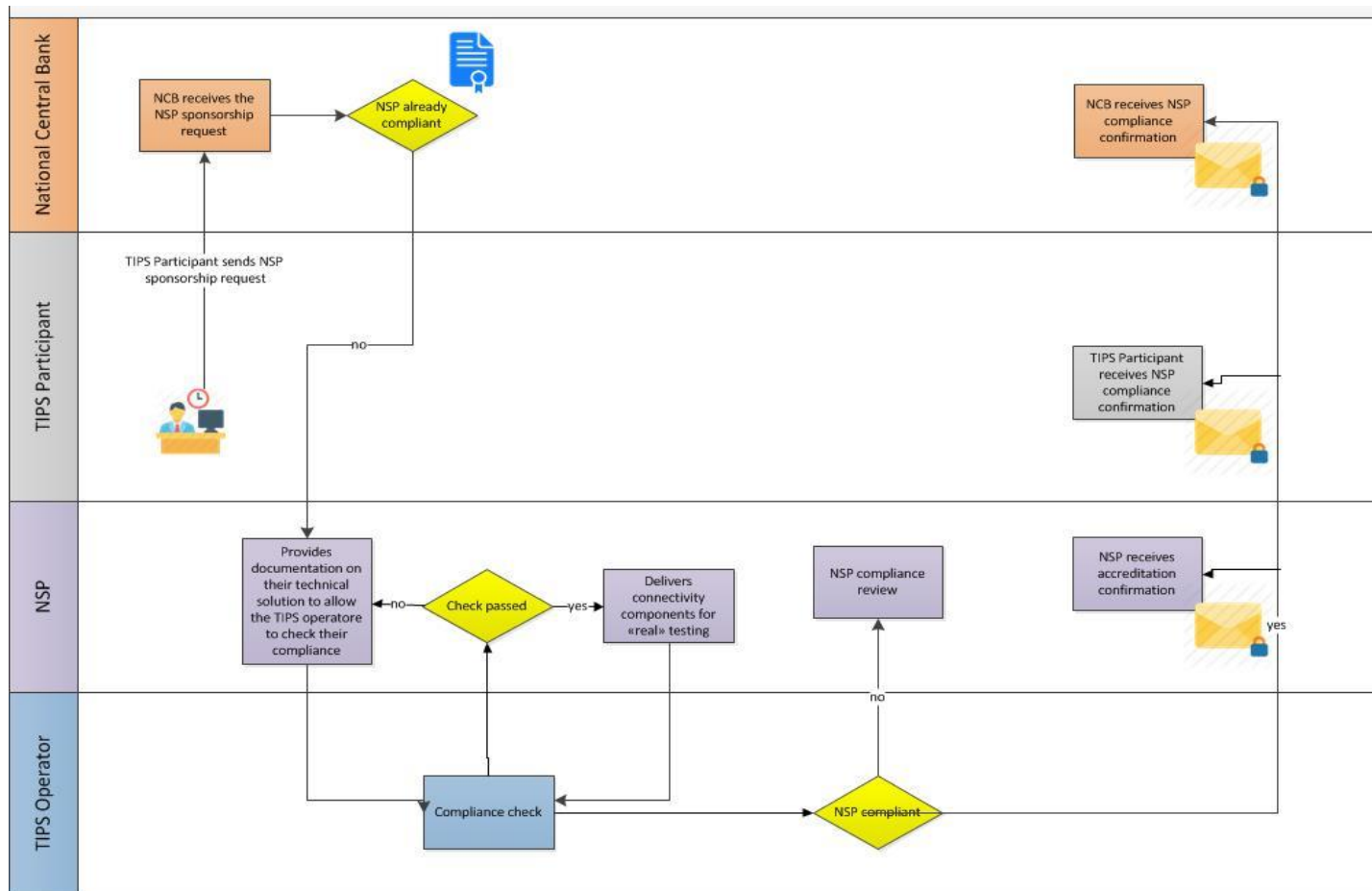
TIPS Registration and Compliance check processes

- User Registration



TIPS Registration and Compliance check processes

- NSP Compliance check



TIPS Registration and Compliance check processes

- NSP Connectivity Services:
 - **CGU Subscription workflow** - The NSP shall allow creation and removal of logically segregated groups of TIPS Actors or end users
 - **Digital certificates** - The NSP PKI provides digital certificates of the following kind:
 - U2A channel: certificates on a smart-card or USB token;
 - A2A channel: certificates on HSM for live traffic.
 - **Connection Security** - The NSPs are responsible for providing a secure connection to TIPS for customers subscribing to their services.

TIPS Access to A2A/U2A Services

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3 **TIPS Access to A2A/U2A Services**

4 Business Continuity

TIPS Access to A2A/U2A Services

- NSP documentation shall include details on:
- **Access to the U2A services** - TIPS relevant URLs (GUI, Trouble Management System, etc.) are reported.
- **TIPS GUI Operability Requirements** – needed hardware/software configuration to access TIPS GUI.
- **Access to the A2A services** – addressing rules for Message/File exchange.

TIPS Access to A2A/U2A Services

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Business Continuity

- NSPs business continuity requirements:
 - In the case of TIPS intra-region recovery (between primary and secondary site), the NSP shall switch traffic between the sites in less than 15 minutes.
 - The NSPs shall manage their own disaster recovery solution, affecting TIPS Connectivity Services, so as to restore traffic in less than 15 minutes. The TIPS active site will, under no circumstance, be forced to switch over to the TIPS secondary one.

References

- TIPS Connectivity Guide (draft – to be provided)
- TIPS Connectivity – Technical Requirements (draft v1.0 – 21/04/2017)
- TIPS User Requirements (final, v1.0 – 21/06/2017)