

Change Request form

General Information (Origin of Request)		
☒ User Requirements Document (URD) ☒ User Detailed Functional Specification (UDFS) ☐ User Handbook (UHB) ☐ Other User Functional or Technical Documentation (SYS)		
Request raised by: Eurosystem	Institution: Eurosystem	Date raised: 02/06/2026
Request title: TIPS Interlinking Landing Zone - Connectivity with other Interconnected Instant Payment Systems		Request ref. no: TIPS-0114-URD
Request type: Interlinking change request		
1. Legal/business importance parameter: Medium	2. Market implementation efforts parameter – Stakeholder impact: Medium	
3. Operational impact: High	4. Financial impact parameter: High	
5. Functional/ Technical impact: Medium	6. Interoperability impact: Medium	
Requestor Category: Eurosystem	Status: PA Approved	

Reason for change and expected benefits/business motivation:

The primary driver for the change is to overcome the technical, legal and pricing obstacles a candidate Instant Payment System Operator (IPSO) for interlinking, located in a different jurisdiction may face to connect to TIPS via standard Network Service Providers (NSPs) connectivity as per the existing Concession Contract.

This prompted an assessment of alternative connectivity options. Following this analysis, the Market Infrastructure Board (MIB) endorsed an option called “Bilateral Link with Banca d’Italia (Bdl managed solution)” — a secure VPN connection over the public Internet where Bdl is acting as technical facilitator to reach TIPS — for further development. The diagram gives an overview of the network connectivity option considered.

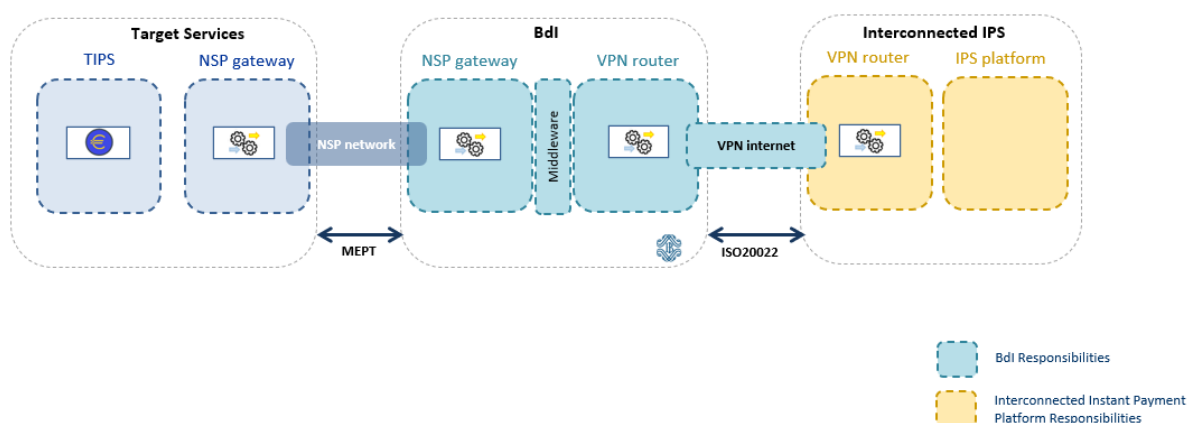


Figure 1: TIPS ↔ Interlinking Connectivity option as endorsed by the MIB

Via this option, Bdl operates a solution to route messages via ESMIG to/from TIPS and the Interconnected Instant Payment System. Bdl creates a “silo” within their infrastructure, connected to ESMIG via NSPs through Message Exchange Processing for TIPS (MEPT). The candidate IPSO would connect to the Bdl infrastructure via an internet-based VPN, without a need for a direct contract with the NSPs. NSPs will have their own contractual arrangements with Bdl.

A key anticipated benefit is the reusability of the “Network Connectivity” and “Message Transport” layers pattern described in this CR as a reference model/architecture for future corridors where standard connectivity cannot be applied and thereby facilitate onboarding of new Interconnected Instant Payment Systems with minimal impact. This consideration will be incorporated by Bdl into the design of this new interlinking connectivity solution.

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Description of requested changes:

Scope

The scope of this change request is depicted below: it includes network connectivity from the Interconnected Instant Payment System endpoint to a Bdl endpoint up to a new NSP gateway dedicated to interlinking to reach TIPS via a so-called “*Interlinking Landing Zone*”. The diagram below shows in dotted line the new TIPS Interlinking Landing Zone in scope.

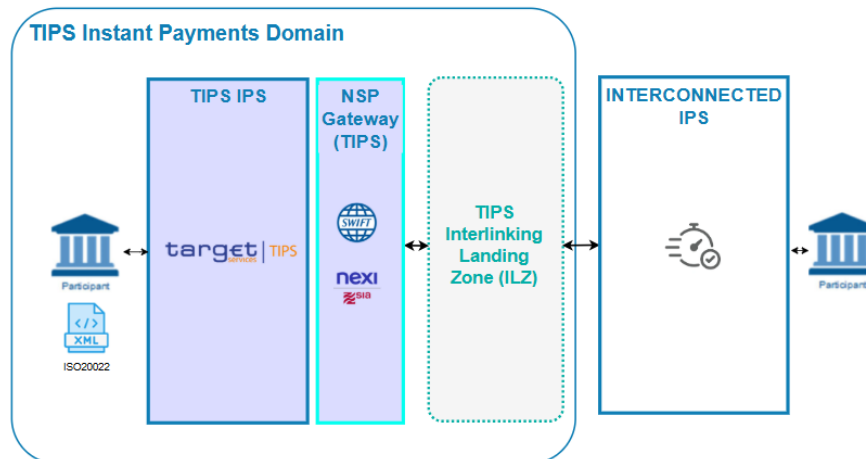


Figure 2: Scope of the Change Request – the new Interlinking Landing Zone

Beyond the network connectivity, this Change Request (CR) also includes the message queue infrastructure required to transport TIPS ISO 20022 messages to/from the Interconnected Instant Payment System.

The CR covers first functional changes, i.e. the features and behaviours the network connectivity with the Interconnected Instant Payment System shall provide (the “what”) and non-functional requirements, related to how well those features behave, e.g. in terms of performance, scalability, security, resilience (the “how”).

Assumptions

It is assumed that the new TIPS *Interlinking Landing Zone* will:

- Provide/extend all SLAs relevant for the TIPS core platform (availability, resilience, automatic failover based on same RPO/RTO, logging and monitoring etc.)
- Interconnection with two TIPS environments, namely User Testing (UTEST) and Production environment (PROD)
- Support up to five interconnected Instant Payment Systems
- Support a yearly bidirectional traffic of 20 million messages per Interconnected Instant Payment System

Functional changes/requirements

These changes/requirements focus first on the “Network Connectivity Layer” i.e. the underlying infrastructure that enables secure and reliable communication between TIPS and the Interconnected Instant Payment System and the “Message Transport Layer”, focusing on how TIPS ISO 20022 messages are transported between the two via standard message queues (MQ).

Network Connectivity Layer

The Interconnected Instant Payment System and TIPS shall be interconnected through a reliable and secure VPN over the public Internet, enabling controlled and bidirectional exchange of traffic between the Interconnected Instant Payment System and the TIPS Interlinking Landing Zone down to TIPS via a newly and dedicated established NSP connectivity.

The interconnection shall support via the Smart Middleware the bidirectional routing of messages between the Interconnected Instant Payment System and TIPS based on corridor¹ information as defined in the CRDM mapping table (refer to CR TIPS-0103-URD). The solution shall ensure that traffic is directed to and from TIPS in accordance with the applicable routing rules, while maintaining segregation from other potential TIPS Interlinking corridors. The requirement is summarised in the diagram below.

¹ A predefined route between TIPS and other countries or regions that enables the transfer of money for cross-borders transactions for given currency-pairs (e.g. EUR/INR via UPI)

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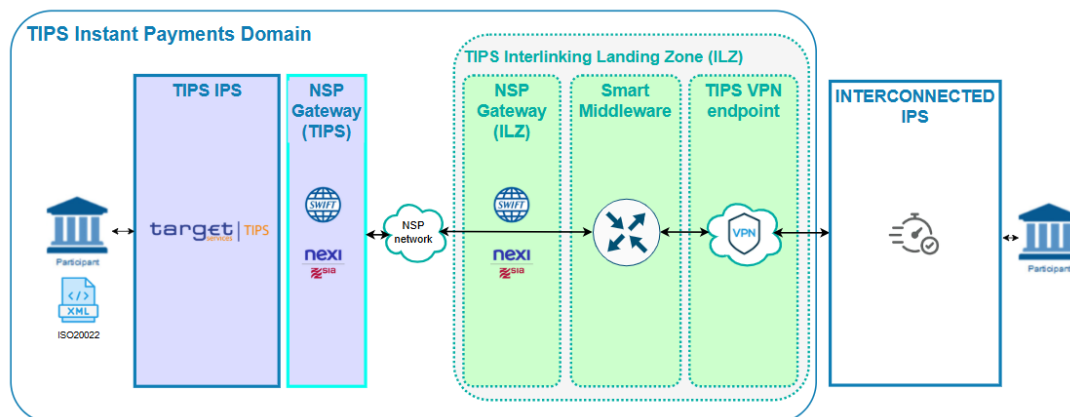


Figure 3: TIPS ↔ Network Connectivity Layer

Message Transport Layer

Interlinking Landing Zone shall be based on a standard message-oriented transport layer using MQ messaging, enabling exchange of ISO 20022 XML messages.

The message transport layer shall support bidirectional communication and provide the necessary functional characteristics for message routing and delivery, based as for network connectivity on the CRDM mapping table corridor definition.

These flows are limited exclusively to “instant” flows (MEPT protocol): payments (pacs.008, pacs.002), investigations (pacs.028), validations (acmt.023, acmt.024) and error management (admi.007) and therefore excludes any store-and-forward asynchronous flow such as reports.

The traffic is exclusively A2A, no U2A HTTP traffic is required at this stage.

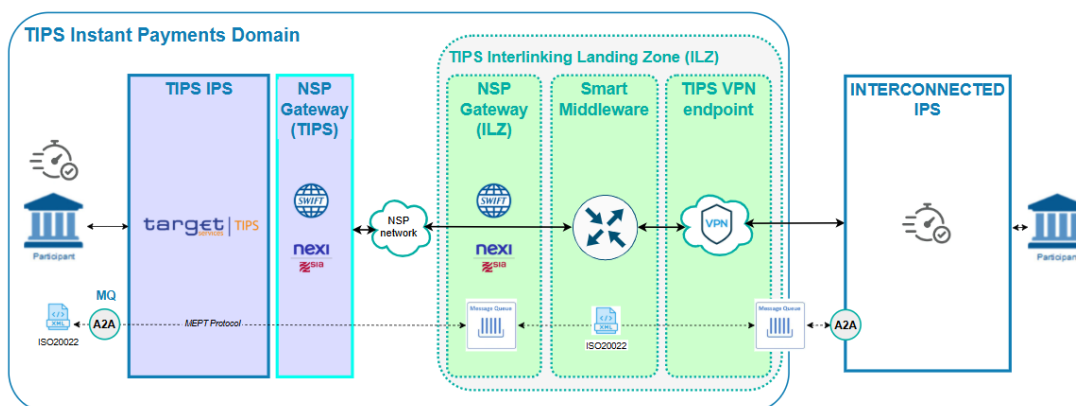


Figure 4: TIPS ↔ Message Transport Layer

Non-functional changes/requirements

As per the assumptions above, the service levels of the TIPS core platform are extended to the Interlinking Landing Zone, detailed further below for some service levels.

Security

The security requirements applicable to the interconnection between TIPS and the Interconnected Instant Payment System shall be at least equivalent to the current TIPS security baseline (TIPS.UR.10.100²), regarding the C//I/A triad Confidentiality, Integrity and Availability.

Should the Interconnected Instant Payment System assessment of existing security requirements for the interconnection design differs to adequately mitigate risks, further analysis and discussions are required to evaluate the impact and agree on appropriate mitigation measures.

Non-Repudiation of Origin

Beyond ensuring confidentiality and integrity at the network connectivity level, and in accordance with TIPS.UR.10.100³, all incoming/outgoing payment messages exchanged between the Interconnected Instant Payment

² As per User Requirement Document (URD) version of R2025.JUN

³ As per User Requirement Document (URD) version of R2025.JUN

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System and the Interlinking Landing Zone shall be digitally signed to ensure non-repudiation of origin. The signing of messages shall provide verifiable proof that a specific party has submitted the corresponding payment message transaction, thereby preventing the sender from later denying its submission.

All incoming signed payment messages shall be archived in accordance with the applicable TIPS Legal Archiving policy (10 years). For this purpose, the TIPS operator shall be able to verify the validity of the digital signatures of processed payment messages using the certificate authority in force at the time the signatures were created to ensure the long-term evidence of the archived records.

For NRO/message signatures between the Interconnect-ed Instant Payment System and Interlinking Landing Zone, beyond the standard TIPS solution, a public PKI/Certificate provider might be used under below requirements upon request of the Interlinked Instant Payment System:

- The Certification Authority (CA) shall comply with CA/Browser Forum standards (<https://cabforum.org/>)
- The CA shall be fully compliant with the CA/Browser Forum Baseline Requirements (<https://cabforum.org/working-groups/server/baseline-requirements/documents/>)
- The issuing CA shall be included in the browser trust store (CA bundle)
- Interlinking Landing Zone digital signatures necessary for Legal Archiving compliance must be archived.

Resilience

The TIPS ↔ Interconnected Instant Payment System interconnection and message transport infrastructure shall be designed and operated without any single point of failure in line with TIPS SLAs. Thereby it shall provide sufficient resilience and redundancy to ensure continuity of service and prevent service interruption.

Reusability

The interconnection solution for the Interconnected Instant Payment System shall be designed as a reusable and scalable connectivity and message transport patterns that can serve as a reference model/architecture for future corridors where standard connectivity via NSP cannot be applied and thereby facilitates onboarding of new Interconnected Instant Payment Systems with minimal impact.

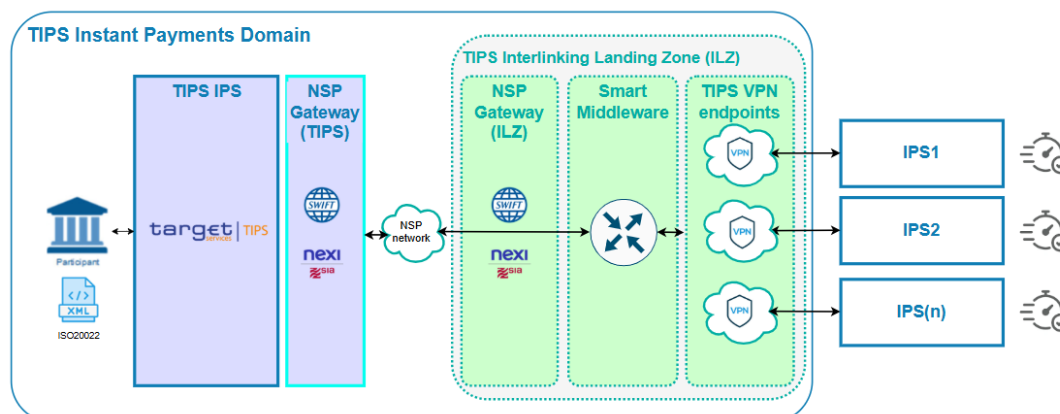


Figure 4: Network Connectivity Pattern for onboarding future corridors

Submitted annexes / related documents:

Proposed wording for the Change request:

High-level description of Impact:

Impacts on other projects and products:

Outcome/Decisions: