

General Info	rmation	(Origin of Rec	juest)	
☐ User Requirements Document (URD)				
☑ User Detailed Functional Specification (UDFS)				
User Handbook (UHB)				
☑ Other User Functional or Technical Documentation (SYS)			
Request raised by: Eurosystem	Institution: ECB		Date raised: 29/10/2025	
Request title: Enhancing TIPS for interlinking with other Fast Payme Systems		Fast Payment	Request ref. no: TIPS-0103-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: High		6. Interoperability impact: High		
Requestor Category: ECB		Status: draft		

Reason for change and expected benefits/business motivation:

As per the phased approach for TIPS cross-currency initiatives, as phase 1, TIPS implemented a One-Leg-Out solution as part of <u>TIPS-0064-URD</u> in TIPS Release R2025.JUN. As phase 2, a cross-currency solution for TIPS hosted currencies is implemented as part of <u>TIPS-0065-URD</u> in TIPS Release R2025.OCT. The phase 3B¹ of the strategy focusses on interlinking TIPS with other systems and the scope of this change request is to describe the requirements to enable an interlinking with the Unified Payments Interface (UPI) instant payment system. The objective is to re-use the functionality introduced with Phase 1 and Phase 2 to the possible extent and implement additional changes as required for the proposed interlinking. It must be noted that the implementation of the change request is subject to a Governing Council decision on interlinking TIPS with UPI².

The Unified Payments Interface (UPI) instant payment system³ is owned and operated by National Payments Corporation of India (NPCI)⁴, an umbrella organisation for operating retail payments and settlement systems in India. NPCI is an initiative of the Reserve Bank of India (RBI) and the Indian Banks' Association (IBA) under the provisions of the Payment and Settlement Systems Act, 2007, for creating a robust Payment & Settlement Infrastructure in India⁵.

¹ Phase 3A focuses on compliance with EPC OCT Inst scheme

² Earliest possible date for a decision: Q4 2025.

³ https://www.npci.org.in/what-we-do/upi/faqs

⁴ https://www.npci.org.in/what-we-do/upi/roles-responsibilities

⁵ https://www.npci.org.in/who-we-are/about-us



Description of requested changes:

The purpose of this change request is to enable cross-border instant payments between TIPS and UPI in both directions:

- Remittances received in India (i.e., Foreign Inward Remittance FIR use case), and
- Remittances sent from India (i.e., Foreign Outward Remittance FOR use case).

1. Message processing

In this paragraph the processing of messages for both FIR and FOR use cases is described.

Like in the ELKT model, the cross-currency payment will be processed in an interlink with UPI by means of two transactions (i.e. mono-currency legs), the former between the Originator PSP and an Exit-leg PSP (in the currency of the originator), the latter between an Entry-leg PSP and the Beneficiary PSP (in the currency of the beneficiary). The implementation of ITPS-0065-URD should be re-used to the possible extent while also catering the requirements mentioned in this document .

However, a new non-financial flow, shall be implemented in TIPS to allow a smooth processing of the payment flow via the upfront execution of several validations. For this reason, the flow is regularly referred to as "validation flow".

Both financial flow and non-financial flow messages are based on the standard ISO 20022 messages. As UPI operates on proprietary message format and makes use of Application Programming Interfaces (APIs), an adapter/converter will be implemented by UPI and located on UPI side will ensure the conversions and translations between TIPS and UPI's communication formats in both directions.

A - Foreign Inward Remittance (FIR)

1) FIR - New non-financial flow

On TIPS side, the non-financial flow will be based on two new ISO 20022 messages, namely (i) acmt.023 *Identification Verification Request* created by the Originator PSP, submitted to TIPS and forwarded by TIPS to UPI, and (ii) acmt.024 *Identification Verification Report* received by TIPS from UPI and forwarded to the Originator PSP. TIPS role will be mainly limited to transporting the messages except for the determination of the Entry Leg PSP as described below.

UPI requires that the Entry Leg PSP information is provided in the validation message so that the respective validations can be performed. TIPS should be able to derive the information based on the Exit Leg PSP details provided in the acmt.023 by the Originator PSP. As the acmt.023 does not convey information on the currencies, the derivation of the Entry Leg PSP will need an adaptation of the logic implemented in TIPS-0065-URD.

At the current juncture, there is no field in the acmt.023 to convey the details of the Exit Leg PSP and of the Entry Leg PSP. A Change Request shall be submitted to the ISO 20022 Payments Standards Evaluation Group (Payment SEG) and the relevant Regulatory Authority for an update of the message XSD. Such enhanced acmt.023 will not be available for use in the interlinking before November 2027. In the meantime, the Assigner BIC shall be used to convey the BIC of the Exit Leg PSP in the acmt.023 sent by the Originator PSP to TIPS, and the BIC of the Entry Leg PSP in the acmt.023 sent by TIPS to UPI. Following finalisation of the Change Request process, a new TIPS CR should be planned to change the application logic to migrate from the Assigner BIC to the new fields of the acmt.023. This requirement applies only to the link with UPI.

2) FIR - Payment/financial flow

On TIPS side, the payment flow will follow the ELKT model. The Originator PSP will issue a pacs.008 as payment instruction that will be forwarded by TIPS to the Exit Leg PSP. If confirmed by the latter, TIPS forwards the pacs.008 to UPI. After the payment processing in UPI, a pacs.002 Status Report is sent back by UPI to TIPS that will trigger the settlement of the euro mono-currency leg, whose result will be forwarded to both the Exit Leg PSP and to the Originator PSP as settlement confirmation.

With regards to the pacs.002 Status Report, it is expected that UPI will map their proprietary reason codes to the EPC OCT scheme reason codes.

3) FIR - Investigation request

If the Originator PSP in TIPS detects that the conditions for sending an investigation request are met and that it did not receive yet a pacs.002 related to a transaction in status pending, the Originator PSP shall be able to send a Payment Status Request message (pacs.028) to TIPS. TIPS shall verify the underlying transaction status and either shall respond back to the Originator PSP with the final status (i.e., the existing processing of a pacs.028 in TIPS) or TIPS shall forward the pacs.028 to UPI (new process to be implemented) to request the transmission of a pacs.002 with final status for the given transaction.

A new configurable investigation offset should be implemented for the interlinking with UPI whose exact value will be fine-tuned during the implementation phase.



The Originator PSP shall continue respecting an investigation threshold (considering the offset introduced above) before sending the pacs.028, as it is already the case in the OCT Inst scheme.

In the context of an interlinking with UPI, TIPS will reject the pacs.028 if the investigation threshold for a link with UPI is not respected.

UPI on receipt of a pacs.028 will answer to TIPS with a pacs.002 and TIPS shall forward the pacs.002 to the Originator PSP.

B - Foreign Outward Remittance (FOR)

1) FOR - New non-financial flow

TIPS will receive the acmt.023 from UPI in this case:

- Upon receipt of the acmt.023 message, TIPS shall verify whether the designated Beneficiary PSP has opted in to process transactions within the TIPS-UPI corridor. Should this validation fail, TIPS will return an acmt.024 response to UPI, indicating rejection and providing an appropriate reason code.
- In case of successful validation, TIPS shall forward the acmt.023 message to the Beneficiary PSP. The
 Beneficiary PSP will respond back to TIPS with an acmt.024 and TIPS performs the technical validations
 and forward the message to UPI.

2) FOR - Payment/financial flow

On TIPS side, the payment flow will follow the ELKT model. TIPS receives a pacs.008 from UPI and forwards it to the Entry Leg PSP (compared to other scenarios, the transaction id in the pacs.008 need not be updated). If the latter authorizes the payment, then TIPS forwards the pacs.008 to the Beneficiary PSP.

Upon (i) (negative/positive) response from the Beneficiary PSP, (ii) time-out trigger (as described below) or (iii) any abnormal scenario occurrence, TIPS shall send back to UPI a pacs.002 providing the status of the payment.

3) FOR - Investigation request

If investigation conditions are hit on UPI side, TIPS may receive a pacs.028 Payment Status Request, equivalent to the one issued by the Originator PSP in a FIR scenario, to which TIPS shall answer with a pacs.002 Status Report. The same threshold conditions as described in the FIR scenario are also applicable for this case.

C - Time-out handling

The EPC OCT-Inst scheme imposes the application of a 20-second hard time-out to the domestic (euro) leg which is transposed into a 20-second end-to-end hard time-out in the ELKT model for cross-currency for TIPS-hosted currencies.

However, UPI currently applies a 90-second time-out⁶ to the Indian leg of the payment instruction.

Additionally, the PSPs in TIPS reported that they will need more than 20 seconds to run their AML/CFT and sanctions screenings for cross-border transactions.

Therefore, any requirement towards fine tuning of the end-to-end hard time-out will be monitored and the current timeout conditions in TIPS will be applied for the interlinking.

In a FIR scenario, that would mean that the time-out condition will be applied by TIPS when waiting for the answer from the Exit Leg PSP (step 3 of the ELKT model). The processing of the answers from the Entry Leg PSP and the Beneficiary PSP to TIPS in a FOR scenario (steps 6 and 8 of the ELKT model) shall be impacted in the same way.

⁶ Majority of the transactions settle within 5 seconds.



2. Reference data

As the service participation is optional for the TIPS participants, it should be possible to capture in the Common Reference Data Management (CRDM) whether a BIC is authorised to send and / or accept cross-currency instant payments via an interlinking with UPI. This requirement should consider both the currencies pair, and the corridor involved. The information captured shall be used for the validations (e.g., reachability check) or to share the data with the respective interlinking party if required. Please note that no impact to the TIPS directory is foreseen at the current juncture as the validation flow aims to cover the reachability check, a new CR will be introduced at a later point of time, in case an impact on TIPS directory is identified.

The reference data and logic for messages routing shall be enhanced to allow a correct routing of both non-financial and financial flows when several corridors exist for the same pair of currencies.

3. Other requirements

It should be possible to identify transactions per currency and corridor in the following processing:

- TIPS Enhanced Information Database (i.e., aggregated data should also consider the currency and corridor of the transaction)
- TIPS GUI (advanced query)
- Statement of Account Report (i.e., covering individual transactions)

The SLAs scope should be extended to include these transactions.

Billing (BILL) common component: it should be possible to price the cross-currency transactions to / from UPI with a different price level (compared to the other domestic or cross-currency transactions) and also a different price level for inflow and outflow. The existing aggregation logic in BILL shall be enhanced to consider currency pair, corridor and direction of the flow.

Submitted annexes / related documents:		
Proposed wording for the Change request:		
High-level description of Impact:		
Impacts on other projects and products:		
Outcome/Decisions:		

⁷ The corridor gains importance as the cross-currency transaction between a currency pair can be offered through one or more corridors (e.g. EUR-INR via UPI and EUR-INR via Nexus).

⁸ This requirement is raised in a currency-pair agnostic way, as this would apply for any orchestrated cross-currency settlement model offered in TIPS, such as the Enhanced Linked Transactions model for TIPS hosted currencies or a potential future link to Nexus, for which it will be possible to set configurations in CRDM based on the participant, corridor, direction and link (this requirement is not applicable for "standard/non-orchestrated" One-Leg Out payments – CR64).

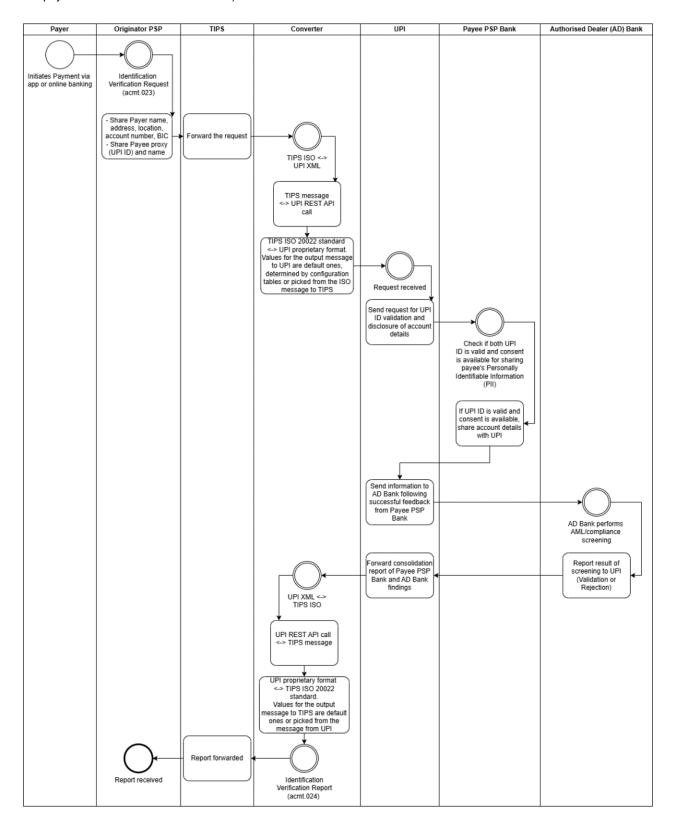


Annexes - Messages flow diagrams

A - FIR use case

1) Non-financial flow

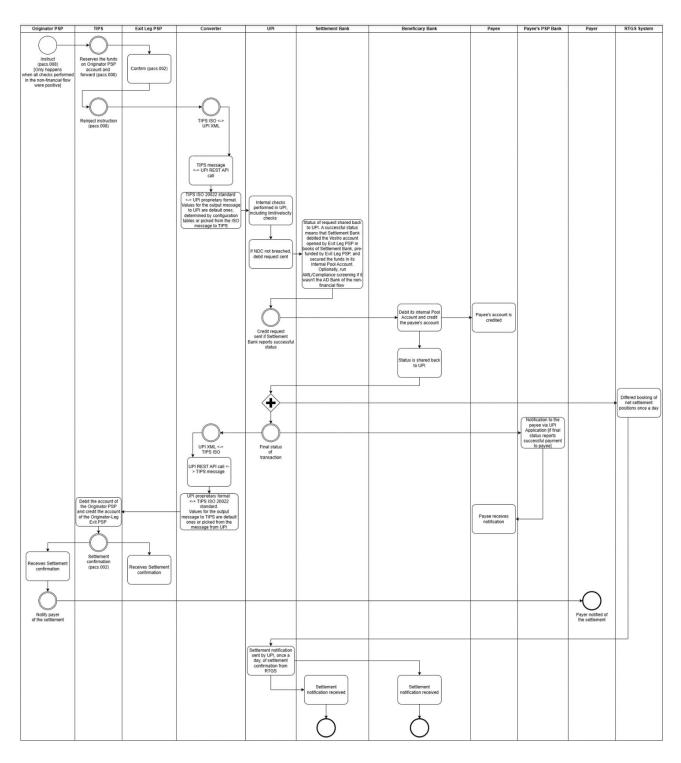
On UPI side, it shall involve the Authorised Dealer (AD) Bank, who will play the role of the Entry Leg PSP, and the PSP Bank who onboarded the payee and shall validate his UPI ID (the proxy used to retrieve a bank account via UPI). The Payee's PSP Bank is usually not the same entity as the one holding the payee's account (i.e., the Beneficiary Bank of the payment flow detailed further below).





2) Payment flow

On UPI side, the Entry Leg PSP in the payment flow is called the Settlement Bank and must be the same entity that played the AD Bank role in the non-financial flow. The Beneficiary Bank plays the role of the Beneficiary PSP of the ELKT model.



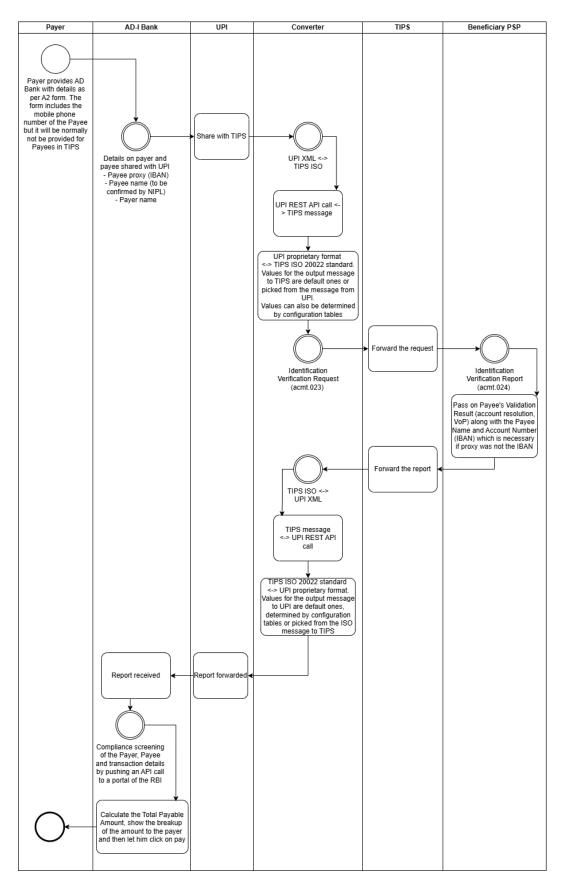




B - FOR use case

1) Non-financial flow

On UPI side, it shall only involve the AD Bank as there will be no settlement in UPI at the time of the payment flow.





2) Payment flow

There is no payment instruction between two participants on UPI side and, therefore, no interbank settlement. For that reason, UPI uses the wording AD Bank for the only participant involved on UPI side which plays the role of both Originator PSP and Exit Leg PSP.

