

Technical introduction

Cross-currency service in TIPS

Andrea Dimartina
Market Infrastructure Expert and
TIPS Functional Manager, Banca d'Italia

Cross-border payments: TIPS for getting there

Introduction to the settlement model

The cross-currency settlement model for TIPS hosted currencies is managed via TIPS change request TIPS-0065-URD – Enhanced Linked Transaction (LKT) settlement model for cross-currency in TIPS

This enhanced cross-currency solution for end-to-end cross-currency payments foresees the following features:

- > Available for all possible combinations of current and future TIPS-hosted currencies
- Guarantees end-to-end instantaneity of the payments between all TIPS-hosted currencies by means of two transactions (i.e. mono-currency legs) and 'all or nothing' approach (i.e. "both transactions are settled or none of them is settled").
- Offers to the originator certainty of the delivery of the funds to the ultimate beneficiary
- Manages the end-to-end timeout within 20 seconds, in compliance with One-leg-out provision
- Reuses to the maximum extent possible existing ISO messages for both EUR and non-EUR currencies

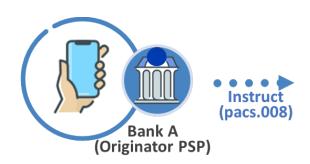
TIPS cross-currency payment initiation phase

The following preliminary steps, belonging to the Customer-to-PSP and Intermediaries spaces, are provided for the sake of completeness:

- 1) The Payer initiates a cross-currency payment request towards its Originator PSP.
- 2) Transaction currency and amount should be provided by the Payer.
- 3) Prior to forwarding the payment request to the TIPS x-ccy service, it is possible for the Originator PSP to present to the Payer the actual FX rate applied (as offered by the Exit-Leg PSP).
- 4) If applicable, this allows the Originator PSP to offer the Payer to confirm the actual exchange rate prior to processing the payment.

Start of a TIPS cross-currency payment – step 1

Cross-currency payment instruction to the CSM shall follow the implementation guidelines stemming from OCT Inst:



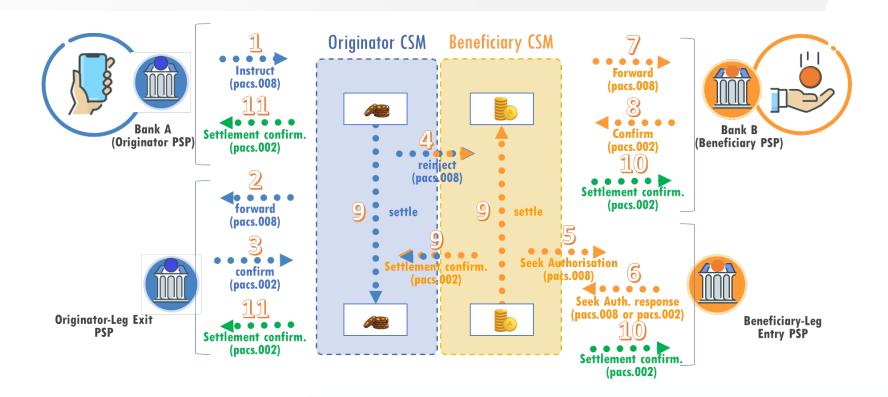
The STEP 1 pacs.008 submitted by Bank A shall include at least the following *business* (**) information:

- ✓ Transaction Identification,
- ✓ Amount in source currency,
- ✓ Amount in destination currency,
- ✓ Applied FX-rate,
- ✓ Intermediaries' info, i.e. BIC or references of the Exit-leg PSP and (on optional basis) Entry-leg PSP(*),
- ✓ Ultimate beneficiary data, such as payee IBAN and BIC of the Bank B.

(*) Exit-leg PSP and Entry-leg PSP (cross-currency PSPs) can either be <u>two distinct players</u> or the <u>same legal entity acting in two different jurisdictions</u>

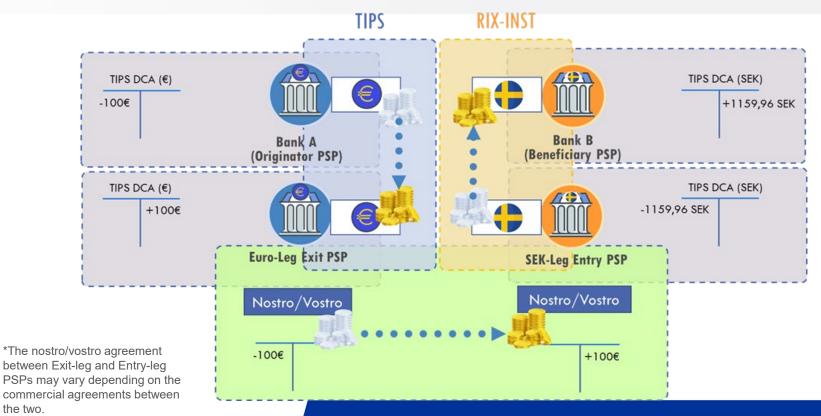
(**) Additional technical fields are needed (e.g. Clearing System Code)

Enhanced Linked Transactions model overview



Example*: EUR-SEK transaction

the two.



A deep dive on the TIPS mapping table (1/2)

- The **mapping table** is primarily used to understand for which couple of currencies the LKT model applies (instead of the regular cross-currency model introduced by CR0064).
- In addition, as the Entry leg PSP information is **not mandatory** according to OCT Inst scheme IGs, but required for settlement in the LKT model, TIPS will rely either on a mapping table to fill the gap or on the information provided by the originator PSP.
- The mapping table is configured upon information provided by each central bank responsible for a currency in TIPS
 (i.e. ECB, Riksbank and Danmarks Nationalbank). The table can be described as two layers:
 - Ad-hoc mapping per each pair of Exit leg and Entry leg PSP (for example Nordea/Deutsche Bank). The mapping table
 is restricted to one entry per entry leg and currency pair. For example, if Deutsche act as an Exit PSP in a crosscurrency transaction between EUR and SEK, Nordea can be the only Entry PSP given this configuration. This referred
 to as the ad-hoc entry.
 - 2. A **default mapping** for an Entry leg PSP per destination currency. If the above pair is not present, a default mapping should exist per source and destination currency, granting that there is always an Entry leg PSP able to receive payments in a given corridor

A deep dive on the TIPS mapping table (2/2)

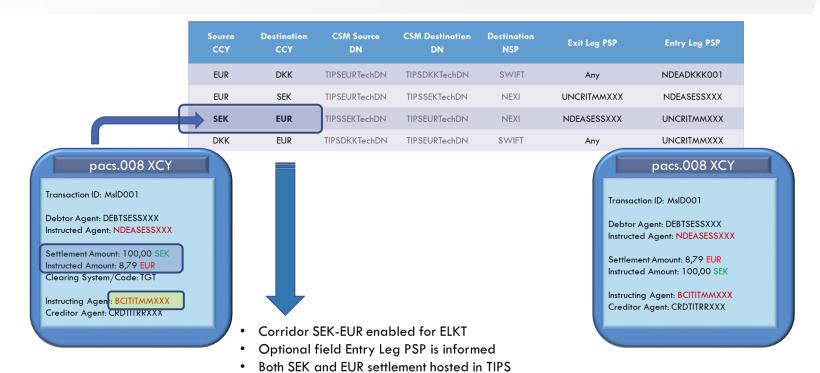
Step 1) Corridor enabled for ELKT: yes/no

Step 2) Consulted only if Entry Leg PSP is not informed

Source CCY	Destination CCY	CSM Source DN	CSM Destination DN	Destination NSP	Exit Leg PSP	Entry Leg PSP	
EUR	DKK	TIPSEURTechDN	TIPSDKKTechDN	SWIFT	UNCRITMMXXX	NDEADKKKXXX	Ad-hoc entry
EUR	DKK	TIPSEURTechDN	TIPSDKKTechDN	SWIFT	Any	NDEADKKK001	Default entry
EUR	SEK	TIPSEURTechDN	TIPSSEKTechDN	NEXI	UNCRITMMXXX	NDEASESSXXX	
DKK	SEK	TIPSDKKTechDN	TIPSSEKTechDN	NEXI	NDEADKKKXXX	NDEASESSXXX	
DKK	EUR	TIPSDKKTechDN	TIPSEURTechDN	SWIFT	Any	UNCRITMMXXX	
SEK	EUR	TIPSSEKTechDN	TIPSEURTechDN	NEXI	NDEASESSXXX	UNCRITMMXXX	
SEK	DKK	TIPSSEKTechDN	TIPSDKKTechDN	NEXI	Any	NDEADKKKXXX	
EUR	EUR	TIPSEURTechDN	ExternallPSDN	SWIFT	Any	UNCRITMMXXX	
				1			

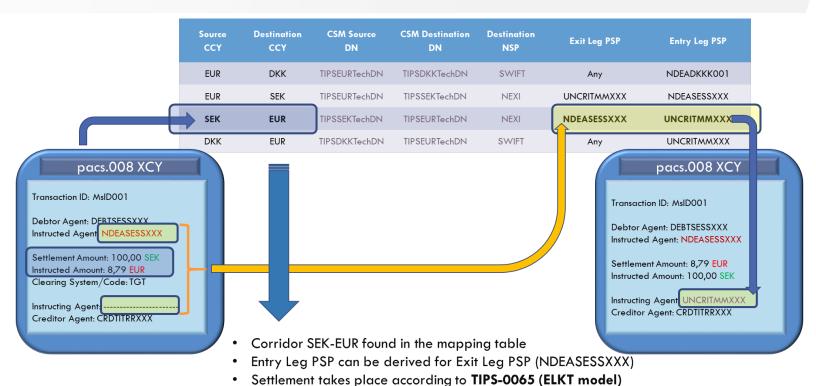
Technical fields for internal routing

Cross-currency transaction – Settlement Model check



Settlement takes place according to TIPS-0065 (ELKT model)

Cross-currency transaction – Missing Entry-Leg PSP



TIPS cross-currency messages

By searching XCY, the TIPS cross-currency messages as displayed below can be found in MyStandards

