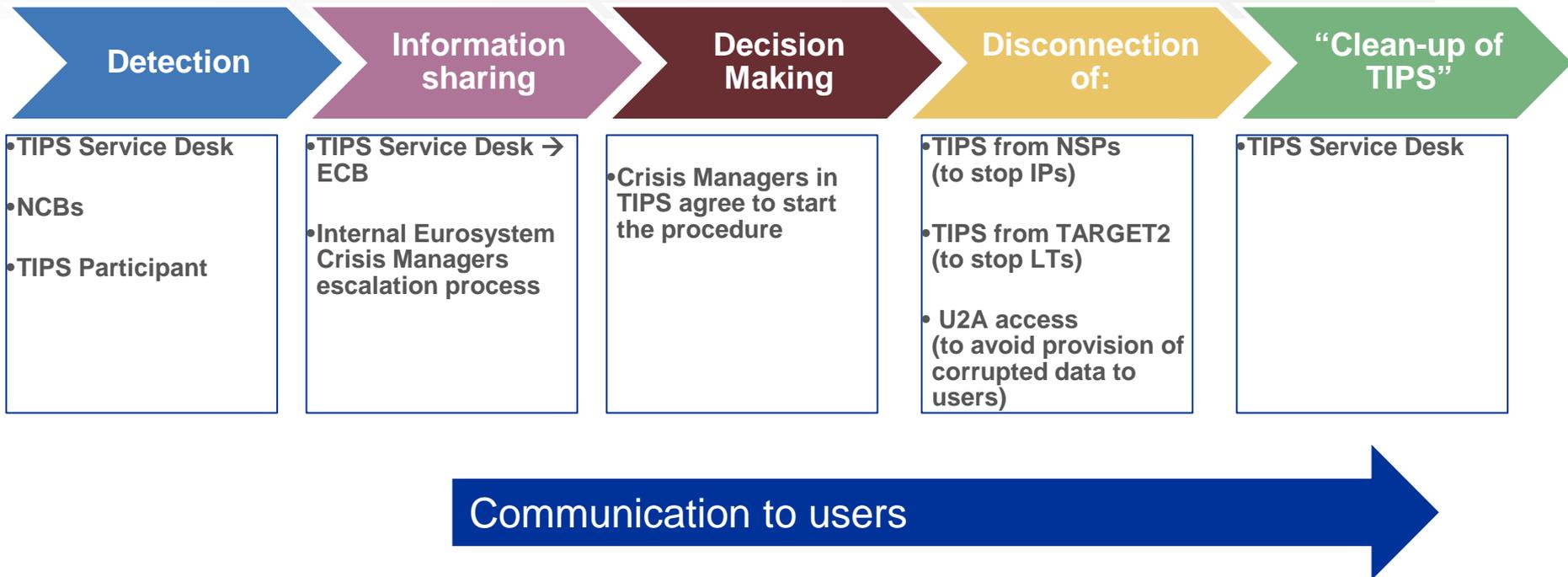# TIPS
Restart with a zero balance

Overview

Purpose of the presentation

❑ Present and explain the rare scenario

❑ Present the approach currently envisaged

❑ Receive your feedback on the envisaged approach, difficulties, challenges it would entail on your side

Why a restart with zero balance?

❑ Extreme scenario that could result in severe data corruption in TIPS (e.g. due to a successful cyber-attack)

❑ Data corruption cannot be repaired

❑ Solution is to restart TIPS with a clean state

- Information that is held in memory is erased (e.g. balances, payment counters, CMBs with their limits/headrooms).

Sequence of actions for containment

Detection	Information sharing	Decision Making	Disconnection of:	"Clean-up of TIPS"
•TIPS Service Desk •NCBs •TIPS Participant	•TIPS Service Desk → ECB •Internal Eurosystem Crisis Managers escalation process	•Crisis Managers in TIPS agree to start the procedure	•TIPS from NSPs (to stop IPs) •TIPS from TARGET2 (to stop LTs) • U2A access (to avoid provision of corrupted data to users)	•TIPS Service Desk

Communication to users →

Restart

Steps to be followed prior to the Restart

1. Alignment of the Transit Accounts (TAs)

   ECB moves funds from the TIPS TA in TARGET2 to another ECB account

   → both TAs are now at zero

2. TIPS Service Desk "resets" TIPS

3. TIPS Service Desk triggers data propagation from CRDM to TIPS (including accounts, users, CMBs, AAUs etc)

4. TIPS Service desk reconnects U2A

5. Users (or their CBs) perform a query of the CMBs to re-establish them

Steps to be followed after the Restart

Internal ESCB process

1. Confirm CMBs have been re-established

2. Agree to resume connection with TARGET2 for liquidity transfers

3. Outside of TARGET2 opening hours (e.g. weekends/closing days) could agree on an exceptional opening of TARGET2 to refuel TIPS.

✓ TIPS DCA holders can transfer liquidity to their DCAs from TARGET2

✓ NCBs will monitor the refuelling happens smoothly

✓ Restore the connection with NSPs to allow settlement of instant payments.

Reconciliation

1. **Reconciliation of balances:**
   - TIPS Service Desk provides CBs with a GL file containing the balances of the TIPS DCAs (and ASTAs) at the latest snapshot before the event
   - Can be used by CBs and their participants as a plausibility check for the reconciliation
   - CBs will collect the information on balances from their DCA holders and ACHs
   - Reporting to the ECB

2. **ECB:**
   - debits the ECB account used to hold the TIPS funds, and
   - credits the respective central banks based on the reporting by their participants

3. **Central Banks:**
   - credit their TIPS DCA/ASTA holders with the sum identified during reconciliation activities

4. **Not a precondition for restarting TIPS** (not time-critical for a restart)

Limitations

➢ **Can only be completed during TARGET2 business days**

During closing days/maintenance window:

- The transit accounts cannot be aligned

- No liquidity can be sent to TIPS

- Instant payment settlement cannot be resumed until liquidity is provided

→ Crisis managers could agree to open TARGET2 exceptionally to send liquidity to TIPS as a mitigation measure.

➢ **Reconciliation might prove difficult**

A. **Identifying** the balance

o Participants may not be able to exactly determine the balance on their side – use of reachable parties.

B. **Difference between the balances** reported by participants and the balance seen on ECB side.

➢ **Time-consuming procedure**

Limitations: AS Technical Accounts

- In principle, ACHs would continue settling internally during the TIPS failure as the CB guarantee on the balance of the ASTA will remain

  ❖ The balance of the ASTA in TIPS would remain the same, although the ownership of those funds could still change with every instant payment settled internally

- For supporting intra-ACH processing, priority should be given in re-establishing the balance on the ASTAs → ACHs would need to be able to identify and provide the central bank with the needed information quickly as reflected in their books.

Next steps

- Receive your feedback on potential difficulties you identify

- If feasibility is confirmed → jointly define further detailed procedures