

Status update on NTC functional and technical assessment

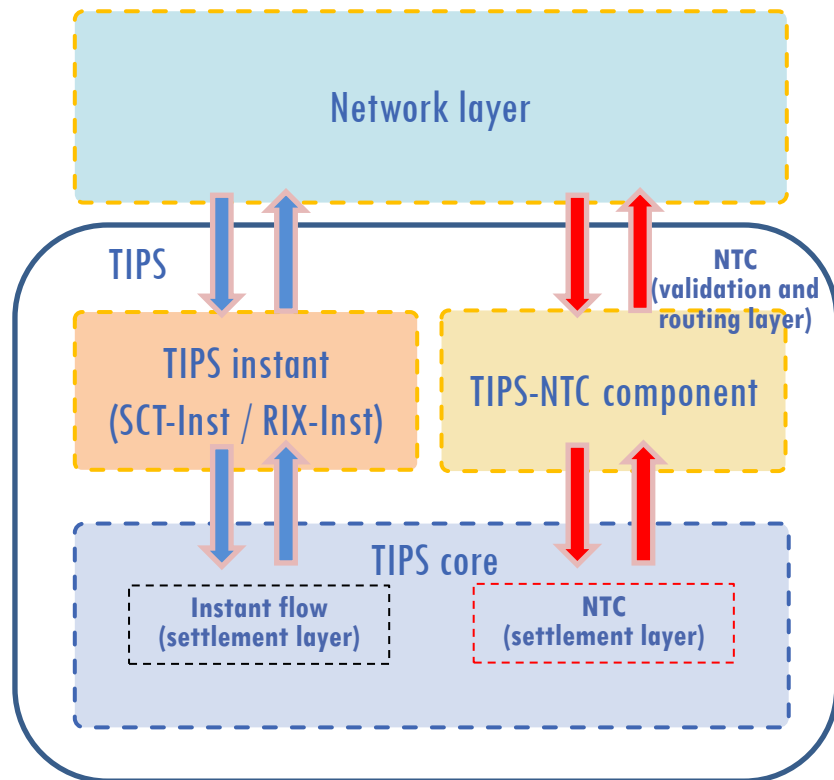
TIPS CG – 11 JUNE 2024

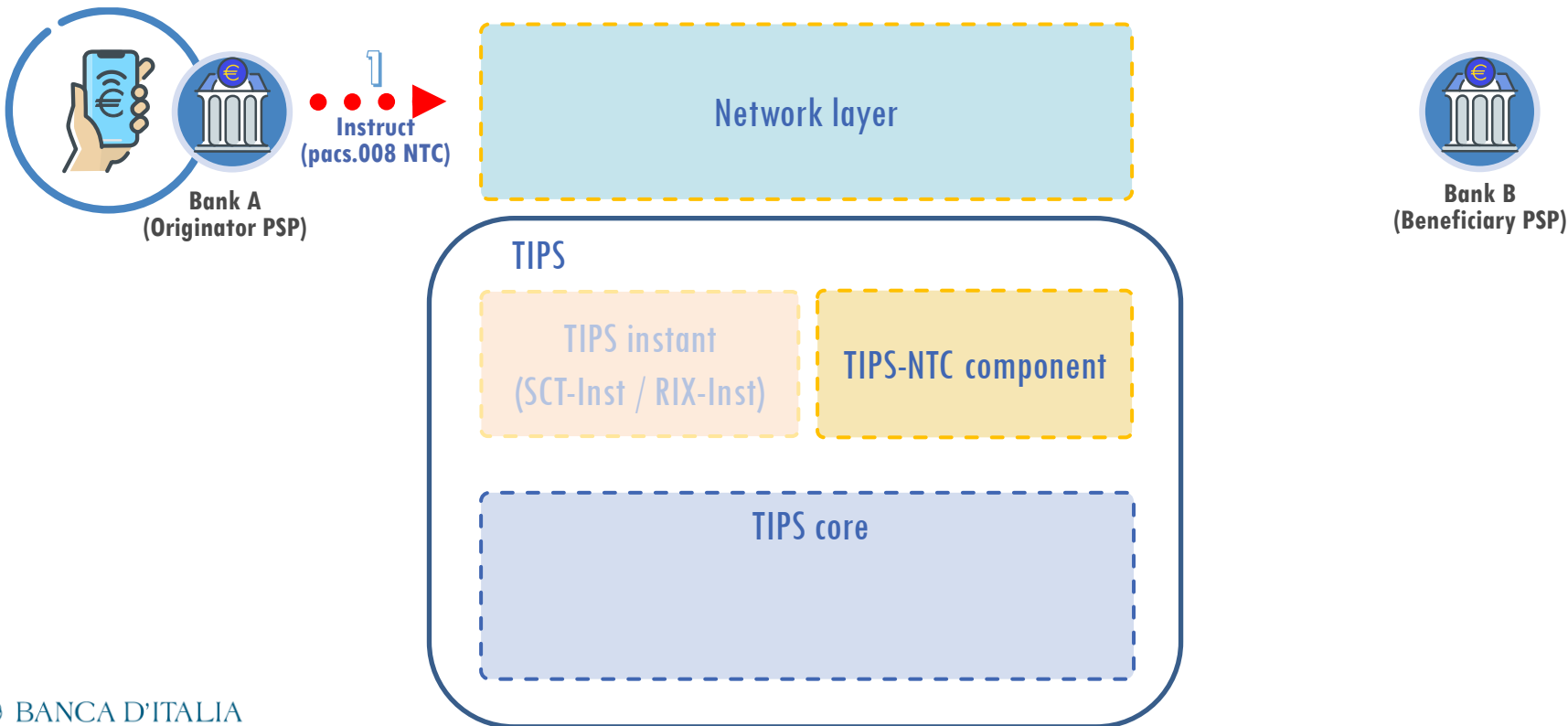
- The NTC traffic should not collide with regular instant payment traffic:
 - Different suffix at network protocol layer
 - Key elements in the payload to differentiate NTC vs regular SCT-Inst
- Existing TIPS processing for instant flow should not be altered:
 - TIPS machine is highly oriented and optimized in the instant payment processing
 - The mixture of any non-instant business cases with instant traffic would result into a substantial distortion of the core functioning (e.g. extension of the timeout and keeping transactions alive for a time greater than 20 seconds), putting at risk (i) the normal functioning and (ii) the evolutionary maintenance design.

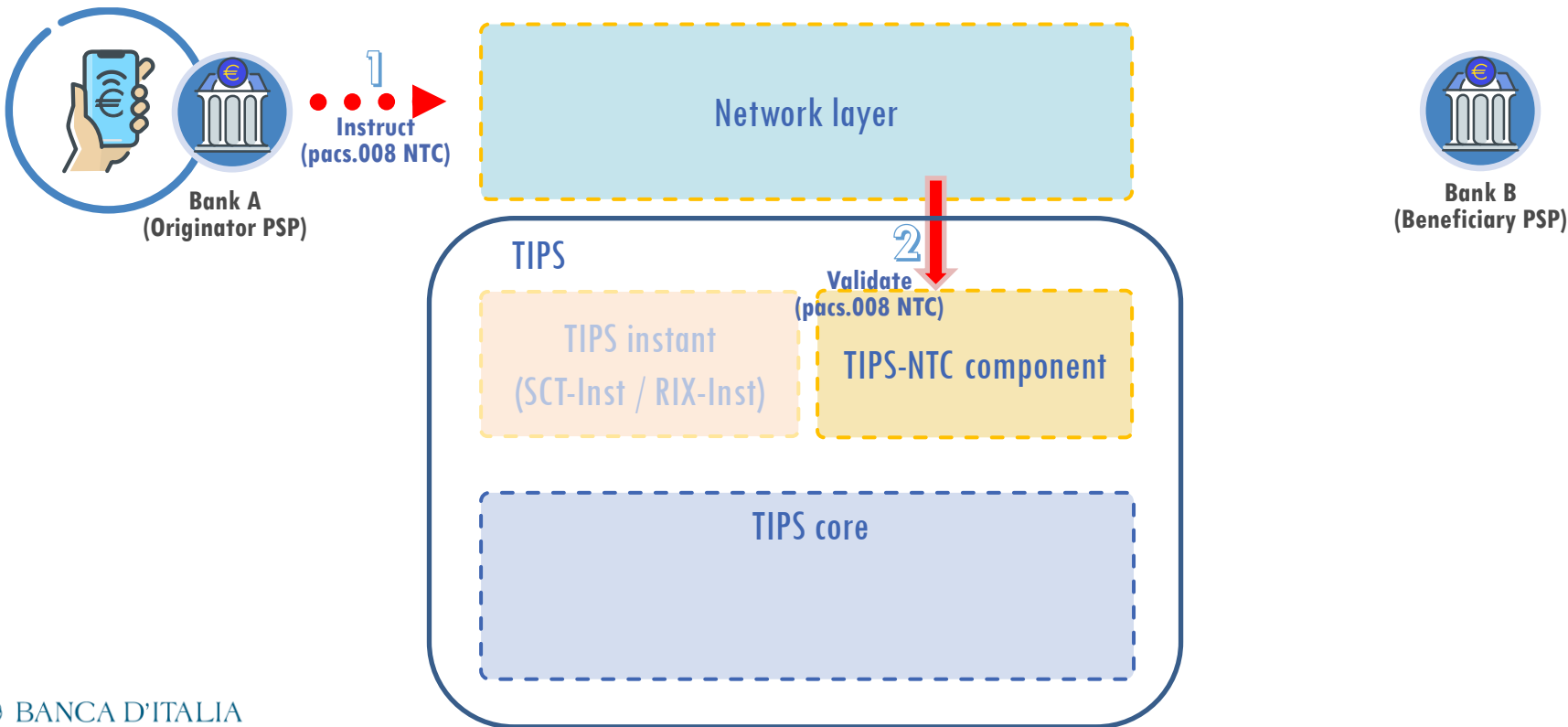
- Introduction of NTC traffic in TIPS, whose lifecycle can last up to 6 hours
- Assessment of a solution with minimum impact on the concurrent instant traffic
- Possibility to cancel an NTC payment that is still pending settlement
- Inquiry mechanism for the Originator PSP to get the status of an NTC payment
- Unsolicited status update from the Beneficiary PSP to communicate intermediate status of an NTC payment (e.g. received, but not yet confirmed)

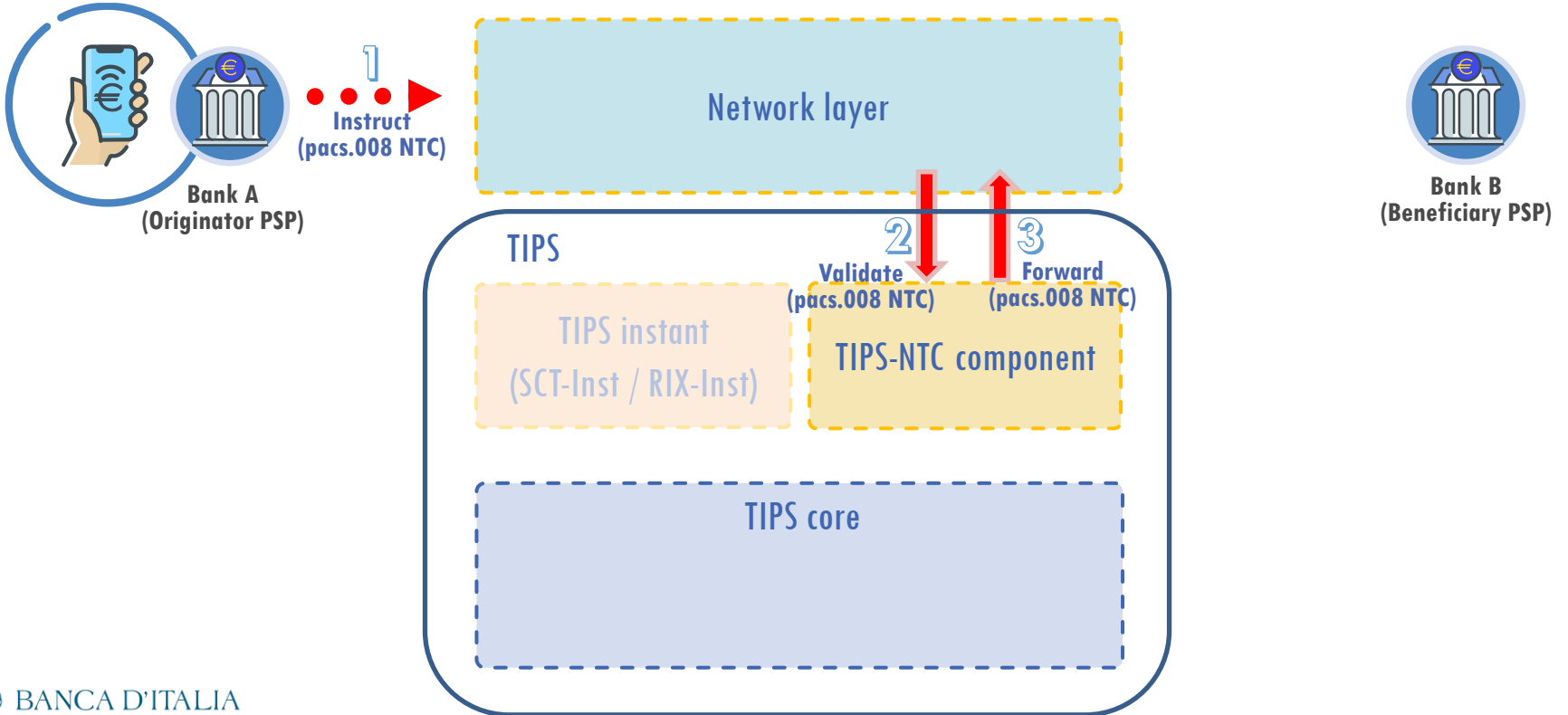
- The functional and technical solutions aim at proposing a **new component** in TIPS to take care of managing NTC in isolation from the SCT Inst traffic.
 - NTC traffic will be intercepted by this component, shielding the TIPS core until a settlement attempt can take place.
 - This new component will take care of:
 - Validating the correctness of the messages (i.e. XML format, additional technical validations)
 - Validating the message content against the reference data configuration
 - Introducing a “**validation and routing layer**” for NTC payments, managing routing of payments and reception of confirmation messages
 - Additionally, it will introduce a “**waiting list**” feature for NTC payments
- As for the technical implementation, the new component can either be rolled out in a form of a “**ad hoc message router**” or it may be integrated into enhanced existing components.

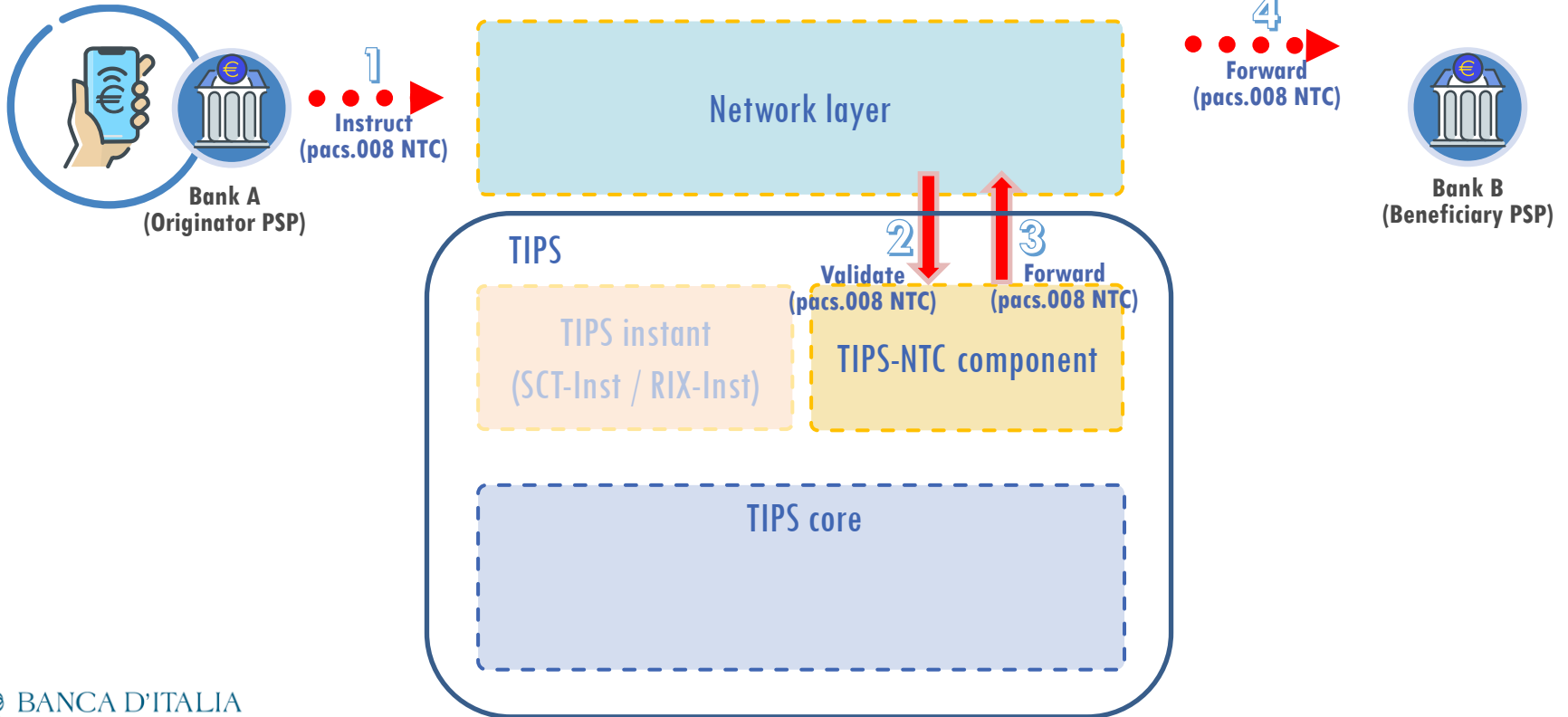
- The new component acts as **instructing party vis-à-vis the TIPS core** for the implementation of the settlement layer.
- This model can efficiently rely on asynchronous **NTC settlement attempts** without affecting neither the scheme nor potential AoS compliance.
- **Waiting list feature** is introduced to optimize the liquidity management:
 - In the proposed NTC model, **no reservation of funds** is done at any time.
 - If a payment is ready for settlement, an internal **NTC settlement attempt** takes place. Should the liquidity on the debtor account be not sufficient to cater for the full payment settlement, the NTC payment will be kept in waiting list up to 6 hours.
 - **Smart reattempt** can be introduced, e.g. when sufficient liquidity is received on the debtor account, an internal notification can reach out the new component to trigger a new NTC settlement attempt.

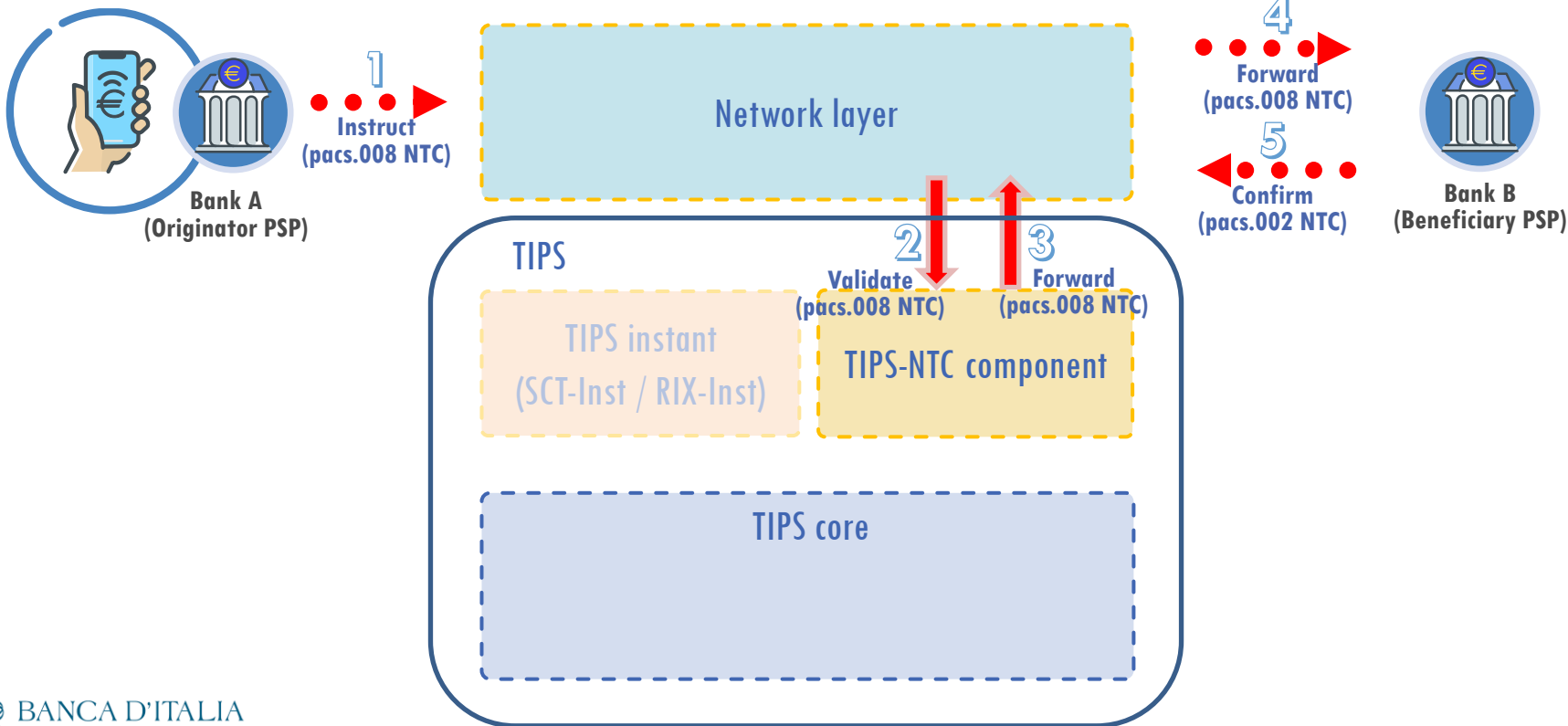


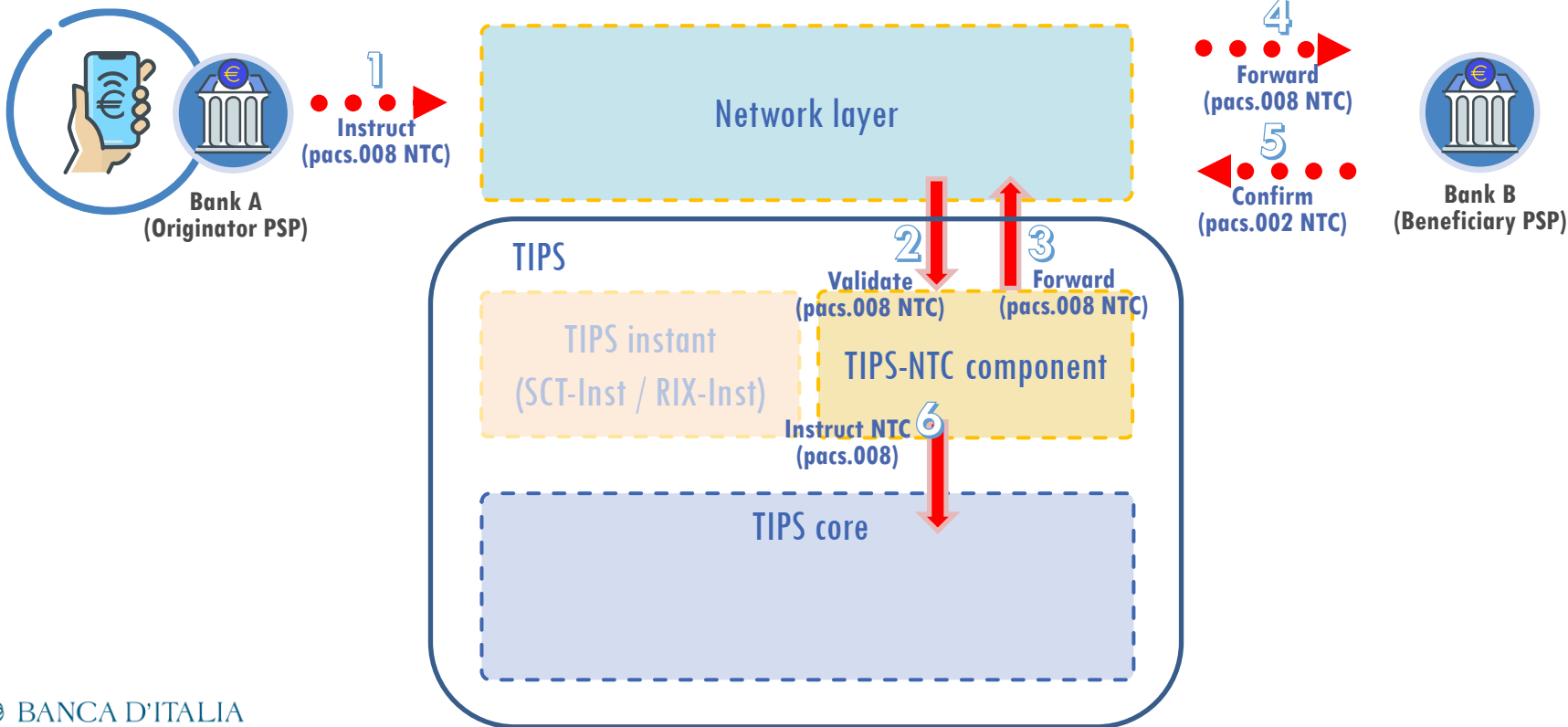


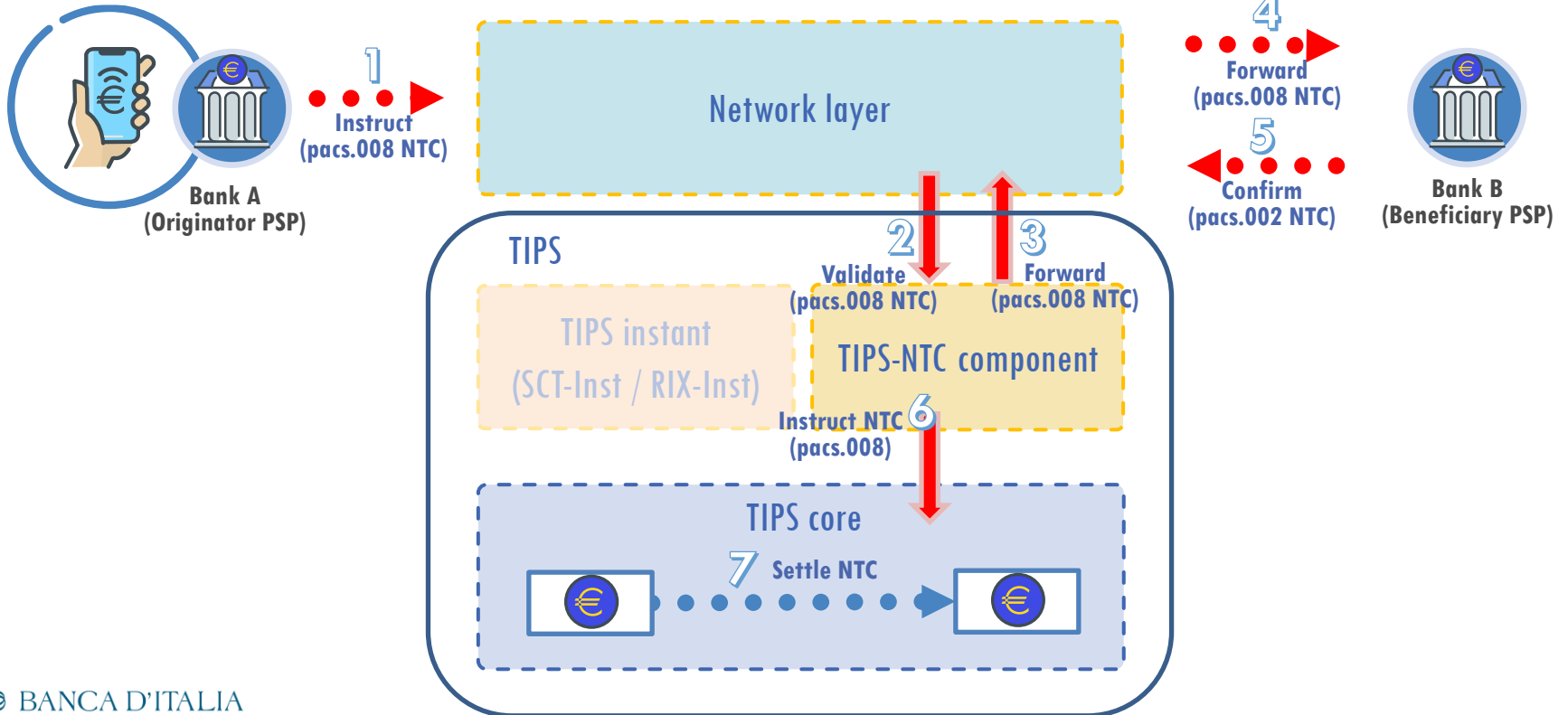


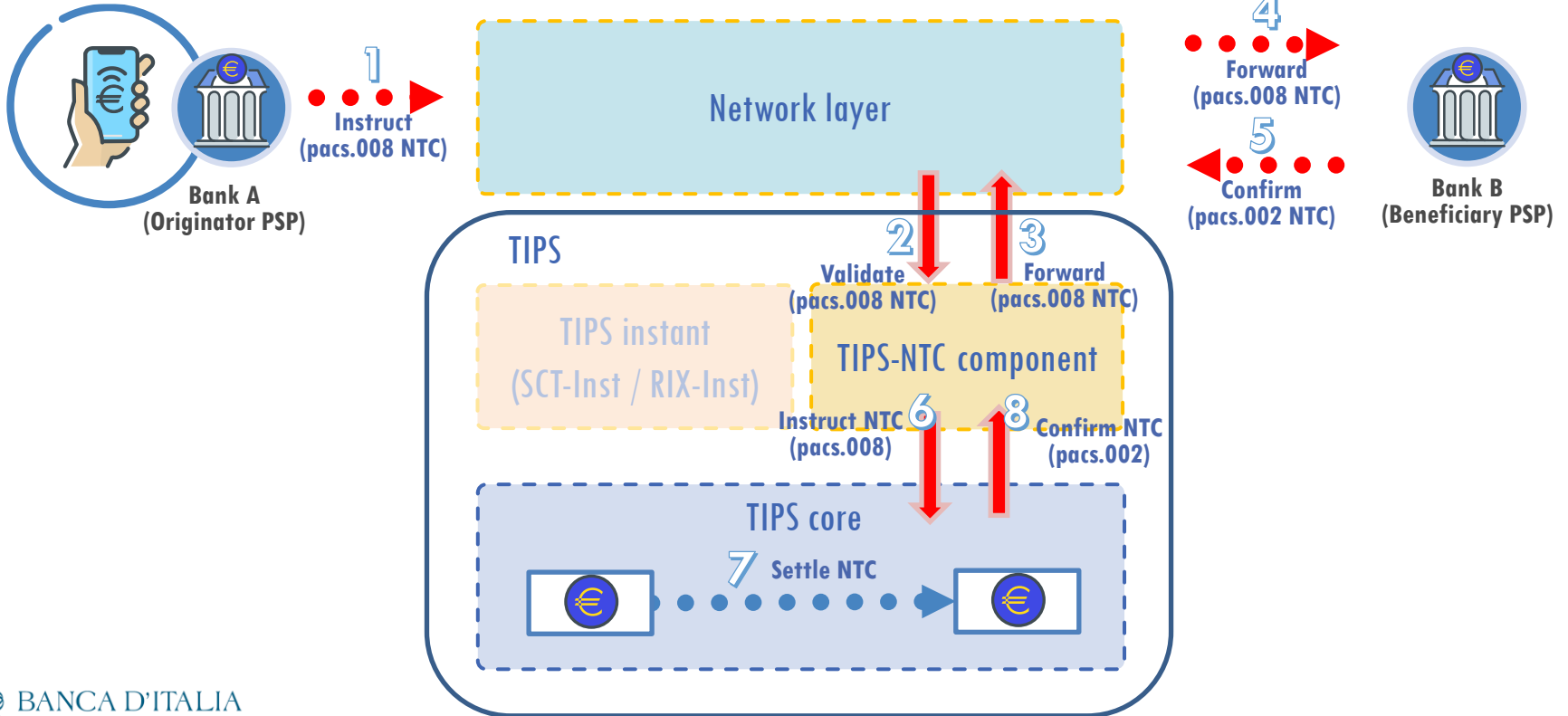


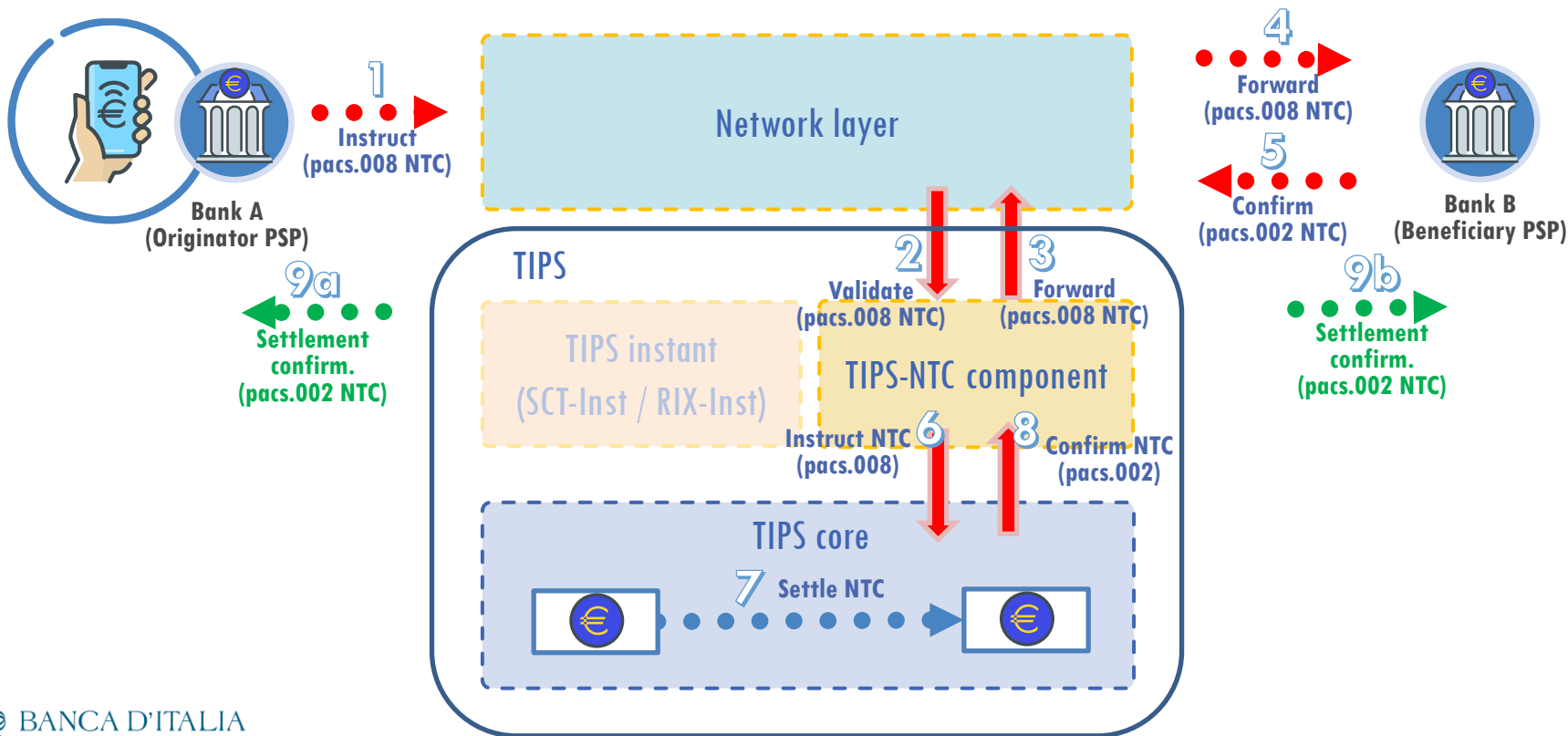












- The following use cases will be directly managed by the new TIPS-NTC component:
 - **NTC payment cancellation**, which can occur at any time if the NTC payment has not reached a final settlement status
 - **NTC Inquiry mechanism**, to retrieve the current status of the NTC payment (e.g. pending, settled, rejected)
 - **Retry of settlement attempts**, in case of lack of funds on the debited account
 - Manage the **NTC Waiting List**
 - Provide the **NTC payment lifecycle** and **timeout management**
 - **Generate NTC confirmations** for both Originator and Beneficiary PSPs

- No segregation of liquidity and no need to implement more costly solutions (e.g. by cloning the TIPS system to manage NTC payments with a different SLA to keep the NTC traffic independent from the regular instant one)
- Existing account and BIC configurations can theoretically be used for both (i) SCT inst/NCT inst and (ii) NTC payments
- Avoid any risk of endangering the current TIPS architecture since the instant and NTC traffic will technically be independent from the real instant traffic
- Reduce impact on liquidity management due to (i) long lasting reservations or (ii) peaks of reserved liquidity stemming from bulks, by optimizing the settlement attempts through the waiting list function
- The limitation of the concurrent number of pending NTC payments, identified during the Preliminary Assessment of TIPS-0041, can be avoided

- At the last TIPS WG meeting, held on 28 May, it was clarified that, for the time being, the TIPS NTC as SCT AoS will be applicable to euro only, since it is not considered as a priority by TIPS non-euro currencies.
- Reuse of Local Instrument Code 'INSTNT01'(*), created ad hoc for the Dutch AoS, does not formally seem to be the right technical solution.
 - TIPS WG members shared the idea of a new ISO CR to create a dedicated Local Instrument Code for the TIPS NTC AoS.

Other points to be further investigated

- How to properly manage the settlement attempts to avoid duplications (e.g. tuple Transaction ID+originator BIC) in the TIPS core?
- How to make the waiting list more efficient (e.g. First in-First out, First Matching Amount-First Out)?

Thank you for the attention!