

T2-T2S: Cash aspects

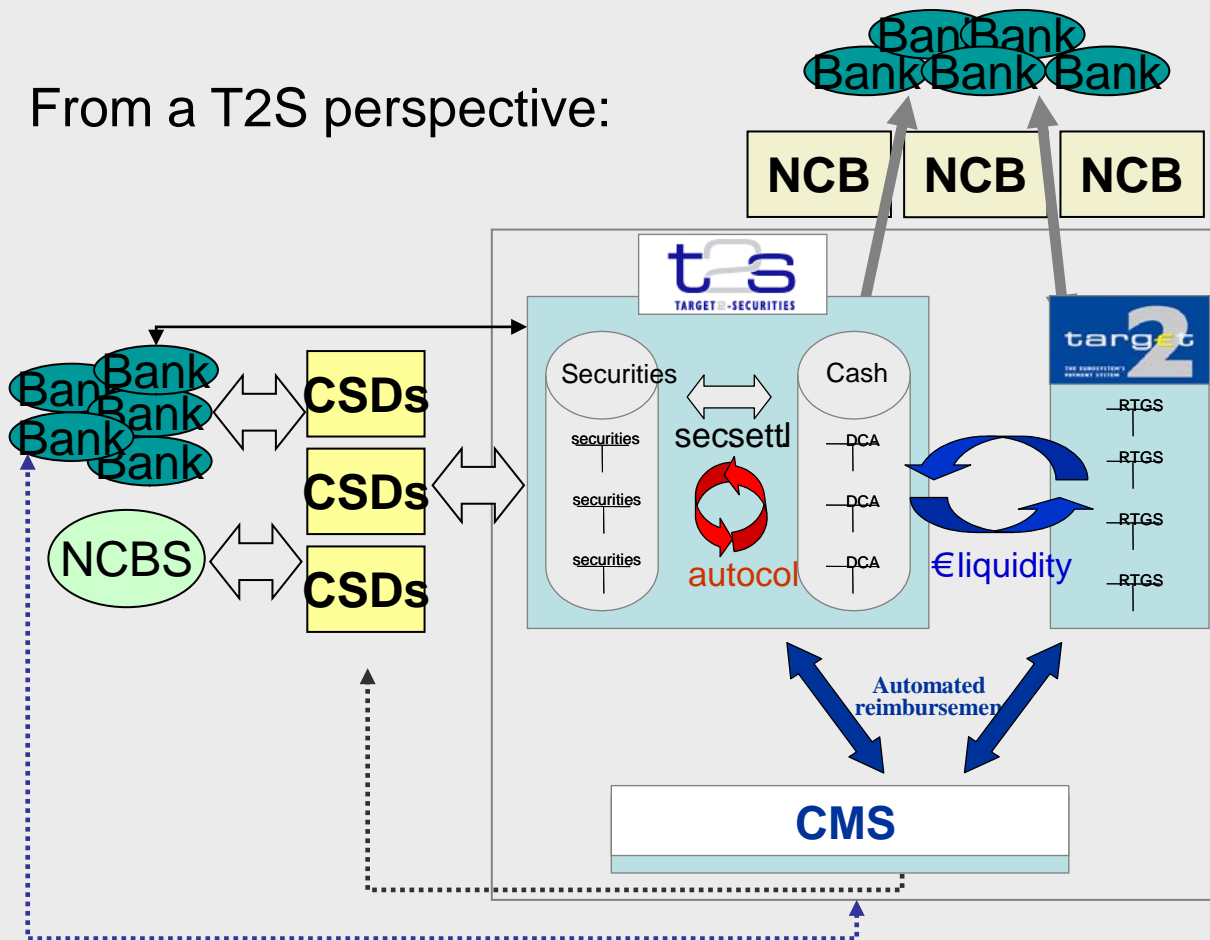
Brussels, 7 June 2012

Patrick HEYVAERT
Chairman T2UG



Background on TARGET2 and T2S

From a T2S perspective:



Banks on the cash side hold their RTGS account with their NCB. Banks can open at their NCB Dedicated Cash Accounts (DCA) for securities settlement purposes.

For the securities settlement, banks will provide liquidity from their TARGET2 accounts to the DCAs e.g. via standing orders, liquidity transfers. Banks may also use auto-collateralisation in T2S.

Towards the end of the business day all DCAs have to have a zero balance and auto-collateralisation credit has to be fully reimbursed. If the DCA balance should not allow to reimburse auto-collateralisation, the so-called automated reimbursement will be invoked.



Background on TARGET2 and T2S

▶ RTGS account

- opened in TARGET2
- only direct participants TARGET2
- can be linked to one or multiple DCA's

▶ Dedicated Cash Account (DCA)

- cash account in T2S
- settlement of DvP transactions
- can be linked to only 1 RTGS account
- can be linked to one or multiple securities accounts
- can be used for one or multiple CSDs



TARGET2- Adaptations in view of T2S

Getting ready for T2S

Changes triggered by T2S (*cash side*)



+



- Fragmentation of participants' liquidity due to the multiplicity of cash accounts/sub-accounts for CSDs.
- Auto-collateralisation in few CSDs and with RTGS account opened with the 'local' NCB.
- Multiplicity of the settlement procedures.
- Strong operational dependence between CSDs and TARGET2.

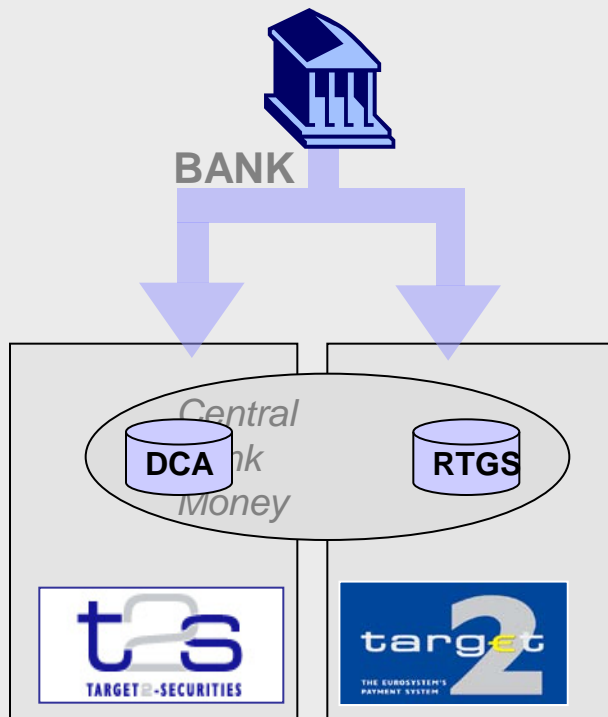
- Rationalisation of banks' liquidity management (possibility to have one single DCA for settling in all CSDs).
- Auto-collateralisation available with all CSDs where the eligible securities are held.
- One single interface for all CSDs hosted by T2S.
- Large operational autonomy thanks to auto-collateralisation.



TARGET2- Adaptations in view of T2S

Getting ready for T2S

Banks' challenge (*cash side*)



Banks wish to

- Monitor and consolidate their cash position in real time
- Shift liquidity quickly wherever it is needed
- Use the same technical interface for managing both their DCA and their RTGS accounts

but

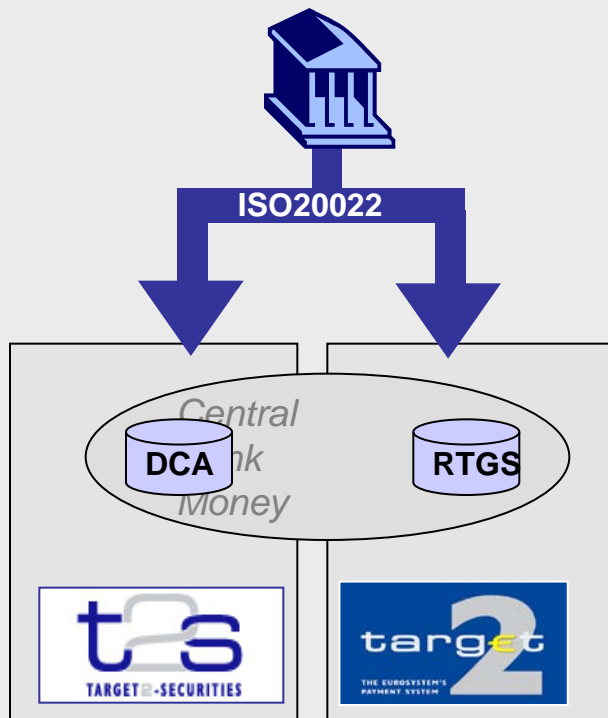
- T2S is exclusively based on ISO20022
- TARGET2 is not yet using ISO20022
- Not all TARGET2 participants will be ready to move to ISO20022 for cash management



TARGET2- Adaptations in view of T2S

Eurosystem's offer for TARGET2

Standard offer – *general approach*



Standard offer

- ISO20022 compliant interface for participants, allowing them to manage their liquidity on their RTGS accounts.
- Access to DCAs related features via T2S but using the same ISO20022 standards.
- First users' consultation in July/August 2011 with very supportive feedback.
- The Eurosystem confirms it will develop the standard offer as part of the core services.
- Technical implementation in Nov.2013 (dormant until T2S goes live).



TARGET2- Adaptations in view of T2S

Eurosystem's offer for TARGET2

Standard offer – *main features*

Standard offer

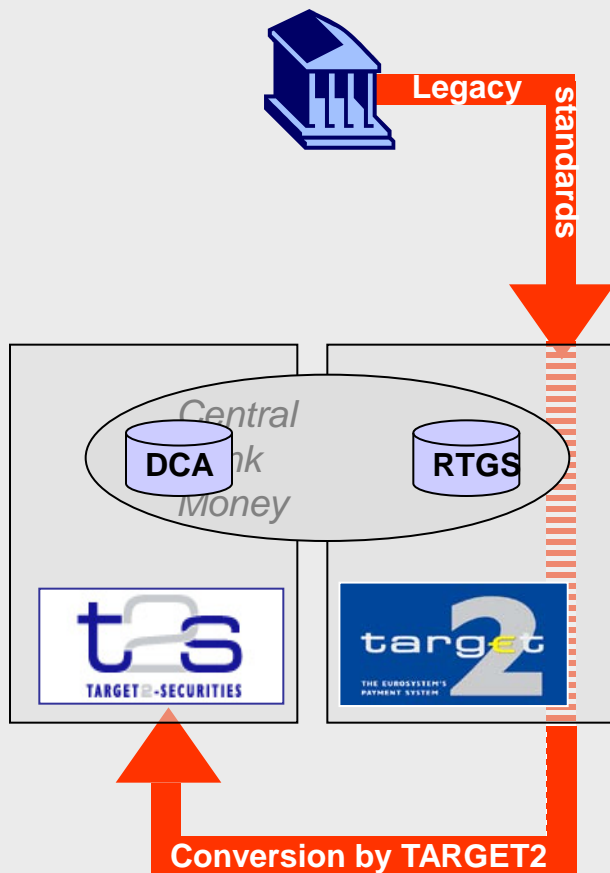
- Implementation of camt5 standards for cash management interface with participants;
 - Standing order liquidity transfer via ICM/U2A and A2A (camt5);
 - Liquidity transfers via ICM/U2A and A2A (camt5)
 - optional debit notification in camt5
- Development of the interface as a new ASI model (e.g. highly urgent status);
- Sophisticated monitoring tools to ensure a smooth settlement of liquidity across the two systems without loss or undue delay;
- Optional notification of debit/credit stemming from liquidity shifts in either ISO20022 or MT900/MT202 formats;



TARGET2- Adaptations in view of T2S

Eurosystem's offer for TARGET2

Optional offer



Optional offer

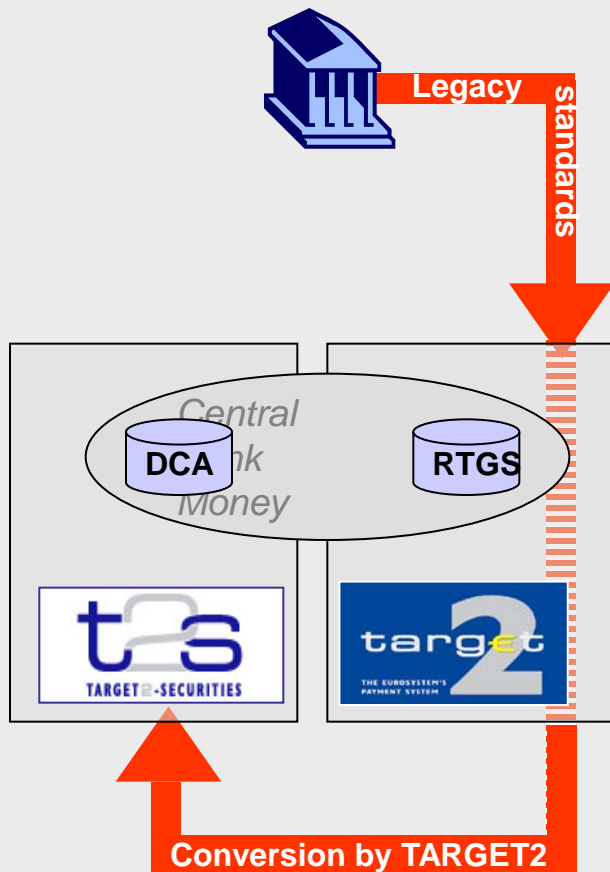
- Alternative interface using legacy standards for managing liquidity on both RTGS and DCAs.
- TARGET2 will ensure the conversion of messages to/from ISO20022.
- Provision of the intraday balances of DCAs on the ICM (U2A) or via GetAccount messages (A2A) for all DCAs linked to the RTGS account of the participant;
- Possibility for participants to initiate pushed liquidity transfers (T2→T2S) and pulled liquidity transfers (T2S→T2) via MT202 messages;



TARGET2- Adaptations in view of T2S

Eurosystem's offer for TARGET2

Optional offer



Optional offer

- Possibility for participants to initiate pulled liquidity transfers (T2S→T2) via the ICM (U2A) or via LiquidityCreditTransfer messages (A2A);
- Eased access to T2S GUI pages via the ICM
- The provision of end-of-day statements for DCAs in legacy standards (MT940/950) was withdrawn considering the limited business case. It is expected that DCA holders will rely on other sources for their reconciliation (e.g. CSD settlement confirmation reports). In case of need, end-of-day statements are available in T2S for 10 years.



TARGET2- Adaptations in view of T2S

Eurosystem's offer for TARGET2

Optional offer – Screenshot (1/3)

Aggregated view (RTGS, sub a/c, HAM and DCAs)

The screenshot displays the TARGET2 interface with the following components:

- Navigation Tabs:** RTGS, Home Account, Services, Static Data.
- Sub-navigation:** Payments & Messages, Liquidity, Limits & Reservations, Ancillary Systems.
- User Information:** User: John Doe, Last Update 10:30:18.
- RTGS Account ZYBLDEF0LD1 (EUR):**

Start balance	222,000,000.00
Liquidity transfers final	28,000,000.00
Debits final	-27,300,000.00
Credits final	77,300,000.00
Current Balance	300,000,000.00
Credit line	20,000,000.00
Available Liquidity	320,000,000.00
Liquidity transfers pending	10,000,000.00
Debits pending	-40,000,000.00
Credits pending	22,000,000.00
Changes of Credit Line pending	-2,000,000.00
Projected Liquidity	310,000,000.00
Timed Payments	
Debits	10,000,000.00
Credits	15,500,000.00
Reservations	
Highly urgent	10,000,000.00
Urgent	15,500,000.00
Pending Reservations	
Highly urgent	1,000,000.00
Urgent	0.00
- Aggregated View (EUR):**

Liquidity RTGS account	320,000,000.00
Liquidity RTGS sub account (s)	50,000,000.00
Total RTGS Liquidity	370,000,000.00
Liquidity HAM Account	70,000,000.00
Total TARGET2 Liquidity	440,000,000.00
Liquidity T2S Dedicated Cash Account(s)	30,000,000.00
Overall Liquidity	470,000,000.00
- Right Panel:** Log Out, Home, Profile Selection (Work as BIC: ZYBMDEF0MD6), Last Update: 10:02:07, Broadcast.
- Bottom Navigation:** Liquidity Transfer, Interbank Transfer other HAM accounts.

TARGET2- Adaptations in view of T2S

Eurosystem's offer for TARGET2

Optional offer – Screenshot (2/3)

Liquidity available on linked DCAs

RTGS Home Account Services Static Data

Payments & Messages Liquidity Limits & Reservations Ancillary Systems

RTGS : Liquidity : Current Liquidity : Dedicated Cash Accounts : **Display Current Liquidity On Linked Dedicated Cash Accounts** User: John Doe Last Update 10:30:18

Current Liquidity RTGS (EUR) ▶ 20,763,125.12

Dedicated Cash Account	Current T2S Balance (EUR)	Standing Orders Amount (EUR)	Standing Orders Settled (EUR)	Pending T2S Transfers RTGS Debits (EUR)	Settled T2S Transfers RTGS Debits (EUR)	Settled T2S Transfers RTGS Credits (EUR)
○ CZT2SDCAZYBMDEF0MD4000000000000001	13,515,000.00	-2,000,000.00	-1,600,000.00	▶ 0.00	▶ -13,000,000.00	▶ 0.00
○ CZT2SDCAZYBMDEF0MD4000000000000002	1,211,188.09	-1,000,000.00	-800,000.00	▶ 0.00	▶ -1,211,188.09	▶ 0.00
○ CZT2SDCAZYBMDEF0MD4000000000000003	17,000.00	-2,000,000.00	-1,600,000.00	▶ 0.00	▶ -1,600,000.00	▶ 1,000,000.00
○ CZT2SDCAZYBMDEF0MD4000000000000004	0.00	-1,000,000.00	-800,000.00	▶ -1,000,000.00	▶ -800,000.00	▶ 0.00
● CZT2SDCAZYBMDEF0MD4000000000000005	0.00	-1,000,000.00	-800,000.00	▶ -4,000,000.00	▶ -800,000.00	▶ 0.00
Total	14,743,188.09	-10,000,000.00	-5,600,000.00	▶ -5,000,000.00	▶ -17,411,188.09	▶ 0.00

Page 1 of 1 Entries 1 to 5 of 5

Liquidity Transfer T2S Dedicated Cash Account

TARGET2- Adaptations in view of T2S

Eurosystem's offer for TARGET2

Optional offer – Screenshot (3/3)

Pulling of liquidity from DCAs to RTGS

The screenshot displays the TARGET2 interface for a liquidity transfer. The top navigation bar includes 'RTGS', 'Home Account', 'Services', and 'Static Data'. The main content area is divided into three sections: 'RTGS Account', 'Transfer (EUR)', and 'Dedicated Cash Account'. The 'RTGS Account' section shows BIC (ZYBMDEF0MD6), Name (Name_MD6), Account No. (CZPCINZYBMDEF0MD600000000000003023), and Available Liquidity (EUR) (5,111,418.68). The 'Transfer (EUR)' section has an 'Amount' input field and a 'Payment Reference' section with 'End to End ID (opt.)' (Liqui to DCA1). The 'Dedicated Cash Account' section shows Account No. (CZT2SDCAZYBMDEF0MD600000000000000001), BIC (ZYBMDEF0MD6), and Available Liquidity (EUR) (2,000,000.00). A 'Submit' button is located at the bottom left. A large 'Draft' watermark is overlaid on the form. On the right, a sidebar contains 'Log Out', 'Home', 'Profile Selection' (Work as BIC: ZYBMDEF0MD6), 'Last Update: 10:02:07', and 'Broadcast'.



Schedule T2S and impact on liquidity

18:45	Start of day
19:30	Night time settlement
03:00 - 05:00	Maintenance window
05:00 < 16:00	Real-time settlement Expectation: banks reimburse voluntarily auto-collateralisation normally prior to 16:00
16:00 16:00 16:00 16:00 - 16:10	DvP cut off Securities settlement restrictions cut-off Cash settlement restrictions cut-off Cash settlement restrictions released
Prior 16:30 16:30	Automated optional cash sweep (bank's choice) Automated reimbursement of auto-collateralisation in T2S
17:00	TARGET2 customer payments cut-off
17:40 at the latest 17:45 18:00	Secured money market transactions (BATM) cut-off Central Bank Operations DvP cut-off Automated <u>mandatory</u> cash sweep from DCAs to T2 FoP cut-off (both CBO FoP and interbank FoP)**
TARGET2 interbank payments cut-off	

* Indicative times

** Requests for accessing the standing facilities can be made until 18:15 (plus 15 minutes on the last business day of a minimum reserve maintenance period).



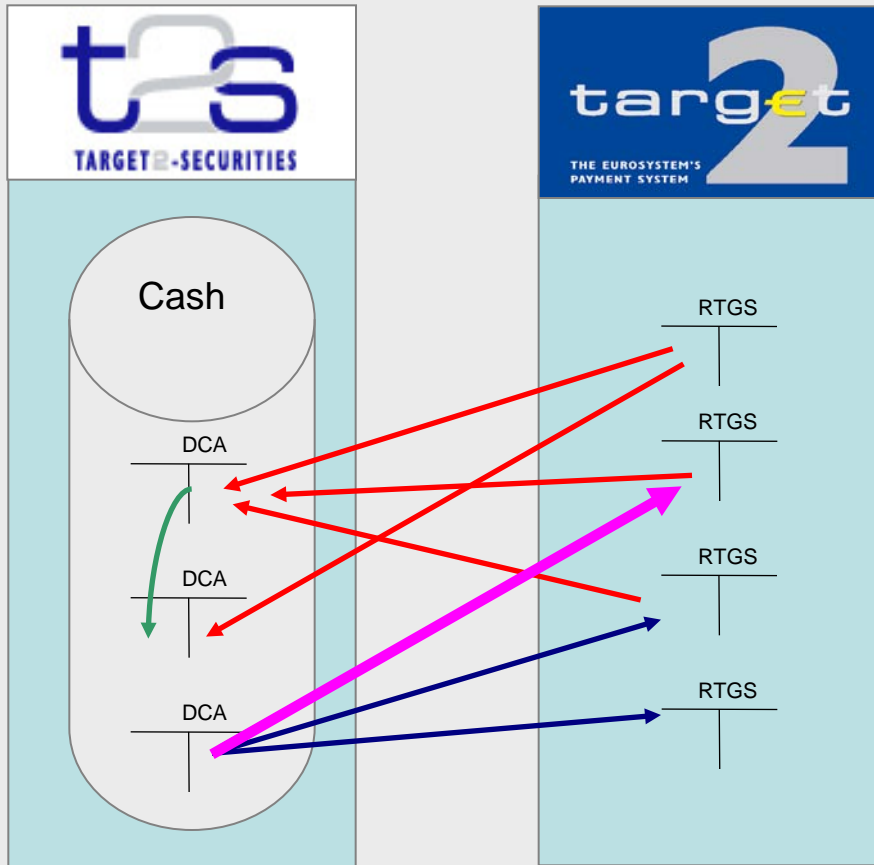
Liquidity DCA

Liquidity movements on DCA via:

- ▶ Liquidity transfers
 - T2 to T2S
 - T2S to T2
 - DCA to DCA
- ▶ Settlement instructions
 - DvP transactions
 - Corporate actions
 - other
- ▶ Auto-collateralisation with Central Bank
 - own RTGS account needed



Liquidity Transfer Flows T2 - T2S



→ Liquidity transfers are possible from any TARGET2 account to any DCA (incl. standing orders)

→ Liquidity transfers are possible from any DCA to any TARGET2 account.

→ Internal liquidity transfer between DCAs are only possible between DCAs belonging to the same entity or linked to the same TARGET2 account.

Rebalancing is possible between the DCAs under the same BIC11

→ Each DCA needs to be linked to one TARGET account. The liquidity sweeps transfer liquidity from the DCAs to the linked TARGET2 account.

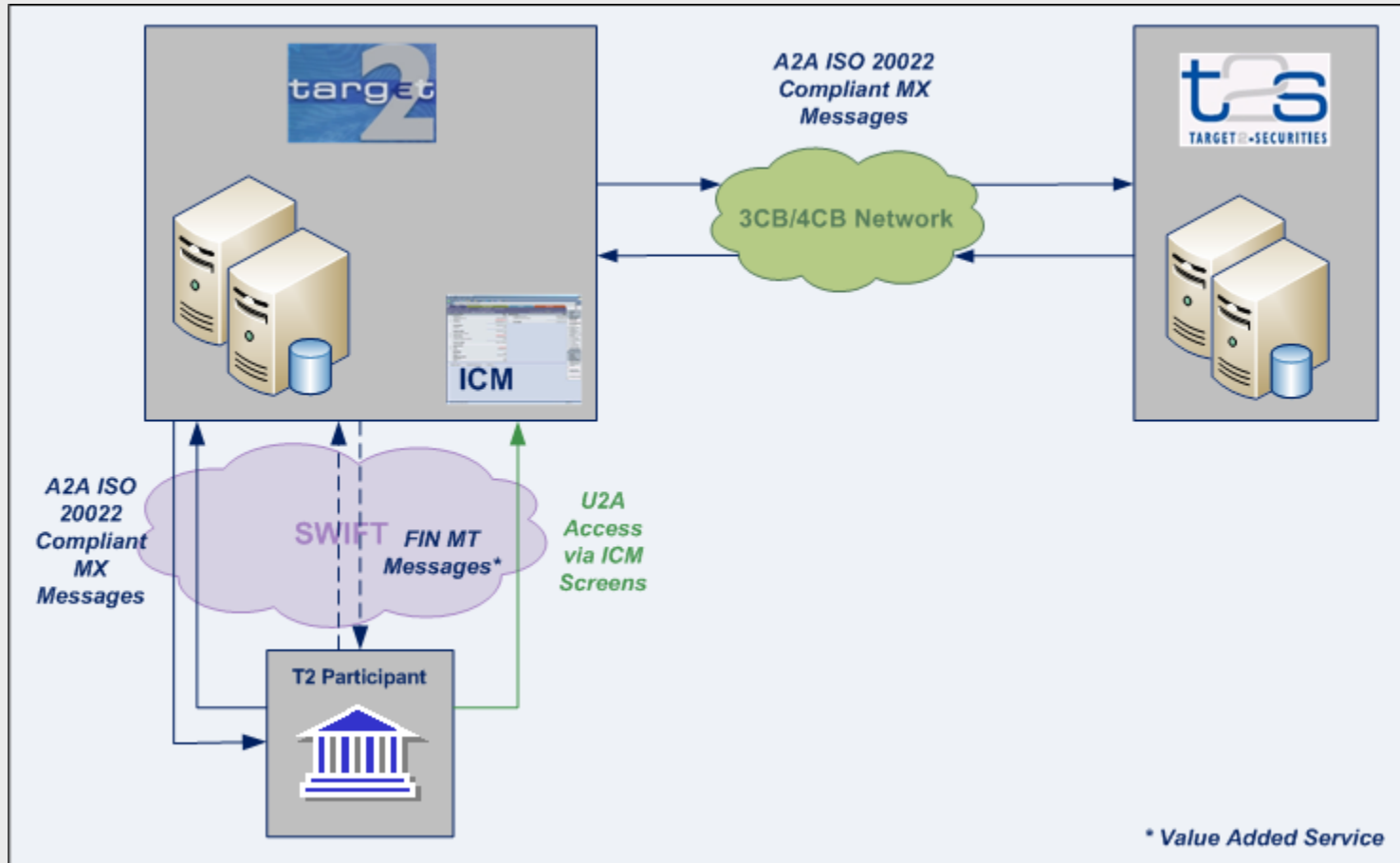


Liquidity Transfer Flows T2 - T2S

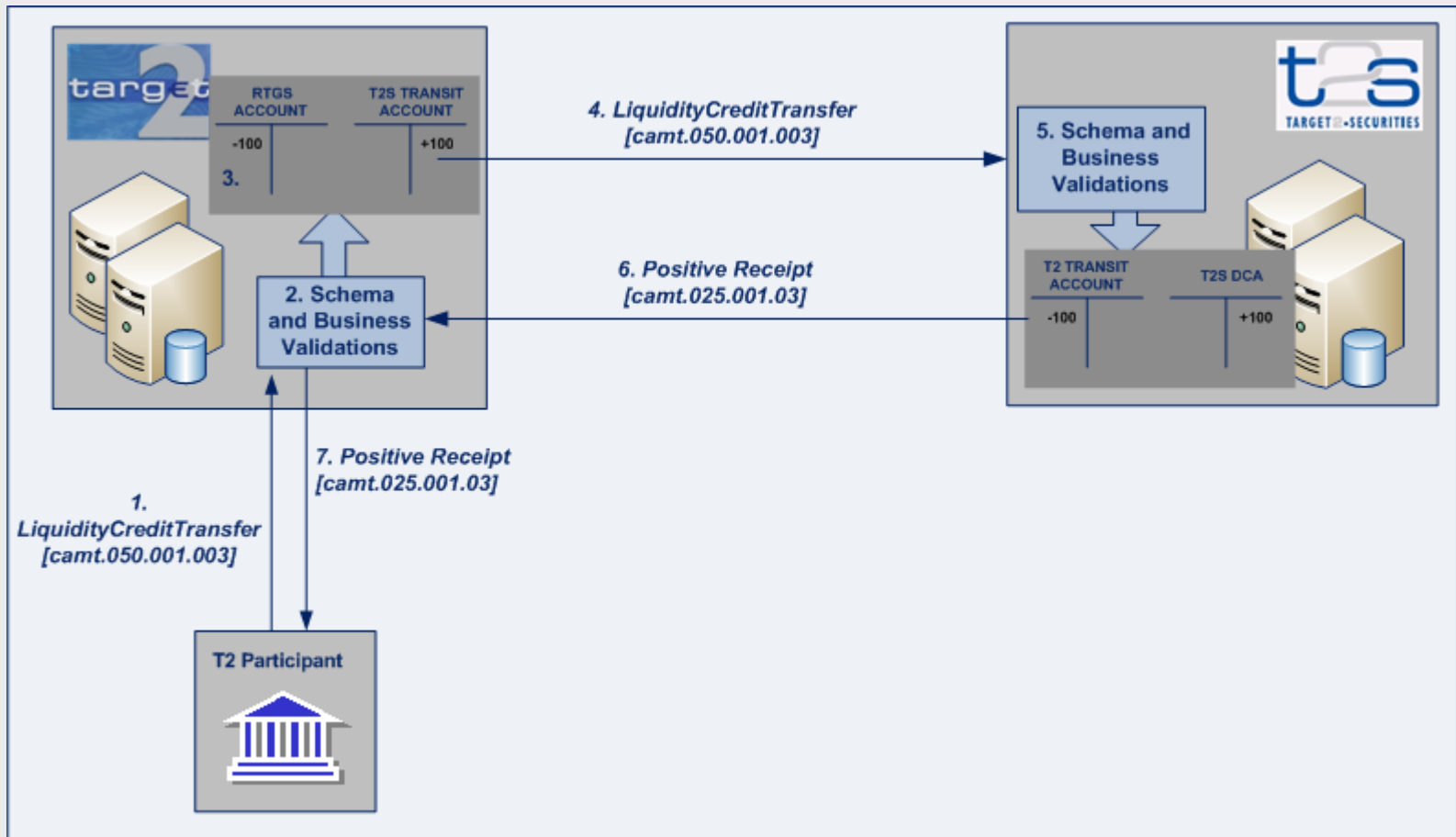
- ▶ Overview about the Technical Interfaces in T2 for T2S-related business
- ▶ Liquidity Transfers to T2S: Initiation via ISO 20022 compliant MX message
- ▶ Liquidity Transfers to T2S: Initiation via MT message
- ▶ Liquidity Transfers to T2S: Initiation via ICM current order
- ▶ Liquidity Transfers to T2S: Processing of negative Receipt from T2S (Automatic Reversal booking in T2)
- ▶ Liquidity Transfer from T2S: Successful Processing in T2 (positive Receipt to T2S)



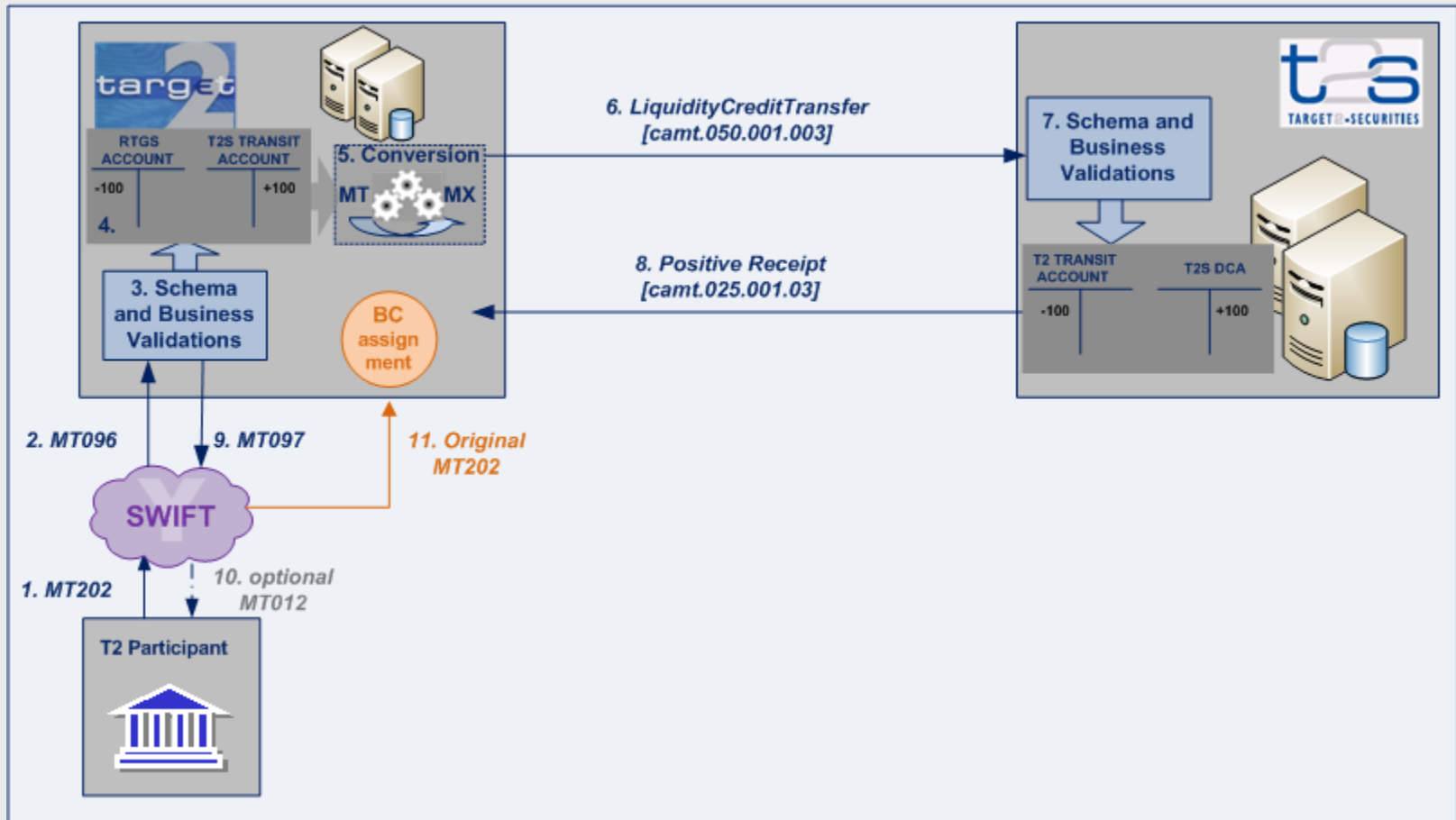
Overview Technical Interfaces in T2 for T2S-related business



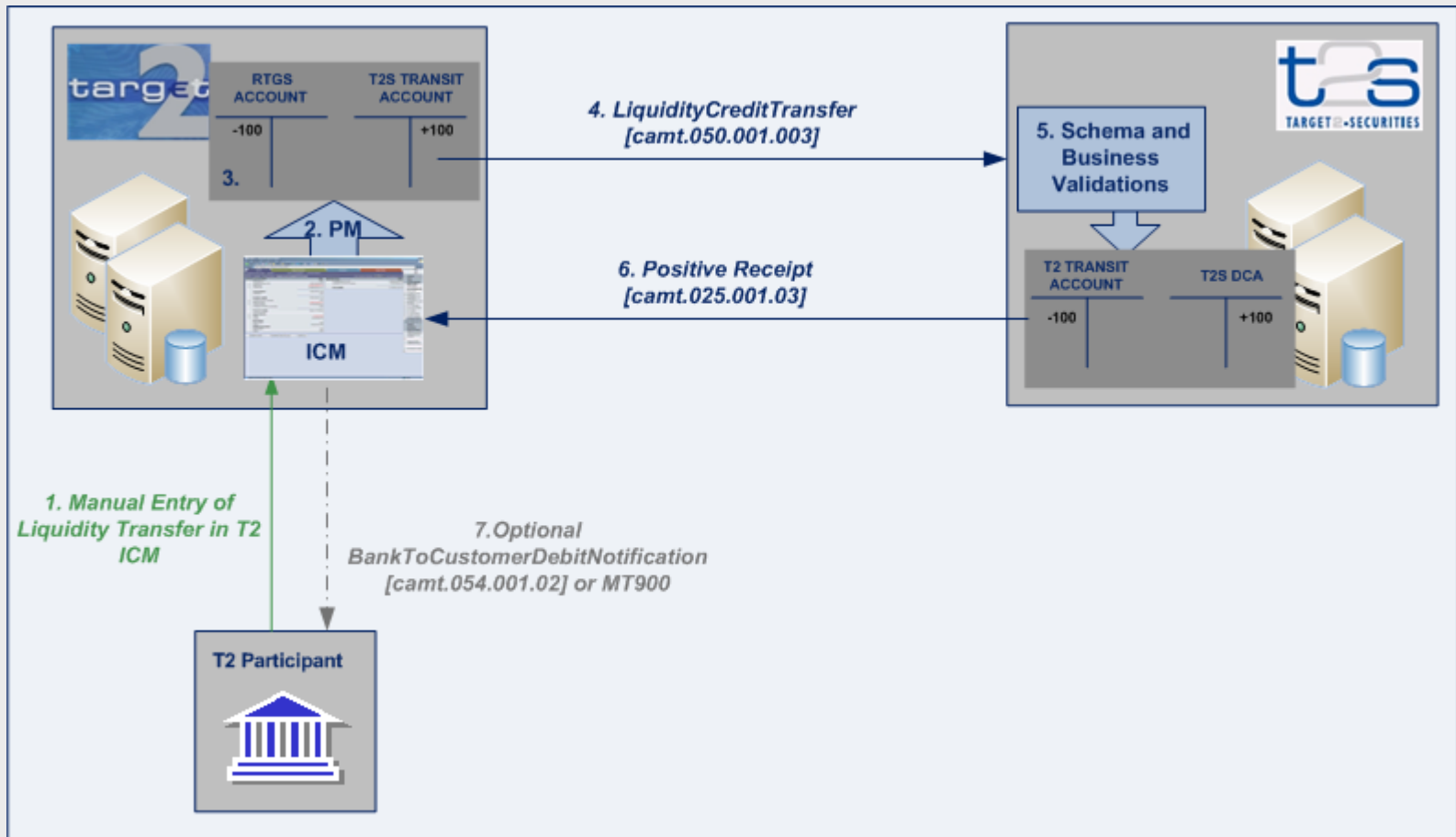
LT to T2S: Initiation via ISO 20022 compliant MX message (Core Service)



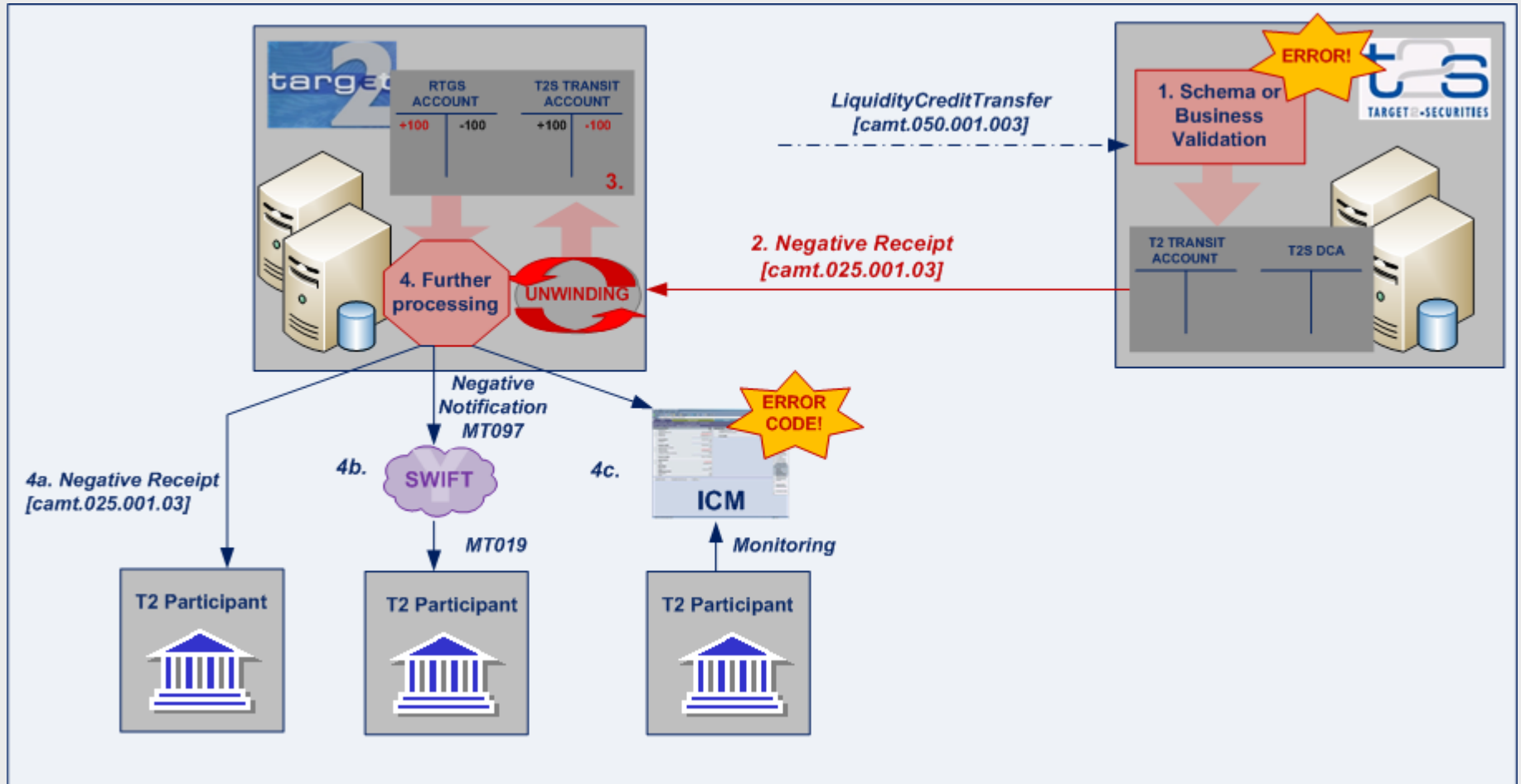
Liquidity Transfers to T2S: Initiation via MT message (Value Added Service)



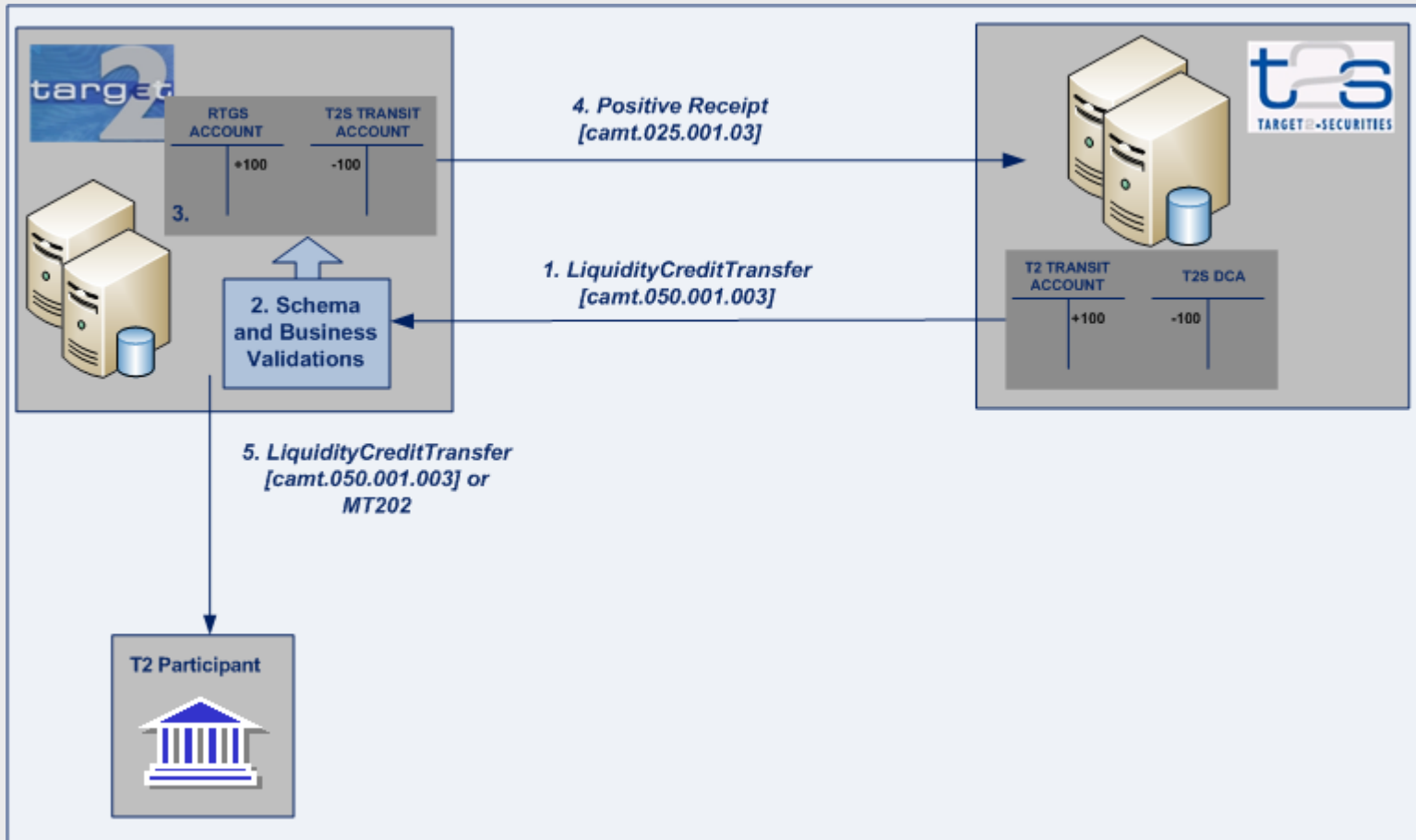
Liquidity Transfers to T2S: Initiation via ICM current order (Core Service)



Liquidity Transfers to T2S: Processing of negative Receipt from T2S (Automatic Reverse booking in T2)



Liquidity Transfer from T2S: Positive Receipt from T2 (Core Service for MX / VAS for MT push message)



QUESTIONS?

