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# Intraday liquidity EMMEC – 28 Nov 2023



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# Agenda

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Context

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Intraday liquidity management - implementation challenges

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Addressing intraday related to custodian accounts

4

AI usage for intraday liquidity management

5

RTGS evolutions, impacts on intraday



# Context



# Managing intraday liquidity is not an option


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# Intraday status

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- ✓ Intraday used to be a « specialist » topic with few regulation documents only as sole compass.
  - It now gets direct scrutiny from regulators during periodic reviews
  - Efficient IT tools - if not developed internally - are now offered by several vendors
  - Consistent large settlement volumes in securities markets mobilize large amounts of Intraday liquidity
  - Sensitivity in payments management is higher after recent banking difficulties – stress approach is required
  - Through Put ratio put additional constraints on Intraday active management
  - Evolution in payments practices (extended hours, IP,...) requires agility in liquidity management.
- Liquidity fluidity is a must and has to be ensured in any circumstances, especially to avoid any negative stigma.



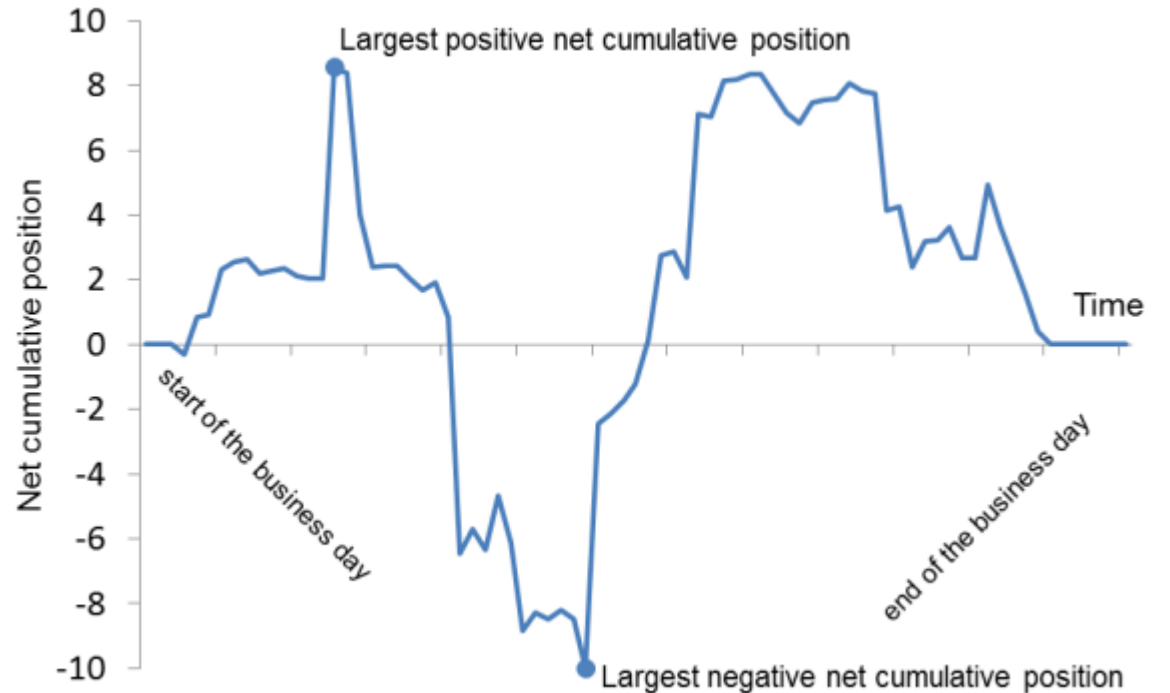
# Intraday liquidity implementation challenges





# Intraday concepts

- Concept defined in BCBS 248 can be refined
- ✓ BAU calculation
- ✓ Historical data averages, *95% 99% percentiles*
- ✓ Stress shape distortion
- ✓ Prefunding or « close-to close » applied to some flows
- ✓ « Only TSO » intraday liquidity usage
- ✓ Analytical view by Business Unit
- ✓ Statistical approach - surfaces



Source: BIS « Monitoring tools for intraday liquidity management »  
April 2013



# Implementation challenges – must have

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- Master Intraday liquidity concepts => design an internal policy including all stakeholders
- Measure Intraday liquidity usages : High precision fast IT tool necessary to collect all flows, with enriched details
- Identify priority payments (Time Specific Obligations) and all priority commitments to clients and counterparts
- Reconcile need to use liquidity with frugality and respect ones' commitments  
Review payments management, sequencing, setup cash pooling...
- Adapt bank's payments prioritization to counterparts behavior
- Setup a robust modelization of stress and assess related liquidity needs
- Ensure availability of enough Intraday resources in any circumstances

# Implementation challenges

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- Infuse Intraday « culture » across the organization into each Business Unit including securities activities
- Charging Intraday internally – to clients ?
- Anticipate expected flows using all available data and modelization => great advantage for active management
- Adopt multi-currency approach ?
- Design KPIs like « Intraday Liquidity Efficiency » (*see BIS document, April 2023...*)



# Intraday @ Custodian accounts



# Custodian accounts

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## ➤ *Why are they so important for intraday liquidity?*

- Custodian accounts are material, systemic, and have significant stigma in case of cash shortage
- Because not all sales and purchases of securities settle simultaneously, Intraday liquidity is used
- 2 funding sources = Liquidity injected from main accounts + Secured intraday liquidity provided by the custodian

## ➤ *What are the challenges?*

- Pure cash injections impact main accounts, therefore increase Intraday buffers requirements
- Access to Intraday credit from Central Banks requires a very robust setup
- Access to Intraday credit from private custodians can be limited and uncertain in stress
- « Know how » and cultures are rarely common between payments and securities departments... while cash and securities are fungible Intraday which requires both knowledge of securities *and* payments processes
- Cutoff times can be different between Central Bank accounts and Custodian accounts
- Strict monitoring of balances is required to avoid costly O/N balances on custodian accounts

# Custodian accounts

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- **Setting KPIs**

- ✓ Daily Funding Efficiency =  $\text{Max (Daily funding)} / \text{Total amount of purchases of the day}$

- ✓ Daily Credit Efficiency =  $\text{Max (Intraday secured credit)} / \text{Total amount of purchases of the day}$

- ✓ Through-Put Ratios =  $\text{Purchases settled at given time} / \text{Total amount of purchases of the day}$

- **Benchmarking custodian accounts (iCSDs, Domestic accounts..)**

- **Identifying margins for improvements**

# Concrete actions

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- **Fully involve Business Units in intraday subjects – regular follow-ups**
- **Review practices for securities settlements**
- **Put in place warnings for atypical flows (syndications, large deals,...)**
- **Develop multi-currency active management between cash and securities accounts**
- **Optimize collateral moves to reduce Intraday liquidity usage, focusing on timings and booking efficiency**
- ***Ultimately gains: reducing usage of Intraday scarce resource and settlements fails, improving client satisfaction and market reputation***



# AI for Intraday liquidity management



# Mobilization of SG stakeholders

## MULTIPLICITY OF STAKEHOLDERS



**Flow Pilots**  
The role of the back-office flow pilots is to **orchestrate and process the payments**



**Short Term Treasurers**  
**Manage short term funding** like money market deals and end-of-day balances



**Securities Account Managers**  
**Manage securities accounts** for the bank - which uses liquidity



**Vincent**  
**Intraday Treasurers**  
**Supervise intraday liquidity management** to ensure fluidity and resource availability



**Banking Counterparties**  
Counterparties which are facing Societe Generale for debits / credits flows.



**Central banks**  
Design rules related to liquidity on accounts managed by banks, and apply regulation

SOCIETE GENERALE ACTORS

EXTERNAL ACTORS

(1) Source:



# What was the initial pain point with intraday liquidity steering ? - reminder

## For our clients



**Stress identification** for dynamic liquidity management to match actual needs (ex: Covid - March 2020)



**Limit high costs associated with Intraday liquidity** buffers: it is a scarce resource for banks => "**frugality**" is necessary

## For internal teams



**Optimize cash allocation between different accounts** held in each currency, requiring cash transfers / pooling between these accounts all along the day



Given the materiality and criticality of flows, **absolute need to monitor Intraday liquidity**, to:

- 1. Control** the usage,
- 2. Provide fluidity** and comfort in payments management,
- 3. Respect our commitments** to clients and the market
- 4. Avoid any stress situation** which could harm confidence in our institution

# Key takeaways

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1

**ORGANIZATION:** sponsorship of executives, commitment of sponsors, involvement of all stakeholders (R.A.C.I)

2

**AVOID PRODUCING DATA FOR DATA:** target concrete actions from the beginning

3

**CONFIDENCE IN AI TOOL:** building trust is crucial right from the implementation phase to ensure involvement of stakeholders and success



# RTGS evolutions, Impacts on intraday



# RTGS towards 24/7 ?

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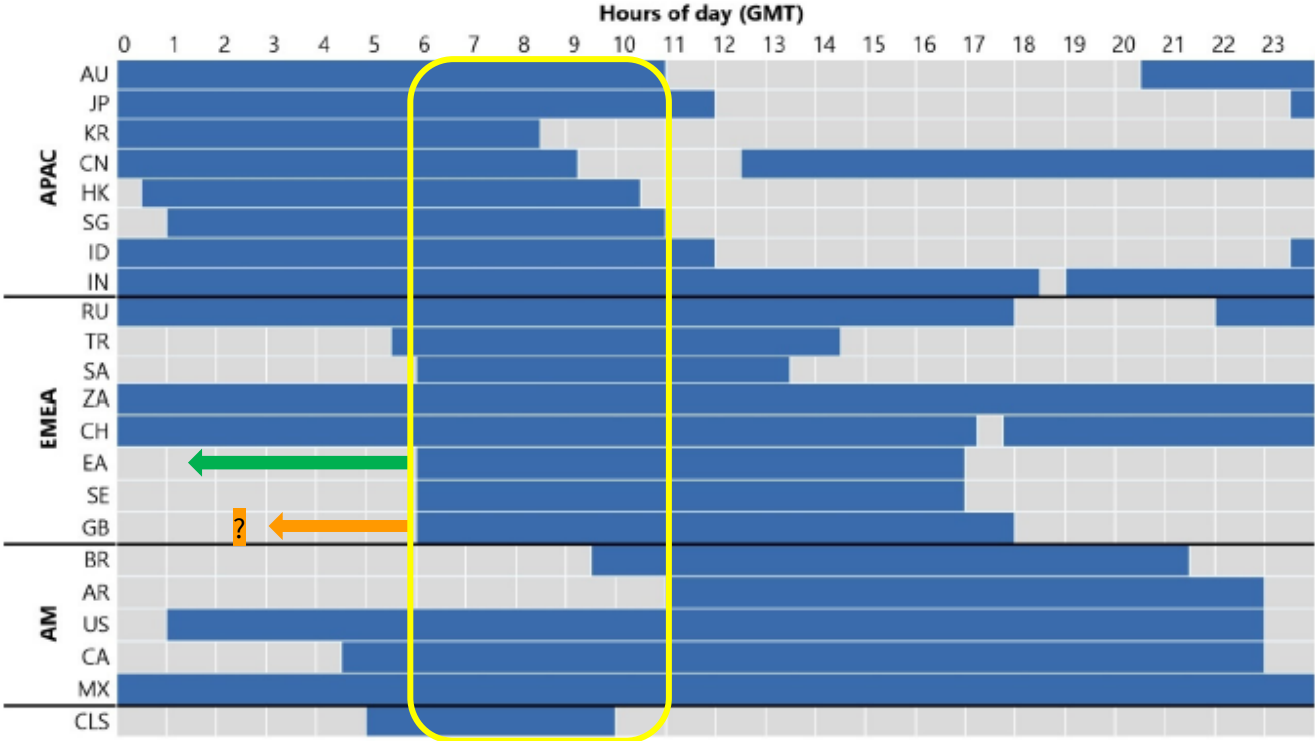
- G20 endorsed in 2020 a roadmap to enhance cross-border payments, developed by the Financial Stability Board (FSB) in coordination with the Bank for International Settlements Committee on Payments and Market Infrastructures (CPMI) and other relevant international organisations and standard-setting bodies.
- An extension of RTGS operating hours should reduce friction in cross-border payments and is now considered. Some large Central Banks like FED are already open almost 24/5. The ECB extended already in March 2023 the opening of Target2 to 2:30 CET, and BoE is considering such a move (recent consultation).
- Many initiatives are also seen in the market from private entities looking to offer 24/7 multi currency payments facilities, that encourage such development efforts.

➤ *Gradual extension of RTGS opening hours is well on its way.*

# Global settlement window

Real-time gross settlement operating hours on working days (GMT) for Committee on Payments and Market Infrastructures jurisdictions per region

Graph 3



AM = Americas; APAC = Asia-Pacific; AR = Argentina; AU = Australia; BR = Brazil; CA = Canada; CH = Switzerland; CLS = CLS Bank; CN = China; EA = Euro area; EMEA = Europe, Middle East and Africa; GB = United Kingdom; HK = Hong Kong SAR; ID = Indonesia; IN = India; JP = Japan; KR = Korea; MX = Mexico; RU = Russia; SA = Saudi Arabia; SE = Sweden; SG = Singapore; TR = Turkey; US = United States; ZA = South Africa.

Source: CPMI survey.

Source: BIS CPMI consultative report Nov 2021

# RTGS towards 24/5 ?

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Operational and business reasons are in favor of targeting 24/5

- Most participating banks are closed on week-ends (staffing issues,...)
  - Activity is very tiny on week-ends and demand is limited at this stage
  - Solving specific difficult situations related to financial stability and resolution policy for troubled institutions
  - IT upgrades often require time
  - IP systems cover some of the needs (retail,...)
  - Screening sanctions filters can be problematic
- Reg. Intraday liquidity why 24/5 would be preferable to 24/7:
- ✓ *Intraday liquidity management could be managed in a much more efficient way...*
  - ✓ *...especially as access to liquidity from other banks is well available in the market if needed.*

# RTGS extension - challenges for Intraday

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- Leverage on existing experience (Fed 22/24,...)
- Adapt to new clients demands
- Modify custodian accounts liquidity management
- Intraday liquidity active management
  - ✓ Follow the sun process
  - ✓ Automation - priority rules driven
  - ✓ Intraday buffers available at any time
  - ✓ New alternatives to source Intraday liquidity anytime – Central Bank Liquidity Bridges ?

# Multi-currency intraday approach

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# Multi-currency Intraday approach

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- BCBS248 : *« If a bank*
  - *can prove to the satisfaction of its supervisor that it manages liquidity on a cross-currency basis*
  - *and has the ability to transfer funds intraday with minimal delay – including in periods of acute stress –*
  - *then the intraday liquidity positions across currencies may be aggregated for reporting purposes.»*
- ✓ A consolidated view with stress approach associated to Central Bank Liquidity Bridges can be a solution.
- ✓ Available: Euro Liquidity Bridge between ECB and BoE *as an example*
- ✓ Set up in stress: Reciprocal swap lines between ECB and several Central Banks like Fed, BoC, Sveriges,...

Central banks already offer such facilities and these could be developed in the context of longer opening hours.

# Central Bank Liquidity Bridges

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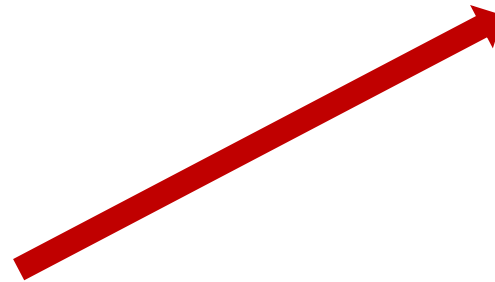


❑ Commercial Bank



1bn€

❑ Bank of England



❑ Commercial Bank

+870m£

# Optimizing Intraday liquidity across currencies

■ Currency A

■ Currency B

