

EUREX

clearstream | DEUTSCHE BÖRSE
GROUP

European repo market
to benefit from **balance sheet
netting** solutions with
central bank money settlement



Executive Summary

- 1** Balance sheet consumption from repo trading continues to constrain banks and broker-dealers and limits their ability to provide clients with liquidity.
- 2** While Eurex's GC Pooling and Special Repo segments are increasingly interlinked, comprehensive accounting standards must be satisfied prior to the recognition of balance sheet netting.
- 3** Enhancements to Eurex and Clearstream's trading, clearing and settlement infrastructure deliver an innovative solution that places repo trading clients in the best possible position to achieve balance sheet netting with settlement in central bank money.
- 4** Central bank money settlement also offers numerous benefits in terms of financial resource management and operational efficiencies, including streamlined intraday liquidity management, lower credit line utilization and extended settlement cut-off times.
- 5** The solution leverages Clearstream's unique STP triparty collateral management solution across ICSD & T2S/CSDs, with full integration with ECMS.
- 6** The solution complements Eurex's ongoing initiatives to support direct buy-side participation in cleared repo markets, which then allows banks and broker-dealers to unlock the capital benefits from multilateral netting through the clearinghouse.

Introduction

Balance sheet size and composition are important characteristics when describing a bank's activities and in comparing performance with peers. Balance sheet size indicators are used in a number of financial performance and prudential regulatory measures.

Repurchase agreements ('repos') and reverse repurchase agreements ('reverse repos') are reported on a gross basis on the balance sheet. This makes balance sheet capacity for repo trading and market-making a scarce resource that needs to be managed prudently.

Banks are heavily incentivized to pursue strategies that maximize opportunities to reduce gross balances. The accounting and regulatory standards permit the offsetting of financial assets (reverse repos) with financial liabilities (repos), also known as "balance sheet netting", subject to several criteria being met.

In response, Eurex and Clearstream have made several enhancements to their trading, clearing and settlement infrastructure and processes to deliver an innovative solution that puts repo trading clients in the best possible position to achieve balance sheet netting under the IFRS (IAS 32 Financial Instruments: Presentation) and US GAAP (FASB Interpretation No. 41) accounting standards.

In this whitepaper, we present a high level overview of the Eurex GC Pooling and Special Repo segments and the growing interlinkage of these products by repo traders. We illustrate the new design and outline the advantages for clients aiming to achieve an optimal allocation of scarce resources. We also present a qualitative overview of the accounting standards for achieving balance sheet netting and review the solution against the criteria. For illustrative purposes, we finally present a case study highlighting the potential for benefits to be achieved.

This whitepaper does not constitute accounting advice or guidance. Customers should consider the accounting requirements in the jurisdictions relevant to them before using Eurex and Clearstream products or services.

GC Pooling and Special Repo segments

The Eurex GC Pooling and Repo segments are compared in Table 1.

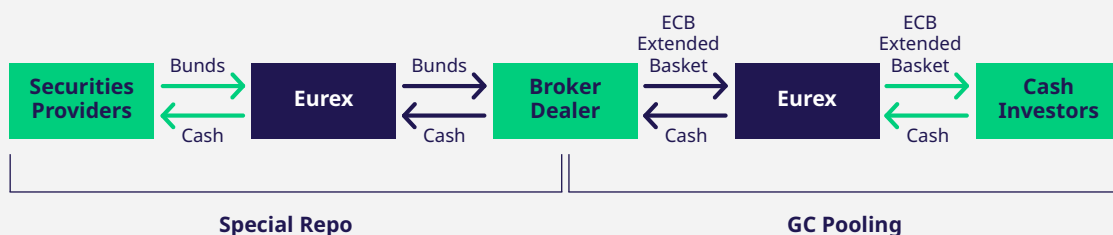
Table 1 – Key characteristics of the Eurex GC Pooling and Repo segments

GC Pooling Segment	Special Repo Segment
Funding	Financing
<ul style="list-style-type: none"> • Cash-driven basket trading • Funding in EUR, USD, CHF, GBP collateralized by five standardized collateral baskets with c. 14,000+ ISINs ranging from government to corporate bonds • Automated allocation of securities and straight-through-processing efficiency (STP) • Real-time substitution of collateral • Settlement netting on basket / currency level • Automated re-use of collateral to ECB/Bundesbank or BCL & Eurex Clearing margining 	<ul style="list-style-type: none"> • Securities-driven trading • Financing of c. 11,000 ISINs single securities against EUR and GBP • Manual allocation of securities allows selective collateralization (STP) • Settlement netting on single ISIN level

According to the Bank of International Settlements, the Euro repo market has increasingly been driven by investors in search of specific collateral, as well as investors seeking funding. At Eurex, the GC Pooling and Special Repo segments are increasingly closely interlinked. Market participants raise cash in GC Pooling

as it permits the monetization of a broad range of securities through the liquid GC Pooling baskets. This cash is then used to purchase a specific security. The example in Figure 1 shows a Broker Dealer looking to secure a specific on-the-run issue of German Bunds which is funded by borrowing cash against the ECB Extended Basket.

Figure 1 – Interlinkage between GC Pooling and Special Repo



Market design and account structures

The Eurex GC Pooling and Special Repo market designs have evolved over the years in response to demand from clients for the most efficient, effective and optimal mechanisms for cash deployment and collateral use (and re-use).

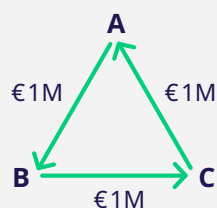
The integrated trading, clearing and settlement designs of the Eurex's segments, as illustrated in Figure 2, are highly efficient from an operational perspective. Further, as all trades ultimately face the clearinghouse there is significantly more scope

for risk management and capital efficiencies from multilateral netting, when compared to facing numerous counterparties in the bilateral markets (see Box 1).

The latest evolution in the clearing and settlement layers stems from the desire from clients for market designs which are more effective in meeting the accounting standards required to achieve balance sheet netting, while optimizing allocation across collateral pools.

Box 1 – Netting through a CCP

In this illustration, the repo segment has three participants, A, B and C. Each participant lends €1M and borrows €1M from another market participant for the same duration. If conducted bilaterally, these transactions would increase the counterparty exposure of the participants.



In the second illustration, the trades are cleared. The counterparties no longer face each other, and instead face the clearinghouse. As the inflows and outflows are netted, the trades do not increase the counterparty exposure.

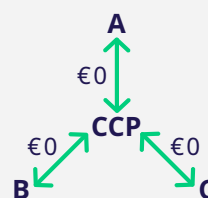
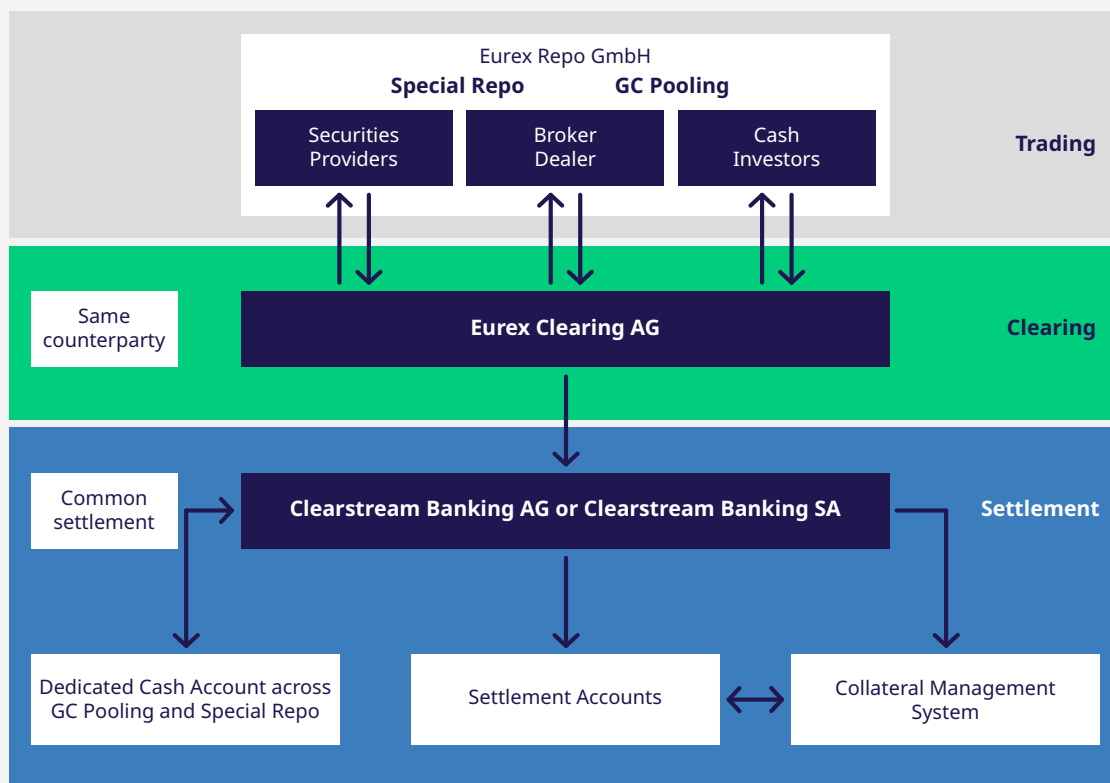


Figure 2 – Balance sheet netting efficient market design – trading, clearing and settlement



Central bank money settlement

Clients with access to T2S have numerous benefits and efficiencies when opting to settle repo transactions in central bank money where possible, rather than commercial bank money.

While Euro GC Pooling has historically been settled in central bank money, there have been gaps with respect to the settlement of Specific ISIN repo transactions in central bank money. In response, Eurex has made substantial improvements in its securities clearing operations, such that German, French, Spanish and Italian Euro-denominated Specific ISIN repo transactions can now settle in central bank money. Additional geographies are also planned based on client demand.

Clearstream’s account structures for cash and securities settlement have also evolved and the principal design is illustrated in Figure 3. Euro GC Pooling transactions can be prefunded from the Member’s (client’s) T2S dedicated

cash account (DCA), which is also used for all Euro GC Pooling and Specific ISIN cash settlements where Clearstream Banking Frankfurt (CBF) has been nominated as the settlement location. It is in Member’s interests to consolidate all T2S-eligible collateral at their CBF main source account, where it is available for allocation in the GC Pooling reservation account or for deployment in Eurosystem operations. The segregation account holds collateral received in GC Pooling transactions, which can be re-used for a growing range of eligible purposes as permissible by Eurex.

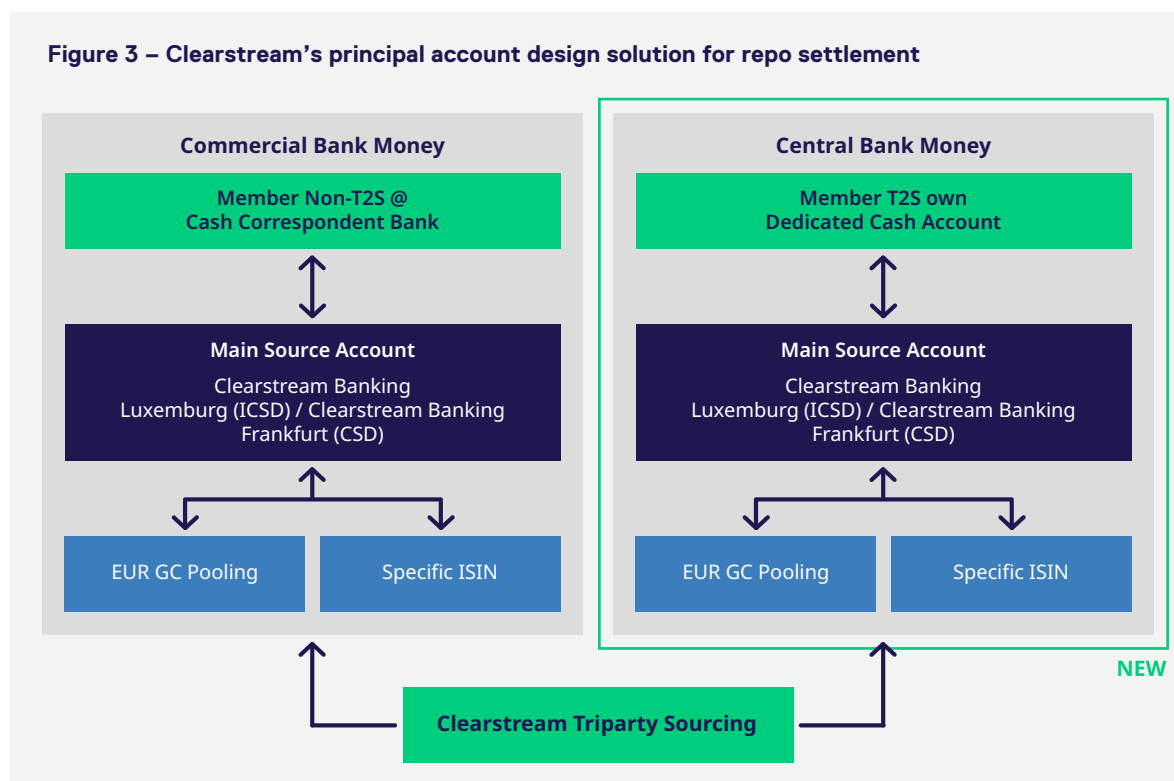
The design also provides for commercial bank money settlement via parallel account structures at Clearstream Banking Luxembourg (CBL), including a Non-T2S ICSD DCA for cash settlement.

Commercial bank money settlement can also be employed for Non-Euro GC Pooling and certain other Specific ISIN transactions, where considered optimal. Collateral held in CBF remains usable in CBL Triparty, including auto-allocation, via Clearstream's unique STP triparty collateral management solution across ICSD & T2S/CSDs, with full integration with ECMS (expected to be launched in June 2025).

By consolidating all T2S-eligible collateral at CBF, members also benefit from streamlined intraday liquidity management and reduced CBL/ICSD credit line utilization. In addition, the improved settlement cut-off times available for Specific ISIN Eurex CBF/T2S settlement further maximize trading, financial resource, and operational efficiencies.

Commercial bank money settlement

Clearstream's commercial bank money settlement solution remains available for clients not wishing to opt for the principal design. In this case members need to transfer cash to CBL's cash correspondent bank in order to prefund their dedicated cash account for their Euro GC Pooling activity.



Accounting standards and the Balance Sheet Netting solution

The accounting standards and guidance for the recognition of balance sheet netting under IFRS and US GAAP are summarized in Box 2. They are comprehensive and will always be open and subject to the interpretation of accountants, auditors, and legal advisors.

We discuss the key requirements below and the Balance Sheet Netting solution features that address compliance.

Box 2 – Criteria for Balance Sheet Netting



Same counterparty



Same explicit settlement date



Netting agreement and rights of set-off



Settlement on a net basis



Intraday credit facilities



Same counterparty

The minimum requirement is that the repo and the reverse repo face the same counterparty. In Eurex's GC Pooling and Special segments, all trades face the clearinghouse (Eurex Clearing AG).

Same explicit settlement date

For a repo and reverse repo to qualify for off-setting, the transactions need to have the same explicit settlement date. Clients need to account for this criterion in the management of their balance sheet resources.

Netting agreement and rights of set-off

A master netting agreement covering the repo and the reverse repo transactions must be in place before netting is permissible under the accounting standards. Participants in Eurex's GC Pooling and Special segments are required to access one of the available clearing memberships and sign a clearing agreement with Eurex Clearing AG, which forms the basis of legally enforceable rights of set-off. In signing a clearing agreement, the clearing member and Eurex Clearing AG are both bound to the Clearing Conditions of Eurex Clearing AG which specify the netting/

rights of set-off arrangements, analogous to those which would be found in a bilateral repo netting agreement, such as a GMRA.

In order to apply netting, clients need to be satisfied that the current legally enforceable rights of set-off are not contingent on a future event and the rights of set-off are legally enforceable in: the normal course of business; the event of default; and the event of insolvency or bankruptcy. The Clearing Conditions do not intentionally prejudice any of those requirements, but clients will need to seek their own counsel to ensure that those criteria continue to be met for any specific scenarios that the client may face.

Settlement on a net basis

The standards require an intent either to settle on a net basis, or to realize the asset and the liability simultaneously. The existence of a single cash account for transacting the cash inflows and cash outflows provides strong support for this objective.

Additional support for the standard can be found from Clearstream's robust settlement processes where cash assets and liabilities eligible for set-off are submitted for settlement in a single cycle with hard submission deadlines. Counterparties are committed to settle once submitted, with no potential for the settlement amounts to change following submission. The securities leg settlements are all required to be settled through Clearstream and are transferred by means of book entry records, and issues arising from the securities legs are not directly prejudicial to the net settlement of the cash payables or receivables.

Intraday credit facilities

To promote further certainty around simultaneous settlement, the guidance on the accounting standard encourages the availability of intraday credit limits at the settlement date. In this respect and in support of client's requirements for balance sheet netting for Special Repo, Clearstream may on a case-by-case basis, decide to grant credit limits at its sole and absolute discretion.

Case study – European Broker-Dealer

“ By enhancing collateral mobility and credit efficiency for post-trade market participants, we continue to improve access to liquidity and to securities financing markets across the Eurosystem.

Marton Szigeti
Head of Collateral, Lending and Liquidity Solutions, Clearstream Banking S.A.

The balance sheet netting solution offers substantial benefits to clients and an illustrative case study is described in Box 3.

Box 3 – Illustrative Broker-Dealer

The European broker-dealer subsidiary of an US bank has a repo trading desk, supporting a wide range of sell-side and buy-side clients on a bilateral and cleared basis. The desk trades a matched/internalized repo market-making book (€25 Bn Notional). The cleared trades include activity on Eurex's GC Pooling, with

settlement in central bank money, and Special Repo segment with settlement in commercial bank money. The desk is supported by a trading inventory of €16 Bn notional comprising sovereign, bank and corporate bonds. The balance sheet of the broker-dealer legal entity is shown below.

Assets	€MM	Liabilities	€MM
Cash	900		
Trading assets	2,820		
Trading assets (Pledged)	13,180		
Reverse Repurchase Agreements	25,000	Repurchase Agreements	25,000
Derivatives Assets	100	Derivatives Liabilities	1,000
Default Fund Contribution	40	Unsecured Borrowings	14,040
		Equity	2,000
<hr/>		<hr/>	
Total Assets	42,040	Total Liabilities	42,040

The broker-dealer trades in Eurex's Special Repo (cleared) segment (c. €3.8 Bn Assets). The Special Repo trades are funded by cash borrowings in Eurex's GC Pooling (cleared) segment (c. €3.8 Bn Liabilities), similar to the example shown earlier in Figure 1. While these trade combinations are efficient from an economic netting perspective, the previous market design involved settlement

in both central bank money (GC Pooling) and commercial bank money (Special Repo), and hence did not meet all the criteria required by the accounting standards. By employing the new Balance Sheet Netting solution as shown in Figures 2 and 3, the revised balance sheet is shown below.

Assets	€MM	Liabilities	€MM
Cash	900		
Trading assets	2,820		
Trading assets (Pledged)	13,180		
Reverse Repurchase Agreements	21,200	Repurchase Agreements	21,200
Derivatives Assets	100	Derivatives Liabilities	1,000
Default Fund Contribution	40	Unsecured Borrowings	14,040
		Equity	2,000
<hr/>		<hr/>	
Total Assets	38,240	Total Liabilities	38,240

By employing the solution, the economic efficiencies from interlinked GC Pooling and Special Repo trading have also been realized in the accounting balance sheet, with a reduction in assets of c. €3.8 Bn. This will have a materially positive impact on the brokerdealer

subsidiary's financial performance and prudential regulatory capital measures and metrics, such as return on assets, Leverage Ratio, and the Global Systemically Important Banks (GSIB) framework.

Summary

“ Running the funding and the securities-driven repo business via the same platform, CCP and settlement system provides unique benefits for our clients, significantly reducing capital requirements for a more efficient and profitable business.

Matthias Graulich

Member of the Executive Board, Eurex Clearing AG

Member of the Management Board, Eurex Repo GmbH

The GC Pooling and Special Repo segments administered by Eurex and Clearstream are increasingly closely interlinked.

In response to client demand, Eurex and Clearstream have made several enhancements to their trading, clearing and settlement infrastructure and processes to deliver an innovative solution that puts repo trading clients in the best possible position to achieve balance sheet netting for GC Pooling and Special Repo under the IFRS (IAS 32 Financial Instruments: Presentation) and US GAAP (FASB Interpretation No. 41) accounting standards.

The completion of this initiative marks a major milestone in Eurex and Clearstream's efforts to deliver efficiencies for participants in the European repo market landscape.

The initiative also complements Eurex and Clearstream's capabilities to support direct access to cleared repo markets for buy-side counterparties. Eurex's ISA Direct models enable buy-side cash investors and cash takers to achieve their objectives in the Eurex Repo segments with secure access to a large liquidity pool through a streamlined process at competitive pricing. Increasing the buy-side participation in the Eurex's cleared repo segments allows banks and broker-dealers to unlock the capital benefits from multilateral netting through the clearinghouse.

Contact us

Eurex Repo

Repo.Sales@eurex.com

© Eurex, January 2025

Published by

Eurex Repo GmbH
Mergenthalerallee 61
65760 Eschborn
Germany

www.eurex.com

ARBN Number

Eurex Frankfurt AG ARBN 100 999 764

© 2025 by Deutsche Börse AG. Eurex®, the EX® and EC®-Logo are registered trademarks of Deutsche Börse AG. This publication is published for information purposes only and does not constitute accounting advice, investment advice or an offer, solicitation or recommendation to acquire or dispose of any investment or to engage in any other transaction. While reasonable care has been taken in the preparation of this publication neither Eurex Frankfurt AG, nor any of its affiliates make any representation or warranty regarding the information contained herein. Customers should consider the legal, accounting and regulatory requirements in the jurisdictions relevant to them before using Eurex® products or services. All descriptions, examples and calculations contained in this publication are for illustrative purposes only.

Find out more online at
eurex.com/repo
www.clearstream.com

