

Updates to the FX Global Code of Conduct:

The risk waterfall for FX flows

The Global Foreign Exchange Committee (GFXC) published the latest version of the Foreign Exchange Global Code of Conduct in January 2025. These revisions follow the latest three-year review cycle of the Code, aiming to address feedback and evolve in line with developments in the FX ecosystem. CLS welcomes the changes to the Code's settlement risk principles, which introduce a "risk waterfall" approach with a specified hierarchy of methods for mitigating FX settlement risk.



What is the FX Global Code of Conduct?

The Code was launched in 2017 following two years of public and private sector collaboration coordinated by members of the central bank Foreign Exchange Working Group (FXWG).¹ Since its launch, the GFXC has maintained the Code through ongoing review and updates, continuing the collaboration between central banks and the private sector.

The Code comprises a set of global principles of good practice for the FX market. Principles 35 (Settlement Risk) and 50 (Measuring, Monitoring & Controlling Settlement Risk)² of the Code encourage FX market participants to explore ways to further mitigate risk and reduce operational costs by adopting a best practice approach to FX settlement risk management and netting.

The Code has been widely adopted by both public and private sector institutions throughout the FX ecosystem, and CLS first signed its Statement of Commitment in 2018.³

A code to fit an ever-changing FX ecosystem

The Code was designed to be a living document with a three-year review cycle. Periodic reviews help to ensure that the Code remains relevant and reflects the continually evolving best practices in the global FX market.⁴ The first update of the Code in 2021⁵ strengthened the settlement risk principles on payment-versus payment and netting (Principles 35 and 50).

The most recent update to the Code was published January 2025 following an extensive consultation period with FX market participants.⁶ A key amendment to the Code introduces a risk waterfall approach through which market participants should consider a hierarchy of methods for reducing FX settlement risk.



¹ The Foreign Exchange Working Group (FXWG) was set up in 2015, under the auspice of the Bank for International Settlement's Markets Committee, to establish a single set of global principles of good practice for foreign exchange markets. See Foreign Exchange Working Group: bis.org

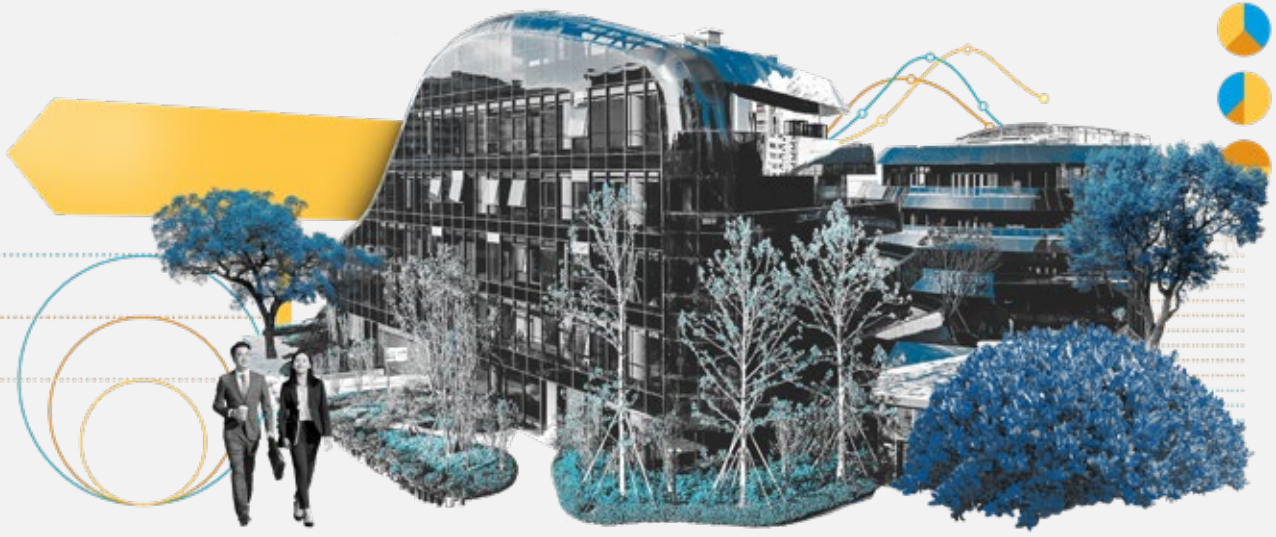
² For detail on how CLS supports adherence to these principles, see cls-group.com/about/fx-global-code/

³ Market participants can demonstrate their recognition of, and commitment to adopting, the good practices set forth in the FX Global Code by signing a standardized 'Statement of Commitment' to the FX Global Code. CLS maintains a public register of Statements of Commitment at Public Register | FX Global Code | CLS Group: cls-group.com

⁴ See Letter: bis.org

⁵ The 2021 version of the FX Global Code; see fx_global.pdf.globalfxc.org

⁶ Membership of the GFXC is made up of central bank-sponsored Foreign Exchange Committees (and sub-committees) and similar structures in various regions. Each member Foreign Exchange Committee designates a central bank and private sector representative for the GFXC. CLS actively contributed to the review of the Code throughout 2024 by responding to the GFXC public consultation as well as participating in two of the central bank-sponsored Foreign Exchange Committees (United Kingdom and United States) that comprise the GFXC membership.



Changes to Principle 35 introducing the risk waterfall approach

The revised Principle 35 states, “Market Participants should reduce their Settlement Risk as much as practicable, by settling FX transactions through settlement methods that eliminate Settlement Risk, for example by using services that provide payment-versus-payment (PvP) settlement where available.”⁷ It also introduces a cascade of methods for reducing FX settlement risk, from PvP settlement to the netting of FX obligations to minimizing gross bilateral settlement.⁸ (See figure 1).

Figure 1: The risk waterfall approach (updates to the wording of Principle 35 are indicated below in red)

When determining settlement methods for FX transactions Market Participants should consider the following hierarchy to reduce Settlement Risk:

1. Where practicable, Market Participants should eliminate Settlement Risk, **for example** by using settlement services that provide **payment-versus-payment** PvP settlement.
2. Where **Settlement Risk cannot be eliminated** **PvP settlement is not used**, Market Participants should reduce the size and duration of their Settlement Risk as much as practicable. The netting of FX settlement obligations, (**including in particular** the use of automated netting systems) is encouraged.
3. Where practicable, **gross bilateral settlement should be minimized**.

Source: GFXC, updates to the FX Global Code, published 2025

Top of the waterfall

PvP settlement mechanisms sit at the top of the risk waterfall approach, whereby the final transfer of a payment in one currency occurs if and only if the final transfer of a payment in the counter currency also occurs. PvP eliminates the time lag between settlement of the two payments and mitigates the underlying settlement risk. CLS provides PvP settlement on a global scale through CLSsettlement, and other settlement mechanisms provide PvP on a more regional basis.⁹

CLSsettlement serves as the wholesale settlement backbone for the global FX market, providing PvP functionality for 18 of the world’s most traded currencies. CLS estimates that it has captured 90% of the CLSsettlement-addressable market, and volumes continue to grow. On 20 June 2024, CLS settled a record USD19.1 trillion of payment instructions.

CLSsettlement combines FX settlement risk mitigation with multilateral netting, which yields liquidity savings for CLS settlement members of approximately 96%. Funding obligations can be further reduced using an optional in/out swap tool.¹⁰ This service, combined with multilateral netting, results in an average funding requirement of less than 1% of the total value of all trades for settlement members. This tremendous reduction in overall funding requirements makes considerable liquidity available to the FX market and beyond.

⁷ The 2024 version of the FX Global Code; see [fx_global.pdf: globalfxc.org](https://www.fxglobalcode.org/)

⁸ To settle an FX transaction, counterparties exchange principal (value of the trade) in two currencies. Settlement risk is the risk that one party to an FX transaction delivers the currency it sold but does not receive the currency it bought, resulting in a loss of principal.

⁹ E.g., B3 Foreign Exchange Clearinghouse (B3) in Brazil and Forex Settlement (CCIL) in India each provide central clearing with net settlement in one currency pair in their respective regions; and the PvP arrangement in Hong Kong (CHATS) conducts simultaneous gross settlement for nine currency pairs across seven different currencies.

¹⁰ An in/out swap is a swap transaction. The first leg settles inside CLS (the “in” part of the swap), and the second leg settles outside CLS (the “out” part of the swap). The effect of the swap is to reduce the net short position that settles within CLS for the counterparty (with a corresponding reduction in the net long position for its counterparty) and thus the funding required within CLSsettlement from each participant in the swap. While the “in” leg minimizes funding needs, the “out” leg must be settled outside CLSsettlement and thereby introduces settlement risk back into the market.

Midway down the waterfall

The second step of the risk waterfall includes those FX transactions that face challenges accessing PvP solutions, where settlement risk cannot be fully eliminated. In recent years, the proportion of FX trades settled without PvP has increased, driven by the growth in emerging market (EM) currency trading. According to the Bank for International Settlements 2022 Triennial Survey, the share of the FX market without risk mitigation stands at 31% of trades.¹¹ However, a more recent estimate puts this figure at 10-15%.¹²

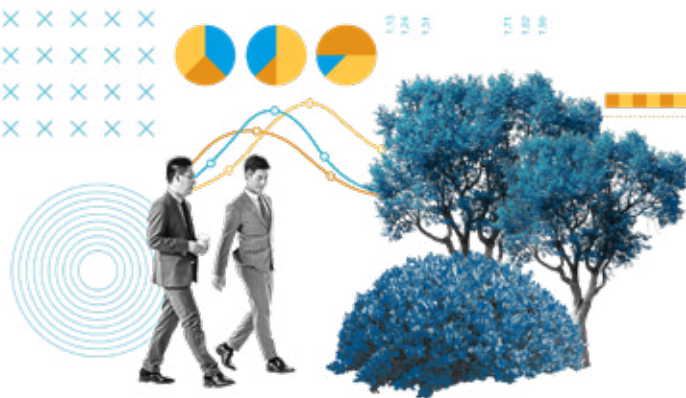
Where settlement risk cannot be fully eliminated, the Code provides that market participants should reduce the size and duration of this risk as much as “is practicable” and encourages the use of automated netting systems.

Netting services can be multilateral or bilateral in nature. As noted above CLSSettlement provides multilateral netting. However, where multilateral netting is not possible and there is some degree of settlement risk, reducing payment obligations through bilateral netting can still substantially reduce settlement risk. While multilateral netting is more effective, bilateral netting can still play an important role, decreasing settlement risk exposure by almost 70% on average.¹³

CLS provides an automated bilateral payment netting calculation service, CLSNet. This service enables market participants to achieve greater operational efficiency and risk mitigation for over 120 currencies, including currencies not supported by CLSSettlement. This service continues to grow, and its average daily netted value¹⁴ is now USD153 billion, up 30% year-on-year. In December 2024 CLSNet saw a record daily netted value of USD620 billion.

Lower level of the waterfall

In the final stage of the risk waterfall, the updated Code states that where practicable, “gross bilateral settlement should be minimized”. This settlement practice is on the upper end of the risk spectrum, where exposure can be 100% and delivery lag can significantly exceed 24 hours. The introduction of the risk waterfall approach encourages market participants to minimize such practices and, where practicable, use safer post-trade mechanisms that better mitigate settlement risk.



¹¹ BIS Triennial Central Bank Survey: bis.org/statistics/rpfx22.htm

¹² See Once more unto the breach – speech by Philippe Lintern | Bank of England

¹³ CPSS (2007) “Progress in reducing foreign exchange settlement”. The bilateral netting ratio is often far higher for inter-group trades.

¹⁴ Netted value refers to bilateral net payment amounts calculated by CLSNet.

Figure 2: How CLS fits into the risk waterfall approach



Between the currents

While the risk waterfall outlined in the Code focuses on PvP, netting and gross settlement, it is important to recognize that there is a range of settlement practices within the FX market with varying levels of FX settlement risk.

For example, in inter-branch settlement, the two payment obligations underlying an FX trade may be transferred between branches of the same legal entity and settle across the books of a single institution without any time lag, effectively eliminating settlement risk.

For certain trades, including some prime brokerage activities, clients close out any open market risk with FX banks on a daily basis. The resulting net single currency cash movement represents realized profit and loss from the day’s trading activity. As there is no exchange of one currency for another, there is no FX settlement risk arising from this arrangement.

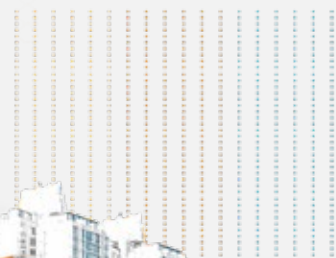
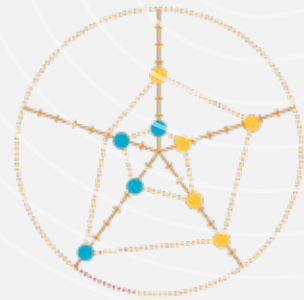
In inter-affiliate settlement, the two corresponding payment obligations may be settled between two subsidiaries or affiliates of a banking group. As such entities typically have their own accounting system, settlement of the two payment legs may not be synchronized. Depending on the precise set-up and underlying legal structure, this arrangement could entail some degree of settlement risk.

Strengthening future flows

CLS strongly endorses the risk waterfall approach, and its product offerings provide methods to mitigate or help mitigate FX settlement risk (CLSSettlement and CLSNet, respectively).

CLS also plays an active role in several public/private sector initiatives, including the Code, that are exploring ways to further facilitate the mitigation of FX settlement risk. These initiatives strive to enable more settlements to occur via PvP. As a member of the CPMI-led Payments Interoperability and Extension (PIE) task force, CLS works with a diverse group of public and private sector stakeholders to help achieve the G20 cross-border payments targets.¹⁵

CLS continues to strongly support the Code and welcomes the 2025 publication of the Code's updates and its efforts to strengthen settlement practices and further mitigate settlement risk in the FX ecosystem.



¹⁵ See [cls-fx-policy-01-navigating-the-fx-lane-shaping-fx-series-september-2023.pdf](https://www.cls-group.com/press-releases/2023/09/01/navigating-the-fx-lane-shaping-fx-series-september-2023.pdf): cls-group.com

Read our ShapingFX series

Trusted by thousands of counterparties within the global FX ecosystem, CLS makes FX safer, smoother and more cost effective. Trillions of dollars' worth of currency flows through our systems each day.

FX Global Code

Using CLS products and services plays an integral part in helping you comply with the FX Global Code.

London
Hong Kong
Tokyo

New York
New Jersey

info@cls-group.com
[cls-group.com](https://www.cls-group.com)