



<u>CLSNow</u>

USD5 trillion gross value daily is settled in CLSSettlement with a netting efficiency of approximately 96%

The out-legs of the in/out swaps reintroduce settlement (Herstatt) and counterparty credit risk to the same-day market as they settle bilaterally outside of CLSSettlement

In/out swaps further improves the netting efficiency to approximately 99%

Out-legs of the in/out swaps and other same-day FX trades equate to circa USD300 billion of gross settlement risk

BCBS 248 principle 8: "banks should actively manage their intraday liquidity positions and risks to meet payment and settlement obligations on a timely basis under both normal and stressed conditions and contribute to the smooth functioning of payment and settlement systems" and "arrange to acquire sufficient intraday liquidity to meet intraday objectives."

FX Global Code principle 50: "settlement services that reduce Settlement Risk – including the use of payment-versus-payment settlement mechanisms should be utilized whenever practicable".



Value proposition and benefits of service

A same-day FX gross payment-versuspayment (PvP) settlement service enabling:

- Trade-by-trade matching with PvP settlement
- Prompt exchange for counter-currencies settled with finality
- Available during overlapping real-time gross settlement (RTGS) system hours

Benefits of service:

- Liquidity management: Prompt access to liquidity, ability to raise countercurrency during market stress events, and liquidity recycling throughout the day
- Ability to settle out-legs in CLSNow
- Capital benefits/balance sheet benefits:
 Aid with recovery and resolution planning as a result of PvP settlement and potentially reduce cash buffer requirements
- Risk mitigation: Settlement finality and mitigation of settlement/principal (Herstatt) risk and counterparty credit risk



Value proposition and benefits of service

Same-day trades:

- All settlement members and CLSSettlement currencies are eligible.
 Day 1 is currently targeted for CAD/CHF/EUR/GBP/USD currencies ...funded per trade
- RTGS system payments to be made in time for settlement to complete
- Unsettled trades will be rejected at currency close for the earliest closing currency (90 minutes prior to the actual RTGS system close)
- Payment instruction needs to include reference to trade instruction for which funding should be used

Settled upon receipt of sufficient funding for both sides to the trade:

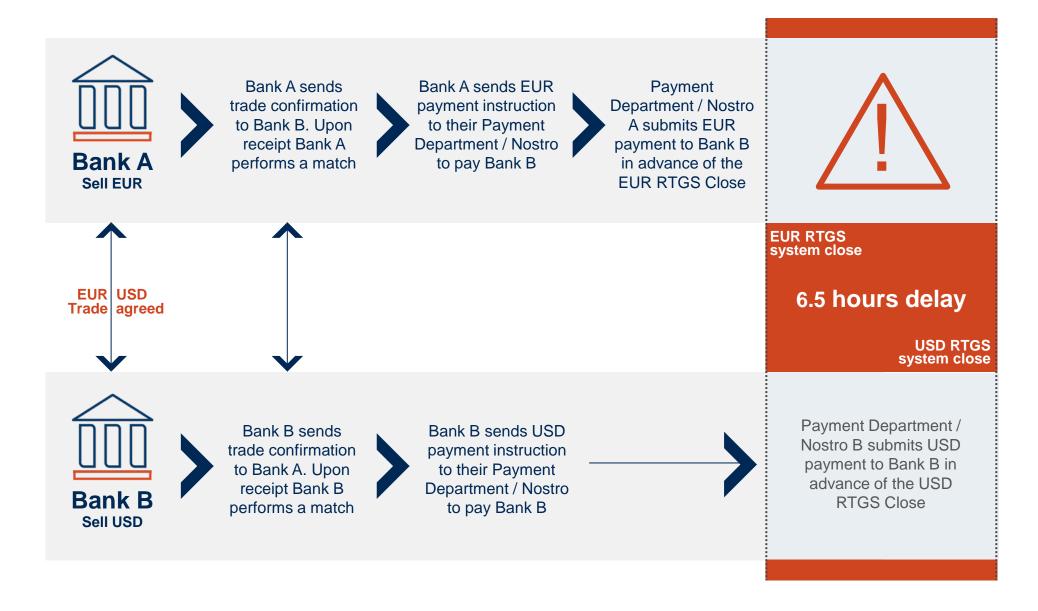
 PvP settlement through simultaneous settlement of amounts bought and sold

Paid out upon completion of settlement:

 Upon completion of settlement both participants receive their funds

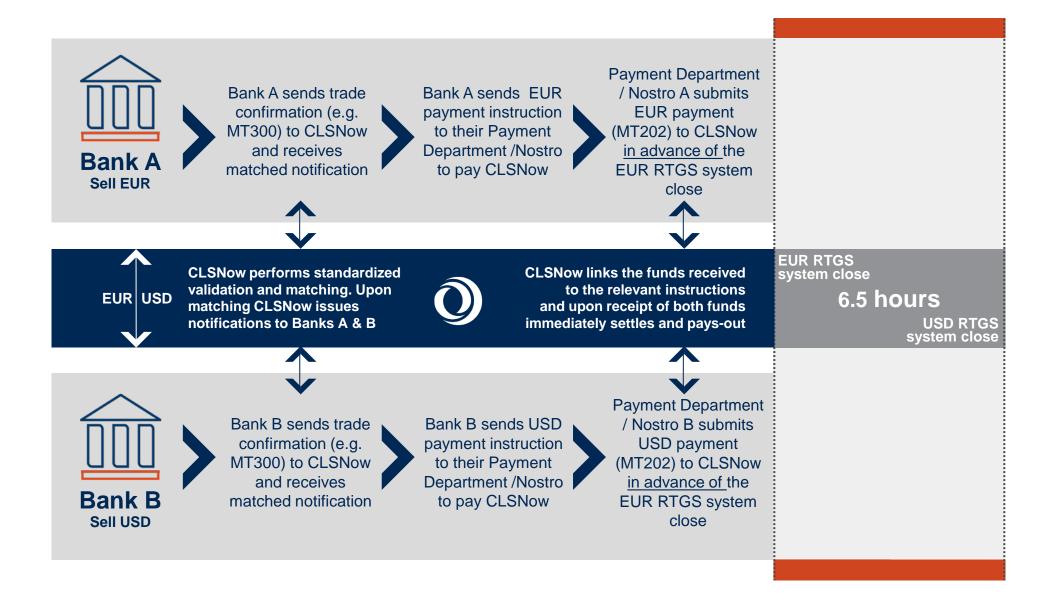


The same-day market today – EUR/USD example



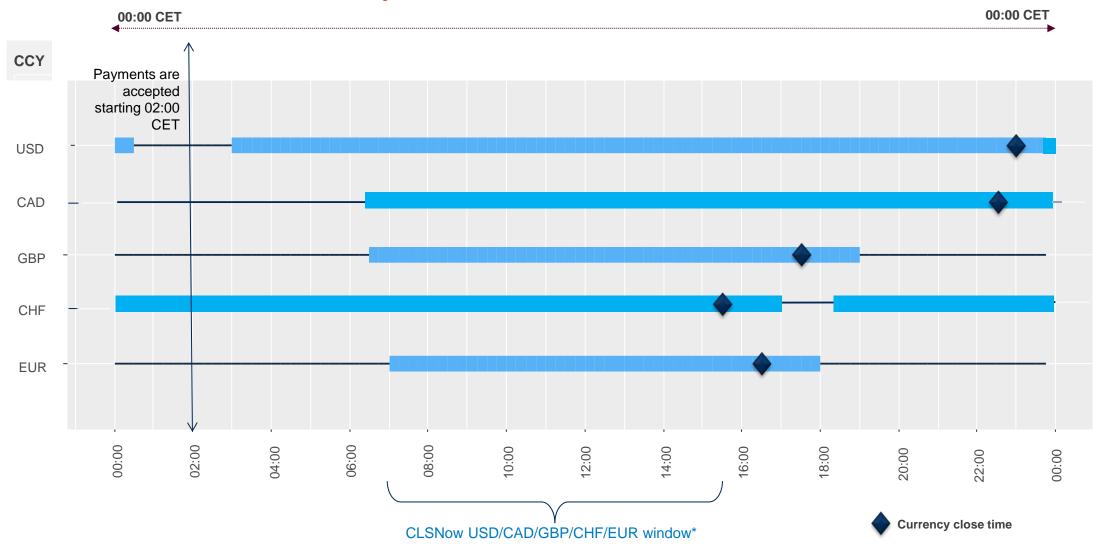


CLSNow – How it works





CLSNow RTGS system session hours



^{*} Illustrates where USD/CAD/GBP/CHF/EUR windows are open simultaneously. PvP will also be possible outside of these hours provided the relevant RTGS system platforms are open.

Note: All CLSNow windows are to be confirmed with the respective RTGS system operators. The currency close time for each currency will be 90 minutes prior to its RTGS system close for payment time.



Progress to date

- Day 1 currencies announced: USD, EUR, GBP, CHF and CAD*
- 14 Letters of Intent (Early Adopters) received to join the service
- Working groups have been held with the Early Adopters to agree and define best practices concentrating on:
 - Liquidity considerations timely submission and funding of transactions
 - Nostro support considerations trade identification and prioritization
 - Treatment of out-legs and other large value trades
 - Throughput monitoring and removing liquidity traps
- Regulatory engagement to secure use of central bank accounts
- CLSNow product workshops held with the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York and the 23 central banks comprising the CLS Oversight Committee
- Enrolment forms issued to Early Adopters to commit to project timeline

Service will add additional currencies based on market interest



Best practices

Agreed best practices:

- Submit trades to CLSNow immediately upon execution of the trade if the trade is same day FX and currency pair and counterparty are CLSNow eligible
- Fund trades as soon as liquidity is available in line with efficient liquidity management practices
- Aim to fund and settle the trade in the order in which it is executed and submitted to CLSNow
- Funding of out-legs, submitted to CLSNow in adherence to Best Practice 1, to be funded and settled in an order relevant to the respective RTGS system session hours of the underlying currency pair
- CLSNow currency close to be set at 90 minutes prior to RTGS system close with a "soft close" (an internal participant close after which new trades would not be submitted for settlement in CLSNow) set at 120 minutes prior to RTGS system close. CLSNow will not reject trades submitted after the "soft close" in order to continue to facilitate settlement via CLSNow

Other agreements reached:

Throughput
 monitoring will be
 required to measure
 adherence to best
 practices and to assist
 clients in identifying
 areas requiring focus



Potential future functionality

Potential Phase 2+ functionality

- Trade expiry at trade level: funding and settlement to occur prior to or at expiry time of trade
 - Can set expiry time at hourly level, for example
- Bi/multilateral netting: Automatic or participant-driven netting multiple times during the day, enabling efficient use of liquidity
- Account funding: Long currency balances (sent via nostro) held at CLS drawn down against CLSNow trade settlement obligations throughout the day



Value projections

- CLS has performed liquidity analysis to assess the estimated volumes through the CLSNow service, as well as understand pay-in requirements
- Analysis was based upon trade data from a survey conducted in 2015
 - The analysis was based upon data received from 59 settlement members
 - The volumes and values in the tables below are for the day 1 currencies of CLSNow (USD, CAD, EUR, CHF and GBP)

Currency	Table 1: Profile by currency							
	Same day		In/out swaps		Total			
	Avg daily value (USDm)	Avg daily volume	Avg daily value (USDm)	Avg daily volume	Avg daily value (USDm)	Avg daily volume		
CAD	9,389	106	7,251	30	16,640	135		
CHF	2,213	25	5,123	20	7,336	45		
EUR	29,520	123	32,070	86	61,590	209		
GBP	14,474	79	13,148	43	27,622	122		
USD	54,768	320	39,168	109	93,936	428		
Total	110,364	652	96,760	287	207,124	940		

Currency pair	Table 2: Profile by currency pairs (EUR)							
	Same day		In/out swaps		Total			
	Avg daily value (USDm)	Avg daily volume	Avg daily value (USDm)	Avg daily volume	Avg daily value (USDm)	Avg daily volume		
EUR-CAD	53	1	1,330	6	1,383	7		
EUR-CHF	43	1	1,534	6	1,577	7		
EUR-GBP	310	4	4,216	13	4,526	17		
EUR-USD	29,114	117	24,990	61	54,103	179		
Total	29,520	123	32,070	86	61,590	209		