CLSNow
An introduction

April 2018
# CLSNow

<table>
<thead>
<tr>
<th>USD5 trillion gross value daily is settled in CLSSettlement with a netting efficiency of approximately 96%</th>
<th>In/out swaps further improves the netting efficiency to approximately 99%</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td>Out-legs of the in/out swaps and other same-day FX trades equate to circa USD300 billion of gross settlement risk</td>
</tr>
</tbody>
</table>

**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-versus-payment (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 counter-currency 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

Bank A
Sell EUR

Bank sends trade confirmation to Bank B. Upon receipt Bank A performs a match.

Bank A sends EUR payment instruction to their Payment Department / Nostro to pay Bank B.

Payment Department / Nostro A submits EUR payment to Bank B in advance of the EUR RTGS Close.

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Bank B
Sell USD

Bank B sends trade confirmation to Bank A. Upon receipt Bank B performs a match.

Bank B sends USD payment instruction to their Payment Department / Nostro to pay Bank B.

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EUR RTGS system close

6.5 hours delay

USD RTGS system close
CLSNow – How it works

Bank A
Sell EUR

- Bank A sends trade confirmation (e.g. MT300) to CLSNow and receives matched notification
- Bank A sends EUR payment instruction to their Payment Department / Nostro to pay CLSNow
- Payment Department / Nostro A submits EUR payment (MT202) to CLSNow in advance of the EUR RTGS system close

CLSNow performs standardized validation and matching. Upon matching CLSNow issues notifications to Banks A & B

EUR RTGS system close

Bank B
Sell USD

- Bank B sends trade confirmation (e.g. MT300) to CLSNow and receives matched notification
- Bank B sends USD payment instruction to their Payment Department / Nostro to pay CLSNow
- Payment Department / Nostro B submits USD payment (MT202) to CLSNow in advance of the EUR RTGS system close

CLSNow links the funds received to the relevant instructions and upon receipt of both funds immediately settles and pays-out

EUR  USD

Bank A sends EUR payment instruction to their Payment Department / Nostro to pay CLSNow

Bank B sends USD payment instruction to their Payment Department / Nostro to pay CLSNow

6.5 hours

USD RTGS system close

Payment Department / Nostro A submits EUR payment (MT202) to CLSNow in advance of the EUR RTGS system close

Payment Department / Nostro B submits USD payment (MT202) to CLSNow in advance of the EUR RTGS system close
An introduction to CLSNow

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)

### Table 1: Profile by currency

<table>
<thead>
<tr>
<th>Currency</th>
<th>Same day</th>
<th>In/out swaps</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avg daily value (USDm)</td>
<td>Avg daily volume</td>
<td>Avg daily value (USDm)</td>
</tr>
<tr>
<td>CAD</td>
<td>9,389</td>
<td>106</td>
<td>7,251</td>
</tr>
<tr>
<td>CHF</td>
<td>2,213</td>
<td>25</td>
<td>5,123</td>
</tr>
<tr>
<td>EUR</td>
<td>29,520</td>
<td>123</td>
<td>32,070</td>
</tr>
<tr>
<td>GBP</td>
<td>14,474</td>
<td>79</td>
<td>13,148</td>
</tr>
<tr>
<td>USD</td>
<td>54,768</td>
<td>320</td>
<td>39,168</td>
</tr>
<tr>
<td>Total</td>
<td>110,364</td>
<td>652</td>
<td>96,760</td>
</tr>
</tbody>
</table>

### Table 2: Profile by currency pairs (EUR)

<table>
<thead>
<tr>
<th>Currency pair</th>
<th>Same day</th>
<th>In/out swaps</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avg daily value (USDm)</td>
<td>Avg daily volume</td>
<td>Avg daily value (USDm)</td>
</tr>
<tr>
<td>EUR-CAD</td>
<td>53</td>
<td>1</td>
<td>1,330</td>
</tr>
<tr>
<td>EUR-CHF</td>
<td>43</td>
<td>1</td>
<td>1,534</td>
</tr>
<tr>
<td>EUR-GBP</td>
<td>310</td>
<td>4</td>
<td>4,216</td>
</tr>
<tr>
<td>EUR-USD</td>
<td>29,114</td>
<td>117</td>
<td>24,990</td>
</tr>
<tr>
<td>Total</td>
<td>29,520</td>
<td>123</td>
<td>32,070</td>
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