The Continuous Linked Settlement (CLS) system eliminates the risk of time lags inherent in the settlement

of FX transactions by enabling simultaneous settlements. Such a system is expected to have significant

benefits for the Tokyo FX Market, considering its location in the Asian time zone, and as such the Tokyo

Foreign Exchange Market Committee (hereafter, FX Committee) has been discussing the implications of

its introduction. The debate has focused on the impact the CLS system might have on FX trading and

points of concern for potential members of the system. This "Issues regarding the introduction of CLS"

(hereafter, "Report") is intended to provide information about these issues and deepen understanding of

the mechanisms involved, thus ensuring smooth market transactions and preventing unnecessary

problems. The Report will focus on the following points:

1. CLS introduction's influence on front-office operations

2. Potential for two-tier pricing

3. Limits placed on transaction amounts

4. Procedures needed in case of "Unsettlement"

5. Liquidity management

This Report was primarily prepared by the FX Committee's sub-committee on CLS, but also reflects the

opinions of the front offices, back offices and settlement departments of financial institutions participating in

the Tokyo FX market, as well as brokers and the CLS Tokyo User Group.

Market practices governing CLS settlements and FX transactions processed through CLS will undoubtedly

evolve gradually on a global scale among CLS member banks once the system is fully operational.

Consequently, this Report will be limited to consideration of identifiable issues based on the information

available before actual introduction. As necessary, we hope to provide updates on various potential

problems that might follow implementation at a later point.

The FX committee members will be happy to discuss about this issue. Please feel free to contact to the

following members, on behalf of the FX Committee, for exchanging information and opinions. Also we will

welcome your visit to our website listed below. Thank you.

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1. Influence of CLS Introduction on Front-Office Operations

(1) Standards for Settlement Method

The CLS system is intended to alleviate settlement risk, and many banks plan to assume that its use will completely eliminate settlement risk. CLS-eligible transactions* will likely be settled within the CLS system—barring special circumstances—once it is confirmed that CLS operates smoothly.

* CLS-eligible transactions are trades between financial institutions using CLS made in the seven major currencies that are eligible for CLS settlement.

(2) Interbank/Direct Dealing (DD) Transactions

Once the CLS system is introduced, CLS and non-CLS settlements will have to be funded separately. Such funding operations would involve tomorrow-next transactions in the forward market in particular. Transaction volume could be sizable and the legs of the swaps could be settled either through CLS or outside CLS. In this environment, each bank must adjust its funding, by identifying and separating CLS and non-CLS transactions.

Necessitated by its funding needs, a bank may choose not to use CLS for settlement, even if the transaction is CLS-eligible; in this case, the bank must stipulate the desired settlement method in advance and must be agreed by the counterparty in question.

In any case, in individual transactions, counterparties should answer any questions regarding the desired settlement method or—if necessary—voluntarily provide settlement instructions before executing trades

Recommendation from FX Market Committee Members

Market participants wishing to settle through CLS should inform all counterparties before they participate in the CLS system, after which point they should clearly indicate preferences, if any, for non-CLS settlement of CLS-eligible direct transactions before executing such trades.

(This recommendation might be included in the Tokyo "Code of Conduct.")

(3) Use of Electronic Brokerage Systems in Tandem with CLS

Electronic brokerage firms plan to modify their systems in order to facilitate the designation of settlement accounts (see below for system preparation*). However, banks using electronic brokerage systems will have to input such settlement information before participating in the CLS system. Although it will differ depending on the electronic brokerage firm, the amount of work required could be considerable. Accordingly, it is essential that the necessary preparation pave the

way for a smooth transition to the CLS system.

* System preparation: Each user will input settlement information for their own bank and their counterparties in the system in advance, designating the preferred settlement method by counterparties or currency and thus eliminating the need to stipulate the settlement method for each individual transaction.

Recommendation from FX Market Committee Members

CLS member banks must update settlement information in their electronic brokerage systems in advance; sufficient preparation and adjustments to procedures will help avoid unexpected settlement problems.

(4) Transactions through Voice Brokers

Given that many market participants feel that voice brokers respond with greater flexibility, non-CLS settlements are expected to be more common, even though the trades executed through voice brokers would be more suitable for CLS settlements, by their very nature. In this case, there is the potential for problems, including 1) whether or not the deal is priced after settlement information has been provided; 2) possible differences in the terms of trade depending on the settlement method (credit line limits, prices); and 3) an increase in the occurrence of broker "stuffing" under the more complex trading conditions.

Recommendation from FX Market Committee Members

The coexistence of transactions made through voice brokers involving both CLS and non-CLS settlement may make it difficult to confirm the trade's details and could inhibit smooth transaction procedures. Furthermore, since there can be different terms of trade for CLS and non-CLS settled transactions, good coordination between dealers and brokers is essential, with the dealers examining circumstances in using brokerage services, and the brokers familiarizing themselves with administrative details.

2. Potential for Two-Tier Pricing

- (1) As there is no plan to create a system capable of offering different prices depending on the settlement method, transactions made through a broker will not have explicit two-tier pricing.
- (2) Electronic brokers and voice brokers also have no plans to offer matching services that vary depending on settlement method. Accordingly, when using a broker, the dealer cannot cancel contracts once they've been made, even if the settlement method for the transaction did not match expectations. As a result, market participants settling through CLS (hereafter, CLS user institutions)

- might, for example, set the credit line of a market participant not settling through CLS (hereafter, non-user institutions) at zero if they wish to avoid non-CLS settled transactions.
- (3) The extent to which CLS user institutions will avoid non-CLS transactions is not clear at this point. Since the risk of non-CLS transactions will be no greater than it is now even after CLS introduction, most tend to think that CLS member banks will not go to great lengths to avoid non-CLS transactions (by cutting credit lines). However, there is still the possibility that non-user institutions could be excluded from trades due to changes in credit policies and pragmatic demands (greater administrative efficiency derived from integrated settlement accounts, less credit management work) that make CLS trades more preferable.
- (4) As a result, non-user institutions could have limited access to the best prices and may have to conduct trades at disadvantageous prices, including a settlement risk premium—in essence, a de facto two-tier pricing situation may arise.
 - The potential for this two-tier pricing situation remains a concern while CLS and non-CLS trades exist concurrently.

Opinion of FX Market Committee Members

Although it is possible that pricing gaps may develop between CLS user institutions and non-user institutions, it is highly unlikely that an explicit two-tier situation will develop in Tokyo markets, given brokers' designs for adjusting their systems for CLS settlement. However, pricing gaps are possible and we should be particularly wary of real market rifts that might occur if we see moves in the market to cut credit lines (rather than adjustment through pricing)—a development that could hurt market liquidity.

3. Limits Placed on Transaction Amounts

- (1) The CLS system automatically subdivides transactions exceeding US\$100mil to limit the sum involved in each trade.
- (2) Accordingly, the front office might be responsible for contracting and subdividing trades in keeping with restrictions, but the likelihood is not significant for the following reasons:

Trades exceeding US\$100mn are rare, with the exception of forward transactions.

Since CLS fees are based on the number of trades, subdividing trades more than necessary can lead to increased costs.

CLS has a mechanism enabling automatic subdivision of large trades.

Recommendations from FX Market Committee Members

There is only a slight likelihood of requests for multiple subdivisions within a CLS transaction, limiting the potential that the dealer will face limitations on large transactions. However, market participants should be aware that differences in financial institutions' perception of settlement risks may lead counterparties to request subdivision.

4. Procedures Needed in case of "Unsettlement"

Financial institutions must respond accurately and quickly to meet funding obligations when a transaction has not been settled, since it is highly likely that yen-dominated transactions in particular will be under time constraints. One option is enhancing activity levels in the Tokyo market after 5pm Tokyo time, for instance by extending trading hours for overnight swap transactions. Discussion with a wide-ranging group of market participants will be essential, on issues such as the necessity of such measures and the question of who should lead the way.

Opinion of FX Market Committee Members

Discussion among market participants on moves to stimulate market activity during the BoJ's extended settlement period (after 5pm) once CLS has been introduced will be important.

5. Liquidity Management

- (1) Settlement members may maintain a negative balance for individual currencies within certain limits, but members must have a net positive balance across all currencies in their accounts with CLS Bank. There are also issues surrounding intra-day liquidity such as Nostro Providers' extension of intra-day overdraft limits to settlement members and adjustment of funding discrepancies between CLS and outside CLS (using inside/outside swaps).
- (2) Managing liquidity is especially important when one account shares a case in multiple locations (Settlement Member Banks' branches and User Members) since uneven distribution can occur.
- (3) Regardless, each bank will have to develop their own distinct management to handle these issues once CLS is introduced.

Opinion of FX Market Committee Members

Maintaining intra-day liquidity for CLS settlements is essential. Relevant divisions within financial institutions should remain in close contact and coordination will be required to ensure proper liquidity management.

6. Other issues for discussion

Although insufficient details prevented full discussion during this round, the sub-committee feels that the following issues should be examined more closely in the future.

- (1) Feasibility of sending confirmation within two hours after the transaction
- (2) Contingency plan for CLS system
- (3) Credit problems occurring with inside/outside swaps
 - CLS Bank provides information on available members, and there is a possibility that credit problems may inhibit swap transactions. Consequently, it may not be possible to adjust uneven distribution of funds between CLS and non-CLS trades.
- (4) Option to exclude counterparties from transactions among settlement members Settlement members have the option to refuse to settle the trade of a particular user member or third party sponsored by another specific settlement member due to that settlement member's loss of credibility, even if lower credit ratings have not yet resulted in that member losing their status as settlement member.

Accordingly it is important for User Members and Third Parties to understand such underlying risk.