



EUROPEAN CENTRAL BANK

21 February 2001

DIRECTORATE GENERAL PAYMENT SYSTEMS

EXPLANATORY MEMORANDUM ON THE RECOMMENDATIONS CONCERNING CLS PAYMENTS IN EURO

1 Introduction

CLS Bank (CLSB) provides global multi-currency settlement services for foreign exchange transactions (FX transactions), using a payment versus payment (PVP) mechanism (i.e. one currency leg is settled if, and only if, the leg in the other currency is also settled). Settlement in the CLSB's books will start immediately when TARGET opens. The funding of its settlement members' short positions is fixed to certain deadlines. The CLSB intends to pay out such receipts to its settlement members with long positions in the relevant currencies as soon as possible. By 10 a.m. CET, the short positions of the settlement members in the "Far East currencies" (e.g. Japan, Australia) should be completely funded and short positions in other currencies should be sufficiently funded, so that all payments in AUD or JPY could be executed by the CLSB. This is essential since the RTGS systems in those countries close shortly after 10 a.m. CET under normal circumstances. For the European and the American currencies there is some leeway to fund short positions completely (and, accordingly, for the CLSB to pay out long balances) until 12 noon CET (or later, if need be).

The CLSB will have an account with the European Central Bank (ECB) and will process all euro payments via the ECB payment mechanism (EPM). Therefore, short banks will pay in favour of their account with the CLSB via TARGET/EPM. Long banks will be paid from this account. If CLS-related payments cannot be made in time, it is likely that trades will not settle and that long positions will not be paid out by the CLSB. Consequently, this could create liquidity imbalances in the affected systems and entail serious liquidity risks, which might be particularly severe for Japan and Australia.¹ Depending on the size of failed transactions, it may even affect the stability of the markets.

2 TARGET contingency and CLS-related payments

Considerable efforts have been undertaken to analyse and manage the risk of unavailability of the various TARGET components. All national central banks (NCBs) participating in TARGET and the ECB have taken preventive measures to ensure business continuity. The central idea to ensure the achievement of this goal consists of duplicating as much as possible the technical infrastructure, including the data communication channels, interfaces, data storage and processing facilities.

¹ It may be possible to ask Far East RTGS systems to stay open longer. However, this should not be considered an option for normal processing, but should rather be reserved for disaster cases.

However, due to the time-criticality of a limited number of payments, e.g. CLS-related payments, the time needed to switch over to a secondary IT component may be considered too long. In order to avoid systemic risk, alternative contingency mechanisms aimed at processing a limited number of time-critical payments have been implemented in each NCB and the ECB.

However, it must be recognised that these failure arrangements can only meet the objectives they are designed for if they are embedded in a framework of sound business practices. Therefore, in order to ensure that these measures will be operationally effective, especially in terms of the time needed for decision-making and activation, a set of “recommendations” for CLS-related payments has been proposed by the Eurosystem. This memorandum provides the background for these recommendations, explains the rationale behind them and describes their scope, as well as the pre-conditions, where relevant, for them to be applied.

3 The general framework for CLS-related payments

3.1 Systemically important payments

Apart from CLS-related payments, there are several types of systemically important payments, e.g. payments to be settled by domestic (net) settlement systems, which might be equally important. There is, however, a difference of possible impact: when the CLS pay-in deadlines for the euro cannot be met due to a TARGET failure, this has implications for other currency zones, which will not be the case for the other types of payments, given their “domestic” (euro area) nature. This certainly cannot be ignored (in the CLS context) and, therefore, CLS pay-ins should always be given high priority in a contingency situation.

For similar reasons, it would seem logical to handle pay-ins with a higher priority than pay-outs. Indeed, all pay-ins should be considered equally critical, irrespective of the amount involved, because of the possible knock-on effects on the efficiency of the settlement process. The shortage of euro resulting from the non-fulfilment of the required pay-ins blocks the settlement process and may delay or prevent pay-outs in other currencies. In addition, it will trigger the activation of the CLSB’s emergency procedures (i.e. revised pay-in calls). Ultimately, this may require recourse to liquidity providers, which may have to step in to allow the CLSB to complete the pay-out in a currency, the RTGS system of which is about to close. On the other hand, the criticality of pay-outs in terms of systemic risk tends to decrease along with the amount involved. Delays in the pay-out phase will certainly have liquidity implications for the long banks, but these implications will only have a significant systemic impact if the value of the receivable funds prevents the banks concerned from making other important payments, which may, in turn, have implications for other banks, etc. In addition, the pay-outs in euro are less time critical, since the time available for processing them is much longer than for Asian/Pacific currencies.

3.2 Serial integration of several links

The complete processing chain of CLS-related payments consists of several links. First of all, the CLSB has to issue a final pay-in schedule. Upon receipt of this schedule, the CLSB settlement members prepare and send payment instructions either directly to the RTGS systems concerned or via their nostro agents. In the case of euro payments, the receiving NCB processes the payment instruction and generates a TARGET payment instruction for the ECB, which processes this request and sends the credit advice to the CLSB.

In such a serial mechanism, it is clear that delays built up in the first stages of the process reduce the ability of subsequent parties to meet the deadline if one of them has to revert to contingency measures.

3.3 CLS settlement schedule

The settlement scheme for the euro will follow the operational time line described below:

- Although a preliminary payment schedule for the pay-ins will be sent to the settlement members at midnight, the final pay-in schedule will only be sent to the settlement members at 6.30 a.m.²
- Settlement in the CLSB will start at 7 a.m.
- There are five consecutive pay-in deadlines scheduled, the first one being at 8 a.m., with the others following at hourly intervals until 12 noon.
- Based on the above-mentioned schedule, the shortest (and earliest) lead time for the preparation and normal settlement of pay-ins is 90 minutes; this is the time between the receipt of the final pay-in schedule (6.30 a.m.) and the first pay-in deadline (8 a.m.).

4 Recommendations for CLS-related payments

Against the background of the framework described above, it should be recognised that the following considerations can be a valid operational basis to increase the probability of CLS-related euro payments being processed within the required deadlines. However, it is important to stress that, whatever the implementation nature of these recommendations at the local level may be, the main approach towards processing time-critical payments should be supported by a co-operative attitude among all parties involved, i.e. settlement members, nostro agents, the CLSB, the NCBs and the ECB. In order for this attitude to be sustained on a long-term basis, normal operations, as well as failure situations, should be guided by this logic, with the main objective being to establish settlement arrangements in a constructive manner.

² The times are always given in CET, unless stated otherwise.

4.1 Introduction of “grace periods”

The idea to introduce a so-called “grace period” is presented in order to reduce the risk of late CLS-related payments due to technical failures. It consists of creating an additional time window that is left for subsequent intermediaries in a payment chain due to the fact that the previous (or first) payment leg was processed before the ultimate deadline. As already mentioned, CLS-related payments are highly time critical payments. The CLSB requires “timely” payments every full hour. Even in an RTGS context, it cannot be assumed that payments issued by the credit institutions can always be processed within seconds.

On the other hand, nor is it conceivable to request the credit institutions to process all payments related to the CLSB at 7 a.m. in order to eliminate the risk of possible technical failures. Between both extremes, a business practice for all the parties involved should be elaborated.³ One basic feature of common business practices is the agreement on a payment schedule, which would give all parties involved scope to activate contingency procedures. Based on the shortest lead time of 90 minutes,⁴ the schedule might look as follows:

- 6.30 a.m. – receipt of final pay-in schedule by the settlement members;
- 7.15 a.m. – receipt of CLS-related payment instructions by the local NCB;
- 7.30 a.m. – receipt of CLS-related payments by the ECB;
- 7.45 a.m. – credit advice sent to the CLSB upon crediting of its account at the ECB.

When one of the above-mentioned deadlines is not met, this should trigger a decision-making process with a view to activating contingency procedures.

4.2 Reduce the number of pay-ins

Banks should be prepared, in the case of a payment system failure, to accelerate their pay-ins (using contingency processing) and to reduce the number of payments needed to complete their funding, in order to ensure the timely settlement of their transactions, as the duration of the failure is normally not known. This would be of considerable help in the event of contingency procedures being activated, as it could solve the possible capacity constraints that manual or semi-automated contingency procedures would naturally entail. Ideally, once contingency is invoked, banks should be ready to send all remaining pay-ins in one payment.

However, this could have liquidity implications for banks. Therefore, it is important to find a balance between liquidity implications and operational convenience.

³ This would include nostro agents.

⁴ Lead time for the preparation and normal settlement of payments.

A valid compromise might be to pay in the amount for the first deadline as soon as possible, according to the above-mentioned schedule, and to aggregate the remaining amounts as much as possible, so that, for instance, all pay-ins are completed by the “settlement completion target time” (9 a.m.), with only two or three payments. This compromise is based on the assumption that the first two deadlines are the most important ones in terms of pay-in obligation, whereas the subsequent ones are presumed to have a substantially lower impact in terms of liquidity.

In order to enable the ECB and the NCBs to monitor the payment flow during a contingency situation and to react promptly in the case of pay-in delays, it is seen as extremely useful for the ECB/NCBs to know which banks have to pay in which amounts to the CLSB, by which time.

4.3 “Double” payments

If the CLSB does not receive the expected funds and if the ECB/NCB concerned cannot identify the related payment instruction(s) due to a failure, it should be acceptable for the credit institution concerned, in order to cater for timely payment, to send a copy of the payment details to the local RTGS system immediately (if the account has been debited) or to re-submit the payment instruction itself (using either the normal or the alternative communication channel, as bilaterally agreed with the NCB). In the latter case, later pay-in obligations should not be added to the payment instruction that is due for re-submission.⁵

However, the request for a payment re-submission can only be considered reasonable after the following measures have been taken:

- thorough attempts to locate the initial payment instruction; and
- neutralisation of the initial payment instruction so as to prevent double processing.

It should be clear that the failing entity, irrespective of whether it is a credit institution, an NCB or the ECB, must take all necessary precautions in order to minimise the risk of double processing payments.

No matter which preventive measures are taken, however, there will always be a residual risk that, when a failing system is restarted, “hidden” payments are released, potentially causing “double” payments (assuming that some of these payments were already performed in contingency).

When the CLSB receives a “double” payment it will not reject it and will normally process it as a regular pay-in. However, although the CLSB has no validation mechanism in place to identify double payments, it automatically pays back the liquidity in excess of the total accumulated pay-in obligation in the next pay-out round (shortly after the next hourly pay-in deadline at the latest), subject to the

⁵ Therefore:

- the credit institution should re-submit the *same* instruction to the local RTGS system (in line with item 4.3); and
- the aggregation of the remaining payments (for other deadlines) should be part of a new payment instruction.

overall positive account value rule. In any event, unless exceptional situations occur, the CLSB will have completed the final pay-out phase shortly after 12 noon.

4.4 Alternative access points to TARGET

Since most settlement members have access to alternative payment channels, the idea of using these channels for time-critical payments in the case of a failure at the settlement member/nostro agent concerned has been raised with the credit institutions.

However, the use of alternative payment channels cannot be viewed in isolation from the “payment capacity” problem. In addition, it is not realistic to assume that all credit institutions will be able simply to re-route their critical payments to an alternative access point in the event of a failure. The use of alternative payment channels may also trigger other problems e.g. the risk of “double” payments, receipt of incoming funds, etc.

Although the use of an alternative access point, either through an own branch (or subsidiary) or through a “nostro agent” (in the euro area), is seen primarily as a contingency arrangement for severe failures in the credit institutions’ infrastructure, it may also be considered the “solution of last resort” if a TARGET component fails. Under these circumstances, the NCB concerned should be able to make at least one “capacity payment” to the relevant alternative TARGET component(s).