

26 February 2009

T2S-08-0033

## **TG3 ANALYSIS OF THE PRIORITISATION OF MULTIPLE T2S DEDICATED CASH ACCOUNTS FUNCTIONALITY**

During its 28/29 November 2007 meeting, the Advisory Group agreed to add possible functionality in the URD on the prioritisation of multiple T2S dedicated cash accounts. The AG also asked TG3 to analyse the issue in more depth and the 3CB+ to calculate the additional costs of this approach. The AG agreed to review the matter in view of the feedback from the public consultation and the cost and the consequences for the market.

Following the AG decision, the prioritisation of multiple T2S dedicated cash accounts functionality was immediately added into the URD by the project team. This functionality was designed with a view to allow CSDs participants to resort to several liquidity providers in a pre-determined sequence. A confidentiality constraint was also taken into account with a view to avoid that a liquidity provider may be informed of the liquidity provision agreement its client may have with additional liquidity providers.

In order to meet the AG request, a meeting of TG3 was convened on 23<sup>rd</sup> January in order to analyse more in depth the functionality and provide TG3 feedback to the AG. Despite views were diverging regarding the business case for this functionality, the TG agreed that the way it had been envisaged so far in the URD was quite complex, in particular due to the confidentiality constraint above mentioned. TG3 consequently agreed to envisage an alternative procedure that could help reducing the complexity of this functionality. However, this new requirement may not fully meet the initial confidentiality constraint.

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This note aims at describing the two possible procedures envisaged so far for this functionality and the associated levels of complexity (I). It provides also an analysis of the business case for this functionality (whatever the procedure preferred) with regards in particular to its potential impact in terms of liquidity management (II).

### **I/ Two procedures for the prioritisation of multiple T2S dedicated cash accounts**

The prioritisation of multiple T2S dedicated cash accounts functionality was initially considered as a procedure leading to transfer (“loop” hereunder) unsettled transactions from one T2S dedicated cash account to a subsequent T2S dedicated cash account, when the liquidity available on the initial account was not sufficient to ensure the cash settlement of the relevant transaction. By looping transactions from one cash account to another, none of the liquidity providers would have aware of the existence/use of additional liquidity providers.

With the alternative procedure envisaged by TG3, transactions would no longer be looped from one account to another, but would remain on the T2S dedicated cash account of the main liquidity provider. With this alternative proposal, instead of looping transactions from one account to another subsequent account, T2S would trigger automated liquidity transfers from subsequent T2S dedicated cash account(s) to the main T2S dedicated cash account used by the relevant CSD participant. Of course, with this functionality, the confidentiality constraint would not be fully met, as the holder of the main T2S dedicated account would identify the liquidity transfers arriving on its account and the relevant liquidity providers.

As detailed hereunder, whereas the initial procedure was quite complex with significant impact on the whole settlement process (e.g. requiring transactions splitting), the second procedure was deemed by TG3 as less complex, as it would only lead to trigger basic cash settlements.

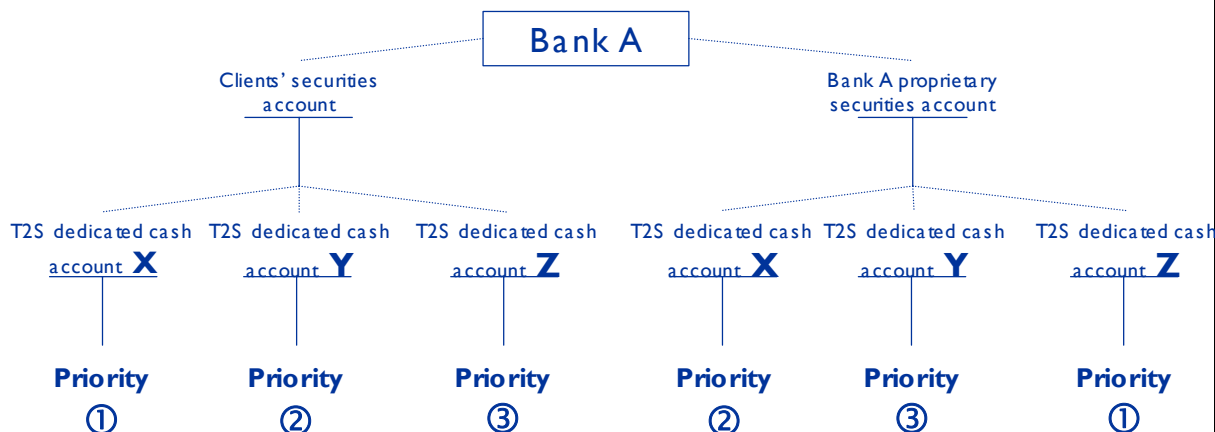
#### ***Initial procedure***

As already mentioned, the procedure initially envisaged for the prioritisation of multiple T2S dedicated cash accounts was leading to loop unsettled transaction from one T2S dedicated

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cash account to a subsequent account. According to this procedure, CSD participants would have had to identify for each securities account a T2S dedicated cash account to be used by default and when necessary<sup>1</sup> a list of subsequent T2S dedicated cash accounts to be used according to the priority assigned to each of them by the relevant CSD participant.

Example



*In the example above, Bank A's client uses T2S dedicated cash account X as cash account by default, and accounts Y and Z as subsequent T2S dedicated cash accounts respectively with a priority 2 and 3. As regards Bank A, it uses the T2S dedicated cash account Z as account by default (priority 1) and cash accounts X and Y as subsequent cash accounts (respectively with priority 2 and 3).*

*In this context, any operation of Bank A's client failing to settle on X account due to a lack of cash would have been looped for the missing cash amount on account Y (and potentially on account Z if liquidity available on account Y were not sufficient). In order to maximise the liquidity available on each account before looping transactions onto subsequent T2S dedicated cash accounts, pending transactions are split and settled on several cash accounts.*

*Example: the purchase of Bank A's client for EUR 25 can not settle on T2S dedicated cash account X, due to the fact that liquidity available on this account only amounts to EUR 12. This transaction must consequently be split with a view to use EUR 12 from X account and settle the remaining part (EUR 13) on the other subsequent accounts, i.e. on Y account and potentially on Z account if liquidity on Y is not sufficient.*

<sup>1</sup> I.e. when the CSD participant has several liquidity providers and wants to prioritise them.

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TG3 has consensually considered that this procedure would involve quite a high level of complexity. In particular, it would require a splitting function with a view to loop each part of the remaining unsettled transaction onto a subsequent T2S dedicated cash account in order to ensure its settlement<sup>2</sup>.

In comparison with the partial settlement functionality, the prioritisation of multiple cash accounts would consequently involve additional steps when splitting transactions and looping their unsettled legs on subsequent cash accounts. In addition, the splitting function may involve additional layers of complexity when partial settlement is not allowed, i.e. when no fraction of a transaction is allowed to remain unsettled (e.g. partial settlement not accepted by CSD participants or outside the two daily partial settlement windows currently foreseen). In such cases, i.e. when partial settlement is not allowed, the prioritisation of multiple T2S dedicated cash accounts functionality would have to check before splitting transactions and looping them onto several cash accounts that the overall liquidity available on these accounts is sufficient to ensure the full settlement of the considered transaction (i.e. that no fraction of the transaction remains unsettled at the end of the process).

Furthermore, this split would also involve difficulties in reconciliation procedures, as the CSD participant resorting to several liquidity providers would have to ensure reconciliation with information coming from several accounts per transaction.

TG3 has also identified potential additional sources of complexity when considering the articulation of transactions' priority and cash accounts priority. In particular, for night-time settlements, TG3 has identified risks that transactions with a high level of priority (e.g. top priority stock exchange transactions) being looped onto a subsequent T2S dedicated cash account may challenge the settlement of transactions with a normal level of priority already provisioned successfully on this account. In other words, looping transactions with a high level priority onto a subsequent account may create new fails on this account, as the normal priority transactions pertaining to this account may no longer settle (cash would be used to settle the top priority transaction just looped). This would consequently require another series of loops onto subsequent accounts, what would require rerunning settlement optimisation procedures to take into account the new situation (i.e. new set of transactions to be settled on

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<sup>2</sup> The difference with the partial settlement functionality already foreseen in the URD is that the latter is only available during two windows per settlement day and does not require looping the unsettled leg of transactions onto a subsequent account.

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each account), would increase time needed for settlement and hence would deteriorate settlement efficiency.

In order to limit this risk, it was considered that transactions for which a successful provision checking on a T2S dedicated cash account has already taken place should not be challenged by transactions of an upper level of priority looped onto the relevant account. However, it was considered that even with this risk mitigation measure, the procedure initially envisaged for the prioritisation of multiple T2S dedicated cash accounts functionality would remain quite complex, as it would create new chains of splitting and looping that would have to be inserted into the already complex settlement procedure.

With regards to the above risk of complexity, TG3 proposed an alternative solution for the prioritisation of multiple T2S dedicated cash accounts functionality.

### *Alternative procedure envisaged by TG3*

TG3 proposed replacing transactions splitting and looping from one T2S dedicated cash account to a subsequent account, by automated cash transfers from subsequent cash accounts to the T2S dedicated cash account used by default. In other words, the new procedure would be based on automated liquidity calls between T2S dedicated cash accounts.

The main drawback of this alternative proposal is that it would no longer meet the confidentiality constraint that was characterising the design of the procedure initially envisaged in the URD. With the new procedure, the holder of the T2S dedicated cash account used by default would be aware of the liquidity arrangement its clients have with its secondary liquidity providers, as the automated liquidity transfers arriving on the T2S dedicated cash account used by default would be visible to the holder of this account. Of course, this confidentiality issue would only appear when the CSD participant resorting to this functionality does not have its own T2S dedicated cash account but uses the T2S dedicated cash account of a primary liquidity provider. Considering the above, TG3 expressed the view that this drawback can be reasonably accepted with regards to the advantages this alternative procedure would bring in terms of simplicity.

One of the main advantages of this procedure is that it would no longer require any splitting procedures of unsettled transactions, as they would remain settling on the initial cash account

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(no looping of transactions from one account to another). Furthermore, by maintaining the settlement of all transactions on the T2S dedicated cash account used by default, this alternative procedure would limit liquidity needs to a net amount (according to the technical netting procedure envisaged for settlement optimisation). In addition, this alternative procedure would avoid reconciliation difficulties for the liquidity receiver, as it would settle all its transactions on the same account. This procedure would consequently involve less complexity than the procedure initially foreseen as it would not have structural impact on the settlement process (no split and looping of transactions), but would merely rely on basic cash settlements.

Besides, with this alternative procedure, some TG members saw an opportunity for allowing liquidity providers to determine the priority according to which their clients would be served. Accordingly, liquidity providers would have to determine the order according to which their liquidity could be distributed among their different clients. TG3 expressed the view that this second layer of prioritisation<sup>3</sup> would help liquidity providers coping with the additional difficulties in treasury management the prioritisation of multiple cash accounts would involve (see hereunder for further analysis on liquidity management impact of the functionality).

With regards to the nature of the cash transfers involved by this new procedure, it was considered that this functionality would not create any clean payment business in T2S, as the need for the cash transfers and the amount of liquidity swept from one account to another would be automatically determined by T2S. Furthermore, like auto-collateralisation, automatic cash transfers would be only dedicated to facilitate the settlement of pending transactions on the T2S dedicated cash account benefiting from the liquidity transfer. In other words, thanks to the automated nature of this functionality, liquidity providers would not have the possibility intervene manually and misuse this functionality to make clean payments in T2S and liquidity receivers would not have the possibility to use this liquidity for other purposes than the cash settlement of pending securities transactions.

Finally, the project team as identified that the replacement of the initially envisaged procedure would have some impact on the URD, which would have to be adapted to integrate this alternative proposal (i.e. if the AG decides to maintain the functionality and opts for the alternative procedure proposed by TG3).

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<sup>3</sup> I.e. prioritisation of clients from liquidity providers points of view, in addition to the prioritisation of cash accounts from the liquidity receivers point of view.

## **II/ Business case for this functionality and impact on liquidity management**

Despite the lower level of complexity of this new proposal may contribute to make this functionality more acceptable, TG3 views were diverging regarding the business case and the impact of this functionality in terms of liquidity management.

### ***Business case***

On one hand, several TG 3 members expressed the view that the business case for this functionality should be evidenced. In particular, some TG members expressed the opinion that by construction, T2S would eliminate a part of the current business case for such functionality. In particular, by allowing CSDs participants to centralise all their cash settlements with one (or a limited number of) T2S dedicated cash account(s), T2S will reduce liquidity pressure stemming from the current liquidity fragmentation and will eliminate liquidity constraints associated to remote settlement (i.e. the fact that a CSD participant settles on a cash account held with a remote NCB from which he can not obtain intraday credit). However, some TG members disagreed with this opinion. They stated that the reduction of the liquidity pressure would only be partially correct, as in some cases, there can still be some significant high peaks of liquidity needs, against which the use of the prioritisation of multiple T2S dedicated cash accounts functionality would limit cash shortages. They also added that the potential absence of multi-cash sourcing would create a less competitive cash clearing environment and force a consolidation on a small number of players (with a potential increase in systemic risk).

They also highlighted that this functionality would come on top of a set of T2S core features already foreseen to mitigate risks of liquidity pressure (ability to centralise all settlements on one T2S dedicated cash accounts, continuous optimisations during the night-time and day-time settlement, auto-collateralisation on stock and on flow, automated transfers of cash from T2 RTGS accounts to T2S dedicated cash accounts...).

On the other hand, some TG3 members expressed the opinion that this functionality would still be needed in T2S, as it is currently used by entities that do not have access to intraday credit, such as non-euro area based entities or non-banking entities. Consequently, the

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advantages of T2S above mentioned should not significantly reduce the business case for this functionality.

In order to evidence the business case, it was agreed that Clearstream Banking Frankfurt (being currently the only CSD offering this functionality) would provide figures on the current frequency of use of the prioritisation of multiple T2S dedicated cash accounts. It was also agreed that Clearstream would provide data on the evolution of the frequency of use of this functionality after the recent extension of the auto-collateralisation mechanism in CBF. (The information provided by Clearstream has been the following: 3 Clearstream customers use the functionality of Multi Cash Sourcing on a daily basis involving a total of 5 RTGS accounts across 3 countries. These customers settle a high turnover value and represent a significant percentage of the total CBF turnover).

TG3 considered that if the business case was evidenced, the use of this functionality would be mainly concentrated on night-time settlements. For day-time settlements, TG3 expressed the view that the continuous use of this procedure would not necessarily make sense, as liquidity providers would have the possibility to make cash transfers from T2 to T2S on demand of their clients on a real-time basis during the whole day-time settlement cycle. Nevertheless, it was envisaged resorting to this functionality at least once during the day-time cycles, for instance a few minutes before the end of the day in order to clear transactions that would remain pending due to a lack of cash.

### ***Impact on liquidity management***

With regards to the impact of this functionality on liquidity management, two cases have been identified: (i) the case where the CSD participant knows in advance ahead of the relevant settlement cycle that it will need additional cash from its liquidity providers and (ii) the case where the CSD participant faces an unexpected need of cash during the night-time settlement cycles for instance.

As regards the first case, on one hand, one may wonder why it is necessary to organise an automated liquidity transfer during the settlement process instead of asking a cash transfer to the liquidity provider ahead of the relevant settlement cycle. On the other hand, it can be argued that the automated liquidity transfer has the advantage of adjusting the cash transfer to the real net liquidity need and hence avoids useless or insufficient liquidity transfers (in case



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the liquidity need materialising in the settlement process is lower or higher than the forecasted cash need).

Concerning the second case, when the cash need is not expected (e.g. consequences of fails on the securities), this functionality can help reducing unexpected additional fails that may appear on the cash side. However, some TG3 members expressed the concern that these unexpected cash needs may create liquidity management difficulties for liquidity providers, as in this type of situation, they may potentially not be able to identify in advance what will be the amount of cash to be provided to their clients. For night-time settlement cycles, liquidity providers may need to maintain unused amounts of cash on their accounts to meet the potential cash needs of their clients. In any case, the unexpected use of liquidity for unforeseen clients' cash needs would disturb cash forecasts for liquidity providers<sup>4</sup>.

In order to limit difficulties that the prioritisation of multiple T2S dedicated cash accounts functionality may create in terms of liquidity management for liquidity providers, in particular during night-time settlement cycles, TG3 expressed the view that liquidity providers should be able to:

- set limits to the amounts of liquidity provided to each of their clients;
- determine the order according to which clients would be served (only for the alternative procedure described above);
- resort to auto-collateralisation to provide sufficient liquidity to their clients.

In particular, the availability of auto-collateralisation for these liquidity provisions would avoid needs for liquidity providers to maintain unused amounts of cash on their cash accounts or to face unexpected liquidity shortages that would be detrimental to their own settlement activities. In other words, the availability of auto-collateralisation could help making the drawbacks of the prioritisation of cash accounts much more acceptable to liquidity providers.

Some of TG3 members even saw some business opportunity thanks to this auto-collateralisation facility, as the automated provision of intraday credit would enable them to provide liquidity to several clients when needed without being required to immobilise unused cash on their T2S dedicated cash accounts.

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<sup>4</sup> Despite the prioritisation of multiple T2S dedicated cash accounts functionality may be detrimental to the accuracy of cash forecasts, TG3 maintained its interest for the cash forecasts functionality in T2S.

**Conclusions**

**The AG is invited to consider:**

- the alternative procedure proposed by TG3 for this functionality;**
- the elements provided above on the business case for this functionality and its impact on liquidity management.**