

COMMENTS TO THE SECOND CONSULTATIVE DOCUMENTS OF JANUARY 2001 OF THE BASEL COMMITTEE ON BANKING  
SUPERVISION:  
"THE NEW BASEL CAPITAL ACCORD"

I. Introduction

Clearstream International <sup>1</sup> has reviewed the Consultative Document regarding the new Basel Capital Agreement and summarised in this paper its findings.

In order to position our subsequent comments appropriately, we would start by emphasising that there are a number of factors which, in our view, differentiate Clearstream International from most of the 'internationally active' banks at which this Accord is aimed. For a start we are one of only two global International Central Securities Depositories "ICSDs", the other being Euroclear Bank. There is therefore no "industry norm" or pool of institutions against which we can be compared in any meaningful way.

The unique characteristics of our business, on which we expand below, also imply that our risk profile may be atypical from other banks and that aspects of the Accord may affect us more significantly than had perhaps been intended. In reducing settlement risk in the international and domestic securities markets by internalising transactions, Clearstream International is, by definition, particularly focused on operational risk issues for itself and for the global capital markets. It is vital for the post-trade industry as a whole to ensure that the measures for operational risk are appropriate and achieve their desired goals of increasing financial safety and soundness in the system. Consequently our reply is focused primarily on the issues surrounding operational risk, where by virtue of our position, we believe we can offer some particular expertise and insight.

In the field of Credit Risk, and the Second and Third pillars, we appreciate that Clearstream International will probably have no contribution beyond that which any other bank may be expected to make.

Clearstream International will be glad to provide any detailed information that its regulators/supervisory authorities, as well as the Basel Committee, may require in support of its suggestions. Consistent with our practice of exchanging views on market policy matters with our regulators/supervisors, we have transmitted a copy of this note to the CSSF and the Banque Centrale du Luxembourg, and the BAWE, and to the BAKred and the Deutsche Bundesbank.

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<sup>1</sup> Clearstream International, for the purposes of this document, meaning Clearstream International and its subsidiaries

## II. Peculiarities of the business of Clearstream International

As mentioned above, the business of Clearstream International is not typical of an “internationally active” bank. Our core activity is the provision of clearing and settlement services for domestic and cross-border bonds, equities as well as investment funds. Transactions are settled during our overnight batch and continuous daytime settlement processing.

To ensure timely settlement of the transactions, Clearstream International provides for delivery versus payment (DVP) settlement – using a book-entry computer system in which cash is exchanged for securities simultaneously. This process eliminates principal risk.

Clearstream International offers certain banking facilities to its participants in the form of securities and cash lending services. However, it is important to note that the principal aim of these services is to reduce the number of settlement fails and improve the predictability of settlement results, in support of the core settlement function.

In addition, we provide custody services, together with a wide range of securities administration services (management of securities events, withholding tax services and reporting, proxy voting services).

In Europe, in respect of the clearing and settlement business for domestic and cross-border securities, Clearstream International's main competitor is Euroclear Bank. It also competes with non-European/non Bank custodians in respect of the custody business.

## III. Impact of the Basel Capital Accord on the business of Clearstream International

### A. First pillar: minimum capital requirement

#### 1. Credit Risk

We believe that the Basel regulations on credit risk will be of limited impact to the capital requirements of Clearstream International, given the very specific nature of our banking and credit activities.

We would like to mention that according to our calculations the overall impact of Accord is to increase our supervisory capital requirement— by the amount of capital required to cover Operational Risk. Although, we note that we have made our calculations of Credit Risk using the new Standardised Approach and not one of the potentially more risk-sensitive approaches.

To the extent that any additional comment we would make in respect of credit risk would merely echo the views of those many banks more significantly affected, we have chosen not to make any specific further contribution in this area.

#### 2. Operational Risk

We recognise that this is an attempt to develop explicit capital requirements in respect of operational risk and, as such, accept that there are inevitably areas that require further work and refinement. Whilst there are a number of issues that give us cause for concern in the current draft we trust our feedback will enable greater clarity and comfort to be obtained when the documents are reissued.

Given there will no doubt be a number of changes when the operational risk principles are next issued and, indeed, some proposals are still awaited, we wonder whether it would not be appropriate to issue operational risk as a further consultative document – prior to attempting to issue “final” proposals.

The introduction of explicit capital requirements for risks other than credit and market risk is clearly a key feature of the revised capital adequacy framework. We accept that this is in line with the expressed objectives of both the EU Commission and the Basel Committee to promote a more comprehensive and more risk sensitive approach to risks.

However, whilst it is important to specifically address the question of operational risk, it is even more vital that any measures applied are appropriate otherwise the effect of the regulations could be counterproductive. Inappropriate measures might encourage banks to manage the capital charge rather than promote a more risk sensitive approach, this being in contradiction with the intent of the Accord.

As mentioned in the introduction the very specific nature of our business means Clearstream International will be particularly impacted by the new Basel regulations on operational risk. To start, it is our impression that the Basic indicator approach is generally regarded by the banking industry as a fairly “crude” measure, and for Clearstream International, in particular, this view appears to be confirmed as it would imply a heavy capital requirement of EUR 210 Million.

The Standardised approach is not a significant improvement for us, as it would impose very broad ratios defined at an industry-wide level. Considering the volumes of our settlement and custody to which the capital requirement would be linearly linked, this would result in a capital requirement similar possibly higher than the Basic Indicator approach.

Consequently we believe Clearstream International will find it necessary to opt for the most sophisticated approach: the Internal Measurement Approach. The previous two options could potentially produce inappropriate requirement for the holding of capital to cover operational risk.

Whilst we recognise that further refinement is likely to take place in respect of the IMA, we would like to explain some of the difficulties we currently anticipate we would face in implementing this approach, in respect of:

- the definition of the business lines and their corresponding “Exposure Indicator”
- the determination of the “Gamma Factor” by the regulator/supervisor for each business line,
- the impact of the Internal Measurement Approach on Clearstream International’s operational risk model.

a) The definition of the business lines and their corresponding “Exposure Indicator”

As defined in the Accord, under the Internal Measurement Approach, a bank has to categorise its activities into a number of business lines. For each of these, the regulator/supervisor specifies an exposure indicator (EI), which is a proxy for the size (or amount of risk) of each business line's operational risk exposure.

Under the guidance of their regulators/supervisors, banks have to determine the probability of loss event (PE), representing the probability of occurrence of loss events, and the loss given event (LGE) which represents the proportion of transaction or exposure that would be expensed as loss, given that event.

The product of  $EI \times PE \times LGE$  produces an expected loss (EL) for each business line/risk type. The regulator/supervisor has then to multiply this amount by a "gamma" factor in order to transform EL into risk or a capital charge. This "gamma" – which is determined by the regulator/supervisor for each business line - is defined as the maximum amount of loss per a holding period within a certain confidence interval.

Our main issue here is that the Basel Committee has proposed that these business lines would be the same as those used in the Standardised Approach. The definitions of these business lines are however very loose: for example, they categorise "Clearing and Settlement" together with "Payment and Collections". It is for this very same reason that we felt it would probably prove necessary to abandon the option of using the Standardised Approach.

Clearstream International is of the opinion that its settlement operations – which are highly automated and require minimal manual processing – differ substantially from that of the settlement department of a trading bank, for example:

- The trades we process are not subject to manual entry into a system.
- We do not incur losses if the trades are not perfectly matched between the counterparties.
- We are not responsible for covering the short positions.
- In view of our transaction volumes in high number of different currencies, it is necessary that all our processes are fully automated.

Therefore, we do not believe that a single "Exposure Indicator" – to be determined by the regulator/supervisor for the "Clearing and Settlement" business line - could be adequately defined to meet the requirements of these two very different industries. Specifically, Clearstream International is concerned that given the settlement volumes we handle, setting up an inappropriate "Exposure Indicator" could have an inappropriate impact on us, requiring excessive capital to be put aside.

Our preferred approach, as detailed to above, would be to introduce a greater degree of granularity to the business line definitions.

In addition, the definition of other business lines might also create inappropriate additional capital requirements. Clearstream International's treasury department places in the overnight money markets surplus cash left by customers on their accounts with us overnight. This cash should not be considered as Assets under Management.

b) The determination of the "Gamma Factor" by the regulator/supervisor for each business line

Another question to be considered is how the regulator/supervisor will determine the Gamma Factor for the business line in which Clearstream International will be categorised, and whether it intends to collect data on the industry in which the latter operates.

The Gamma Factor as explained in the Basel Accord on Operational Risk, depends on the distribution of the loss data. This distribution will be subject to the assumptions made by the bank when defining its Operational Risk model. This implies that the regulator/supervisor has to be able to validate the model defined by the bank. This further implies that the regulator/supervisor has sufficient data to compare Clearstream International to an industry distribution, which will be problematic as our only true competitor in clearing and settlement is Euroclear Bank.

Furthermore, the competition between Clearstream International and Euroclear Bank is extremely strong. We believe there might be some reluctance by both parties to disclose certain business data, if this was felt to be commercially sensitive.

In the clearing and settlement industry, the requirement for capital in respect of operational risk will be mostly affected by high impact, low frequency events, such as a mainframe computer breakdown. Consequently, the most suitable model to represent our risk profile is a loss distribution approach, the expected and unexpected losses being deducted from the model. The loss distribution of Clearstream International will present a very fat tail; as such we are also very concerned by the interval of confidence that we will be authorised to use. According to our internal simulations a change from an interval of confidence from 98% to 99% would double our capital requirements for operational risk.

We believe that it would be constructive to review possible approaches to these issues with our regulator/supervisor prior to final proposals being issued.

#### c) The impact of the Internal Measurement Approach on Clearstream International's operational risk model

Clearstream International is currently in the process of finalising the definition of its operational risk model, which will undoubtedly be impacted by the Basel proposals. However, due to some lack of clarity in certain aspects of the New Accord we are unable to determine or quantify some of the specific impact on this model:

- The acceptance of the risk mitigation techniques by the regulator. The principles defining the qualifying criteria for a risk mitigation technique to be recognised still need to be defined, although it seems clear that contingency planning will be accepted as a risk mitigation technique. The situation could lead Clearstream to hold both an insurance and a capital requirement for the same operational event.
- The acknowledgement of the legal frameworks protecting Clearstream International. Contractual agreements with clients and providers as well as the national legal framework can impact significantly the level of operational losses. This type of risk mitigation technique has not been discussed in the Operational Risk framework and it is still unclear whether it should be taken into account when computing the Capital charge,
- As it is the best fit to our risk profile, our internal operational risk model uses a Loss Distribution Approach. The Basel Committee does not anticipate this measurement technique to be available in the first stage. Consequently we might have to modify the output and possibly collect different data in order to comply with the new Capital Adequacy requirement,
- The range of estimates for the exposure indicator and the gamma factor.

As a conclusion, it is to be noted that Clearstream International believes it will not be able to use either the Basic Indicator Approach or the Standard Approach. The former approach would imply a Capital Requirement of EUR 210mio and the latter is likely to prove inappropriate due to the described lack of granularity in the definition of the business lines. Thus the Internal Measurement Approach is the only approach available to us.

Our favoured measurement methodology would be for Clearstream International to be able move directly to a Loss Distribution Approach as this would reflect more accurately our risk profile. The concept of floor when evolving from the Internal Measurement Approach to the LDA Approach could lead us from an inaccurate measure to a measure too high because floored. As such, we hope that a door will remain open as to the possibility of using more sophisticated approaches from the beginning.

On account of the above, Clearstream International is very concerned by the opacity of the implementation of the IMA and the fact that we cannot currently forecast our future capital charge, particularly as no other suitable solution is available to us.

#### B. Second pillar: supervisory review process

Our main observation here is again in respect of operational risk, and the possible impact of the Accord on competition with other players and the enforcement by the national regulators/supervisors.

As mentioned earlier, in terms of international clearing and settlement services in Europe Clearstream International is competing primarily with Euroclear Bank, and with non-European/non Bank custodians in respect of the custody business.

On the one hand, Clearstream International is concerned that Euroclear Bank or another present or future competitor might benefit from a more lenient regulatory/supervisory environment and therefore have a competitive advantage. This issue could be resolved by a harmonisation requirement for the respective national regulators in respect of Pillar 2.

On the other hand, Clearstream International is conscious that, in its capacity as a bank subject to the Basel rules, it might be in a detrimental position vis-à-vis non bank custodians.

Regarding the Supervisory Review Process of Pillar 2, the approach of the home regulator for an international group in our business will be to assess a global capital charge on the basis of consolidated activities in all countries from which it operates. However, should the regulator of the market where, say, one of the subsidiaries operates wish to evaluate the internal assessment processes of the subsidiary separately and differently, this may create a complex and disadvantageous situation.

A requirement for bilateral agreements among relevant regulators in this respect would comfort the industry in upcoming phases of consolidation among national entities.

#### C. Third pillar: market discipline

As per the comment in relation to Pillar 2 above, in respect of Pillar 3, Market Disclosure, the Basel Committee should consider urging national regulators to set public disclosure requirements under a harmonised framework.

### IV. Summary

The role performed by the ICSDs, and so by Clearstream International, is core to the continuing efficiency and overall growth of the financial capital markets. It is therefore essential that the role of Clearing and Settlement in this context is fully understood and properly catered for in the design of the New Accord.

We would urge that the New Capital Accord itself, and the role of the regulators/supervisors, should in principle be sufficiently flexible to accurately reflect the risk profile presented by specialist banking organisations. As mentioned in our opening remarks, Clearstream International would be pleased to fully assist the regulators/supervisors in this respect through the provision of further information and discussion, as appropriate.