

Reforms to the securities clearing, settlement and registry system: consultation paper

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1. Reasons for the reform

Spain's clearing, settlement and registry system has proven to be extraordinarily robust, providing a very high degree of security. However, the system has a number of specific features that may impair its ability to participate in the process of integration of post-trade systems that is currently under way in the European Union.

The December 2007 joint report by the National Securities Market Commission and the Bank of Spain entitled "Securities clearing, settlement and registry systems in Europe. Current situation, ongoing initiatives, and recommendations" identified a number of changes that would be advisable to implement in the clearing, settlement and registry procedures of Iberclear' equity settlement platform "*so as to bring Spain's current post-trade processes into line with the European standards and practices.*"

This paper describes and details the changes that are needed to attain those goals, as set out in broad terms in that report.

The changes set out here for public consultation will "*facilitate interoperability between Spain's settlement system and the other systems in Europe*". One of the principal issues in C&L in Europe at present is the Eurosystem's T2S (Target 2 Securities) project to implement a technical platform for providing centralised securities settlement services. Specific national features (i.e. practices and rules that depart from the average standard) can only survive T2S if they are compatible from an operational standpoint and are economically efficient.

This analysis may also be of use in the framework of a broader reflection on Spain's various systems for clearing securities (both fixed-income and equities) with a view to maximising harmonisation while taking account of the various categories of securities involved.

In any event, the fact that some rules, procedures and practices in Spain differ from those of other European countries is not *per se* sufficient reason for a reform that affects the orderly performance and legal certainty of settlement and registry, two of the core functions of securities markets. The changes proposed in this document would not be justified if they did not lead to improvements in the system's security, agility and efficiency and its competitive position in a situation of open markets (post-MiFID).

In fact, independently of T2S, the reasons why the Spanish system needs to be reformed lie in the difference between the market situation in which it was established (first half of the 1990s) and current conditions. Those differences include most notably:

1. Demutualisation of the regulated markets

The former mutualised market system, based on the idea of a club of equals (members/participants/custodians), has been replaced in Spain as in many other European countries by a listed operator (whose shareholders are no longer necessarily its users) in a situation of growing specialisation, in which the sequence of

functions (trader/clearer/settler/custodian) is tending towards functional and institutional specialisation and separation, each subject to different solvency requirements.

2. Lowering barriers to competition in trading.

In contrast with the former situation of a single domestic market that operated as a monopoly, the market is now in a moving environment, with alternative trading venues competing with each other. In this context, settlement systems must become providers of services to multiple users (not necessarily confined to market members) with trades received from multiple platforms (not necessarily official) as well as purely OTC trades. Additionally, the provision of clearing and settlement services in Europe, even for Spanish securities, requires versatility in terms of the settlement models, deadlines, cycles, etc.

3. Persisting rigidities derived from guaranteed delivery and assignment of settlement finality to the moment of trading.

In coherence with the preceding point, guaranteed delivery and assignment of settlement finality to the time of the trade (technically, the time that the trade is notified to Iberclear, immediately after it is performed) are a departure from international practices. In a situation of competition such as that described above, it is advisable to analyse the possibility of introducing flexibility and diversification in those principles.

4. Unconditional recognition of purchases, and risk of mismatches in recognised balances.

Recognition of all purchases, independently of the timely settlement of the corresponding sales, is a system initially conceived to provide certainty to good-faith buyers in a single centralised market; however, it can cause temporary mismatches in the balances of securities recognised by settlement participants, a phenomenon not confined to the Spanish system and one that should ideally be eliminated in the medium term.

5. Greater sensitivity to credit risk following the 2007-2009 crisis.

Although the Spanish market has operated satisfactorily to date using a mechanism of collateral posted on a joint guarantee fund by settlement participants (instead of a well-capitalised CCP), this is not the model being used by the European countries with which the Spanish market must compete. Dynamic risk management is vital for mitigating systemic impact pressures, considering the importance of counterparty risk following the crisis and the experience with Lehman Bros.

6. Changes in market structure and internationalisation.

Internationalisation of both listing (i.e. securities listed on several markets) and trading (remote members) is transforming the way in which markets and their clearing and settlement infrastructures relate to market participants, as is being observed in the post-MiFID environment. Internationalisation requires efforts to make current domestic post-trade procedures compatible with those of other countries. This would facilitate connections between Iberclear and other CSDs and between its participants and other settlement systems.

7. The growing trend towards international interconnection between CSDs.

Even outside the framework of T2S, the European Commission is intensely promoting interoperability or interconnection on an operational and legal level, in response to a clear demand from market participants. This trend leads naturally towards models of clearing and settlement and securities' holding patterns that are mutually compatible or can at least intertwine through interfaces or central mechanisms.

The transformation described in this paper will be the largest in Spain's securities clearing, settlement and registry system since 1992, and it is vital for the system's efficiency as it affects the procedures for registering ownership, performing settlement and managing system risks. Therefore, the determined, active participation of Iberclear and its participants is essential for this project, as is an appropriate degree of transparency and public participation.

2. Identification of the necessary changes.

Shift finality towards the time of settlement, and review the system's principles and the mechanisms for guaranteed delivery.

At present, in stock market trades, finality (i.e. irrevocability and unconditionality) of securities and payment transfer' orders occurs immediately after trading (when Iberclear receives the trading volumes). In parallel, the settlement system has the principle of guaranteed delivery, to which end a series of mechanisms have been established that seek to settle all final trades on their theoretical settlement date. Despite those mechanisms, in practice it is not always possible to settle all sales on their value date; this results in transient mismatches in the recognised balances of securities which, though fully identified and controlled by the system, should ideally be eliminated.

The current system was designed on the basis of implicit assumptions about markets with limited volume and in a situation of stability (low volatility, concentrated trading venues) and other explicit assumptions such as the express prohibition of naked short selling, OTC trading, etc.; these circumstances have changed with time.

The reform seeks to shift finality to the time of effective settlement of the transaction, in line with the trend in other European systems, while allowing cancellation of settlement orders as a last-resort mechanism for resolving incidents.

In parallel, the goal is that the system should be able to settle in different deadlines depending of the existing demand of the participants, enabling it to compete with the current standard among European systems and making it possible to shorten average settlement cycle.

Establish a CCP for stock exchange trades.

Although the Spanish system has a mechanism for managing risk which consists of the provision of collateral on a joint guaranteed fund by all participants, the possibility of revoking settlement instructions would bear counterparty risk, whose impact should be mitigated as much as possible, particularly in multilateral markets. Moreover, for the purposes of investor protection (particularly retail investors), it is advisable to establish effective mechanisms to provide guarantee for settlement and minimise cancellations.

In the mid-1990s, the world's leading bourses introduced CCPs in order to extend the scope of guaranteed settlement (strengthening their appeal to investors), simplify settlement processes and allow for active centralised management of counterparty risk.

A review of the current mechanisms for applying the principle of guaranteed delivery reveals that it is essential to implement a CCP for stock market trades.

Moreover, netting by the CCP greatly reduces the number of transactions to be settled, simplifies the processes and enhances the system's competitiveness vis-à-vis integration processes such as T2S. This Market-CCP-CSD scheme is standard in the international markets and is used throughout almost all of Europe¹.

Modify ownership tracking systems

¹ CCPs have been established recently in Sweden, Finland and Denmark. One was established in Hungary slightly over one year ago.

In line with the principles of the Spanish system, Iberclear's settlement procedures are very strict as regards identifying the securities that are being sold, and the registry identification of the securities must be delivered prior to settlement. The result is that settlement and registry are closely intertwined and hard to unbundle in practice.

Once the guaranteed delivery procedures are amended and one or more CCPs are introduced, which work on a netting balances basis and in which the settling members and the CCP take responsibility for the trades to be settled, then there is no longer a need for prior identification of the securities to be delivered and it is possible to provide the Registry References (RR) after the settlement process

The proposed change in procedure would, therefore, lead to greater functional separation between settlement and registry, in contrast to the current situation; this would facilitate integration into projects such as T2S, in which the services are functionally separable.

Nevertheless, the aim of achieving more agile settlement processes should not interfere with the tasks in which RRs are a critical component, such as system auditability, integrity of registry, and supervision, none of which depend on prior presentation of the RR for settlement. That is to say, the proposal is to maintain the RRs (or another system for balance tracking and numerical control of ownership that offers the same features as RRs) while eliminating the requirement that they be delivered before the sale is settled.

Allowing the delivery of RRs after the settlement would require not only sweeping changes in Iberclear's settlement procedures, but also the introduction of specific procedures for tracking and cross-checking securities balances and flows.

3. Strategic implications of the proposed changes

The proposed changes will both impact and be impacted by the current breakdown of the Spanish equities trading business. Locally-based investment firms account for the bulk (60%) of trading, measured in cash terms. Branches of EU-based credit and saving institutions have the largest share of settlement (62%), while Spanish-resident credit and saving institutions dominate registry (85%).

Some of the potential implications of the proposed changes can be classified into three groups:

1. Concentration of settlement and registry, with a possible reduction in the current number of players.

There is currently a very large number of participants, but activity is very concentrated: of the 74 firms that provide settlement, just 10 account for 80% of the volume, while 15 firms account for 80% of the equities registry volume. These activities are potential sources of systemic risk and require sophisticated process and systems technology; consequently, the proposed changes might lead to more concentration among the firms with the greatest capacity and resources. The reform might also enable some players to take on certain functions without assuming others that might hamper their competitiveness².

2. Changes in system participants' revenues, and changes in costs and fees in the value chain.

Greater specialisation is likely, with the appearance of new functions and business models within what is broadly a vertically-integrated value chain at present. In any event, the distribution of costs and revenues along the value chain of (a) trading, (b) clearing/settlement, and (c) registry will foreseeably differ for the different types of participant.

² Novation of the CCP reduces market members' perceptions of counterparty risk, which favours the existence of members with a broad diversity of capitalisation levels in multilateral markets (such as the Spanish market), a feature that should be preserved as far as possible.

3. Possible changes in trading mechanisms.

Changes in the registry system by eliminating operational restrictions connected with the moment of finality and assured delivery might require some trading rules to be amended (e.g. with regard to grouping of orders or limitations on short selling).

4. Detailed description of the amendments that need to be undertaken and analysed

This section generically identifies the main design decisions to be considered and adopted in each area to ensure the reform is operationally viable. It does not seek to be exhaustive nor to determine *a priori* which solutions should be adopted in each case; rather, its goal is to identify and describe the sort of issues that need to be debated (and resolved) at the design stage. The descriptions should not be interpreted as expressing the position of the National Securities Market Commission.

Some of these issues may be affected if the European Commission ultimately decides to draw up a regulation on securities registry, clearing and settlement following the report by the Legal Certainty Group³. Likewise, the development of the European Commission's recent proposal for legislation on market infrastructures⁴ may require some changes to the current legal framework or affect the design of the CCP.

4.1 To shift finality to the time of settlement and review other principles of the system.

Diverse settlement models (departure from the universality principle)

Adaptation to the growing diversity of trading systems and regimes makes it advisable to have a plurality of procedures that can be applied to the same securities. Moreover, the possibility of cancelling trades that is contained in the proposed reform requires that there be mechanisms to minimise cancellations (which are undesirable in any event). To that end, it would be necessary to have different deadlines and procedures for settling the same securities. These changes represent a departure from the principle of universality, as currently applied; accordingly, exceptions should be minimised.

In particular, the availability of a mechanism for real-time settlement of bilateral trades might expand the range of services offered by the settlement system and provide major positive externalities by allowing bilateral trades to be settled without waiting for the standard settlement cycle; this would spare collateral, strengthen intra-day finality and make it possible to restock securities to avoid delivery shortfalls.

A greater range of cycles, and flexibility with value dates (departure from the principle of objective settlement date)

Making settlement periods more flexible so as to offer more possibilities than at present (only T+3) entails departing from the principle of objective settlement date. It might be advisable to offer settlement dates that are suited to the specific type or trading model. In parallel, it is necessary to consider whether there is demand for more settlement accounts or processes (bilateral and multilateral).

³ 'Second Advice of the Legal Certainty Group on solutions to legal barriers related to post-trading within the EU'. August 2008.

⁴ 'Discussion Paper for the 1st meeting of Derivatives and Market Infrastructures Member States Working Group'. 22 January 2010. Legislation on Market Infrastructures.

Allow cancellation of settlement instructions as a means of resolving settlement failures (revision of the principle of assured delivery).

Revocation of settlement instructions already entered in the system would be a last-resort mechanism for resolving incidents, applicable only when all other procedures had failed. The parties affected by a counterparty failure should be given the option of revoking settlement instructions or delaying settlement.

4.2 To establish a CCP for clearing stock exchange trades.

Regulatory requirements and general design

The only Spanish regulation at present on the authorisation and operation of CCPs incorporated in Spain is article 44 ter. of the Securities Market Act. It might be advisable to amend that article, for example, to allow the establishment of **capital requirements** or to allow the CCP to have a special status (e.g. a bank), or to allow these issues to be developed in subsequent rule-making (Royal Decree or Ministerial Order).

In any event, it would be necessary to analyse possible locations for the CCP and consider the **scenario of several CCPs coexisting** in the future (and, in that case, the relations between them and the central provider of settlement and registry services).

To ensure that the legal design is compatible with a viable business model and, therefore, that there would be sufficient candidates to manage the CCP, a **business case analysis** would have to be conducted.

Scope of the CCP: securities transactions and accounts.

In the short term, it would be advisable to decide, depending on the trading model, **for what trades the use of the CCP should be made obligatory**. One possibility would be to register with the CCP at least all multilateral trades, while participants might have the option for registering OTC bilateral trades. The obligation to register trades with the CCP might require the enactment of some regulation.

When establishing the details of the accounts that participants can open in the CCP, it would be advisable to analyse whether to make it obligatory to segregate certain individual client accounts as well as the proprietary account and the current clients' general account. A factor to consider when establishing the taxonomy of account types: the more accounts that are allowed, the lower will be the compression capacity of the CCP's netting, but the greater will be the protection afforded to the segregated account-holders.

Considerations when delimiting which transactions are required to be entered in the CCP include whether or not to limit the scope or, conversely, to allow it to apply also to securities traded in fixed-income regulated markets as well as OTC derivatives.

Solvency requirements for the CCP and its participants: CCP's own funds, risk control, participants' collateral and margins, other guarantees, establishment of daily limits on risk.

Concentration of risk at the CCP and its direct participants makes it advisable to establish appropriate solvency requirements for all of them so as to prevent and hedge credit and liquidity risks. To that end, the CCP should have sufficient financial resources (amount to be determined) and its participants should be required to have certain minimum levels of solvency.

The CCP should apply existing best practices with regard to **risk management and hedging**, and it should have a guarantee fund, daily and extraordinary collateral (margins) as well as its own funds.

The need for the CCP to have immediate access to liquidity makes it advisable to consider the

possibility of setting requirements in terms of liquidity coefficients referenced to the CCP's equity and the collateral it manages. Alternatively, a more restrictive option would be to **require that the CCP have a bank license**. This is proving to be the most common approach in Europe.

Among the mechanisms to be implemented to control credit and liquidity risks, the CCP should have specific procedures for resolving a failure or default of a participant.

Members of the CCP / CSD: establishment of procedures to assigning clearing members to market members.

To maintain the distinction between trading and clearing functions, it would be advisable to establish mechanisms so that all trades by market members are assigned to CCP clearing members. At present, all market members are settlement participants of Iberclear, so that all transactions not explicitly assigned to another settlement participant remain as a risk on the trader's books. However, there are no objective or legal reasons for maintaining this set-up when the CCP is established.

Since the CCP would have access only to information about trades to be cleared and settled, but no access to the registry, the clearing members should be liable for ensuring that there are sufficient securities and cash in each settlement batch, with mechanisms that might include filling shortfalls with securities or cash from their proprietary account.

The **categories of clearing member** and the range of services that they can offer in each case should take account of the amount of own funds.

Procedures for resolving incidents: buy-ins, loans

One of the main issues requiring consensus and regulation is the **resolution of incidents**; the maximum coordination should be sought between infrastructures (CCPs and CSD) in order to minimise both revocations of settlement instructions and obligatory buy-ins.

Penalties for buy-ins and cancellations

Experience with the current system shows that a scheme of penalties contributes greatly to maintaining a high level of efficiency. Buy-ins (understood as a mechanism for resolving settlement failures, even if not using the current operational procedures) and cancellations should be viewed as exceptional events. Accordingly, it is advisable to establish a **system of penalties** as a serious discouragement to participants so that failures are rare, while not putting the Spanish market in an uncompetitive position vis-à-vis other European markets. Penalties should be designed to ensure that a party in a failure does not benefit from the price difference of the securities.

Information to be exchanged between the market, the CCP and the settlement and registry system: flows and definition of transactions to be settled, so as to enable counterparties to be identified at all times (bilateralisation)

The creation of a CCP makes it advisable to **review the current information flows between the infrastructures and their participants** so as to take account of each one's needs and the interaction between the CCP and the settlement and registry processes performed by Iberclear and its participants.

At present, purchases and sales are assigned separately, and it is impossible to link these transactions to the original executions, which prevents the identification of counterparties. The possibility of revoking settlement instructions or delaying settlement without granting the buyer title to the securities makes it advisable to design a system for maintaining counterparty identification from the point of execution in the market, with the logical implications for the current assignment system, thus providing the greatest possible linkage

between transactions to be settled and the original executions.

4.3 To enable delivery of Registry References (RR) *a posteriori*.

Maintenance of RRs as a means of tracking transactions

RRs make transactions traceable, so that it is possible to identify accurately the origin and time sequence of any movement in securities that occurs in the registry. Accordingly, the future mechanism for managing account balances should maintain all the useful features of the RR, where possible:

1. Oversight of short selling. If the RR provided in support of a sale comes from transactions that occurred subsequent to the sale, naked shorts can be detected reliably.
2. Oversight of intraday trading. The time-stamp factor of RRs is once again essential in this regard.
3. Oversight of potential abuses consisting of the use of customer securities for proprietary transactions or the arbitrary allotment of transactions among customers. A firm that uses a customer's securities without his consent necessarily leaves a trail (the RR) which will enable a penalty to be imposed once this behaviour is detected.
4. Mass oversight of ownership (in cases of potential breach of legislation on takeovers and significant shareholdings, and in investigating cases of market abuse). The RR makes it possible to reconstruct how and when each position in a given security owned by each owner was built.
5. Tax compliance oversight. As the official proof of acquisition date, the RR bears witness to each security's provenance.
6. Cross-check and backstop for systems of registered share ownership (such as those used by financial institutions).

Note that none of the foregoing features requires that RRs be presented beforehand to settle a sale; rather, they are based on the RR being presented at some time close to the time of sale so that each position in the registry has a valid RR.

For that reason, it is sufficient to have *a posteriori* presentation of RRs, or some other system based on netting balances that provides some numerical tracking control of ownership that offers the same features as RRs.

Definition of balance-based oversight with subsequent presentation of the RRs.

At present, Iberclear guarantees the integrity of issues by overseeing the balances in member accounts using a double-entry system. The current system recognises all purchases of securities immediately at the time of the trade, but does not check off sold securities until the RRs which identify them are delivered.

The revision will need to analyse how balances recognised in participants' securities accounts are to be reconciled with the total number of securities documented by current RRs.

Deadlines for providing RRs. Maintaining the RR identification function in the securities registry

One feasible option would be to maintain the current oversight mechanism based on RRs but eliminate the requirement that they be presented prior to settlement of a sale, even allowing them to be presented after settlement. In this case, the market members and clearing members of the CCP would be responsible for ensuring there are sufficient securities and cash for the transactions to be settled. It would be necessary to **define accurately the exact**

time of making the registry entry with respect to the time of settlement and the time of providing the RRs, and the measures to be adopted in the event that a trade is settled but the RRs are not subsequently provided.

Cross-checking settled balances against securities provided. Oversight of issue integrity

With the stated reforms, it would be necessary to define what information the clearing members must provide about the balances and transactions they enter into each multilateral settlement cycle.

Iberclear must exercise specific oversight to match settled balances with the securities documented by RRs that are deregistered due to sales and the corresponding RRs that are registered due to purchases.

Penalties for failure to provide RRs

A **system of specific fines** should be established to discourage delays in delivering RRs (or an equivalent numerical tracking system) documenting the securities sold and settled. The system could also provide severe penalties for revoking settlement instructions.

As at present, Iberclear should keep track of incidents in the system (overall and by individual firm).

Clients' securities registry supervision function: who to supervise and how

The new framework should review the supervision functions currently assigned to Iberclear for ensuring proper record-keeping by participants and active supervisory procedures.

5. Work methodology and public consultation.

Because of the scale of the reforms to be undertaken, the process should be as transparent as possible. The first step is this public consultation, to obtain the opinion of participants in the securities industry and the infrastructures.

A Monitoring Committee has been formed, chaired by the CNMV and with the participation of the Bank of Spain and industry representatives, including Iberclear, which will oversee the planning and development of the necessary amendments and also coordinate at least two technical working groups.

The Development Plan is expected to be ready by the end of 2010.

6. Appendix. Legislation and regulations to be amended.

Below is a list of the legislation that will probably have to be amended. As noted earlier, the changes considered necessary may be modified if the European Commission finally decides to issue regulations with regard to registry, clearing and settlement of securities. The development of the legislative proposal for market infrastructures launched recently by the European Commission may also require changes in the current regulations in those areas. Some necessary amendments have been identified in the following legislation that is currently in force:

- Securities Market Act (articles 44 bis, 44 ter, provisions of Chapter I of Title I).
- Royal Decree 116/92, on securities represented by book entries.
- Royal Decree 505/87, on Government Debt represented by book entries.
- Stock Exchanges Rule Book to replace the current one.

- Iberclear Rule Book.
- Development of a Royal Decree on CCPs.
- Iberclear's internal regulations (Circulars, Operating instructions and Procedures).