CNMV
COMISIÓN NACIONAL DEL MERCADO DE VALORES

Proposed reforms to Spain's securities clearing, settlement and registry system

Consultation paper

14.01.11

1.Introduction

1. Clearing, settlement and registry of securities trades are an essential component of any financial system. These activities, whose function is to effect the exchange of securities for cash, encompass all the post-trade process up to change of ownership of the securities and registration of the new owner. Though post-trade mechanisms are less visible than trading processes, it is essential that they work properly and offer legal certainty in order to guarantee the financial system's efficiency, competitiveness and stability.

2. Late in 2007, the CNMV and the Bank of Spain published a joint report entitled "Securities clearing, settlement and registry systems in Europe. Current situation, ongoing initiatives, and recommendations". One of the report's main conclusions was that certain specific features of Spain's clearing and settlement system needed to be modified in pursuit of greater standardisation between domestic post-trade processes and practices or standards that are accepted throughout Europe.

3. The process of reform commenced in February 2010 with the publication of a consultation paper entitled "Reforms to the securities clearing, settlement and registry system: consultation paper", which described and detailed the modifications required to attain the objectives set out in broad terms in the aforementioned joint report. That same month, the CNMV established a Steering Committee for the reform process, chaired by the Vice-Chairman of the CNMV and comprising the Bank of Spain, the Spanish Banking Association (AEB), the Spanish Confederation of Savings Banks (CECA), the Investors Compensation Scheme (FOGAIN) and Bolsas y Mercados Españoles (BME).

4. The committee met regularly throughout 2010 in order to advise the CNMV and serve as a forum for debate on the main aspects of the ongoing process. Additionally, to attain its goals, the Steering Committee established two groups of experts to carry out technical work.

5. After analysing the aspects susceptible to improvement with the industry representatives, the CNMV concluded this phase by publishing this consultation paper setting out detailed proposals for change, the main features of which are as follows:

1) Review the principles of the system and the current mechanisms for ensuring delivery, while allowing revocation of settlement orders as the last-resort mechanism for resolving incidents and shift finality to the time of settlement of the transaction, in line with the trend in other European systems.

2) Allow for the establishment of a Central Counterparty (CCP) to clear trades in the multilateral stock market platform and replace the existing multilateral settlement system with a bilateral model based purely on balances.

3) Replace the current system of tracking ownership using registry references (RR) with an oversight system for tracking securities accounts and balances that provides equivalent performance in terms of security and supervision capabilities.

6. The purpose of the public consultation is to obtain feedback on the content and scope of the proposal, and subsequently refer any legal modifications proposal to the Ministry of Economy and Finance.

7. The following sections summarise the main principles underlying this document, describe how it fits with the changing European panorama, and mention aspects that may require further development.

2. Main aspects of the reform

8. The following sections summarize three main aspects of the reform:.

2.1 The creation of a Central Counterparty and changes in the time of finality at the Central Securities Depository (CSD) and in the principle of assured delivery

9. The first main element of the proposed reform is the replacement of the current mechanism for assuring delivery of securities by interposing a Central Counterparty (CCP) for transactions in equities. A CCP is considered to be obligatory, at least in the context of stock exchanges and those multilateral trading facilities which trade securities admitted to the stock exchange, although it can also be viewed as a possibility in OTC trades in equities and in fixed-income markets.

10. The CCP would replace two mechanisms in the current system:

- Assurance of delivery by posting entries for buys without making them conditional upon the delivery of the sold securities.

- The system of joint guarantees among participants of the *Sociedad de Sistemas* to cover the counterparty risk and the consequent price risk resulting from fluctuations in the market price of the securities to be delivered.

11. Although the finality of transfer orders is a different concept from assurance of delivery, the proposed changes would be incompatible with the current settlement finality at the time of trade and make it necessary to shift the time of finality from when orders are considered final towards the time of settlement. The goal is to confer finality only on those orders which are expected to lead to the actual delivery of securities (all stock market trades have this status under the current system).

2.2 Settlement by balances and elimination of the Registry References

12. The reform has a particular impact on pre-settlement checks. Specifically, it is proposed to eliminate pre-settlement checks (currently obligatory) relating to creation/removal of RRs and to focus checks on the sufficiency of balances. The goal of this principle is that the existence of sufficient balances of securities and cash should be the factor determining whether a transfer order (which has been duly matched and confirmed) can be settled, without depending on whether or not the seller has delivered the *Sociedad de Sistemas* one or more valid numerical codes corresponding to the securities that were sold.

13. The reform entails the disappearance of the precepts and practices relating to the delivery or generation of RRs in the settlement process, and also of those that result in practice the absence of trade cancellations due to insufficient balances. The need also arises to consider mechanisms for indemnifying the aggrieved party in cases of failed delivery, where cash compensation is required. Accordingly, the certainty of settlement of purchases under the current system is altered, but the new system eliminates the resulting risk of transitory excess balances of securities.

14. The proposed reform does not include numerical codes similar to the current RRs and the control of the integrity of the issues is supported by the specification of standards and rules on detailed record-keeping and its supervision by the *Sociedad de Sistemas* (hereinafter, Iberclear) and the CNMV.

2.3 Amendments to the principles of the registry system

15. The proposal to which this consultation paper refers envisages standardising the detailed record-keeping, at least in its essential features, i.e. account identification, coding of the concepts and principles of the registry records, oversight of matching detailed balances to those recognised by Iberclear, or extraction of homogeneous data sets for enhanced supervision.

16. To date, this system of standardisation hinges on RRs, and the entire ownership registry system (although the RRs *per se* do not confer ownership) and the oversight and data dump processes revolve around them. Accordingly, the reform requires new rules for detailed record-keeping, which had not been necessary to date.

17. Standardisation of detailed record-keeping pursues two objectives:

- To guarantee a minimum level of quality and harmonisation in the principles of managing and keeping a substantial part of the securities registry.

- To enable robust, standardised communications between market participants, Iberclear and the CNMV in order to facilitate the supervisory role (of Iberclear and the CNMV) and other data supply functions.

3.Institutional aspects, legal regime, risk management and CCP participants

3.1 Role and implications of a CCP

18. The CCP is one of the most novel features of the proposed reform, although it is a standard feature of most comparable multilateral markets. CCPs have traditionally been used in derivatives markets and some stock exchanges and trading facilities, but they have been established in numerous stock exchanges in recent years and have also begun to serve unregulated markets (OTC), including repo and derivatives markets.

19. A CCP is an entity that is interposed between the parties to a final contract traded in one or more markets, i.e. it acts as the buyer with respect to all sellers and the seller with respect to all buyers. As market orders are executed, the CCP receives and confirms the required detailed data and performs their immediate, unconditional novation with respect to the clearing members designated for this purpose by the market members. As a result of this novation process, each trade executed in the market gives rise to two trades in the CCP: a purchase, in which the CCP acts as a counterparty of the buyer's clearing member, and a sale, in which the CCP acts as the counterparty of the seller's clearing member.

20. Clearing members report to the CCP how the executed trades are assigned to accounts, whether proprietary or of third parties, and the identity of the designated CSD participant for settlement, if none is pre-assigned. Market members inform the settlement agents of the identities of the buyer and seller in each trade that they have executed, including a detailed individual assignment of brokered securities and prices. The registry process in the CCP concludes at the end of the stock market session.

21. Subsequently, the CCP performs a process of netting each member's individual trades to get, for each session, a net purchase or sale for each member (or account) and each security, i.e. converting trades performed by a plurality of trading members (i.e. multilateral trading as is currently settled in the Spanish system) into a much smaller series of purely bilateral securities settlement instructions in which one of the parties is always the CCP. The CCP sends these orders to the CSD accompanied by the identity of the settling agent designated by each clearing member (if not the default agent). The CSD sends to its participants and checks with them the orders for the transfer of securities and cash that it has received. If there are no incidents, it stores the orders pending the settlement date.

22. The delivery assurance provided by the current system makes it possible to "break" the linkage between buyer and seller and treat purchases and sales separately from the time of the assignment process up to settlement. That is to say, bilateral executions resulting from multilateral trading cease to be bilateral (i.e. the buyer-seller pairs in the settlement process) in the current subsequent assignment process.

23. The proposed model presents a dual concept of bilaterality: 1) bilateral nature of movements between the CCP and its clearing members; and 2) the maintenance of traceability throughout the process, which identifies the buyers and sellers in each market trade so that the information link between the original trading parties is

maintained. To that end, in the new model the existing assignment process (grouping of executed trades by owner, date and price, or breakdown of an executed trade into several transactions for different owners) will be placed in the ambit of clearing/settlement (outside of the trading platform) and will be restricted to disaggregation of trades where this is necessary because there is more than one buyer or seller involved; this makes it possible to know the counterparties in each trade at all times. That is, several transactions by a given participant could not be grouped into a single trade.

24. Clearing members of a CCP need not be market members or settling agents (Iberclear participants). In any event, it is possible to distinguish between three distinct layers: trading (market members, stock exchange), clearing (clearing members, CCP), and settlement-registry (Iberclear and its participants). Those functions may be performed by a single entity or a trade may be brokered, cleared and settled by different players, giving rise to specific market niches.

25. A basic function of a CCP is to mitigate counterparty risk for the market participants to which it provides clearing services. Absent a CCP, guarantee arrangements can be established such as those existing in Spain at present (assurance of delivery) to ensure that the wide range of counterparty risks of market members does not prevent trading by other members or shifts trading towards members with perceived lower counterparty risk, to the detriment of the others. By interposing itself as buyer and seller, the CCP transforms the market members' reciprocal counterparty risk into individual risks between them and the CCP and its clearing members. To mitigate counterparty risk, the CCP must have sophisticated risk hedging mechanisms.

26. It should be noted that a CCP minimises and manages the risk of failure to deliver securities to the buyer on a timely basis, but it does not eliminate that risk entirely. Failure by the seller to deliver securities may mean that the CCP is unable to deliver them to the buyer on the planned date. The total certainty for the buyer of receiving the securities provided by the current system cannot be replicated in a system based on balances; more importantly, it cannot be replicated even if a CCP is introduced.

1. What do you think of curtailing the assignment process?

2. Do you think the aggrieved party should receive the penalty imposed, eventually, to the party in breach?

3.2 Regulatory framework: draft European Regulation

27. At the beginning of the reform process referred to in this consultation paper, Spanish legislation on CCPs was practically non-existent, apart from a number of provisions in the Securities Market Law about authorising them. The European Union has recently begun a regulatory project on a number of post-trade aspects (clearing, settlement and registry) whose first ingredient is a proposal of European Regulation on OTC derivatives, CCPs and trade repositories[1], initially known as European Market Infrastructures Regulation (EMIR). EMIR already consist of a detailed text for discussion. When adopted, EMIR probably will determine many of the conditions governing a CCP operating in the European Union.

28. In particular it regulates, according to the existing proposal, such important issues as the authorisation and supervision of CCPs, their capital requirements, cross-border cooperation between supervisors, organisational requirements, rules on conflicts of interest, corporate governance, operating rules, collateral, and risk management. That is, the main features of a substantive regulation on CCPs would be set out in EMIR, which also would establish a mechanism for technical development of the regulation principles that seeks the maximum harmonisation within Europe by means of decisions of the European Commission or technical standards to be issued by the European Securities and Markets Authority (ESMA).

29. If EMIR is approved in the near future, it will evidently shape the legislation governing CCPs that are established or operate in Spain under the proposed reform of Spanish legislation. Therefore, this consultation

[1] Regulation of the European Parliament and of the Council on OTC derivatives, central counterparties and trade repositories.

paper does not seek to set out detailed regulations on these matters for Spain (a large part of which will be covered by EMIR); rather, it seeks to discuss the minimum requirements for a CCP and its basic characteristics, with two objectives: to provide an explanation without which the other elements of the proposed reform would be difficult to comprehend, and to establish the CNMV's position on some issues about which EMIR is silent or which are left for regulation or interpretation by national supervisors.

30. Therefore, it is particularly important to analyse, from the foregoing standpoint, the CCP-related issues addressed in this section, which will probably be regulated by a European Regulation.

3.3 Number of CCPs

31. It is a fact, both legal and economic, that there are a number of trading platforms where the same financial instruments are traded simultaneously. In 2004, the MiFID established the principle of competition and decentralisation in financial instrument trading, and this was implemented in Spanish law in the 2007 reform of the Securities Market Law. Furthermore the case (relatively usual in the European Union) of one CCP providing clearing services for several trading platforms, two scenarios can be considered as to the number of CCPs and trading platforms:

1) Several competing platforms, each with a CCP.

32. Although there is a high degree of concentration in the official secondary market in equities, a number of factors suggest that there could be an increase in the fragmentation of trading in Spanish equities (i.e. the number of platforms accounting for a given percentage of total trading) in the future. Some of these platforms will have their own CCPs, or will have preferential agreements with a CCP, with the result that there may be several trading/clearing circuits ultimately ending in the CSD designated by the regulated market for settlement, and particularly registry, of securities holdings and transactions, in the broad sense of these terms. However, this multiplicity already exists at present and it poses no major risks nor does it alter the substance of an analysis of the requirements and procedures for a CCP or of the role of Iberclear in the process.

2) Several CCPs serving the same platform.

33. This consists of two or more CCPs co-existing and clearing trades in one or more financial instruments executed on a given platform. The various CCPs would compete to attract clearing business from clearing members.

34. Since the existence of several CCPs dissipates the volume of clearing, it automatically reduces each one's individual compression capacity and impairs the overall system's efficiency. This will be the case unless full interoperability agreements are established so that each clearing member can choose a specific CCP for commercial or operational reasons but maximum compression is attained nonetheless since all trades in a given security, market or platform can be cleared via the same CCP.

35. In this case, clear rules for interoperability between CCPs are needed to ensure that the process does not generate undue risks or risks that are not duly hedged, and that efficiency is not impaired. Interoperability conditions are analysed in section 3.10.

36. Based on the foregoing, it is considered advisable that the reform project should not rule out the possibility of several co-existing CCPs for a given market, but, in line with the provisions of article 44.quater of the Securities Market Law, the law should provide that, where there are several interoperable CCPs wishing to provide services to members of Spanish official secondary markets, their creation and the interoperability arrangements should be subject to authorization and supervision by the CNMV or, in the case of foreign CCPs, to joint supervision with the supervisor in their home country.

3.4 Nationality of the CCP

37. An issue that merits attention is whether there may be a process of Europe-wide concentration of CCP services in the next few years.

38. The conditions in which centralised clearing services are provided should consider that eventuality. Since, despite recent initiatives, there is not Europe-wide harmonisation of post-trade services regulation, it is worth considering whether it would be acceptable for CCP services to be provided by an entity not established in Spain or subject to supervision by the CNMV. Under the existing regulations, this would only be admissible if the CCP were subject to authorisation and supervision by another EU supervisor, and only if there were close, effective cooperation between that supervisor and the CNMV. In any case, the EMIR referred to in section 3.2 can be expected to modify the base scenario and should establish the conditions for effective cross-border operations.

3.5 CCP location and ownership

39. Article 44.bis of the Securities Market Law provides that the *Sociedad de Sistemas* will provide the service of clearing securities and cash as a result of trades in securities.

40. However, there are reasons to support the idea of CCP services being provided by an entity other than the CSD:

1) Operational efficiency, considering the very different functions performed by a CSD and a CCP.
2) The need for a CCP to have specific risk management mechanisms and sizeable financial resources, contrasting with the requirements for a CSD.
3) It is advisable to separate risks between systemic operators so that a serious incident at one does not impair the functions provided by another.
4) It is advisable to maintain registry as a public good, operated by a central management body with no immediate commercial interests in the upstream functions of the trading/post-trading value chain.

41. Therefore, it is preferable that the CCP operator (i.e. the legal entity acting as management body) should be an entity other than the *Sociedad de Sistemas*.

42. If the principle of separation proposed here is accepted, another question arises: whether the existence of ownership links (direct or crossed) and commercial links between platform operators, CCPs and CSDs is positive or negative from the standpoint of efficiency, independence and avoidance of conflicts of interest. In this sense, it is not proven that any given ownership model affects a market infrastructure's efficiency or soundness provided that a number of basic conditions are met:

1) Proper regulation to ensure robust risk management.
2) Tight supervision of regulatory compliance.
3) A high level of competition, ensuring that there are no barriers to entry, that fee structures are transparent and non-discriminatory and avoiding cross-subsidies between the different services.
4) A corporate governance scheme that enshrines the principle of user participation and has effective mechanisms for addressing conflicts of interest between shareholders and users.

43. Therefore, while those premises are included in the rules derived from the reform, the ownership structure of the CCP(s) should not be restricted a priori, without prejudice to the shareholders duty to comply with the requisites of fitness and propriety.

3. Do you consider that the elements described above are sufficient to enable CCPs to be managed professionally, independently of their ownership structure? Do you consider additional factors should be added?

3.6 Scope of clearing: compulsory in multilateral trading in official markets

44. It is considered advisable that, at the very least, it should be obligatory for all multilateral trades in equities on the Spanish stock exchanges to be cleared in one or more CCPs, provided that the CCP(s) and its(their) clearing members fulfil the regulatory requirements. It would appear right to allow bilateral trades (OTC) in

listed securities traded in the stock exchanges or in other securities (fixed-income) also to be cleared in a CCP if the counterparties wish, but without making this obligatory.

45. Due to the existence of economies of scope in CCP services, it would appear advisable to consider, from the outset, the possibility that the CCP(s) offer services as well in the area of fixed-income securities (government and private sector debt) provided there is sufficient market demand, whether they are traded on regulated markets, MTFs or OTC. Accordingly, it would be advisable to include fixed-income in the analysis of the necessary changes, though it would apparently require fewer changes than in the case of equities because clearing and registry of fixed-income securities is already based on a system of balances. Nevertheless, it would be necessary to consider a number of amendments, which may be important in scale, in the registry process (the current system of registration is too costly and complex). Also, trading concentration in decentralised non-electronic markets affects information processes and flows to and from the CCP(s) in comparison with the system in equities.

4. Do you think it should be legally binding to channel multilateral trades in equities listed in the stock exchanges via a CCP?

5. Do you think the reform should be addressed on a joint basis so that the CCP handles both equities and fixed-income securities?
If so,

6. Do you think the use of the CCP should be optional in markets where trading is not multilateral (e.g. fixed-income outside the electronic platforms, block trades, OTC trades in equities)?

3.7 Authorisation and supervision of CCPs

46. Current Spanish legislation already allows for the creation or designation of a CCP for securities. There are basically two possibilities: creation under article 44.ter of the Securities Market Act, or designation under article 44.quater. In the first case, the mechanism would involve creating one or more CCPs under Spanish law to provide services to the regulated markets and other trading platforms. The second case would involve a regulated market reaching an agreement with a CCP from another EU Member State for the latter to clear trades executed in the aforementioned market. This last possibility would usually require the enactment of a harmonizing European regulation such as EMIR that is currently in discussion.

47. As regards the solvency requirements for CCPs, the situation in Europe varies considerably in terms of the ratio between own funds and the volume of cleared trades or collateral posted. Therefore it is very difficult to obtain a standard scale on which to base a recommendation for a universal capital ratio to be imposed on all CCPs. Without prejudice to establishing a legally binding minimum level of capital or own funds that would be generally applicable, CCP solvency should be analysed on a case-by-case basis both at the time of authorisation and in ongoing supervision.

48. Under the draft EMIR, CCPs would be required to have a minimum capital of 5 million Euro, but it considers capital adequacy to be a dynamic element requiring ongoing tracking and supervision.

3.8 Conflicts of interest and corporate governance in CCPs

49. A CCP's corporate governance arrangements must be oriented towards reconciling potential conflicts of interest, particularly between the public interest inherent in the purpose of the CCP, namely to reduce systemic risk, and the private interest of its direct users and shareholders, as acknowledged in the CESR/ESCB recommendations for CCPs[2]. The public interest is protected by public intervention in authorising and supervising CCPs. The interests of direct users are protected by means of an equity holding and representation on the Board of Directors.

[2] "CESR/ESBC - Recommendations for securities settlement systems and recommendations for central counterparties in the European Union". June 2009.

50. The need for CCPs to have a proper corporate governance structure has been a constant concern of regulation, from the 2004 CPSS/IOSCO recommendations on CCPs up to the recent proposed European Regulation on OTC derivatives, CCPs and trade repositories, published in September 2010, whose Title IV addresses CCPs' corporate governance. Regardless of what shape the European regulation in this area finally adopts, the main regulatory concerns about governance mechanisms and bodies are as follows:

1) Ensuring clear and transparent[3] governance rules that fulfil the public interest requirements, and that support the goals of both owners and participants. In particular, they must contribute to the establishment of effective risk management procedures.

2) Ensuring proper management of any conflicts of interest between parties.

3) Ensuring that there is an appropriate structure for the relations between owners, managers, regulators and users, including rules for the composition of the Board of Directors and other governing bodies, their functions and organic structure, devoting particular attention to audit, nomination and risk committees, with user and shareholder participation in the Board and the committees, and establishing clear lines of responsibility between senior management and the Board.

4) Ensuring that the composition of the Board guarantees protection of the rights of CCP users, and that the latter receive sufficient information about the entity's operation.

5) The existence of a detailed regulation for the risk committee to ensure it is independent of management (as is, in fact, provided in EMIR).

6) The existence of appropriate regulation for the functioning of the audit committee (generally comprised of non-executive or independent directors) and the nomination and compensation committee.

7. Do you consider that the conditions set out above about the CCP's corporate governance are sufficient?

3.9 CCP risk management, capitalisation, management of collateral, and access to liquidity

51. To hedge risks, the CCP has the collateral provided by its members and the intraday margin calls. Also, if necessary, it may draw on its clearing members' contributions to the guarantee fund. In the final instance, it must use its own funds to cover losses.

52. A CCP's capital amount should be commensurate with its volume of activity. Part of its funds should be kept in cash, with a liquidity coefficient being established for this purpose.

53. The CCP must monitor, on a continuous basis, the risks entered by the clearing members, checking that the collateral they provided to hedge them is sufficient. Where necessary, it must require that members post additional intraday collateral.

54. The collateral accepted by the CCP must meet the requirements for acceptance by the Eurosystem in its credit operations. The criteria to be applied by the CCP in accepting collateral must take account of the issuer's credit quality.

55. Re-use (re-hypothecation) by the CCP of collateral provided by its members should be allowed only in very specific circumstances, such as intraday liquidity management, which may be provided by central banks, or investment in sovereign bonds.

56. Access to the central bank's liquidity facilities is an additional source of soundness and solvency for a CCP. Insofar as the liquidity facilities are reserved for financial institutions, it appears reasonable for the CCP to be

[3] Main text of CESR/ESCB recommendation 13 for CCPs.

located in the euro area and for its corporate form and legal structure to qualify it for access to central bank liquidity, at least on an intraday basis. It could be considered that CCP has access to central bank's overnight liquidity facility as well, which could entail for CCP to have a banking license.

8. Do you think it is necessary that the CCP have access to overnight liquidity from the Eurosystem?

3.10 Interoperability between CCPs: risks and additional requirements

57. Interoperability between CCPs can be described as a process that allows a CCP to act, vis-à-vis its members, as a global clearing member of another CCP, and vice versa, enabling members of each CCP to clear trades in a CCP of which they are not members. In this scheme, each CCP performs, for all its members and its members' clients, the functions of a global clearing member of the other CCP.

58. The main advantage of this type of agreement is that, for a given product, the client or member can choose the CCP to act as counterparty to clear its trades and through which it can access the settlement of its trades.

59. Interoperability agreements can introduce some additional risk factors, such as counterparty, liquidity, operational and legal risks, which it would be advisable to identify and assess in order to establish additional requirements to hedge them adequately. CCPs that interoperate must have mechanisms enabling them to fulfil the functions of general clearing member with the other CCPs with the maximum diligence.

3.11 Categories, requirements, default and removal of CCP participants

60. CCPs normally have different classes of members in order to accommodate market members' different needs and circumstances. There are general clearing members, who are liable before the CCP for their proprietary activities and those of their clients, including market members who are not clearing members. There are also individual clearing members, who are liable before the CCP for their proprietary activities and for those of their clients, provided that the latter are not market members. And there are also non-clearing members, i.e. market members who are not members of the CCP, who need a global clearing member to clear all their trades.

61. A CCP's strength and financial stability depends essentially on the solvency of its members. It is a priority for the CCP to establish measures to avoid the default of its participants. To that end, entities wishing to become CCP members must be required to have a high level of solvency and the appropriate operational resources. Additionally, the CCP will establish control mechanisms to identify situations that may lead to default by a member and provide early warning signals for detecting potential situations of default, including tracking its participants' risk exposure, imposing caps on open interest, and systems that encourage clearing members to immediately report potential financial, liquidity or other problems that might lead to a situation of default.

62. The CCP's internal regulations must include specific procedures for managing the case of a default of a clearing member. These procedures will tend to mitigate potential losses, to settle in an orderly manner, or to transfer open interest to other clearing members, and generally seek to ensure continuity of the activities of the other clearing members.

63. The CCP must immediately suspend any clearing member that fails to keep its payment obligations. All costs of the default management process must be covered by the collateral provided by the member in breach and, where necessary, any other funds provided by the member, including its contribution to the default fund.

64. The segregation and deposit with the CCP of the collateral provided by clients to clearing members facilitates portability of clients' open interest and assets in the event of breach and consequent suspension of a clearing member. In the same way, in order to protect the overall system it is necessary to consider the possibility for the clearing members to use close-out netting arrangements in case of the default of their clients.

3.12 Failed transactions management mechanisms in the CCP

65. Although the operating rules of the various CCPs in other markets at present may differ substantially and there is no single approach to managing failed transactions, some general reflections can be made in this respect. From the moment the CCP becomes aware of a shortfall of securities, it may address the issue by means of a buy-in to deliver them to the buyer, or it may borrow them for lending to the member in breach with the sole purpose of enabling the latter to make a timely delivery. The choice between a buy-in and a loan should be based on the feasibility of obtaining the securities and the risks incurred in each case. In the loan option, the CCP may act as a direct counterparty of the lender or borrower, assuming principal risk. In this case, the cost of the loan should be covered by additional collateral provided by the clearing member that failed to deliver.

66. If the CCP chooses to buy-in the securities, it may purchase them directly through bilateral trades (even OTC), with settlement in the same trading session or in real-time, if that possibility is available. The securities so acquired may be sold or loaned to the clearing member in breach. The costs of these transactions, including price differences, should be covered by additional guarantees.

67. An alternative mechanism consists of the CCP using securities provided as collateral by its clearing members to resolve securities delivery failures. To that end, it must always have prior authorisation from the clearing member and recognise the cash collateral demanded from the member for the loan as a new guarantee. This approach would appear to be reasonable only to overcome transitory shortfalls in securities.

68. Where it is not possible to borrow the securities or purchase them with settlement in the same day, the CCP must postpone or cancel the corresponding settlement instructions. Any deferral of settlement must follow the rules established by the CCP. In the event of cancellation, the affected buyer must receive compensation in lieu of the shares to which it is entitled. All the costs arising from the chosen solution plus any penalties must be charged to the clearing member that failed according to the rules established by the CCP.

69. To ensure that any failure in the delivery of cash by a clearing member is resolved, the CCP must have sufficient liquidity to pay its clearing members who are net sellers. That liquidity may be obtained from any of the following sources:

1) Collateral provided in cash to the CCP.
2) The sale of securities through special transactions settled in the same day (sell-outs), where the CCP orders the sale of assets owned by the failed party so as to fulfil the obligations which the latter assumed to deliver cash.
3) Credit lines with financial institutions posting as collateral the unsold securities.
4) Access to intraday finance and other marginal credit facilities of the Eurosystem if feasible according to the Eurosystem policy.
5) The liquidity coefficient required to the CCP.

9. Do you consider the proposed mechanisms for managing failed transactions to be appropriate?

3.13 System of penalties

70. The CCP's regulation must clearly establish a system of penalties for breaches with a triple aim: to discourage failed deliveries of securities and cash, to compensate for the financial losses to the non failing party and to cover the costs incurred by the CCP to solve or reduce the failure. Therefore, the penalties must be proportionate with the amount of the failure and its seriousness, particularly when it results in delay or cancellation of transaction's settlement. The system of penalties should include indemnity for the aggrieved party, consisting of a cash compensation for the failed settlement, based on the market value of the financial instrument to be delivered at the time of the trade, plus a percentage to compensate for the cost of replacing the position plus an additional amount for damages.

71. In addition to the penalties, the CCP will charge clearing members in breach for all the costs of the mechanisms to manage the incident.

72. Penalty mechanisms should be transparent and objective, and the procedures for calculating financial penalties should be disclosed publicly.

4. Changes in the settlement system

4.1 Settlement by balances

73. The changes to be made in the settlement model should pursue greater convergence and compatibility between the current settlement systems used for fixed-income and equities in the majority of the European countries. In particular, a bilateral settlement model by balances is proposed, similar to the existing for Spanish fixed-income securities which will facilitate the compatibility of the new stock market settlement system with pan-European projects such as T2S platform for securities settlement.

74. The possibility of cancelling trades and of introducing clearing services in one or more CCPs, at least for multilateral trading in stock exchanges, makes it advisable to establish the principle of bilaterality for all stock market trades, thus maintaining for information purposes the linkage between purchases and sales from their execution.

75. Settlement of other trades, all bilateral, which will not be cleared at the CCP, may be performed through specific settlement processes or included in the settlement processes established for transactions resulting from clearing in the CCP.

76. Settlement of stock market transactions will follow a balances approach for both securities and cash, and the settlement system will work only on the balance of securities recognised in its proprietary accounts and the clients' omnibus accounts of its participants. Settlement will not require the delivery of RRs, which will be eliminated from the settlement processes.

77. The settlement by balances model will apply to all settlement processes. In each one, the settlement system will calculate each participant's securities position as a result of settlement instructions that result in credits or debits to their securities accounts. Before settling the transactions, the central system will verify that the securities recognised in each participant's proprietary accounts and omnibus third-party account are sufficient and will send the corresponding orders for cash credits and debits to the Bank of Spain (TARGET2) so that it can check there is sufficient cash in the accounts of participants who are net payers, block the necessary cash balances and return the results of the cash account to the CSD. Where the result is positive, the transactions will be declared final (i.e. accepted by the system) and the CSD will commence the process of settlement through delivery versus payment.

78. It appears reasonable that the last bilateral settlement cycle of transactions novated by the CCP should conclude at least one hour before the settlement of bilateral transactions not involving the CCP. This point is particularly important in the case of OTC activities since it would allow participants sufficient time to deliver, to their ultimate clients, the assets received in settlement resulting from prior netting at the CCP without missing a settlement date, thus avoiding the problem of "onward deliveries".

10. Do you consider appropriate the proposed model of settlement by balances and the elimination of the RR?

4.2 Requirements for participants in the new settlement system

79. In the proposed model of settlement by balances, the CSD operates with exclusive information on each participant's securities position in its proprietary and clients' omnibus accounts at any given time. By working

with the aggregate positions of participants' securities accounts, the system benefits from the full potential of the fungibility of the securities in each issue, which in turn makes the settlement process more agile and efficient.

80. However, when it comes to trigger the settlement account, the CSD does not have sufficient information on its participants' detailed securities registry and it is unable to verify whether each individual client of a participant with a net selling position in the settlement account has sufficient securities recognised on the participant's books. That is to say, the central system must settle without being able to verify that the information of each participant's individual client accounts perfectly matches the aggregate data that the CSD recognises in the participant's omnibus account.

81. This lack of detailed registry information at the time of settlement makes it necessary to require great responsibility on the part of all participants in fulfilling their obligations. Independently of the mechanisms established to ensure integrity and accuracy in the detailed record-keeping, which are absolutely essential, it is considered prudent to impose more stringent requirements on participants than at present, in parallel with the greater responsibilities which they assume. In particular, the function of registry and book-keeping of client securities accounts warrants requiring a high level of solvency and technical resources as well as sufficient, capable, proven control capacities.

82. In short, it would appear reasonable to strengthen participants' financial capacity to enable them to meet liability for any deficiency in securities book-keeping and the potential negative consequences for their clients. In order to enhance participants' solvency, membership of the CSD should require sufficient own funds, regardless of the entity's legal status, but without requiring a bank charter. Some countries have established a rule under which the participant's proprietary accounts could be used to compensate for a possible lack of securities in its clients accounts.

11. Do you consider it necessary to impose solvency requirements on participants in the proposed settlement system?

12. Do you consider the participant's proprietary account should be used to cover shortfalls in securities in its customers' accounts?

4.3 Failed transactions management: the role of the CSD

83. The CSD must settle trades previously cleared by the CCP as well as others not from the CCP. Settlement of the former will be guaranteed by the CCP and its clearing members. It is the responsibility of the CCP to resolve any incidents in settling these transactions using its system of collateral. To this end, it is necessary to create mechanisms for coordination between the CCP and the CSD that contemplate the possibility of cancelling trades where the CCP cannot buy-in the securities in the period provided for this purpose and needs to apply cash or equivalent compensation mechanisms provided for these cases.

84. Settled transactions that are not from the CCP are not guaranteed. To minimize settlement failures in these transactions, it is advisable for the CSD to arrange liquidity supply mechanisms to enable the securities to be obtained in situations of transitory shortfalls. In the final instance, the CSD must cancel the trades that cannot be settled by the deadline established in its regulations.

85. An additional mechanism available to the CSD is partial settlement of the trade, subject to this being allowed in its regulation. In some cases, this option would permit in some cases to reduce the shortfall of securities and make more effective the alternative mechanisms for solving failed transactions.

13. Do you consider that the proposed failed transaction management mechanisms are appropriate?

4.4 System of penalties to compensate the non failing party

86. The introduction of a system of penalties for CSD participants who are unable to settle their trades by the deadline is considered to be a useful means of incentivising their settlement discipline .

87. The system of penalties to be established by the CSD must be confined solely to the trades it settles directly. Trades from the CCP will be subject to the penalty mechanisms established by the latter.

88. The penalties should be sufficient in amount to discourage delivery failures, and they should also be proportional to the harm caused or to the aggregate ratio of failures by the participant in a period. Where appropriate, penalties should be used to compensate the compliant party for settlement breach by the counterparty where it is not possible to avoid settlement failure using the failed transactions resolution mechanisms put in place by the CSD.

89. The CSD may also penalize the party in breach with a fine sufficient in amount to cover the cost of executing the procedures for solving failed transactions.

90. It is necessary that penalty mechanisms be transparent and objective, and the procedures for calculating monetary fines should be disclosed publicly. It would also appear to be advisable for the CSD to publish information on trades where settlement failed, as an incentive to discipline in settlement.

14. Do you consider that there should be a mechanism of alternative compensation?

15. Do you consider it appropriate to establish a penalty system so as to discourage settlement failures?

16. Do you think that the CSD should publish information on trades where settlement failed? If so, in what degree of detail and how often?

5. Changes in the registry system

91. The Spanish regulation on book-entry securities adopts an approach involving total dematerialisation (i.e. no paper). The security certificate has been replaced entirely by book entries in the registers of the entities that manage the system. The establishment and transfer of rights takes place through inscriptions in the corresponding registries. Replacing security certificates with registry entries, as the documentation supporting rights, has made it possible to maintain the conventions of the *in rem* law within the book entry system and, consequently, the bulk of the principles governing the special law on security certificates.

92. The reform of the operational model for registry is based on the premise that the current regulation on book-entry securities should be preserved as far as possible while making the necessary changes as a result of the change in the operational approach. Nevertheless, the reform does not envisage a radical change in the regulations on book-entry securities laws: rather, it involves adapting the current regulations (basically contained in the Securities Market Law and in Royal Decree 116/1992) to the new approach. In any case the reform does not seek to change the contractual relationship between the participants and their clients or the book-keeping of client securities accounts.

5.1 Changes in ownership assignment and accreditation: elimination of the RR system

93. The reform proposes to replace RRs with a system of registry by balances under which security accounts are kept following standardised rules , to be described later; this represents a major change from the operational point of view.

94. RRs were conceived as an instrument for "proper control of the system"[4]. They play an indisputably valuable role in the system's security, as a link between the central registry kept by the CSD and the detailed

[4] Article 32 of RD 116/1992 .

records kept by participant entities, and as a tool for ascertaining the number of securities of each class that are outstanding at any given time. Moreover, by means of a coded series of numbers, RRs make it possible to identify specific balances of fungible securities and, if this information is crossed against the central and detailed records, they can be attributed to a specific owner, thus avoiding application of the rules on collective deposits. At the same time, because of their composition, RRs make it possible to trace the origin of each credit and debit (transaction traceability) and, in the event of system malfunction, attribute losses to individual investors.

95. However, although they play an important role in the security of the securities registry, RRs do not entirely eliminate custody risks since the assignment of a specific RR to a specific owner depends on the participant. Moreover, the current modus operandi, in which the RRs that were sold must be delivered to the CSD in the settlement process and the latter generates RRs corresponding to the purchased securities, makes it more difficult to achieve the objectives pursued by the reform: to efficiently leverage the functional advantages of CCPs and facilitate participation by the CSD in integration projects such as T2S.

96. Although the elimination of RRs will have a substantial impact from an operational standpoint, it does not entail a radical legal change, although some regulatory amendments will be required to reduce the legal risks that may arise due to the change in model. Specifically, RRs are regulated in an article of a regulation as an element for controlling system balances, whereas the general legislation on book-entry securities hinges on concepts such as “accounting records”, “recording”, “entries” and “registrations”. In fact, the legal regime on book-entry securities is indifferent to the existence or otherwise of RRs as a control mechanism.

97. In the proposed reform, accreditation of securities ownership does not depend on the assignment of RRs to a specific investor; rather, it is determined in each case by the balance of the accounts kept by the CSD or in the detailed accounts kept by participants for their clients, in accordance with standardised book-keeping requirements and procedures and under the supervision of the CSD.

5.2 Maintaining the single, two-tiered registry. Elements of synchronisation between the two tiers of the registry

98. The proposed model is based on maintaining the system of a single two-tiered registry so that the registry is jointly kept by the CSD (Iberclear) and its participants. The characteristics of the registry as set out in article 31 of Royal Decree 116/1992 are maintained. The CSD will be in charge of the central registry and, for each participant and each category of securities, it will keep an account reflecting the balance held by each participant for its own account at any given time and another account reflecting the total balance of securities that the participant has registered in detail accounts in the name of its clients, who are the owners of the securities.

99. Nevertheless, a new feature introduced by the reform is the possibility that certain firms that are not participants may have segregated securities accounts at the CSD via the CSD’ participants.

100. The CSD will be in charge of ensuring that the sum of the balances in the accounts recognised by it at central level does not exceed the maximum balance of securities in each class of security. Additionally, it will supervise detailed book-keeping by participants in accordance with the technical procedures to be determined.

101. Therefore, as is currently the case, the CSD will keep each participant's proprietary account, and the participants themselves will keep the book-keeping of the detailed securities registry for their clients. "In accounting records kept by the participants, a record will be kept, with reference to each security, of the accounts corresponding to each investor, which must reflect at all times the balance of securities owned by the investor".[5]

[5] Article 31.2 of RD 116/1992.

102. In no event may a participant recognise a balance of securities in the name of all its clients in aggregate which is greater than the balance of each security recognised for the participant in the omnibus account at the CSD level.

103. In order to avoid or reduce potential situations of inflation in the detailed records kept by participants, rules of conduct must be instituted to ensure that the additions and removals of securities between detailed accounts within a given firm take place simultaneously.

104. Additionally, there must be rules to the effect that the changes in detailed accounts that entail an increase or decrease in the balance of the omnibus clients' account must take place once the change in the omnibus account has been effected, and as soon as possible.

105. The elimination of RRs should not suggest that the unity of accounting record is being abolished. The central registry and the registry kept by each participant will continue to be relevant and complementary. The former will determine the maximum number of securities in each class that may be distributed among the clients of each participant, whereas the detailed registry at participants will provide the breakdown of securities (or rights *in rem*) per investor.

106 Under the new model of registry-keeping, entries in the detailed accounts and in the participants' proprietary account at the central registry will be made by means of credits or debits against the balances in the participants' accounts and will not require RRs to be delivered or generated beforehand. Movements in these accounts must be made in accordance with uniform rules that are binding for all participants, and the CSD will be in charge of supervising proper book-keeping.

107. Moreover, the registry principles currently in force, such as priority and chain of title, or the rule that a credit cannot be registered without a corresponding debit, should not be eliminated; rather, the fact that trades are settled by balances and that credits and debits of securities no longer go through the centralised RR system but are "internalised" in the case of transactions between clients of the same participant increases the operating risk that these principles will be violated through error, negligence or malice. Nevertheless, it makes legal sense to maintain them, although they may need to be adapted somewhat to the change in the registry model.

5.3 Acquisition of securities and legal nature of investor rights

108. Book entries and cancellations will take place by means of credits or debits in the respective accounts kept by the CSD or the participant.

109. Under the current regulations[6], "inscription in the holder's name in the accounting records of the participant or, where the latter is the owner, in the registry kept by the Service will have the effects provided in articles 9, 10 and 11 of the Securities Markets Act and matching precepts in this Royal Decree" (non-actionability, legitimation, presumption of ownership).

110. Therefore, the relevant accounts for determining ownership of book-entry securities, and when ownership is acquired or lost, must be precisely those accounts (the account at the CSD, in the case of securities owned by the participants or firms with segregated accounts, and the detailed accounts in the case of securities owned by the participant's clients). Those same accounts should be considered as the relevant ones for the purposes of registering limited rights *in rem*, seizures, loans, etc. (applying the principle established by other jurisdictions where by this type of right may not be registered in the immediate upper tier of the relevant client accounts— "upper-tier attachment").

111. Client rights are in some way conditional upon participants keeping accounting records diligently and properly, so that the total balance of the omnibus client account recognised at the CSD coincides with the sum of the balances of all the detailed client accounts.

[6] Article 31.5 of RD 116/1992.

112. In the event of a discrepancy, the balances recognised by the CSD will prevail over those recognised in participants' detailed records.

113. The elimination of the RR does not necessarily, per se, alter the legal nature of the ownership of book-entry securities as a right *in rem*.

114. In fact all European jurisdictions where the balance-based registry system has been adopted configure ownership of securities as a right *in rem* and not as a credit claim. Nevertheless, there are variations.

115. In some cases, the investor has the direct ownership right to the balance of book-entry securities recorded in the participant's detailed accounts, although that right is conditional upon the firm's balances in its client accounts matching those in the central registry for each class of security. In other cases, investors are considered to have a sort of joint ownership, by quotas, of the collective deposit, i.e. of the overall balance of the participant's third-party accounts at the CSD. In Spanish law, contrasting with other jurisdictions, the fungibility of the deposited good does not render the deposits irregular, even if mixed with fungible goods of other deposit-holders, except where expressly agreed otherwise[7]. This idea can be applied to book-entry securities. Omnibus accounts of fungible securities are not necessarily classified as irregular deposits but, rather, as a collective deposit. This is a case of joint ownership rights of the clients in whose accounts the securities are credited over the total amount of fungible securities of the same class which the participant has credited in its omnibus account at the central registry[8].

116. A third alternative, which was applied in the past in some other countries, would consist of a combination of the two approaches. Under this construct, investor rights would be classified as individual property rights over the securities credited in the account but, in a bankruptcy situation, these would be transformed into joint ownership by quotas of the collective balance at the CSD.

17. Do you have any other legal comments on this issue?

117. The legal system must provide the response to the problem that may arise if the participant has recognised in its clients' favour an amount of securities in excess of that recognised in the omnibus account at the CSD, particularly in the event of bankruptcy, since otherwise the participants must indemnify any aggrieved parties in kind, as far as possible.[9]

118. To that end, in a registry-based system, determining which investor must bear the loss can be made by recourse to the registry principles (priority, chain of title, presumption of good faith, etc.) or, alternatively or subsidiarily, if the application of such principles proves insufficient for this purpose, the pro rata rule could be applied.

119. Although the application of the registry principles may apparently be the most appropriate approach in a registry system, it is proposed, in line with other European jurisdictions, to apply a pro rata rule, i.e. attributing any securities shortfall proportionally to all owners of the class of security concerned at the participant, although, given the scope of this proposal, it will need the involvement of a court in order to be applicable.

120. The pro rata rule seems to be the most common approach in balance-based registry systems, and it is justified by reasons of clarity and because it is the approach that is most coherent with the principle of treating all a firm's clients equally; i.e. it represents an equitable distribution of the harm resulting from improper keeping of the securities registry. Another justification for this rule is that it is apparently the most beneficial approach as regards reducing systemic risk in the event that, as a result of insolvency of the participant, a financial institution which is a client of the insolvent firm might be left without securities in the distribution, which would trigger a cascade of non-compliance. Anyway, the pro rata rule is considered as a last resort solution, only in those cases where it is not possible to identify the reason of the securities shortfall or resolve it with the own funds of the participant.

[7] Articles 309 of the Code of Commerce or 1768 of the Code of Commerce, *a sensu contrario*.
[8] The Securities Market Act indirectly confirms this interpretation when it acknowledges the CNMV's power to transfer securities to another entity "even if those assets are deposited at third entities in the name of the undertaking providing the depository service" (article 70.ter.f).
[9] Articles 7.5 of the Securities Market Act and 27 of Royal Decree 116/1992.

18. Do you agree with the introduction of the pro rata rule into Spanish law as the method for resolving securities shortfalls in the event of insolvency of a participant?

121. Additionally, to strengthen the system's solvency, other jurisdictions have introduced a rule whereby, in the event of insolvency of a participant, the securities held in its proprietary account may be used to cover shortfalls in its third-party accounts. Accordingly, investors would take precedence over other creditors of the insolvent firm.

19. Do you agree with introducing this rule? If so:

20. Do you consider that a rule such as the one proposed should be formulated such that all the securities in the insolvent firm's proprietary account may be used to cover any overall shortfall in securities in third-party accounts? or, on the contrary

21. Should the attachment of securities in the proprietary account be limited to the shortfall in third-party accounts of the same class of security?

122. The latter two proposals would represent a departure from existing regulations and would need, where appropriate, a specific legal provision to be enacted.

123. The regime for exercising corporate rights and for establishing liens on securities and issuing legitimation certificates will remain unchanged. It will hinge on the registry work of the participants, and the replacement of RRs by balances does not alter the current legal system.

5.4 Principles of account segregation

124. In addition to participants' proprietary accounts and third-party accounts, certain other countries allow non-participants to maintain segregated accounts in the central registry.

125. The segregation of accounts has the advantage that any mismatch or shortfall in securities is not collectivised among all clients of a given firm but is distributed by accounts. Each owner of a segregated account will bear only the risk of shortfall in its own accounts at the central registry but will not be affected by shortfalls in other accounts kept by the same participant.

126. This is the most coherent solution if segregation of a given firm's third-party accounts at the central registry is accepted and supported by legislation. The idea of "unity of registry" between central registry accounts and detailed registry accounts leads inexorably to this conclusion. Nevertheless, there is nothing to prevent a special rule being legislated for a very specific case: when there is a surplus in one or more client accounts and a shortfall in another, it may be reasonable to use this surplus to cover the shortfalls rather than assigning it to the bankrupt estate. Again, this solution will need to be legislated specifically.

127. If it is accepted that the participant's proprietary account may be used to cover any shortfalls in third-party accounts, one may also consider the order of precedence in assigning securities from the participant's proprietary account among the various third-party accounts kept by the firm prior to the application of any pro rata rule.

5.5 Principle of operational keeping of the detailed registry

5.5.1 General basic concepts

128. Securities registered in the system must be identified by their International Securities Identification Number (ISIN), which hereafter will be equivalent to referring to a specific security. To each ISIN will be assigned an integer equal to the number of securities with that ISIN in the overall system in its two tiers. That integer will be the *Control Batch*, i.e. the only numerical reference for checking the integrity of the number of securities for each ISIN in the system.

129. The balances in the securities accounts of the two tiers will be kept by an accounting method. In addition to establishing which entries are valid for modifying account balances, the system will distinguish between two basic classes of book-entry:

130. On the one hand, those that modify the value of the *Control Batch* of a given ISIN because, when they are all performed simultaneously, all with the same arithmetic sign, they increase or decrease *ipso facto* the number of securities of that ISIN in the aggregate accounts of the two tiers (i.e. by increasing or decreasing the number of outstanding securities with that ISIN that are registered in the system).

131. On the other hand, entries due to transfers of securities between accounts in the system in either of its two tiers, which do not alter the *Control Batch* of any ISIN. The latter will use a double entry accounting method. Under the system, the validity of these entries is conditional upon: (1) the increase in the balance of an account by an amount X of securities to reflect ownership of a given ISIN is matched by a simultaneous reduction in the balance of one or more accounts with that same ISIN which amounts to X in aggregate; and (2) no balance can be rendered negative by the reduction.

5.5.2 Securities accounts and harmonised coding

General basic principles

132. Participants will operate the detailed securities accounts vis-à-vis the system being able to distinguish and report at all times segregated information according to each existing combination of ISIN, form of holding and different identified ownership and status of the holding. This system of keeping the securities accounts can rest on the internal register of subaccounts for each owner (by ISIN and form of holding).

133. Participants would keep itemised accounts of securities held by third-party owners of ISIN in the system, whereas Iberclear will keep each participant's holding accounts. It will also keep "*general third-party accounts*" (omnibus accounts) by ISIN and participant; in each such account, Iberclear will enter the number of securities recognised as a result of the total of the balances of third parties that the participant has open in the system for a given ISIN.

Optional forms of book-keeping

134. As optional departures from the general basic principle of book-keeping and balances, the following kinds (any one or all three since they are not necessarily alternative features) could be considered:

135. One: Iberclear, either directly or indirectly, keeps segregated on its books all the accounts and balances of all holdings by certain persons of ISIN recognised in the system.

- In the direct case, Iberclear will keep the itemised accounts segregated for those persons and will directly make postings to the accounts. This type of record-keeping does not give those persons either the status or the powers of system participants. This option is not conceived as a widespread system of direct accounts, but as an specific form for a very limited number of institutions (securities accounts of General Government Administration, other CSD with interoperability agreements or links with Iberclear, etc).

- In the indirect case, movements in individual segregated accounts owned by those persons will be made, as in the case of all other third parties, by participants, but Iberclear will always be aware of those persons' identity and their balances in a specific section of its central books. This possibility arises as an optional element for certain investors who wish to have their balances recognized in the CSD, for custody risk mitigation purposes or, where appropriate, mandatory for certain types of collective investment.

136. Two: Iberclear can keep, directly in its central books, all the securities accounts and balances of all holders of a given ISIN recognised in the system, having regard to the special circumstances or problems of the securities issued under that ISIN or the listed company. It could be of application to registered stocks, but its scope would not affect all them.

137. Three: the participants may, in certain circumstances, keep collective accounts, i.e. those that group securities holdings of various natural or legal persons without identifying them individually. Participants will only be able to open such collective accounts for non-resident investors.

22. Which of the optional modes of record-keeping do you believe might be a suitable alternative to consider, and which do you believe should be ruled out?

Account coding

138. The system of coding securities accounts must be uniform or harmonised in its basic features in both tiers, and it must be regulated and supervised by Iberclear. Nevertheless, if participants decide so, they could use variations or extensions of the general code in their internal books of third-party securities accounts. Those private variants or extensions may not, either legally or in operational terms, replace the harmonised codes or have any validity vis-à-vis the system.

139. Coding of individualised securities accounts must take account of the natural or legal persons identified as owning a balance, the legal form of holding that balance, and the operational status in terms of duration and legal restrictions. To that end, the code or sub-codes associated with any individualised or collective account in the system must identify at least the following fields, relating to the three classes of fundamental classification data: (1) *ISIN, location, form of holding, and holders*; (2) *duration of holding (temporary or indefinite);* (3) *restrictions on the balance for each ISIN code.*

140. At all times, Iberclear will control the proper use of coding in the system (see Annex 1) and will define all the software specifications for the processes of coding securities accounts in the overall system, the interchange files and electronic formats, channels and means for transmitting files, and the processes for validating such transmissions.

5.5.3 Entry of items in the accounts, and harmonised coding

General basic principles

141. There may be differences in the details of the source and level of detail in the entries in *general third-party* accounts in Iberclear's books and in the individualised accounts at the participants books, even though the origin of the data is the same. The necessary details for posting entries in individualised accounts should include the identity of the holders, a datum that would not be necessary when posting entries to the *general third-party* accounts kept by Iberclear.

142. The system will distinguish between entries in the individualised accounts *resulting from a purchase or sale* and *those arising for other reasons* (see Annex 1) and it will treat them differently. The former should also include purchases/sales between balance accounts kept by a given participant or by Iberclear, even if no cash or securities are released since the participant also settles the trade.

143. In connection with *general third-party accounts* in the first tier of Iberclear, the data required to move balances of third-party holders at the ISIN and participant level would be split into aggregate additions and aggregate removals (even though settlements or transfers are on a net basis). The balances resulting from those additions and removals will take precedence over the sum of individualised balances in the accounts that participants keep for third parties with regard to each ISIN.

Coding entries that modify book-entry balances

144. Iberclear will regulate the coding and formats of the basic items that qualify to be represented as book-entries in the system accounts, including those kept by the participants. The only items that may modify the balances of those accounts are those coded in accordance with the Iberclear specifications. Nevertheless, participants may also elaborate upon the harmonised code or, if they wish, use other codes in their internal

books. These private developments or codes may not take the place of those recognised by the system nor will they have any validity vis-à-vis the system.

145. The harmonised code of book entries and items must contain at least the following data fields: entry date, ISIN concerned, description of the entry, sign of the entry, number of securities + [date of the addition or removal, if known] (see Annex 1).

146. Iberclear will define all the software specifications for the processes of coding book-entries and accounting items in the overall system, the interchange files and electronic formats, channels and means for transmitting files, and the processes for validating such transmissions.

23. Do you agree with the need for harmonised discipline that regulates the accounts and book-entries, and that variations used by participants should be valid vis-à-vis the system?

5.6 Control and supervision mechanisms by Iberclear and CNMV

1. General principles and tasks

147. Iberclear should not be responsible for the quality and accuracy of its participants' keeping of individualised accounts and collective accounts, if any, or for discrepancies or anomalies in the balances; however, it will be responsible in the case of individualised accounts on its central books of investors with a direct account.

148. Iberclear will be responsible for executing the controls of verification and reconciliation of the general integrity and of the overall detailed accounts in the system, including those kept by participants. The participants will be obliged to reconcile and justify to Iberclear the origin and cause of any discrepancy, to provide Iberclear with all explanatory information and details, and to present any information that is requested in accordance with the specifications on control and supervision procedures included in a rule book that Iberclear must develop (Annex 1 sets out the matters to be addressed in the manual).

149. Iberclear should have powers to require from its participants any information that is needed for its system supervision functions, and the participants should be obliged to comply.

24. Do you agree with these general principles on the distribution and identification of tasks and responsibilities between Iberclear and the participants?

2. Checks to be performed by Iberclear

Daily checks

150. Iberclear must check the integrity of the ISIN *Control Batch* datum. Additionally, it must check and reconcile its general journal of aggregated items posted to the *general third-party accounts* by ISIN and participant, comparing it with daily summaries of gross additions and removals, and the resulting balances, which participants must submit on the basis of the general journals of additions/removals entered in individualised third-party accounts which they keep in their books (see Annex 1).

Regular checks (not necessarily daily)

151. Iberclear would periodically (at least four times per year or with the minimum frequency to be determined) send statements of balances and entries in its *general third-party accounts* to the participants for reconciliation by the latter, and also to ask the participants for details of the general journal of additions/removals in third-party accounts and their balances for cross-checking (see Annex 1).

3. Other control mechanisms

152. Iberclear would have the power to suspend a participant for a serious breach of their functions, or repeated continuous non-serious breaches. It would also draw up, with the frequency to be determined, tracking reports of the system's efficiency (see Annex 1 for more details of this item 3).

25. Do you agree with the proposed approach to control, cross-checks and daily and regular verification?

4. Control and supervision by the CNMV

153. The authorisation and inspection powers granted by current regulation to the CNMV must be adapted to attribute to this body the power to verify and supervise that Iberclear performs the regular and daily checks and produces the tracking reports referred to in the preceding paragraph.

5.7 Facilitating financial and corporate transactions, and other services to issuers

154. Iberclear should be the only channel for communication between issuers and intermediaries in preparing financial and corporate transactions; to this end, it should be empowered, in this context, to obtain from participants *all the identification data of holders and balances* in their accounts as of a given date or dates.

155. Participants would be obliged to provide Iberclear with that data in that context, in accordance with the files, electronic formats and transmission protocols established by Iberclear for that information, and it would keep the data only so long as the financial/corporate transaction for which they were obtained is under way.

26. Do you agree with the proposed approach to dealing with corporate/financial transactions?

27. Do you consider that this is the right approach or can you propose substantial changes?

5.8 Participants' liability

156. Replacing a registry system based on RRs with one based on balances entails granting greater responsibility to participants insofar as the postings of additions/removals of securities in the detailed records do not require prior intervention by the CSD. It is logical to presume that this greater autonomy can lead to greater operating risk in custody, hence the proposal to impose more stringent requirements (both technical and in terms of own funds) for entities wishing to become participants.

157. Moreover, even though the CSD should be empowered to suspend a participant and take other precautionary measures in the event of a serious or repeated breaches of its functions, the participants may also incur administrative and civil liability in such cases.

158. As regards administrative liability, the Securities Market Act already classifies breach by participants of their obligations as a very serious infringement.

159. Participants may also incur civil liability. This is referred to in article 7 of the Securities Market Law and article 27 of Royal Decree 116/1992, which establish a system of liability for risk. Under those articles, failure to make the pertinent entries, inaccuracies therein or delays and, in general, any infringement of the rules laid down for the keeping of records shall give rise to liability on the part of the entity entrusted with the function or the participant in breach, or, where appropriate, Iberclear, vis-à-vis the aggrieved party, unless the aggrieved party is solely to blame. As for the consequences, where the harm consists of deprivation of certain securities, the entity responsible must purchase securities of the same characteristics for delivery to the aggrieved party, where this is reasonably possible (article 27 of RD 116/1992). Otherwise, it must pay damages.

28. Do you agree with the foregoing approach?

5.9 Mechanisms for resolving errors in account-keeping

160. To exercise supervision of proper book-keeping by participants of their clients' individual securities accounts and their proprietary accounts, Iberclear must have procedures for regular reconciliation of its participants' securities positions and for supervising their detailed book-keeping so as to enable it to detect mismatches in participants' securities accounts. Iberclear's regulations should include procedures for immediately resolving any mismatches detected in securities accounts.

161. If any shortfall of securities is detected in a participant's third-party account, the firm must cover the deficit with securities from its proprietary account or by purchasing securities in the market.

29. Do you agree that the participants of the settlement system should cover shortfalls in securities in their customers' accounts out of their proprietary accounts?

5.10 System of penalties for book-keeping errors

162. Iberclear will have a system for penalising participants that present mismatches in their securities positions. The penalties should be sufficient to return the non delivered securities to the clients, provided that the damage has not been previously repaired. Moreover, there will include a system of penalties for the responsible for the mismatches, in order to encourage due diligence in record-keeping.

6. Departure from assured delivery and amendment of the principle of finality

6.1 Amendments in the area of finality

163. The concept of "finality" of securities and cash transfer orders, and of the related clearing, was introduced into the law[10] with the fundamental objective of ensuring that the clearing and settlement processes, managed by systems that qualify for inclusion in its scope, are not perturbed as a result of the declaration of insolvency by any participant, the goal being to reduce systemic risk. In this way, once the transfer order or the clearing of such type of orders becomes final according to the system rules, those orders and where appropriate any clearing between them become enforceable and binding upon the parties that ordered them and are enforceable vis-à-vis third parties, and the system has no obligation to guarantee or cover a lack of cash or securities for the purposes of settlement or clearing. In these cases, systems may draw on the collateral provided by the insolvent participant in order to fulfil its obligations preferentially with respect to other possible creditors.

164. Both the European Directive regulating this institution and the Spanish law transposing it (Law 41/1999) established finality in connection with securities and cash transfer orders and the clearing between them[11]. Additionally, the Law also applies to "payment and clearing and settlement systems for securities or financial instruments"[12].

165. Consequently, not only the securities settlement systems managed by the CSD but also any CCP that clears stock exchange trades and fulfils the rest of the requirements established in the regulation should be considered as systems for the purpose of Law 41/1999 and, therefore, both types of institutions must establish in their rules on finality[13].

10 Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on settlement finality in payment and securities settlement systems, transposed into Spanish law by Law 41/1999, of 12 November, on securities payment and settlement systems.
11 Article 11 of Law 41/1999, of 12 November, on securities payment and settlement systems.
12 Article 2 of Law 41/1999, of 12 November, on securities payment and settlement systems.
13 This conclusion is supported by the fact that, at present, not only does indent 10 of article 44 bis of the Securities Market Act establish that Sociedad de Sistemas (now Iberclear) is the manager of the clearing and settlement systems recognised by Law 44/1999 but also, in connection with CCPs, article 44.ter of that Act establishes that the provisions of Law 41/1999 are applicable to CCPs authorised by the Ministry of Economy.

166. Nevertheless, CCP(s) and the systems managed by the CSD do not constitute a single system; rather, they are distinct (though interconnected) systems and, consequently, each one must have its own finality rules. Such rules must be duly coordinated to minimise risks.

167. If one or more CCPs are introduced into the post-trade infrastructure, the provision contained in Royal Decree 116/1992[14] with respect to the principle of delivery assurance as one of the principles governing the settlement of securities trades and, therefore, the settlement activities of the CSD will cease to be meaningful.

168. The CSD will only be obliged to settle securities and cash transfer orders (trades) where the participants entrusted with settlement have previously obtained accreditation as to the existence of the securities or cash, but without assuming any guarantee of compliance. Conversely, the CCP assumes liability for fulfilling the transactions in which it is interposed.

169. For that reason, it is considered that the rules currently established by the CSD regarding finality of securities and cash transfer orders resulting from multilateral stock market trades should be modified since, in line with the principle of assured delivery, the current regulations establish that these orders become final when the CSD received the information on multilateral trading in the stock markets, which takes place on the trading day (T), and transactions are settled on T+3.

6.2 Finality of clearing in the CCP

170. Under the proposed new model, stock market trades will be notified to one or more CCPs. Once the CCP has received the transactions and accepted them in accordance with its rules, each one can be viewed as two transfer orders, one for securities and the other for cash, entailing a twin mandate for the CCP:

a) Novation: assuming a payment obligation (understood broadly as a genuine form of extinguishing obligations by fulfilling them) and becoming a counterparty vis-à-vis the buyer and seller.

b) The mandate or instruction to place an amount of money at the disposal of its recipient (vis-à-vis the seller) and transfer ownership or any other rights over the securities (vis-à-vis the buyer).

171. This scheme can apply equally to transfer orders from the market and to bilateral OTC transfer orders submitted voluntarily for clearing to the CCP.

172. In this scheme, both orders or mandates are generated simultaneously. Therefore, once the transfer orders relating to securities and cash (as a result of stock market trades) have been entered and accepted by the CCP, they should be considered final, so that the time lapse between the transaction in the market, its notification to the CCP and acceptance by the latter should be as short as possible.

173. Under this approach, finality in the CCP systems means that, once the orders enter the system, the CCP becomes, finally and irrevocably, the counterparty to the buyer and seller, regardless of what may occur later in clearing and settlement, and the CCP assumes the risk.

6.3 Finality in the CSD

174. Once the CCP has novated and cleared the transfer orders coming from the market, settlement instructions will be given to the CSD. Following clearing, the CCP's relationship to the CSD will be that of just another CSD participant.

175. The instructions to settle the outcome of clearing, which are net orders, must be received and accepted by the CSD to be considered final. Such finality must be established in the CSD's regulations.

176. An analysis of finality in the CSD must necessarily take account of the origin or type of the transfer order entered in the system, having regard to the operational implications of finality or lack thereof.

14 Article 56 of Royal Decree 116/1992, on the representation of securities by book-entries and clearing and settlement of stock market transactions.

177. Two basic scenarios should be distinguished: (1) transfer orders from the CCP, (2) transfer orders from sources other than the CCP (OTC, etc.). The options for the time of finality at the CSD are as follows:

1) When the transaction is matched.
2) When the settlement procedure commences, once it has been ascertained that there are sufficient securities and cash.
3) The moment of actual settlement.

178. The time of matching may appear to be the best time for seizing the legal advantages of finality, since this would enable the system to apply its settlement procedures, even if any of the participants is insolvent, without requiring the system to cover the shortfalls of cash or securities in order to perform settlement or to use means other than those provided in its rules of operation[15]. Nevertheless, it might have the drawback of reducing the system's operating flexibility to resolve incidents in the case of non-payment, since it would not allow orders from the insolvent entity (and its counterparties) to be revoked once matching had taken place.

179. The second option is used by some of Europe's largest central depositories[16]. It involves establishing finality once the settlement cycle has commenced, the sufficiency of the securities and cash has been ascertained and they have been frozen (pre-funded); up to that point, it is possible to revoke transfer orders if it is clear that they will lead to a negative outcome once the process commences.

180. The third option is the one that would benefit least from the legal advantages of finality, although it might give some advantage to participants, taken individually, who are liable for settlement of orders from an insolvent investor or intermediary, insofar as they could revoke orders from the insolvent clients and thus avoid any ensuing loss for themselves. In this scenario, it is vital to determine the cases in which an order can be revoked (insolvency of a participant or a third party, or mere breach by the investor who gave the order or by an intermediary), and who would be entitled to revoke it (the participant which issued the order, the client, a judge or receiver in the case of insolvency, or the CNMV if it intervened). It would also be necessary to consider the harm which revocation would cause for the settlement counterparties who, in principle, will not have been able to choose or, consequently, assess or hedge the counterparty risk to which they were being exposed. Consequently, this does not appear to be the most appropriate approach for reducing systemic risk by means of the finality rules.

181. The clearing process to be performed by the CCP should take as little time as possible so that the CCP can notify the CSD as soon as possible of the orders with the outcome of clearing and the balances to be settled. In other words, the time elapsed between novation and clearing should be as short as possible or, at least, cycles or successive procedures should be regulated to enable the CCP to send the CSD the results and corresponding orders as soon as possible so as to reduce the volume potentially at risk at the CCP as quickly as possible.

30. In your opinion, does any other aspect of finality need to be considered at this time?

31. Which of the three options for the time of finality at the CSD do you consider to be most appropriate from the standpoint of protecting the system?

15 Article 11.2.b) of Law 41/1999, of 12 November, on securities payment and settlement systems.
16 Clearstream Banking Frankfurt AG (Germany).

7.Implications for the structure and competitiveness of Spain's financial sector

7.1 Compatibility with T2S

182. The clearing and settlement procedure resulting from the reform includes two key aspects that will facilitate future integration of the securities settlement system into the T2S project: elimination of the registry references (RR), meaning elimination of the current requirement to first obtain RRs in order to support sales, and the introduction of a CCP to clear trades from the multilateral stock exchange platform.

183. T2S will not keep or manage RRs or any other control or identification codes for trades in multilateral markets (these tasks correspond to the CSD). To cater for CSDs where settlement is subject to some form of preconditions, T2S envisages a function called "CSD validation hold/reject" which, once activated by any CSD for each ISIN that it requires, will automatically put on hold all instructions sent to the system with respect to that ISIN, including those sent by participants with direct connectivity. Once the condition has been met, the CSD will release all the instructions that were on hold. Eliminating the current requirement to provide RRs upfront for the purpose of justifying the sale will mean that Iberclear will not need to use the CSD validation hold/reject function and will also enable CSD participants to make full use of the direct connectivity option offered by T2S; in particular, this will facilitate settlement between participants of different CSDs, especially in OTC transactions.

184. T2S will settle only bilateral transactions i.e. real time gross settlement. Introducing a CCP means that Iberclear will replace the current multilateral settlement cycles with purely bilateral settlement cycles for transactions resulting from netting by the CCP. The interposition of a CCP enables the current multilateral securities settlement system to be replaced by a purely bilateral one, which is perfectly compatible with T2S.

7.2 Potential consequences in terms of costs and efficiency

185. Settlement through Iberclear will become more cost-efficient because netting by the CCP will reduce the number of transactions to be settled and the process of settling by balances is more agile. However, Iberclear and its participants must bear the cost of the changes in the settlement procedures.

186. In the short term, there are the costs of developing and implementing the new system for control the balances and keeping the securities registry. Balance-based tracking does not require the CSD to keep live RRs to identify the flows leading to reach registry entry; consequently, once the new tracking system is implemented, management costs can be expected to be notably lower than at present.

187. Transactions cleared through the CCP must bear the cost of the new service. Nevertheless, the overall cost of the collateral contributed to the CCP should be lower than in the current system of settlement guarantees due to compression by the CCP.

32. Do you think overall system costs will be lower than at present?

33. In your opinion, will eliminating RRs make settlement and registry processes cheaper?

7.3 Reducing the number of participants: market members, clearing members, settling members and custodians

188. Settlement is currently highly concentrated among a relatively small number of entities. Of the 74 active participants, 10 account for 80% of the total settled volume. The degree of concentration is similar in registry: 15 firms account for 80% of the equities registry volume. Spanish-resident investment firms dominate stock market trading, while settlement is largely in the hands of branches of European Union banks and savings banks, and Spanish-resident banks and savings banks dominate registry.

189. The changes proposed in this reform will impact the current distribution of business in Spanish equities

but will also be affected by that distribution.

190. The amendments to be made may increase the current level of concentration in settlement and registry as a result of a foreseeable reduction in the number of participants resulting from the reduction in volume and number of transactions to be settled and the higher solvency requirements imposed for settlement and registry activities.

191. Netting by the CCP will greatly reduce the volume and number of transactions to be settled. At the same time, settlement by balances and the new control system for the book-keeping of the registry will require Iberclear participants to assume greater responsibilities and they will be subject to greater solvency requirements that not all current participants will be able to meet.

192. Changes in the registry system by eliminating operating 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).

193. As a result of the introduction of the CCP, market members will need a clearing member for their transactions. Moreover, the new settlement system will not settle purchases until their counterpart sales can be settled. These two factors may create some restrictions for certain intraday trades, which will probably require higher collateral than at present since members may only execute trades in the orders market up to the limits allowed in their contract with clearing members and they may not assume more risk than contracted.

194. The new clearing activities must be performed by highly solvent entities, and it can be expected that only a few entities will be interested in registering with the CCP as clearing members.

195. In short, the proposed changes to the settlement system may lead to greater concentration among the firms with the greatest capacity in terms of technology processes and systems and in terms of own funds. At the same time, the distribution of costs and revenues along the value chain of (a) trading, (b) clearing/settlement, and (c) registry will foreseeably be altered for the different types of participant.

34. Do you think the changes to be introduced by the reform will reduce the number of entities performing these activities?

35. What other changes do you think the reform may produce in the current configuration of post-trade activities?

7.4 Functional specialisation

196. The reform might also enable some players to take on certain functions without assuming others that might hamper their competitiveness. Greater specialisation is likely, with the appearance of new functions and business models within what is broadly a vertically-integrated value chain at present.

197. To facilitate functional specialisation, it might be possible to consider the creation of non-settling market members, which would avoid the current need for many market members to outsource their settlement activities and to have a settlement agent in order to settle their transactions.

198. Additionally, a degree of separation could be introduced in the settlement and custody/registry function, for example by allowing participants to perform the registry function without requiring them to perform settlement, which would enable some entities (for example those of small size) to concentrate their activities on those where they have greater comparative advantages.

36. Do you consider the introduction of non-settling market members to be a good idea?

37. Do you think separating settlement from custody/registry activities may be beneficial for some entities?

ANNEX 1. Additional details of how the registry system works

A1.1 Principles of operational keeping of the detailed registry

A1.1.1 Basic general principles

The registry system will be oriented towards determining the positions or balances of securities in the securities accounts recognised in the system's two tiers at any given time. Securities will be identified by their ISIN; the addition or removal of an ISIN in the system will entail immediate simultaneous addition in all the accounts that are to contain balances of that ISIN.

The total number of securities so added will be identical to the whole number of securities with that ISIN whose registry is entrusted or assigned to the system. That whole number representing the total number of securities with the given ISIN to be registered in the system will be the "Control Batch" or "Batch" of securities to be monitored by the system.

When an ISIN that is added corresponds to securities issued by a entities whose home country is Spain and its registry is entrusted to the Spanish system, the value of the Batch to be controlled will be the same as the total number of securities coded under that ISIN. In short, it will be the total number of securities in the issue coded by a same ISIN.

Once an ISIN has been added to the system, any changes will be made with entries which must all be of the same sign, i.e. addition or removal, depending on whether there is to be an increase or reduction in the value of the Batch to be controlled by the system. Entries will be made using a single entry system (same sign) in which all entries will be made simultaneously in all the accounts containing balances of that ISIN in the system.

a) In the case of ISIN originating in Spain whose registry is fully entrusted to the Spanish system, changes may only arise as a result of an authorised increase or reduction in the number of securities covered by that ISIN.

b) In the case of a foreign ISIN traded in Spanish markets, the change may only take place in the event of inflow of securities into the Spanish system or outflow of securities to the foreign system of reference, leading to a need to adjust the value of the Control Batch for that ISIN in the Spanish system.

Any amendment to the balances of the accounts containing securities of a given ISIN recognised in the system, for any reason other than a change in the value of the Control Batch, must be made using a double entry system (two entries of different sign) in the system accounts containing balances of that ISIN.

Accordingly, any increase in the balance of securities, by an amount X, for reasons other than a change in the value of the Control Batch, in an account containing a specific ISIN must be matched by a simultaneous reduction in the balance of one or more accounts containing securities under that same ISIN which, in aggregate, total that same amount X. Any entry involving an addition (+ sign) or removal (- sign) of a given number of securities under a certain ISIN may only be made if, simultaneously, an entry of the opposite sign is made for the same amount in one or more other accounts containing balances of that same ISIN.

The balance of the account may not be negative. It is not possible to deliver securities or, therefore, register a removal from an account of an amount in excess of the balance that was in the account prior to the delivery.

A1.1.2 Securities accounts and harmonised coding

The system of coding securities accounts will be uniform throughout the system and its basic attributes will be supervised and regulated by Iberclear.

The opening and coding of third-party securities accounts at participants will be based on the name and domicile of the natural or legal persons identified as owners of the balance and the legal form of such ownership. The coding system will itemise accounts on the basis of the form of holding: individuals, proindiviso

holdings, persons with community property marriages, and other forms of joint ownership in which the identity of the owners is known.

Participants will open a single securities account for each combination of ISIN and owner/form of holding, so that for each ISIN and owner/form of holding there is only one account open at each participant in an identical situation of duration and legal restrictions.

The system's management body and its participants may agree on details and elaborations upon the fields or attributes defined as basic for coding and sorting accounts. The code of an individualised account in the system will identify at least the following basic fields or attributes:

- [ISIN] / [participant] / [type of account, i.e. individual or where appropriate collective]/ [location code - identification of account at participant] + control code or sequence.

- [Duration of holding]: indefinite, or definite because temporary (e.g. loan), transitory or instrumental

- [Balance availability status]: free (unrestricted), limited by any situation restricting entries or changes in the balance (seizure, non-possessory security interest, etc.).

The accounts that are open will vary depending on whether the holding is indefinite or temporary, and whether or not the balance is restricted. If, for example, part or all of the balance of an account of indefinite duration changes its status, e.g. because it is loaned, the amount will be debited against the account of indefinite duration and a new account of definite duration (i.e. temporary) will be created with the balance on loan. A similar and equivalent process will be followed if part or all of the balance of an account becomes restricted.

Iberclear will draw up a manual, available to all participants, which describes all the attributes to be coded (including location/identification of the account at participants) and the coding procedures. It will also develop the necessary mechanisms to ensure that coding by participants in the system meets the established specifications.

A1.1.3 Entries in accounts and harmonised coding

Entries due to purchase/sale

System participants may make provisional addition/removal entries in accounts they have open based on information provided to the clearing members during the ratification phase of clearing at the Central Counterparty with regard to availability of balances of securities in transactions involving delivery. In any event, participants must make those entries at the time they deliver the sold securities to the settlers and the corresponding cash is available in the payment system's cash accounts for the purpose of settlement.

a) Entries will also be made for sales between accounts and balances kept by a given participant, which might not lead to the release of cash or securities to a third party for settlement if the participant itself is the settling agent of the transactions.

b) If settlement is completed without any notice to the participant of an interruption or failure, the registry entries it has made will become final and be entered in the holders' accounts who are keeping their balances in the system.

Iberclear will perform an equivalent process to keep the individual securities accounts (participants' proprietary accounts and any other accounts it keeps on a direct, individualised basis) open in its central books for which it is directly responsible, mutatis mutandis.

In connection with the *general third-party accounts* on Iberclear's central books reflecting the position by ISIN and participant of third parties' balances in individualised and collective accounts kept by participants:

a) Iberclear will have direct access to the information on changes in the balances involved in settlement of buys and sales, splitting the transactions into purchases and sales (even where settlement is done on a net

basis) by third-party holders in terms of additions/removals of ISIN and participant.

b) Based on that information, it will create addition and removal entries in the general third-party accounts which Iberclear must keep in its central books.

Entries for reasons other than purchase/sale

Where an event or transaction changes the duration or availability status of part or all of the balance of an account, the balance concerned will be transferred to an account that reflects the new status or situation appropriately. The entry making an addition to the balance in the account to reflect the new situation and the removal of that balance from the preceding account must take place as soon as the participant has sufficient information on the transaction or event leading to the change of status or situation of the balance.

The entry constituting an addition or removal due to modification of the balance of an account resulting from transfer of part or all of same for reasons other than a purchase or sale, where there is no change in the duration or availability but there is a transfer to or from the account of another holder, must also be made as soon as sufficient information is available about the transaction or event causing the transfer.

For each category, Iberclear will regulate what type of information is considered to be sufficient in order to make the entry for causes other than purchase or sale. It will also regulate the protocols, formats and procedures for disclosing this information between participants.

Coding of items that modify balances in accounts

Iberclear will regulate coding of basic items that may be entered in the accounts recognised in the system, including accounts kept by its participants. It will also regulate the formats for entries reflecting those basic items. Account balances may not be modified with entries bearing codes other than those regulated by Iberclear.

Nevertheless, participants may elaborate upon the harmonised code, if they wish, by adding sub-codes (extensions to the general code) for their internal book-keeping of client accounts. These private developments or codes may not take the place of those recognised by the system nor will they have any validity vis-à-vis the system.

- A transaction that modifies balances, other than a change in the value of an ISIN's Control Batch, will entail coding of addition and removal entries in the accounts based on their conceptual nature and with the corresponding sign: additions (+) and removals (-). The coding of these addition and removal items will be based on the legal nature of the transactions that lead to the changes in the holdings reflected in each account.

- Iberclear will harmonise the code for each item that is admissible as an entry, which must contain at least the following data fields and will distinguish at least the following concepts:

  - **[Date of entry] [ISIN concerned] [description of entry] [sign of entry] [number of securities] + [date, if known, on which the addition/removal originated].**
  - When general journals are being transmitted, the code of the account (i.e. its basic fields or attributes) in which the item was entered must be added.
  - Items that may be reflected in accounting entries: **(1) Purchase/sale, with the possibility of discriminating by origin (secondary markets, MTF, systematic internalizer, OTC, etc); (2) Repos (possessory), distinguishing between loans and other temporary assignments, which may be defined by law; (3) Assignment as guarantee with transfer of securities to the borrower; (4) Delivery/receipt of securities without return to assignor due to court decisions, execution of guarantees, donations, and other transfers not for a consideration; (5) Transfers versus payment; (6) Transfers free of payment; (7) Other**

- By common agreement with its participants, Iberclear will regulate harmonisation of the coding for other items based on effective transfer or legal change of ownership of part or all of the balance.

Iberclear will define the software specifications of the format for codes of items and entries, including the formats for the amounts to be added/removed and their sign. The specifications to be regulated will guarantee compatibility of all the files containing registry entries at all the participants and in the books of the *Sociedad de Sistemas* itself.

Iberclear will also define the system for transmission and the processes for validating transmissions, as well as the systems for aggregated daily summaries of gross additions and removals, and their breakdown by headings, that participants must send to Iberclear on a daily basis. This harmonisation will include the specifications or IT protocols for assuring compatibility when sending, sharing and processing computer files containing registry entries (additions/removals) throughout the system, among participants and between the latter and Iberclear.

A1.2 Control and supervision mechanisms:

Daily checks

In addition to control of the integrity of the Control Batch for each ISIN, Iberclear will receive a daily summary from each participant of the general journal of entries per ISIN comprising the gross definitive additions and removals registered in the accounts and balances kept by the participants for third parties.

a) That summary will contain information similar to a simplified ledger or trial balance per ISIN, without details to identify the individual accounts at the participant to which the numbers refer. For each ISIN, Iberclear will receive, from the participants, the aggregate additions and removals in the set of third-party accounts kept by the participant, with the initial and final balances. The only breakdown in that information will be the aggregate totals of additions and removals by family of addition/removal codes, in line with the entry coding structure to be established.

b) In the event that the accounts of certain third parties are kept indirectly by Iberclear, the daily accounting summary of entries to be sent by each participant with the aggregate additions/removals and the balance described in the preceding paragraph will contain identification information but only for the accounts of third parties kept indirectly by Iberclear.

Regular (but not necessarily daily) checks

Iberclear will be required to perform the following checks and general and detailed reconciliations of registry accounts and entries:

- Send to each participant a statement of balances and entries (those which took place since the last statement) in the general third-party accounts per ISIN and participant kept by Iberclear; the purpose will be to enable the participants to reconcile those statements and their balances with the aggregate balances of individual and collective accounts which they keep. Participants will be required to notify Iberclear, in the prescribed period, of any unexplained difference detected in reconciliation.

- Send a statement to its participants containing the entries (since the last statement) and balances of the individual accounts on Iberclear's books that are kept indirectly. These statements can be sent simultaneously with those referred to in the immediately preceding paragraph for reconciliation in the same way.

- Send a statement to investors whose individual accounts are kept directly by *Sociedad de Sistemas* in its central books. Holders must notify *Sociedad de Sistemas* of any discrepancy by the stated deadline.

- Obtain from each participant a report on the balances of all third-party accounts kept by the participants, as of a date or for a period chosen at random by Iberclear for cross-checking and reconciliation with the general third-party accounts

- Obtain from each participant the detailed general journals of the accounts which they have open for a period chosen at random by Iberclear, to cross-check with the summary general journal information filed by the participants as described above, and for supervision of the sequence of opening, closing and change of duration and availability status of the accounts.

In the event of a discrepancy between the balance of a given ISIN-participant omnibus account on Iberclear's books and the balances of the various accounts for that ISIN and participant, the balance on Iberclear's books will be deemed to be valid except where proven otherwise.

- Participants will be obliged to reconcile and justify the origin and cause of any discrepancy and provide a full explanation to Iberclear.

- Iberclear will not be liable for the quality and accuracy of participants' keeping of individual and collective accounts or for discrepancies or anomalies in their balances. Nevertheless, it will be liable for individual accounts kept on its books for investors with direct accounts.

Other control mechanisms

Iberclear may require participants to provide any information or data about the accounts they keep, whether on an aggregate basis or itemised by individual accounts, that it considers necessary for its system supervision functions, and the participants will be obliged to comply; this will also apply to information that the CNMV demands for supervision purposes and is communicated to the CNMV via Iberclear.

Iberclear will draw up a regular report as to the quality and accuracy of securities account-keeping in the system, as well as detailing any anomalies and their seriousness. In that report, following consultation with the participants, Iberclear will propose any measures that it considers necessary to improve the system. That report must be sent to the CNMV, which may ask Iberclear for the detailed information on which it is based, including identification of the participants where the greatest anomalies were detected.

Independently of the report referred to in the preceding paragraph, Iberclear must inform the Comisión Nacional del Mercado de Valores of any unreconciled or unjustified anomaly or discrepancy in the master account file or an individual account in its books, as well as any anomaly or discrepancy that could not be resolved by the established deadline despite efforts to resolve it. Iberclear should also propose a course of action or a solution for each issue sent to the CNMV for its information.

A1.3 Facilitating financial and corporate transactions, and other services to issuers

When preparing a financial or corporate transactions, issuers of securities whose central registry is entrusted to Iberclear must necessarily contact the latter, as government body of the system, to obtain the necessary data for the transaction to be performed.

- When preparing such transactions, Iberclear will be the only channel for communication between issuers and intermediaries that are participants in its registry systems.

- To this end, Iberclear will be empowered to obtain from participants all the identification data of holders and balances in their accounts as of a given date or dates, the details of which are not known to Iberclear.

- Participants will be obliged to provide Iberclear with full details of that data in that context, and it will keep the data only so long as the financial/corporate transaction for which it was obtained is under way.

Iberclear will expressly regulate the files, electronic formats and transmission protocols for this information provided by the participants, on the grounds that prior regulation and harmonisation of the software specifications for the structure of the accounts and the registry entries will broadly ensure compatibility of the data along the chain of system participants.

ANNEX 2. Main legislative changes associated with the reform

A2.1 Introduction

At the present time, when a public consultation has been launched with regard to the changes to be made in Spain's securities clearing, settlement and registry system, it may be too early to consider the changes in detail. Consequently, this section will give merely a broad outline of the rules that foreseeably should be amended and the matters that will be affected.

Apart from other factors described below, the proposed reform is heavily influenced by legislative initiatives being considered in the European Union.

The preparatory work by the European Commission in connection with the future legislation on book-entry securities and central securities depositories, once it takes shape, may logically have a significant impact on this reform. Particularly notable is the proposed Regulation of the European Parliament and of the Council on OTC derivatives, central counterparties and trade repositories, on which work is most advanced and which will have the most immediate and important impact on the Spanish reform since that proposed regulation harmonises requirements for the creation and operation of CCPs.

A2.2 Regulatory changes to be made with regard to CCPs

Since the proposed European regulation will regulate the requirements for CCPs, it will be necessary to review article 44 ter of Spain's Securities Market Act, where CCPs are currently regulated, in the light of the proposed reform and the European regulation and to identify any aspects not covered by the European regulations which should be included in the Securities Market Law, such as: competition rules for CCPs, and supervision and inspection measures (Title VIII of the Securities Market Act). Moreover, it is necessary to analyse which special rules on insolvency need to be introduced or amended (this area is the competency of the Member States).

However the above, the possibility that European legislation currently in elaboration delay its entry into force raises the possibility of developing a rule's statutory range to develop the Securities Markets Act in this area in order to provide the normative instrument for constituting CCPs under Spanish law with in accordance with the premises set forth in this document in terms of requirements for constitution and operation. This regulatory instrument should be consistent with the European Union regulation.

In addition, as already provided for in article 44 ter of the Securities Markets Act and in line with the projected European regulations, the CCPs should have internal rules of operation that will be properly authorized. In the Securities Markets Act the power for authorization the CCPs corresponds to the Ministry of Economy and Finance, but is worth noting the power that the proposal of European Regulation will give to the other authorities of the other Member States and to the European Securities and Markets Authority (ESMA) in authorising and supervising CCPs. As is the case with Iberclear, each CCP's internal regulation may be fleshed out with regulatory letters and operating instructions.

The internal rules of the CCPs must include provisions related to finality.

Interoperability arrangements between CCPs and CSDs or between several CCPs should be approved by all the competent authorities of the infrastructures involved.

A2.3 Regulatory amendments to be made in the area of settlement and registry

With regard to securities settlement and registry, changes will be required in the Securities Market Act, Royal Decree 116/1992, and Iberclear's Regulation.

The aspects of the Securities Market Act that need analysis are basically as follows:

- Chapter II of Title I, on book-entry securities. From a legal standpoint, particularly with regard to the private law of securities registry, the change in operational approach does not apparently require a radical change in Spanish law. The current legal framework, provided in the Securities Market Act, is broadly neutral with respect to the way in which the registry is kept and, therefore, it is compatible with both a system based on registry references and one based on balances.

Nevertheless, based on experience with comparative law, it would be appropriate to introduce some regulatory amendments to reduce the legal risks that may arise due to the proposed change in model.

- Article 44.bis, relating to the *Sociedad de Sistemas*, must be revised, specifically new features of insolvency law, such as the introduction of the pro rata rule in the event of a shortfall in securities in the hands of participants, or the need to allocate the participant's proprietary account to cover shortfalls of securities in client accounts.

- The amendments required to Royal Decree 116/1992 will be sizeable, both quantitatively and qualitatively, since it will be necessary to revise the regulations governing the registry of listed securities and will impact settlement (assurance of delivery, collateral, and principles of the system), supervision by Iberclear, and access by participants, among other aspects.

As a result, Iberclear's Regulation will need to be modified substantially, including more technical aspects relating to settlement, particularly, of stock market trades cleared through one or more CCPs, securities registry and rules on finality. This amendment may lead to many changes in Iberclear's regulatory letters and operating instructions.

In addition to the matters directly covered by the reform, a possible directive on securities may also impact the registry of book-entry securities. Preparatory work continues for the moment. Since the proposed Directive may cover all types of book-entry securities (those registered with Iberclear, unlisted securities, and the accounts kept by entities authorised to provide securities custody and administration services), its approval may make it necessary to undertake deeper reforms, affecting both the Securities Market Act (Chapter II of Title I will need to cover securities accounts held both direct and indirectly, article 63, etc.) and Royal Decree 116/1992.

A2.4 Amendments to be made in Royal Decree-Law 5/2005 of 11 March

It may be advisable to amend Chapter II of Royal Decree-Law 5/2005, of 11 March, to include close out netting or the possibility for members of a CCP and participants of a CSD to clear reciprocal debits and credits with clients and collect the net balance in their favour out of collateral provided by clients, with particular preference in the event of client insolvency. In this matter it will also be necessary to consider the results of the forthcoming European legal initiative.

A2.5 Stock Exchange Regulation

Under article 31.2 of the Securities Market Act, the stock exchanges must draw up a Regulation governing clearing and settlement of transactions and market supervision and discipline, among other matters. Accordingly, stock exchanges must draft regulations specifying the CCPs where they will clear their transactions and designating Iberclear as the entity entrusted with settlement and registry. The stock exchanges must sign agreements with the CCPs to regulate their relations.

Relations between the various infrastructures involved in trading, clearing, settlement and registry with respect to listed securities must be established in the form of agreements to be authorised by the competent authorities in each case (CNMV, Bank of Spain, Regional Gevernments).

A2.6 Summary of administrative acts required to implement the reform

Implementation of the reform will not only require regulatory changes that will be very significant, both quantitatively and qualitatively; it will also require notable administrative acts.

Administrative acts required for the establishment of a CCP in Spain:

- Authorisation by the competent authority, including the internal regulations (Regulation, regulatory letters, etc.).

- Authorisation by the Cabinet to classify the CCP being established as a System for the purposes of Law 41/1999.

Administrative acts required to implement the new clearing, settlement and registry system:

- Authorisation of the amendments to Iberclear's regulations (Regulation, regulatory letters, etc.).

- Authorisation of the Stock Exchanges Regulation.

- Authorisation of the agreements between the various trading, clearing, settlement and registry infrastructures, to regulate their legal relations in detail.