

**DISCLOSURE FRAMEWORK FOR
SECURITIES SETTLEMENT SYSTEMS**

November 1997

Introduction

The Committee on Payment and Settlement Systems of the central banks of the G10 countries (CPSS) and the International Organisation of Securities Commissions (IOSCO) have demonstrated a shared concern with regard to clearance and settlement practices throughout the world. Both the CPSS and IOSCO believe that common interests in the efficiency and risk management of securities settlement systems can be advanced through collective initiatives. Consequently, in 1996 the CPSS and IOSCO formed a joint working group to develop a disclosure framework for securities settlement systems. The working group consisted of securities settlement system operators, including both official and private-sector representatives, securities regulators and central bankers. Both developed and emerging markets were represented in the working group.

The goal of developing a disclosure framework for securities settlement systems (SSSs) builds on important prior work undertaken by CPSS and IOSCO to identify risks associated with securities settlement. The 1992 CPSS report, *Delivery versus payment in securities settlement systems* (DVP Report) defines and analyses the types and sources of risk associated with settlements between direct participants in a single settlement system. This report also clarifies the meaning of delivery versus payment (DVP) mechanisms and describes three common approaches to achieving DVP, each of which entails different risks to market participants.

The *Cross-Border Securities Settlement* report (Cross-border Report), prepared by the CPSS in 1995, expands on the DVP Report by analysing the channels that market participants use to complete cross-border securities transactions. This report outlines the different risks that may be present in these arrangements, even in those cases where DVP is achieved, including replacement cost risk, liquidity risk, cash deposit risk, custody risk and systemic risk. In particular the report highlights the fact that custody risk will be present whenever market participants hold their securities through an intermediary, a standard practice for non-residents attempting to settle cross-border transactions.

The Cross-Border Report stresses the importance of understanding the nature of the custody risk, as well as the procedures used to effect back-to-back settlements and cross-system settlements in the cross-border context. The report concludes that complexity of relationships between the multiple intermediaries associated with cross border settlement poses challenges to the oversight of domestic markets and settlement systems. It notes that the most basic challenge stems from the lack of transparency in cross-border securities settlement arrangements.

In 1990, IOSCO published a report in which it endorsed and supported the prompt implementation of nine recommendations by the Group of Thirty, such as shortening the time between trade date and settlement and assuring the simultaneous exchange of payment and securities. Successive reports on the implementation have also been prepared (1993, 1994, 1995 and 1996). In 1992 IOSCO published a document entitled *Clearing and Settlement in Emerging Markets - A Blueprint*, to facilitate the development of centralised, automated SSSs.

More recently, IOSCO's 1996 *Report on Co-operation Between market Authorities and Default Procedures* (IOSCO Report) determines that transparency of

market default procedures is important in that it provides certainty and predictability to market participants, facilitating orderly handling in case of an actual default and enables market participants to make an informed assessment about markets.

These reports, as well as other work undertaken by the CPSS and IOSCO, have consistently emphasised the importance of transparency of market mechanisms. At the same time, however, growth in world-wide settlement volumes and greater use of financing transactions have required settlement system operators to develop processes for more rapid exchange of securities and funds and more efficient linkages between systems. Moreover, as prior reports have shown, apparent similarities in the technologies employed and services offered can mask significant differences in securities settlement arrangements as well as in the approaches taken to the management for the associated risks.

Therefore it is critical that participants in the securities markets carefully examine the rules and operating procedures and practises of each system, as well as the governing law, underlying custody arrangements and linkages across systems. While much relevant information of this type is publicly available, it is often contained only in extensive, detailed handbooks of rules and procedures. A number of SSSs publish informative pamphlets for their participants, but these can take a variety of forms, making it difficult for participants to assess similarities or differences in the risk management approaches used by the different systems.

To assist market participants in identifying important risks associated with their participation in the SSSs, the CPSS and IOSCO therefore determined that it would be beneficial to develop jointly a disclosure framework that system operators and participant could use to gain a clearer understanding of the rights, obligations, exposures associated with the SSSs. The CPSS and IOSCO welcomed the participation of a number of private sector SSS operators in the development of the disclosure framework.

The framework is intended to be completed by SSS operators for the information and benefit of their direct participants, both current and potential, as well as for indirect participants. It is not intended as an attempt to set prescriptive standards for the SSSs, as a replacement for the rules and procedures of the SSS or as a legal representation or binding contract. Moreover, the framework does not necessarily identify all information that the SSS should disclose in the light of its individual facts and circumstances and therefore it may be necessary for participants to discuss issues directly with the SSS to obtain a full understanding of the system. The framework should, however, help market participants and regulators to organise and understand the information that they need in order to appraise the risks, including any systemic risks, potentially associated with SSSs.

While the framework focuses on the risks of direct participation in SSSs, it is clear that many of the same issues arise in connection with the relationships between market participants and local or global custodians. Therefore, while this framework is not intended to cover the specific aspects of this relationship, it may be helpful as a point of reference for those using the services of custodians as well.

The sections below are intended to elicit important information from SSSs in the areas of organisational structure and market context, ownership arrangements, rules and

procedures, relationships with participants, links to other SSSs and intermediaries, procedures for funds and securities transfers, default procedures, settlement of back-to-back transactions, risk control measures and operational risk. The disclosure framework is structured in the form of a questionnaire which SSSs would complete. The CPSS and IOSCO encourage SSSs to complete the questionnaire and make their responses available to market participants, regulators and other interested parties. To ensure that the information in their responses to the questionnaire remains accurate, SSSs would also need to review their responses periodically at least annually and make appropriate changes if necessary. The questionnaires completed by SSSs would therefore serve to increase the transparency of their operations to the market place.

I Basic information

This section addresses a number of fundamental features of the SSS and provides the market context for its operation. The questions establish the basic functions of the SSS, including the securities for which it provides settlement services, as well as whether the SSS offers other services. Questions on the organisational and ownership structure of the SSS elicit information on its legal basis and corporate governance.

A wide variety of organisational structures and business functions are possible for SSSs. For example, systems may be owned by central banks, by their participants or by an independent private sector entity that may or may not be operated for profit. It is helpful to distinguish the type of ownership, the organisational and decision-making structure of the SSS and the financial resources of the SSS, as well as the supervisory oversight to which the system is subject, as a first step in clarifying the respective responsibilities of all relevant parties.

A What is the name of the SSS?

The name of the securities settlement system is “Liquidazione dei titoli” (LDT). Moreover, securities can be transferred on a free of payment basis through book entries at the CSDs.

B Where and in which time zone is the SSS located?

The LDT operates on a nation-wide basis through seven clearing houses located in Rome, Milan, Turin, Naples, Florence, Genova and Venice.

The time zone is the European Central Bank Time.

C What functions does the SSS perform?

1. Does the SSS serve as a securities depository and/or provide securities settlement services?

The LDT provides securities settlement services for all types of securities traded in Italy. The LDT does not serve as a securities depository.

(a) What types of instrument are eligible for deposit at the SSS (e.g. debt, equities, warrants, etc.)?

The securities settled through the LDT are deposited at two CSDs: the Central Securities Account (Conto accentrato in titoli - CAT), managed by the Banca d'Italia, for government securities and Monte Titoli for the other securities (i.e. shares, bonds, warrants.....).

(b) What types of instrument are eligible for transfer within the SSS?

The LDT handles all types of domestic and foreign securities deposited at the two CSDs and, under specific requirements, a small amount of issues which still circulates in paper form.

(c) Please describe whether eligible securities are dematerialised, immobilised or transferred physically.

Under the Italian law physical certificates of all securities are required. This legal requirement is basically met by issuing global certificates. Securities are de facto immobilised at the two CSDs and transferred in the LDT by book entries through the accounts held at CAT and Monte Titoli, without any physical transfer. Only a small number of securities not deposited at the CSDs still needs to be transferred physically.

(d) Does the SSS provide safekeeping for physical certificates?

The LDT does not serve as a securities depository. Monte Titoli and CAT hold physical certificates and provide safekeeping services.

2. **Does the SSS provide cash accounts and/or provide funds transfers in conjunction with securities transfers? If so, in what currencies?**

The LDT does not keep cash accounts; funds transfers are settled through the interbank clearing system on the lira denominated cash accounts held at the Banca d'Italia. Fund transfers are settled in conjunction with securities transfers on a net DVP basis. Cash transfers are settled in Italian lire.

3. **Does the SSS provide a trade matching service? Do others provide such services for securities settled at the SSS?**

The LDT does not provide trade matching services.

Trade matching services are provided by the Ced-Borsa for transactions concluded on the Stock-Exchange and for OTC transactions and by SIA for transactions concluded on the screen-based market for government securities (MTS). The trade matching for the primary market of government securities is provided by the Banca d'Italia.

4. **Does the SSS provide a trade netting service (as distinct from undertaking the settlement of securities transfers on a net basis)? Do others provide such services for securities settled at the SSS? In either case, what types of netting (bilateral or multilateral), if any, are performed?**

The LDT receives net bilateral balances from Ced-Borsa and SIA (see answer 3) and calculates multilateral net balances in cash and securities in order to perform settlement at the end of the operational day.

5. **Does the SSS offer a securities lending or borrowing program?**

The LDT does not provide a securities lending and borrowing facility. Over the last years the Banca d'Italia - along with Consob, the regulatory body for the Stock Exchange market - has been fostering the implementation by intermediaries of a securities lending market similar to those already operating in other European countries.

6. **Does the SSS provide custodial and/or related services such as the collection of interest, dividends, principal or withholding tax reclamation? Which types of service are provided?**

The LDT does not provide custodial services. CAT and Monte Titoli provide all services related to custodial activity such as the collection of interest, dividends, principal and all related payments. Withholding tax reclamation services are provided by intermediaries.

7. **Does the SSS act as a central counterparty or principal to transactions with its participants?**

8. **Other? Please specify.**

The LDT is a securities settlement system managed by the Banca d'Italia and it is not an entity separated from the central bank. It does not act as a central counterparty or principal to transactions with its participants.

D. What type of organisation is the SSS?

1. **Please indicate whether the SSS is a public sector or private sector entity.**

The LDT system is owned and managed by the Banca d'Italia, which is a public institution.

2. **Please indicate whether the SSS is organised on a for-profit or a non-profit basis.**

The LDT is managed on a non-profit basis.

3. What is the legal basis for the establishment of the SSS and for securities transfers made through it?

The legal basis for the establishment of the LDT is Article 52 of D.Lgs. no. 415/96 which transposes into the Italian law the EU Directive on investment firms and services. The main features of the system are established by a regulation issued by the Banca d'Italia in agreement with Consob.

Participants in the system have to subscribe a model agreement laid down by the Banca d'Italia, which contains the operational and legal framework of the relationships between intermediaries and the manager of the system.

E. Please describe and provide a diagram outlining the organisational and ownership structure of the SSS.

1. Who are the owners of the SSS?

The LDT is owned by the Banca d'Italia.

2. What entity or entities operate the SSS? Which functions of the SSS, if any, are outsourced to third parties?

The Banca d'Italia operates the LDT. None of the functions of the LDT is outsourced to third parties.

3. Does the SSS have a Board of Directors?

(a) What is its composition?

(b) What are its responsibilities?

The LDT does not have a separate Board of Directors but decisions are made by the senior management of the Banca d'Italia. It is the responsibility of the Banca d'Italia - the manager of the system and payment system overseer - to ensure the smooth, reliable and efficient functioning of the LDT.

F. Please describe the financial resources of the SSS.

1. Amount of paid-in capital and retained earnings?

2. Guarantees, insurance coverage or other similar arrangements?

3. Credit lines or letters of credit?

The financial resources of the LDT are provided by the Banca d'Italia. The central bank covers its costs by collecting two kinds of fee from system participants. One is fixed; its amount, the same for all participants, is paid on a yearly basis. The other depends on the level of activity of each participant and is represented by a fee for each bilateral balance. The pricing scheme has been recently revised to ensure a wider coverage of costs, in line with the guidelines laid down at the EU level.

The LDT does not have any insurance coverage or other similar arrangements.

4. Powers to assess participants or equity holders?

In case of default, LDT's regulations do not provide for assessment power on participants (see Section VI).

G. Please describe whether the SSS or its operator is subject to authorisation, supervision or oversight by an external authority.

The Banca d'Italia, which owns and operates the LDT, is the overseer of the Italian payment system.

II Rules and procedures of the SSS

It is important that SSSs have clear rules and procedures governing all major aspects of their operations. If participants have access to these rules and procedures, they will be able to form clear expectations about the actions of the SSS and will be able to use their understanding to make decisions on that basis. This is particularly important with regard to the resolution of failures to settle or other potential disruptions to the operation of the SSS.

The rules and procedures also typically describe the structures and processes for taking decisions that are at the core of any organisation's corporate governance. For SSS operators, the integrity of the decision-making processes and the means for communicating decisions is important to the level of confidence participants have in the system's ability to manage risk fairly and effectively.

The questions below focus broadly on how participants can obtain copies of the SSS's rules and procedures, how participants can provide input to the rules and procedures, how they are notified of changes, the applicability of the rules and procedures to the SSS as well as its participants, and the circumstances under which the rules and procedures can be overridden. Taken together, the questions are intended to provide participants with an understanding of the role that the system's rules and procedures play within the operation of the SSS.

A. Does the SSS maintain a complete list of the rules and procedures governing the rights and obligations of participants and the duties of the SSS?

The Banca d'Italia maintains a complete list of all regulations governing the LDT, which are available to participants.

1. How can participants obtain a copy of the rules and procedures?

The operational and legal framework of the LDT is laid down in the model agreement which is subscribed by participants. A copy of the rules and procedures governing the LDT is given to the participants when they subscribe the model agreement. Information about new regulations concerning the LDT is immediately given to all participants through specific messages.

Additional copies of rules and procedures are available upon request by each of the seven clearing houses (see answer I B).

2. Does other documentation provided to participants (e.g. user guides) have the same status as the rules and procedures?

The operational features of the system are notified to participants in the same way as rules and regulations and are equally binding on participants.

3. Describe the process for changing rules and procedures, including any need for regulatory approval.

(a) What authority is required and how does this differ depending on the type of change involved?

Regulations are issued by the Banca d'Italia in agreement with Consob. Technical changes and operational rules are decided by the central bank.

(b) How are participants notified of changes in rules and procedures?

Information about changes in rules and procedures is provided through letters sent to all participants prior to the application of the new rules and procedures. The main regulations are also published on the "Gazzetta Ufficiale della Repubblica Italiana".

(c) Is there a procedure for participants or others to comment on proposed rule changes?

Occasionally, the Banca d'Italia organises meetings where the associations of intermediaries may comment on the main changes in the rules.

B. Are the rules and procedures binding on the SSS as well as its participants? Under what conditions and on whose authority can written rules and procedures be waived or suspended by the SSS?

The rules and procedures are binding both on the management of the LDT and on its participants. Obviously, they can be modified by the issuing authority.

III Relationships with participants

In evaluating SSSs, it is essential that participants understand the nature of the relationships that the systems have with their participants. The different types of membership that are available as well as the requirements for admission as a participant should be understood. A knowledge of the account structure of the SSS is also important for an informed evaluation of the system. Participants should understand whether this structure allows or requires the segregation of their customers' cash or securities in separate accounts or sub-accounts at the SSS.

This section addresses these issues as well as the procedures for and consequences of terminating participation in the SSS. Because of loss-sharing or other arrangements, termination of membership may not extinguish all obligations of participants with respect to the SSS. General limitations on SSS liability to participants are the subject of the final question in this section. These questions are obviously important in enabling participants to establish the magnitude of their exposures to different risks associated with the SSS.

Although these questions provide the basic framework of the relationship between participants and the SSS, many of the most important aspects of these relationships concern the resolution of failures to settle or events of default. Specific questions on these topics are discussed in Section VII below.

A. Please describe the types of membership offered by the SSS.

- 1. How do the types differ?**
- 2. Within each membership category, are all participants subject to the same rules and procedures? Please describe important exceptions, including both differences in rules across participants and the rationale for these differences.**

Despite the fact that only direct membership is offered, in addition to their own trades participants in the LDT may settle those concluded by other intermediaries which participate in the market but not in the LDT. Participants in the LDT have the responsibility to settle all the trades sent to the LDT in their name, regardless of the counterparty that concluded the trade in the market.

B. Can participants establish accounts for their customers' assets that are segregated from their own asset accounts at the SSS?

The LDT does not offer custodial services. By law participants are obliged to open two custody accounts at the central securities depositories: one for their own trading purposes and the other for their customers' assets (customer account). Participants may also open another securities account for each intermediary on whose behalf they settle (settler account). All the accounts are segregated one from the other.

- 1. If so, is this accomplished through a single omnibus customer account or through a multiplicity of accounts and/or sub-accounts?**

Customer accounts are omnibus accounts. Participants cannot open more than one customer account at each CSD. Each participant may open more settler accounts for each intermediary on whose behalf it settles or, alternately, one omnibus settler account.

- 2. Is the segregation optional or compulsory?**

The segregation between the participants' own trading purposes account and the customer/settler account is compulsory.

3. **Does the fact that a sub-account at the SSS bears the name of a third party give any rights to that third party as a participant under the rules of the system?**

There are no sub-accounts in the CSDs.

C Please describe participant requirements for each type of membership.

1. **Are participants required to be domiciled or resident in a particular jurisdiction?**

There are not residence or domicile requirements.

2. **Are participants required to be subject to a supervisory regime? If so, please describe.**

The categories permitted to participate (banks, investment firms and stockbrokers) are all subject to individual supervision aimed at verifying either their financial soundness or their risk control measures. Italian banks and the Italian subsidiaries of non-EU banks are supervised by the Banca d'Italia. Italian investment firms and the Italian subsidiaries of non-EU investment firms are supervised by the Banca d'Italia together with Consob. Stock brokers are supervised by Consob. EU participants (including Italian subsidiaries) are supervised by the supervisory authority of the home country.

3. **Are participants required to hold an equity stake in the SSS?**

This question is not applicable since the LDT procedure is not an entity separated from the Banca d'Italia.

4. **Are there financial, economic, personal or other requirements (e.g. minimum capital requirements, "fit and proper" tests)? If so, please describe.**

Only banks, investment firms and stock-brokers may participate in the LDT.

In order to perform settlement, participants have to open securities accounts at the central depository institutions and, in case of banks, cash accounts at the Banca d'Italia. Non-bank participants, which cannot participate in the interbank clearing system, have to entrust a bank for the settlement of cash balances.

In addition, participants have to join the trade matching system and comply with specific technical requirements.

As the settlement of the trades concluded on the stock exchange on shares, warrants and convertible bonds is guaranteed, intermediaries who wish to participate in the guaranteed settlement have to contribute to the guarantee fund.

- D. **Does the SSS engage in oversight of its participants to ensure that their actions are in accordance with its rules and procedures? If so, please describe.**

The Banca d'Italia is in charge of the oversight of the smooth functioning of the Italian payment system, including the LDT.

The model agreement signed by participants establishes that the participant who does not behave in accordance with the system rules and procedures may be excluded from the LDT.

- E. **Under what conditions can participants terminate their membership in the SSS? Does this mark the end of all liabilities of the participant? If not, please describe what liabilities could remain.**

Participants are enabled to terminate their membership at any time, on condition that they notify their exit at least 20 days in advance. Participants have to ensure the settlement of all contracts concluded on the market by the time of notification.

- F. **Under what conditions can the SSS terminate a participants membership in the SSS?**

The top management of the Banca d'Italia may exclude participants if they do not comply with the rules and procedures of the system and in case of insolvency (see Section VI).

- G. Please describe the scope of the SSSs liability to participants, including the standard of liability (negligence, gross negligence, wilful misconduct, strict liability or other), the force major standard, and any limitation to the scope of liability of the SSS (e.g. indirect or consequential damages). Where are these liabilities and their limitations set out (e.g. in statute or contract) ?**

The liability of the Banca d'Italia, who manages the LDT, is regulated by the general principles of the Italian law.

IV Relationships with other SSSs and commercial intermediaries

Many SSSs have relationships with intermediaries who perform critical tasks for the SSS and indirectly, therefore, for the system's participants and their customers. In particular, relationships or linkages between SSSs may be important for an understanding of the implications of settlement arrangements. For example, in those instances where the linkage includes using another SSS or a commercial intermediary as a securities sub-custodian, disclosure of information concerning the linkage would be essential for participants to fully evaluate the associated risks. The appraisal of risks may differ depending on whether the linkage allows only free deliveries or whether cash accounts at the two SSSs are also involved. The latter types of linkage deserve particular attention to ascertain whether they increase the potential for settlement disruptions to spread quickly between different systems.

Because it is the SSS and not its participants that negotiates and concludes the agreements with these third parties, it is important for participants to be fully advised on the relevant aspects of the system's various intermediary relationships, including the standards used by the SSS in the selection and monitoring of intermediaries, the functions that the intermediaries perform and any specific risk management mechanisms in place specifically to protect against the risks posed by these relationships. It is also important to identify instances in which the SSS advances funds or securities on behalf of third parties or intermediaries, as these actions can pose risks to the SSS and its participants.

A. Does the SSS maintain linkages (including sub-custodian or cash correspondent relationships) or other relationships with other SSSs?

1. Please identify each of the other SSSs used and the type of securities transferred via the linkages.

- (a) What is the name of the other SSS? Where is it located?**
- (b) What securities are eligible for transfer via the linkage to the other SSS?**
- (c) Are transfers of securities made via the linkage to the other SSS limited to only those that are free of payment or are transfers against payment also made via the linkage to the other SSS? If against payment, please describe the timing of the transfers and the corresponding payments.**
- (d) Does the other SSS provide custody services to the SSS and, if so, who bears any credit or custody risks?**

At present the LDT is not directly connected to foreign SSSs.

B. Does the SSS use securities custodians (other than the other SSSs addressed in the previous question) and/or commercial cash correspondents? Please identify the custodians or cash correspondents used and the duties that each performs.

The LDT does not perform custodial services. Securities are settled through the two Italian central depositories: CAT for government securities and Monte Titoli for the other securities.

Cedel and Euroclear opened accounts at CAT to settle transactions for their customers. Monte Titoli has linkages with the French and the German central depositories; these linkages provide settlement for cross-border trades in German and French securities listed on the Italian stock exchange on a free-of-payment basis.

The LDT does not have commercial cash correspondents and settles all cash balances through the accounts held by bank participants with the Banca d'Italia.

- C. Please describe the standards used in approving or reviewing relationships with other SSSs, custodians or cash correspondents, including any financial or operational requirements or the presence of insurance or public supervision.**

The LDT does not have relationships with other SSSs, custodians or cash correspondents.

- D. Does the SSS advance funds or securities to or on behalf of other intermediaries such as issuing or paying agents? If so, please identify the circumstances in which such exposure could arise.**

The LDT does not advance funds or securities.

- E. Please describe measures in place to protect the SSS and its members against the failure of other SSSs or commercial intermediaries to meet obligations to the SSS, including risk controls, collateral or alternative sources of funds and securities.**

See answer IV C.

V. Securities transfers, funds transfers and linkages between transfers

At the heart of the operations of SSSs are the transfers of securities and funds that actually comprise the settlement process. The questions in this section begin by focusing on the process, if any, for matching settlement instructions prior to beginning the settlement process itself. In some markets, matched settlement instructions are binding, which may impose additional obligations on participants that are important for them to understand.

This section next considers issues raised by the practice of securities registration. Because the laws of different countries vary widely in this regard, this disclosure framework has not been designed to substitute for the legal analysis of the implications of registration, for example the issue of the nature of the title to securities that is transferred in the SSS if the system itself is not also the registrar. The questions are instead focused on the circumstances in which the SSS itself becomes involved in the registration process as well as the risks that may arise if participants fail while securities are in the process of being re-registered in the buyer's name. In particular, it is important to understand whether the rules and procedures of the SSS would require transactions to be unwound in such an event.

The mechanism of securities and funds transfers are then addressed, including the issue of where cash transfers associated with securities transfers at the SSS take place. These questions also address the circumstances under which the SSS extends credit to participants as an aspect of providing funds transfer capability at the SSS. It is clearly important for participants to understand what types of cash account are offered at the SSS and on whom they take a risk with respect to cash deposits, as well as whether the SSS itself bears credit risk in conjunction with these accounts.

The questions then explore the timing of processing within the SSS, whether the SSS is a DVP system, and what type of DVP model, if any, has been adopted by the SSS. DVP is a mechanism which ensures that final delivery occurs if and only if final payment occurs, which eliminates principal risk and contributes to reductions in liquidity risk.

The issues which arise in the practical implementation of DVP were outlined in the DVP Report referred to in the Introduction, and mainly concern the finality of the securities transfers and the funds transfers which together constitute the DVP settlement. Transfers are final if they are both irrevocable and unconditional. A transfer is irrevocable when the parties to it can no longer revoke their instructions and it becomes unconditional when there are no longer any circumstances that could cause the SSS to unwind it. If transfers are provisional at the time of processing, even if DVP is achieved, the risk remains that transfers may have to be unwound later if finality cannot be achieved.

If not properly recognised and controlled, this "finality risk" could have systemic effects. Members of SSSs are often provided with immediate availability of securities received, even if the transfer is not final. If these members then sell the securities again, or make them available to custodial clients, and the original transfer is subsequently unwound, additional transfers by the member or the member's clients may also have to be unwound, spreading the impact of the unwind to unrelated parties. It could also ultimately lead to losses to be shared among participants. For these reasons, the questions below attempt to clarify precisely the circumstances under which transfers become final.

The questions also address the provision of settlement guarantees by the SSS. If guarantees exist, it is necessary for participants to understand the events that trigger the guarantee as well as the coverage that is provided by the guarantee, including the liability of the SSS with respect to the guarantee.

A. Please discuss whether and how settlement instructions are matched between participants prior to processing by the SSS.

Matching is provided by Sia, Ced-Borsa and Banca d'Italia (see answer I C3).

1. Is matching required for all transactions without exception?

All transactions carried out on regulated markets are automatically matched by the trading systems. Transactions concluded off the market need to be matched.

2. What procedure is used when instructions do not match?

When instructions do not match, the matching services providers notify the error to the counterparties concerned that have to send new instructions. Trade matching have to occur at latest one day after the trade date (T+1) for buy and sell orders; other operations can be matched until one day before the settlement date (S-1). If the instructions do not match by the scheduled time, the transaction is not sent to the LDT settlement procedure.

3. Are matched settlement instructions binding on participants?

Matched transactions are binding on participants.

(a) If so, please describe the consequences of failure by participants to meet obligations (e.g. forced settlement, penalties, short positions).

In case of temporary failures to deliver securities, a special procedure called "assegnazioni" can be initiated; the participant failing to deliver securities agrees with the intermediary that has a credit position on the same security - which may be different from the original counterparty to the trade due to multilateral netting - to postpone settlement of the unavailable securities. The illiquid participant has to deposit at the central bank an amount equal to 20% of the total value of the undelivered securities. These amounts are kept at the Banca d'Italia until the securities are delivered. After 5 days for shares, warrants and convertible bonds and 3 days for government securities, the illiquid participant has to pay a penalty equal to 10% of the deposit for each day of delay. At the end of the year, the sums collected are calculated in deduction of the fees participants have to pay to the clearing houses.

In case of insolvency, the procedure is different depending on the type of securities involved. The settlement of shares, warrants and convertible bonds traded on the stock exchange is guaranteed by a settlement guarantee fund fed by all system participants. When a participant is insolvent, the Clearing and Guarantee House, which manages the fund, intervenes to ensure the timely settlement. If the fund is not sufficient to cover all debit balances banks have to provide the necessary funds. Losses are then divided among all participants.

The settlement of other securities transactions (different from shares, warrants and convertible bonds traded on the stock exchange) is not guaranteed. In case of insolvency an unwinding procedure is activated.

(b) Please describe whether this is a feature of the SSS's rules and procedures or of national law or regulations.

The Banca d'Italia in agreement with Consob regulates the procedure called "assegnazioni" and the intervention of the Clearing and Guarantee House.

- (c) **Please provide a time line indicating the points at which matched instructions become binding, as well as any pre-matching process that takes place.**

See answer V A 2-3

B. Are securities transferred within the SSS registered?

Government and private bonds, as well as savings shares, are held in bearer form, ordinary and preference shares are registered.

1. Who is the registrar?

The issuers hold the register for shares.

2. Is it normal practice to register the securities in the name of the SSS (or its nominee) or in the name of the beneficial owner? Are there instances in which securities housed within the SSS are registered to neither the SSS (or its nominee) nor the beneficial owner?

Securities are sub-deposited at the central securities depositories, CAT and Monte Titoli, in omnibus accounts in the name of the bank or investment firm at which securities are deposited by the owner. Following law no.289 of 1986 shares are endorsed in the name of Monte Titoli. The issuers record the names of the beneficial owners of the shares (when in registered form) on occasion of shareholders' meetings and dividend payments and following the law 289/86 make a note of the sub-deposit of the shares with Monte Titoli.

3. If the SSS offers custodial services, will it hold securities registered in the name of the beneficial owner?

The LDT does not offer custodial services.

4. Under what circumstances does the SSS initiate registration of securities in the buyer's name?

The LDT does not offer registration services.

5. How long does the registration process typically take? Are participants notified when registration is complete?

6. Can securities be transferred within the SSS before registration in the buyer's name is complete? If so, do the rules and procedures of the SSS provide for an unwind or reversal of such transfers in case of bankruptcy or other events which result in the buyer's name not being entered on the register?

The settlement process is completely independent from the registration process in the name of the beneficial owner.

C. Please describe how securities transfers are processed within the SSS.

Securities transfers within the LDT are fully automated. Starting from the evening before, until 6 a.m. of the settlement date the LDT receives from the trade matching services provider net bilateral balances in cash and securities. Between 6,30 a.m. and 8 a.m. the LDT calculates the final multilateral net balances and sends the information about net debit balances in securities to the CSDs. It also sends to the banks that settle the cash leg of the transactions on behalf of investment firms the cash debit positions of the intermediaries concerned. At latest at 8 a.m. the CSDs give to the LDT the information about the coverage of securities' debit positions. Securities are transferred from the sellers' accounts at the CSDs to an intraday provisional account in the name of the LDT. These transfers are irrevocable. Securities will be credited to the buyers' accounts at the CSDs only at the end of the settlement process. Between 8 a.m. and 1,30 p.m. intermediaries, that did not have sufficient securities to cover their debit position, have time to borrow the securities on the market. At 1,30 p.m. all debit position in securities have to be covered. In case of failure, intermediaries may activate the procedure called "assegnazioni" (see answer V A 3a).

Once the securities debit balances are covered, net debit and credit balances in cash are sent to the interbank clearing system. At 3.30 p.m. the LDT receives the information about the settlement of cash positions and sends via network to the CSDs the order to credit buyers' securities accounts.

1. Please indicate whether the transfers are processed as debits and credits to members' accounts or via some other method.

Securities transfers are processed as debits and credits to members' accounts.

2. On a continuous (real-time) basis, or in one or more batches?

Multilateral balances are processed on one batch cycle.

3. If continuous, during what hours does the process occur? If in batches, at what time or times is the process initiated and completed?

See answer V C.

4. Do securities settlements occur daily? Please identify securities for which settlement occurs only on specific days of the week or month.

Securities settlements occur daily on a rolling basis. Primary market operations on government bonds are settled at T+2. Primary market operations on government discount bills are settled at T+3. Outright trades in private shares and convertible bonds are settled five days after the trade (T+5), trades on government securities and corporate bonds are settled three days after the trade (T+3). Trades on government discount bills are settled two days after the trade (T+2).

D. Please describe whether final funds transfers in conjunction with the SSS are made as debits and credits to balances held at the SSS, at one or more commercial banks, at the central bank; or via some other method.

Final funds transfers in conjunction with the LDT are made through the interbank clearing system. As long as only banks can open a cash account at the Banca d'Italia, non-bank participants (investment firms and stockbrokers) settle their cash balances through a bank.

I. Does the SSS maintain cash accounts for its participants? Are these accounts equivalent to deposit accounts at a commercial or central bank or do they serve only as "cash memorandum" accounts?

The LDT does not maintain cash accounts for its participants.

2. On what entity (SSS or other) does the participant bear cash deposit risk?

Since the custodian of cash accounts is the central bank, participants do not bear any cash deposit risk.

3. Under what circumstances does the SSS provide credit extensions or advances of funds to its participants and thereby expose itself to credit risk?

4. How long can such credit extensions last? How long do they typically last?

The LDT does not provide either credit extensions or advances of funds to its participants.

E. Is the SSS a DVP system? If so, please describe the DVP used according to the models outlined in the DVP Report (see the Introduction). Please also provide a diagram indicating the timing of events in the process of securities and funds transfers in the SSS. Where the SSS provides more than one alternative for settlement processing, please provide a response for each alternative and indicate the relative importance of each alternative.

I. Are funds transfers and securities transfers processed within the same system or in different systems? If different how are they linked?

(a) Please describe whether each securities transfer is linked to a specific funds transfer on a trade-by-trade basis or on a net basis or via some other method.

The LDT operates a system based on model 3 DVP net multilateral settlement of both cash and securities. Credit balances in securities and cash cannot be settled until all debit balances are transferred. On the settlement date debit balances in securities are conveyed electronically to the central depositories and debited to the participants' accounts. The cash leg of securities transactions is settled through the interbank clearing system, managed by Banca d'Italia. At the end of the process securities are delivered to the members with credit positions by directly crediting their accounts held at the central securities depositories.

- (b) **Does the SSS "split" large transactions into multiple transactions or require participants to do so?**

The LDT does not split large transactions and does not require participants to do so.

2. When do securities transfers and funds transfers become final?

Securities and fund transfers become final at the end of the settlement process.

- (a) **At what time do securities transfers become final? After what event or events?**

The debiting of securities' transfers occurs at the beginning of the settlement date, but these transfers become final only after the debiting and crediting of cash balances at the end of the settlement process (see answer V C).

- (b) **At what time do funds transfers become final? After what event or events? Does this timing allow for same-day retransfer of funds received in exchange for securities?**

Final transfers of funds occur at the end of the settlement process (when the interbank clearing process is concluded).

- (c) **If final delivery of securities precedes the final transfer of funds, can participants dispose freely of such securities prior to funds finality? If so, what actions will be taken if funds are not received?**

Final delivery of securities does not precede the final transfer of funds.

- (d) **If final delivery of funds precedes the final transfer of securities, can participants dispose freely of such funds prior to securities finality? If so, what actions will be taken if securities are not received?**

Funds transfers are settled through the interbank national clearing system. As a consequence, cash balances relating to securities transactions are settled together with all the payments made or received by the bank concerned on the same day. Debit cash balances stemming from the securities settlement procedure may be covered by the credits that the bank has to receive on that day through the interbank clearing procedure and credit cash balances may cover a debit position of the bank in the interbank deposit market.

Final settlement of cash balances precedes logically the crediting of securities, the lag is however minimal.

- (e) **Does the timing of finality differ depending on the type of security transferred or the currency in which payment is to be made? Please describe.**

The timing of finality does not differ depending on the type of security transferred. Funds transfers may be made only in Italian lire.

3. Please discuss whether participants are notified of securities or funds transfers while they are still provisional, only when they are final, or both.

Participants are notified of their securities and cash balances in the LDT at the beginning of the settlement day. They are notified of the cash and securities transfers once they become final.

F. Does the SSS itself "guarantee" funds or securities transfers?

- 1. Under what circumstances and at what point are transfers guaranteed by the SSS?**
- 2. What actions does the guarantee obligate the SSS to take?**
- 3. Please indicate whether the guarantee is a feature of the SSS's rules and procedures or of national law or regulations.**

The LDT itself does not guarantee funds and securities transfers.

However, settlement of the trades concluded on the stock exchange is guaranteed by a special guarantee fund, managed by law by the Clearing and Guarantee House within a regulatory framework laid down by the Banca d'Italia in agreement with Consob. In the event of a participant's default, the House intervenes by replacing the position of the defaulting counterparty i.e., by settling the defaulter's debit balances while receiving its credit balances. To do this, the Clearing and Guarantee House uses the funds deposited in the special guarantee fund, which is fed by the margins paid in by system participants, according to the volume of trades settled through the LDT. The House is just the operator of the system and it has no property liability; should the final losses exceed the funds deposited by the defaulting counterparty, the remaining losses are shared among all participants, in proportion to the volume of trades settled through the LDT.

VI. Default procedures

Events of default are among the most difficult and stressful occurrences that market participants and SSSs may experience. The IOSCO Report underscores the need for transparency in the area of default procedures on the grounds that it will provide more certainty in the operation of critical market mechanisms during these stressful events, and thereby reduce the risk that a single default will cause further disruptions.

Because the definition of a default event may differ across systems, the IOSCO Report recommends disclosure with regard to the circumstances in which action may be taken, as well as who may take it, and the scope of the actions that may be taken. In some cases, the term "default" may not be used by the SSS in its rules and procedures or in contracts with its participants. In these instances, SSSs should attempt to spell out for their participants both how they would address the insolvency of a participant and any other circumstances in which they would initiate exceptional measures to fulfil settlement or other obligations to their participants.

In this regard, this section attempts to lay out in one place the available resources of the SSS with respect to meeting obligations in the event of a default or other events that would trigger exceptional measures. It is important for participants to understand what these resources are as well as the order in which they will be accessed. The questions also address the possibility that securities or funds transfers will be unwound by the SSS. Because unwinds are a way to reallocate liquidity pressures and credit losses, it is vital that participants understand all the possible circumstances in which an unwind could occur.

A. Please discuss the events or circumstances that would constitute default of a participant under the rules and procedures of the SSS or that would lead the SSS to make use of exceptional settlement arrangements or unwind procedures.

1. Failure by a participant to meet a test of its solvency under the applicable laws of its jurisdiction?

2. Failure to make payments or deliveries of securities within the time specified?

A participant in the LDT is insolvent when it cannot cover its debit positions in cash or in securities. In addition, if the system gains knowledge of the fact that a participant has been suspended or that any default procedures have been instituted by any Italian Court, this would be deemed to constitute default of a participant.

3. To the extent that the rules and procedures grant discretion in the determination of the use of default or other exceptional procedures, please discuss where the authority to exercise such discretion resides and the circumstances in which this authority would be used.

Rules and procedures do not grant any discretion to the management of the Banca d'Italia in the determination of the use of default or other exceptional procedures.

B. What procedures are followed by the SSS once it has determined that a default event has occurred or that exceptional settlement arrangements are to be employed?

1. How and at what point are participants notified that this has occurred?

2. Would the SSS be expected to continue to meet all its obligations to participants under these circumstances? Please discuss the resources in place to ensure that this would occur (e.g. collateral, participants' fund, insurance, loss-sharing arrangements, etc.).

3. Please describe and provide a time line indicating the order in which these resources would be used as well as the timing of participant notifications and

important deadlines (e.g. when the SSS's obligations to participants would be met, when participants would need to cover their loss-sharing obligations).

The settlement of trades on listed equities, convertible bonds and warrants is supported by a guarantee mechanism, operated by the Clearing and Guarantee House. The Clearing and Guarantee House manages the guarantee system, without any property liability. The regulatory framework of the guarantee system is laid down by the Banca d'Italia and Consob. Intermediaries willing to settle transactions in listed shares, convertible bonds and warrants have to contribute to the Guarantee Fund according to the volume of trades settled through the LDT. The amount of deposit is calculated by the Clearing and Guarantee House on the basis of criteria laid down by the Banca d'Italia, in agreement with Consob. In case of intervention it first uses the funds deposited by the defaulting participant and then those deposited by the other participants. If the total amount is not sufficient to cover all debit cash and securities balances banks have to provide the additional funds needed to cover the position of the insolvent participant. Once the settlement process is closed, the final losses are calculated, taking into account also the funds and securities received in the settlement process. Losses are shared among participants in proportion to the volume of trades settled through the LDT.

In case of a participant's failure to settle a transaction in securities other than listed shares, convertible bonds and warrants (unguaranteed settlement) an unwinding procedure is activated, which provides for the recalculation of final multilateral balances of the surviving participants. The single debit and credit positions of the defaulting counterparty will be handled separately. Participants in the LDT are notified immediately of all problems occurring in the settlement process.

4. Please describe all conditions under which irrevocable transfers of securities or funds could be unwound by the SSS.

Irrevocable debiting of securities may be unwound if the cash balances cannot be settled.

(a) How and on what authority would a decision to unwind securities or funds transfers be made by the SSS?

The top management of the Banca d'Italia would make the decision to unwind securities and funds transfers.

(b) When and how would participants be notified of a decision to unwind provisional securities or funds transfers?

Participants would be immediately notified of the decision to unwind transfers.

(c) How long would participants have to cover any debit positions in their own securities or funds accounts resulting from an unwind?

It will be judged case by case.

(d) In the event of an unwind, would all transfers be unwound or would only a subset of transfers (e.g. only securities purchases or only those of a subset of participants) be unwound?

(e) If only a subset of transfers, what procedure would be followed to determine which transfers and in what order?

The trades concluded on the stock exchange, whose settlement is guaranteed, will not be unwound.

5. Can bankruptcy or insolvency be declared retrospectively in the SSS's jurisdiction (e.g. under a "zero-hour" rule), and could this cause provisional securities or funds transfers to be unwound?

It never happened that bankruptcy or insolvency have been notified to the LDT during the settlement date and it is most unlikely that it will happen in the future. At

present, if bankruptcy or insolvency is declared by the competent authority and the decision is notified to the LDT during the settlement day before settlement has occurred, final multilateral balances have to be unwound (see answer VI B 3) and the positions of the individual surviving participants have to be recalculated. However, the regulatory framework is about to change in the near future. A regulation will be issued which will provide multilateral balances with immediate finality, avoiding the need to unwind debit and credit positions. Of course, individual transfers may be revoked outside the settlement process.

- 6. Please describe any circumstances in which transfers of securities or funds that were defined as final in response to question V. E.2 above would ever be unwound.**

Final transfers cannot be unwound.

- C. Has a participant in the SSS ever been declared in default or become insolvent?**

It happened a few times, particularly in 1990 and 1991, without serious consequences.

- I. Have loss-sharing procedures been invoked?**

Where necessary, the intervention of the guarantee fund has been invoked.

- 2. Please describe whether any of these defaults or insolvencies resulted in losses for the SSS or its participants and how they were absorbed.**

The LDT did not bear any losses since it is not directly involved in the settlement of transactions.

VII. Securities overdrafts, securities lending and back-to-back transactions

In recent years, SSSs have implemented a variety of approaches aimed at satisfying increasing demands for more rapid securities settlements, particularly in the cross-border context. This section focuses on several related issues that can arise in conjunction with these procedures.

The first set of questions in this section relates to the possibility of debit positions in participants' securities accounts at the SSS. Because such positions indicate instances where participants have been allowed to transfer securities that they do not have on deposit at the SSS, they clearly involve substantial risk that the SSS may not be able to obtain the actual securities and complete all necessary settlements. For this reason, it is vital for participants to understand the conditions, if any, under which such debit positions can arise, and what actions the SSS will take to rectify them. The questions also address measures that SSSs can take to reduce or prevent such debit positions.

The existence of a securities lending program at the SSS and the conditions under which securities loans are trickered is another important topic covered by the questions in this section. Participants need to understand both when the SSS will arrange for securities to be lent to them and when securities they hold on deposit at the SSS will be made available for lending to others. The existence and terms of a securities lending program may also have implications for the SSS's ability to facilitate settlements in a variety of circumstances, particularly for back-to-back transactions.

Back-to-back transactions were a major focus of the Cross-Border Report and involve a pair of transactions that require a counterparty to receive and redeliver the same securities on the same day. They have the major advantage of avoiding unnecessary funding costs by the party buying and selling the securities.

This practice poses no particular risk when the delivery follows an actual final receipt of the securities, as there is then no risk that this receipt would have to be unwound. Especially in the cross-border context, differences in the timing of settlement cycles or of finality have led to the development of practices whereby SSSs in some circumstances allow on-deliveries under back-to-back transactions before the initial securities receipts are final, in effect extending temporary (often intraday) securities loans. The questions in this section attempt to clarify the circumstances under which this occurs, so that participants can understand the risks entailed by these practices.

A. Is it possible for debit positions (overdrafts) in securities accounts at the SSS to arise?

The LDT does not hold securities accounts on behalf of participants. Debit positions in securities are covered by the CSDs only if the amount due is available on the accounts at the time of settlement. To cope with temporary unavailability of securities participants may activate the procedure “assegnazioni” (see answer V A 3a)

1. Under what conditions could such debit positions occur?

- (a) Do these conditions always result in debit positions in securities accounts rather than failed transactions? If not, please explain the basis for differential treatment by the SSS.**
- (b) Are these situations covered explicitly by the rules and procedures of the SSS?**

2. **How long can such debit positions last? How long do they typically last?**
3. **How are debit positions in securities accounts prevented, rectified or managed?**
4. **What procedures would be followed by the SSS in case the debit cannot be rectified? (e.g. failure by a participant with a debit balance in a securities account or unavailability of the securities in the market).**
 - (a) **Application of loss-sharing provisions allocating the loss to participants?**
 - (b) **Absorption of the loss by the SSS?**
 - (c) **Other? Please specify.**

Debit positions in securities accounts are prevented by the system itself because multilateral final balances are settled only when the seller has sufficient holdings on its securities account.

B. Under what circumstances does the SSS provide for the lending of securities to ensure settlements?

The LDT does not offer securities lending facilities.

1. **Is the process for lending securities automatic? If not, please describe the procedures used by the SSS to determine whether a securities loan will be made.**
2. **At what point are participants notified that securities are being lent to them in order to complete their settlements?**
3. **Which securities on deposit at the SSS are eligible for lending? Do participants have the option to make securities available for lending or is it mandatory?**
4. **Are lent securities identified by the SSS with specific participants as lenders or only with a common pool of securities available for lending? Does the participant whose securities are lent become a principal to the transaction?**

C. How does the SSS settle back-to-back transactions?

Back-to-back transactions are settled by the system as all other transactions. Given that the system is a multilateral netting system, back-to-back transactions are netted together.

1. **Under what conditions are delivery instructions by participants receiving and redelivering securities on the same day under back-to-back transactions settled for same-day value?**
 - (a) **Only if the participant has securities on deposit with the SSS that have been received pursuant to a final securities transfer?**
 - (b) **If the participant has securities on deposit with the SSS that have been received pursuant to a provisional securities transfer?**
 - (c) **Before securities have been received either provisionally or finally, but when a matched receipt instruction exists for the same or greater value? Is such a practice limited to markets where matching is binding?**
 - (d) **Before securities have been received either provisionally or finally, but when a third party has promised to deliver to the SSS securities of the same or greater value? Must the provider of the guarantee have itself received the securities through a final transfer? Please describe how the SSS evaluates such promises, and whether they are addressed by the written rules and procedures of the SSS.**
 - (e) **Other? Please specify.**
2. **Please describe limits or controls in place with respect to any of the above arrangements for the settlement of back-to-back transactions, including limits on amounts involved or related to the liquidity of the underlying securities.**
3. **Under what conditions are payment instructions by participants in the SSS under back-to-back transactions settled for same-day value? Can participants**

use the proceeds of an undelivery of securities without the need for an extension of credit?

There are no specific settlement procedures for back-to-back transactions. As long as delivery instructions are sent to the system for the same settlement date, transactions are netted together and settled for same-day value along with other transactions.

VIII. Risk control measures

This section of the disclosure framework is intended to provide a description of the risk management systems employed by the SSS. Sound risk management encompasses a number of aspects, including assessment of risks and senior management and Board of Directors input into the risk management process particularly with respect to the review of new products and services by the SSS. Internal and external audits as well as supervisory oversight can also play a vital role in ensuring that the risk management approach is sound and implemented with integrity.

A range of different risks can arise in conjunction with the different services that SSSs may provide. For example, in the course of providing settlement services, the SSS may become exposed to credit, custody or liquidity risks if it either explicitly or implicitly extends funds credit or lends securities to participants. In the provision of custody services, the SSS may take on credit risk if it extends funds to or on behalf of third parties. A variety of risk management approaches to these risks are possible, including in particular the use of collateral or limits on risk exposures. The questions also address several other provisions or tools that may be helpful to SSSs in managing or containing the different risks that they face, but are not meant to exhaust all the possible approaches that SSSs may employ.

A. Please describe the roles and responsibilities of those areas of the SSS responsible for risk management and control.

The Banca d'Italia operates the LDT and is responsible for risk management and control. In addition the central bank is also overseer of the smooth and efficient functioning of the Italian payment system.

Besides applying DVP in the settlement of final net balances, which eliminates principal risk, and adopting "rolling settlement", which reduces replacement and settlement risks, the Italian system relies on strict membership requirements: participants in the LDT may be banks, investment firms and stockbrokers. Italian banks are supervised by the Banca d'Italia, investment firms are supervised by the Banca d'Italia and Consob, stockbrokers are supervised by the Consob. Foreign institutions are supervised by the home competent authorities. Supervision aims at verifying the financial soundness of intermediaries and controlling their positions on the market.

With regard to the settlement of listed equities and warrants, there is a special guarantee fund managed by the Clearing and Guarantee House.

1. Please describe the process for the internal review of risk management policies and procedures.

The Banca d'Italia carries an on-going monitoring of the operation of the system and the positions of individual participants. It adopts all the necessary operational and regulatory measures to ensure the smooth, efficient and reliable functioning of the LDT and avoid settlement risk.

2. Is there a risk management policy that addresses the review and approval of new products and services offered by the SSSs? At what level of the organisation is risk management approval given for a new product or service?

The provision of new services by the LDT, if any, is subject to the approval by the top management of the Banca d'Italia, which also controls the risk management policy.

3. Does the SSS have a risk management function with clear independence from and authority over operational or marketing functions?

The LDT does not have a risk management function which is independent from the operational function.

4. Does the Board of Directors review risk management policies and procedures? Does the Board have a risk management or audit committee?

The LDT does not have a separate Board of Directors (see answer I E3). However, the senior management of the Banca d'Italia is reported continuously of the operation of the LDT and can decide to review risk management policies and procedures to increase overall efficiency and stability of the system.

B. Please describe any internal or external audits or supervisory/regulatory examinations that are performed with respect to the SSS. For each such audit or examination, please address the following question.

1. Who performs the audit or examination?

2. What is the scope of the audit or examination?

(a) Please indicate whether and how it addresses the sufficiency of and compliance with internal controls.

(b) Please indicate whether and how it addresses the SSS's compliance with its own rules and procedures.

3. What is the frequency of the audit or examination?

4. Are audit or examination reports available for review by participants?

The LDT procedure is only subject to internal audit controls. Such controls are directed at verifying the operation of the different departments of the central bank and controlling their activity. Internal auditing mainly judge compliance of the rules of the procedure with the internal regulation of the Banca d'Italia.

C. Please discuss whether the SSS has the capacity to value (i.e. mark to market) the securities that it holds.

The LDT does not hold any securities.

I. Please describe how these valuations are used by risk control systems at the SSS.

2. How frequently are securities revalued?

3. What are the sources for security valuations?

(a) What outside price or data sources are used?

(b) If pricing models are used, please describe how the models are chosen and how the model inputs are obtained.

D. Please discuss whether the SSS has a lien on the securities held in or transferred through it.

I. Does the lien apply only to the securities owned by the participants themselves or does it extend to the securities beneficially owned by customers of participants?

2. Under what circumstances and in what manner would such a lien allow the SSS to use the securities?

The LDT does not have a lien on the securities transferred through it.

E. Please discuss the circumstances in which the SSS requires collateral to limit or mitigate risks.

I. Does the SSS manage its own collateral system?

2. Does the SSS share a collateral system with another SSS or payment system?

3. Can collateral at the SSS be posted and returned on the same day?

4. What types of transaction at the SSS involve the use of collateral?

5. **What are the policies with regard to the type of collateral used or haircuts required?**
6. **How are collateral valuation methodologies developed and reviewed?**
7. **To what extent are collateral policies described in the written rules and procedures of the SSS?**

The LDT does not require any collateral. Risk control measures are described above.(see answer VIII A)

F. Please describe the SSS use of limits on exposures to monitor or control risks.

1. **Please explain the types of limit used and the exposures to which they apply.**
2. **Do the limits apply to all participants and/or to other SSSs with which the SSS is linked? What are the exceptions to the limits?**
3. **Do limits apply to participants individually or in the aggregate or both?**
4. **Do limits apply to implicit as well as explicit extensions of credit or securities (e.g. when on-deliveries of securities are pursuant to provisional but not final delivery of securities)?**
5. **Does the SSS automatically reject transactions that exceed limits or is compliance determined ex post?**
6. **How are limit policies developed and reviewed?**
7. **To what extent are limit policies described in the written rules and procedures of the SSS? Where does additional authority to set or amend limit policies reside?**

The LDT does not impose any limits on exposures.

G. Please describe other controls to mitigate or reduce risks at the SSS.

Risk control measures are described above (see answer VIII A)

1. **Does the SSS or its participants have the capacity to monitor participants' accounts continuously during processing?**

Any information about the trades concluded and the related settlement process, as well as the balances of participants' cash or securities accounts are available to the Banca d'Italia. Participants have the possibility of monitoring their own accounts. Participants are notified of their final balances in the morning of settlement date in order to be able to borrow the cash and the securities they need to cover their debit positions.

2. **Is there a special risk control regime that the SSS would apply to a participant known to be experiencing financial difficulties?**

The LDT does not apply any special risk control regime to a participant known to be experiencing financial difficulties.

3. **Does the SSS maintain or administer loss-sharing arrangements other than those applicable to events of default and addressed in Section VI above? Are these loss-sharing pools pre-funded by participants?**

The LDT does not maintain or administer loss sharing arrangements. Settlement of the trades concluded on the Stock exchange is guaranteed by the intervention of the Guarantee and Settlement Fund whose operation is described above (see answer VI B3).

IX Operational risks

Operational failures at the SSS could limit participants' ability to access their assets held at the SSS and prevent them from honouring their commitments to others, with potential spillover effects on other payments, clearance, and settlement systems. Furthermore, prolonged problems could reduce or eliminate trading activity with respect to the affected securities, with substantial consequences for market participants.

It is good practice to mitigate operational risks through redundancy and the maintenance of strong internal controls over the operations of the SSS. In the event of an unavoidable problem or natural disaster, the SSS should also have in place a well-rehearsed plan for business continuity that addresses all the business functions and resources that the SSS would need to renew operations.

A. Please provide assessments of the operational reliability of the computer and other systems used by the SSS, including any criteria that the SSS uses internally for this purpose.

The operational reliability of the system's EDP environment is at the highest level offered by the market.

- 1. What is the percentage uptime of the systems used by the SSS?**
 - (a) Whole system overall?**
 - (b) Broken down by major components? (e.g. communications network, central processing facility)**
 - (c) During critical processing periods?**

100%.
- 2. Has the SSS experienced major operational problems during the past two years?**
 - (a) Have settlements been delayed, been disrupted or otherwise failed because of operational problems during this period?**
 - (b) Please describe the nature of any such problems.**

Over the last years the LDT has not experienced any serious operational problems.

B. Please describe contingency or disaster recovery planning at the SSS.

All procedures, data-base, messages within the securities settlement procedure are duplicated. Therefore, operational risks are mitigated through redundancy. In case of failure of the primary system, the duplicated information (redundant system) may be used to ensure the smooth functioning of the system. However, when the failure involves the whole system (primary and redundant systems) a disaster recovery procedure may be activated, which ensures the recovery of the information and restores the operation of the system within four hours.

1. Does the SSS have a formal plan for business continuity in place?

The LDT has a formal plan for disaster recovery.

2. Is this plan available for review by participants?

The disaster recovery plan only involves the operation of the central bank's procedures and it is not available to system participants.

3. How often is this plan tested? Does this involve participants in the SSS?

The plan is tested every 6-8 months and does not involve participants.

4. What are the major elements of the business continuity plan?

5. How long would it take the SSS to resume operations if primary systems become unusable?

What are the key feature of the internal controls covering operations and security at the SSS (e.g. change controls or those covering remote access)?

- 1. Please describe controls or security procedures in place to ensure that the SSS acts only on authentic settlement instructions from valid participants.**
- 2. Are internal operational and security controls included in the internal and/or external audits of the SSS?**
- 3. Are internal operational and security controls covered by regulatory requirements applicable to the SSS?**

The internal operational and security controls are twofold:

- if the transactions are paper-based, the documents have to be delivered to the Banca d'Italia, that controls the identity and powers of signature of the signer;
- if the information is sent via network, there are specific automatic controls to verify the identity and powers of signature of the sender.

D. Does the SSS impose minimum operational or performance standards on third parties (e.g. communications providers)?

- I. How does the SSS ensure that such standards are met on a continuing basis and what sanctions are available to the SSS if they are not?**
- 2. How would the SSS allocate losses incurred due to operational problems caused by third parties?**

The LDT does not impose any operational standards on third parties.