# DISCLOSURE FRAMEWORK FOR SECURITIES SETTLEMENT SYSTEMS

# THE SECURITIES SETTLEMENT SYSTEM of the National Bank of Belgium

### Preamble and disclaimer notice

The following document comprises the answers formulated by the National Bank of Belgium regarding its securities settlement system in response to the Disclosure Framework questionnaire published in February 1997 by the joint working group of the Committee on Payment and Settlement Systems (CPSS) of the Bank for International Settlements, and the International Organization of Securities Commissions (IOSCO).

This document is intended to inform potential direct and indirect participants by providing information about the settlement system and to help them understand and assess the risks associated with its securities settlement activities. The framework does not necessarily identify all possible topics.

While the National Bank of Belgium believes the information to be accurate at the time of completing the questionnaire, no warranty of accuracy or reliability is given and no responsibility to any person will be accepted by the National Bank of Belgium for any error or omission howsoever arising. The following document has only an informative nature: it can neither be considered as a part of the rules and procedures of the system or of agreements between the National Bank of Belgium and any person, nor as an amendment or addition to the aforesaid texts.

Requests for further information may be directed to Securities Settlement Unit National Bank of Belgium sss@nbb.be

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# I. Basic information

### A. What is the name of the SSS?

The National Bank of Belgium Securities Settlement System (formerly known as NBB Clearing).

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

boulevard de Berlaimont / de Berlaimontlaan 14

B - 1000 Brussels

Belgium

Time zone: CET (central european time).

## C. What functions does the SSS perform?

- 1. Does the SSS serve as a securities depository and/or provide securities settlement services? Yes (securities depository + settlement services).
  - a) What types of instrument are eligible for deposit at the SSS (e.g. debt, equities, warrants, etc.)?

issuer = Belgian State:

- -Linear bonds (€);
- -Strips of linear bonds (€);
- -Treasury certificates (€);
- -Belgian Treasury Bills in OECD currencies;
- -Bearer bonds (BEF +  $\clubsuit$ );
- -Staatsbons/bons d'Etat (€).

issuer = private + public sector (but not the Belgian State):

- -bearer bonds (BEF + €+ OECD currencies);
- -treasury bills and certificates of deposit in €and OECD currencies;
- -dematerialised bonds.
- b) What types of instrument are eligible for transfer within the SSS?

All instruments mentioned hereabove are eligible for transfer within the SSS. The securities denominated in OECD currencies can only be transferred on a free of payment way.

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

Strips and linear bonds (€), treasury certificates, some bonds issued by the Belgian State, treasury bills and certificates of deposit (€+ OECD currencies) : dematerialised.

The bearer securities are immobilised and transferred by book entries.

d) Does the SSS provide safekeeping for physical certificates?

Safekeeping for bearer global certificates and bearer bonds.

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

The central bank of Belgium being the manager of the SSS, provides cash accounts so that a DVP service can be offered by the SSS. Only in €(funds transfers for non-OECD currencies are settled outside of NBB SSS).

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

The SSS provides a trade matching service. No other entity is involved.

4. Does the SSS provide a trade netting service (as distinct from undertaking the settlement of securities transfers on a net basis)?

No trade netting service is provided by the SSS.

Do others provide such services for securities settled at the SSS? In either case, what types of netting (bilateral of multilateral), if any, are performed?

For stock exchange transactions, LCH.Clearnet SA is acting as the central counterparty to the trades. Also LCH.Clearnet Ltd acts as a central counterparty for the trades cleared in its system.

NBB SSS receives in both cases netted notifications and settles the transactions on a gross basis.

- 5. Does the SSS offer a securities lending or borrowing programme?
  - The SSS provides an optional automatic securities lending facility at the end of the day.
- 6. Does the SSS provide custodial and/or related services such as the collection of interest, dividends, principal or withholding tax reclamations? Which types of service are provided? For securities denominated in € and BEF, the SSS ensures the payment of interests and the redemption of capital.
  - For private issues these payments are announced up to 5 days in advance by e-mail or Swift messages (MT564).
  - Withholding tax: see 8.
- 7. Does the SSS act as a central counterparty or principal to transactions with its participants? The SSS as such does not act as a central counterparty or principal to transactions with its participants. For the working of the automatic securities lending system, the SSS however acts as intermediary in its own name on behalf of the lenders. Moreover some operations of the National Bank of Belgium (not acting as SSS) are settled through the SSS.
- 8. Other? Please specify.

Collection and refunding of withholding tax within the framework of the X/N system.

## D. What type of organisation is the SSS?

- 1. Please indicate whether the SSS is a public sector or private sector entity.
  - The National Bank of Belgium (being the Belgian central bank and operating the SSS) was founded by a special law dated 5 May 1850. The shares of the National Bank of Belgium are split up into 50 p.c. owned by the Belgian State and 50 p.c. quoted on the Brussels Stock Exchange.
- 2. Please indicate whether the SSS is organised on a for-profit or a non-profit basis. The SSS is governed by NBB's organic Law, its Statutes and, additionally, by the rules applicable to for-profit companies ("sociétés anonymes"-"naamloze vennootschappen"). NBB's policy is to cover the full cost of the operated system.
- 3. What is the legal basis for the establishment of the SSS and for securities transfers made through it?

The law of 2nd January 1991 (executed by the Royal Decree of 23 December 1991) vested the National Bank of Belgium with a securities depository and settlement function for dematerialised government bonds. The Law of 22 July 1991 on commercial paper extended the application field to securities issued by private organisms. The royal decree of 12 January 2006 concerning the dematerialised corporate securities designated the NBB as a settlement institution for (dematerialised) corporate bonds.

Moreover, the SSS operates the book-entry transfers of bearer securities on the basis of the Royal Decree nr 62 of 10 November 1967 Facilitating the Circulation of Securities.

NBB is entitled by its organic law (Art. 8 of Act of 22 February 1998) to oversee securities clearing and settlement systems incorporated in Belgium. This role is reaffirmed by the law on the supervision of the financial markets (Art. 23 §3 of the Law of 2 August 2002). An Oversight Unit has been established within the Bank accordingly.

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

1. Who are the owners of the SSS?

See D.1.

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

The SSS is operated by the Belgian central bank (more precisely by the Securities Settlement Unit, which is part of the Financial Markets Division). No outsourcing occurs.

3. Does the SSS have a Board of Directors?

The Board of Directors is responsible for the SSS of the National Bank of Belgium.

- a) What is its composition?
  - G. Quaden (Governor), L. Coene (Vice Governor), M. De Wachter, N. De Batselier, P. Praet, J. Smets, F. Masai and J. Hilgers.
- *b) What are its responsibilities?* Full management responsibilities.

## F. Please describe the financial resources of the SSS.

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

According to the 31 December 2006 accounts, the capital and reserve amounted to EUR 2 059 408 000.

2. Guarantees, insurance coverage or other similar arrangements?

Currently no specific insurance is covering the activities of the SSS.

3. Credit lines or letters of credit?

Nihil.

4. Powers to assess participants or equity holders?

No.

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

The National Bank of Belgium is submitted to the control of the Government's Commissioner (who can veto any decision of the NBB governing bodies in case of infringement of the law or of acts contrary to the interests of the state) and of the Bank's external auditors.

Within the NBB, the Oversight Group - a unit in the Financial Stability Department - is in charge of the oversight on Belgium based payment and settlement systems (see also D.3).

# II. Rules and procedures 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 rules and procedures governing the rights and obligations of the participants and the duties of the SSS are described in the official regulation of the NBB SSS.

- 1. How can participants obtain a copy of the rules and procedures?
  - On demand made by phone, by (e-)mail, by fax or Swift message. It is possible to download a copy via the internet (www.nbb.be>finance>securities settlement system or www.nbbsss.be).
- 2. Does other documentation provided to participants (e.g. user guides) have the same status as the rules and procedures?
  - The user guides related to communication means and all other relevant documentation are included in the rules and procedures (and its annexes).
- 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?
  - Rules and procedures can be completed, updated or changed by decision of the National Bank of Belgium (with a minimum 8 working days prior notice except in urgent cases).
  - The amount of the charges may be adjusted provided that all participants are notified three months beforehand.
- b) How are participants notified of changes in rules and procedures?

  The SSS sends, beforehand and by mail, to the participants a circular summarizing the contents of the official amendment to the rules and procedures, and the amendments as well.
- c) Is there a procedure for participants or others to comment on proposed rule changes?

  In case of major changes to the rules and procedures the participants will be consulted. No structured procedure has been set up.
- 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?

Yes, the rules and procedures are binding on the SSS as well as its participants.

The rules and procedures cannot be waived or suspended by the SSS. They can only be amended in the way described under question II.A.3.a).

# III. Relationships with participants.

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

Only one type of membership (a direct one) is offered.

1. How do the types differ?

Not applicable.

2. Within each membership category, are all partipants subject to the same rules and procedures? Please describe important exceptions, including both differences in rules across participants and the rationale for these differences.

Following to the Royal Decree of 14 June 1994, only 5 participants may hold securities denominated in foreign currencies (other than the €) with the SSS:

- 1) the National Bank of Belgium;
- 2) Clearstream Luxembourg;
- 3) Euroclear Bank (Brussels);
- 4) the paying agent concerned with the issue in foreign currency.
- B. Can participants establish accounts for their customers' assets that are segregated from their own asset accounts at the SSS?

Yes.

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

It is accomplished through a single omnibus customer account. Participants can however always ask to have additional customer accounts at their disposal in the system.

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

It is not possible to open an account in the system in the name of a third party.

## C. Please describe participant requirements for each type of membership.

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

In general, participants have to be located in a member state of the European Union. For institutions outside the EU, NBB will ask outside legal counsel's opinion on the local legal framework (art. 2.2.1.).

- 2. Are participants required to be subject to a supervisory regime? If so, please describe. Participants are
  - 1) Banks and investment firms, subject to a prudential control;
  - 2) Public or semipublic entities (Ministry of Finance, National Bank of Belgium,...).
- 3. Are participants required to hold an equity stake in the SSS?
- 4. Are there financial, economic, personal or other requirements (e.g. minimum capital requirements, "fit and proper" tests)? If so, please describe.

No financial, economic or personal requirements are imposed. However, the National Bank may make the participation of an institution in the securities settlement system, as well as the maintenance of this membership, dependent upon the successful outcome of tests demonstrating that this institution has the operational and technical capacity required (notably regarding its IT systems and telecommunications)

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.

If a participant does not meet the obligations resulting from the rules and procedures, the sanctions provided in the rules and procedures do apply.

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.

Any participant may terminate its membership in the SSS with a 15 days prior notice, for any reason the participant deems fit. It remains liable for all transactions notified before the expiry of this 15 days delay. In other words, cancellation of membership of the system may not take effect until the date on which all transactions of the participant concerned, notified before expiry of the period of notice required for cancellation, have been either settled or eliminated from the system. The securities on the participant's accounts have to be transferred to an account held by another participant.

### F. Under what conditions can the SSS terminate a participant's membership in the SSS?

The SSS may terminate a participant's membership in the SSS with a 15 days prior notice. The SSS must indicate the reasons that justify this decision. The participant remains liable for all transactions notified before the expiry of this 15 days delay. In other words, cancellation of membership of the system may not take effect until the date on which all transactions of the participant concerned, notified before expiry of the period of notice required for cancellation, have been either settled or eliminated from the system.

The participants are automatically and immediately excluded from the SSS in such case as insolvency.

G. Please describe the scope of the SSS's liability to participants, including the standard of liability (negligence, gross negligence, wilful misconduct, strict liability or other), the force majeure 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 SSS's liability to participants is limited to its own negligence. Furthermore, the SSS incurs no liability in case of force majeure or computer breakdown. The liabilities and their limitations are described in the rules and procedures.

# IV. Relationships with other SSS's and commercial intermediaries.

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

Yes.

- 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? Cf b).
  - b) What securities are eligible for transfer via the linkage to the other SSS?

NBB SSS has a link with Euroclear Belgium for the transformation of securities in bearer form (and vice versa). Only State Bonds (Bons d'Etat, Staatsbons) are eligible. This link will be abandoned in the second quarter of 2008 due to the dematerialisation of bearer securities foreseen by the law of 14 December 2005.

Issuer links:

- -Euroclear (Brussels): all securities
- -Euroclear France: idem
- -Clearstream (Luxembourg): idem
- 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.

Euroclear Belgium: only FOP.

Rest: FOP + DVP (at each settlement cyle).

d) Does the other SSS provide custody services to the SSS and, if so, who bears any credit or custody risks?

Euroclear Belgium is delivering physical securities to the NBB on a regular basis to cover the positions on NBB's securities accounts with Euroclear Belgium which change daily due to mutual securities transfers by giro. This practice is ruled by a formal agreement between Euroclear Belgium and NBB, which gives NBB the right to demand regularly additional securities if the position in a given ISIN code is judged excessive. The temporary negative positions are covered by an insurance.

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.

No other securities custodians, neither commercial cash correspondents.

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.

Not relevant.

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.

No advance of funds or securities on behalf of other intermediaries, except for the automatic securities lending system (the latter includes an integrated compulsory collateralisation process).

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.

Not applicable.

# V. Securities transfers, funds transfers and linkages between transfers.

- A. Please discuss whether and how settlement instructions are matched between participants prior to processing by the SSS.
- 1. Is matching required for all transactions without exception?

Matching is compulsory for all transactions to be settled in the SSS except for internal transfers between securities accounts belonging to one single participant.

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

The concerned participants can follow their instructions throughout the day by means of automatically refreshed screens (application named 'Wirow') connected to the SSS application. Upon demand from the participant, Swift messages MT548 can also be automatically sent to the latter after each settlement batch, providing him with a confirmation of the matching status. Four times a day all unmatched instructions are communicated by e-mail as well.

Any unmatched instruction is cancelled on settlement date by the final settlement process.

- 3. Are matched settlement instructions binding on participants?
  - Matched notifications (i.e. settlement instructions) are in principle binding on participants. Nevertheless cancellation is possible in following cases:
  - instructions concerning clients' accounts which are only binding as from the settlement date at 11:00 AM.
  - instructions concerning own accounts can be cancelled bilaterally until the day before the settlement date (limit: 17:30)
  - automatically postponed transactions can be cancelled bilaterally (own accounts) or unilaterally (at least 1 client account involved) on settlement date until 11:00 AM.
  - a) If so, please describe the consequences of failure by participants to meet obligations (e.g. forced settlement, penalties, short positions).
    - In case of failure due to a lack of cash or securities, the notification is postponed to the following working day (maximum 5 consecutive times). The defaulting participant has to pay a penalty of €350 to the SSS.
  - b) Please describe whether this is a feature of the SSS's rules and procedures or of national law or regulations.
    - This is a feature of the SSS's rules and procedures.
  - 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.

No prematching.

If the participant's notification relates to its securities own account, the notification becomes irrevocable as soon as it is matched (i.e. revocation would then only be possible with the consent of the other participant). If the participant's notification relates to its securities customer account, the notification can be revoked until 11.00 a.m. on the settlement date. See also 3.

## B. Are securities transferred within the SSS registered?

The securities held with the SSS are not subject to a registration procedure.

According to the laws of 2 January 1991 (public debt), 22 July 1991 (commercial paper) and 14 December 2005 (abolition of bearer securities) the dematerialised securities held with the SSS exist simply because they appear on the accounts of the SSS.

The bearer securities held with the SSS (thanks to the fungibility created by the aforementioned Royal Decree nr 62) are physically represented and do not need any registration.

1. Who is the registar?

Not applicable.

- 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? Not applicable.
- 3. If the SSS offers custodial services, will it hold securities registered in the name of the beneficial owner?

Not applicable.

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

Not applicable.

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

  Not applicable.
- 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?

  Not applicable.

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

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

Debits and credit to members' accounts are used.

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

Gross settlement with multiple batches throughout the day.

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

Batches are started at around 08:00, 9:00, 10:00, 11:00, 12:00, 12:15, 12:45, 13:15, 13:45, 14:15, 14:45, 15:15, 15:30, 15:45, 16:00, 16:15 and 16:30. Completion time: between 5 and 15 minutes. There is also a possibility to settle free-of-payment securities transfers for the need of ESCB collateralisation, after the foreseen cut-off time.

Extra batches on demand of the system manager within the window from 8:00 to 16:15 are also possible.

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

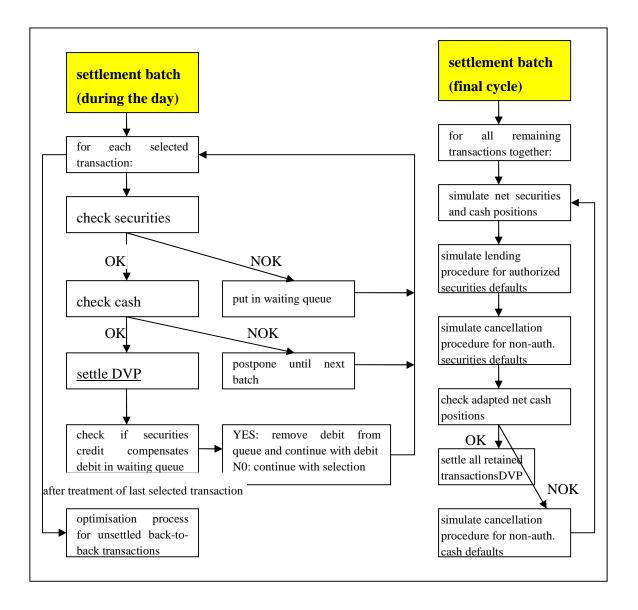
Daily settlement batches for all kinds of securities.

- 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 are made as debits and credits to balances held at the central bank (being also the manager of the SSS). Participants that have no direct account at the central bank may make use of a third party that has an account with the central bank.
- 1. 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 SSS is managed by the central bank of Belgium. The cash accounts used for fund transfers in conjunction with the SSS are thus held at the central bank, but aren't part of the SSS.
- 2. On what entity (SSS or other) does the participant bear cash deposit risk?

  The central bank, or, in case of a participant relying on a third party, on the latter.
- 3. Under what circumstances does the SSS provide credit extensions or advances of funds to its participants and thereby expose itself to credit risk?
  - The SSS as such (as opposed to the central bank in its monetary function) does not grant any credit of funds.
- 4. How long can such credit extensions last? How long do they typically last? Not applicable.

E. Is the SSS a DVP system? If so, please describe the DVP model 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 processing 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.

The SSS is a DVP system defined as model 1 (simultaneous gross settlement of securities and funds transfers) in the CPSS "DVP report". At the end of each settlement batch during the day, an 'optimisation process' is executed to deal with back-to-back transactions which have failed to be settled separately (see VII.C). In the final settlement cycle a particular settlement procedure is applied, as shown by the diagram.



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

Funds and securities transfers are processed in two different systems both managed by the central bank of Belgium (the central bank is thus responsible for holding the cash as well as the securities accounts). There is a computer link between the two applications.

- 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 SSS runs a gross settlement process, which means a trade-by-trade simultaneous settlement of the cash and securities legs related to each transaction.
- b) Does the SSS "split" large transactions into multiple transactions or require participants to do so?
  - The SSS doesn't split large transactions into multiple transactions nor requires participants to do so.
- 2. When do securities transfers and funds transfers become final?
  - a) At what time do securities transfers become final? After what event or events?

    During the completion of each settlement batch (i.e. intrabatch for all cycles except for the final cycle) or at the end of the batch (i.e. final cycle).
  - 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? During the completion of each settlement batch (see remarks in a)). Same-day retransfer of funds received in exchange for securities is possible.
  - 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?

    Not applicable.
  - 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?

    Not applicable.
  - 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.

    No difference. DVP service only provided for transactions with a cash leg in €
- 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 by the SSS of securities or funds transfers when they are final. However, they have the opportunity to follow the status of their instructions: if that status is still pending (namely not yet settled) the concerned participants can anticipate securities or cash movements to come.

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

Considering the DVP procedures used in the SSS, there is no need for a special "guarantee" by the SSS.

- 1. Under what circumstances and at what point are transfers guaranteed by the SSS? Not applicable.
- 2. What actions does the guarantee obligate the SSS to take? Not applicable.
- 3. Please indicate whether the guarantee is a feature of the SSS's rules and procedures or of national law or regulations.

  Not applicable.

# VI. Default procedures.

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.

A participant is automatically and immediately excluded from the SSS in cases like bankruptcy, winding up, withdrawal of the authorisation to work as a credit institution,....

Furthermore, the SSS may immediately exclude a participant from the SSS in cases like seizure, non-fulfilment of its obligations, substantial weakening of the financial soundness,...

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

No test of solvency is made by NBB.

- 2. Failure to make payments or deliveries of securities within the time specified? The failure to make one payment or one delivery is not considered as an event of default by the SSS.
- 3. To the extent that rules and procedures grant discretion in the determination of the use of default or other exceptional procedures, please discuss where the authority to exercice such discretion resides and the circumstances in which this authority would be used.

Up to now, the SSS has never made use of its discretionary rights in the determination of the use of default or other exceptional measures.

- B. What procedures are followed by the SSS once it has determined that a default event has occured or that exceptional settlement arrangements are to be employed?
- 1. How and at what point are participants notified that this has occurred?

  The participants will be informed as soon as possible about the exclusion of a participant following to an event of default, and this by any convenient communication means.
- 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, partipants'fund, insurance, loss-sharing arrangements, etc.).

In principle, the SSS does not act as a central counterparty. It does only act in the name and on behalf of the participants. Therefore, the default of a participant could not have any impact on the fulfilment of the obligations of the SSS itself.

For the smooth functioning of the automatic securities lending system, the SSS however acts as an intermediary in its own name on behalf of the lenders. The borrower's obligations are secured by a pledge on securities. The market value of the pledged securities must at least amount to 110 p.c. (incl. haircuts) of the market value of the borrowed securities. In the rather theoretical case where the realisation of the pledged securities would not be sufficient to fulfil the borrower's obligations, the loss would be shared between the lenders.

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).

As mentioned under question VI.B.2., the SSS's resources would not be used because the SSS does not in principle act as a counterparty.

Within the framework of the automatic securities lending system, the procedure in case of an event of default is as follows:

- a) if the borrower does not reimburse the borrowed securities, the SSS immediately buys similar securities in the market:
- b) if the borrower does not pay the purchase price of the similar securities, the SSS realises the pledged securities;
- c) if the sale price of the pledged securities is not sufficient to fulfil all the borrower's obligations, the loss is shared between the lenders.
- 4. Please describe all conditions under which provisional transfers of securities or funds could be unwound by the SSS.

No provisional securities or cash transfers are carried out during the settlement batches.

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

Not relevant.

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

Not relevant.

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

Not relevant.

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

Not relevant.

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

Not relevant.

- 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?
  - a) Although general Belgian bankruptcy law still applies the zero-hour rule, the definitive character of securities and cash transfers executed by SSSs is not endangered. According to article 157 of the Federal Banking Law of 22 March 1993, as adapted by the Royal Decree of 28 January 1998, payments or transactions made by or to a bankrupt credit institution, investment institution, financial institution, SSS, etc are valid, if made before the moment of the Court decision, or before the Court decision is known.
    - Moreover, the Federal Law of 28 April 1999 implementing the (EU) Settlement Finality Directive has enlarged the protection of transfer orders, netting and the execution of securities and funds transfers, against unwinding due to bankruptcy or insolvency.
  - b) No provisional securities or funds transfers are carried out within the settlement batches.
- 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.

In case of bankruptcy of a participant, three sets of rules might allow the liquidator or third parties to challenge a transaction made through the SSS with the defaulting participant :

- \* the application of the so-called "zero-hour" rule, but very important derogations to this rule have been provided by specific legislation (see answer to question VI.B.5.);
- \* the application of the rules relating to the "suspect period". They provide that certain acts and transactions concluded or performed after the beginning of this period (maximum six months before the bankruptcy order) are void or voidable when they are made at a time when the counterparty knew of the "cessation des paiements" of the debtor.
- \* the application of the rules relating to the "fraus omnia corrumpit": all acts and transactions which have been fraudulently executed against the interests of the creditors are void.
  - In both the latter cases, the legal consequence of a successful challenge of a transaction by the liquidator should only be the reimbursement of the cash or the securities transferred to the non-defaulting parties <u>provided</u> that the liquidator returns for its part the securities or the cash transferred to the defaulting party in the course of the same transaction.

The cancellation of a transaction due to the infringement of the rules on suspect period or to the zero-hour rule (if applicable) should, in our opinion, not lead as such to the unwinding of the final settlement already occurred. It must be noted however that this opinion has never been tested before courts.

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

Yes.

 Have loss-sharing procedures been invoked? No.

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

No default or insolvency resulted in losses for the SSS or its participants.

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

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

Debit positions are not allowed in the SSS.

- 1. Under what conditions could such debit positions occur? Not applicable.
  - 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. Not applicable.
  - b) Are these situations covered explicitly by the rules and procedures of the SSS? Not applicable.
- 2. How long can such debit positions last? How long do they typically last? Not applicable.
- 3. How are debit positions in securities accounts prevented, rectified or managed? Not applicable.
- 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).

Not applicable.

- a) Application of loss-sharing provisions allocating the loss to participants? Not applicable.
- *b)* Absorption of the loss by the SSS? Not applicable.
- c) Other? Please specify? Not applicable.

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

Five conditions have to be fulfilled to take part in the automatic securities lending facility.

- An agreement has to be signed up between the interested member and the central bank managing the SSS.
- 2 The position to be covered can only take place on the own or trading securities account belonging to the participant itself.
- The potential borrower must have sufficient other securities at disposal to be pledged in favour of the pool of lenders in order to ensure the repayment of the automatic borrowed securities.
- **4** Sufficient lendable securities have to be at disposal of the pool of lenders.
- An automatic borrowing can only be renewed within a period of maximum ten successive banking days.
- **6** The securities belong to a lendable category of securities.
- 1. Is the process for lending securities automatic? If not, please describe the procedures used by the SSS to determinate whether a securities loan will be made?

The process for lending securities is automatic.

2. At what point are participants notified that securities are being lent to them in order to complete their settlements?

Participants are notified that securities are being lent to them (in order to complete the settlement of their planned transactions) when receiving their final statements for the concerned day (they can also make use of their IT screen-based connexion to the SSS application after completion of the final settlement batch).

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?

Only some kinds of securities are eligible for automatic lending, and are listed as such in annex 14 to the rules and procedures (art. 3.2.9.2.2.).

If a participant wants to benefit from automatic borrowings, then he must be a potential lender. However, the participant is able to determine for each family of securities the proportion of its remaining securities that he puts at disposal of the pool of lenders (at least 10%).

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?

In the context of the automatic securities lending system, the SSS acts as an intermediary in its own name on behalf of the lenders. The SSS's intermediation entails that: 1) the lenders may be considered as a pool; 2) the lenders do not know which participant their securities are transferred to and the borrowers do not know from which participant they receive the securities.

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

The SSS settles back-to-back transactions during the multiple concerned daily settlement batches (optimalisation programs after each batch cycle).

- 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? Same isin code and same nominal amount involved.
  - a) Only if the participant has securities on deposit with the SSS that have been received pursuant to a final securities transfer?

The two transactions, namely the receiving one and the redelivering one will be settled simultaneously on a trade-by-trade basis.

b) If the participant has securities on deposit with the SSS that have been received pursuant to a provisional securities transfer?

Not relevant.

c) Before securities have been received either provisionally of 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?

Not relevant.

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.

Not relevant.

e) Other? Please specify. Not relevant.

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.

Same isin code and same nominal amount involved.

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 on-delivery of securities without the need for extension of credit.

No specific restrictions; the standard DVP rules with free disposal of the final cash positions do apply.

# VIII. Risk control measures.

- A. Please describe the roles and responsibilities of those areas of the SSS responsible for risk management and control.
- 1. Please describe the process for the internal review of risk management policies and procedures.

This process is undertaken by the operational entity responsible of the daily management of the SSS (i.e. the Securities Settlement Unit) in collaboration with the NBB Legal and Internal Audit (IA) Departments. In April 2004, IA started a Control & Risk Self-Assessment (CRSA) which was - in a first phase - primarily focussed on the division of tasks in various units and the adequacy of data management (e.g. securities values, participants, issuers and issuance programs). Related processes and tasks have been reviewed in detail and any related risks were analysed. This type of assessment will be repeated in the future on a more or less regular basis (e.g. in 2007-2008 the procedures for the management of the X/N system will be assessed).

- 2. Is there a risk management policy that addresses the review and approval of new products and services offered by the SSS? At what level of the organisation is risk management approval given for a new product or service?
  - Role of the NBB Legal Service and of the managing entity in case of new products and services offered by the SSS.
- 3. Does the SSS have a risk management function with clear independence from and authority over operational or marketing functions?

No specific risk management function has been installed up to now. In 2004 a working group was set up to discuss the introduction of risk monitoring tools concerning the concentration of exposures and the financial condition of settlement banks in NBB SSS.

This working group agreed to set up the necessary procedures to outsource the risk management concerning settlement banks to the BFIC (CBFA), the prudential regulator of financial institutions established in Belgium.

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

The Bank has no audit committee.

The Board of Directors may endorse the conclusions about risk management policies and procedures resulting from the process described under VIII.A.1..

The Board can also rely on an Internal Audit department dealing with periodical accounting and organizational analyses.

- 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 questions.
- Internal audits : organizational examinations.
  - 1. Who performs the audit or examination? The Internal Audit department.
  - 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.

They overview the organization of all the tasks in order to check if all the recommended internal controls are effectively performed in the daily management of the SSS.

- 3. What is the frequency of the audit or examination?
  - Internal audit is using an ESCB scoring system to define its priorities for the next planned period. Major organizational changes and new IT projects get high priority.
- 4. Are audit or examination reports available for review by participants? The reports are internal and consequently not published.

2 Internal audits : accounting examinations.

### 1. Who performs the audit or examination?

The Internal Audit department.

### 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.

They check

- the invoiced amounts for a given month,
- together with the certification of the accounting: billing over a period of 6 months,
- whether the end-of-day final statements provide the members with a correct and complete information about their planned transactions for the day.
- all major incidents (if any)
- new IT developments (if any)

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

Once or twice a year.

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

The reports are internal and consequently not published.

**3** External auditors.

## 1. Who performs the audit or examination?

Staff members of two external auditors firms.

- 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.

They certify the accuracy and reliability of the information included in the yearly accounts of the National Bank of Belgium as a whole.

They assess the internal control measures applied to each activity of the central bank, under which the activity of SSS (due to the critical role of that system in the Belgian financial markets).

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

Their tasks related to the yearly financial accounts are performed once a year. The assessment of the internal control measures is conducted at least once during the mandate of the external auditors, namely at least once every three years.

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

The report of the external auditors about the yearly financial accounts is annexed to the published NBB annual report.

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

The major part of the securities held in the SSS are valued on a daily basis. There are no quotations for dematerialized commercial paper and certificates of deposit. For linear bonds, strips and treasury certificates the Securities Regulation Fund (a public body managed by representatives of the BelgianTreasury and of the central bank) publishes daily indicative prices and interest rates. For other public securities, the SSS uses the Stock Exchange prices.

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

These valuations are used for collateralisation purposes within the framework of the automatic securities lending facility on one hand, and within the reservation process to the benefit of the NBB as cash lender (intraday and overnight credits).

How frequently are securities revalued? Daily.

- 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.

For linear bonds, strips and treasury certificates the Securities Regulation Fund publishes daily indicative prices and interest rates. The Stock Exchange prices are used for other public securities.

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

The SSS has two sorts of lien on the securities held in it:

- \* According to article 31, § 2 of the Law of 2 August 2002, the SSS has a lien on all securities (funds and other rights) held in it by a participant as own assets. This lien covers all the claims of the SSS on the participants, that result from the clearing or settlement of securities transactions or forward currency transactions (including claims resulting from loans or advances). The SSS also has a lien on all securities (funds and other rights) held in it by a participant as clients' assets of a participant. This lien only covers the claims of the SSS on the participant, that result from the clearing or settlement of securities transactions or forward currency transactions which have been performed by the participant for the account of its clients (including claims resulting from loans or advances).
- \* According to article 7 of the organic law of the National Bank of Belgium (being the SSS), the Bank has a lien on all securities held in the Bank (or the SSS) by a debtor as own assets. This lien covers all credit operations of the Bank.
- 1. 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?

The liens only apply to the securities held as own assets by the participants themselves.

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

See answer to question D for a description of the claims covered by the liens.

If the debtor does not pay a claim covered by the liens despite a formal notice, the SSS may, even in case of bankruptcy of the debtor, sell the securities on the market without any need for a prior judicial authorisation.

- E. Please discuss the circumstances in which the SSS requires collateral to limit or mitigate risks.
- 1. Does the SSS manage its own collateral system?

Yes (see below for details).

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

The SSS does not really share a collateral system with another SSS or payment system. However, the collateral systems mentioned under answers VIII.E.4.b) and VIII.E.4.c) have some links with respectively Euroclear Bank/Clearstream and the payment systems managed by the National Bank of Belgium.

Also the SSS participates in the CCBM-model to cover credit needs of credit institutions in other countries.

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

Yes, through the reservation mechanism. CCBM: via free transfers.

- 4. What types of transaction at the SSS involve the use of collateral?
  - a) In the context of the securities lending system, the SSS acts as an intermediary in its own name and on behalf of the lenders. The risk taken on the borrowers is covered by a pledge in the way described under question VI.B.2.
  - b) As mentioned under question VIII.D., the National Bank of Belgium (as operator of the SSS) has a lien on all securities held in the Bank (or the SSS) by a debtor as own assets. The SSS has developed a reservation system that guarantees that the securities held as own assets in the SSS by the Bank's debtor remain at a sufficient level.

5. What are the policies with regard to the type of collateral used or haircuts required?

Only Tier 1 securities with a sufficiently liquid secondary market are accepted as collateral. Haircuts being used are those determined by ECB for the pledging of securities in the context mentioned under VIII.E.4.a, b, c.

6. How are collateral valuation methodologies developed and reviewed? According to prudent ECB standards.

7. To what extent are collateral policies described in the written rules and procedures of the SSS?

The collateral policies mentioned under answers VIII.E.4.a) to VIII.E.4.c) are described, for one part, in the SSS's rules and procedures and, for the other part, respectively in the automatic securities lending agreement, the bridge agreements and the credit agreements.

## F. Please describe the SSS's 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.

NBB grants intraday credit to credit institutions that have sufficient pledge in their accounts in NBB SSS. This is managed by NBB's Back Office.

The total amount to be automatically borrowed for one specific security on a give day can not exceed 10 % of the outstanding amount held in the SSS. A limit of 5 % of the outstanding amount (for one security) is set for each individual potential borrower.

2. Do the limits apply to all participant and/or to other SSSs with which the SSS is linked? What are the exceptions to the limits?

Appliance to all concerned participants.

No exceptions.

3. Do limits apply to participants individually or in the aggregate or both? See point 1. hereupon.

4. Do limits apply to implicit as well as explicit extensions of credit or securities (e.g. when on-deliveries of securities are permitted pursuant to provisional but not final delivery of securities)?

Not relevant.

5. Does the SSS automatically reject transactions that exceed limits or is compliance determined ex post?

No automatic rejection of such transactions.

6. How are limit policies developed and reviewed?

Decision of the central bank as manager of the SSS.

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?

Description in the SSS's rules and procedures.

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

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

This is possible after each settlement batch, not only for the SSS but also for the participants (on line using the application 'Wirow' - the accounts' positions are refreshed after each settlement batch).

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

More attention devoted to the positions and pending transactions of the participant facing 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 prefunded by participants?

No.

# IX. Operational risks.

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

The percentage uptime of the systems used by the SSS operated by the National Bank of Belgium over the last 12 months was higher than 99 p.c..

- 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?

Yes.

b) Please describe the nature of any such problems.

On 6 July 2005 no settlement could be effectuated during 2 hours in the early afternoon. The SSS has not experienced any other major operational problem since the beginning of its operation in January 1991.

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

- 1. Does the SSS have a formal plan for business continuity in place? Yes, this is part of the general BCP of the NBB.
- 2. Is this plan available for review by participants? No.
- 3. How often is this plan tested? Does this involve participants in the SSS? At least twice a year tested by the concerned unit.
- 4. What are the major elements of the business continuity plan?
  - a) The <u>plan in place</u> is based on the use of an internal backup centre at the other side of the street (in another building of the central bank called NBB2).
  - b) In the case of a complete unavailibility of the main <u>and</u> the disaster centres, and in order to avoid the loss of data, a system of permanent duplication of the data towards an external backup centre (called NBB3) is operational.

Disaster	Back-up procedure	Restart	Consequences
Non-availability of IT-	IT processing is taken over by the remaining	<4h	No loss of data
infrastructure in either NBB1 or	platform (either NBB1 or NBB2)		
NBB2			
Non-availability of the central IT-	NBB3 is to resume operational activities	<4h	No loss of data
infrastructure in both NBB1 and	(based on a disaster recovery provider and data		
NBB2	available in back-up centre NBB3)		
Inaccessibility of NBB's head	Back up centre of NBB3 will take over	<4h	No loss of data
office (NBB1 & NBB2) while IT-	activities of max. 100 staff and the control of		
infrastructure is maintained	IT-infrastructure		
Non-availability of the office area	Infrastructure is made available to move max.	<2h	No loss of data
	25 staff to another location in NBB2		

5. How long would it take the SSS to resume operations if primary systems become unusable? See 4.

- C. What are the key features 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.

Electronic authentication process valid for the incoming instructions via the interbank IT communication network and to be controlled by the SSS prior to the input in the system. Other incoming instructions sent through the Swift network are authenticated by the network itself.

2. Are internal operational and security controls included in the internal and/or external audits of the SSS?

Yes in the internal audits of the SSS.

3. Are internal operational and security controls covered by regulatory requirements applicable to the SSS?

No.

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

The National Bank may make the participation of an institution in the securities settlement system, as well as the maintenance of this membership, dependent upon the successful outcome of tests demonstrating that this institution has the operational and technical capacity required (notably regarding its IT systems and telecommunications).

- 1. 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?
  - Monitoring of the business activity within the system. The sanction foreseen in the rules and procedures consists in locking the securities accounts of the concerned direct member until the satisfactory outcome of the tests referred to hereupon.
- 2. How would the SSS allocate losses incurred due to operational problems caused by third parties?

According to the SSS's rules and procedures (chapter 9), the SSS's liability is limited to its own negligence. Furthermore, the SSS incurs no liability in case of force majeure or computer breakdown.

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