

ANNEX TO RESOLUTION JM-166-2005

REGULATION OF THE SYSTEM OF GROSS SETTLEMENT IN REAL TIME -LBTR-(for its acronym in Spanish)

CHAPTER I GENERAL DISPOSITIONS

Article 1. Legal Basis. The present regulation is founded in the agreed in Articles 4, clause c) and, 26, literal m) of Decree Number 16-2002 of the Congress of the Republic of Guatemala, Organic Law of the *Banco de Guatemala*.

Article 2. Objective. The present regulation has as its objective to regulate the administration and operation of the Gross Settlement System in Real Time, in the system as well as the requirements that the participants must fulfill.

Article 3. Purpose of the System. The system has as its purpose to offer the automated mechanisms that, through transparent, efficient and secure processes, allow the participants to electronically settle, in real time and in gross manner, their operations in national as well as foreign currency.

Article 4. Definitions. For the effects of the present regulation the following definitions are established:

Authentication: Process used to verify the origin of a message or the identity of a participant that operates in the system, as well as to confirm that a message has not been modified or replaced while in transit in the communication network.

Certifying Authority: It is the entity to which the issue of certificates of public codes and the assignment of these to the participants of the system is entrusted.

Digital Certificate: Is a unique identifier that guarantees the identity and the capacity of issue and the receptor of a message or electronic transaction; the confidentiality of the sent message; the integrity of the transaction; and, the non-repudiation of the electronically acquired commitments.

Central component: Set of applications, services and information platform of the system, installed in the *Banco de Guatemala*.

Deposit Accounts: Accounts expressed in *quetzales* or in foreign currency, constituted by the participants in the *Banco de Guatemala*, which will be used by the settlement of its operations within the system.

Special Settlement Accounts: Accounts expressed in *quetzales* or foreign currency, constituted in the *Banco de Guatemala* by participants who are not obligated to keep deposit accounts, which will be used for the settlement of its operations in the system and that, when closing daily operations, must have a balance of zero.

Administrative Decisions: Set of norms and procedure manuals that the General Manager of the *Banco de Guatemala* will issue on the administration and operation of the system.

Facility of the intraday settlement: Mechanism that allows the participating banking entities of the system, to have access to liquid resources that can be used in the course of one (1) operating day, which must be paid the same day.

Digital signature: Data generated by a cryptographic method that is attached to an electronic message to ensure its authenticity, as well as to protect the receptor of any refusal on behalf of the sender.

Hardware: Set of components that integrate the material part of a computer.

Payment Instruction: Electronic message through which the participant instructs that a funds transfer to another participant be charged to their account.

Gross settlement in real time: Payment mechanism in which the processing and settlement operations are continuous in gross and real time; in other words, operation by operation.

Net settlement in deferred time: Settlement of the operations that are made, in the clearing houses, at days closing or in previously established schedules in the system.

Users Manual of the system: Document that describes the steps and activities to be made in the system, on the payment operations, settlement and funds transfers.

Structured Electronic Message: Message in a pre-determined format and authenticated within the system.

Free electronic message: Message in free format, which can be authenticated by the system or not.

Non-repudiation: Capacity of avoiding rejection or repudiation on behalf of the sender or receiver of a payment instruction transmitted through system messaging.

Queue Operations: This is the mechanism through which the system temporarily and automatically transfers a module named queue administration, those operations that

come in at the same time and do not count on sufficient resources for the settlement of deposit or in special settlement accounts, and are left “pending”.

Priority Operations that must be made by the *Banco de Guatemala*: Are those that are subject to particular conditions, such as, those derived from the Banking Clearing House, the remunerated legal reserve, of the formation quota of the Fund for Savings Protection, and others, which because of their own nature will be a priority as to their processing and settlement in the system.

Participants: Entities that through the system make any number of transactions allowed in the same. The participants can be:

- a) **Direct Participant:** Entity that, for the settlement of operations effects made through the system, has a deposit or special settlement account constituted in the Central Bank.
- b) **Indirect Participant:** Individual or juridical person that does not have a deposit account nor a special settlement account constituted in the *Banco de Guatemala* and does not possess a computer connection with the system; in other words, they require the services of a direct participant to perform their operations.
- c) **Origin participant:** Direct participant that through the system sends or originates an electronic message through which a transaction is ordered.
- d) **Destination participant:** Direct participant that through the system receives an electronic message or the benefit of a determined transaction.

Technological Information Platform: Set of *Hardware* and *Software* elements that support one or various systems that use communication protocol to interact with other systems or external networks. Within the *Hardware* we can mention, there are servers, computers, external devices and *Software* like application programs and data bases.

Technological Security Information: Set of mechanisms, norms, procedures and controls adapted to saving the information systems and the data they contain.

Compensation and negotiation Systems: Systems that, for their incorporation to the Gross Settlement System in Real Time, requires the authorization from the *Banco de Guatemala* and is used to facilitate the settlement of funds transfers or financial instruments and that provide information to compensate and/or make transactions.

Software: Set of programs, instructions and technological rules to execute certain tasks on a computer.

Funds Transfer: Operation that is irrevocable through which the participants of the system transfers funds among themselves.

CHAPTER II ADMINISTRATION

Article 5. Administration. The *Banco de Guatemala* will be the administrator of the system, function it will exercise according to the present regulation, as well as the norms and procedures and other instructions issued by the General Manager of this institution.

Article 6. Attributions. The *Banco de Guatemala*, in its quality of administrator of the system, will have the following attributions:

- a) Settle the operations that the participants make in the system, affecting for the effect the deposit and special settlement accounts;
- b) Watch that the system functions adequately;
- c) Issue digital certificates for each participant;
- d) Establish adequate systems of internal control;
- e) Establish contingency plans that reasonably guarantee the continuity of the system;
- f) Norm and apply technological security procedures;
- g) Let the participants know the administrative dispositions it issues;
- h) Elaborate the manuals for norms and procedures;
- i) Elaborate and update the user manuals; and,
- j) Exercise other attributions that legally correspond to them.

Article 7. Publication of the Administrative dispositions. The administrative dispositions issued by the General Manager of the *Banco de Guatemala* will be compulsory observations for the participants and must be made known to the interested parties through the system or in writing.

Article 8. System Operation Schedule. The operation Schedule, attention and service rendering for the system to participants, those priority operation processes that must be made in the *Banco de Guatemala*, as well as any other permanent or transitory modification of the same, will be fixed by the *Banco de Guatemala*. For said effect, the reference hour for the operations will be that of the central system server.

Article 9. Commission for services. The *Banco de Guatemala* will fix the commission applied to the participants of the system to reimburse the expenses in which the administration will incur due to the system, which will be revised annually. The referred commission will be charged at the end of each month, within the first three (3) days of the following month that corresponds, through charging the participants account, under the following concepts:

- a) Monthly payment for participation in the system (includes the right to connect four terminals).
- b) Monthly payment for each additional terminal to the system.
- c) Payment per transaction made in the system.

CHAPTER III PARTICIPATION

Article 10. Participants. Of those who can be participants in the system, resides the Central Bank, banking entities and public entities that have deposit accounts in said bank, as well as other entities expressly authorized that have a special settlement account in the *Banco de Guatemala*. For the effect, the interested institutions must present a written request directed to the General Manager of the *Banco de Guatemala*, and attach the form designated for that purpose.

The decision made will be notified to the interested party and will be communicated to the direct participants of the system and to the corresponding supervising entities.

Article 11. Habilitation of the participant in the system. The participant must count on the minimum technical specifications to interact with the system. The *Banco de Guatemala*, within a term of thirty (30) days as of the date following the reception of the request and once the corresponding technical analysis is made, will notify as of the date in which the participant can begin operations in the system.

Article 12. Obligations of the participants. The participants in the system will have the following obligations:

- a) Fulfill the administrative dispositions contained in the present regulation and those published in the system;
- b) Fulfill the regulations approved by the Monetary Board, as well as the norms, procedure manuals and other instructions that the General Manager of the *Banco de Guatemala* issues, for the operation of the system;
- c) Count on the minimum technological platform required for operating in the system;
- d) Effectuate the payment of commissions for using the system;
- e) Immediately communicate authorized user changes to operate in the system to the administrator;
- f) Immediately inform the administrator of any failure or irregularity detected in the system;
- g) Count on an adequate internal control system to effectuate their operations in the system;
- h) Remit the information to the administrator that it may require in matter of payment system, in the manner and through the means decided; and,
- i) Others that correspond according to the laws and regulations.

Article 13. Responsibility in the authorization of users. It will be the responsibility of the direct participant to authorize the users that on his account use the system for operations.

Article 14. Responsibility of the participants in the operations. The operations made on the account of each direct participant in the system will be their strict responsibility.

Article 15. Temporary Suspension of the participant in the system. The *Banco de Guatemala* can temporarily suspend a direct participant when:

- a) Performing unauthorized operations;
- b) Exposing operatives and financial operations and other participants to unnecessary risk; and,
- c) Lack of fulfillment of the present regulation, as well as the norms, procedure manuals and other instructions that the General Manager of the *Banco de Guatemala* issues for the system.

The temporary suspension in the system can be up to ten (10) working days, when the participant incurs unjustly in any of the faults referred to in clauses a) and c) of this Article, on three or more occasions, within a thirty (30) day period.

The *Banco de Guatemala* will communicate the effective date and the temporary suspension period to all participants of the determined participant within the operative system.

The Central Bank will inform the Superintendence of Banks on the adopted decision in application of the declared in the present article.

Article 16. Loss of quality of the participant. The banks of the system regarding that which the Monetary Board, according to the declared in article 75 of the Law of Banks and Financial Groups, has resolved as to the suspension of operations, will be excluded from the system as of the moment in which said suspension is decided. The *Banco de Guatemala*, in its quality of administrator of the system, will communicate said decision to the participants itself, as well as to the Superintendence of Banks, at the correct moment.

Article 17. Voluntary withdrawal. The participants can request voluntary withdrawal from the system through written communication directed to the *Banco de Guatemala* at least thirty (30) working days prior. The request as well as the decision adopted accordingly will be communicated by the Central Bank to the other participants, as well as to the Superintendence of Banks, at the correct moment.

CHAPTER IV OPERATION

Article 18. Operation. The Central component of the system will work in the installations of the *Banco de Guatemala*. The participants must count on the technological platform necessary to interact with the same, which must be approved by the Central Bank, including the communication mechanisms that guarantee service and security among the participants, according to the previously fixed schedules by the Central Bank.

Article 19. Operation Settlements. The operations made in the system will be settled by the *Banco de Guatemala*, which effects must affect the deposit or special settlement accounts, according to each one, that the participants have constituted in the same.

Article 20. System Operations. The participants can perform the following operations in the system, in national as well as foreign currency:

- a) Funds transfers;
- b) Payment instructions;
- c) Payment of investments in value titles issued by the Government of the Republic and of Term Deposits constituted in the *Banco de Guatemala*;
- d) Instructions for numerary withdrawal;
- e) Settlement of net bilateral and multilateral clearing results;
- f) Account Operations of the public sector;
- g) Operations settlement under cash on delivery and cash on cash;
- h) Payment for commissions in favor of the *Banco de Guatemala* for services rendered in the system;
- i) Consultations and generation of files;
- j) Elaboration and generation of reports and statistical information; and,
- k) Others authorized by the *Banco de Guatemala*.

Article 21. Balance of operations. As a result of the operative process and as a part of security, this will identify the state in which the operations are; with the value they enter the system, in the following manner:

- a) **Pending:** Operation waiting to be settled, due to funds insufficiency in the corresponding account, condition that must change at the moment of its settlement or at days' closing of where the operation originated.
- b) **Cancelled:** Operation that does not count on sufficient resources for its settlement at operations closing on the day in question or that can not be settled for any other motive that does not allow its validation in the system.

- c) **Complete:** Operation which cycle has concluded within the system and, therefore, have been affected by balances in origin accounts and corresponding destinies.
- d) **Deferred:** Operation that has as settlement instruction in the same day, but with an hours difference of its entry into the system.
- e) **Future:** Operation that has as instruction the settlement that corresponds to a later date than the date of entry in the system.

Article 22. Currency. The operations can be made in *quetzales* or foreign currency. They will be accepted and processed among deposit accounts or special settlement accounts, as long as said accounts are expressed in the same currency in which the operation or operations are made to be settled.

Article 23. Consulting of movement and balances. During the operation schedule of the system, the participants can monitor and consult:

- a) The movement of its operations during the day;
- b) The balances of accounts during the day and closing of operations; and,
- c) The history of movements of the accounts.

Article 24. Irrevocability. The operations entered in the system, whose state, according to the defined in clause c) of Article 21 of the present regulation, is “complete”, has an irrevocable character.

Article 25. Reversal of operations. The operations that the participants make in favor of the *Banco de Guatemala* and upon entering the system, the state of these, according to the decided in clause c) of article 21 of the present regulation is “complete”, can be reversed if the information that is included within the structured electronic message does not coincide with the information registered in the internal systems of the *Banco de Guatemala*.

Article 26. Non-repudiation. The participants of the system can not refuse the messages, sent or received, in their deposit accounts or in the special settlement accounts, as well as the free format messages that are transmitted through the system.

CHAPTER V ADMINISTRATION OF QUEUES

Article 27. Operation of Queues. The operations that are entered in the system and which deposit accounts or special settlement accounts do not have sufficient resources for its settlements, will be in “pending” status, according to the defined in clause a) of Article 21 of the present regulation.

Article 28. Assignment of priorities. The operations that enter the system and that are found within the module of administration of Queues as “pending” will be prioritized for their settlement according to the code table defined by the *Banco de Guatemala* in the corresponding manuals. Notwithstanding, this order of priorities can be modified by the participants according to the established in the norms and procedure manuals defined by the *Banco de Guatemala*.

Article 29. Cancellation of operations. The participants can order the cancellation of their “pending” operations at operations closing; on the contrary, the administrator will proceed to cancel the “pending” operations in the referred closing, due to insufficient funds. Said operations will be reported to the corresponding supervising entity.

CHAPTER VI FACILITY OF INTRADAY SETTLEMENT

Article 30. Intraday settlement facility. The *Banco de Guatemala*, with the objective of facilitating the settlement of operations in the system, will allow the participating banking institutions to have access to the intraday settlement facility, through the celebration of a repurchase contract, through an electronic message generated by the system. For the effect the *Banco de Guatemala* will acquire values titles expressed in national currency as well as foreign currency, issued by the Government of the Republic of Guatemala or by the Central Bank.

Said facility can also be granted on delivery, on behalf of the requesting bank, of term deposit certificates expressed in national currency as well as foreign currency, issued by the *Banco de Guatemala*. This operation will be formalized through an electronic message generated by the system.

Article 31. Administration of the facility. The administration of the intraday settlement facility corresponds to the *Banco de Guatemala*, who will exercise this function according to the present regulation, as well as with the norms, procedure manuals and other decisions approved by the General Manager.

Article 32. Conditions for granting. The granting of the intraday settlement facility is subject to the following conditions:

- a) The term of the intraday settlement facility will be that corresponding to the operations established for the system.
- b) The financial resources that are granted under this facility will be only in *quetzales* and will be accredited to the account of each participating bank that for the effect the *Banco de Guatemala* will open in the system.

- c) The values titles and/or certificates of term deposit will be in the custody of the *Banco de Guatemala*, in its favor, or in that of the entity that according to law and fulfilling the best internationally generally accepted and recognized practices in matters of values custody, rendering services of said nature; or, in its case, the corresponding annotations in the account will be made in favor of the Central Bank.
- d) The *Banco de Guatemala*, due to the granting of intraday settlement facilities being dealt with, will perceive one hundred percent (100%) of the interest earned in one (1) day of values titles and/or certificates of term deposits that served as a basis for the operation.
- e) In order to accept the titles values and/or certificates of term deposit expressed in foreign currency, as well as for the computing of the interest, the reference exchange rate will be applied to the purchaser, published by the *Banco de Guatemala*, corresponding to the day of operation.
- f) The titles values and/or certificates of term deposit, expressed in foreign currency, object of the repurchase contract, will be received by the *Banco de Guatemala* with a two per cent (2%) discount of its face value.

Article 33. Accrediting of the facility. The *Banco de Guatemala*, after establishing that titles values/or term deposit certificates are found in custody in favor of them or that the corresponding annotations have been made in the account, also in favor of the Central Bank, and that the requested amount is covered by the value of the same, will proceed in the foreseen manner in clause b) of the previous article.

Article 34. Schedule of granting and settlement. The intraday settlement facility will be granted and settled within the established schedule for the system.

CHAPTER VII

TECHNOLOGICAL ASPECTS, COMPUTER SECURITY AND CONTINGENCIES

Article 35. Communication Network. The participants will select the communication network for its operations, in the system according to the established standards in the norms and procedures manuals defined by the *Banco de Guatemala*.

Article 36. Production environment. The participants will count on the technological platform necessary so the administrator of the system can install the module or modules that are necessary to operate. Said platform will have the minimum characteristics defined by the *Banco de Guatemala* in the corresponding norms and procedure manuals.

Article 37. Computer Technology Security. The computer technology security of the system will be defined by the *Banco de Guatemala*, according with the standards and international practices that regulate this matter, aspects that will be established in the corresponding norms and procedures manuals.

Article 38. Certifying Authority. The *Banco de Guatemala*, in its quality of system administrator, will be the authority that will be in charge of the issue of the digital certificates for the participants, according to the standards established in the corresponding norms and procedures manuals.

Article 39. Contingency plan for the participants. The participants must count on a contingency plan that guarantees the continuity of its operations within the system.

CHAPTER VIII

FINAL DECISIONS

Article 40. Responsibility for economic loss. The participants in the system will be responsible before the *Banco de Guatemala* for the economic losses originated by the infractions to the present regulation and to the approved norms and procedure manuals by the General Manager of the *Banco de Guatemala* for the operation of the system.

Article 41. Electronic registries of the operations. Due to its nature, the electronic registries of the operations that are made in the system will have the same effects and validity than the contained in the documents.

Article 42. Norms. The General Manager of the *Banco de Guatemala*, according to the necessary requirements that procure the good operation of the system, will approve the norms and procedure manuals and other applicable instructions of the same.

Article 43. Non-foreseen cases. The cases not foreseen in the present regulation, as well as the doubts that could be had, will be resolved by the General Manger of the *Banco de Guatemala*.

Article 44. Refutation Means. The resolutions that are issued by the *Banco de Guatemala* regarding the functions of administration of the Gross Settlement System in Real Time will be compulsory, but will admit recourse of revocation. Said recourse will be interposed within a five (5) day term, as of the following date of the notification of the resolution in question, and must be presented in writing before the General Manager of the *Banco de Guatemala*, expressing the motives of dissention, which will be taken to the Monetary Board, five (5) days after the reception, including its antecedents.

The Monetary Board will resolve the recourse of revocation within a term of thirty (30) days as of the date in which it was received.

The resolutions that are issued by the Superintendence of Banks, when it is about entities subject to surveillance and inspection, will be compulsory, but will admit recourse of appeal before the Monetary Board. Said recourse will be substantiated according to the foreseen in Articles 20 of the Law of Financial Supervision and 104 of the Law of Banks and Financial Groups.