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THE REGULATION ON ELECTRONIC BANKING IN ANGOLA

ANGOLA FINANCIAL SECTOR PROGRAM

December 2009

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THE REGULATION ON ELECTRONIC BANKING IN ANGOLA

ANGOLA FINANCIAL SECTOR PROGRAM

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Regulation N.o --/09

of __ November

Given the need to regulate the delivery of banking services over the Internet, through automatic tellers, and through text messages of mobile phones, to ensure operational transparency and to protect consumers, the National Bank of Angola, using its authority,

DETERMINES:

Article 1.

(Purpose and Scope)

1. Considering that the National Bank of Angola is responsible for defining the terms and conditions for financial transactions realized over the Internet, through automated tellers, and through telephones and other electronic means;
2. Using its jurisdiction under the Law of the National Bank of Angola No. 6/97 of July 11th, and by the Law of Financial Institutions No. 13/05 of September 30th, and by Law of the Payments System of Angola No. 5/05 of July 29;
3. This Regulation prescribes financial and other activities of Financial Institutions, in the delivery of services outside their offices through computer and communication technologies including allowing access by means of the Internet, automated tellers, and telephone text messages; for opening, operating, and closing client bank accounts; for the request of credit and debit cards; for delivery of bank account balances and periodic statements; for transferring funds between client accounts, and between accounts of clients and others; for payment orders; for withdrawal orders, deposit orders, debit and investment orders; for cancelling investments and depositing to accounts; for filing all types of credit applications; for other permitted bank operations and services to individuals and enterprises; and for the provision of non banking funds transfer services through service providers.

Article 2

(Definitions)

1. “Means of Access” denotes a card, code or other Means of Access, which can be used by the consumer to carry out banking operations concerning his account.
2. A Means of Access becomes an “Accepted Means of Access” when the consumer:
 - a. Requests and receives, or signs, or uses (or authorizes another person to use) the Means of Access to transfer money, between accounts without affecting accounts, or to obtain or to transfer monies, goods, or services;
 - b. Requests validation of a Means of Access supplied without being requested; or
 - c. Receives a Means of Access as renewal of, or in replacement of, an accepted Means of Access that was initially issued.
3. “Account” means a current (checking) account, a savings account, or an account of any asset (not related to credit) directly or indirectly established in a Financial Institution.
4. “Consumer” means a natural or legal person.



5. “Credit” means the right awarded by a Financial Institution to defer payment of a debt, incur debt and defer its payment, or to acquire goods and services and defer the payment thereof.
6. “Electronic Transfer” means operations that, whether affecting or not an account of a consumer, are not realized within a branch of the Financial Institution.
7. “Electronic Equipment” means a machine, including, but not limited to, land or mobile telephones, Point of Sale (POS) devices, magnetic card readers, intelligent cards, and automatic teller machines (ATMs).
8. “Financial Institution” means, for the purposes of this regulation, bank and non bank Financial Institutions described in Article 5 of the Law of Financial Institutions No. 13/05; and, also any person who directly or indirectly controls an account belonging to the consumer; or who issues a Means of Access and agrees with the consumer to provide electronic funds transfer services.
9. “National Territory” means the jurisdiction of Angola over Financial Institutions, with or without legal or physical presence in the country, and which offer or provide services over the Internet, telephone, or any other electronic means to consumers within Angola (Modality 1 of the WTO). National Territory does not include movement of the consumer and where the service is provided outside of Angola (Modality 2 of the WTO).
10. “Person” means a natural or legal person.
11. “Pre-authorized Electronic Funds Transfer” is an electronic funds transfer that is authorized in advance and at regular intervals.
12. “Work Day” means any day in which the offices of the Financial Institution of the consumer are open to the public for essentially all operations.
13. “Service Provider” is a person or company which offer electronic funds transfer services through debit cards or through other Means of Access to an eventual bank account, be of the consumer or a general account of the service provider.
14. “Unauthorized Electronic Funds Transfer” is an operation initiated by a person other than the consumer and not authorized by said consumer; or an operation in which the client does not receive a benefit. This does not include electronic funds transfers initiated:
 - a. By a person who was provided by the consumer with the Means of Access to the consumer’s account, and where the consumer later informed the Financial Institution that transfers through that person were no longer allowed;
 - b. With fraudulent intent by the consumer, or by any person acting in concert with the consumer with fraudulent intent;
 - c. By the Financial Institution or its employees.

Article 3

(Reach)

1. These regulations apply to all transactions which authorize, instruct or order, a Financial Institution in the National Territory to debit or to credit a consumer’s account. They also apply to Service Providers in the National Territory of Electronic Transfers which affect their own bank account or that of a consumer. They also apply to foreign Financial Institutions which offer their services in the National Territory. These regulations apply to any provider of services which involve electronic Means of Access to funds transfers. However, in general terms, these regulations apply to Financial Institutions; they also apply to any person.
2. These regulations do not apply to:



- a. Funds transfers originated in checks, drafts, or similar paper based instruments; nor do they apply to payments made by check, draft, or similar paper based instruments at an electronic terminal.
- b. Check guarantees or check authorizations or transfers for these reasons.
- c. Interbank transfers, or between companies, by wire systems such as SWIFT or similar systems.
- d. Securities and transfers of assets resulting from the EMIS bank payments system, or from the SVC securities payments system.
- e. Automated transfers by the institution where the consumer has his/her account where said transfer was previously approved by the consumer.
- f. Transfers authorized by the consumer through a telephone conversation, letter, fax, or electronic mail message with his/her Financial Institution.

Article 4

(Delivery of the Means of Access)

1. Delivery on request. Financial Institutions will deliver a Means of Access to consumers only:
 - a. In answer to a written or verbal request; or
 - b. As renewal, replacement, or substitution of a Means of Access already accepted by the consumer.
2. Unsolicited Delivery. A Financial Institution may deliver a Means of Access to a consumer without a previous request, if the Means of Access is:
 - a. Not valid. Meaning that the Financial Institution has not initiated the procedures that allow the consumer to initiate transfers of funds using the Means of Access.
 - b. Accompanied by a clear explanation that the Means of Access is not valid, that the consumer has no obligation to accept it, and of how the consumer can dispose of the Means of Access if he does not wish to have it validated.
 - c. Accompanied by clear and complete information of the terms and conditions, and of the charges, for its use.
 - d. Accompanied by a clear report of the risks and benefits, and of the rights and duties for the parties if the Means of Access is validated.
 - e. Validated only in answer to the verbal or written validation request of the consumer and only after the Financial Institution verifies the identification of the consumer through reasonable means.

Article 5

(Responsibilities of the Consumer for Unauthorized Transfers)

1. Conditions of responsibility. A consumer may be responsible, within the limitations of paragraph 2 of this Article, for an unauthorized electronic fund transfer involving the consumer's account



only if the Financial Institution has provided the disclosures required by the BNA. If the unauthorized transfer involved an access device, it must be an accepted access device and the Financial Institution must have provided a means to identify the consumer to whom it was issued.

2. Limitations on amount of liability. A consumer's liability for an unauthorized electronic fund transfer or a series of related unauthorized transfers shall be determined as follows:
 - a. Timely notice given. If the consumer notifies the Financial Institution within two business days after learning of the loss or theft of the access device, the consumer's liability shall not exceed 5,000 Kwanzas.
 - b. Timely notice not given. If the consumer fails to notify the Financial Institution within two business days after learning of the loss or theft of the access device, the consumer's liability shall not exceed the lesser of 25,000 Kwanzas or the sum of:
 - (i) 5,000 Kwanzas or the amount of unauthorized transfers that occur within the two business days, whichever is less; and
 - (ii) The amount of unauthorized transfers that occur after the close of two business days and before notice to the institution was given, provided that the institution establishes that these transfers would not have occurred had the consumer notified the institution within that two-day period.
 - c. Periodic statement; timely notice not given. To avoid liability for subsequent transfers, a consumer must report an unauthorized electronic funds transfer that appears on a periodic statement within 60 days of the Financial Institution's transmittal of the statement. If the consumer fails to do so, the consumer's liability shall not exceed the amount of the unauthorized transfers that occur after the close of the 60 days and before notice to the institution, provided that the institution establishes that these transfers would not have occurred had the consumer notified the institution within the 60-day period. When an access device is involved in the unauthorized transfer, the consumer may be liable for other amounts set forth in paragraphs 2a and 2b of this section, as applicable.
 - d. Extension of time limits. If the consumer's delay in notifying the Financial Institution was due to extenuating circumstances, the institution shall extend the times specified above to a reasonable period.
 - e. Notice to Financial Institution. Notice to a Financial Institution is given when a consumer takes steps reasonably necessary to provide the institution with the pertinent information, whether or not a particular employee or agent of the institution actually receives the information.

The consumer may notify the institution in person, by telephone, or in writing. Written notice is considered given at the time the consumer mails the notice or delivers it for transmission to the institution by any other usual means. Notice may be considered constructively given when the institution becomes aware of circumstances leading to the reasonable belief that an unauthorized transfer to or from the consumer's account has been or may be made.



Article 6

(Initial Disclosures)

1. Timing of disclosures. A Financial Institution shall make the disclosures required by this section at the time a consumer contracts for an electronic funds transfer service or before the first electronic funds transfer is made involving the consumer's account.
2. Content of disclosures. A Financial Institution shall provide the following disclosures, as applicable.
 - a. Liability of consumer. A summary of the consumer's liability, for unauthorized electronic fund transfers.
 - b. Telephone number and address. The telephone number and address of the person or office to be notified when the consumer believes that an unauthorized electronic funds transfer has been or may be made.
 - c. Work days of the Financial Institution.
 - d. Types of transfers and limitations. The type of electronic funds transfers that the consumer may make and any limitations on the frequency and dollar amount of transfers. If confidentiality is essential, details of the limitations need not be disclosed to maintain the security of the electronic funds transfer system.
 - e. Any fees imposed by the Financial Institution for electronic funds transfers or for the right to make transfers.
 - f. Documentation. A summary of the consumer's right to receipts, periodic statements, and notices regarding pre-authorized transfers.
 - g. Stop payment. A summary of the consumer's right to stop payment of a pre-authorized electronic funds transfer and of the procedure for placing a stop-payment order.
 - h. Liability of institution. A summary of the Financial Institution's liability to the consumer for failure to make or to stop certain transfers.
 - i. Error investigation or correction. A summary of the process required by the Financial Institution to request the investigation of possible errors.
 - j. Appealing to the BNA. The right of the consumer to ask the BNA to review his/her case.
 - k. Confidentiality. The circumstances under which, in the ordinary course of business, the Financial Institution may provide information concerning the consumer's account to third parties.
 - l. ATM fees. A notice that a fee may be imposed by an automated teller machine operator or provider and by any network used to complete the transaction when the consumer initiates an electronic funds transfer or makes a balance inquiry.
 - m. Addition of electronic funds transfer services. If an electronic fund transfer service is added to a consumer's account and is subject to terms and conditions different from those described in the initial disclosures, disclosures for the new service are required.



Article 7

(Notices on ATMs)

1. An operator of an automatic teller machine or ATM is a person operating an electronic device by which a consumer initiates an account balance request or an account funds transfer request, and where this person does not control the bank account of the consumer.
 - a. An operator of an ATM which imposes charges for initiating account balance reports or electronic funds transfers must:
 - a. Provide notice that a fee or commission will be charged to provide the account balance or the account funds transfer, and
 - b. Reveal the amount of the charges.

Article 8

(Change in Terms Notice; Error Resolution Notice)

1. Prior notice required. A Financial Institution shall mail or deliver a written notice to the consumer, at least 21 days before the effective date, of any change in a term or condition required to be disclosed if the change would result in:
 - a. Increased fees for the consumer;
 - b. Increased liability for the consumer;
 - c. Fewer types of available electronic funds transfers; or
 - d. Stricter limitations on the frequency or Kwanza amount of transfers.
2. Prior notice exception. A Financial Institution need not give prior notice if an immediate change in terms or conditions is necessary to maintain or restore the security of an account or an electronic funds transfer system. If the institution makes such a change permanent and disclosure would not jeopardize the security of the account or system, the institution shall notify the consumer in writing on or with the next regularly scheduled periodic statement or within 30 days of making the change permanent.
3. Error resolution notice. For accounts to or from which electronic funds transfers can be made, a Financial Institution shall mail or deliver to the consumer, at least once each calendar year, an error resolution notice substantially similar to the model below:

In Case of Errors or Questions about Your Electronic Transfers:

Telephone us at [insert telephone number]

Write us at [insert address] or

E-mail us at [insert electronic mail address]

As soon as you can. If you think your statement or receipt is wrong or if you need more information about a transfer listed on your statement or receipt, we must hear from you no later than 60 days after we sent the FIRST statement on which the problem or error appeared. Include in your notice of error information:



(i) *Your name and account number (if any).*

(ii) *Describe the error or the transfer you are unsure about, and explain as clearly as you can why you believe it is an error or why you need more information:*

(iii) *Tell us the Kwanza amount of the suspected error.*

If you tell us orally, we may require that you send us your complaint or question in writing within 10 business days.

We will determine whether an error occurred within 10 business days after we hear from you and will correct any error promptly. If we need more time, however, we may take up to 45 days to investigate your complaint or question. If we decide to do this, we will credit your account within 10 business days for the amount you think is in error, so that you will have the use of the money during the time it takes us to complete our investigation. If we ask you to put your complaint or question in writing and we do not receive it within 10 business days, we may not credit your account.

For errors involving new accounts, point-of-sale (POS), or foreign-initiated transactions, we may take up to 90 days to investigate your complaint or question. For new accounts, we may take up to 20 business days to credit your account for the amount you think is in error. We will tell you the results within three business days after completing our investigation. If we decide that there was no error, we will send you a written explanation. You may ask for copies of the documents that we used in our investigation

Article 9

(Receipts at Electronic Terminals; Periodic Statements)

1. Receipts at electronic terminals - General. Except for transactions of less than 1,000 Kwanzas, a Financial Institution shall make a receipt available to a consumer at the time the consumer initiates an electronic funds transfer at an electronic terminal. The receipt shall set forth the following information, as applicable:
 - a. *Amount.* The amount of the transfer. A transaction fee may be included in this amount provided that the amount of the fee is disclosed on the receipt and displayed on or at the terminal.
 - b. *Date.* The date the consumer initiates the transfer.
 - c. *Type.* The type of transfer and the type of consumer account(s) to or from which funds are transferred. The type of account may be omitted if the access device used is able to access only one type of account at that terminal.
 - d. *Identification.* A number or code that identifies the consumer's account or accounts or the access device used to initiate the transfer. The number or code need not exceed four digits or letters to comply with the requirements of this paragraph.
 - e. *Terminal location.* The location of the terminal where the transfer is initiated or other type of terminal identification such as a code or terminal number. Except in limited



circumstances where all terminals are located in the same city or state, if the location is disclosed, it shall include the city and state or foreign country and one of the following:

- i) the street address; or
 - ii) a generally accepted name for the specific location; or
 - iii) the name of the owner or operator of the terminal if other than the account-holding institution.
 - i. Third party transfer. The name of any third party to or from who funds are transferred.
2. Periodic statements. For an account to or from which electronic funds transfers can be made, a Financial Institution shall send a periodic statement for each monthly cycle in which an electronic funds transfer has occurred and shall send a periodic statement at least quarterly if no transfer has occurred. The statement shall set forth the following information, as applicable:
 - a. Transaction information for each electronic funds transfer occurring during the cycle;
 - b. The amount of the transfer;
 - c. The date the transfer was credited or debited to the consumer's account;
 - d. The type of transfer and type of account to or from which funds were transferred;
 - e. For a transfer initiated by the consumer at an electronic terminal (except for a deposit of cash or a check, draft, or similar paper instrument), the terminal location and the name of any third party to or from who funds were transferred.
 - g. Account number. The number of the account.
 - h. Fees. The amount of any fees assessed against the account during the statement period for electronic funds transfers, for the right to make transfers, or for account maintenance.
 - i. Account balances. The balance in the account at the beginning and at the close of the statement period.
 - j. Address and telephone number for inquiries. The address and telephone number to be used for inquiries or notice of errors, preceded by "Direct inquiries to" or similar language. The address and telephone number provided on an error resolution notice given on or with the statement satisfies this requirement.
 - k. Telephone number for pre-authorized transfers. If the Financial Institution uses the telephone-notice option, a telephone number the consumer may call to ascertain whether pre-authorized transfers to/from the consumer's account have occurred,

Article 10

(Procedures for Resolving Errors)

1. Definition of error. Types of transfers or inquiries covered. The term error means:
 - a. An unauthorized electronic funds transfer;
 - b. An incorrect electronic funds transfer to or from the consumer's account;
 - c. The omission of an electronic funds transfer from a periodic statement;



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- d. A computational or bookkeeping error made by the Financial Institution relating to an electronic funds transfer;
 - e. The consumer's receipt of an incorrect amount of money from an electronic terminal;
 - f. An electronic funds transfer not identified; or
 - g. The consumer's request for documentation or for additional information or clarification concerning an electronic funds transfer including a request the consumer makes to determine whether an error exists.
2. Types of inquiries not covered. The term error does not include:
 - a. A routine inquiry about the consumer's account balance;
 - b. A request for information for tax or other record keeping purposes; or
 - c. A request for duplicate copies of documentation.
 3. Handling a notice of error from a consumer – Timing and Contents. A Financial Institution shall comply with the requirements of this section with respect to any oral or written notice of error from the consumer that:
 - a. Is received by the institution no later than 60 days after the institution send the periodic statement or provides the passbook documentation, on which the alleged error is first reflected;
 - b. Enables the institution to identify the consumer's name and account number; and
 - c. Indicates why the consumer believes an error exists and includes to the extent possible the type, date, and amount of the error.
 4. Written confirmation. A Financial Institution may require the consumer to give written confirmation of an error within 10 business days of an oral notice. An institution that requires written confirmation shall inform the consumer of the requirement and provide the address where confirmation must be sent when the consumer gives the oral notification.
 5. Request for documentation or clarifications. When a notice of error is based on documentation or clarification that the consumer requested, the consumer's notice of error is timely if received by the Financial Institution no later than 60 days after the institution sends the information requested.
 6. Time limits and extent of investigation. Ten-day period. A Financial Institution shall investigate promptly and, except as otherwise provided in paragraph 8 of this Article, shall determine whether an error occurred within 10 business days of receiving a notice of error. The institution shall report the results to the consumer within three business days after completing its investigation. The institution shall correct the error within one business day after determining that an error occurred.
 7. Forty-five day period. If the Financial Institution is unable to complete its investigation within 10 business days, the institution may take up to 45 days from receipt of a notice of error to investigate and determine whether an error occurred, provided the institution does the following:



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- a. Provisionally credits the consumer's account in the amount of the alleged error (including interest where applicable) within 10 business days of receiving the error notice. If the Financial Institution has a reasonable basis for believing that an unauthorized electronic fund transfer has occurred, the institution may withhold a maximum of 5,000 Kwanzas from the amount credited. An institution need not provisionally credit the consumer's account if:
 - i. The institution requires but does not receive written confirmation of an oral notice of error within 10 business days; or
 - ii. The alleged error involves an account under the SCV securities payment system.
 - b. Informs the consumer, within two business days after the provisional crediting, of the amount and date of the provisional crediting and gives the consumer full use of the funds during the investigation;
 - c. Corrects the error, if any, within one business day after determining that an error occurred; and
 - d. Reports the results to the consumer within three business days after completing its investigation (including, if applicable, notice that a provisional credit has been made final).
8. Extension of time periods. The time periods of this section are extended as follows:
- a. The applicable time is 20 business days, in place of 10 business days, under this section if the notice of error involves an electronic fund transfer to or from the account within 30 days after the first deposit to the account was made.
 - b. The applicable time is 90 days in place of 45 days under this section, for completing an investigation, if a notice of error involves an electronic fund transfer that:
 - (i) Was not initiated within Angola;
 - (ii) Resulted from a point-of-sale debit card transaction; or
 - (iii) Occurred within 30 days after the first deposit to the account was made.
9. Investigation. With the exception of transfers, a Financial Institution's review of its own records regarding an alleged error satisfies the requirements of this section if:
- a. The alleged error concerns a transfer to or from a third party; and
 - b. There is no agreement between the institution and the third party for the type of electronic funds transfer involved.
10. Procedures to follow if the Financial Institution determines no error, or a different error, occurred. The Financial Institution shall also follow the procedures set forth in this paragraph if it determines that no error occurred or that an error occurred in a manner or amount different from that described by the consumer:
- a. Written explanation. The Financial Institution's report of the results of its investigation shall include a written explanation of the institution's findings and shall note the consumer's right to request the documents that the institution relied on in making its determination. Upon request, the institution shall promptly provide copies of the documents.



- b. Debiting provisional credit. Upon debiting a provisionally credited amount, the Financial Institution shall:
 - (i) Notify the consumer of the date and amount of the debiting;
 - (ii) Notify the consumer that the institution will honor checks, drafts, or similar instruments payable to third parties and pre-authorized transfers from the consumer's account (without charge to the consumer as a result of an overdraft) for five business days after the notification. The institution shall honor items as specified in the notice, but need honor only items that it would have paid if the provisionally credited funds had not been debited.
11. Reassertion of error. A Financial Institution that has fully complied with the error resolution requirements has no further responsibilities under this section should the consumer later reassert the same error, except in the case of an error asserted by the consumer following receipt of information provided under paragraph 1(g) of this section.

Article 11

(Retention of Records)

1. Any person subject to this Regulation shall keep evidence of having met the requirements for a period of 24 months starting from the date when issuance of notifications or the start of actions are required to be undertaken.
2. Any person subject to this Regulation, who is informed of being subject to investigation by the BNA, or by law, shall keep all records concerning the investigation, action, or proceedings until authorized otherwise by the BNA or by a court of law.

Article 12

(Service Provider of Electronic Operations or Funds Transfers not Controlling the Account of the Consumer)

1. Provider of electronic fund transfer service. A person that provides an electronic fund transfer service to a consumer but that does not hold the consumer's account is subject to all requirements of this Article if the person:
 - a. Issues a debit card (or other access device) that the consumer can use to access the his/her account held by a Financial Institution; and
 - b. Has no agreement with the account-holding institution regarding such access.
2. Compliance by service provider. In addition to the requirements generally applicable under this clause, the service provider shall comply with the following special rules:



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- a. Disclosures and documentation. The service provider shall give the disclosures and documentation required that are within the purview of its relationship with the consumer. The service provider need not furnish the periodic statement required if the following conditions are met:
- i) The debit card (or other access device) issued to the consumer bears the service provider's name and an address or telephone number for making inquiries or giving notice of error;
 - ii) The consumer receives adequate notice concerning use of the debit card;
 - iii) The consumer receives, on or with the receipts, the address and telephone number to be used for an inquiry, to give notice of an error, or to report the loss or theft of the debit card;
 - iv) The service provider transmits to the account-holding institution the information needed, in the format prescribed by the automated clearinghouse system used to clear the fund transfers;
 - v) The service provider extends the time period for notice of loss or theft of a debit card, from two business days to four business days after the consumer learns of the loss or theft; and extends the time periods for reporting unauthorized transfers or errors, from 60 days to 90 days following the transmittal of a periodic statement by the account-holding institution.
3. Error resolution. If delay resulted from an initial attempt by the consumer to notify the account-holding institution, the service provider shall extend, by a reasonable amount of time, the period in which notice of an error must be received. In addition:
- a. The service provider shall disclose to the consumer the date on which it initiates a transfer to affect a provisional credit.
 - b. If the service provider determines an error occurred, it shall transfer funds to or from the consumer's account in the appropriate amount and within the applicable time period.
 - c. If funds were provisionally credited and the service provider determines no error occurred, it may reverse the credit. The service provider shall notify the account-holding institution of the period during which the account-holding institution must honor debits to the account. If an overdraft results, the service provider shall promptly reimburse the account-holding institution in the amount of the overdraft.
4. Compliance by account-holding institution. The account-holding institution need not comply with the requirements of the Article with respect to electronic funds transfers initiated through the service provider except as follows:
- a. Documentation. The account-holding institution shall provide a periodic statement that describes each electronic funds transfer initiated by the consumer with the access device issued by the service provider. The account-holding institution has no liability for the failure to comply with this requirement if the service provider did not provide the necessary information; and



- b. Error resolution. Upon request, the account-holding institution shall provide information or copies of documents needed by the service provider to investigate errors or to furnish copies of documents to the consumer. The account-holding institution shall also honor debits to the account.
5. A service provider that issues to a consumer, in exchange for monies, debit cards, pre-paid credit cards, smart cards, or any other Means of Access that records amounts to be later withdrawn through ATMs, POS, card readers, or any other electronic equipment, shall deposit the net proceeds to be withdrawn by the consumer in a bank account in Angola, shall maintain sufficient liquidity to honor withdrawals, and shall maintain those consumer-owned amounts in trust.

Article 13

(Security in Electronic Funds Transfers)

- 1 Controls over Internet and other electronic funds transfers. Financial Institutions must limit electronic funds transfers ordered over the Internet to the consumer's own accounts and to pre established third party accounts. Financial Institutions must also offer consumers of Internet banking the option to limit the daily and weekly withdrawals and funds transfers as well as limit the frequency of daily and weekly withdrawals and funds transfers.
 - a. When a bank account is initially activated for electronic funds transfers ordered by consumers over the Internet or other electronic means, the default settings should be set to zero for unregistered (local and foreign) third party accounts. Consumers shall only be allowed to increase amount and transaction limits through secure means (e.g. at the offices of the Financial Institution and with adequate identification).
 - b. The electronic funds transfer service shall be disabled (or reprogrammed to zero) for amount and transaction limits of electronic funds transfers to unregistered third parties when it has not been used for a prolonged period (eg. One year) despite prior authorization.
2. Two factor protection with one time passwords - OTPs, and consumer alerts. Financial Institutions must ensure that the two factor safeguards or OTPs (used to authorize funds transfer over the Internet and other high risk on-line transactions) must expire within a very short period of time (eg. 100 seconds). Each Internet funds transfer and other type of high risk on line transaction must require a separate OTP.
 - a. The message of the Financial Institution containing the OTP must also contain the funds transfer details including type of transaction, partial account number, and amount of the transaction, if relevant. The consumer must be reminded to review the details of the transaction before entering the OTP and initiating the funds transfer.
 - b. The Financial Institutions must immediately notify the consumer through an alternate channel (e.g. preferably SMS or electronic mail) after completing a risky transaction such as registering the account for payments to a third party and transferring funds to an unregistered account. The



- notice must describe transaction details including the type of transaction, a partial number of the account credited, and the amount of the transaction.
- c. Consumers choosing not to use the previously indicated notification system shall not be allowed to make risky transactions on line. Such consumers need to previously register third party accounts and/or increase the amounts and the limits on the number and frequency of transactions by visiting the bank's branches in person with adequate identification.
3. Security of the digital certificate. If the Financial Institution decides to adopt the digital certificate for the two factor authentication, it must ensure that the digital certificate and its associated private keys cannot be duplicated and that they are stored in a secure manner (eg. an intelligent card). Consumers shall be reminded to remove digital certificates from their computers when they finish using them.
 4. Monitoring of unusual activities. The Financial Institutions must have a robust automated anti-fraud mechanism to detect, in a timely manner, suspicious on-line transactions and unusual activities in accordance with established criteria (e.g. transitions initiated from a different Internet Protocol (IP) address than usual, funds transfers not made before, and funds transfers up to the approved limit for the consumers' accounts).
 5. The Financial Institutions must adopt formal procedures to inform and administer security incidents, and to detect or manage suspicious or unusual on-line transactions. Within reason, the Financial Institutions must contact their consumers before making such transactions. The Financial Institutions must immediately inform the BNA of suspected or confirmed cases of fraud in electronic banking operations.
 6. Client education. The Financial Institutions must regularly review their security warning to ensure that it remains relevant and appropriate for the latest developments in electronic banking security.
 - a. The Financial Institutions must pay special attention in giving advice to consumers in clear and simple terms, about needed safeguards in electronic banking. In particular, how to securely configure personal computers, how to establish virus protection, and how to check for malicious programs should be conveyed to the consumer.
 - b. Financial Institutions must remind consumers to provide a valid cell phone number to receive alerts and warnings and to report any changes in the cell phone number.