



የኢትዮጵያ ብሔራዊ ባንክ
NATIONAL BANK OF ETHIOPIA
ADDIS ABABA

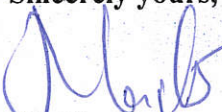
PSSD/0176/2020
August 5, 2020


- All Banks,
 - All Microfinance Institutions,
 - EthSwitch S.C.
 - Premier Switch Solutions S.C.
- Addis Ababa

Subject: Licensing and Authorization of Payment System Operators
Directive No. ONPS/02/2020

Please find attached the Directive under caption for your information and implementation

Sincerely yours,


Martha Hailemariam
Director,
Payment and Settlement System Directorate



CC:

- H.E. The Governor,
- V/Governors,
- Senior Advisor,
- Advisors,
- All Directorates

National Bank of Ethiopia



የኢትዮጵያ ብሔራዊ ባንክ
NATIONAL BANK OF ETHIOPIA
ADDIS ABABA

OVERSIGHTT OF THE NATIONAL PAYMENT SYSTEMS
Licensing and Authorization of Payment System Operators
Directive No. ONPS/02/2020

Whereas, it is important to maintain the safety and efficiency of the national payment system;

Whereas, it is important to foster transparency, ensure interoperability, guarantee the effective protection of customers, ensure existence of a competitive environment, and promote the financial inclusion;

Whereas, innovative and well-functioning payment systems are important to provide competitive, efficient and inclusive payment services;

Whereas, it is essential to regulate, set standards and oversee the payment systems operation;

Whereas, it is necessary to set clear criteria for licensing and authorization of payment system operators and their operations;

Now, **therefore**, in accordance with sub article 4(2a)/1, 4(2)/e, 6(6), 19(3), 20(2),22(2) and 37(2) of the National Payment System Proclamation No. 718/2011, and the application of the general principles of the Proclamation, the National Bank of Ethiopia has issued this Directive.

PART I
GENERAL PROVISIONS

1. **Short Title**

This Directive may be cited as “**Licensing and Authorization of Payment System Operators Directive No. ONPS/02/2020**”

2. **Definitions**

For the purpose of this Directive:

- 2.1 “**acquirer**” means an entity that owns and operates payment channels and enters in to an agreement with financial institutions, merchants, switch processors or providers of card schemes;

- 2.2 **“automated teller machine/terminal”** means an electromechanical device that permits authorized users to withdraw cash from their accounts and/or access other services, such as balance enquiries, transfer of funds, acceptance of deposits or any other related services;
- 2.3 **“bank”** means a company licensed by the National Bank to undertake banking business or a bank owned by the Government;
- 2.4 **“card scheme”** means one or more payment networks linked to payment cards of which a financial institution or any other person can become a member;
- 2.5 **“cardholder”** a person that enters into an agreement with (payment instrument issuer) in order to obtain a payment card and is authorized to use the card for accessing the account associated with the card for the purpose of making deposit, withdrawing money, making payments and obtaining other related services;
- 2.6 **“contactless”** means a process of executing a payment or transaction by presenting a card to pay without physical contact between the card and card reader device (ATM/POS);
- 2.7 **“company”** means a share company as defined in the Commercial Code of Ethiopia, in which the capital is: (a) fully owned by Ethiopian nationals or foreign nationals of Ethiopian origin or jointly owned by Ethiopian nationals and foreign nationals of Ethiopian origin;
- 2.8 **“chief executive officer”** means a person by whatever title that person may be referred to, who is primarily responsible for the day-to-day management of the affairs of the payment system operator;
- 2.9 **“customer”** means a person who uses the services of payment system operator;
- 2.10 **“director”** means a person by whatever title that person may be referred to, who is a member of the board of directors of a licensed payment system operator;
- 2.11 **“electronic funds transfer (EFT)”** means a fund transfer which is initiated through an electronic, telecommunication or other automated device;
- 2.12 **“electronic money”** means monetary value represented by a claim on the issuer, which is: (a) issued on receipt of Ethiopian Birr, (b) accepted as a means of payment by a person other than the issuer, (c) having equal value with other

Final



electronic money issued in Ethiopian Birr, (d) stored in an electronic device such as chip, prepaid card, mobile phone, tablet or any other computer systems;

- 2.13 “**financial institution**” means a bank or a microfinance institution licensed by the National Bank;
- 2.14 “**interconnectivity**” means the technical capability to enable a connection between two or more schemes or business models;
- 2.15 “**interoperability**” means the technical or legal compatibility that enables a system or a scheme to be used in conjunction with other systems or schemes. It allows participants in different systems or schemes to process, clear and settle payments or financial transactions across systems or schemes without participating in multiple systems or schemes;
- 2.16 “**instant retail payment**” means electronic low value payments including person to person, person to business, business to person, Government to person and person to Government payments that settle in beneficiary and payer account in a real time;
- 2.17 “**know your customer**” means a set of due diligence measures undertaken by a financial institution, a payment instrument issuer or a payment system operator, including policies and procedures, to verify the identity of a user and the motivation behind its financial activities;
- 2.18 “**merchant**” means a person who enters into an agreement with an acquirer, operator, a financial institution, or payment instrument issuer, which accepts payment using the payment instrument and payment channel, against the sale of goods and/or services;
- 2.19 “**National Bank**” means the National Bank of Ethiopia;
- 2.20 “**national payment gateway**” means a system which consists standards, switchings, and services built to integrate all card and non-card payment schemes domestically;
- 2.21 “**near field communication**” means a set of protocols that enables devices to establish a contactless communication with each other;

faa



- 2.22 “**non-card scheme**” means one or more payment networks linked to other than card scheme including electronic money which a financial institution or any other person can become a member;
- 2.23 “**off-us transaction**” means a payment transaction which occurred on acquirer by using payment instrument which is issued by another issuer;
- 2.24 “**on-us transaction**” means a transaction or payment which occurred within the financial institution which is the issuer and acquirer at the same time;
- 2.25 “**outsourcing**” means an arrangement of any form between a payment system operator and a third party provider by which the provider handles a process, a service or an activity that would otherwise be undertaken by the payment system operator;
- 2.26 “**participant**” means a party authorized by the National Bank to participate in a payment system to send and receive payments;
- 2.27 “**payment aggregator**” means an intermediary in an online payment transaction accepting payments on behalf of the merchant from the customers and then transferring the money to the merchant’s account;
- 2.28 “**payment card (card)**” means a card enabling the holder to make payment from point of sale, e-commerce (through payment gateway) or withdraw cash from point of sale machine or automated teller machine;
- 2.29 “**payment gateway**” means a technology infrastructure that provides electronic services to route and facilitate processing of online card and non-card transactions, without any involvement in the actual handling of funds;
- 2.30 “**payment instrument issuer**” means any person licensed or authorized by the National Bank to issue payment instrument;
- 2.31 “**payment scheme**” means a card and non-card payment network in which a financial institution and any other person becomes a member;
- 2.32 “**payment service**” means any of the following activities carried out by a financial institution, payment instrument issuer and payment system operator: (a) services enabling cash to be placed in or withdrawn from an account held at a licensed financial institution or payment instrument issuer and all of the operations required for operating an account. (b) execution of payment

420



transactions where the funds are covered by either user's own fund or a credit line; including transfer of funds on account with the user's payment service providers or another payment service providers; (c) issuing payment instruments or acquiring payment transactions; (d) money remittance; (e) payment initiation service; (f) account information service;

- 2.33 “**payment system**” means a set of instruments, procedures, and rules for the transfer of funds between or among participants; the system includes the participants and the person operating the arrangement;
- 2.34 “**payment system operator (operator)**” means the National Bank, a financial institution or any other person authorized by the National Bank as per this Directive to own, operate and administer a payment system;
- 2.35 “**payment terminal service aggregator**” means interconnectivity service among payment terminals which enables sending and receiving of payments to and from different business models or schemes;
- 2.36 “**person**” means any natural or juridical person;
- 2.37 “**point of sale machine or device**” means a digital machine or device including a smartphone, tablet or dedicated wireless device placed at merchant site that enables to capture, send and receive payment information;
- 2.38 “**proclamation**” refers to the National Payment System Proclamation No. 718/2011;
- 2.39 “**real time**” means the electronic processing of transactional data instantaneously upon data entry or receipt of a request;
- 2.40 “**senior executive officer**” means a person by whatever title that person may be referred to, who is deputy to the chief executive officer or is directly reporting to the board of directors;
- 2.41 “**settlement agent**” means National Bank or any other person authorized by the National Bank to provide settlement services;
- 2.42 “**stored value**” means electronic money stored in the payment system operator's payment application or solution for the purpose of making payment only on operator's payment platform;

Handwritten signature



- 2.43 “switch” means a payment platform or network that enables payment transactions to be routed from one participant to another, whether within the same scheme or between different schemes;
- 2.44 “system rules” means a set of rules issued by a payment system operator and approved the National Bank to govern the payment system operator and its participants;
- 2.45 any gender expressed in masculine shall also include the feminine.

3. Scope of the Directive

This Directive shall apply to payment system operators licensed and authorized by the National Bank.

PART II

APPLICATION AND APPROVAL PROCESS

4. Conditions for Granting Authorization and Licensing

- 4.1 Any person other than a financial institution who intends to operate a system that routes payment transactions, authorization and settlement request from merchants, acquiring and issuing financial institutions, shall be licensed by the National Bank as a payment system operator.
- 4.2 In addition to sub article 4.1 of this Article, any person other than financial institution who intends to engage in the provision of payment processing, personalization of payment cards, merchant acquiring, point of sale machine deployment, payment aggregation and payment applications or solutions services shall be licensed by the National Bank as a payment system operator.
- 4.3 A person who intends to be licensed as a payment system operator shall submit a complete application as any of the following: a national switch operator, a switch operator, an automated teller machine operator, a point of sale machine operator and /or payment gateway operator.
- 4.4 A person may be licensed to operate more than one system.

Final



- 4.5 Licensed financial institutions are deemed to be authorized payment system operators. They shall, however, operate only for their own use and be required to comply with this Directive.
- 4.6 An applicant intending to be licensed as a payment system operator shall:
- a) be established as a company;
 - b) have ownership by a person limited to 40%, if it is other than national switch operator;
 - c) have a minimum of 10 (ten) shareholders to operate more than one system;
 - d) only be owned by financial institutions and the National Bank, if it is the national switch operator;
 - e) have ownership by a natural person limited to 1 (one) share at the time of entry and have 1 (one) more share every time new shares are sold thereafter, if it is the national switch operator;
 - f) have ownership by an institutional shareholder other than National Bank limited to 5% (five percent), if it is the national switch operator;
 - g) submit signed minutes of shareholders along with attendance sheet;
 - h) submit a certificate of registration for trade name from the relevant federal ministry and/or regional bureau;
 - i) publish or notify on a widely circulating newspaper: list of names, nationality, address, number and value of subscribed shares of founding shareholders;
 - j) submit articles and memorandum of association prepared both in Amharic and English;
- 4.7 An applicant intending to be licensed as payment system operator shall have a paid up capital of not less than:
- a) ETB 300 million (three hundred million Birr) if it is the national switch operator ;
 - b) ETB 40 million (forty million Birr) if it is a switch operator;
 - c) ETB 20 million (twenty million Birr) if it is an automated teller machine operator;
 - d) ETB 10 million (ten million Birr) if it is a point of sale device operator;

Final



- e) ETB 3 million (three million Birr) if it is a payment gateway operator;
- f) the sum of a paid up capital stated hereinabove under each operator if an applicant intends to be licensed to operate two or more of the payment systems.

4.8 An applicant shall pay a non-refundable application processing fee of ETB 3,000 (three thousand Birr) and present proof of payment together with the applications.

4.9 The applications and accompanying documents shall provide adequate details and complement the National Bank's evaluation and decision making process.

4.10 In addition to requirements under sub-articles 4.6 to 4.9 of this Article, the application shall be accompanied by the following:

- a) a set of comprehensive documents, demonstrating applicant's ability to manage the system, including at least:
 - i. analysis of Ethiopian financial system, which well elaborates payment processing challenges and opportunities;
 - ii. technical viability, standard or design, identification, description of the payment systems to be operated and the trend of using such system in other market ;
 - iii. source of capital and finance to execute the project;
 - iv. the need for the proposed system, the service proposed to be undertaken by the operator and planned geographical coverage of the system ;
 - v. financial and business plan, including budget forecast for the first five years of operations including balance sheet, income statement, cash flow statement and basic assumptions for the projections;
 - vi. the identity of directors of the applicant and the persons responsible for managing the system of the applicant;
 - vii. the proposed rules of the system;
 - viii. description of the organization of the system the applicant runs, including outsourcing arrangements (if any);

Handwritten signature in blue ink.



- b) a set of signed documents detailing the features and operational modalities of all systems to be used, including the operating systems, software and interfaces explaining at least the following:
- i. description (including diagrams) of the configuration of the company's system operation, function and capability;
 - ii. the manner in which such system will be linked to other host systems or the network infrastructure in the company and; the way transaction and data flows through the network;
 - iii. the means of payment transaction, clearing and settlement process;
 - iv. types of telecommunication channels and remote access capabilities and the way security controls/measures are installed;
 - v. a list of software and hardware components indicating the purpose of the software and hardware in the infrastructure;
 - vi. the manner in which data security and data integrity is ensured;
 - vii. description on the system's interoperability and interconnectivity with other payment systems;
 - viii. applicability of relevant international, national and industry level standards, guidelines and recommendations wherever possible.
 - ix. network infrastructure, authenticity and security policies and procedures installed to maintain the integrity authenticity and confidentiality of data and operation;
 - x. data management - archiving, retrieval and destruction procedure;
 - xi. business continuity and disaster recovery arrangement;
 - xii. system audit log file generation for all activities and back up policies;
- c) policies and procedures to comply with relevant Anti-Money Laundering and Counter Financing of Terrorism (AML/CFT) laws whenever required;
- d) dispute management and resolution policies and procedures.

4.11 Any other relevant information requested by the National Bank.

Handwritten signature



- 4.12 The National Bank shall respond to the application submitted in accordance with sub article 4.3, 4.4, 4.6 and 4.7 of this Article within 60 (sixty) calendar days from the submission date of a complete application.
- 4.13 Based on the conditions set out in this Directive, the National Bank may opt for the licensing or authorization process to follow two stages; primary approval – for piloting and final approval-for business/operation.
- 4.14 As part of the application process, the National Bank, may request for a preliminary meeting and demonstration of the intended system to be operated and its related services and operation.
- 4.15 The National Bank, based on the proposal of the applicant, may authorize a pilot period for the maximum of 3 (three) months.
- 4.16 An applicant who is granted authorization for piloting systems shall submit detailed piloting plan and commence the pilot test within 30 (thirty) calendar days after the date on which the notification is made.
- 4.17 An applicant who is granted authorization for piloting system as per sub-article 4.15 of this Article shall perform the pilot and submit periodic detailed performance report showing, system performance, system errors, participants' complaints, deviations observed and changes required to address risks and the changes proposed to be introduced as a result of the pilot.
- 4.18 Based on a written request by the applicant, the National Bank may extend the pilot test period for the minimum of 1 (one) month.
- 4.19 Based on the results and assessment of the pilot trial where authorization has been granted, the National Bank may grant full license.
- 4.20 The National Bank may reject an application for licensing on any of the following grounds:
- a) the applicant or its owners have been convicted of a crime involving a financial transaction;
 - b) the intended payment system is not currently suspended not to be operated in processing of financial transactions by relevant domestic or international body;

[Handwritten signature]



- c) the application and its accompanying documents contain false information;
- d) the applicant fails to give any response to a request from the National Bank, within 15 (fifteen) calendar days;
- e) the submitted documents are incomplete, ambiguous or misleading;
- f) the intended payment system to be operated or its related service poses risk to users or the national payment system.

4.21 Where the National Bank rejects the application or any part thereof, the National Bank shall provide the applicant with a written explanation of the grounds upon which the rejection is based.

4.22 An applicant whose application has been rejected may be allowed to reapply, if the deficiencies that formed the basis for rejection of the initial application or subsequent review have been corrected otherwise addressed.

4.23 An applicant whose application has been rejected may appeal against the decision within 7 (seven) working days from the date on which the refusal is communicated.

4.24 An applicant shall pay an initial licensing fee of ETB 5,000 (five thousand Birr).

4.25 A license or authorization granted as per this Directive to a payment system operator shall be subject to such conditions as the National Bank considers necessary.

5. Appointment and Approval of Directors and Executive Officers

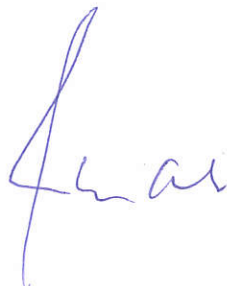
5.1 The appointment of directors of a licensed operator shall get prior written approval from the National Bank.

5.2 The following requirements and conditions shall be fulfilled for approving the appointments of directors of licensed payment system operator:

- a) a director shall have a minimum of first degree or equivalent from recognized higher learning institutions;
- b) a director shall have adequate work experience to effectively oversee the business of the payment system operator and shall have prior understanding about payment system;



- c) signed biography and curriculum vitae of directors shall be submitted to the National Bank;
- 5.3 The appointment of chief executive officer of a licensed operator shall get prior written approval from the National Bank.
- 5.4 The appointment of senior executive officer of the national switch operator shall get prior written approval from the National Bank.
- 5.5 The following requirements and conditions shall be fulfilled for approval of the appointment of chief executive officer and senior executive officers of licensed payment system operator:
- a) a chief executive officer shall have a minimum of first degree from a recognized higher learning institutions;
 - b) a chief executive officer of the national switch and switch operator shall have a minimum of 8 (eight) years' work experience in finance, payment and information technology areas of which, 5 (five) years shall be in senior executive position;
 - c) a senior executive officer of the national switch shall have a minimum of first degree from recognized higher learning institutions and shall have 6 (six) years working experience of which 3 (three) years in managerial position including at departmental level or equivalent;
 - d) a chief executive officer of a licensed automated teller machine operator, point of sale machine operator and online payment gateway operator shall have a minimum of 5 (five) years' experience in the area of finance, payment and information technology;
 - e) a signed biography and a curriculum vitae of the chief executive officer or senior executive officer shall be submitted to the National Bank
 - f) signed meeting minutes of the directors wherein the appointment of the chief executive officer and/or senior executive officers is made.
- 5.6 Directors, chief executive officers and senior executive officers shall be honest, reputable and diligent. **Annex** is attached. In determining these traits of the person, all relevant factors shall be considered. Including but not limited to:



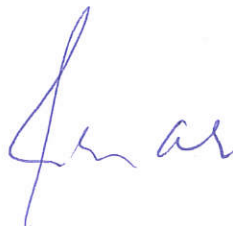
- a) whether the person has a record for previous conduct and activities where he has been convicted for a criminal offence under any law to protect members of the public from dishonesty or fraud anywhere; and
 - b) whether the person has a record of withholding information from public authorities, submission of incorrect financial or other statements and failure to comply with requirements of a regulator
- 5.7 The National Bank may require a licensed payment system operator for further documentation or explanation depending on the case.

PART III

SYSTEM RULE, RISK MANAGEMENT AND SYSTEM CHANGE

6. **System Rule**

- 6.1 A payment system operator shall establish written rules for the governance, management and operation of its system including, at a minimum, rules to determine: access, contingency arrangements, operational risk, dispute management, rights and liabilities of participants and the operator.
- 6.2 System rules shall include provisions on objective, risk based, and publicly disclosed criteria for participation.
- 6.3 System rules shall include the clearing and settlement arrangement with a clear time table and shall be communicated to the participants.
- 6.4 Payment system operator shall follow the rules of card scheme participants when processing their transactions.
- 6.5 The system rule for system operator shall be agreed and signed by both participants of the system and the operator.
- 6.6 System rules made pursuant to sub-article 6.1 of this Article shall be subject to the approval of the National Bank and shall comply with the requirements of this Directive.
- 6.7 The National Bank may vary or revoke an established rules where it deems necessary, having regard to:



- a) ensuring the safety and efficiency of the national payment system;
- b) whether the variation or revocation would be in the interest of the public;
- c) the interests of the current participants in the system.

6.8 A payment system operator shall not amend rules established as per Article 6 of this Directive without:

- a) the written approval of the National Bank;
- b) giving at least 30 (thirty) calendar days' notice to the participants after the written approval of the National Bank is obtained.

7. System Change

7.1 A payment system operator shall not change a system or cause a change in the system which would affect the structure, operation or administration of a system licensed under sub article 4.19 of this Directive without:

- a) the written approval of the National Bank; and
- b) giving at least 30 (thirty) calendar days' notice to the participants after the written approval of the National Bank is obtained.

7.2 Notwithstanding sub-article 7.1 of this Article, the National Bank may, in the interest of safety and efficiency of the payment system, monetary policy, financial stability, or the public, order a system operator to make a change to a system without giving prior notice to the participants under sub-article 7.1(b) of this Article.

8. Risk Management

8.1 A payment system operator shall have sound risk-management policies, procedures, and systems that enable it to comprehensively identify, measure, monitor, and control the range of risks appropriate to the operator, including legal, credit, liquidity, business, technology/cyber security and operational risks that arise in or are borne by the operator.

Handwritten signature



8.2 An operator shall put in place operational policies and procedures which identify and define responsibilities on the functionality, connectivity and risks of systems that are operated by the operator, which at least include the following:

- a) a clear organizational structure with well-defined, transparent and consistent lines of responsibility;
- b) effective procedures to identify, manage, monitor and report the risks to which it is or might be exposed;
- c) adequate internal control mechanisms, including sound administrative and accounting procedures.
- d) human resources plan to ensure adequate resources to the operation of the system;
- e) internal complaint and dispute management mechanism;
- f) means of protection from technical breakdowns within the system;
- g) business continuity plan and disaster recovery arrangement; and
- h) clear and well defined clearing and settlement policies and procedures.

8.3 Notwithstanding sub article 8.1 and 8.2 of this Article, the payment system operator shall undertake the following:

- a) maintain a safe and tested system and secured information technology
- b) ensure interoperability;
- c) set up fraud monitoring tool with well-defined rules to ensure that customer accounts are well protected;
- d) keep confidential and separate all the information in respect of the services of the payment system operator outsourced to third parties; and
- e) keep/store records and documents electronically of each and every payment transaction processed in accordance with relevant data archiving laws.

8.4 A payment system operator shall have up to date risk-management framework.

8.5 A payment system operator shall from time to time set standards and rules to minimize risks related to operations of their systems.

Handwritten signature



PART IV
ROLES AND RESPONSIBILITIES OF A PAYMENT SYSTEM OPERATOR

9. National Switch Operator

- 9.1 There shall be a single national switch operator.
- 9.2 EthSwitch S.C. shall be the national switch for card and instant retail payments and transfers.
- 9.3 Interbank direct debit, credit transfer and cheque payment shall be processed and cleared through the Ethiopian Automated Transfer System (EATS) - Automated Clearing House (ACH).
- 9.4 A national switch operator shall:
- a) provide domestic payment scheme;
 - b) provide national payment gateway services;
 - c) provide interconnectivity, interoperability and clearing amongst authorized and licensed switches, participants and other authorized or licensed payment service providers;
 - d) determine net settlement positions of participants and send the net settlement to the EATS for final settlement;
 - e) ensure the efficiency, readiness and availability of its systems for the clearing and settlement services of all authorized electronic transactions;
 - f) have clear scheme rules and management for card and non-card payment scheme transactions;
 - g) be operationally independent of other switching companies;
 - h) comply with domestic or international security standards as prescribed by the National Bank from time to time;
 - i) maintain, subject to National Bank approval and in consultation with participants and operators, minimum technical standards on interoperability, messaging, network connectivity, network monitoring, security, disaster recovery, fraud management, dispute management, and programming interfaces;



- j) conduct at least quarterly planned system tests to ensure the ability to seamlessly switch from primary to back-up systems and send the result to the National Bank. Such tests shall not interrupt the regular business of the switch;
- k) have a minimum of 2 (two) communication links as the primary and secondary link for its connectivity;
- l) ensure all systems used for transmitting financial data within the switching networks are complying with relevant technical and security standards;
- m) assess the readiness of operators' and participants' systems before their joining the national switch;
- n) conduct an assessment test on at least quarterly basis against all systems switched to the national switch;
- o) provide other related services as approved by the National Bank.

9.5 Up on approval of the National Bank, the national switch operator together with financial institutions and payment service providers may establish Payment System Management Body (PSMB), which will be responsible for proposing technical and operational standards and rules to be approved by the National Bank and applied for payment devices, domestic card and non-card scheme and other related services.

10. Switch Operator

10.1 A switch operator shall:

- a) be connected to the national switch for the purpose of routing, clearing and settlement of inter institutional payments;
- b) comply with domestic or international security standards as prescribed by the National Bank from time to time;



- c) transmit all messages or financial transactions emanating from connected payment devices to the national switch and/or financial institution as per the relevant standards;
- d) transmit all messages or financial transactions emanating from the national switch to their expected destinations, without regard to the originating switch of such message or financial transaction;
- e) have a minimum of 2 (two) communication links as the primary and secondary link for its connectivity;
- f) have adequate and effective device monitoring mechanisms;
- g) not reject, degrade, give lower priority or service, or in any way negatively affect any message or financial transaction originating from the national switch or from any connected devices;
- h) have an open network for reciprocal exchange of transactions with the national switch or licensed financial institution.

10.2 Based on the request made and written approval of the National Bank, a switch operator may be allowed to provide the following services:

- a) routing of payment transactions;
- b) authorization and settlement request from merchants and acquiring and issuing;
- c) printing and personalization of payment cards;
- d) payment terminal aggregations;
- e) provision of training and advices on its system and related services to merchants, financial institutions, participants and other payment service providers; and
- f) other related services as approved by the National Bank

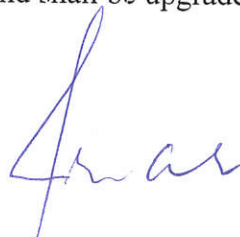
Handwritten signature



11. Automated Teller Machine Operator

11.1 An automated teller machine operator shall:

- a) own through either acquiring or capital lease agreement for not less than 15 (fifteen) automated teller machines
- b) enter in to a service level agreement with licensed financial institutions for cash loading and such agreement shall be approved by the National Bank (applies only to licensed automated teller machine operator);
- c) enter into an agreement with a card scheme or a scheme operator or designated financial institution for acceptance and settlement of a transaction at the automated teller machine;
- d) submit evidence for acquired or leased terminal devices. Acquiring and leasing of terminals shall be made from the vendor that provides a valid certificate in compliance with the required standards;
- e) monitor and report suspicious and fraudulent transactions to National Bank and other relevant government body.
- f) comply with the relevant security standards and cyber security regulations;
- g) Ensure that its automated teller machine and it management :
 - i. correctly dispense denomination of Ethiopian Birr only;
 - ii. display acceptable denomination, if the automated teller machine is deposit taking;
 - iii. retract cash which is not collected by the user from automated teller machine slot within 15 (fifteen) seconds;
 - iv. display acceptable type of foreign currency if the automated teller machine exchanges foreign currency;
 - v. comply with latest version of domestic and international card scheme standards, and shall be upgraded from time to time,



- vi. have an audit trail and log capability to facilitate investigation, reconciliation and dispute resolution;
 - vii. process card-less transactions;
 - viii. have tactile graphic symbol and voice activation for the use of a visually impaired customer;
 - ix. do not discriminate against any card or non-card scheme;
 - x. are situated to permit access for physically disabled users and provide adequate lighting;
 - xi. are located to prevent reflected sunlight or other bright lighting from striking the display;
 - xii. have web cam camera which instantly takes identifiable image of a customer whenever transaction is executed on automated teller machine. The camera shall not record the key strokes of a customer;
- h) process inter automated teller machine transaction through a licensed /authorized payment switch;
 - i) send transaction to licensed switch or financial institutions for the purpose of routing, processing, authorization, settlement or switching;
 - j) not send any transaction outside Ethiopia for the purpose of processing, authorization or switching (only applies for licensed automated teller machine operator).

11.2 An automated teller machine operator shall ensure the following;

- a) the downtime for automated teller machine shall not be more than 24 (twenty four) hours and when it is not rectified, the operator shall display a notice at the terminal;
- b) a toll free helpdesk contact line number shall be displayed at the automated teller machine terminal;
- c) based on request an automated teller machine shall issue or send an electronic receipt to the user ;
- d) partial cash dispensing shall be disabled on automated teller machine;

Handwritten signature



- e) a financial institution shall reconcile and refund all funds belonging to a customer as a result of an automated teller machine non-dispense error within 72 (seventy two) hours for off-us and within 6 (six) hours for on-us transactions;
- f) a monitoring mechanism shall be put in place to promptly detect automated teller machine failure;
- g) a change of personal identification number shall be provided to customers free of charge;
- h) a back-up power shall be made available at an automated teller machine location;
- i) a redundant network backup infrastructure shall be provided;
- j) a notice is displayed at the automated teller machine for planned maintenance period and disruption to service at least 3 (three) calendar days prior to planned maintenance;
- k) maintenance of automated teller machine shall always be carried out in the presence of the operator's internal staff and under controlled environment (if maintenance service is outsourced);
- l) each automated teller machine shall have a maintenance register or log for 1 (one) year.

11.3 An automated teller machine operator shall ensure existence of the following security measures:

- a) the picture taken by the automated teller machine web cam camera shall be kept in accordance with relevant archiving law;
- b) adequate security control mechanism shall be put in place to protect the automated teller machine from any security threat;
- c) a network used for the transmission of automated teller machine transaction shall have data confidentiality and integrity;
- d) there shall be a mechanism to prevent network intrusion;
- e) an operator shall conduct a regular physical inspection against its entire automated teller terminals;

Handwritten signature



- f) a yearly security assessment shall be conducted against the entire systems of the operator by relevant body;
 - g) an operator shall take all relevant security measures to protect customer's sensitive information on its automated teller machine.
- 11.4 National Bank may from time to time provide the operator with geographical distribution mechanism for automated teller machine positioning.
- 11.5 Based on request made and written approval from the National Bank a licensed automated teller machine operator may provide the following services through its automated teller terminal;
- a) process payments through international card scheme;
 - b) account to account transfer;
 - c) card to card transfer;
 - d) mobile top-up;
 - e) bill payment;
 - f) domestic remittance; and
 - g) other related services as approved by the National Bank.
- 11.6 Based on written approval of the National Bank, a licensed automated teller machine operator under full responsibility of and written outsourcing agreement with regulated financial institutions and Forex bureaus, may be allowed to provide the following services on automated teller machine:
- a) foreign currency exchange; and
 - b) accepting deposit.

12. **Point of Sale Machine Operator**

- 12.1 A point of sale machine operator shall own and operate through either acquiring and/or capital lease not less than 300 (three hundred) point of sale devices from a licensed payment terminal provider.

Free



- 12.2 Stakeholders in point of sale machine operation services may include operator, instrument issuer, merchant, cardholder /instrument holder, card scheme, national switch and non-card scheme;
- 12.3 A point of sale machine operator shall comply with relevant security standards and cyber security regulations for processing, storing and transmitting of customer information;
- 12.4 a yearly security assessment shall be conducted against the entire systems of the operator by relevant body and present the proof of assessment to the National Bank;
- 12.5 A point of sale machine operator shall acquire or lease terminal devices from the vendor that provides a valid certificate in compliance with the standard stipulated in sub-article 12.3 of this Article.
- 12.6 A point of sale machine operator shall enter in to a service level agreement with terminal device vendor to undertake review and recertification in line with sub article 12.3 of this Article.
- 12.7 A point of sale machine operator shall:
- a) ensure that payment terminal deployed at a merchant location shall accept a card and/or a near field communication enabled device;
 - b) enter into an agreement with a merchant to accept payment by means of an electronic payment instrument;
 - c) transmit payment data through a secured communication channel and protocol;
 - d) connect all of its deployed terminals to the licensed financial institution or national switch or switch operator as per the standards and protocols provided by financial institutions for switching, authorization, clearing and the settlement of fund purposes;
 - e) not send domestic payment information outside Ethiopia for the purpose of authorization, clearing, and settlement;
 - f) only send payment data made via international card scheme to financial institution or national switch;
 - g) provide guidelines to a merchant on payment procedures for a transaction;

Handwritten signature in blue ink.



- h) reconcile a merchant account on behalf of the merchant;
- i) ensure payment terminal accepts payment instruments issued by a person authorized or licensed by the National Bank as payment instrument issuer and certified international card schemes;
- j) provide training to a merchant;
- k) ensure payment terminal issues receipt either in electronic or paper form upon completion of a transaction;
- l) be liable to refund the entire merchant service charge for failed or not-successful settlement file transfer to the financial institutions or national switch.

12.8 Based on the written request and approval of the National Bank, a licensed point of sale machine operator may provide the following services:

- a) merchant aggregator;
- b) payment processing via point of sale devices;
- c) merchant acquiring;
- d) point of sale deployment and maintenance;
- e) training and support of merchant; and
- f) other related service as approved by the National Bank.

13. Payment Gateway Operator

13.1 A payment gateway operator shall only operate a hosted payment gateway which shall integrate with merchant's website, mobile/tablet application or licensed e-commerce platform.

13.2 A payment gateway operator shall own, operate and utilize the services of a licensed gateway system that complies with relevant security standards and cyber security regulations;

13.3 a yearly security assessment shall be conducted against the entire systems of the operator by relevant body and present the proof of assessment to the National Bank;

Amal



13.4 A foreign payment gateway provider may provide online payment processing in the following manner;

- a) shall enter into an agreement with a licensed financial institution or national switch for the purpose of authorization, switching, clearing and settlement of payments;
- b) the agreement shall be presented by the financial institution or national switch to the National Bank for approval.

13.5 A licensed payment gateway operator shall:

- a) enter in to an agreement with financial institutions, payment instrument issuers, merchants, merchant aggregators and national switch, e-commerce platform operators for acceptance and processing of payment;
- b) evaluate the merchant web portal, web or mobile application and control environment against security, integrity and efficiency;
- c) ensure the security and confidentiality of customer payment and transaction information;
- d) only send payment data made via international card scheme to financial institution or national switch;
- e) ensure that customer payment and account data is not stored in a merchant's website or e-commerce's platform;
- f) not store customer payment and account data in its server and be responsible for payment data security;
- g) comply with scheme rules as defined by the various scheme owners;
- h) route and process a transaction done on a website of merchant to the national switch or financial institution;
- i) act as facilitator on behalf of a customer and merchant to enable payment transaction effected and reconcile merchant account;
- j) discontinue the service on grounds of fraud or security breach identified on merchant's website, mobile application or e-commerce's platform;
- k) implement an effective fraud management system.

13.6 Based on request made and written approval of the National Bank; a licensed payment gateway operator may be allowed to provide the following services;



Handwritten signature in blue ink, appearing to read 'G. Lal'.

- a) online payment processing and aggregation;
- b) stored value services;
- c) merchant development platform;
- d) payment application or solution development.

14. **Settlement Mechanism**

- 14.1 Inter financial institutions payment shall be final when it is settled in the authorized settlement agent system;
- 14.2 National switch operator shall aggregate and send the net settlement file of all inter financial institutions executed card payment to the settlement agent system for final settlement on T+1 basis.
- 14.3 For card payments, a financial institution shall settle a merchant account on the maximum of T+1 basis.
- 14.4 An operator shall send a detail settlement file of card payments to respective financial institution daily on 12:00 hour's basis.
- 14.5 The settlement between payee and payer account for instant payment shall be made in a real time;
- 14.6 National switch shall aggregate and send the net settlement file of all inter-financial institutions executed instant payment to the settlement agent system for final settlement on T+0 (same day settlement) basis;
- 14.7 If settlement day falls on public holidays or weekends, the settlement date shall be the next working day.

PART V

LICENSE RENEWAL, SUSPENSION, REVOCATION AND TERMINATION

15. **License Renewal**

- 15.1 A license issued as per this Directive shall be renewed annually.
- 15.2 A payment system operator requesting for renewal of business license shall submit the following:



Handwritten signature in blue ink.

- a) a request or application for renewal and any changes shall be made on the particulars of the existing license (if any) 30 (thirty) calendar days prior to expiry of the existing license;
- b) an evidence of payment of renewal fee of Birr 3,000 (three thousand Birr);
- c) audited financial statements and tax clearance certificate;
- d) a confirmation signed by the chief executive officer of the operator on compliance of the company with all requirements set under this Directive; and
- e) the original business license of the operator.

16. **Suspension, Revocation and Termination**

- 16.1 Suspension or revocation of an authorization or license granted to a person shall be applied in accordance with the provisions of the Proclamation.
- 16.2 Notwithstanding sub- article (1) of this Article, the license or authorization granted to a person shall also be suspended or revoked if:
- a) the payment system operator has ceased operation of the system for a maximum period of 3 (three) months; or
 - b) in the opinion of the National Bank, the operation of the system is no longer in the public interest or the system no longer represents the interest of the participants.
- 16.3 A payment system operator which intends to terminate or wind up its operation shall ensure the following:
- a) notify in a widely circulating newspaper the sequential steps to be followed by users;
 - b) notwithstanding sub article 16.3(a) of this Article users shall be given at least a period of three months.



PART VI

OVERSIGHT, DISCLOSURE AND CUSTOMER PROTECTION

17. Oversight

- 17.1 The National Bank may oversee payment system operators, their systems and outsourcing counterparties.
- 17.2 A payment system operator shall submit to the National Bank the following information both in hard and soft copies along with a covering letter signed by the chief executive officer or his/her delegate within 7 (seven) calendar days after the end of every month;
- a) value and volume of transaction processed;
 - b) value and volume transaction processed per card type (debit card, credit card, mobile money and international cards);
 - c) value and volume of transactions processed per instrument issuer;
 - d) total number of payment channels (ATMs/POS machines);
 - e) location (distribution) of the channels per region;
 - f) number, duration and reason for systems interruption and subsequent measures taken to resolve the issue;
 - g) fraud attempts, which shall at least include number of known fraud attempts, value involved, source of fraud and actions taken;
 - h) any cyber breach and data loss; and
 - i) the National Bank may request additional information as and when it deems necessary.
- 17.3 National switch shall send a monthly report of all downtimes experienced to all participants and the National Bank. Such reports shall include the duration of the downtime, the cause(s) of the downtime, and the remedial actions taken to prevent recurrence.
- 17.4 A licensed payment system operator shall prepare its financial statements in accordance with International Financial Reporting Standard.



Final

- 17.5 A licensed payment system operator shall have its book of accounts audited annually by authorized independent external auditors and submit the report to the National Bank within 60 (sixty) calendar days after the end of the fiscal year.
- 17.6 The National Bank may instruct the payment system operator to conduct self-assessment on its system or get assessed by a certified or competent entity.
- 17.7 The National Bank may instruct the payment system operator to submit assessment reports on different aspects of its system that is conducted by itself or another certified body in line with sub-article 17.6 of this Article.
- 17.8 A payment system operator shall make available all non-confidential information to the public through its website.

18. **Customer Protection**

- 18.1 A payment system operator shall ensure maximum customer protection while carrying out its business.
- 18.2 A payment system operator up on providing payment services shall disclose to its customers, in a clear and understandable manner that meets at the minimum the following:
- a) ensuring arrangement of customer call center and its contact details, working hours, procedures and response time;
 - b) giving announcement when there are service interruptions and changes;
 - c) making available standard transaction receipt with details; transaction paper or electronic receipts to customers at the time when transaction order is placed and after execution;
 - d) stating the confidentiality of all customers' information;
 - e) informing customers about the roles and responsibilities of the parties;
 - f) disclosing the price for services to customers at the level of individual services it offers.
- 18.3 A payment system operator shall make and share with all relevant parties' clear and standard terms and conditions applicable to all customers in relation to its services.



Handwritten signature in blue ink.

- 18.4 Notwithstanding sub-article 18.3 of this Article, issuance and any subsequent amendments made on terms and conditions shall get prior written approval from the National Bank.
- 18.5 A payment system operator shall work closely with financial institutions and other payment system operators in relation with customer support and complaint handling.
- 18.6 A payment system operator shall announce list of payment channels, address, types of cards and payment instruments accepted, applicable fees and charges on its website or by any other accessible means.
- 18.7 A payment system operator shall update and notify the public pertinent information like address, complaint reporting, and contact details on its website, its channels and its offices.

19. **Customer Complaint Procedure**

- 19.1 A payment system operator shall serve as a first and primary instance for handling customer's complaints with regard to the service of payment system.
- 19.2 A payment system operator shall have a dedicated structure in place as well as written policies and procedures regarding the customer complaints handling, which shall meet at the minimum the following:
- a) ensuring the operator has appropriate capacity and deploys the resource necessary to respond to the complaints;
 - b) designating a senior management team within the organization that is responsible for complaint handling;
 - c) providing users with a free, easily accessible, efficient, timely and impartial complaint handling process; and
 - d) reviewing and auditing the complaint handling process with a view to make improvements, if needed.
- 19.3 An operator shall maintain and make available to the National Bank, on a regular basis, statistics and records of customer complaints and their resolutions.



Handwritten signature in blue ink.

PART VII

MISCELLANEOUS PROVISIONS

20. Requirements, Permission and Prohibitions

- 20.1 Without prior written approval of the National Bank, no payment system operator shall:
- a) operate payment systems;
 - b) merge with or takeover the business of another entity;
 - c) enter into any arrangement that brings changes in its primary business;
 - d) amend its articles and memorandum of association; and
 - e) change the name in which it conducts the payment system operator business.
- 20.2 A licensed payment system operator shall not engage in any other business including payment instrument issuer business.
- 20.3 A person engaged in some other businesses and interested to be licensed as payment system operator shall do so by establishing a separate entity exclusively for the purpose.
- 20.4 A payment system operator may outsource its operational functions related to automated teller machine or point of sale terminal maintenance and deployment.
- 20.5 Notwithstanding sub article 20.4 of this Article a payment system operator shall ensure that the outsourcing arrangement complies with this Directive.
- 20.6 A payment system operator shall prepare a board bylaw which at least includes board remuneration, code of conduct, number of sub-committees, and rotation of chairmanship to be approved by the National Bank.
- 20.7 A person to whom a license is granted to operate a payment system shall display the license conspicuously at the primary location where the person conducts business and shall similarly display a copy of such document at its every other location where applicable.
- 20.8 An authorization, license or any other right acquired under this Directive shall not be transferable, whether wholly or partly, and any transfer in contravention thereof shall be null and void.



Four

21. **Penalty**

- 21.1 Any person who contravenes the provisions of this Directive and subsequent amendments may be punishable in accordance with article 35 of the Proclamation.
- 21.2 Without prejudice to sub-article 21.1 of this Article, the National Bank may also take its own administrative measures in accordance with Article 34 of the Proclamation.

22. **Transitory Provisions**

Any person engaged in the business of payment system operator with a license or authorization given by the National Bank before the coming into effect of this Directive shall comply with the provisions of this Directive within 6 (six) months after this Directive enters in to effect.

23. **Effective Date**

This Directive shall inter in to force as of 15th day of August 2020


Yinager Dessie (PhD)
Governor



ANNEXES

ANNEX I

APPLICATION FORM

1	NAME OF APPLICANT (as it appears in the trade registration certificate)	M/S
2	CATEGORY OF LICENSING BEING APPLIED FOR (please put 'X' in the boxes provided,)	<p>A) LICENSE FOR (please put "X" in the box provided)</p> <p>Switch Operator <input type="checkbox"/></p> <p>Automated Teller Machine Operator <input type="checkbox"/></p> <p>Point of Sale Operator <input type="checkbox"/></p> <p>Payment Gateway Operator <input type="checkbox"/></p> <p>B) LICENSE RENEWAL <input type="checkbox"/></p>
3	APPLICANT'S ADDRESS DETAIL	
	PHYSICAL ADDRESS	
	STREET /ROAD	
	TOWN/CITY	
	POSTAL CODE	
	PHONE : OFFICE	
	MOB	
	FAX NO.	
	EMAIL	

Gwar



ANNEX II

PARTICULARS OF SHARE HOLDERS

S. N	NAME OF SHAREHOLDERS	NATIONALITY	TELEPHONE NUMBER/EMAIL ADDRESS	OCCUPATION	5 OF SHARE HOLDING
1					
2					
3					
4					
5					
6					

Declaration

I am aware that under sub article 2(d) of Article 35 of National Payment System Proclamation No.718/2011 it is an offence to provide false or misleading statement

I certify that the information and /or statement given above are complete and accurate to the best of my knowledge, and that there are no other facts relevant to this application of which the National Bank should be aware. I also undertake to inform the National Bank of any charges material to the applications

Name _____

Signature _____

Date _____

4200



ANNEX III

FIT AND PROPER PERSON FORM /CONFIDENTIAL/

GENERAL INFORMATION (Influential shareholder, Director, Chief executive officer ,or Senior executive officer – Underline)

1. Name of Payment system Operator

2. Personal information

a. Full name

b. Date of birth

c. Place of birth

d. Nationality

e. Identification card number and date of issue

f. Passport number and date of issue

g. Tax payer Identification Number

h. Address : City _____ Sub- city _____ Zone _____

Woreda _____ Kebele _____ House No. _____ Postal

Address _____ Phone Number : Office: _____ Residential: _____

Mob: _____ Fax: _____ Email: _____

i. Educational qualification _____

j. Summary of Work experience

No.	Name of Organization	Position	Duration /years of work

3. Please list financial institutions in which you currently (as of completing this form) owns shares in the following table

Name of financial institutions	Subscribe share shares owned		Remark
	In number	Shares in the financial institution's total subscribed capital (%)	

Handwritten signature in blue ink



4. Description of your past and current business activities in Ethiopia and abroad (if applicable)

a. Current shareholding or ownership in non- financial institutions /companies

Name of the company	Date of incorporation	Amount of share/ownership (in ETB)	% from the total capital of the company	Remark

b. Past shareholding or ownership in a company (shares you owned in the past but had been relinquished) including financial institutions

Name of the company	Date of incorporation	Amount of share/ownership (in ETB)	% from the total capital of the company	Reason for termination of share holding	Remark

5. If juridical person (only for influential shareholders in the payment system Operators), please complete the following table the three recent financial years (please also attaché audited financial statement)

Year	Asset	Liabilities	Net worth	Remark

6. If you are shareholder of the payment system operator or existing shareholder planning to increase your shares in the payment instrument issuer, please provide details of the actual source(s) of fund that, you as a shareholder, would like to invest or use in the acquisition of shares in the payment instrument issuer. _____

Handwritten signature



Declaration

I am aware that under sub article 2(d) of Article 35 of National Payment System Proclamation No.718/2011 it is an offence to provide false or misleading statement

I certify that the information and /or statement given above are complete and accurate to the best of my knowledge, and that there are no other facts relevant to this application of which the National Bank should be aware. I also undertake to inform the National Bank of any charges material to the applications.

Name _____

Signature _____

Date _____

Handwritten signature



ANNEX IV

PROPRIETRY TEST QUESTIONNAIRE

Please give Yes or No answers for the following questions and if your answer is "Yes" please give particulars.

Full Name: _____

(Influential shareholder, director, chief executive officer, senior executive officer- underlying)

Name of Payment system operator : _____

1. Have you or the juridical person in which you were a director, chief executive officer, senior executive officer or owner been charged or convicted of any criminal offence, particularly an offence relating to dishonesty or fraud, under any law whether in Ethiopia or elsewhere?
Yes No if yeas give particulars _____

2. Have you or the juridical person in which you were a director, chief executive officer, senior executive officer or owner been imposed with corrective actions or interventions by public authority due to withholding information or submission of incorrect financial or other statements?
Yes No if yeas, give particulars _____

3. Have you or the juridical person in which you were a director, chief executive officer, senior excutive officer or owner been refused approval by any regulatory/supervisory body of field to comply with requirements of regulatory /supervisory body?
Yes No if yeas, give particulars _____

4. Have you ever been in dispute with previous employees concerning fulfillment of position or compliance with a code of conduct which has led to imposition of penalty under employment or ever been dismissed or requested to resign from any office of employment or disciplinary measures imposed by trade or professionals?
Yes No if yeas, give particulars _____

Handwritten signature



5. Have you been refused, whether in Ethiopia or elsewhere, the right to carry on any trade, business or profession for which a specific license, registration or other authority is required?
 Yes No if yeas, give particulars _____
-
6. Have you or the juridical person in which you were a director, chief executive officer, senior executive officer or owner been declared bankrupt whether in Ethiopia or elsewhere or have its asset sequestrated because of bankruptcy or foreclosed by a bank due to failure to repay a loan?
 Yes No if yeas, give particulars _____
-
7. Have you or the juridical person in which you were a director, chief executive officer, senior executive officer or owner been convicted of default on repayments of bank or other credits or tax payment ?
 Yes No if yeas, give particulars _____
-
8. Have you or the juridical person in which you were a director, chief executive officer, senior executive officer or owner been carrying non-performing loan or account closed and not reinstated by any bank in line with relevant directives of the National Bank?
 Yes No if yeas, give particulars _____
-
9. Has your purchase of shares in payment instrument issuer been funded or to be funded by another person or legal entity who is actually bankrupted or technically insolvent because of irresponsible or reckless management, fraud or illegal business practice?
 Yes No if yeas, give particulars _____
-
10. Has your minimum net worth at the time of acquisition of shares at least greater than the shares acquired or to be acquired from a financial institution?
 Yes No if yeas, give particulars _____
-
11. Are you currently a member of board of directors or chief executive officer in any of the financial institutions or other business?
 Yes No if yeas, give particulars _____
-

Handwritten signature



Declaration

I am aware that under sub article 2(d) of Article 35 of National Payment System Proclamation No.718/2011 it is an offence to provide false or misleading statement

I certify that the information and /or statement given above are complete and accurate to the best of my knowledge, and that there are no other facts relevant to this application of which the National Bank should be aware. I also undertake to inform the National Bank of any charges material to the applications.

Name _____

Signature _____

Date _____

Handwritten signature



ANNEX V

FEE SCHEDULE

No.	Service type	Fee
1.	Application processing /application fee	ETB 3,000
2.	Licensing fee	ETB 5,000
3.	License renewal fee	ETB 3,000

Final

