



GUIDELINE FOR AUTOMATED TELLER MACHINE (ATM) AND POINT OF SALE (PoS) 2020

In exercise of the powers conferred by Section 4 (Section 4.1.1- 4.1.2) of the Payment and Settlement Systems Rules and Regulations 2018, the RMA hereby issues this Guideline for the effective operations of Automated Teller Machine (ATM) and Point of Sale (PoS) in Bhutan.

SECTION I: PRELIMINARY

1. SHORT TITLE AND COMMENCEMENT

This Guideline Shall:

- a) Be cited as the Guideline for operation of ATM and PoS 2019;
- b) Come into force with effect from 1st July,2020.

2. APPLICATION

This Guideline shall be applicable to all:

- a) Commercial banks licensed by the RMA;
- b) Any other Payment Service Providers approved by the Authority for commencement of such operations;

3. PURPOSE

The primary purpose of this Guideline is to set certain minimum standard and procedures to ensure smooth, secure and effective operation of ATM and PoS.

4. SUPERSESSION

This Guideline shall supersede any Guideline, Circulars or Notifications that are inconsistent with this Guideline.

5. INTERPRETATION

The authority for the final interpretation of any provision of this guideline shall vest with the RMA which, if warranted, may issue such instruction and clarification from time to time as may be necessary to give effect and implement this guideline.

6. AMENDMENT

The amendment relating to addition, changes or repeal of any provisions of this guideline shall be made by the Executive Committee based on the recommendation of the Management.

SECTION II: AUTOMATED TELLER MACHINE (ATM)

All commercial banks and payment service providers authorized by the RMA deploying ATM terminals in Bhutan shall comply at the minimum following standards;

7. Technology and Specification

- a) All ATMs shall be Euro Pay Master and Visa (EMV) and Payment Card Industry Data Security Standards (PCIDSS) compliant at a minimum, and shall be upgraded in a timely manner to comply with the latest version;
- b) An ATM shall have latest security features (i.e. anti-skimming device, Encrypted PIN Pad, PIN shield mechanism etc.);
- c) A Cash Deposit Machine (CDM)/ATM shall display acceptable denominations;
- d) An ATM shall have audit trail and logs capabilities, comprehensive enough to facilitate investigations, reconciliation and dispute resolution;
- e) An ATM Card reader shall be identified by a symbol that represents the card and identifies the direction by which the card shall be inserted into the reader;
- f) Location of all ATM terminals deployed shall be visibly publicized and updated regularly on the service providers website and other online platforms;
- g) ATM terminals are interoperable through its connection to Bhutan Financial Switch;

8. Deployment

- a) Strategically deploy ATM across the country to increase accessibility and functionality of ATMs to all;
- b) ATMs accept all cards issued in Bhutan and also international card for any card-based or related value-added services available on the ATMs;
- c) All accepted card scheme/network logo are adequately displayed in the ATM terminal for customer's information and awareness;
- d) The helpdesk contact centers, ATM charges, and other relevant information shall be adequately displayed at the ATM terminals. At the minimum, a toll-free number and contact number of dealing officials shall be displayed for fault reporting; and
- e) An ATM is able to process cardless and any other non-financial transactions;

9. Operation

- a) There shall be cash at the ATMs at all time.
- b) There shall be online monitoring mechanism to determine cash levels in the ATM vault to avoid shortage or insufficient cash;
- c) ATM shall not be stocked with counterfeit, soiled notes;
- d) Cash depositing (CDM) shall reject the transaction with relevant message (printed/on screen) if a customer tries to deposit counterfeit, soiled notes;
- e) Cash retraction and partial cash dispensing shall be disabled on all ATM terminals;
- f) Ensure the ATM issue receipts for the amount withdrawn, terminal location, date and time of the transaction. However, account number and card numbers of the cardholder shall be masked.
- g) The ATMs issue receipts, where requested by a customer, for all non-financial transactions, including balance enquiry, mini statement, amount withdrawn, terminal location, date and time of the transaction;
- h) Any downtime shall not be more than seventy-two (72) hours/ three working days consecutively, where this is not practicable, customers shall be duly informed through banks website, social media and other channels;
- i) Back-up power (Online UPS) shall be available at all ATM locations in such a way that the machine would not cease operation while in the middle of a transaction;
- j) Maintain adequate hygiene of the ATMs and its surroundings; and
- k) A register or MIS of all ATMs in Bhutan with location, identification, serial number of the machines, etc. shall be maintained monthly and submitted to RMA;

10. Maintenance

- a) Regularly carry out onsite inspection of the ATMs;
- b) Notify the RMA of any planned maintenance in advance;
- c) Notify the general public for any downtime, planned maintenance, or any disruption in the system through social media, message, or banks website; and
- d) Maintain ATM maintenance register or log appropriately.

11. Safety and Security

- a) ATM terminals shall have built in cameras/CCTV, which shall view and record all persons using the machines and activity at the ATM location. However, such cameras shall not record the key strokes of customers using the ATM and shall maintain 70 days of CCTV footage for the purpose of Dispute Resolution;
- b) ATMs should have a mechanism to maintain confidentiality of user's transactions;
- c) ATM should not store customers' PIN, Card number and /or account number by any means;
- d) ATMs shall be installed with Anti-Skimming devices that would ensure effective mitigation against fraud incidents;
- e) ATMs shall have in-build mechanism to capture counterfeit cards as a part of fraud prevention;
- f) All types of removable media devices such as USB device, CD/DVD ROM etc. should be disabled at the ATM terminal;
- g) Banks shall monitor and report any suspicious transaction to the RMA;
- h) Periodic vulnerability assessment and penetration testing along with port scanning should be ensured for the ATM network. Unnecessary ports and shared folders should be blocked /stopped. Each and every ATM terminal should contain a solution to prevent data leakage/loss;
- i) Regular patching process should be ensured for Operating System as well as for all software installed in ATMs;
- j) ATM key management process shall ensure that combination of keys is changed regularly (every year) and the same key shall not be used at multiple ATMs. Further, ATM custodians should also be changed periodically; and
- k) Additional precautionary measures shall be put in place to ensure that any network connectivity from the ATM to bank or switch is protected, to prevent the connection of other devices to the network point;

SECTION III: POINT OF SALE (POS)

12. Stakeholder

Point of Sale stakeholders include the following:

- a) Acquirer
- b) Card Issuer/Card Scheme
- a) Retailers/merchants
- b) Cardholders
- c) Switch
- d) Any other payment service provider authorized by the Authority

13. Technology and Specification

- a) A PoS Acquirer (commercial bank or an authorized payment service provider) deploying PoS terminals in Bhutan shall comply at the minimum following standards;
 - i) Payment Application Data Security Standard;
 - ii) Payment Card Industry PIN Entry device;
 - iii) Payment Card Industry Data Security Standard;
 - iv) EMV compliant at a minimum, and shall be upgraded in a timely manner to comply with the latest version;
 - v) Any other relevant standards that the Authority may prescribe from time to time;
 - vi) Provide valid certificate in compliance with standards stipulated in paragraph (a);
 - vii) Annual review status of a terminal in line with existing standards; and
 - viii) Undertake review and recertification in line with the standards stipulated in paragraph (a)

14. Roles and Responsibilities

- a) An Acquirer shall ensure the following:
 - i) POS terminals purchased and deployed at retailers/merchant shall accept all approved cards;
 - ii) PoS terminals are interoperable through its connection to Bhutan Financial Switch;

- iii) Ensure effectiveness of POS operations and its functionality at all times. Appropriate mechanism must be put in place to remotely detect and resolve certain technical failures;
- iv) Ensure the PoS issue receipts for the amount transacted, terminal location, date and time of the transaction. However, account number, account balance and card numbers of the cardholder shall be masked.
- v) Enter into an agreement/contract with retailers/merchants for accepting payment by means of electronic payment instrument. All agreement shall clearly spell out the terms and conditions, including roles, responsibilities and rights of the Banks and retailers/merchants. The agreements should also clearly spell out requirements for the retailer's/merchants' responsibilities in ensuring proper functioning of the POS terminal;
- vi) Provide adequate user training and awareness to its retailers/merchants on the processes and system, confirming cardholder institutions and detecting suspicious or unauthorized usage of electronic payment instruments, where customer/cards are physically present at point of sale;
- vii) Undertake measures to prevent the use of their networks for purposes associated with money laundering and other financial crimes;
- viii) Apply proper KYC norms in appointing retailers/merchants;
- ix) Maintain and reconcile accounts on behalf of the retailers/merchants;
- x) Provide retailers/merchants the ability to view transactions and monitor performance of their devices online;
- xi) All POS terminals deployed must have stickers with support service contact information;
- xii) Regularly review the terminals and ensure that terminals are phased out/replaced/upgraded as appropriate; and
- xiii) Develop POS deployment strategy plan to ensure adequate and equal distribution of POS across the country.

b) Card Schemes

- i) All commercial banks licensed by the RMA are authorized to issue domestic cards in Bhutan;
- ii) The cards issued shall be EMV chip and PIN based cards, by employing dynamic authentications, to further enhance the security and risk mitigation in card-present transactions;
- iii) Cash withdrawal limit on the ATM shall be set by the RMA from time to time;

- iv) Regularly review the cards and ensure that it is phased out/replaced/upgraded as appropriate; and
- v) RMA shall reserve the right to assess the rules to confirm objectively, related to internationally standards/best practice.

c) A Retailer/Merchant appointed by the Acquirer shall adhere to the following;

- i) Enter into an agreement with a Banks specifying the obligations of each party;
- ii) Accept card payment as a method of payment for goods and services;
- iii) Be liable for frauds arising due to negligence, connivance, etc;
- iv) Adopt and charge uniform and pair price or surcharge to users and in no circumstances discriminate against any customer who chooses to pay with a card;
- v) Comply with the minimum-security guidance provided by the Acquirer; and
- vi) The POS shall display the amount to be authorized on the screen requesting PIN entry, so that the customer can see the amount being paid before authorization.

d) A Cardholders/Customer shall:

- i) Store the payment card and protect his/her PIN with due care;
- ii) Not keep his /her payment card together with the PIN;
- iii) Notify the issuer without delay, about missing, stolen, damaged, lost or destroyed card;
- iv) Not make the payment card available to unauthorized persons;
- v) Present a form of identification when required by a retailer/merchant;
- vi) Bear liability for a loss arising from misuse of the PIN or card;
- vii) Be entitled to receive a receipt, or any other form of evidence at the time a transaction is performed; and
- viii) Be entitled to receive a monthly statement of all transactions performed.

SECTION IV- INTEROPERABILITY OF ATM AND POS TERMINALS

15. The RMA in order to promote interoperability of ATM and POS to expand network reach and avoid market fragmentation shall provide;

- a) Common switch infrastructure (Bhutan Financial Switch) and interbank settlement facility;
- b) Fair and open access criteria to the common switch infrastructure to promote a level playing field and foster collaboration at the infrastructure level;
- c) Transparent rules for withdrawal, suspension and termination of the access by a participant to the common switch infrastructure, which shall- (a) clearly define the circumstances that may give rise to such events; and (b) set out the rights and obligations of participants during such events;
- d) Clear procedures, controls and measures for the management of risks associated with inter-bank fund transfer including but not limited to credit or settlement risk, liquidity risk, security risk and risk associated with data privacy; and
- e) Prescribe any fees such as interchange fee, switching fee, membership fee and other fees in consultation with its member institutions from time to time;

16. Payment service provider (commercial banks and authorized payment service provider) shall ensure the following:

- a) Any inter-bank ATM and POS transactions are processed in Bhutan through their account maintained at the RMA for effective oversight of these operators to maintain safety, integrity, and stability of the financial system;
- b) Notwithstanding a) Authorized payment service providers shall settle the transactions through its account maintained with any of the commercial banks or otherwise approved by the RMA; and
- c) All ATM and PoS terminals are interoperable through its connection to the RMA's common switch;

SECTION V- CUSTOMER PROTECTION, REPORTING & MONITORING, AND PENALTY

17. Customer Protection:

A commercial bank or authorized payment service provider offering ATM and PoS services to its customers shall:

- a) Provide a convenient means for its customers to view their transaction, at the minimum, via its website, ATM terminals or mobile application;
- b) Provide instant notification to its customers for any transaction made or received;
- c) Provide a convenient means for its customers to check their account balance on a real-time basis, at the minimum, via its website, ATM terminals, or mobile application;
- d) Disclose the pricing and information on interbank fund transfer through ATM and PoS in a manner that is transparent and would facilitate comparison and informed decision-making by the customers;
- e) Ensure that its customer data are securely protected including but not limited to deploying preventive and detective controls to prevent any occurrence of loss, theft or unauthorized access of customer data; and
- f) Take reasonable steps to ensure its customers are adequately alerted and provided with updated safety tips that are practicable and effective, in order to prevent customers from becoming victims of fraud.

18. Reporting & Monitoring

All commercial banks and payment service provider authorized by the RMA to deploy ATM and PoS terminals shall:

- a) File an updated list of ATM and POS terminal, including the detail location of their addresses to the Department of Payment and Settlement Systems, RMA for compliance monitoring. This information must be also available in the bank's website;
- b) Conduct random onsite inspection of POS and ATM with a view to ensuring compliance of cash and service availability; and
- c) Report volume and value of transactions (On-Us success and failure On-Us data) to the Department of Payment and Settlement System, RMA on daily basis or as an when required by the Authority provided in the annexure.

19. Penalty

A person failing to comply with any of the provisions of this Guidelines and other relevant notifications and circulars issued by the RMA shall be liable for appropriate penalties specified under Penalties Rules and Regulations 2019.

20. Transitional Provision

Timeline shall be given to the service providers to ensure smooth shift to and successful implementation of the new guidelines, in particular to enable transition to the EMV and PCI-DSS standard stipulated under Technology and Specifications.

21. Definitions:

In this guideline, unless the context otherwise requires, it shall have the same meaning as defined in the Payment and Settlement Systems Rules and Regulations 2018.

- a) **“Acquirer”** means the bank, which will acquire cards issued by other banks on its ATMs and POS;
- b) **“Authority”** means the Royal Monetary Authority of Bhutan as defined by the Royal Monetary Authority Act of Bhutan 2010;
- c) **“Person”** means an individual or juridical entity, whether incorporated or not;
- d) **Automated Teller Machine** means an unattended electronic device or equipment that enables an individual to undertake remote financial transaction;
- e) **“Bhutan Financial Switch (BFS)”** means a shared ATM and POS network, interconnecting bank’s ATM switches together with the BFS. This enables member bank’s customer to perform transactions at any other member bank’s ATMs and POS terminals in addition to his own ATMs and POS terminals;
- f) **Cardholder** means individual or company issued with a payment card linked to an account at a licensed financial institution;
- g) **Card Reader** means a component of a payment device that reads data from a payment card;
- h) **Card Scheme** means payment networks linked to payment cards such as debit or credit card of a financial institution;
- i) **EMV (Europay, Mastercard and Visa)** means the global standard that ensures smart cards, terminals and other systems interoperate;
- j) **“Interoperability”** means a seamless transfer of payment instructions or funds from account of one payment service provider or user to the account of another payment service provider or user;
- k) **“Issuer”** means the bank, which issues cards to its customers;
- l) **“Merchant/Retailer”** means a commercial establishment which enables a customer to pay for goods and services using payment instruments or electronic money;
- m) **“Off Us”** means those transactions, which are done by the cardholder at the ATMs and POS terminals belonging to any member bank other than the one which has issued the ATM card. (e.g. Bank a cardholder transacting at ATMs & POS belonging to Bank B);

- n) **“On Us”** means those transactions, which are done by the cardholder at the ATM & POS terminals belonging to the member bank which has issued the ATM card. (e.g. Bank A cardholder transacting at ATM belonging to Bank A);
- o) **Payment Application Data Security Standard** means a global security standard created by the Payment Card Industry Security Standards council to guide software vendors in the storage, processing or transmitting cardholder or sensitive authentication data.
- p) **Payment Card Industry PIN Entry Device** means a set of security requirements that are primarily concerned with characteristics impacting the security of the PIN entry device used by the customer during a financial transaction.
- q) **Payment Card Industry Data Security Standards** means a set of requirements to enhance cardholder data security and facilitate the broad adoption of consistent data security measures.

Annexure 1

Daily/Monthly Report on ATM-On-Us Transactions

Name of the Bank:.....

Date (Daily/Monthly) :.....

Month Dzongkhag Name	20-Jan		20-Feb		20-Mar		20-Apr		20-May		20-Jun	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Thimphu												
Chhukha												
Paro												
Wangdue Phodrang												
Samtse												
Punakha												
Haa												
Gasa												
Sam/jongkhar												
Trashigang												
Mongar												
Tashiyangtshhe												
P/Galtshhe												
Lhuntshe												
Sarpang												
Bumthang												
Tsirang												
Trongsa												
Dagana												
Zhemgang												
Total	0	0	0	0	0	0	0	0	0	0	0	0

Annexure 2

Daily Report on ATM-OFF-Us Transactions

Name of the Bank:.....

Date (Daily/Monthly) :.....

Month Dzongkhag Name	20-Jan		20-Feb		20-Mar		20-Apr		20-May		20-Jun	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Thimphu												
Chhukha												
Paro												
Wangdue Phodrang												
Samtse												
Punakha												
Haa												
Gasa												
Sam/jongkhar												
Trashigang												
Mongar												
Tashiyangtshhe												
P/Galtshe												
Lhuntshe												
Sarpang												
Bumthang												
Tsirang												
Trongsa												
Dagana												
Zhemgang												
Total	0	0	0	0	0	0	0	0	0	0	0	0

Annexure 4

Monthly Report on POS Transactions

Bank Name:				
Month	On-us		Off-us	
	Volume	Value	Volume	Value
20-Jan				
20-Feb				
20-Mar				
20-Apr				
20-May				
20-Jun				
20-Jul				
20-Aug				
20-Sep				
20-Oct				
20-Nov				
20-Dec				
Total				

Annexure 5

Monthly Report on ATM and POS terminal deployed by the Banks.

Name of the Bank:.....

Month :.....

Monthly	Total no. ATM Terminals	Total no. POS Terminals	Total no. Registered merchant (POS)	Total no. bank account holder	Total no. branches
20-Jan					
20-Feb					
20-Mar					
20-Apr					
20-May					
20-Jun					
20-Jul					
20-Aug					
20-Sep					
20-Oct					
20-Nov					
20-Dec					