

Bhutan Financial Switch Operating Procedural Guideline



Department of Payment and Settlement Systems

Royal Monetary Authority of Bhutan

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Section I

1. Overview:

“With a view to inter-connect the ATMs and PoS in the country to facilitate easy banking for the common man, the RMA conceptualized the idea of implementing the Bhutan Financial Switch.”

The Royal Monetary Authority of Bhutan (RMA) in its effort to improve the Payment Systems infrastructure in the country had set up Bhutan Financial Switch (BFS) Network to allow interoperability of Automated Teller’s Machine (ATM) and Point of Sale (PoS) terminals amongst the commercial banks. The main objective for creating BFS is to make ATM and PoS deployment more economical and viable to banks by pooling resources together and have been operational from December 2, 2011.

2. Purpose:

BFS Operating Procedural Guidelines 2018 defines the operating and settlement guidelines for the members of the BFS network to follow. It mandates all the members on the BFS network to follow certain standard procedures to ensure smooth, secure, and effective operation of the network.

3. Definitions:

- a) **“Acquirer”** means the bank, which will acquire cards issued by other banks on its ATMs and PoS;
 - b) **“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;
 - c) **“Beneficiary bank”** means bank whose customer is beneficiary for card-to-card fund transfer transaction;
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- d) **“Business decline”** means those, which occur either due to the customer’s action or customer’s account parameters. (e.g. Invalid Account, Invalid PIN, Exceeds Funds Available, Exceeds Withdrawal Limit etc.);
 - e) **“Chargeback”** means compliant of non-receipt of cash from acquirer member’s ATM while account has been debited raised by the issuer member;
 - f) **“Credit adjustment”** means adjustments raised by acquirer members when excess cash found is in their ATMs, which would help issuer members in giving credit to their customers without raising a chargeback;
 - g) **“Debit adjustments”** means adjustments raised by acquirer members when cash is dispensed and the transactions have not been settled;
 - h) **“Exception transactions”** means those transactions that are not reconciled and are reported by a customer as erroneous;
 - i) **“Issuer”** means the bank, which issues cards to its customers;
 - j) **“Member Banks”** means all the commercial banks participating in BFS ATM and PoS network;
 - k) **“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);
 - l) **“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);
 - m) **“Remitter bank”** means a bank whose customer initiates card-to-card fund transfer transaction;
 - n) **“Settlement Account”** means the current account of the member banks at the RMA that shall be utilized to settle payments obligations for all ATM and PoS transactions;
 - o) **“Settlement Period”** means the period between two BFS switch cutovers that shall be initiated at 24.00 hours each day;
 - p) **“Successful or Approved Transaction”** means those transactions, which have resulted in the cardholder availing the desired service at the ATM and PoS terminals and are processed with response code (RC) 00 and 11 (Settled manually);
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- q) **“T+1”** means transactions performed by members before 12:00 AM are settled on T+1 basis, which means transaction date plus one working day;
- r) **“T+2”** means Transactions performed by members during weekends and holidays and are settled on T+2 basis, which means transaction date plus two working days;
- s) **“Technical Declines”** means those, which occur due to Hardware/ Software/Application or Communication issues arising anywhere on the entire path of the transaction;
- t) **“Unsuccessful (or declined) transactions”** means those transactions in which the customer has not been able to avail the desired service at the ATM and PoS terminals because of the transaction being declined due to Business or Technical reason and these are processed with response code (RC) other than 00 and 11.

4. Membership Structure:

Banks participate in the BFS network as per Payment and Settlement Systems Rules and Regulations (PSSRR) 2018 and BFS Procedural Guidelines 2018, shall fulfill the following membership criteria prescribed by RMA and shall submit membership application to RMA.

4.1 Membership Criteria:

Banks joining the BFS network should meet the following criteria:

- ✓ Bank should have valid banking license issued by the RMA;
- ✓ Bank should have current account with RMA;
- ✓ Bank should hold RMA's BFS Membership; and
- ✓ Bank should route their ATM and PoS transactions through BFS switch.

4.2 Reporting of ATM locations:

BFS network, as a dependable service provider to the commercial banks, requires all the member banks to furnish their ATM and PoS location information as and when required in the format provided by the RMA (**Annexure- A**). These details are primarily required to maintain the service level of BFS network.

4.3 Membership Fee:

Commercial Banks willing to join the BFS network need not pay any membership fee unless mandated by RMA.

4.4 Interchange Fee:

Card acquirer bank gets the interchange fee from the card-issuing bank for providing ATM and PoS services to the card-issuing bank's customer. However, customers are allowed five successful financial interbank ATM transaction per month free of charge.

Figure 1. Interchange fee structure for BFS ATM and PoS:

Transactions	Interchange Fee	
	ATM	PoS
Financial Transaction	Nu. 12	Nu. 12
Non-Financial Transaction	Nu. 8	N/A
All Amount in Ngultrum (Nu.)		

4.5 Fee Revision:

The RMA do not charge any transaction switching Fee. However, in future the fee structure shall be reviewed by RMA in consultation with the BFS Steering Committee members.

4.6 BFS Availability:

The BFS will be in operation/available to all member banks on **24 x 7** with 99% uptime except:

- ✓ In the event of force majeure such as war and natural calamities; and
- ✓ Regular periodic maintenance with prior notice.

However, during the regular periodic maintenance of the BFS network, member banks shall be notified two **(2)** working days in advance.

5 Security Aspects:

The BFS network focuses on two vital security issues; they are Encryption Hardware and PIN Encryption.

5.1 Encryption Hardware:

Each ATM and PoS acquirer on the BFS network should use Hardware Security Module (HSM) for PIN blocks translation.

5.2 PIN Encryption:

Each PIN as and when entered by the cardholder should be encrypted using Data Encrypted Standard (DES).

6. BFS Network Operations:

6.1 Message Formats:

As a national service provider, we promote standards in our services. All transactions routing through the BFS should comply with message specifications standards specified on International Organization for Standardization (ISO) 8583 message format.

6.2 Transaction Logging:

The BFS shall maintain logs of all transactions passing through the BFS network. Under no circumstances, BFS shall keep annals of PINs or disclose PINs, card number, expiry date accessible in un-encrypted form to other member banks participating in the BFS network.

Section II- BFS Services:

7. Role of RMA:

The RMA as the owner and coordinator of the BFS network reserves the right to either operate & maintain the BFS network of its own or shall obtain necessary services for third party service providers.

7.1 BFS Service Offerings:

RMA shall provide following services through BFS network and are not necessarily limited to:

- ✓ ATM and PoS Switching;
- ✓ ATM and PoS network Services; and
- ✓ Settlement Services related to ATM and PoS network.

7.2 Member Notification:

RMA shall notify all the member banks regarding:

- ✓ Inclusion of a new member to the BFS network;
 - ✓ Cessation of any member;
-

- ✓ Suspension/termination of any member;
- ✓ New enhancement of the software and hardware released pertaining to the BFS network;
- ✓ Changes in the periodic maintenance hours; and
- ✓ Any other issues deemed important such as non-disclosure of card number, expiry date, service code etc.

7.3 BFS Steering Committee:

The BFS network agreement shall be carried out under the supervision of BFS Steering Committee and the Committee members shall constitute:

- ✓ Deputy Governor, RMA;
- ✓ Director, DPSS, RMA;
- ✓ Director, DIT, RMA; and
- ✓ Deputy CEO's of member banks.

The Committee will review the functioning of the BFS network and discuss issues related to:

- ✓ Operational issues;
- ✓ Network security;
- ✓ Technical issues;
- ✓ BFS product development; and
- ✓ Any other issues deemed important for BFS network.

7.4 Composition and terms of Office of BFS Steering Committee:

The composition and terms of office of BFS Steering Committee are as follows:

- ✓ Steering committee cannot have more than 10 members; and
- ✓ RMA reserves the right to call steering committee member for discussion on matters relating BFS.

8. Oversight by DPSS, RMA:

The DPSS, RMA as required by the PSSRR, 2018 shall conduct Oversight of the BFS related systems (including hardware and software) of the member banks. Each BFS member banks shall furnish reports on:

- ✓ The state of operations;
- ✓ A description of systems risks and internal control; and
- ✓ Deficiencies if any, in the system.

Further, each member bank should conduct annual risk assessment and system audit to comply with BFS operating procedural guidelines 2018 and PSSRR, 2018.

9. Settlement:

All interbank settlement pertaining to BFS transaction shall be carried out on T+1 basis for normal working days and settlement for weekends and holidays shall be performed on the next working day by DPSS. However, the Settlement in respect of exception transactions shall be carried out within 3 working days following the date of receipt of claim by DPSS.

9.1 Settlement account:

The settlement account for BFS transactions is the current account maintained by all member banks with Department of Banking (DB), RMA through which the inter-bank transactions are routed in the day-to-day banking activity.

9.2 Settlement procedure:

The RMA as the settlement agency would credit/debit the member banks current account maintained with Department of Banking (DB), RMA with the amount generated from the BFS Net Settlement/ BFS Net Interchange fee report determined as per the total of acquiring and issuing transactions for a particular member.

In case of net debit, the member banks has an obligation towards other member banks equal to the amount of the net settlement. However, to affect this, the net debit member bank should hold sufficient funds in its settlement account. Each member banks should follow settlement procedures laid down under these and defaulting member bank for each instance of non-compliance shall be penalized with an appropriate fine specified by the Authority. Following explains the settlement process between the card issuer and acquirer for any financial and non-financial transactions.



Figure 2. Settlement process flow:

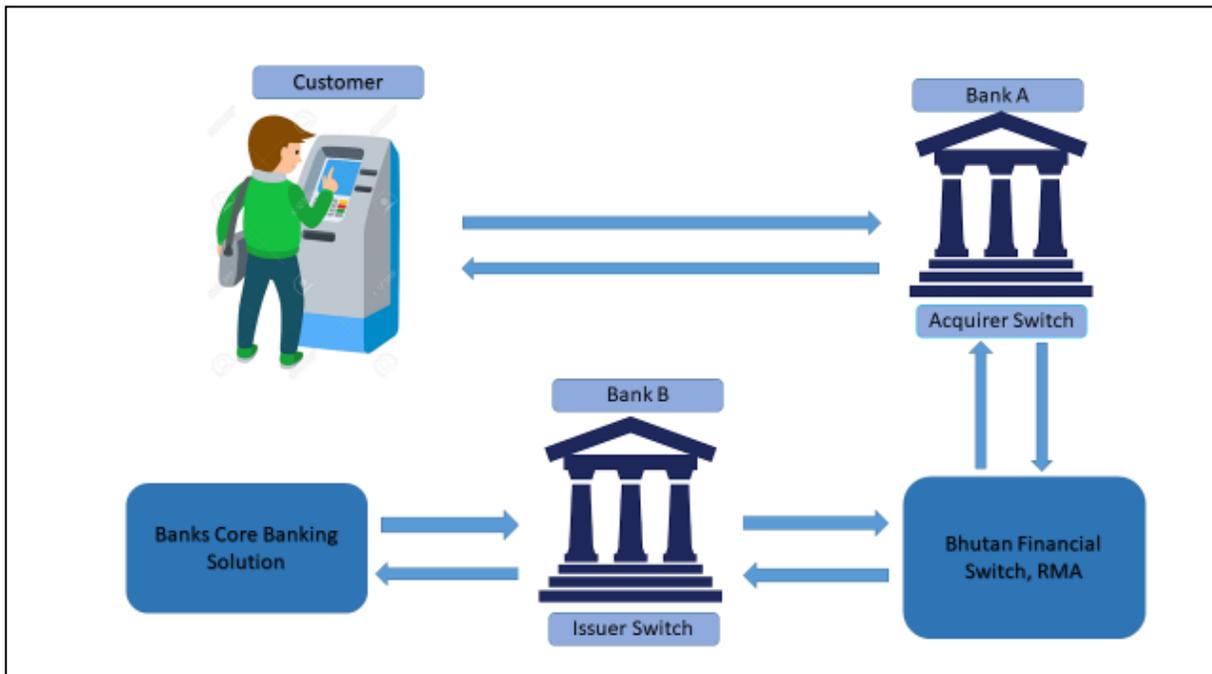


Figure 3: Financial Transaction (Cash withdrawal, PoS Merchant Payment)

Transaction Amount		Interchange fee	
Debit	Credit	Debit	Credit
Issuer	Acquirer	Issuer	Acquirer
All Amount in Ngultrum (Nu.)			

Figure 4: Non- Financial Transaction. (Balance enquiry, Mini statement, Pin change, Chequebook request and Statement request).

Transaction Amount		Interchange fee	
Debit	Credit	Debit	Credit
N/A	N/A	Issuer	Acquirer
All Amount in Ngultrum (Nu.)			

9.3 Settlement confirmation:

The settlement executed by DPSS, RMA would be deemed as the final net settlement for BFS transactions and should be settled in Ngultrum (Nu).

9.4 Reversal transaction:

Reversal transaction would be initiated in the event of incomplete message communication between the acquirer member banks ATM switch and BFS network.

10. Maintaining transaction records:

Each member bank should maintain records of all transactions for a minimum period of Ten (10) years as stipulated by PSSRR, 2018. In case of disputes, member banks should keep records of all disputed transactions until the disputes are resolved amicably. Member banks should provide details of all disputed transactions to other member banks whenever requested.

10.1 Details to be provided for the disputed transaction record include:

- ✓ Date, time and transaction number;
- ✓ ATM Identification (ID) Number;
- ✓ Retrieval Reference Number (RR No);
- ✓ Processing Code;
- ✓ ATM Location;
- ✓ Requested Amount; and
- ✓ Amount Disputed.

11. Settlement Reports and Reconciliation:

11. Reports:

Member banks can download their respective daily BFS ATM and PoS Net Settlement Report and BFS ATM and PoS Net Settlement Interchange Fee Report by accessing the BFS portal. These reports will indicate debit or credit net settlement position for each of the member banks. If the net settlement position is a debit amount, it indicates that member banks issuing transactions are more than its acquiring transactions and vice versa. The net settlement amount would include transaction amount, net dispute/adjustment amount and interchange fees.

DPSS, RMA, as the settlement agency will effect the necessary credits and debits to the member banks settlement account with Department of Banking, RMA.

11.2 Reconciliation:

RMA will provide details of reconciliation reports to the member banks on any transactions routed through the BFS network and deemed important for reconciliation and adjustment purposes. BFS portal will also provide the customized reports within reasonable timeframe for reconciliation.

11.3 Adjustment to settlement:

Discrepancies relating to reconciliation/adjustment done by member banks, based on reports furnished by BFS are the responsibility of the participating member banks. Such discrepancies should be resolved by member banks as per the dispute settlement procedures set forth in the subsequent section later in the document.

11.4 Adjustments to fees:

The following explains the fee adjustments:

- ✓ BFS determines the amount of service fees its member banks owe for using the BFS network; and
- ✓ RMA, as a service provider would maintain an account of member banks participating in the BFS network.

12 Network cutover time:

Currently, the BFS network cutover time is 12:00 AM and RMA reserves the right to amend the BFS network cutover time.

12.1 Exception handling:

Exception transactions are those that remain un-reconciled and/or are reported by a customer as erroneous. Member banks should collaboratively endeavor to settle such discrepancies, if raised by other member banks. All such discrepancies should be resolved amicably as per the “**Dispute Resolution Mechanism**” laid down in this document.

Section III - Operating Procedure for Members:

All member banks participating in the BFS network should strictly abide by BFS Operating Procedural Guidelines 2018 and PSSRR 2018. Further, it is important that member banks comply with operating circulars (OC's) and instructions issued by the DPSS, RMA from time to time.

13. Issuer Member Bank:

This section defines the Operating Procedures of BFS card-issuing member banks.

13.1 ATM and Cards (Debit/ Credit):

In cases where the card-issuing member banks have tied up with BFS, they shall define their own card base for acceptance of their card on the BFS network. BFS would be responsible for routing the transactions between the card-issuing member banks and the acquirer member banks based on the Bank Identifier Number (BIN) updating request shared by issuing banks. BIN updating form is provided in **(Annexure B)**.

13.2 Card standards:

The card issuing member banks should adhere strictly to the card standards provided in **(Annexure C)** and to the prevailing standards of the ISO.

13.3 Personal Identification Number (PIN):

The card-issuing member banks shall allocate Personal Identification Numbers (PIN) to each customer. Further, they should not retain the PIN and card number in the form of a clear text message under any circumstances. All PINs and card Number should be encrypted in keeping with the prevailing encryption standards and should be four (4) digits.

13.4 Transaction service:

The card-issuing member banks should support the following ATM and PoS services:

- ✓ Cash withdrawal;
 - ✓ Balance Inquiry;
 - ✓ PIN change;
 - ✓ Mini statement;
 - ✓ Funds transfer;
-

- ✓ Cheque book request;
- ✓ Account statement request;
- ✓ Card less withdrawal; and
- ✓ Merchant payments.

13.5 Successful transaction:

Successful (or approved) transactions are those, which have resulted in the customer availing the desired service at the ATM and PoS, and are processed with response code (RC) **00**.

13.6 Unsuccessful Transaction:

Unsuccessful or declined transaction are those transaction in which the customer has not been able to avail the desired service at the ATM and PoS because of the transaction declining due to 'business' or 'technical' reasons. These are processed with response code other than **00** and **11**.

13.7 Response Time:

All ATM and PoS installed or operated by the respective card-issuing member banks should respond to the Request Message from BFS within Forty (**40**) seconds. Failing to comply with such a request would result in an unsuccessful message to the ATM and PoS acquirer member banks.

13.8 Accuracy:

All card-issuing member banks would be responsible for the content, completeness, and accuracy of all transaction messages entering the BFS network.

13.9 Failure to perform:

In case, any member banks fails to comply with the performance criteria, would be penalized with an appropriate fine specified by the Authority.

13.10 BIN table maintenance:

The BIN table maintenance comprises the following:

- ✓ The card issuer member banks should provide details of Bank Identification Number (BIN) to BFS. On receiving the BIN, BFS will update the BIN table within five (**5**) working days on its production system; and
-

- ✓ The acquiring member banks shall update the BIN in their BIN table / system within five **(5)** working days from the date of receiving the information from BFS and would use this BIN table to route transactions through BFS to the card-issuing member banks.

13.11 Acquirer member bank:

This section defines the Operating Procedures of BFS pertaining to the acquiring member banks. The acquirer member banks would be responsible for providing and managing their ATM and PoS network, which in turn would allow customers of other member banks to access their ATM and PoS network.

14. ATM and PoS services:

This section deals with the services offered on BFS network for all the member banks joining the BFS network.

14.1 Cash withdrawal:

- ✓ Cash withdrawal is a transaction performed at an ATM, which dispenses cash to the customer upon request;
- ✓ Member banks should provide the customer with any one of the following options – to obtain a receipt upon request or to allow the customer to decline a request for receipt;
- ✓ The receipt should indicate details of the entire transaction;
- ✓ In case the ATM fails to generate the receipt automatically, the ATM screen should display the details of the transaction; and
- ✓ In case the ATM malfunctions, the member banks should take every remedial step to provide appropriate reversal messages to the issuer through BFS.

14.2 Balance inquiry:

Balance inquiry is a statement that displays a customer's actual/available funds on the ATM screen. In addition, the customer could get a printed receipt of the account balance.

14.3 Transaction service:

The card-acquiring member banks should support and allow the following ATM services:

- ✓ Cash withdrawal;
 - ✓ Balance inquiry;
-

- ✓ PIN change;
- ✓ Mini statement;
- ✓ Funds transfer;
- ✓ Cheque book request;
- ✓ Account statement request; and
- ✓ Card less withdrawal.

14.4 ATM base:

The acquirer member banks should ensure the participation of all the ATMs on the BFS network and should adhere to the BFS Operating Procedural Guidelines 2018.

14.5 ATM standards:

All ATMs participating in the BFS network should comply with the extant industry standards to provide better quality of service to the customers through BFS and other guidelines issued by RMA from time to time.

14.6 Receipt requirement:

- ✓ The acquirer member banks should ensure that all ATMs would provide a transaction receipt to the customer on request;
 - ✓ In case of malfunctioning of the ATM or the ATM running out of paper, the customer should be provided with the option of further continuing with the transaction or terminating it; and
 - ✓ The following details should be displayed on the customer's transaction receipt. While this is an indicative list, the acquirer member banks may subsequently add other details pertaining to the receipt requirements such as:
 - Date, time, and transaction number;
 - ATM identification (ID) number;
 - ATM location;
 - Cardholder's account number (masked);
 - Withdrawal amount;
 - Available balance; and
 - Response code.
-

14.7 Dispensing capability:

All ATMs should be capable of dispensing Bhutanese Ngultrum (Nu) notes preferably of the denominations of **50, 100, 500** and **1,000**.

14.8 Partial dispensation of cash by ATM:

Acquiring member banks should disable the partial dispensation of cash from the ATM to prevent the impact of partial dispensation of cash by the ATM on the BFS settlement.

14.9 Cash retraction:

- ✓ It is obligatory for acquirer member banks to ensure that in each of its ATMs, the cash retraction facility is **disabled**. This is a mandatory guideline issued by the DPSS, RMA to all the BFS member banks;
- ✓ Member banks should also comply with the following guidelines with respect to disabling cash retraction facility;
- ✓ Educate the customer on the consequences of cash retraction and the reasons for disabling the facility, as customer awareness is very crucial to bring about discipline in collecting the cash ejected;
- ✓ Display information regarding disabling cash retraction at all ATM locations and ensure wide propagation. The message may be flashed on the ATM before conducting the transaction; and
- ✓ Ensure that new ATMs being installed do not provide cash retraction features.

14.10 Capability to read data from tracks:

All ATMs should be able to read the data on Track II of the magnetic strip present on the customer's card and transmit the same to BFS.

14.11 Captured cards:

Under no circumstances should the ATMs participating in the BFS network capture the cards, unless specifically informed by BFS or legally required to do so. However, this is not applicable in case of ATM malfunctioning or cards left in the ATM machine by the customer after the transaction is completed.

The following points describe the approach that members need to adopt with respect to captured cards in case of ATM malfunctioning or cards left in the ATM by the customer after the transaction is completed:

- ✓ The customer should be advised through call SMS to contact the issuing member bank to report card captured by the ATMs; and
- ✓ The issuing member bank, upon receiving the information on card capture should either handover the ATM card back to the person on request or should block the card and arrange to issue fresh card at the earliest.

14.12 Acquirer Member Banks requirement - Acceptance of cards:

The acquiring member banks should treat all cards as equal and should ensure that these cards are accepted at all ATMs participating in the BFS network.

14.13 BIN table maintenance:

The BIN table maintenance comprises the following:

- ✓ The acquiring members should update the BIN in their BIN table / system within five **(5)** working days from the date of receiving the information from BFS;
- ✓ The information of BINs updated in BFS is made available in DMS, Acquirers can download the BIN details from DMS and confirm once it is updated in their system; and
- ✓ The acquiring member banks would use this BIN table to route transactions through BFS to the card issuing member bank.

14.14 ATM operation requirements:

All acquiring members participating in the BFS network mandatorily need to meet the minimum performance standards listed below with all its ATMs.

14.15 ATM time-outs:

The ATM should wait for Forty **(40)** seconds to receive responses to the requests through BFS before declining a transaction. It is advised that the time out sessions should be enabled for all screens / stages of ATM transaction keeping in view the time required for such functions in normal course. Member banks may ensure that no time extensions are allowed beyond a reasonable limit at any stage of the transaction. It is also advised that the cardholder is prompted to enter the PIN as the last step of the transaction.

14.16 Accuracy:

The acquiring member banks are responsible for the content, completeness, and accuracy of all transaction messages that enter BFS network.

14.17 Failure to perform:

In case, an acquiring member banks does not comply with the performance criteria, it would be suspended from participating in the BFS network and/or penalty would be levied as specified by the Authority.

15. PoS Services:

15.1 Merchant payment for purchase:

A data capture transaction that debits a cardholders account in exchange for goods or services as per the following transaction process:

- ✓ The merchant will swipe the Card on an electronic data capture terminal for authorization;
- ✓ After successful authorization, a hold for the transacted amount will first be placed on your Card account. Your Card balance will subsequently be debited for the transacted amount;
- ✓ A charge slip will be generated;
- ✓ Check the amount and sign the charge slip. Your signature must match the signature on the reverse side of your card/ of your bank;
- ✓ Ensure that your Card is returned to you; and
- ✓ Retain your copy of the charge slip for future reference

15.2 Presentment of PoS files to RMA:

- ✓ Member banks are required to send PoS files for settlement to RMA zipped and password protected on T+1 basis. Failing which, PoS files will not be entertained for settlement process; and
-

- ✓ Password for the zip shall be sent in the subsequent mail and password should be changed monthly basis.

15.3 Exceptional Files

- ✓ The Exceptional Files Generated from RMA systems shall be zipped and emailed to member bank on the same day it is generated; and
- ✓ The rectified exceptional files should be sent to RMA for processing on the next day.

Section IV- Termination and Suspension of BFS Network Membership:

16. Criteria for Termination and Suspension of member banks:

RMA under the following circumstances may terminate/suspend the BFS membership:

- ✓ Member banks commits a material breach of BFS Operating Procedural Guidelines 2018, which remains un-remedied for Thirty **(30)** days after giving notice;
- ✓ The member banks has failed to comply with or violated any of the provisions of the PSSRR, 2018;
- ✓ The current account with DB, RMA of the member bank is closed or frozen;
- ✓ The member bank is amalgamated or merged with another member bank; and
- ✓ Steps have been initiated for winding up the business of the member bank

16.1 Process of BFS Membership Termination/Suspension:

- ✓ RMA shall inform in writing to the member banks regarding termination/suspension of its membership to the BFS network;
 - ✓ If the RMA is of the opinion that the breach is not curable, RMA may suspend/terminate the membership with immediate effect. However, the member bank shall be given an opportunity to be heard within Thirty **(30)** days and confirming or revoking the termination/suspension passed on earlier;
 - ✓ The RMA may at any time, if it is satisfied, either on its own notion or on the representation of the member that the order of suspension/termination of its membership may be revoked, it may pass on accordingly; and
 - ✓ The member bank whose termination of membership has been revoked shall be entitled to apply for membership afresh in accordance with BFS Operating Procedural Guidelines 2018.
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Section V- Dispute Management System (DMS):

For resolution of errors, disputes, and adjustments of transactions, participating member banks should collaboratively perform the following:

17.1 Responsibilities in dispute resolution:

The following are the responsibilities of member banks in dispute resolution:

- ✓ It is obligatory on the part of individual member banks to resolve all disputes amicably, which pertains to customer's transactions, within the stipulated time as per the BFS Operating procedural guidelines 2018;
- ✓ The dispute, error, fraud, or any issues related to BFS network or to any other commercial banks must follow the procedure and timelines laid down in the BFS operating procedural guidelines 2018;
- ✓ Resolutions of disputes must happen within the ambit of PSSRR, 2018 and BFS operating procedural guidelines 2018, various instructions and directions issued by the DPSS, RMA; and
- ✓ However, the use of the Dispute Resolution Mechanism will not be resorted to by member banks to deal with the aspects related to the acts of customer that are apparently fraudulent in nature and are internal to the member banks operations.

17.2 The procedures of handling disputes in the BFS network are as follows:

- ✓ BFS maintains a database for all transactions performed by the member banks and only valid disputes are processed by online DMS System;
 - ✓ Online DMS System validates and processes the disputes raised by member banks in the DMS; and
 - ✓ Disputes (Debit Adjustments or Re-presentments) not satisfying the validation process (with Journal Print/Electronic Journal) are rejected from the Settlement and communicated to the corresponding member banks through e-mail copying DPSS, RMA.
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17.3 Charge Back:

A chargeback should be initiated by the Issuer member banks through DMS provided by RMA. Issuer can raise the chargeback on the instance where his customer raises a complaint of non-receipt of the cash from acquirer's ATM but the account of the customer gets debited.

17.4 Timeframe for settling chargeback in the BFS network:

- ✓ A customer shall file the chargeback complaint with Issuer banks within 60 days from the date of transaction;
- ✓ The Issuer bank should raise the chargeback within 5 working days furnished with all supporting documents of cardholders' transaction dispute to the acquirer bank; and
- ✓ Acquiring bank should accept or decline the chargeback within 7 working days after the chargeback is raised and Issuer bank shall settle the customer's account the next working day.

On raising a chargeback through DMS, remitter (issuer) will get credit for the transaction amount along with the interchange fee and acquiring bank will be debited. However, if there is no response from the acquiring bank on charge back within Seven (7) days, the charge back shall be deemed accepted by the Acquiring bank.

17.5 Re-presentation:

- ✓ Re-presentation is raised by the acquirer bank against a chargeback raised by the issuer bank;
 - ✓ Acquirer bank has to furnish copy of Electronic Journal (EJ) as a proof of dispensing cash to the cardholder against the chargeback;
 - ✓ Acquirer bank has to raise the re-presentation within Ten (**10**) working days from the next date of chargeback;
 - ✓ Disputes satisfying the validation process will be processed through online DMS System; and
 - ✓ BFS can reject a dispute in the event of:
 - Identical re-presentation raised;
 - Copy of Electronic Journal is not in readable form/available;
 - Copy of Electronic Journal is presented with Error; and
 - Chargeback is already accepted or the Time Line (TAT) for processing re presentation is expired. The chargeback shall be deemed accepted.
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BFS will consider those disputes for re-presentation where the Electronic Journal copy submitted by acquiring bank is supported by Cash Balance Report, Video Footage or Audit Trail Report.

However, if acquiring bank does not submit the copy of Electronic Journal / Journal Printing (EJ/JP) while representing the chargeback but provides some other document or the copy of EJ/JP is not of the disputed transaction and is of some other transaction. In this case, the Issuer bank should raise pre-arbitration and also send email to DPSS, RMA reporting non-compliance by Acquiring bank. DPSS, RMA will take up the matter with acquiring bank to address disputes accordingly. If the issuer bank do not respond to the re-presentation within Ten (10) days, it shall be deemed accepted by the Issuer bank.

17.6 Pre-arbitration process:

If the issuer and acquirer member banks are unable to settle the dispute after chargeback and re-presentation, the next stage for DMS will be the process of pre-arbitration dispute resolution. The card-issuing member bank has the right to refer pre-arbitration by lodging the dispute in the DMS interface with the requisite proof in support of its claim within Ten **(10)** days after the re-presentation date if proper proof of dispensing of cash is not provided in form of EJ/JP by the Acquiring bank while representing a chargeback for cash withdrawal transaction.

The acquiring bank should respond to the pre-arbitration raised by the issuer bank within Ten **(10)** days from the pre-arbitration date. The acquiring bank can decline the pre-arbitration along with valid reasons and other attachments.

In the absence of response from the acquiring bank within Ten **(10)** days, the pre-arbitration request submitted by the issuing bank should be **deemed accepted** and the amount will be reversed to the issuer bank. Where the pre-arbitration decline by the acquiring bank is not acceptable to the issuer bank, the issuer bank can refer to dispute for arbitration by manual process.

While rejecting a pre-arbitration dispute, the acquiring bank needs to upload/submit the following documents:



- ✓ Certified copy of log of EJ/JP of the disputed transaction along with three preceding and three succeeding transactions of the same customer who has disputed the transaction;
- ✓ Duly certified cash certificate of overage/outage/tallied position;
- ✓ Certified copy of system generated switch log;
- ✓ Certified copy of End-of-Day (EOD) cash verification/ cash balance/ cash summary report duly stamped and signed by the competent authority; and
- ✓ CCTV footage, if available, to be sent through email.

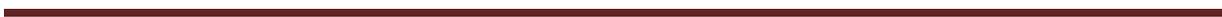
However, for uploading of incorrect copies of EJ/JP by the acquiring bank, appropriate penalty shall be imposed by the RMA.

17.7 Arbitration by manual process:

The timeframe for referring a dispute to arbitration by manual process is Twenty **(20)** days from the date of concluding the pre-arbitration process.

All arbitration disputes concerning settlements will be referred to the BFS Steering Committee. If no documents are uploaded /submitted within Twenty **(20)** days for arbitration case as mentioned above, the documents already uploaded /submitted in DMS by acquiring bank at the time of re presentment and rejection of pre-arbitration will be retrieved by DPSS, RMA and placed before BFS Steering Committee. Non-submission of complete set of documents may result in BFS Steering Committee's decision going against the acquiring bank on technical grounds. If the issuer bank is satisfied with the documents uploaded by acquiring bank in DMS, it may withdraw a dispute from arbitration.

If the acquiring bank wants to accept the arbitration dispute for any reason they can do so, the acquiring bank will be debited, and issuer bank will be credited with the disputed amount. Similarly, if the decision of the BFS Steering Committee is in favor of the acquiring bank, there will be no settlement for the dispute transaction as the fund is already with the acquiring bank and if the decision is in favor of issuer bank, the disputed amount should be credited to issuer bank and acquiring bank will be debited.



18. Debit Adjustment and Credit Adjustment:

18.1 Debit Adjustment:

- ✓ Debit adjustments are raised by Acquiring banks when cash is dispensed from its ATM but the transaction has not been settled with BFS network within Ten **(10)** days from the next day of the transaction. While raising a debit adjustment, acquiring bank should upload/submit scanned copies of Journal Print (JP) or Electronic Journal (EJ) as a proof of dispense of cash. The transaction should be a clear successful withdrawal as per EJ/JP;
- ✓ The copy of EJ/JP should contain the transaction for which the debit adjustment is raised along with three preceding and three succeeding successful cash withdrawal transactions into the DMS. Complete dispute cycle is available for transactions where debit adjustment is raised. Chargeback on debit adjustment can be raised up to Ten **(10)** days from the next day of raising debit adjustment; and
- ✓ For cases, where cardholders account does not have sufficient funds for recovery towards the debit adjustments raised by the Acquiring bank, the issuing bank can raise chargeback with reason 'Dr. Adj. – Insufficient Funds' and in such cases, Acquiring bank does not have the right to raise re-presentment for such chargebacks. This will be considered as a declaration from the issuing bank that the cardholder does not have sufficient balance to recover the debit adjustment on that day. The issuing bank should attempt to recover the amount and arrange to credit the acquiring bank as and when recovered from the cardholder. The transfer of funds in such cases will be done by the member banks outside the system. Debit adjustment is not applicable for card-to-card fund transfer transactions.

18.2 Credit Adjustment:

- ✓ Credit adjustments are raised by Acquiring banks where its ATM is unable to dispense the requested amount, but have received the transaction amount through BFS settlement, within Sixty **(60)** days from the next day of transaction. This would help Issuer bank in giving credit to their customers without raising a chargeback. Acquiring bank should take appropriate measures to adjust the excess cash balance available at their ATMs, post reconciliation and process proactive credit adjustments for failed transactions;
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- ✓ If a credit adjustment is raised on same day of raising chargeback, the chargeback will be cancelled and credit adjustment will be considered for settlement; and
- ✓ For card-to-card fund transfer transactions, acquiring bank should raise credit adjustment within Sixty **(60)** days from the next day of transaction which is settled in BFS network, if it cannot be credited to customer account for any reason.

18.3 Good faith:

- ✓ BFS member banks should resolve dispute within the stipulated time as per the BFS Operating Procedural Guidelines 2018 for disputes relating to chargeback, re-presentment, debit adjustment, chargeback and re-presentment on debit adjustment;
- ✓ If member banks fail to raise the dispute/adjustment within the prescribed time limit, the same can be initiated on 'Good faith' basis through DMS;
- ✓ Recourse to pre-arbitration/arbitration would not be available for disputes raised as Good faith in DMS; and
- ✓ The documents / supporting to be provided for Good faith shall be same as those submitted during chargeback, re-presentment and debit adjustments.

19 Process for handling transactions not settled due to data loss:

The RMA as the owner of the BFS that can operate **24x7** with near zero downtime and zero tolerance to data loss. However, as an efficient system it is necessary to have a process in place to handle transactions not settled in case of loss of data due to disaster or any unforeseen events.

If any unforeseen event that affects RMA's BFS network resulting in loss of online transactions data and if the data is non-recoverable by RMA system, member banks will have to settle the transactions between themselves. DPSS, RMA shall facilitate settlement of such transactions between member banks.

Settlement of funds between member banks will be necessary when the transactions are routed through BFS, authorized by issuers and serviced by acquirers and has not been settled by DPSS, RMA due to loss of data of online transactions.

Settlement of funds for data lost will not be applicable under the following circumstances and such cases will be considered as technical declines and treated as in the normal scenario:

- ✓ BFS has not received authorization from issuer bank;
- ✓ Authorization has been received from issuer bank but not sent to acquirer by BFS; and
- ✓ Acquiring bank has not serviced the request after receiving authorization from Issuer bank through BFS.

19.1 Process to be followed by RMA:

- ✓ RMA shall keep the member banks informed on the date and time-period when such situation of force majeure has occurred and resulted in loss of data of online transaction;
- ✓ Member banks, upon receiving intimation from RMA, will focus on reconciling the transactions done during that period and identify the transactions not settled by RMA;
- ✓ Since records of these transactions would not be available with RMA, the settlement for such transactions will not be done by RMA; and
- ✓ RMA shall facilitate settlement of such transactions between member banks.

19.2 Process to be followed by Member Banks :

Members as an Issuer and Acquirer should focus and reconcile the transactions done on BFS network during such period and identify the transactions not settled by BFS RMA. Members should settle such identified transactions between themselves, which are not settled by RMA due to loss of data.

19.3 As an Acquirer:

- ✓ Acquirer should reconcile the transactions and identify successful transactions at their end during the reported disaster period, which are not settled; and
- ✓ Acquirer should share the list of such successful transactions not settled by BFS RMA along with the switch logs, EJ/JP and other supporting documents required to confirm the status of the transaction as successful with all relevant Issuers as well as with RMA.

19.4 As an Issuer:

- ✓ Issuer's banks should reconcile the transactions and identify those transactions, which are debited to customer's account during the reported disaster period but not settled;
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- ✓ Issuer banks should not reverse such transactions to customer's account during reconciliation or on receipt of complaint without referring it to Acquirer for checking the status of the transaction. Only those transactions confirmed by Acquirer's as failed should be reversed to the customer's account;
- ✓ Acquirer banks shall share with Issuer the list of such successful transactions not settled by BFS RMA along with the switch logs, EJ/JP and other supporting documents required to confirm the status of the transaction as successful;
- ✓ Issuer banks should check the switch logs, EJ/JP and other supporting documents and satisfy themselves about the status of the transaction. Issuer should pay the amount equal to the successful transactions not settled by BFS RMA; and
- ✓ Issuer banks shall not be able to raise chargeback (dispute) for such transactions, as those records shall not be available with RMA.

20. Records:

The member banks of BFS network shall maintain Seventy **(70)** day of CCTV footage for the purpose of Dispute Resolution to provide member banks reasonable time to review the customer complaint and raise chargeback.

BFS would preserve all records related to complaints and can refer to them as and when situation arise.



Annexure- A

ATM and PoS location details to be sent to RMA

SI No	Character Length	Field Name	Description
1	23	Terminal Address	ATM and PoS address along with the name of location/place as allocated by General Post Office (GPO)
2	13	Terminal city	District Name should be populated as allocated by GPO
3	2 (TH)	Terminal state	State code
4	2 (BT)	Terminal country	Country code should be provided as per ISO standards. 'IN' for domestic transactions.

Annexure B
BIN UPDATE FORM

Ref. No:

Date:

To

The Director,

Department of Payment & Settlement Systems

Royal Monetary Authority of Bhutan,

Thimphu

Sub: - BIN Update intimation

Dear Sir/Madam,

This is to inform you that the bank has added the following BIN to its card base. We request BFS to do the needful so as to route transactions with the enclosed BIN through BFS.

BIN	Bank Name	Card Length (16/19)	Issuer Type (Domestic, RuPay VISA, Master Card etc.)	Card Type (ATM, Debit, Prepaid, Credit)	Card Description (Platinum, Gold etc.)

Thanking you

Signature:

Name:

(Bank Name) _____

Company Seal:



Annexure C

Card Specification

Encoding

Track I

The encoding of Track I would conform to the prevailing ISO standard for Track I. When the Primary Account Number (PAN) contains a major industry identifier of “5” (for instance) and the first digit of the Issuer Identification Number (IIN) is “9”, the following minimum data must be encoded on Track I:

- Start Sentinel
- Format Code
- Primary Account Number
- Field Separator
- Country Code
- Customer Name
- Expiration Date
- Interchange Designator
- Service Code
- End Sentinel
- Longitudinal Redundancy Check

In all other cases, the following minimum data should be encoded on Track I mentioned above, except the following:

- Expiry Date
- Interchange Designator

Track II

This is meant for use in online equipment terminal for retail and financial services. All ATMs participating in the BFS network should support both the “Old” and “New” formats for Track II. When the PAN contains a major industry identifier of “5” (for instance) and the first digit of the Issuer Identification Number (IIN) is “9”, the following minimum data must be encoded on Track II:

- Start Sentinel
 - Primary Account Number
-

- Field Separator
- Country Code
- Expiration Date
- Interchange Designation
- Service Code
- End Sentinel
- Longitudinal Redundancy Check

In all other cases, the following minimum data should be encoded on Track II (as mentioned above) except the following:

- Start Sentinel
- Primary Account Number.

