

**Bhutan Immediate Payment Service (BIPS) and  
Payment Gateway  
Procedural Guidelines**



**Royal Monetary Authority of Bhutan**

**Thimphu, Bhutan**

**(2017)**

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## **Procedural Guidelines for Bhutan Immediate Payment Service and Payment Gateway 2017**

Pursuant to section 9(c) of the Royal Monetary Authority Act 2010 and approval accorded by the Board of Directors during the 119<sup>th</sup> RMA Board meeting on November 23, 2016, the Royal Monetary Authority of Bhutan hereby adopts the procedural guidelines for Bhutan Immediate Payment Service (BIPS) and Payment Gateway (PG) to govern the operation of BIPS and PG.

### **1. SHORT TITLE AND COMMENCEMENT**

This guideline shall be called 'Procedural Guidelines for Bhutan Immediate Payment Service & Payment Gateway 2017'. They shall come into force from 27 January 2017 and extends to all member of BIPS and PG in Bhutan.

### **2. OBJECTIVE**

Bhutan Immediate Payment Service (BIPS) and Payment Gateway is an instant interbank electronic funds transfer system through the Internet banking, mobile and ATM channels by leveraging the use of the Bhutan Financial Switch and Bank Application Programming Interface (API) platform.

The main objective of the BIPS and PG Procedural Guideline is to govern the day to day operation of the systems by its members which comprise of the RMA, member banks and merchants. The objectives of system are:

- a. To build a robust and cost effective real-time retail payment service available round-the-clock;
- b. To provide a channel independent access mechanism;
- c. To build an interoperable fund transfer service; and
- d. To be a catalyst in facilitating financial inclusion process and to provide banking services to even the last mile customer.

### **3. INTERPRETATION**

The authority for the final interpretation of any provision of the Procedural 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.

#### **4. AMENDMENT**

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

#### **5. COVERAGE**

The system shall cover transactions of the following characteristics:

- a) For transactions initiated through Mobile channels, which will be authenticated using mobile, m pin & account number.

**Mobile + Account Number + M Pin**

- b) For transactions initiated using the Internet banking, which will be authenticated the using existing two-factor authentication method i.e. username and password.

**User ID +Internet Banking Password + Account Number**

- c) For transactions initiated using ATM, which will be authenticated by using existing two-factor authentication method i.e. ATM card and pin code.

**ATM card + Pin code+ Account Number**

- d) For payment related to Government to Citizen (G2C) services, which will be the authenticated by account number and one-time password provided by Issuing Bank for remitting customers using G2C/appropriate web portal and mobile apps.

**G2C Portal + Account Number + One Time Password (OTP)**

To complete a cycle, following five parties shall be involved:

- a) Remitting customer
- b) Remitting bank
- c) Bhutan Financial Switch (BFS)
- d) Beneficiary bank
- e) Beneficiary customer

The process flow of BIPS and PG is covered under Annexure I.

## **6. OPERATING PROCEDURE AND RESPONSIBILITY OF MEMBERS**

### **6.2. RMA**

- a. Operation and Maintenance

The RMA is the owner and coordinator of the BIPS and PG and shall operate and maintain BIPS and PG. RMA shall undertake the task of operation, supervision and maintenance of the network.

- b. Monitoring and reports

The entire operation pertaining to the BIPS and PG shall be monitored by RMA.

The RMA shall ensure that each member banks receives transaction and settlement reports. However, members shall keep their books of accounts reconciled on a daily basis.

- c. Settlement

Interbank settlement amongst the members involving debiting the remitting bank and crediting the beneficiary bank shall be carried out on a net basis on a daily by the RMA.

### **6.3. Member banks**

- a. Operations: Members shall maintain round-the-clock connectivity of their network for the BIPS services with an uptime of 99 %;

- b. Accuracy of input Data: Members shall ensure that their switch generates accurate input data with reference to the BIPS specification for BIPS transactions;
- c. Security of transactions: Security of transactions between the mobile handset and the bank's BIPS server shall be the responsibility of the remitting and beneficiary member banks;
- d. If any member banks fail to fulfill its commitment towards other members participating in the BIPS Network, thus, causing any loss in the form of settlement or transaction fees, the defaulting member shall bear such loss completely. In such a case, funds available in the defaulting member's settlement account shall be used to settle claims at the earliest.
- e. Members are required to have a round-the-clock help desk team.
- f. Members are required to have a reconciliation team working daily.
- g. Members are required to have a separate operations team to handle inter member/customer's complaints.
- h. Members shall have primary infrastructure, Business continuity plan, and disaster recovery (DR).
- i. Members shall have robust infrastructure in terms of application, network, and hardware capabilities to perform BIPS transactions in a secure and efficient manner.
- j. Members shall perform all scheduled maintenance activity during non-peak hours.

### **4.3 Merchant**

- a. Merchants shall maintain round-the-clock connectivity of their network for the BIPS and PG services with an uptime of 99 %;
- b. Merchant shall ensure that their web portal/mobile application generates and abides to accurate input data with reference to the BIPS and PG specification of RMA;
- c. Merchant shall ensure the security of their web portal using Secure Sockets Layers (SSL) certification.
- d. Merchant shall share the PKI to complete the Certificate Signing Request (CSR) with RMA.

## **7. CUSTOMER CARE**

### **7.1. Customer registration**

- a. To avail BIPS services, all banks shall to ensure safe and secure registration process for their customers.
- b. For remitters opting for mobile phones to initiate BIPS fund transfer, mobile banking registration is mandatory. However, this registration is not mandatory while initiating transactions using the Internet or ATM channel.
- c. Mobile banking registration is not mandatory for beneficiary to receive the fund in his/her bank account.

### **7.2. Customer complaint**

In BIPS and PG remittance, a debit to a customer's account takes place first at his/her request and therefore it is expected that there can only be a complaint about the beneficiary not receiving credit or credit to wrong account. Any complaint about credit not being given to an intended beneficiary should be dealt with conclusively and bilaterally by the remitting and beneficiary banks within **3 days** from the date of the complaint.

## **8. SERVICE CHARGES**

Service charges levied as part of availing the service is determined by Service Charge Committee for BIPS and PG comprising the representative from RMA and the banks or any other measures adopted by Authority. The charges shall be configured in the system. Service charge shall be revised periodically based.

## **9. INDEMNIFICATION**

All members participating in the BIPS network shall defend, indemnify, and protect themselves from all loss and liabilities, if any, arising out of the following:

- a. Member's failure to perform its duties and responsibilities as per BIPS and PG, 2016;
- b. Malfunctioning of member's equipment;
- c. Fraud or negligence on the part of a member;
- d. Unauthorized access to BIPS network, and
- e. Member's software, hardware, or any other equipment violates copyright and patent laws.

## **10. AML/CFT COMPLIANCE**

All BIPS members should comply with proper Anti Money Laundering (AML) and Combating the Financing of Terrorism (CFT) checks as stipulated by RMA and other regulatory bodies, regulating the activities of the members before registering a customer for BIPS and PG. Further, remitting and beneficiary members banks shall be responsible to check the transaction amount limit as prescribed by RMA along with unusual remittance pattern, if any, with their customers.

## **11. NON-DISCLOSURE**

All members participating in the BIPS network shall maintain the confidentiality of the BIPS and PG data. Each member shall treat BIPS and PG related documents strictly confidentiality and shall not disclose to third parties without prior written permission from RMA.

## **12. PENALTY**

All members shall comply with the BIPS and PG Procedural Guideline. RMA reserves the right to impose penalties on the members if they have violated any of the provisions specified under these guidelines. Penalty may include imposing a fine decided by RMA or suspending/terminating of end-to-end (host-to-host) connectivity of the member.

## **13. DISPUTE MANAGEMENT**

### **13.1. Error handling**

- a. A payment request may fail to be effected due to various reasons such as loss of network connectivity, incorrect beneficiary details, etc. A remitting bank will accordingly receive from BFS or the beneficiary member, a negative response with the appropriate error code/response code. Details of various possible errors and handling them are available in the BIPS web portal that will be made available upon admission as BIPS member.
- b. RMA is committed to achieve and sustain a near-zero failure rate of payment requests that it processes. Therefore, RMA shall analyze the causes for failed payments requests on an ongoing basis and share the analysis with other members periodically. BIPS members on receipt of the



same are expected to initiate immediate corrective action and support RMA in achieving a near-zero failure rate.

### **13.2. Failed payment requests**

In case any BIPS transaction request fails, the remitter, based on the BFS or Beneficiary's response, would reverse the original transactions and give a credit back to the remitting customer. This reversal shall happen upon the receipt of a failed status response. The procedure to be followed, to ascertain the finality status of a payment request is given in the BIPS reports.

### **13.3. Exception handling**

- a. Exception transactions are those, which cannot be reconciled or are reported as erroneous by a customer. Members should collaboratively endeavor to settle discrepancies in settlement, if raised by other members. To facilitate settlement of the exception transactions, RMA shall provide necessary transaction logs as logged by the BIPS systems of BFS, if any, relating to the transaction reported as exception.
- b. Members should resolve and settle all adjustments pertaining to the BIPS remittance transactions arising out of error. They shall furnish all reports/documents in support of the BIPS transaction dispute.
- c. Members are required to make necessary changes in the systems and procedures to comply with any revision in the guideline that may be issued by RMA from time to time.

### **13.4. Dispute Redressal**

The procedure for handling disputes in the BIPS and PG Network is as follows:

- a. RMA maintains a database for all transactions performed by the members. Only valid disputes are processed by the RMA and the member banks.
- b. RMA and the member banks shall validate and processes the disputes raised by members upon verification of reports.
- c. Appendix – III explains the Dispute for BIPS and PG settlement guidelines

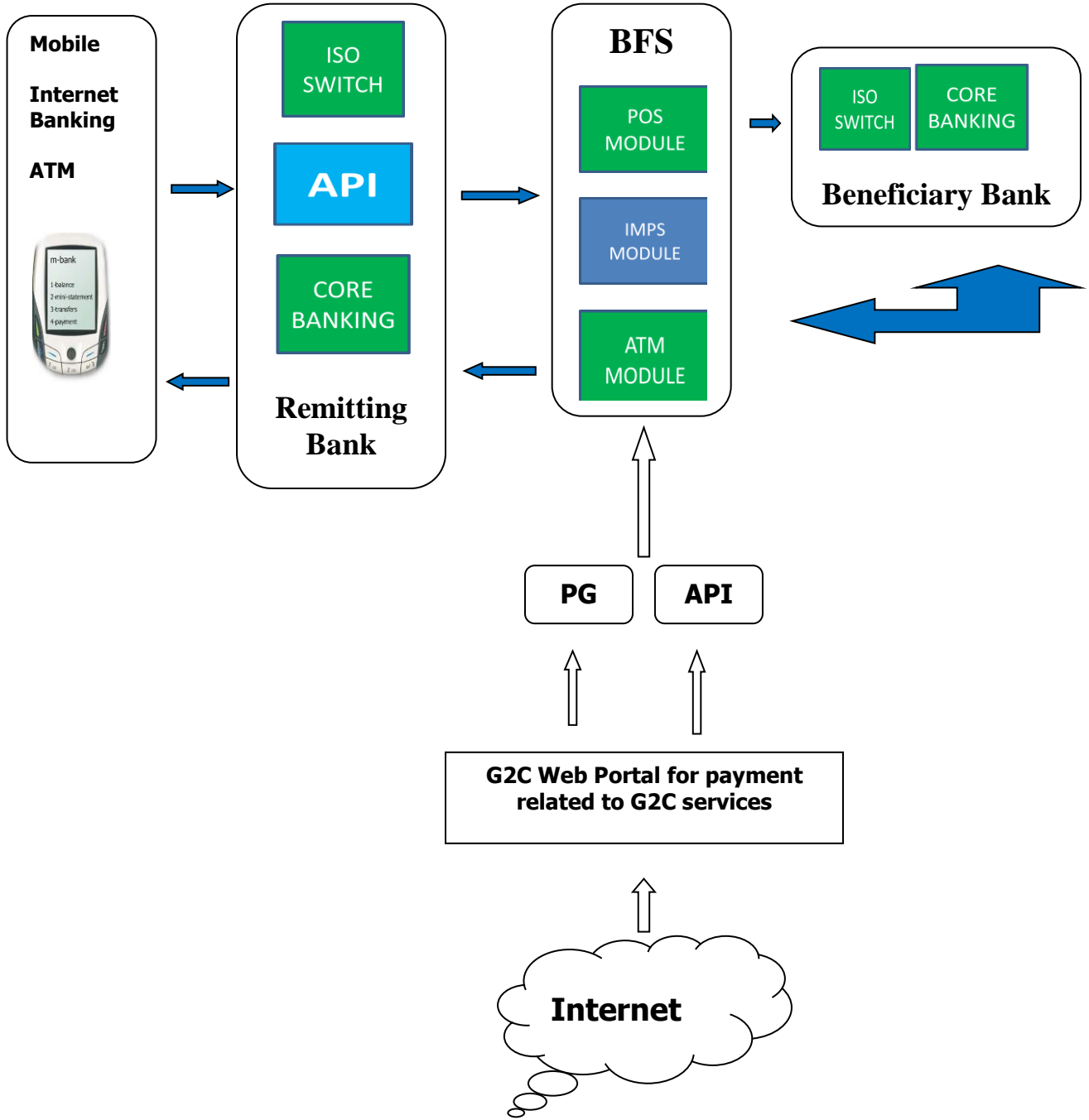
## 14. DEFINITIONS

- i. **BIPS and PG:** Immediate Payment Service (BIPS) and Payment Gateway (PG) is an instant interbank electronic funds transfer system through the Internet banking, mobile and ATM channels.
- ii. **Remitter** - means the person having account with the sending/originating bank wishing to transfer funds from his account through BIPS channels.
- iii. **Bank** - means a commercial bank as defined in Financial Services Act of Bhutan 2010.
- iv. **Beneficiary Bank:** refers to the BIPS member bank including branch where the beneficiary's account is held.
- v. **Customer:** customer refers to an account holder of a bank who registers to avail of the BIPS services.
- vi. **Remitting Bank** - refers to a member bank where the account of a remitter is held.
- vii. **Account Holder** - refer to the beneficiaries under the scheme who would opt to receiving funds from the remitter directly by way of credit to their bank accounts.
- viii. **Member Bank** - means a bank admitted for participating into the BIPS by RMA.
- ix. **RMA** - means the Royal Monetary Authority of Bhutan established under the RMA Act 2010.
- x. **Governor** - means the Governor of the Royal Monetary Authority of Bhutan.
- xi. **Deputy Governor** - means the Deputy Governor of the Royal Monetary Authority of Bhutan.
- xii. **Settlement Account** - means an account maintained by a participating bank at the Banking Department of RMA for the purpose of settlement of payment obligations.
- xiii. **Bhutan Financial Switch (BFS)** – is the switch set up by the RMA to facilitate interbank fund transfer.
- xiv. **Merchant:** is a service provider who has been authorized by RMA to perform PG and BIPS transactions.
- xv. **One Time Password (OTP)** OTP is assigned by Issuer Bank to the remitter to initiate the payment for services through BIPS.
- xvi. **RRN:** Retrieval Reference Number refers to the unique number assigned to a remittance transaction that helps in subsequent retrieval for reference.
- xvii. **SFTP:** refer Secured File Transfer Protocol.

*Procedural Guidelines for BIPS& PG*

# Annexure I

## PROCESS FLOW OF BIPS AND PG



- o **Step 1:** Remitter sends payment instruction from his/her BIPS application i.e. the Internet, Mobile, ATM and G2C portal.
- o **Step 2:** Remitting bank validates the details of the remitter and debits his/her account. Thereafter, the transaction detail is sent by the remitting bank to RMA BFS.
- o **Step 3:** After processing, transaction is passed by RMA BFS to the beneficiary bank. Beneficiary bank validates the details of the beneficiary customer, credits the account, sends confirmation to RMA about transaction status and sends a SMS to the beneficiary customer informing him of the credit.
- o **Step 4:** RMA sends the transaction status to remitting bank which in turn informs the status of the transaction to the Remitter.
- o **Step 5:** Remitting bank sends SMS confirmation of the transaction to the remitting customer.

**FORMS**

**Annexure-II**

**Form: RMA / BIPS&PG– I**

Ref. No.....

Date:.....

The Deputy Governor  
Royal Monetary Authority of Bhutan  
Chhophel Lam, Kawajangasa  
Thimphu Bhutan

Dear Sir,

**Subject: Membership for Bhutan Immediate Payment Service (BIPS)**

The .....(name of the bank) would like to participate in the RMA Immediate Payment System.

In this connection, we would like to request the RMA to kindly approve our participation in the RMA BIPS.

We agree to abide by the Procedural Guidelines for BIPS in the event of being admitted into the System.

We would also comply with the technical and operational requirements of the BIPS.

We will ensure that adequate balance would be maintained in our account with Royal Monetary Authority of Bhutan for settlement of obligation relating to BIPS transaction.

We authorize the Royal Monetary Authority of Bhutan to debit our account maintained at Banking Department, RMA for all transaction relating to BIPS.

Yours faithfully,  
Signature:

Name:  
Designation of the authorized signature

**Form: RMA/BIPS&PG-2**

ReferenceNo:

Date:.....

.....  
.....  
.....  
.....

Dear Sir,

**Subject: Letter of Admission for participation of bank in RMA BIPS**

Kindly refer to your application no. ....  
dated.....requesting for participation in the RMA BIPS.

In this regard, RMA is pleased to inform that..... (name of the bank) has been admitted for participation in the RMA BIPS with effect from.....

As confirmed in your application, you are required to adhere to the Procedural Guidelines as well as comply with the technical and operational requirements as indicated in the Procedural Guidelines for BIPS.

Further, as authorised vide your letter no. .... dated ....., we will be debiting your current account maintained at Banking Department of Royal Monetary Authority of Bhutan for all transactions relating to your BIPS operations.

Yours faithfully,

Signature:

Name:

Designation of the authorized Signatory:

**Payment Gateway Merchant Registration Form: RMA / BIPS– II**

**Part A: To be filled in by the Merchant**

**Date:**

The Director,  
.....

Dear Sir,

We would like to register as a merchant in the Payment Gateway and details of the merchant are given below:

Name of the Merchant: .....

Mobile No. of the Merchant: .....

Merchant website URL: .....

Type of Service provided: commercial/ G2C

(If the services provided is commercial then the merchants to furnish a copy of the trade/business license issued by MoEA)

Technical/focal person details:

Name:.....

Email:.....

Mobile:.....

Office Telephone:.....

**Terms of Registration:**

1. I hereby accept to abide by the PG/BIPS regulation of RMA.
2. Transfer charges for the above funds, if any, may be debited to the above referred Account Number
3. I shall follow the specification provided by the RMA to integrate my merchant website to the Payment Gateway (specification will be emailed).
4. Should there be any changes in the information submitted, the merchants need to inform and update accordingly to RMA.

Signature: .....

Name of the Authorizer: .....

Full address: .....

Mobile No.:.....

**Part B: To be filled in by the Bank**

Current/Saving/ RGR Account No. of the Merchant (*verify from Bank with seal*):

.....

Bank address of the Merchant: .....

Merchant bank Account Number: .....

**Part C: To be filled in by the RMA**

Received merchant registration form from Mr/Ms.....at  
..... (time) on..... (date).

Authorized Signatory: .....

**Annexure III**

**Dispute Management for BIPS and PG**

**Processing of beneficiary time out as deemed successful**

For the successful transactions, remitting bank need not hold funds in its pooling account since such transactions are settled and deemed to have been credited to beneficiary’s account.

The beneficiary timed-out transactions will be considered as deemed successful transactions. Consequently, such transactions will be settled in the BIPS settlement process (In other words, the beneficiary bank will be credited and remitting bank debited for transactions that are timed out at beneficiary banks’ end as part of BIPS settlement process).



## **Processing of successful transaction with wrong beneficiary account number**

In any case if the remitting customers inform that the final beneficiary through the inserted bank account number is wrong then bank shall entertain the dispute within the time period of three days and request shall come from remitting bank to beneficiary bank. The beneficiary bank shall investigate the transaction and credit the original beneficiary after getting consent from the customer whose account has been credited.

**Reconciliation Actions:** There will not be any change to existing BFS methodology of making available various reports to banks. The **response code too** will remain same. Beneficiary banks will have to reconcile the CBS data with settled transactions report of BIPS provided by RMA. It must be ensured that the reconciliation process is carried out immediately and the beneficiary's account is credited if the credit has not been completed online.

**Return process:** Beneficiary bank can return the funds to the remitting bank where beneficiary bank is not able to credit their customer's a/c due to wrong a/c no., a/c closed, etc. Beneficiary bank after verifying the BIPS report and CSB report shall return the funds through manual settlement by instructing RMA. The returns must be processed maximum within **T+3 day**.

### **Reconciliation Team:**

All BIPS member banks have to deploy separate resources for performing reconciliation on daily basis and raise manual adjustments, if needed. Banks are advised to handle the recon operations on all days irrespective of Sundays and other public holidays.

### **Operations Desk:**

Banks need to have operations desk to address other bank customer complaints and ad-hoc requirements.

## **Disputes in BIPS**

### **Reconciliation Actions**

<b>S. No</b>	<b>Scenario</b>	<b>Status</b>	<b>RMA proposed actions</b>	<b>Remitting Bank Actions</b>	<b>Remarks</b>
1	Beneficiary bank response timed out	Customer account is debited but response got timed out		Remitting bank can see the status of timed-out transaction and credit back the remitting customer	All transactions other than response code 00 shall be reversed by Remitting bank
2	Manual Settlement	On good faith	Settlement as per the instruction from member banks		Bank need to provide Debit instruction to PSSD, RMA to debit their account maintained with Banking Dept. RMA with official e-mail ID