ROYAL MONETARY AUTHORITY OF BHUTAN



Procedural Guideline for Bhutan Inter-Bank Real Time (BIRT) - Fund Transfer System 2022

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 Procedural Guideline for Global Interchange for Financial Transaction.

Acronyms

- 1. BI: Bank Interface
- 2. BITS: Batched Settlement Service
- 3. BFSC: Bhutan Financial System Code
- 4. BRN: Bank Rejection Number
- 5. BIRT Fund Transfer System: Bhutan Inter-Bank Real Time (BIRT) Fund Transfer System
- 6. CBR: Central Bank Rejection
- 7. EOD: End of the Day
- 8. GSS: GIFT Settlement Server
- 9. IC: Inward Credit Message
- 10. ICC: Inward Credit Confirmation Message
- 11. ICR: Inward Credit Rejection Message
- 12. MI: Messaging Interface
- 13. MRN: Message Reference Number
- 14. RTGS: Real Time Gross Settlement
- 15. SOD: Start of the Day
- 16. OD: Outward Debit Message
- 17. ODC: Outward Debit Confirmation Message
- 18. ODR: Outward Debit Rejection Message
- 19. UTN: Unique Transaction Number

SECTION I: PRELIMINARY

1. SHORT TITLE, COMMENCEMENT, AND APPLICATION

These Guidelines Shall:

- a) Be called Procedural Guideline for Bhutan Inter-Bank Real Time (BIRT) Fund Transfer 2022:
- b) Come into force with effect from February 2022.
- c) Apply to all participating banks in the Bhutan Inter-Bank Real Time (BIRT) Fund Transfer System.

2. RULES OF CONSTRUCTION

In these guidelines unless the context indicates otherwise, the singular shall include plural and the masculine gender shall include the feminine gender hereafter.

3. OBJECTIVE

The Objective of this guideline is to facilitate an efficient, secure, and seamless interbank fund transfer via BIRFT.

4. SUPERSESSION

This guideline shall supersede any Provisions, 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 guideline shall be amended by the authority based on the recommendation of the Management/department.

SECTION II: ENTRY CRITERIA

7. ELIGIBILITY

To be eligible to apply for admission to the Bhutan Inter-Bank Real Time (BIRT) – Fund Transfer System, an applicant shall be:

- a) Licensed Commercial Banks; and
- b) Any other financial service providers approved by the RMA.

8. PROCEDURE

- a) Eligible applicants may submit an expression of interest along with the BIRT Fund Transfer System admission checklist (Annexure 1: BIRT Fund Transfer System Admission Checklist) to the RMA;
- b) The RMA shall issue a conditional letter of admission to the applicant if all the preliminary conditions prescribed in (a) above are met;
- c) Upon successful technical integration of their system to the BIRT Fund Transfer System, based on the documentary evidence of completion such as UAT sign-off document, the RMA may issue the final letter of authorization (Annexure 2 which will be issued by the RMA) to go live.

9. COST

The cost of integration to the BIRT – Fund Transfer System shall be borne by the applicant unless otherwise approved by the RMA. The integration cost may include but not limited to the following:

- a) Hardware Cost;
- b) Bank Interface License Cost (BI);
- c) Annual Maintenance Cost; and
- d) Any additional cost depending on the customization/application required.

10. TYPES OF PAYMENT SERVICES

The RMA may allow access to all or one of the following payment services under BIRT – Fund Transfer System:

- a) **RTGS** (Real Time Gross Settlement): refers to a fund transfer system that allows instant transfer of large value funds above Nu.1 million. It provides transfer of individual payments on real time, both at customer and bank level. The transactions are settled by the RMA on a gross settlement basis;
- b) **BITS**: refers to a fund transfer system that allows transfer of retail small value funds below Nu. 1 million. The transactions are settled by the RMA in batches on a deferred

- net settlement basis. The receiving bank and the beneficiary shall receive credit every 30 minutes from the time of initiation;
- c) **BULK:** refers to a fund transfer system that enables transfer of funds to multiple beneficiaries from one single remitter account. The transactions are settled on a real time gross settlement basis at the RMA.

SECTION III: PROCESS FLOW

11. PARTICIPANTS

The participants in the BIRT – Fund Transfer System shall be the following:

- a) Sender/Originator
- b) Sending Bank
- c) RMA (Host)
- d) Beneficiary Bank
- e) Beneficiary

12. SETTLEMENT WINDOW

BIRT – Fund Transfer System will operate on all days except Sundays and National holidays. However, the RMA may at its discretion, change the operating hours for a particular day or for any period with prior notification.

#	Time	Settlement Window	EOD Cut Off Time
1	Summer Timing	Weekdays (10:00 AM - 4:00 PM)	4:30 PM
		Weekend (10:00 AM -12:00 PM)	12:30 PM
2	Winter Timing	Weekdays (10:00 AM – 3:00 PM)	3:30 PM
		Weekend (10:00 AM- 12:00 PM)	12:30 PM

13. PROCESS FLOW

The participating banks and the RMA shall follow the following process flow for transfer of funds from sending bank to beneficiary bank through the BIRT – Fund Transfer System: The RMA and participating bank shall perform SOD before 10 AM on all the BIRFT days;

a) Request for BIRT – Fund Transfer System transfer by a sender/originator

- (i) The sender, client of the sending bank shall fill in and submit the BIRT Fund Transfer System application form (designed by the sender bank) physically;
- (ii) Sending bank shall ensure that the customers are made aware of the rights and obligations of participants in the BIRT Funder Transfer System;

- (iii) A sending bank may reject a customer's request for fund transfer if the sender has no sufficient fund and if any one of the following beneficiary identifications are missing;
 - Name
 - Bank Account
 - Account Type
 - BFSC code
- (iv) The sending bank shall prominently display at its premises the cut-off timings up till which it shall receive the BIRT Fund Transfer System application forms from its customers for different payment types and the likely timings of the settlements by the RMA. Any payment instruction received after the cut-off time shall be included for the next available settlement either on the same BIRT Fund Transfer System Day or the next Day.

b) Data entry at the sending bank

A sending bank shall initiate an OD message as and when they receive the duly filled BIRT – Fund Transfer System application form, and arrange to send the message to the RMA within the prescribed cut off time upon verifying the following mandatory fields;

- (i) BFSC code of the beneficiary bank are correct;
- (ii) Value date and Transaction date are current and same.
- (iii) No special characters or symbols are input in the Account No field; and
- (iv) File types are as per the required specifications.

c) Processing & Transmission of message by the RMA

On receipt of the OD message from the sending bank, the RMA shall;

- (i) Auto generate and transmit ODC and IC messages to sending and beneficiary bank for successful transfer, simultaneously sent debit message to the sender;
- (ii) Auto Debit and Credit the banks settlement account maintained at the RMA; and
- (iii) Auto-generate and transmit CBR message to the sending bank for unsuccessful transfer.

d) Validation at the beneficiary bank

The beneficiary bank upon receiving the IC message shall acknowledge as follows:

- (i) For Successful transfer, transmit ICC message to the sending bank with simultaneous credit to the beneficiary's account of the recipient client of the beneficiary bank. The beneficiary entity shall ensure payment to the beneficiary is done instantly or latest before carrying out EOD; and
- (ii) For unsuccessful transfer transmit ICR message to the sending bank and the RMA. The transfer amount shall be auto-reversed in the bank's settlement account at the RMA.

- (iii) The sending bank may reinitiate the rejected transfer as a new OD message after cross verification.
- **e**) The RMA and participating banks will perform **EOD** on or before 10:00 PM on all the BIRT Fund Transfer System days.

SECTION IV: RIGHTS AND OBLIGATIONS OF PARTICIPANTS

14. ROYAL MONETARY AUTHORITY OF BHUTAN

The RMA as the operator and the host of the BIRT – Fund Transfer System shall be responsible for the overall functioning of the system and the following:

a) Operation and Maintenance

- (i) Perform SOD (Start of the Day) and EOD (End of the Day) on time and accordingly, inform the participating entity;
- (ii) Monitor and ensure all transactions including pending transactions unacknowledged by the participating banks are cleared before performing EOD every day;
- (iii) Execute and lead regular system maintenance of the BIRT Fund Transfer System on time and ensure that it is carried out after EOD has been performed by all the participating banks or on weekends for minimum service disruption;
- (iv) Perform Settlement Server time change with prior notification to the participating banks; and
- (v) Develop ways to enhance the services in context to improvement/enhancement in technology.

b) Interbank Settlement

The obligations of the banks arising from all the BIRT – Fund Transfer System are settled in the respective bank's settlement account maintained at the RMA. The RMA uses following basis of settlement for different types of payment service under BIRT – Fund Transfer System.

RTGS	BITS	BULK
Real Time Gross Settlement	Net Deferred batched settlement	Real Time Gross Settlement

15. PARTICIPATING BANKS

A participating bank who has been authorized to be member of the BIRT – Fund Transfer System shall be responsible to but not limited to the following:

a) Operation:

- Facilitate other entities to avail one or all types of payment services in the BIRT
 Fund Transfer System by ensuring that all necessary safety and security measures are complied with;
- (ii) Perform SOD (Start of the Day) and EOD (End of the Day) and subsequently inform the RMA and participating banks;
- (iii) Adopt Straight Through Processing (STP) mechanism on the BIRT Fund Transfer System to minimize manual interventions;
- (iv) Report to the RMA and the participating banks immediately of any failure in the network/system or service disruption;
- (v) Ensure that the interbank transfer facility through the BIRT Fund Transfer System is accessible to and from all the branches and extension offices if any;
- (vi) Seek prior approval from the RMA to make any changes in BIRT Fund Transfer System including integration to other payment channels such as Mobile Banking app etc.;
- (vii) Ensure that the settlement accounts are reconciled with the RMA and the other participating banks regularly;
- (viii) Institute adequate internal dispute handling procedures and mechanism in place to handle any disputes pertaining to BIRT Fund Transfer System transactions;
- (ix) Comply to Anti Money Laundering (AML) and Combating the Financing of Terrorism (CFT) Act 2018 and relevant regulations thereto to the extent prevalent; and
- (x) Comply to the Data Residency Policy for Payments Data 2021.

b) Settlement

- (i) Open and maintain mirror settlement accounts for easy settlement and reconciliation of accounts;
- (ii) The sending bank shall initiate debit message from their system immediately on debiting a senders account;
- (iii) The beneficiary bank shall credit the account of the beneficiary instantly or within 30 minutes for BITS transactions after generating the ICC message; and
- (iv) The beneficiary bank shall be held liable for any loss accruing from failing to provide credit to beneficiary after successfully transmitting the ICC message;
- (v) Notwithstanding above, if the beneficiary bank cannot credit the fund to the beneficiary within the stipulated time for in case, if it is not possible to credit the

funds to the beneficiary's account for any reason e.g., account does not exist, account frozen, dormant account etc. funds will be returned to the sending bank within one hour of the receipt of the payment by the beneficiary bank.

c) Reports

- (i) Maintain daily transaction reports including for successful, failed, entities on boarded, and other relevant data required by the RMA from time to time; and
- (ii) Submit correct reports on time to the RMA.

d) Security

- (i) Have a robust infrastructure in terms of applications, network, and hardware capable/scalable to perform transactions securely and efficiently;
- (ii) Have the primary infrastructure, business continuity plan, and disaster recovery (DR) sites;
- (iii) Shall execute regular maintenance of the BIRT Fund Transfer System during off hours and ensure that it is carried out after EOD has been performed by all the participating entities or on weekends for minimum service disruption; and
- (iv) Not cause any change in the BIRT Fund Transfer System which could substantially affect the structure or the operation of the system unless approved by the RMA.

e) Service Charges

- (i) Sending banks may levy minimum service charges that are prior approved by the RMA; and
- (ii) The beneficiary bank shall not claim service charge for passing on the credit to the customers.

16. CUSTOMER

- (i) Customer shall ensure that the account number, beneficiary name is correct and also ensure that the beneficiary account is active; and
- (ii) Customer shall ensure availability of funds in his/her account to transfer fund through BIRT Fund Transfer System.

SECTION V: DISPUTE HANDLING & REDRESSAL

17. DISPUTE HANDLING & REDRESSAL

- a) The RMA and participating banks shall resolve and settle adjustments of the BIRT Fund Transfer System transactions arising out of error or any other issues in the current financial year upon verification of reports and evidence based on the reports/documents;
- b) The RMA shall facilitate provision of reports and disputes that are within the five financial years from the current financial year; and
- c) Participating banks shall comply with Consumer Protection for Financial Services (CPFS) Rules and Regulations 2019 for any customer services.

SECTION VI: EXIT CRITERIA

18. WITHDRAWAL

- a) A Participating bank may, by giving a notice of one month in writing to the RMA may voluntarily withdraw from the BIRT Fund Transfer System;
- b) The withdrawal notice will come into effect from the date of receipt of notice by the RMA, the same will be communicated to the withdrawing entity;
- c) A participating bank shall discharge all its payment obligations arising out of fund transfers attributable to it, whether effected before or after the withdrawal became effective; and
- d) The RMA shall notify withdrawal of any entity from the BIRT Fund Transfer System to other participating banks.

SECTION VII: INDEMNIFICATION, CONFIDENTIALITY, AND PENALTY

20.INDEMNIFICATION

All participants in the BIRT – Fund Transfer System shall defend, indemnify, and protect themselves from all loss and liabilities, if any, except arising out of the following:

- a) Participating banks failure to perform its duties and responsibilities;
- b) Malfunctioning of participating banks equipment;
- c) Fraud or negligence on the part of a participants;
- d) Unauthorized access to BIRT Fund Transfer System; and
- a) Participating bank's software, hardware, or any other equipment violates copyright and patent laws.

21.CONFIDENTIALITY

Each participating bank shall treat BIRT – Fund Transfer System related documents strictly confidential and shall not disclose to third parties without prior written permission from the RMA.

22.PENALITY

Violation of any provisions under this Procedural Guideline shall be dealt as per RMA's Penalty Rules and Regulations 2019 and amendments thereto.

23.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 2019.

- a) "Authority" means the Royal Monetary Authority of Bhutan as defined by the Royal Monetary Authority Act of Bhutan 2010;
- b) "Batched Settlement" means a net settlement mechanism which settles on a net basis at the end of a predefined settlement cycle.
- c) "Beneficiary" means recipient client of the beneficiary bank who is the ultimate beneficiary of the fund transferred through BIRT Fund Transfer System;
- d) "Beneficiary bank" means a bank who receives the fund from the sending bank on behalf of the Client;
- e) "BFSC" means Bhutan Financial System Code which is a unique code generated by BIRT Fund Transfer System (by the RMA) and assigned to the participating banks;
- f) "EOD" means End of the Day for BIRT Fund Transfer System messages;
- g) "BIRT Fund Transfer System" means Bhutan Inter-Bank Real Time (BIRT) Fund Transfer System, is a system set up by the RMA to facilitate real time interbank fund transfer;
- h) "BIRT Fund Transfer System Days" means the days when BIRT-Fund Transfer System is up for real time inter-bank fund transfer;
- i) "Net Deferred Settlement" means a net settlement mechanism which settles on a net basis at the end of a predefined settlement cycle;
- j) "Participating Bank" means banks authorized by the RMA to participate in the BIRT Fund Transfer System;
- k) "Sender" means the client of the sending bank initiating to transfer fund through BIRT Fund Transfer System;
- 1) **"Sending Bank"** means the bank who initiates the BIRT Fund Transfer System transaction; and
- m) "Settlement Account" means an account maintained by participating banks at the RMA for settlement of payment obligations arising on account of BIRT Fund Transfer System transactions.
- n) "SOD" means Start of the Day to facilitate BIRT Fund Transfer System messages;
- o) "Settlement Window" means the period during the day when BIRT Fund Transfer System messages can be initiated and acknowledged by the participating banks;
- p) "Gross settlement system" mean the settlement of transfer instructions or other obligations individually on a transaction-by-transaction basis for full value.

- q) "Net settlement system" means a funds or securities settlement system in which final settlement of transfer instructions occurs on a net basis at one or more discrete, pre-specified times during the processing day.
- r) **Straight through processing (STP)** mean the automated end-to-end processing of trades and/or payment transfers, including the automated completion of confirmation, matching, generation, clearing and settlement of instructions, without the need for re-keying or reformatting data.

Annexure I

Bhutan Inter Bank Real Time (BIRT) – Fund Transfer System Checklist

A bank desirous of joining BIRT – Fund Transfer System shall ensure but not limited to the following:

#	Particulars	
1	Core Banking System (CBS) – application and server	
2	Implementation for Straight Through Process (STP) enabled/CBS adapter	
4	Hardware (servers for production, production standby and UAT as per RMA recommended specifications)	
5	Point to Point connectivity with the RMA	

Conditional Letter of Admission

FORM A: RMA/BIRT- Fund Transfer System				
To The				
Subject: Conditional Letter of Admission.				
Dear Sir/Ma'am,				
The RMA is pleased to grant the Conditional Letter of Admission to (Name of the Applicant Bank).				
With this conditional letter of admission, the RMA approves the bank to carry out technical integration to the BIRT – Fund Transfer System hosted at the RMA only and will not be permitted to GO-LIVE. The applicant bank shall apply to the RMA with the documentary evidence upon successful technical integration for final authorization for admission.				
Yours sincerely,				
Signature				
Name: Designation of the authorized Signatory				

Annexure II

Date:				
Date.				
То				
The				
Subject: Authorization for admission to BIRT – Fund Transfer System.				
Dear Sir,				
The RMA is pleased to inform you that				
Yours sincerely,				
Signature				
Name:				
Designation of the authorized Signatory				

Bhutan Inter-Bank Real Time (BIRT) – Fund Transfer System Form

A sample of BIRFT form should include all the fields mentioned below. However, the participating entity can customize the BIRT – Fund Transfer System form accordingly.

Part A: Remitter Customer Details	Part B: Beneficiary Customer Details
Section 1 - Mode: Account or Cash	Beneficiary Customer name:
a) If cash go to Section 4	
Section 2: Account Type	Beneficiary Mobile Number:
1. Saving	
2. Current	
3. Overdraft	
4. Loan	
Section 3:	Name of the Bank:
Remitter Account No:	
Section 4:	
Remitter Name:	Branch Name:
CID/Work Permit No.:	
	BFSC Code:
Remitter Mobile Number:	Beneficiary Account No:
Amount to be remitted:	Account Type:
	1. Saving
	2. Current
	3. Overdraft
	4. Loan
Charges:	