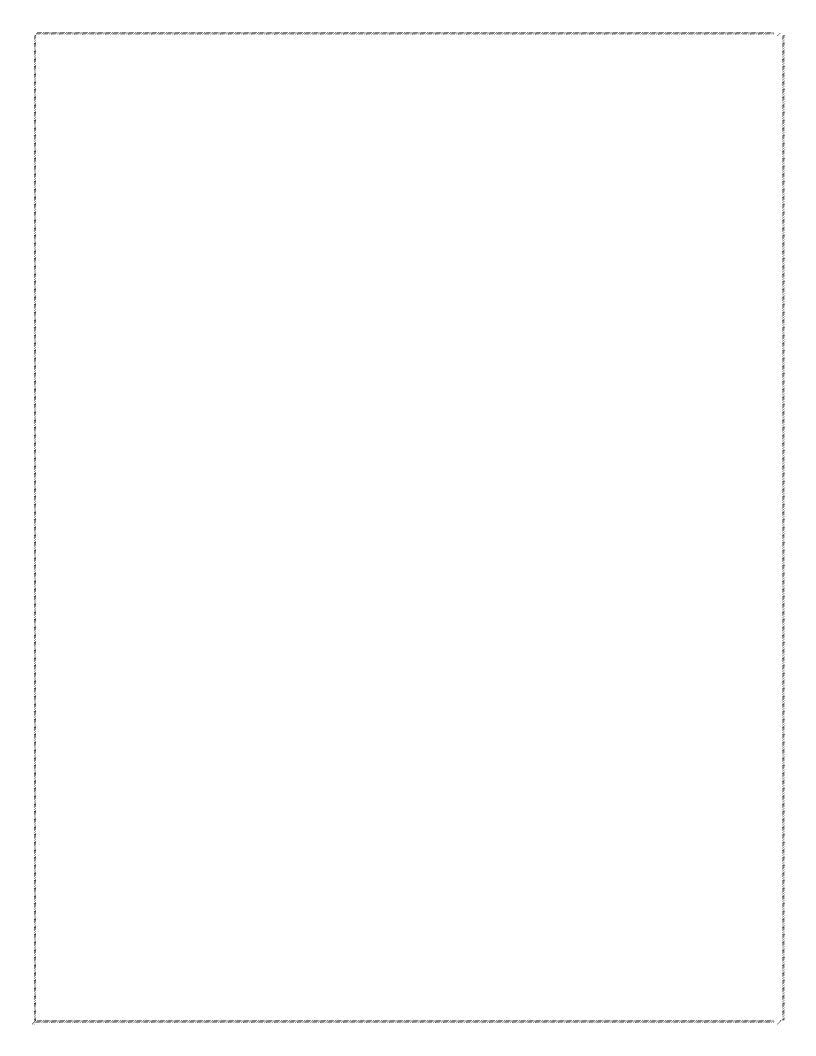


# Quarterly Payment System Report Q4, 2022 (October–December)

**Department of Payment and Settlement Systems.** 



#### **PREFACE**

We are delighted to share the quarter 4, 2022 report. The report highlights the outlook of digital payment channels – in terms of volume, value, usage, and users observed in the first quarter (October 2022 – December 2022). The report also shows the performance in comparison to the same quarter of the previous year (Q4, 2021).

For easy reference, the report has been categorized as –

- 1) Domestic payment transactions
- 2) Regional payment transactions and
- 3) International payment transactions.

We would like to thank all our contributors for submitting the report on time.

### PAYMENT TRANSACTIONS AT A GLANCE (Q4, 2022)

# VOLUME & VALUE OF DOMESTIC PAYMENT TRANSACTIONS -2022 Q4 IN FOCUS



Mobile & Internet Banking

37.61 million transactions amounting to
Nu. 120.11 billion
Both volume and value 1



**QR Code Payments** 

19.90 million transactions amounting to Nu. 18.40 billion

Both volume and value



Wallets

2.05 million transactions amounting to

Nu. 585.64 million

Both volume and value

Domestic Payment Gateway

833.67 thousand transactions amounting to Nu. 370.88 million
Both volume and value

## VOLUME & VALUE OF DOMESTIC PAYMENT TRANSACTIONS -2022 Q4 IN FOCUS



Electronic Fund Transfer

**72.89** thousand transactions amounting to

Nu. 22.78 billion

Volume 1

Value



Card – ATM & POS

**0.62** million transactions amounting to

Nu. 3.28 billion
Both volume and value

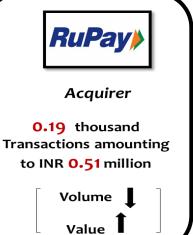


### Cheque

123.56 thousand transactions amounting to Nu. 48.57 billion

Both volume and value

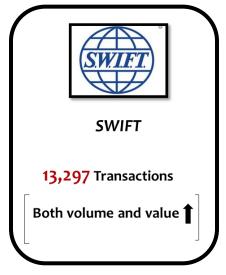
# VOLUME & VALUE OF CROSS – BORDER PAYMENT TRANSACTIONS – 2022 Q4 IN FOCUS





Issuer

8.80 thousand
Transactions amounting
to INR 40.22 million
Both volume and value





#### **SUMMARY**

The payment transactions in Table 1 report the total transactions made through various digital payment channels operated by the RMA and the 6 banks at the domestic, regional (India), and international levels from October to December 2022. It also shows the comparison of these transactions with the same quarter of the previous year, Q4 2021.

Table 1: Payment Transaction Comparison – Q4 2021 and Q4 2022.

Instrument	Q4, 2021		Q4,2022		% Change	
	Volume	Value	Volume	Value	Volume	Value
	(thousands)	(millions)	(thousands)	(millions)	(thousands)	(millions)
Paper-Cheques	113.99	40,481.22	123.56	48,570.69	8.40%	19.98%
Mobile & Internet Banking	33,015.54	105,439.93	37,611.96	120,112.99	13.92%	13.92%
QR Code Payments	13,327.42	12,633.08	19,895.21	18,402.39	49.28%	45.67%
Payment Gateway	831.88	264.71	833.67	370.88	0.21%	40.11%
Wallets	1,055.36	368.18	2,049.76	585.64	94.22%	59.06%
Electronic Fund Transfer	68.42	35,870.00	72.89	22,776.24	6.54%	-36.50%
ATM	823.68	3,436.78	609.02	3,082.47	-26.06%	-10.31%
PoS	0.29	1.66	7.41	194.82	2445.02%	11647.89%
Domestic Payment	49,236.57	198,495.56	61,203.48	214,096.14	24.30%	7.86%
RuPay ATM & PoS Acquiring	0.21	0.49	0.19	0.51	-9.13%	2.45%
RuPay ATM & PoS Issuing	3.46	12.60	8.80	40.22	154.20%	219.07%
Regional Payment	3.67	13.10	8.99	40.72	144.95%	210.91%
SWIFT -Inflow	9.28	87.09	13.30	267.04	43.35%	206.63%
SWIFT -Outflow		215.38		263.99		22.57%
International Payment Gateway (IPG)	1.02	2.08	1.81	11.98	77.70%	475.57%
International Payments	10.29	304.55	15.11	543.00	46.75%	78.30%

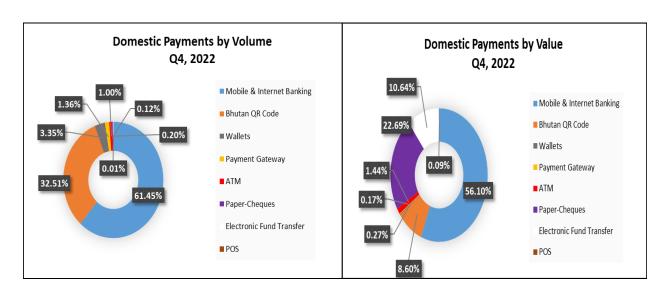
As compared to the fourth quarter of 2021:

- Domestic payments saw an overall increase of 24.30% by volume and 7.86% by value.
- Regional payments saw an overall increase of 144.95% by volume and 210.07% by value. This increase is mainly because of the increase in RuPay issuing transactions.
- International payments saw an overall increase of 46.75% by volume and 78.30% by value. The SWIFT transactions are the transactions that are carried out at the bank level and don't include RMA transactions.

#### DOMESTIC PAYMENTS

**Domestic payments** recorded 61.20 million transactions comprising intra and interbank domestic transactions worth **Nu.214.10 billion** during the 4<sup>th</sup> quarter, of 2022. There is an increase of 24.30% by volume and 7.86% by value as compared to the fourth quarter of 2021. The increase in both volume and value of the domestic payments in the fourth quarter of 2022, is mainly contributed by an increase in the transactions of PoS, wallets, and QR code payments.

The PoS transactions saw an increase of 2445.02% by volume and 11647.89% by value amounting to Nu. 193.16 million. The wallet transaction saw an increase of 94.22% by volume and 59.06% by value amounting to Nu. 217.46 million. The QR Code payments saw an increase of 49.28% by volume and 45.67% by value amounting to Nu. 5.77 billion.



Pie chart 1: Domestic Payment Transaction - Q4, 2022.

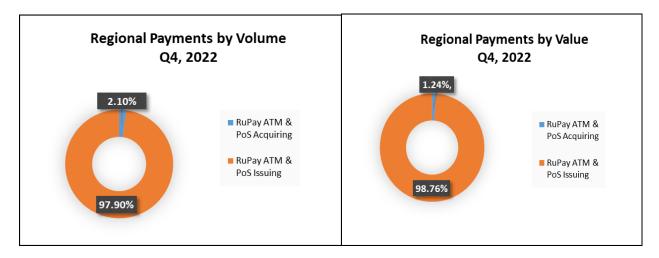
In Q4 2022, mobile and internet banking dominated the domestic payment space followed by QR code payment in terms of volume and terms of value, it is followed by paper cheques and electronic fund transfers.

Although mobile banking and QR code payments are one channel, it is segregated because it is independently integrated with separate settlement accounts. The share percentage of QR payments is increasing more than other channels including mobile banking over the years.

#### REGIONAL PAYMENTS

**Regional payments** include RuPay card transactions through the ATM and PoS terminals in India and Bhutan. During the 4<sup>th</sup> quarter of 2022, a total of **8,992** regional payments amounting to **Nu. 40.72 million** were transacted. However, the RuPay ATM & PoS **Acquiring transactions** are **much less than** the RuPay ATM & PoS **Issuing transactions**.

Pie chart 2: Regional Payment Transaction - Q4, 2022.

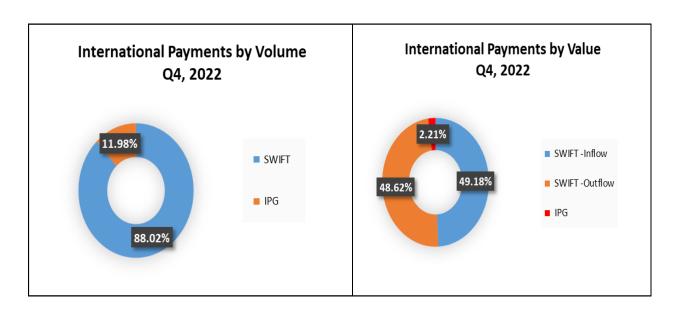


#### INTERNATIONAL PAYMENTS

**International payments** contain the SWIFT and International Payment Gateway (IPG) transactions made from the banks. During the 4<sup>th</sup> quarter of 2022, international payments recorded 15,106 transactions of **543 million**. There is an increase of 46.75% by volume and 78.30% by value as compared to the same quarter of the previous year.

The IPG recorded 1,809 transactions while the SWIFT recorded a total of 13,297 transactions.

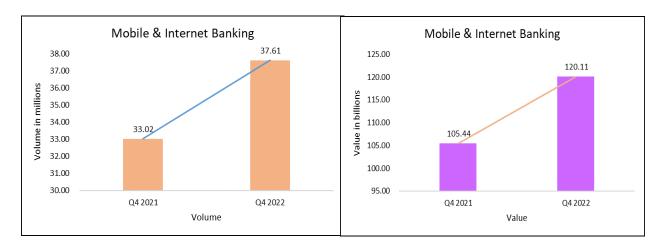
Pie chart 3: International Payment Transaction - Q4, 2022.



# DOMESTIC PAYMENT TRANSACTIONS (Q4, 2022)

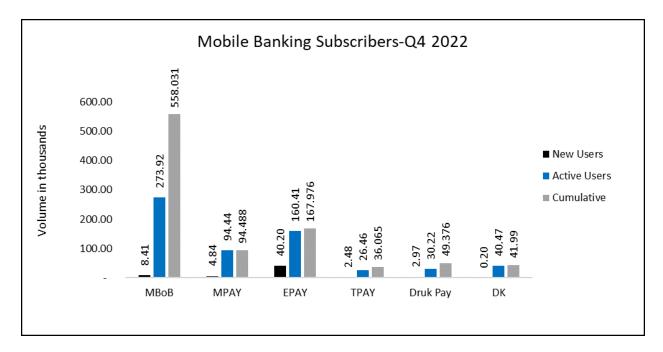
#### a) Mobile and Internet Banking

Graph 1: Mobile and Internet Banking Transaction (Volume & Value -Q4, 2021 and Q4, 2022)



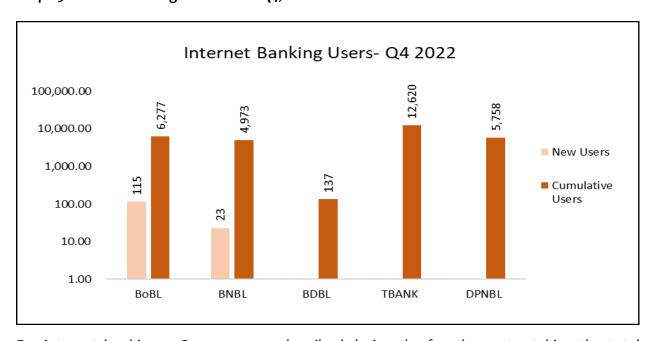
During the 4<sup>th</sup> quarter of 2022, **37.61 million** transactions worth **Nu. 120.11 billion** were processed through the bank's mobile banking app (direct fund transfer) and internet banking. Compared to the same quarter of the previous year, there is an increase of 13.92% in terms of volume and value. The average value per transaction is **Nu. 3,193.48** per transaction in 4<sup>th</sup> quarter 2022.

Graph 2: Mobile Banking Subscribers -Q4,2022



From October to December 2022, **59.10 thousand** new users subscribed to use the mobile banking apps making the active number of mobile banking subscribers **625.905** during the reporting quarter. The detailed bank-wise subscription during the 4<sup>th</sup> quarter, of 2022 is shown above in the graph.

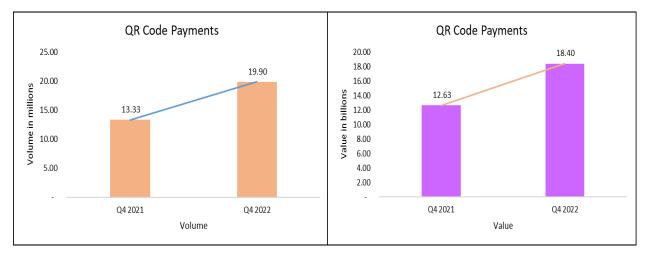
Graph 3: Internet Banking Subscribers -Q4,2022



For internet banking, 138 new users subscribed during the fourth quarter taking the total internet banking users to 29,765 as of the fourth quarter of 2022.

### b) Mobile Banking – QR Code Payments

Graph 4: QR Code Payments (Volume & Value -Q4, 2021 and Q4,2022)



QR code payments saw a total of **19.90 million** transactions of value **18.40 billion** during the 4<sup>th</sup> quarter of 2022, equivalent to 52.90% of the mobile banking transactions in terms of volume and 15.32% in terms of value. The transactions have increased by 49.28% by volume and 45.67% by value compared to the same quarter of the previous year.

The increase is because of the launch of Bhutan QR by the RMA in July 2021, enabling the interoperable use of common codes issued by member banks. Since then, QR scan codes have been gaining popularity in shops, restaurants, cafes, and even taxis as they are contactless, touchless, and easy to use.

Bhutan QR Code Merchant Registration 15,625 3,125 625 125 25 5 1 Wateduezhodrans Trashivandise Trashigang Inventse Santse Monear **Tsirane** Trongsa Dagana Q4 2021 -**Q**4 2022

Graph 5: QR Code Merchant registration (Dzongkhag wise) -Q4, 2021 & Q4, 2022

During the 4<sup>th</sup> quarter of 2022, the banks have onboarded **10,395** new QR code merchants, taking the total QR issued till now to 64,656, an increase of **19.16**% compared to the total merchant registration in the 3<sup>rd</sup> quarter of 2022. If we compare it to the same quarter of the previous year, there is an increase of 107.11% in the Bhutan QR code merchant registration which is equivalent to 5,376 merchants.

A drastic increase was seen in Gasa Dzongkhag with 92.48%. They registered 10 QR Code merchants in the fourth quarter of 2021 but it has increased to 133 in the same quarter of 2022. This is followed by Trongsa Dzongkhag and Tashiyangtse Dzongkhag with 78.77% and 77.94% increase respectively.

The highest issuance is still in Thimphu Dzongkhag with 4,143 new registrations as shown above in graph 5, owing to the maximum merchant base.

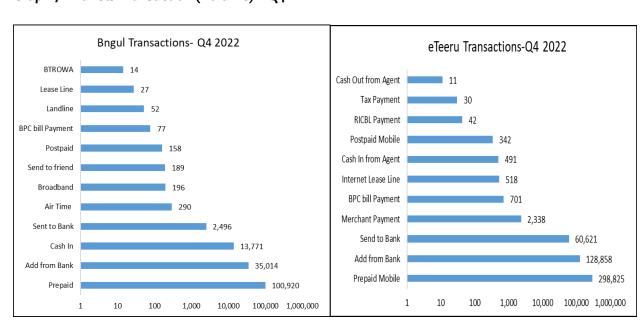
#### c) Wallets

As of the fourth quarter,2022 Bhutan Telecom has onboarded **10** Bngul merchants with **95,230** users, Tashi Cell has onboarded **58,263** merchants for eTeeru with **89,943 users** and BOBL has registered **154,363** goBoB users.

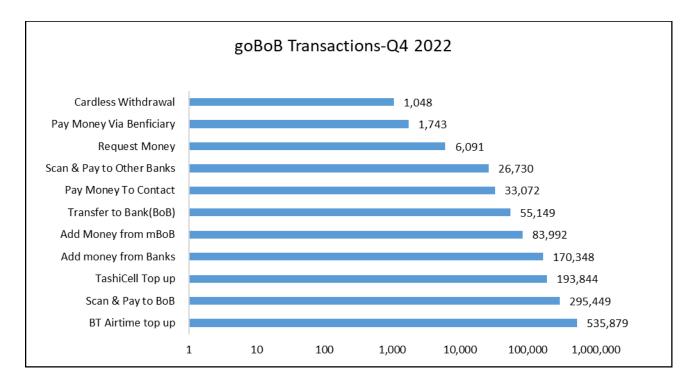
Wallets Transactions Wallets Transactons 2,500.00 700.00 585.64 2,049.76 600.00 2,000.00 Volume in thousands 500.00 Value in millions 1,500.00 368.18 400.00 1,055.36 300.00 1,000.00 200.00 500.00 100.00 Q4 2022 Q4 2021 Q4 2022 Q4 2021 Volume Value

Graph 6: Wallets Transaction (Volume & Value -Q4 2021 and Q4 2022)

A total of **2,049.76 thousand** transactions worth **Nu. 585.64 million** were transacted through the wallets during the 4<sup>th</sup> quarter of 2022. Wallet transactions have greatly increased by 94.22% and 59.06% by volume and value respectively as compared to the same quarter of the previous year. This could be due to the addition of goBoB as one of the wallet service providers since November 2021 as well as due to the bonuses declared during festive days.



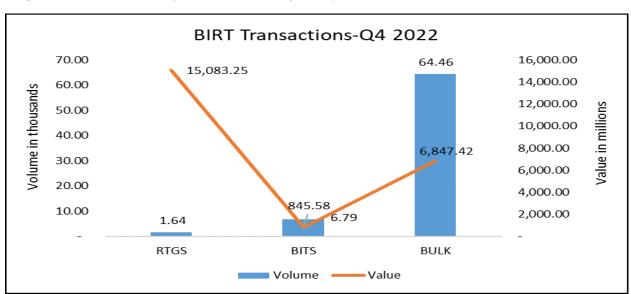
Graph 7: Wallets Transaction (Volume) - Q4 2022



Most wallet transactions are observed to be done for availing telco services like recharges, followed by fund transfers and merchant payments. The goBoB transactions dominate the wallet transaction due to the easy interoperability with another wallet account, mobile numbers of both telcos, and most importantly bank accounts provided by BoBL may be the factor for such diverse usage.

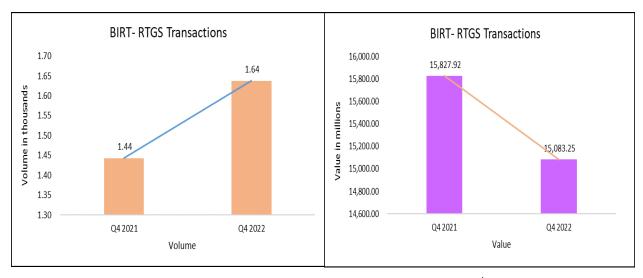
### d) Electronic Fund Transfer – BIRT Fund Transfer System

During the 4<sup>th</sup> quarter of 2022, **72,890** transactions amounting to **Nu. 22.78 billion** were transacted through BIRT Fund Transfer System. The total BIRT transactions in the 4<sup>th</sup> quarter of 2022 have increased by 6.54% by volume but the value has decreased by 36.50% as compared to the same quarter of the previous year. The maximum transactions were received in the BULK settlement in terms of volume and RTGS in value, as shown below.



Graph 8: BIRT Transaction (Volume & Value -Q4 2022)





**BIRT RTGS** allows real-time fund transfers above Nu. 1m. During the 4<sup>th</sup> quarter of 2022, 1,638 transactions worth Nu.15.08 billion were transacted which is an increase in the volume by 13.51% and a decrease of 4.70% by value as compared to the same quarter of the previous year.

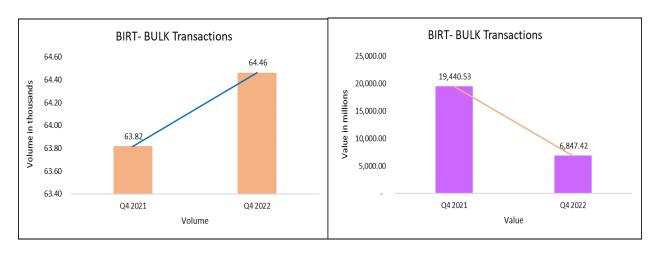
### e) Domestic Payment Gateway

Graph 10: BIRT-BITS Transaction (Volume & Value -Q4 2021 and Q4 2022)



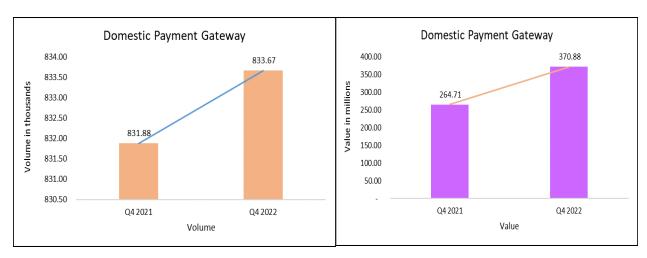
BIRT BITS permits the users to transfer funds below Nu. 1m in the batch settlement (10 transactions in a batch) every 30 minutes. There were 6,789 transactions worth Nu. 845.58 million transacted in the 4<sup>th</sup> quarter of 2022. There is an increase of 115.25% by volume and 40.57% by value as compared to the same quarter of the previous year.

Graph 11: BIRT-BULK Transaction (Volume & Value -Q4 2021 and Q4 2022)



Likewise, **BIRT BULK** allows single debit and multiple credits for the users. In the 4<sup>th</sup> quarter of 2022, there were **64,463** BULK transactions amounting to **Nu. 6.85 billion**. It is an increase in terms of volume by 1.01% and a decrease in value by 64.78% as compared to the same quarter of the previous year.

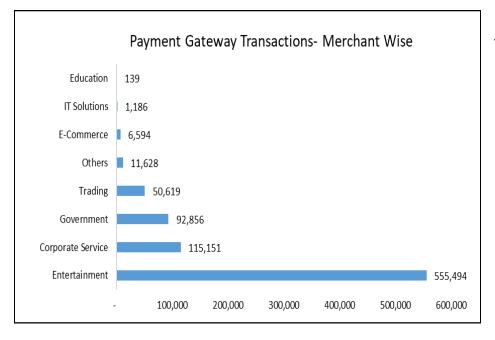
Graph 12: Payment Gateway Transaction (Volume & Value -Q4 2021 and Q4 2022)



A domestic Payment gateway is a merchant service provided by RMA for direct payment processing for e-commerce, government services, and e-corporate utilities. During this quarter, 833,667 transactions amounting to Nu.370.88 million were transacted. In comparison to the same quarter of the previous year, there is an increase both in terms of volume and value by 0.21% and 40.11% respectively.

The highest domestic PG transactions in the fourth quarter of 2022 were recorded in the entertainment category followed by government services -G2C Payment aggregator and then e-corporate utility services.

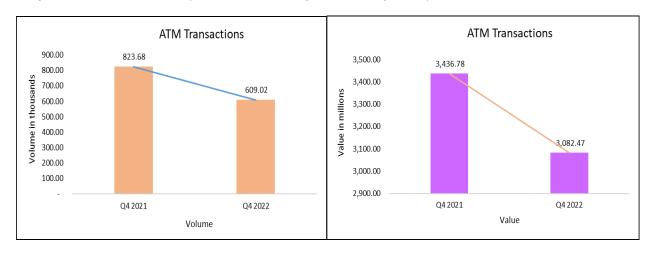
Graph 13: Domestic PG Transactions- Merchants Wise -Q4 2022



There are a total of 89 registered merchants in the domestic PG portal December of 2022, out of which 58 merchants are active while the services are blocked for 28 merchants, and 3 are under the testing phase.

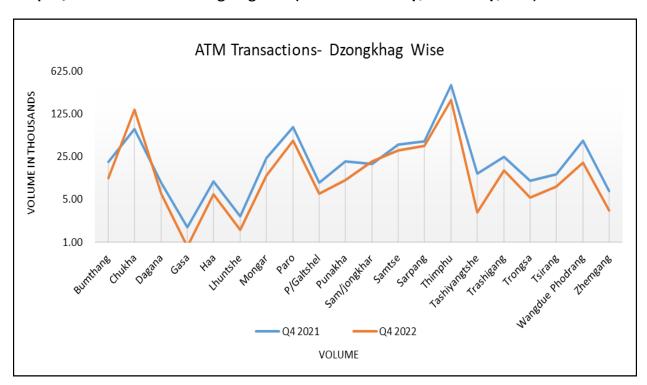
#### f) Cards – ATM

Graph 14: ATM Transaction (Volume & Value -Q4 2021 and Q4 2022)



Card payments refer to cash withdrawals/transactions from ATM terminals in the country using domestic ATM cards. In the 4<sup>th</sup> quarter of 2022, a total of **0.61 million** transactions worth **Nu.3.08 billion** were transacted. Unlike other payment instruments, we are observing decreasing trend for card payments every quarter. In terms of volume, there is a decrease of 26.06% and in terms of value, there is a decrease of 10.31% as compared to the same quarter of the previous year.

Graph 15: ATM Transaction Dzongkhag Wise (Volume & Value -Q4 2021 and Q4 2022)



In the 4<sup>th</sup> quarter of 2022, there is a drastic decline in ATM transactions in all the Dzongkhags except Chukha and Samdrup Jongkhar Dzongkhag as compared to the same quarter of the previous year. The maximum decrease was seen in Trashiyangtse Dzongkhag with 76.77% followed by Wangdue Phodrang and Gasa Dzongkhag with 56.40% and 51.69% respectively in terms of volume. In terms of value, the maximum decrease was seen in Trashiyangtse Dzongkhag with 75.86% followed by Zhemgang Dzongkhag and Punakha Dzongkhag with 46.57% and 43.44% respectively.

Point of Sale (PoS)Transactions Point of Sale (PoS) Transactions 8.00 7.41 250.00 7.00 194.82 200.00 /alue in millions 5.00 150.00 4.00 100.00 3.00 2.00 50.00 1.00 1.66 Q4 2022 04 2021 Q4 2022 Q4 2021

Graph 16: PoS Transaction (Volume & Value -Q4 2021 and Q4 2022)

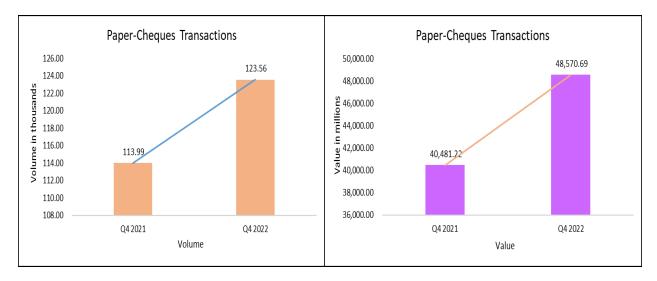
Volume

The domestic PoS transactions have recorded **7,406** transactions of value **Nu.194.82 million** during the fourth quarter of 2022. There is a drastic increase of 2445.02% in terms of volume and 11647.89% in terms of value as compared to the same quarter the previous year.

Value

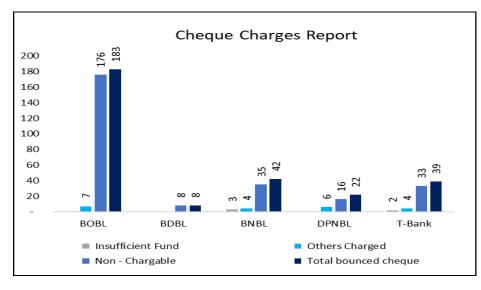
#### g) Paper Cheque

Graph 17: Paper Cheque Transaction (Volume & Value -Q4 2021 and Q4 2022)



Cheque payments are still observed to be used for making large-value payments in the country. A total of **123,563** cheques worth **Nu. 48.57 billion** was recorded in the 4<sup>th</sup> quarter of 2022. There was an increase of 8.40% in volume and 19.98% in value as compared to the same quarter of the previous year.

Graph 18: Bounced cheque report -Q4 2022



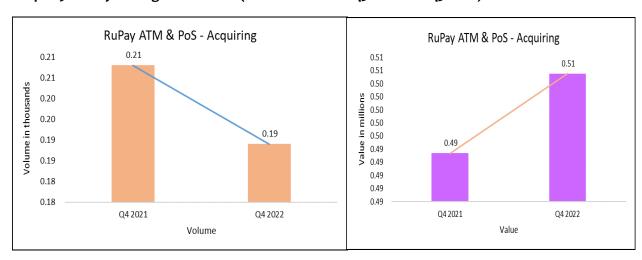
During 4<sup>th</sup> the quarter, a total of 294 cheques were bounced out of which, 5 cheques were charged to the customer for their insufficient balance and 21 cheques were charged to the banks for their failure to do the due diligence.

The maximum number of cheques were returned because of the invalid account number, cheques belonging to a different account, endorsement missing, drawers signing differently, etc. RMA has instituted to charge Nu.300 plus 10% of the cheque value for the insufficient balance to stop the cheque returned due to insufficient balance and associated illicit activities around it and Nu.100 to the banks for failure to do their due diligence.

### REGIONAL PAYMENT TRANSACTIONS (Q4,2022)

#### a) RuPay Acquiring

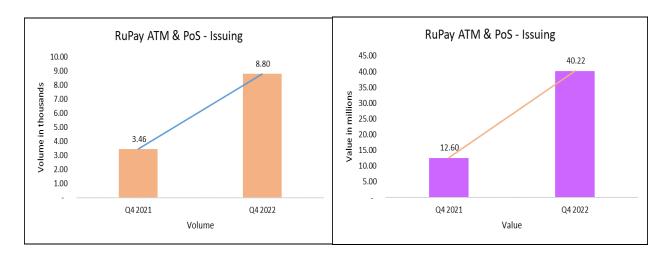
Graph 19: RuPay Issuing Transaction (Volume & Value -Q3 2021 and Q3 2022)



RuPay Acquiring allows Indian nationals to withdraw cash and make payments through all Bhutan ATMs and PoS terminals. During the 4<sup>th</sup> quarter of 2022, it recorded **189** transactions worth **Nu. 0.51 million**, a decrease of 9.13% by volume and 2.45% by value as compared to the same quarter of the previous year.

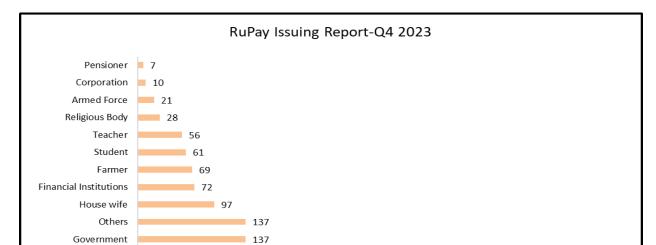
### b) RuPay Issuing

Graph 19: RuPay Issuing Transaction (Volume & Value -Q4 2021 and Q4 2022)



RuPay Issuing launched in November 2020, allows Bhutanese nationals to withdraw cash and make payments through all the ATM and PoS terminals in India. Currently, Bhutan National Bank Ltd. is the only issuing bank in Bhutan.

During the 4<sup>th</sup> quarter of 2022, **8,803** transactions worth **Rs. 40.22 million** were recorded. There was a drastic increase of 154.20% by volume and 219.07% by value as compared to the same quarter of the previous year.



Graph 20: RuPay Card Issuance (BNBL) -Q4,2022

Labor

100

Private/Individuals

During the fourth quarter of 2022, a total of **1,427** cards were issued. The highest issuance was to private firms and individuals with 562 cards followed by laborers with 170 cards. The minimum card issuance was to pensioners with 15 cards.

300

400

500

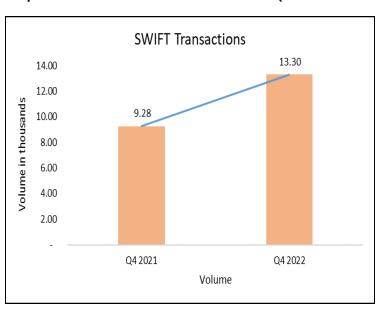
600

200

### INTERNATIONAL PAYMENT TRANSACTIONS (Q4,2022)

#### a) SWIFT Transactions through the banks

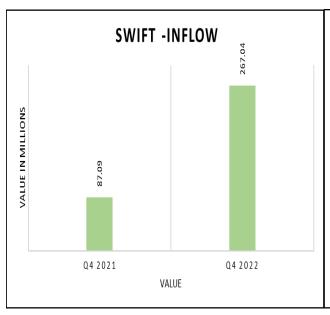
Graph 21: Member Bank SWIFT Transaction (Volume & Value -Q4 2021 and Q4 2022)

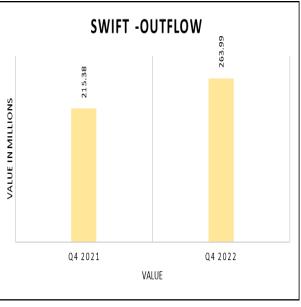


In this quarter, the SWIFT transactions have recorded 13,297 transactions which is an increase of 43.35% by volume as compared to the same quarter of the previous year.

The highest transacted currency is US Dollar with 9,563 transactions followed by Australian Dollar with 2,330 transactions and EURO with 689 transactions.

During the fourth quarter of 2022, in terms of value, the SWIFT inflow has increased by 206.63% and the SWIFT outflow has increased by 22.57% as compared to the same quarter the previous year.





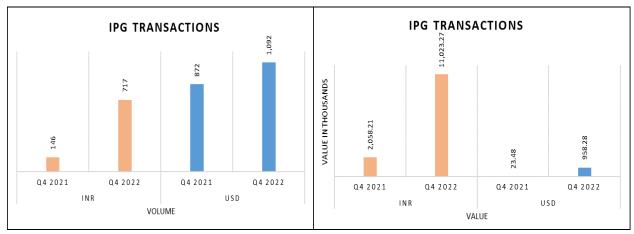
#### b) International Payment Gateway (IPG)

The International Payment Gateway (IPG) is a platform to acquire card payments made in USD and INR. There was a total of USD **1,092** transactions of value \$958,279 and INR **717** transactions of value **11.98** million transacted in the fourth quarter of 2022.

**IPG Transactions IPG Transactions** 2.00 14.00 1.81 11.98 1.80 12.00 1.60 Volume in thousands in millions 10.00 1.40 1.20 8.00 1.02 6.00 0.80 0.60 4.00 2.08 0.40 2.00 0.20 Q4 2021 Q4 2022 Q4 2021 Q4 2022 Volume Value

Graph 22: IPG Transaction (Volume & Value -Q4 2021 and Q4 2022)

During the fourth quarter of 2022, 2 merchants registered in the International Payment Gateway Platform in BoBL and 17 merchants registered in the International Payment Gateway Platform in BNBL. The total IPG merchant stands at 292 for BoBL and 293 for BNBL. The IPG transactions saw a decrease of 29.89% by volume but an increase of 1064.25% by value as compared to the same quarter of the previous year.



In terms of INR, both the volume and value have increased by 391.10% and 640.45% respectively as compared to the same quarter the previous year.

In terms of USD, the volume has increased slightly by 25.23% and value by 3981.68% respectively as compared to the same quarter the previous year.