PAYMENT SYSTEMS OVERSIGHT REPORT

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Nepal Rastra Bank Payment Systems Department Baluwatar, Kathmandu



Foreword

Dear Valued Readers,

The digital disruption continues to transform financial services offering unprecedented form of digital solutions of payment which is playing pivotal role in reshaping socioeconomic dynamics across the globe. Nepal alike, the rapid developments supported by encouraging level of adoption of digital payments has contributed remarkable achievements in ensuring efficiency, convenience, and safety of payment systems. The faster payment systems and their cross-border integrations have underpinned new avenues for a more connected and inclusive global economy.

In Nepal, faster payment systems have emerged as a cornerstone of digital financial services, enabling instant, low-cost, and user-friendly transactions. These systems are fostering financial inclusion by making payments accessible to individuals and businesses in both urban and rural areas gradually reducing reliance on cash and physical infrastructure, creating opportunities for more targeted and equitable access to financial services.

Nepal Rastra Bank (NRB) remains committed to fostering a secure, efficient, and inclusive payment ecosystem. As per the mandate of the NRB Act, 2002, NRB has prioritized the development of resilient payment infrastructures, prudential regulatory frameworks, and the promotion of digital financial literacy to ensure that the benefits of digital payments reach all segments of society. NRB is actively playing its role of overseer, operator, policy-maker and catalyst in a balanced way.

This fifth edition of the **Payment System Oversight Report, 2023/24** provides a detailed account of Nepal's evolving payments landscape, the strategic initiatives undertaken to bolster responsible innovations, and the oversight activities aimed at resiliency and stability.

I would like to acknowledge the hard work and collaboration of the Payment Systems Department (PSD) team, including Director Laxmi Prasad Prasai, Deputy Director Sudha Shrestha, and Assistant Directors Rajesh Paneru and Sabin Shrestha. I believe, this report will be a valuable resource for stakeholders to further cooperation to build an inclusive, safe and robust payment ecosystem in Nepal.

Thank you,

Kiran Pandit

Acting Executive Director Payment Systems Department January 2025

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Acronyms and Abbreviations

Automated Clearance House
Anno Domini
Advanced Economies
Artificial Intelligence
Application Programming Interface
Automated Teller Machine
Banks and Financial Institutions
Buy-Now-Pay-Later
Bikram Sambat
Compound Annual Growth Rate
Central Bank Digital Currency
Customer Due Diligence
Chief Executive Officer
Committee on Payments and Market Infrastructures
Committee on Payment and Settlement Systems
Cyber Resilience Guidelines
Distributed Ledger Technology
Electronic Cheque Clearing
Emerging and Developing Economies
European Euro
Fiscal Year
GigaByte
UK Pound Sterling
Gross Domestic Product
General Ledger
Government of Nepal
Interbank Fund Transfer
Identity
Intraday Liquidity Facility
International Organization of Securities Commission
Internet-of-Things
Interbank Payment System

JPY	Japanese Yen
KYC	Know-Your-Customer
LIs	Licensed Institutions
LOI	Letter of Intent
Ltd.	Limited
ML	Machine Learning
NCHL	Nepal Clearing House Limited
NEPS	Nepal Electronic Payment System
NFC	Near-field Communication
No.	Number
NPR	Nepal's Rupee
NPS	National Payment Switch
NPSDS	Nepal Payment System Development Strategy
NRB	Nepal Rastra Bank
OLF	Overnight Liquidity Facility
PEP	Politically Exposed Person
PFMI	Principles of Financial Market Infrastructure
POS	Point of Sale
POT	Point of Transaction
PSD	Payment Systems Department
PSOs	Payment System Operators
PSPs	Payment Service Providers
P2P	Peer-to-Peer
Pvt.	Private
QR	Quick Response
RPS	Retail Payment Systems
RTGS	Real Time Gross Settlement
SCT	Smart Choice Technologies
SIPS	Systemically Important Payment System
SIS	Supervisory Information System
SME	Small and Medium Enterprises
USD	U.S. Dollar
4G/LTE	Long Term Evolution

1. Background

Payment and settlement systems contribute significantly to financial stability and economic growth by mitigating systemic and settlement risks, ensuring effective liquidity management, and facilitating the efficient transmission of monetary policy¹. Modern payment systems operate under a two-tier structure, combining the central bank's oversight with the operational capabilities of licensed banks and financial institutions (BFIs) and non-banking institutions.

In 2023, the global payments industry processed 3.4 trillion transactions, valued at USD 1.8 quadrillion². The pace of transition to modes of digital payments, however, varies across regions.

Digital transformation in the financial sector has immense potential to advance financial inclusion, particularly in emerging markets and developing economies (EMDEs), by overcoming geographical barriers and addressing information asymmetries in payment, credit, and other financial products³. Customer adoption of digital payment modes has surged, leading to a substantial growth in both physical and e-commerce transactions. According to PwC (2022), the global digital payments market is growing at an 11% compound annual growth rate (CAGR) and is projected to reach USD 9,073 billion by the end of 2025. Furthermore, global cashless payment volumes are expected to increase by over 80 percent from 2020 to 2025, rising from approximately 1 trillion transactions to nearly 1.9 trillion, and nearly tripling by 2030⁴. The Asia-Pacific region is leading this transformation, with cashless transaction volumes expected to grow by 109 percent from 2020 to 2025, followed by a projected 76 percent growth from 2025 to 2030. Other regions, including Africa, Europe, and Latin America, are also witnessing substantial growth, while the US and Canada are projected to have moderate growth.

¹ See. The World Bank Group (2020)

² See. McKinsey's Global Payments Report (2024)

³ See. Feyen, Natarajan, & Saal (2023)

⁴ See. https://www.businesswire.com/news/home/20220218005233/en/Global-Digital-Payment-Market-is-Expected-to-Grow-at-a-CAGR-of-over-20.5-During-2022-2030---Re-searchAndMarkets. com

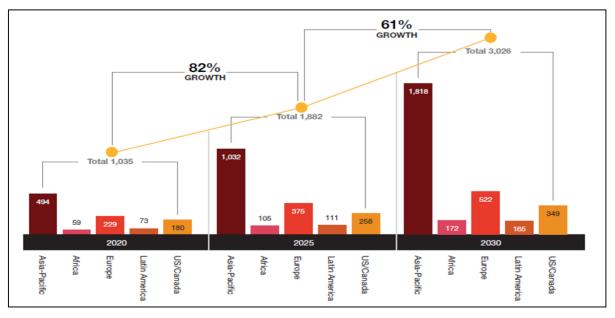


Figure 1: Actual and Projected Cashless Transactions in Global Space⁵

Source: PwC (2021)

The CPMI Red Book Statistics, 2023 has highlighted a continued rise in cashless transactions in 2022. As illustrated in Figure 2, First Panel, the total value of cashless payments per capita increased significantly. In advanced economies (AEs), the value rose from USD 426 to USD 468, representing a 10 percent increase. Similarly, in EMDEs, the value grew from USD 246 to USD 291, reflecting an 18 percent growth.

The growth in the value of cashless payments as a percentage of Gross Domestic Product (GDP) has mainly been driven by credit transfers. The volume of cashless payments has also increased sharply in 2022, driven mainly by card payments (Figure 2, Second Panel). The use of cheques has continued to decline globally, as they are replaced mainly by credit transfers. Cheque usage continued to decline in most regions, with AEs averaging five cheque payments per person in 2022, down from six in 2021. In EMDEs, where cheque use was already low, the average dropped to less than one. Overall, AEs conducted approximately twice as many cashless transactions as EMDEs. The value of cashless payments as a percentage of nominal GDP increased by 4 percent in AEs but decreased by 2 percent in EMDEs. Thus, this trend underscores the ongoing global shift towards cashless payment systems, driven by technological advancements and increased customer adoption, particularly in EMDEs, where the growth rate outpaces that of advanced economies.

⁵ The total cashless transactions for 2025 and 2030 are projections made by PwC (2021).

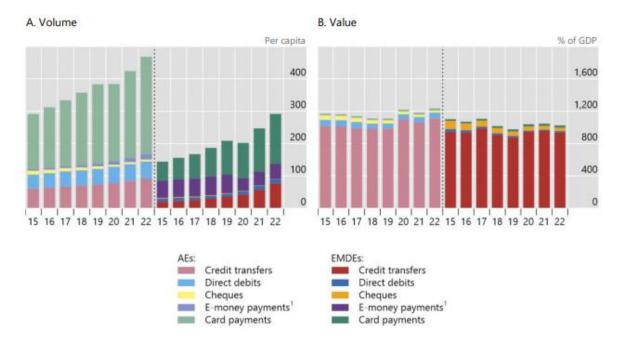


Figure 2: Growth Trends of Value and Volume of Cashless Payments

Source: CPMI (2024)

The upsurge in the global payments industry has been made possible by several factors, including open data frameworks, data privacy and consumer protection regulations, legal and regulatory frameworks, technical infrastructures for asset registries and invoices, tokenization, atomic settlements enabled by smart contracts, and other related services⁶. Smartphones have played a pivotal role in enhancing the payment experience and enabling real-time payments. Other financial infrastructures, such as Digital ID for real-time data exchange without compromising safety; open banking systems, sound credit information systems (automated registries and credit bureaus), secured-asset infrastructures for assets-based lending have also promoted the digital banking ecosystem.

PwC (2021) states that the remarkable uptrends in the payments industry, particularly in the Asian markets, are driven mainly by new business models and innovation. In addition to digital payments, digital lending is gaining traction, with fintech's applications offering credit through digital channels and employing data-driven underwriting and risk management. In 2020, global digital credit flow reached nearly USD 800 billion, with Big Tech lending platforms accounting for 70 percent of this volume⁶. Various digital lending products, including buy-now-pay-later (BNPL) solutions, peer-to-peer (P2P) lending, SME financing, receivables financing, stand-alone microloans, mobile network credit to mobile money agents and merchants, among others,

⁶ See. (Feyen, Natarajan, & Saal, Fintech and the Future of Finance: Market and Policy Implications, 2023)

are increasingly becoming popular in the digital banking landscape. Furthermore, innovations are centered around cross-border payments today. The G20 has ambitious targets in reducing costs, increasing speed and transparency, and providing wider access to payments by end-2027 and end-2030⁷. Many countries are exploring the implementation of Central Bank Digital Currencies (CBDCs) to promote innovation in payment products, including cross-border applications. CBDCs are expected to foster cashless payment innovations, ensuring transparency, speed, seamlessness, and cost-effectiveness in payment services.

However, the increased adoption of digital payments has given rise to concern about data privacy and cybersecurity. PwC (2022) highlights that data privacy and cybersecurity will be the top concerns for regulators over the next five years, followed by digital identity and authentication, cryptocurrencies, and Central Bank Digital Currencies (CBDCs). Regulatory authorities are making substantial investment to ensure a secure and efficient environment, with a specific focus on addressing issues related to algorithm biases, digital exclusion, digital privacy, and consumer protection.

Central Banks play a crucial role in balancing innovation and risk in payment systems. They ensure safety, efficiency, and strengthen the system's financial and technical aspects. Through oversight, they enhance the system's resilience, efficiency, and integrity by setting rules, monitoring, and enforcing standards. This also supports policies and initiatives for payment system modernization.⁸.

The "Payment System Oversight Report, 2023/24" provides information on the development of Nepal's payment systems and to elucidate oversight activities conducted by the Payment Systems Department (PSD) to ensure an efficient, safe, and healthy payment system in Nepal.

2. Nepal's Payment System

Nepal digital landscape has undergone exponential rise and adoption while the country shifted from the traditional, conventional and physical transactions to the technology-infused financial transformations. The 4G/LTE services now cover 741 of 753 local levels across 77 districts in Nepal⁹. The smartphone penetration rate stands at 72.94%, 15% have access to computers/laptops and 38% households have access to the internet services¹⁰. The cost of

⁷ See (BIS, 2024)

⁸ See. CPMI (2021)

⁹ See. NTA (2024)

¹⁰ See Nepal Census, 2021, available at https://censusnepal.cbs.gov.np/results/files/result-folder/National%20Report_English.pdf

connectivity has also dropped significantly from USD 2.25/GB in 2019 to USD 0.27/GB in 2024¹¹. The opportunities still exist for digital innovators as 50 percent adults from rural area and 40 percent adults from urban area still lack an account at a financial institution¹².

Since the COVID-19 pandemic, Nepal has seen significant advancements, particularly in the digital payments sector. The demand for the contactless transactions during the pandemic sped up the adoption of digital payment solution, making financial transactions easily accessible and secure. New payment instruments have evolved in the payment system, changing how people transact and bank. Such instruments are Quick Response (QR) codes, *connect*IPS (Faster Payment System), Cardless Withdrawal, Smart Point-of-Sale (POS), Contactless Cards based on Near-Field Communication (NFC) technology, Virtual Cards, Digital Lending. For Nepal, financial literacy plays the pivotal role in boosting the digital transactions. NRB formulated the Financial Literacy Framework 2020 for promoting financial literacy. Furthermore, NRB issued the Financial Literacy Guidelines (2022) and Financial Inclusion Policy (2024) to improve financial access and standardize financial literacy programs. The NRB's readiness in promoting digital transactions helped millions of small businesses switch to digital acceptance which enhanced their business.

Nepal has operationalized the Retail Payment Switch (RPS) for domestic retail transactions, with the National Payment Switch (NPS) under development. Launched in November 2021, RPS is the first phase of the NPS project. The second phase, the NEPAL PAY card, will handle all domestic card transactions and is expected to launch in December 2024. The final phase will route all domestic electronic transactions through the NPS. As physical banking evolves into phygital banking, Nepal is also gradually moving toward a full-fledged digital banking system.

NRB has setup Central Bank Digital Currency (CBDC) Division in Payment Systems Department (PSD) to further the consultations, dialogues, studies and development of CBDC. A concept report on "CBDC: Identifying Appropriate Policy Goals and Design for Nepal" was released for public consultation. With CBDC in place, payment-related innovations are expected to further flourish in Nepal. The CBDC is expected to work alongside current legal

¹¹ See. https://www.cable.co.uk/mobiles/worldwide-data-pricing/

¹² See. Nepal Financial Inclusion Report 2023, available at https://www.ifc.org/content/dam/ifc/doc/2023-delta/2023-nepal-financial-inclusion-report.pdf

tender and its gradual rollout will take into account the country's economic situation, technological readiness, regulatory environment, and public preferences.

Box 1: CBDC in Nepal

- Strategic Plan of NRB has envisioned to launch CBDC pilot by 2026.
- CBDC Division has been established under Payment Systems Department with dedicated IT and Policy personnel.
- Wholesale CBDC Prototype has been developed.

As digitalization starts penetrating the grassroots, cybersecurity and digital financial literacy become equally important. In this regard, NRB has issued Cyber Resilience Guidelines (CRG), 2023 targeting all licensed institutions (LIs) undertaking payment-related transactions. The CRG is a supplemental guideline to the overarching Principles of Financial Market Infrastructures (PFMI) regarding cyber resilience and is intended to increase the degree of cyber maturity of LIs by enhancing the capacity to carry out critical activities and recover from cyberattacks. NRB has further institutionalized Financial Inclusion and Consumer Protection Division under the Office of the Governor to systematically carry out financial literacy and consumer protection related activities. The division is undertaking digital financial literacy programmes by using the social media platform of NRB.

Recent incidences of smuggling and similar money laundering (ML) activities financed through digital platforms have raised concerns about the risks of ML, terrorism financing (TF), and proliferation financing (PF) associated with emerging payment methods. In response, the NRB has institutionalized **Money Laundering Prevention Division (MLPD)** to oversee risk-based supervision and monitoring of all banking and financial activities conducted by licensed BFIs, as well as payment system operators (PSOs) and payment service providers (PSPs). To further strengthen regulatory oversight and promote sound corporate governance, the NRB has mandated all licensed PSOs and PSPs to transition into public companies by mid-April, 2025. This transformation is expected to enhance governance practices and ensure greater accountability among non-banking entities driving payments innovations in Nepal.

Most transformations in Nepalese payments system are the direct outcomes of the National Payment Systems Development Strategy (NPSDS), 2014. The NPSDS was formulated to further develop a secure, healthy, and efficient payment system as mentioned in the NRB Act,

2002¹³. The achievements of strategies specified in the NPSDS have been presented below in

Box 2.

Box 2: Mapping of Achievements of Strategies Specified in NPSDS, 2014

The NPSDS, 2014 consists of 9 pillars, with several strategies planned for the development of the payment system in Nepal. In line with such strategies, the following developments have been made under each pillar:

Pillar 1: Legal Framework

- 2015: Established Payment Systems Department (PSD)
- 2016: Issued Licensing Policy for Payment related institutions/mechanism (Replaced with Licensing Policy for Payment-related Institution (First Amendment, 2024), 2023)
- 2019: Issued Payment and Settlement Act, 2019
- 2019: Issued Retail Payment Strategy, 2019
- 2019: Implemented RTGS System Rules, 2019
- 2020: Issued Payment and Settlement Bylaws (First Amendment 2023), 2020
- 2021: Issued Digital Lending Framework, 2021
- 2021: Issued NepalQR Standardization Framework and Guidelines, 2021

Pillar 2: Large and Critical Value Payments

• 2019: Implemented the Real Time Gross Settlement (RTGS) System

Pillar 3: Retail Payment System

• Implemented faster payment systems like cards, *connect*IPS, Fonepay Interbank Fund Settlement System (IBFT), etc. Other payment solutions like mobile banking, internet banking, QR codes, interbank payment system (IPS), payment gateway (ecommerce), point-of-sale (POS) have also been implemented.

Pillar 4: Government Payments

- Person-to-government (P2G) payments like Inland Revenue Department (IRD) tax payments and traffic penalties have been integrated in faster payment systems like *connect*IPS, e-wallets, etc.
- Government-to-person (G2P) payments like salary payments are routed through bank accounts.
- G2P payments like pension, gratuity, etc. through e-wallets are being explored.

Pillar 5: Securities Depository, Clearing and Settlement Mechanisms

5.1 Capital Market Development

- 2011: Established CDS and Clearing Limited, a subsidiary of Nepal Stock Exchange (NEPSE), in 2011
- 2015: Implemented dematerialization of physical shares
- 2016: Implemented Nepal Stock Exchange (NEPSE) App
- 2018: Implemented Centralized Account Supported by Blocked Accounts (CASBA)
- 2019: Implemented online trading system (TMS/x)
- 2020: Implemented Meroshare app

5.2 Public Debt Management

- 2018: Established Public Debt Management Office (PDMO) under the Ministry of Finance (MOF)
- 2022: Implemented Public Debt Management Act, 2022
- 2024: Signed RTGS membership agreement for settlement of cash leg of DvP payments

¹³ See. NRB (2014)

- 2024: Implemented Debt Operation and Management Software (DOMS) for the entire lifecycle management of government securities (from issuance to settlement or sale)
- 2024: RTGS-DOMS integration currently under testing phase

Pillar 6: Interbank Money Market Management

- Open market operations integrated with the RTGS system through the Olympic Banking Software (OBS) of the NRB.
- Implemented Intraday Liquidity Facility (ILF) and Overnight Liquidity Facility (OLF), integrated with the RTGS system.

Pillar 7: International Remittance

- Inward remittances are allowed through remittance companies to e-wallets
- Remittance service providers are licensed through the Foreign Exchange Management Department (FEMD)
- P2P transfers to Indian bank accounts allowed up to INR. 15,000 per day and INR. 100,000 per month¹⁴

Pillar 8: Oversight

- 2018: Implemented Payment System Oversight Framework
- 2021: Implemented Payment System Oversight Manual
- 2021: Implemented Payment System Inspection and Supervision Bylaws
- 2023: Issued Cyber Resilience Guidelines
- 2024: Implemented Procedure for Onsite Inspection of Payment-related Activities of Banks and Financial Institutions, 2024

Based on these frameworks, PSD undertakes onsite and offsite supervision of the licensed institutions.

Pillar 9: Cooperation

• Established National Payment Board with representation from the Ministry of Finance, Nepal Telecommunication Authority, and FCGO

The Payment and Settlement Act, 2019, formulated broadly as strategized in NPSDS, mandates entities/ institutions willing to operate payment-related services/instruments/systems to seek license from the NRB. PSD has been entrusted with the responsibility to issue licenses (PSO/PSP) and monitor/supervise/oversee the activities of licensed institutions.

Box 3: Functions of PSO/PSP

As per Point 2(4) and 2(5) of the Licensing Policy for Payment-related Institutions (First Amendment, 2024), 2023, PSOs and PSPs can undertake the following functions:

Payment System Operator (PSO)	Payment Service Provider (PSP)
• Operate Automated Clearing House (ACH)	• Operate card and non-card instruments for
function	payment of goods, services, property, or any
	other obligations
• Ensure interoperability of payment systems	• Facilitate domestic fund transfers

¹⁴ Circular No. 09/2080-81, dated January 11, 2024, of the Foreign Exchange Management Department, NRB

etwork	
specified by NRI	В

As of mid-July, 2024, 35 institutions are licensed as payment institutions. Among them, 26 are PSPs, and 9 are PSOs. In addition, all 20 commercial banks, 17 development banks, 15 finance companies, and 11 microfinance financial institutions have obtained the license to operate as PSP from NRB. The detailed list of licensed institutions is presented in Annex 1 to Annex 5. The summary list of licensed PSO/PSP is shown in Table 1.

Table 1: Number of Institutions Licensed as PSO/PSP (Mid-July, 2024)

Category	Count
Payment Service Provider (PSP)	26
Payment System Operator (PSO)	9
Commercial Banks as PSP	20
Development Banks as PSP	17
Finance Companies as PSP1:	
Microfinance Financial Institutions as PSP	11

PSD has revised the transaction limits for different payment instruments. Further, the directive on interoperability has been issued to ensure smooth, efficient, and seamless operations of payment instruments such as QR Codes, e-wallets issued and managed by different PSPs/PSOs.

3. NRB as a Regulator and Supervisor of the Payment Systems

As the Central Bank of Nepal, NRB has been entrusted with the responsibility to regulate and supervise/oversee payment-related institutions, activities, and mechanisms by the NRB Act, 2002. To carry its responsibility of maintaining a secure, healthy, and efficient payment system, NRB periodically issues policies, directives, guidelines, circulars, and notices to licensed institutions considering the domestic situation and international best practices.

PSD is the dedicated department for regulating and supervising/overseeing the payment-related institutions based on the existing legal framework, directives, oversight framework, major international guiding principles such as PFMIs, and other prevalent guiding documents.

4. Legal and Regulatory Provisions

NRB has formulated and implemented several legal and regulatory provisions consisting bylaws, policies, guidelines, and manuals to monitor and regulate the licensed institutions. NRB has suggested the licensed PSOs and PSPs to adhere to the PFMI also issued by the Committee on Payment and Settlement System (CPSS) and the International Organization of Securities Commissions (IOSCO).

The legal framework for payment activities bears relevant implications for the oversight objectives by affecting the payment system's efficiency, reliability, safety, and stability. As the legal provisions impact the payment market participants, NRB usually undertakes policy dialogues and collects stakeholders' opinions and feedbacks while issuing new provisions. The major documents framing current legal and regulatory provisions related to the payment system is listed in Box 4:

Box 4: Legal and Regulatory Framework

- Nepal Rastra Bank Act, 2002.
- Payment and Settlement Act, 2019
- Payment and Settlement Bylaw (First Amendment, 2023), 2020
- Payment System Inspection and Supervision Bylaw, 2021
- Licensing Policy for Payment Related Institutions (First Amendment, 2024), 2023
- Payment Systems-Related Unified Directives, 2024
- Nepal QR Standardization Framework and Guidelines, 2021
- Payment Systems Oversight Manual, 2021
- Bank and Financial Digital Payment Related Onsite Inspection Manual, 2024.

5. Key Developments in FY 2023/24.

NRB has issued directives, circulars, and notices to the licensed institutions as part of its regulatory and supervisory functions. New licenses have been issued to additional BFIs for payment service provision in FY 2023/24. The key developments and activities undertaken by NRB in FY 2023/24 are as below:

5.1 Amendment of Unified Directives

NRB continuously updates the directives to further ensure the safety and efficiency of the payment systems to address the pertinent payment related issues and to implement the

policy changes. The amended unified directive related to payment systems/services was published on Mid-November 2023.

5.2 Notices and Circulars

NRB periodically issues public notices related to payment systems to the stakeholders and the general public. Table 2 lists down the major notices issued in FY 2023/24.

Issued Date (A.D.)	Public Notice Regarding
17 Oct, 2023	License Dismissal of Mohar Digital Pvt. Ltd.
10 Nov, 2023	Temporary Increase in the Number of Times for Wallet Load in a
	Particular Day.
20 Nov, 2023	Issuance of the Payment Systems Related Unified Directives,
	2080.
13 May, 2024	License Dismissal of E-net Payment Pvt. Ltd.
2 Jun, 2024	Nepal Clearing House Limited Acquires Nepal Electronic
	Payment Systems Limited and initiates Joint Operation on name
	Nepal Clearing House Limited
3 Jun, 2024	Account Freeze of Paywell Nepal Pvt. Ltd. and Sajilo Pay
	Payment Services Pvt. Ltd.

NRB has also issued circulars to amend the existing provisions of payment systemsrelated unified directives. The overview of the circulars issued in FY 2023/24 is presented in Table 3.

Table 3:Circulars Is	sued by PSD in 2023/24
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Issued Date	Circulars				
(A.D.)	Circulars				
27 Aug, 2023	Issuance of Cyber Resilience Guidelines.				
10 Nov, 2023	Temporary Increase in the Number of Times for Wallet Load in a				
101101, 2023	Particular Day.				
27 Jun, 2024	Additional Provisions in Payment Systems Unified Directives				
27 Jun, 2024	Direction No. 16/080(8)				

5.3 Licensing

During FY 2023/24, NRB has issued licenses to the institutions listed in Table 4 to operate as PSP.

Licensed Date (A.D.)	Institution's Name	Address	Institution Type
2023/11/01	City Wallet Pvt. Ltd.	Kamaladi, Kathmandu	PSP
2080/05/10	Jeevan Bikas Laghubitta Bittiya Sansthan Ltd.	Katahari , Morang	PSP
2023/08/27	Suryodaya Womi Laghubitta Bittiya Sansthan Ltd.	Banepa, Kavrepalanchok	PSP
2024/06/10	NIC ASIA Laghubitta Bittiya Sansthan Ltd.	Banepa, Kavrepalanchok	PSP
2024/06/07	Mahila Laghubitta Bittiya Sansthan Ltd.	Banepa, Sanga, Kavrepalanchok	PSP
2024/07/12	Salapa Bikas Bank Limited	Diktel, Khotang	PSP

Table 4:PSP Licenses Issued by PSD in FY 2023/24

5.4 Large Value Payment Systems

Based on the mandate given by the Payment and Settlement Act, 2019 and the Payment and Settlement Bylaw (First Amendment, 2023), 2020, NRB has been operating Real Time Gross Settlement (RTGS) system for large value and critical payments since September 12, 2019.

NRB has issued the RTGS System Rules, 2019 that incorporates the membership criteria, responsibilities of members, settlement rules, operating procedures of the RTGS system, provisions related to Intraday Liquidity Facility (ILF) and Overnight Liquidity Facility (OLF) among others. Similarly, NRB has also issued a separate directive (Directive No. 7 of Payment System Related Unified Directives, 2080) for the operations of the RTGS system. Further details about the RTGS system are presented in Table 5.

Table 5: RTGS System in Nepal

Particulars	Details			
RTGS Direct Participants	Participants	Count		
	Commercial Banks	20		

	Developme	ent Banks	11			
	Finance Co	mpanies	12			
	Nepal Infra	structure Bank (NIFRA)	1			
		Total	44			
	(As of Mid-Ju					
Allowed Currencies for	• Nepalese Rupees (NPR)					
Transaction Settlement	• US Dolla					
	• Euro (EUR)					
	• Pound Sterling (GBP)					
	• Japanese	Yen (JPY)				
Transaction Limits	Currency	Mandatory Threshold	Minimum Limit			
(for allowed currencies)	NPR	NPR 2 Million or above	NPR 200,000			
	USD	USD 20,000 or above	USD 2,000			
	EUREUR 20,000 or aboveEUR 2,000					
	GBP	GBP 20,000 or above	GBP 2,000			
	JPY	JPY 2 Million or above	JPY 200,000			
			<u> </u>			

RTGS system has replaced the manual process to clear large value and critical payments in NRB's General Ledger System with an automated and real-time payment process¹⁵. Further, the RTGS system can enhance trust and confidence in the payment system as it significantly reduces the settlement risk in payment mechanism. The usage of the RTGS system in Nepal is presented in Table 6.

	2022/23 2023/24			2023/24
Currency	No. of	Amount	No. of	Amount
	Transaction	(in Million)	Transaction	(in Million)
NPR	794,427	34,135,418	789,875	38,111,369
USD	17,384	936	16,948	20,584
EUR	2,034	172	1,705	5,477
GBP	964	8	692	282
JPY	371	8,307	459	12,611

¹⁵ Cheques of value NPR. 300 million and above are still cleared manually through the Nepal Rastra Bank.

Note: Transaction amount (in Million) in respective currencies

Since the RTGS system is a domestic interbank settlement system, around 97.5 percent of the total transactions are based on Nepalese Rupees. Out of the allowed 4 foreign currencies, transactions in US Dollars are dominant in terms of frequency and value of transactions than in other currencies.

Since 16 December, 2022, the RTGS system participants are allowed to avail liquidity facility through the provision of Intraday Liquidity Facility (ILF) and Overnight Liquidity Facility (OLF). BFIs are charged interest on OLF at policy rate as per the Intraday Liquidity Procedure (Third Amendment, 2023), 2019. In 2023/24, the direct participants of the RTGS system have availed ILF of NPR. 1104 Billion, of which the total liquidity provided in the form of OLF has stood at NPR. 290 Billion. The usage of mid-July, 2023 to mid-September, 2023 was moderate to fulfill the shortage of the liquidity in Nepal's financial market.

Month	Amount (in N	PR. Million)
	ILF	OLF
16 Jul-16 Aug 2023	323,895.00	234,631.84
17 Aug-16 Sep 2023	152,300.00	125,523.72
17 Sep-16 Oct 2023	25,100.00	300.00
17 Oct-15 Nov 2023	93,950.04	151,450.00
16 Nov-15 Dec 2023	17,000.00	-
16 Dec 2023-14 Jan 2024	8,000.00	1,000.00
15 Jan- 12 Feb 2024	17,007.00	7.00
13 Feb- 14 Mar2024	150,000.00	47,500.00
15 Mar- 13 Apr 2024	291,600.00	232,600.00
14 Apr- 14 May 2024	26,000.00	9,500.00
15 May- 15 Jun 2024	50.00	50.00
16Jun- 16 Jul 2024	-	-
Total	1,104,902.04	802,562.56

Table 7: Total ILF and OLF Availed by RTGS Participants in 2023/2024

Source: RTGS Unit, PSD, NRB

5.5 Retail Payment Systems (RPS)

The Nepal's retail payment systems consist of cheque-clearing, electronic fund transfer, card payment systems, QR code-based payment, e-money, and remittances. These systems are characterized as low-value payment systems targeted at retail customers. These systems are majorly operated by Nepal Clearing House Limited (NCHL), which

provides image-based cheque-clearing solution and electronic fund transfer facility to customers. Similarly, Fonepay Payment Services Ltd., the licensed PSO, provides the platform for QR payments, interbank fund transfer (IBFT), and online payments to customers.

Other major operator in the cards payment landscape is Smart Choice Technologies (SCT) Ltd. and Nepal Electronic Payment Systems (NEPS) Ltd.¹⁶ The internationally recognized institutions like Visa Worldwide Pvt. Ltd., Union Pay International Company Ltd., and Master Card Asia/Pacific Pvt. Ltd. are also operating as PSOs in the Nepal's payment industry.

The digital wallet and remittance service providers further complement the retail payment infrastructure in Nepal. The usage of retail payments has increased rapidly in recent years, especially after the COVID-19 pandemic. IPS, *connect*IPS, Mobile Banking, Internet Banking, e-Wallets, QR Code are the major developments in the field of retail payments in Nepal. The use of faster payment systems like *connect*IPS, IBFT, and QR code has significantly increased after the COVID-19 pandemic. Such a surge in the use of digital financial services has paved the path to modern banking, wherein physical banking is gradually transforming into digital banking.

Recent innovations in retail payments in Nepal have focused on the cross-border integration of payment systems. In this context, acquiring of Wechat Pay¹⁷, Alipay¹⁸, and Union Payments Interface (UPI)¹⁹ transactions through QR code issued to Nepalese merchants has started in Nepal.

For cross-border issuing, Fonepay Payment Service Limited has received approval to enable customers of BFIs within Fonepay's network to make merchant payments in India by scanning UPI QR codes²⁰.

¹⁶ NCHL started its joint operation from 21st Jestha, 2081 after acquiring Nepal Electronic Payment Systems Ltd (NEPS).
¹⁷ At present, NMB Bank Limited acquires WeChat Pay transactions in Nepal. Many BFIs have been using the network of First Pay Technology Pvt. Ltd., a licensed PSO, to acquire WeChat Pay transactions in Nepal.

¹⁸ Focusone Payment Solutions Pvt. Ltd. a licensed PSP, along with direct coordination with Himalayan Bank Limited acquires transactions of Alipay wallet users. This arrangement has facilitated several Chinese tourists to make QR payments using the integrated QR issued by Focusone Payment Solutions Pvt. Ltd.

¹⁹ Since Feburary 28, 2024, merchants within Fonepay's QR network are accepting UPI transactions. With this arrangement, Indian tourists and visitors can seamlessly make payments at 15 lakh merchant outlets in Nepal.

²⁰ BFIs within the Fonepay's network can empower their issuing app (Mobile Banking app) to allow their customers to scan UPI QR codes in India to make merchant payments.

To further enhance cross-border remittances and fund transfer, NCHL has also been authorized to implement cross-border Person-to-Person (P2P) payments through the National Payment Interface (NPI), integrating with India's UPI network. These initiatives underscore Nepal's commitment to fostering a seamless and efficient cross-border payment ecosystem for international trade, remittances and financial transactions. To modernize the retail payment system in Nepal, NRB formulated the Retail Payment Strategy, 2019, the accomplishments of which are presented in Annex 9.

5.6 National Payment Switch (NPS)

The mandate for a National Payment Switch has been obtained through the Payment and Settlement Act, 2019 and the Payment and Settlement Bylaw (First Amendment, 2023), 2020. The monetary policy of FY 2019/20 also announced the need for a NPS to ensure interoperability and settlement of all domestic transactions within the country. Based on these legal mandates, the NPS is currently being developed through NCHL. The RPS, a component of NPS, went live in November 2021. All retail payment transactions originating from Interbank Payment Systems (IPS), *connect*IPS, and ECC systems are currently settled through RPS in the books of the Central Bank (via the RTGS system). The strategic direction of NRB is to ensure the settlement of all electronic transactions of the country through NPS.

6. Access on Payment Instruments

The COVID-19 pandemic accelerated the digitalization of payments making non-cash payments the new normal, especially in city areas. There has been a rapid surge in the use of digital payment instruments like Mobile Banking, Cards, QR code, *connect*IPS, e-Wallets, Internet Banking, POS machines. Audio QR Codes, Cardless withdrawal through ATMs, loyalty and redemptions are increasingly becoming popular in Nepal. Furthermore, the licensed institutions are constantly working to modernize and innovate payment instruments.

	Number						
Particulars	Mid-August, 2020	Mid-July, 2021	Mid-July, 2022	Mid-July 2023	Mid-July 2024		
PSPs Agent	5,139	9,279	12,685	14,123	17,563		
Wallet Users	6,274,129	8,885,914	13,675,993	18,941,793	23,461,107		

Table 8: Access on Payment Systems

connectIPS Users	162,117	534,615	896,341	1,108,436	1,276,886
ECC Members	65	60	59	53	54
IPS Members	85	103	111	115	132

There has been a rapid increase in the user base of e-Wallets and *connect*IPS in recent years. The number of wallet users quadrupled from 6.27 million in Mid-August, 2020 to 23.46 million in Mid-July, 2024. Similarly, the number of *connect*IPS users increased from 0.16 million in Mid-August, 2020 to 1.28 million in Mid-July, 2024. The number of IPS members has also seen growth reaching 132 members in Mid-July, 2024. Due to ongoing mergers and acquisition of BFIs, the number of ECC members has reduced from 65 at Mid-August, 2020 to 54 at Mid-July, 2024.

Over the years, the adoption of digital payment instruments has taken momentum. The evolution of faster payment systems has further familiarized users to digital banking rather than branch-based banking. The access on different payment instruments in FY 2023/24 has been summarized below:

6.1 Cards

The number of debit and credit cards issued to customers has been increasing since Mid-July, 2018. However, the growth rate of debit cards was comparatively lower during the period of the COVID-19 pandemic (Mid-July, 2019 to Mid-July, 2020).

Time	Debit	Card	Credit	t Card	Prepaid Card	
(Mid July)	Number (in '000)	Growth (%)	Number (in '000)	Growth (%)	Number (in '000)	Growth (%)
2018	5,544	-	105	-	97	-
2019	6,709	21.0	123	17.1	67	-30.9
2020	7,329	9.2	160	30.1	64	-4.5
2021	8,840	20.6	192	20.0	68*	6.3
2022	10,856	22.8	239	24.5	109*	60.3
2023	12,245	12.8	284	18.8	140*	28.4
2024	12,893	5.3	289	1.9	181*	30.0

Table 9:Number of Cards

* Also includes card issued by PSPs

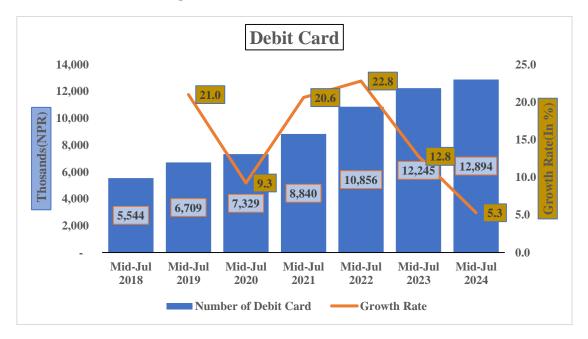


Figure 3: Number of Debit Cards

As seen in Figure 3, the number of debit cards has increased each year since Mid-July, 2018. The growth rate, however, decreased in 2020, due to COVID-19 pandemic and its effect on business and households. As restrictions imposed during COVID-19 pandemic were gradually lifted up, the issuance of debit cards took pace again. However, there has been a decrease in the growth rate of debit cards at Mid-July, 2024 compared to Mid-July, 2023. This could be because the BFIs have actively endorsed peer-to-peer (P2P) payments. QR codes have blanketed the merchant payments, largely reducing the need of cash or card. Similarly, other payment instruments like *connect*IPS, IBFT, cardless withdrawals, payment gateway have also become popular. These payment innovations have somewhat reduced the need to have a physical card for making payments. Nevertheless, debit card is still one of the most preferred modes of payments; hence, issuance of the same is still increasing (although at a decreasing rate) in all years.

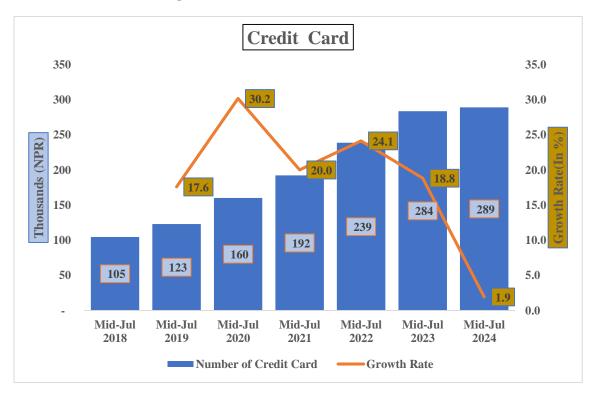


Figure 4: Number of Credit Cards

The number of issued credit cards is also on the rise, especially after the COVID 19 pandemic. Nepal has experienced the increased use of e-commerce sites, where credit cards are used as the major payment instrument. The growth rate of credit card at Mid-July, 2024 is less than that of Mid-July 2023. This could be because e-Wallets are directly integrated in e-commerce site like Daraz.

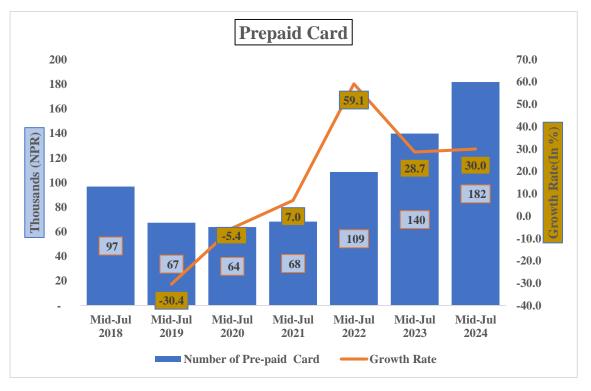


Figure 5: Number of Prepaid Cards

As shown in Figure 6, the number of prepaid cards has also decreased primarily due to domestic as well as international travel restrictions imposed by the government during the COVID-19 pandemic. As the restrictions were lifted and the pandemic subsided, growth rate of prepaid card issuance has peaked in mid-July, 2022. However, in the recent year (mid-July, 2023), a sudden decrease in the growth rate of prepaid card is seen due to rapid growth in other modes of faster payments such as wallets and IBFT, connectIPS. In 2024, the number of prepaid cards soared as BFI's promote the prepaid cards as the international travel cards.

The recent trend in the issuance of debit and credit cards show an increase but at a decreasing rate. This may be because of other payment innovations, especially QR codes, faster payment systems (like *connect*IPS and IBFT), digital loan etc.

6.2 Cheque Clearing

Electronic Cheque Clearing (ECC) system allows the BFIs to accept and present interbank cheques for clearing and settlement. NCHL has been operating the ECC system, which offers high-value, express, and regular cheque clearing options to customers. BFIs use the ECC portal to scan the cheques and present them for clearing and settlement. The product-wise transaction number of the ECC system is presented in Table 10.

FY	High Value	Express (in '000)	Regular (in '000)	Overall (in '000)	Growth (%)
2016/17	751	437	9,513	9,951	-
2017/18	245	938	8,748	9,686	-2.7
2018/19	310	1,573	10,182	11,755	21.4
2019/20	288	1,466	10,432	11,898	1.2
2020/21	608	1,005	13,406	14,411	21.1
2021/22	263	2,031	14,694	16,726	16.1
2022/23	255	2,187	13,034	15,221	-9.0
2023/24	320	2,196	12,335	14,532	-4.5

Table 10:Product-wise Transaction Number through ECC System

Source: NCHL

During the period of the COVID-19 pandemic, the growth rate of presented cheques (1.2 percent) was low due to lockdown and shutdowns imposed by the government. As the effect of the pandemic subsided, the use of cheques increased in subsequent years. However, in the recent (FY 2023/24), there has been a 4.5 percent decrease in the use of cheques. This statistic also suggests that innovative payment instruments like QR codes, Faster Payment Systems, Mobile Banking, Internet Banking, and e-Wallets are increasingly becoming popular.

Particulars	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Cheque Presented Count (in'000)	9,951	9,686	11,755	11,898	14,411	16,726	15,221	14,532
Cheque Value (in billions)	5175	6342	7657	7346	9234	10538	7830	7,359
Cheque Cleared Count (in'000)	9,153	8,582	10,125	10,150	12,295	13,920	12,349	11,976

Table 11:Number of Cheques Presented and Cleared (NCHL-ECC)

Source: NCHL

In FY 2023/24, the total number of presented cheques stood at 14.53 million of amount NPR. 7,359 billion. Out of the total presented cheques, 11.98 million cheques were successfully cleared.

6.3 Automated Clearing House

The most widely used Automated Clearing House (ACH) payment in Nepal is the Inter-Bank Payment System (IPS) offered by NCHL. IPS is a form of electronic fund transfer that is sent from one bank account to another and it can either be a direct debit or a direct credit facility to the customer.

FY	Total Presented Transactions (in '000)	Total Rejected Transactions (in '000)	Presented Transaction Growth (%)	Rejected Transaction Growth (%)
2018/19	4,932	504	-	-
2019/20	5,876	485	19.1	-3.8
2020/21	11,376	535	93.6	10.3
2021/22	14,037	613	23.4	14.6
2022/23	16,124	743	14.9	21.2
2023/24	28,132	673	74.5	-9.4

Table 12: Number of Transactions through IPS

Source: NCHL

Table 13:Transaction	Value (i	in NPR)	through IPS
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FY	Total Presented Transactions Value (NPR in Billion)	Total Rejected Transactions Value (NPR in Billion)	Presented Transactions Value Growth (%)	Rejected Transactions Value Growth (%)
2018/19	1,559	49	-	-
2019/20	2,138	71	37.1	44.9
2020/21	2,443	76	14.3	7.0
2021/22	2,117	59	-13.3	-22.4
2022/23	2,169	37	2.5	-37.3
2023/24	2,459	28	13.4	-24.3

Source: NCHL

Like other digital payment instruments, the transaction count through IPS has also plunged after the COVID-19 pandemic. There has been a rapid growth in the number of presented transactions from 19.1 percent in FY 2019/20 to 93.6 percent in FY 2020/21.

In FY 2023/24, the number of presented IPS transactions has increased by 74.5 percent, reaching 28.13 million (as shown in Table 13). The presented IPS transactions has increased however, the rejection rate of transactions has decreased.

6.4 Faster Payment

There are two forms of faster payment systems in operation namely, high value payments and retail payments. Currently, three major networks facilitate retail faster payments. NCHL operates *connect*IPS and *corporate*PAY faster payment systems. Fonepay Payment Service Ltd. offers faster payment through fonepay direct and IBFT systems. Nepal Payment Solution Ltd. offers faster payment through InstaFund systems. These three networks link one bank customer with another through their faster payment system. Fonepay's faster payment systems are embedded in the mobile banking application of BFIs, whereas NCHL offers *connect*IPS through 3 mediums: the mobile banking application of BFIs, NCHL's *connect*IPS web portal, and *connect*IPS mobile application. Customers can also use QR codes to transfer funds from their bank accounts. By linking mobile wallets with a bank account, customers can deposit or withdraw funds and pay for services instantly using mobile wallets. For real-time settlement of high value and critical payments, NRB owns and operates the RTGS system.

6.4.1 connectIPS and IBFT

*connect*IPS is one of the major faster payment systems offered and operated by NCHL. *connect*IPS allows bank customers to make instant payments using the mobile application or the web portal. Table 14 and Table 15 have highlighted the trend of RPS/*connect*IPS transactions over the last 6 fiscal years.

FY	Total Presented Transactions (in '000)	Total Rejected Transactions (in '000)	Presented Transactions Growth (%)	Rejected Transactions Growth (%)
2018/19	186	6	-	-
2019/20	2,850	65	1432.3	983.3
2020/21	18,981	147	566.0	126.2
2021/22	39,602	185	108.6	25.9
2022/23	50,579	277	27.7	49.7
2023/24	75,597	260	49.5	-6.0

 Table 14: Number of Transactions through NCHL RPS/connectIPS

Source: NCHL

-
2 1659.4
275.2
36.7
50.0
22.2

Table 15:Transaction Value (in NPR) through NCHL RPS/connectIPS

Source: NCHL

The use of *connect*IPS has surged especially after the COVID-19 pandemic (with the growth rates of number of transactions through connect IPS remaining as high as 1432.3 percent and 566 percent in FY 2019/20 and FY 2020/21 respectively). In FY 2023/24, the total number of *connect*IPS transactions has increased (49.5 percent) and reached 75.56 million. Similarly, the rate of rejected transactions has decreased with -6.0 percent of the total presented transactions being rejected in FY 2023/24.

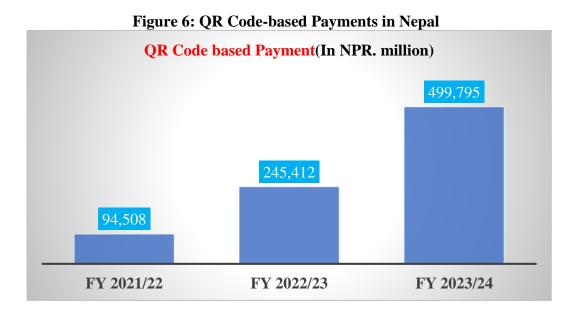
Currently, Fonepay IBFT, Nepal Payment Solutions Instafund and SCT Smart IBFT are also the faster payments(IBFT) services available in the Nepal. In the FY 2023/24, the transactions volume of the Fonepay-IBFT, NPS-Instafund and SCT Smart IBFT are NPR.2006.5 Billion, NPR. 5.12 Billion and NPR. 2.09 Billion respectively.

6.4.2 QR Code-based Payment

Fonepay Payment Service Ltd. started the platform for QR Code-based payment in Nepal in 2019. Nepal Pay QR and Smart QR also provide the QR-based payment services in Nepal. The total merchants having QR in Nepal have reached around 2 million making it as one of the easiest mode of payment to the customers.

BFIs have also used the same platform to offer QR Code based payment services to their customers. Further, most PSPs, such as Esewa Ltd., Prabhu Technology Pvt. Ltd., IME Digital Solution Ltd., Q Pay Pvt. Ltd., Khalti Pvt. Ltd., and Nepal

Paytime Pvt. Ltd., have also started QR code-based payment service through their respective mobile application.



QR Code is one of the cheapest and easiest payment platforms for faster payment. Customers can pay a merchant after scanning the QR code through their mobile banking application. The number and value of QR Code-based transactions have increased by 117.03 percent and 103.66 percent respectively in FY 2023/24 as compared with FY 2022/23(Annex 6). At present, QR Code is the most widely preferred payment instrument by customers.

FonePay Payment Services Ltd. started cross-border QR Acceptance with India where Indian tourist and visitors can seamlessly pay using QR in 1.5 million Fonepay Merchants, from March 2024. In the 5 months after the launch of the Cross Border QR acceptance in Fonepay Merchant, the transaction count reached to 134,701 amounted to NPR 321 million. Also, the company is planning to start the Cross-Border QR Issuance with India from December 2024.

Province	NPCI Count	NPCI Volume(RS) (In Million)
State-1 Koshi	8,750	16
State-2 Madesh	12,790	26
State-3 Bagmati	57,336	152
State-4 Gandaki	22,253	56
State-5 Lumbini	11,447	24

State-6 Karnali	1,856	5
State-7 SudurPaschim	20,269	42
Total	134,701	321

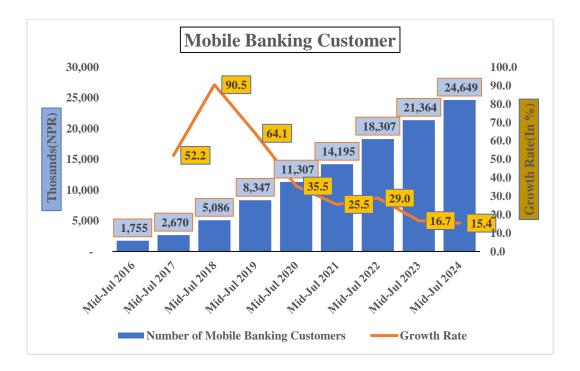
6.4.3 Mobile and Internet Banking

BFIs have offered Mobile Banking and Internet Banking services to their customers, allowing the users to perform financial transactions, such as fund transfer, QR payments, utility payments on self-service and digital mode.

Mobile Banking Internet Banking Number Period Growth Number Growth (in '000) (in '000) (%) (%) Mid-Jul, 2016 1,755 515 --Mid-Jul, 2017 2,670 52.1 784 52.2 Mid-Jul, 2018 5,086 90.5 834 6.4 Mid-Jul, 2019 8,347 917 10.0 64.1 Mid-Jul, 2020 11,307 35.5 1,031 12.4 Mid-Jul, 2021 12.5 14,195 25.5 1,160 Mid-Jul, 2022 18,307 29.0 45.2 1,684 Mid-Jul, 2023 21,364 10.2 16.7 1,856 Mid-Jul, 2024 24,649 15.4 1919 3.4

Table 17: Number of Customers using Mobile and Internet Banking

Figure 7: Mobile Banking Customers in Nepal



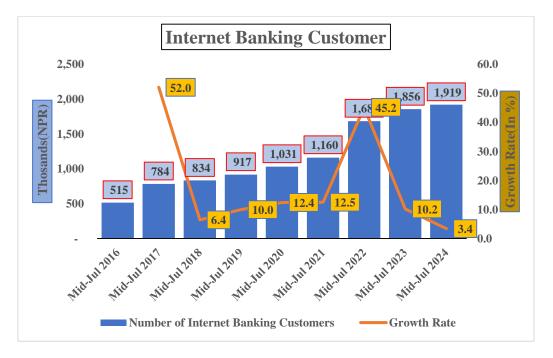


Figure 8: Internet Banking Users in Nepal

The user base of mobile banking and internet banking has increased post the COVID-19 pandemic, although at a decreasing rate. In FY 2023/24, the number of mobile banking users has increased by 15.4 percent and reached 24.65 million. Similarly, the number of internet banking users has increased by 3.4 percent in FY 2023/24 and reached 1.92 million.

6.4.4 *Mobile* Wallet

The use of mobile wallets (e-money) provided by PSPs has been increasing significantly in Nepal. The number of mobile wallet users has stood at 23.46 million as of Mid-July, 2024 (Table 19) with a total transaction amount of NPR. 302.69 billion (Annex 6).

7. Usage of Payment Systems

As access on the payment system is increasing, the use of different payment instruments has also increased in Nepal. Recently, instruments like *connect*IPS, e-Wallets, Mobile Banking, Internet Banking, QR code, and Cards have widely been used as customers can use these instruments in self-service mode. Further, e-commerce and POS transactions have also increased. Post COVID 19 pandemic, the use of faster payment systems like *connect*IPS, QR, e-Wallets, and Mobile Banking has increased exponentially. The number and value of *connect*IPS transactions have grown by 40.29 percent and 37.68 percent respectively from FY 2022/23 to FY 2023/24. Similarly, QR code-based payment is the most widely used digital payment instrument in the country. The number and value of QR-based payments have surged by 117.03 percent and 103.66 percent respectively from FY 2022/23 to FY 2023/24 (Annex 6).

While card-based payments (debit and credit cards) are increasing at a decreasing rate, the use of prepaid cards has plunged. The number and value of transactions through prepaid cards increased by 53.84 percent and 55.85 percent respectively from FY 2023/24 to FY 2022/23. The primary reason for the rapid growth in volume and value of prepaid card transactions, which had dropped during the COVID-19 pandemic, could be the revival of tourism after the removal of travel restrictions by different countries.

The number and value of online payments using cards have increased by 48.90 percent and 42.61 percent in FY 2023/24 as compared with FY 2022/24. Further, online stores have integrated wallets and faster payment systems for online payment, providing cardless digital payment options to customers.

The RTGS system is the central infrastructure to process large value payments. The number of transaction through RTGS system decreased by 0.66 percent in FY 2023/24, but the total value of transaction went up by 12.34 percent. The number and value of ECC transactions have gone down by 3.02 percent and 4.96 percent respectively in FY 2023/24 as compared to previous

fiscal year. As digital financial services are proliferating, the use of cheques and the ECC system is decreasing.

8. Payment Systems Oversight

Oversight function differs from supervision in the sense that oversight uses a guideline and resolution-based approach from a payment system viewpoint (considering the broader system), whereas supervision uses a regulation and institutional-based approach from prudential solvency and liquidity viewpoint (considering the individual institutions)²¹.

8.1 Payment System Oversight Framework in Nepal

NRB has implemented the Payment System Oversight Framework, 2018 highlighting the objectives, principles, instruments, targets, scope, types of action, and the role of overseer as the major components of the oversight framework. NRB undertakes the supervisory and oversight function by following the Payment System Inspection and Supervision Bylaw, 2021 and the Payment System Oversight Manual, 2021; which have been prepared considering the Payment System Oversight Framework, 2018. The provisions of the framework are summarized in Table 18.

Role of the Overseer	 Develop a secure, healthy and efficient system of
(PSD)	payment in Nepal.
	✤ Assess systems, participants, and instruments to ensure
	that systems are sufficiently protected against risks.
	 Promote the smooth, efficient, and safe flow of funds
	between individuals, businesses, and financial markets.
	 Promote payment system development.
Oversight Objectives	General Objective:
	\clubsuit Ensure a secure, healthy, and efficient system of
	payment.
	Specific Objective:
	 Ensure a sound legal foundation
	 Enhance risk management and control

Table 18:Payment System Oversight Framework in Nepal

²¹ See. Payment System Oversight Framework, (2018)

	*	 Boost competitive market conditions 								
	*	Ensure integration and interoperability of different								
		payment system	1 0							
	*	Assess reach and	range of payment serv	vices						
			et from abuse and frau							
	*		ners and ensure their p							
	*	U	iveness in the market							
Oversight Principles		Fairness (Fair con								
Oversight Filiciples		,	inpetition)							
	*	Transparency								
	*	Continuity								
	*	Cooperation								
	*	International Star	ndard							
Oversight Instruments		Targets	Scope of Action	Types of Action						
 Regulations 	*	Fair Access	✤ Institutions:	★ As per						
 Incentives and 	*	Risk Control	PSPs PSOs	Section 35 and Section						
Sanctions	*	Transparency	• 1505	36 of the						
✤ Monitoring:	*	System	◆ <u>Instruments:</u>	Payments & Settlement						
• Off-site		Development	CardsMobile Banking	Act, 2019						
supervisionOn-site Inspections	*	Integration and	• Internet Banking	✤ As per						
• Special Inspection		Interoperability	• e-Money	 As per Unified 						
✤ Assessment/		of Systems	• Others (QR Codes, POS)	Directive No.						
Analysis	*	Consumer		14/080 for money						
A Dolioy Diologue		Protection	 Systems: Large Value 	laundering						
 Policy Dialogue Enforcement and 	*		Payment System	and financing of terrorism						
 Enforcement and Remedies 		Economic Stability	(SIPS)	activities						
		Stability	Retail Payment System	related						
 Agreements with other Regulatory 			• Securities	offense.						
Institutions and			Settlement							
Stakeholders			SystemOther payment							
			and settlement							
			systems ✤ Any New							
			Payment							
			Services							

8.1.1 Reporting Arrangement

NRB has laid down regulatory reporting requirements in Directive No. 10 of the Payment Systems Related Unified Directives. The types of reports, along with the frequency and deadline of reporting, are presented in Annex 10. NRB uses these reports for the oversight of the licensed institutions as well as in the publication of indicators, licensed institutions must adhere to the submission deadlines.

9. Oversight Activities in 2023/24

PSD carries out on-site inspections of PSPs/PSOs at least once in every two years, as planned in the annual action plan each fiscal year. The off-site supervision of PSD requires licensed institutions to submit reports in the prescribed format (as specified in Table 20). The oversight activities and the key findings and actions taken by NRB in FY 2023/24 have been summarized below:

9.1 Inspection/Supervision

9.1.1 On-site Inspection

The on-site inspection activities may broadly be classified into following 3 categories:

1. Periodic Inspections

These are scheduled inspections as a part of annual action plan.

2. Special Inspections

As the name indicate, these are unscheduled inspections carried out as needed based on the analysis of data and information of payment related institutions.

3. Follow-up Inspections

The follow-up inspections are carried out to assess the implementation status of the directions given in the earlier inspection report.

The on-site inspection process is basically composed of following 3 steps:

i. Inspection Planning

In this step, the inspection team determines the scope of the inspection. The team reviews all available information (off-site supervision report, previous on-site inspection report, E-money and Settlement A/c Balances, Updated Transactions Status, Users Status and so on.).

ii. Inspection Procedure

Introductory meeting with CEO along with top management of the institution is conducted firstly. Relevant and necessary data and information are collected in detail.

iii. Evaluation of Regulatory Compliance

The assessment of the compliance functions is conducted thoroughly on the basis of following grounds:

- Payment and Settlement Act, 2019
- Payment and Settlement Bylaw (First Amendment, 2023), 2020
- Payment Systems Inspection and Supervision Bylaw, 2021
- Licensing Policy for Payment Related Institutions, 2023
- Payment System-related Unified Directive 2080
- Notices and Circulars
- Prevalent Accounting Standards

In FY 2023/24, NRB carried on-site inspection of the 16 licensed institutions and special inspection of the 6 licensed institutions. The list of those institutions are listed in Annex 11.

In FY 2023/24, NRB carried RTGS System Related Inspection of the 6 BFI's. The list of those BFI's are listed in Annex 12.

During on-site inspections, information related to systemic, operational, settlement, and liquidity risks of licensed institutions were collected. The analysis was done based on the available information and the prevailing market scenario. The major issues observed from the on-site inspections in FY 2023/24 are as follows:

The major issues observed from the on-site inspections in FY 2023/24 reveal several areas of concern related to governance, risk management, operational procedures, and compliance in the LIs. Here's a brief elaboration of each of these issues:

- 1. Lack of Sufficient Policies (Annual Plan, Risk Management, Business Continuity Policies): Without an annual plan, PSP may struggle to prioritize goals. Absence of a risk management policy can leave the PSP exposed to unforeseen financial, operational, and market risks. Furthermore, a lack of a business continuity policy can hinder the company's ability to function during emergencies.
- Wallet Balance More Than Regulatory Limit: The PSP's wallet balance exceeds the limit of NPR 50,000 at the end of the day which violates the direction no 5(3) of the Payments Related Unified Directives.
- 3. Not Having Two Toll-Free Numbers from Different Telecom Providers: PSPs must have two toll-free numbers from different telecom providers to ensure service availability during outages or emergencies with one telecom provider. However, some PSPs are not complying with this regulatory provision.
- 4. *Unverified KYC:* Some PSPs are permitting transactions up to NPR. 5,000 for KYCunverified customers which might lead to misuse of the platform for illegal activities such as money laundering, fraud, or terrorism financing.
- 5. *Inadequate Physical Infrastructure for the Operation:* Some PSOs and PSPs lack adequate physical and technological infrastructure which hinders the smooth operation of the wallet.
- 6. *Poor Corporate Governance and Risk Culture:* Many PSPs were observed to have poor governance lacking transparency, accountability, and strong leadership within a company, along with a weak risk culture not prioritizing risk management in operations.
- 7. *Lack of Strategy for Continuous Business Operations in Times of Crisis:* PSPs lack the proper strategy for business continuity in a crisis as it is essential to ensure that essential services remain operational during disruptions, such as natural disasters, cyber-attacks, or system failures.
- 8. *Failure to Maintain and Timely Update the Risk Register:* Most PSPs have the Risk Management policy and Risk Register but the prompt updates regarding the risks, such as cyber-attacks, is missing which can lead to unaddressed or untracked risks, leaving the company vulnerable to unforeseen threats.
- Non-Compliant with Risk Diversification and Risk Management: PSPs are not complying with risk diversification and risk management provisions as required by the Directive 12(2) of the Payment Related Unified Directives.

- Incomplete Reporting of Agents and Merchants' E-money: PSPs must report the complete information related to E-money balance. Some PSPs reported the E-money Balance of general Wallet Users only.
- 11. Lack of Adequate Due Diligence of Agents and Merchants: Enhanced KYC procedures are necessary to evaluate the risk profile of customers, agents, or merchants that are more susceptible to fraud or illegal activities while the most PSPs have adopted simplified KYC regardless of their risk categories.
- 12. *Failure to Report Risks to the Board:* Regular reporting of risks to senior leadership is essential for informed decision-making while PSPs haven't reported and communicated risks to the board of directors.
- 13. *Lack of AML-CFT Programs in the Annual Budget:* Excluding AML-CFT programs from the budget not only leads to non-compliance but also expose the organization to such risks.
- 14. *Under qualified CEOs:* Some PSPs have failed to Appoint Full-Time, Qualified CEOs as required by the Direction no 11(3) of the Unified Directives.
- 15. *Non-Implementation of the Disaster Recovery Plan:* Most of the PSP's and PSO's adhere in preparation of the DR plan but there is the gap in the implementation of the DR Plan.
- 16. *Lack of DR Drill:* Regular disaster recovery drills are necessary to ensure the organization's readiness to respond the crises efficiently however most of the PSPs haven't done DR drill yet.

Each of the above issues highlights significant areas where the inspected LI is exposed to financial, operational, or compliance risks. Addressing these weaknesses would require a concerted effort to improve internal policies, governance structures, and risk management practices.

9.1.2 Off-site Supervision

Payment and Settlement Act, 2019 requires the LIs to complete their statutory audit within 4 months of the completion of the fiscal year. They are also required to get approval on the financial statements from NRB before publishing them. Based on the document submitted by the institution, PSD prepares the off-site supervision report of the concerned institution. In FY 2023/24, NRB conducted off-site supervision of the 28 licensed institutions which are listed in Annex 13. However, 3 institutions were not

granted approval for the publication of their financial statements. The list of these PSPs, which did not receive approval, is presented in Annex 14.

The issues highlighted from the off-site supervision in FY 2023/24 are related to the areas of governance, compliance, operational efficiency, and transparency that require improvement. Major issues are as follows:

- 1. Some of the PSPs doesn't conduct Internal Audit Semi-Annually which violates the direction no 11(7) of the Payments Related Unified Directives.
- 2. Excessive Amount of Accumulated Losses and Negative Net Worth: Most of the PSPs have the excessive amounts of the accumulated losses as they invest lot on infrastructure and business expansion however minimal signs of growth has been seen in their adoption.
- 3. Some of the PSPs haven't conducted System Audit Bi-Annually which violates the direction no 3(4)(1) of the Payments Related Unified Directives.
- 4. Some PSPs haven't appointed CEO within the Three-Month Period After Resignation which violates the direction no 11(3)(5) of the Payments Related Unified Directives.
- 5. Some PSP's doesn't have information of Fees and Charges on the Particular Website which hinders the wallet users to get updates of the fees and charges.

9.2 Actions Taken for the Non-compliance

In FY 2023/24, following actions have been taken against several PSP's for noncompliance of the Payment System Act, Payment Systems By-laws, Payment Related Unified Directives.

Name of PSP	Actions Taken	Date
Mohar Digital Pvt Ltd	License Dismissal	2080/06/08
E-Net Payment Pvt. Ltd.	License Dismissal	2081/02/32
Kurakani Pay Pvt Ltd.	Warned	2081/01/25
Sulav Pay Pvt. Ltd.	Warned	2081/02/28
Paywell Nepal Pvt. Ltd	Settlement A/c and Call A/c	2081/02/21
Sajilo Pay Pvt. Ltd.	Blocked	

9.3 Policy Facilitation

In FY 2023/24, NRB carried out following activities to ease the payment system:

- i. Cyber Resilience Guidance issued by Nepal Rastra Bank for Efficient Risk Identification and Management by PSPs and PSOs.
- ii. Temporary relaxation in the maximum number of wallet transactions during Dashain and Tihar Festival.
- Provisions regarding Acquiring and Issuing of Cross-Border Transactions for Merchant Payments until National Payment Switch go live.

9.4 Challenges and Risks

The rapid growth of digital payments in Nepal presents exciting opportunities but also brings its own set of challenges and risks for both PSOs and PSPs. Some of those challenges are highlighted in the following points:

Challenges and Risks of PSO:

- i. *Cybersecurity threats:* Maintaining robust security systems is crucial, as PSOs are prime targets for cyberattacks like data breaches and fraudulent transactions.
- ii. *System outages:* Technical failures can damage trust and reputation, leading to financial losses and user dissatisfaction.
- iii. *Failure to adapt to changing regulations:* Inability to comply with evolving regulatory requirements can result in penalties and operational disruption.
- iv. *Lack of public awareness:* Raising awareness about the benefits of digital transactions and promoting financial literacy is crucial for widespread adoption, which requires ongoing efforts.
- v. Unclear legal provisions: Clear legal frameworks are crucial for addressing disputes, resolving fraud cases, and protecting consumer rights, and any gaps in legislation can increase risks.

Challenges and Risks of PSPs:

- i. *Tough Competition:* The growing number of PSPs vying for the same user base necessitates innovative customer acquisition and retention strategies.
- ii. *Fraudulent activities:* Preventing fraud has become increasingly complex with newer payment methods and growing user base.
- iii. Data privacy and security: Striking a balance between offering personalized services and protecting user data from misuse is crucial, requiring robust data

security practices. Failure to protect user data can lead to legal repercussions, fines, and loss of consumer trust.

- iv. *Operational disruptions and downtime:* System outages or technical issues can hinder transactions, leading to lost revenue and frustrated users.
- v. *Non-reporting or incomplete reporting:* Incomplete reporting of transactions of PSPs can conceal several risks including AML/CFT and other non-compliances.

Mitigating these challenges and risks requires a collaborative effort from all stakeholders, such as:

- i. *Payment System Department, NRB:* Continuously update regulations, foster interoperability, monitoring the transactions and promote financial literacy.
- ii. *PSOs:* Invest in robust security technology, expand and integrate infrastructure, and actively collaborate with PSPs.
- iii. *PSPs:* Implement strong fraud prevention measures, prioritize data security, and offer innovative services to stand out in the market.
- iv. *Consumers:* Understand the basics of digital financial services and risks, Practice safe online habits, ignore offers of scammers and choose trusted PSPs.
- v. *Law enforcing agencies and Government authorities:* Continuous dialogue among authorities, Consumer protection, Conducive policies.

By addressing these challenges and mitigating the risks, Nepal's digital payments landscape can reach its full potential, promoting financial inclusion, economic growth, and a cashless, digital ecosystem for all.

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Annexure

S.N.	Name	Address	Licensed Date (B.S.)	
Payme	nt System Operators (PSOs)			
1	Nepal Clearing House Ltd.	Kamaladi, Kathmandu	2074/04/15	
2	SmartChoice Technology Ltd.	Baluwatar, Kathmandu	2074/09/17	
3	Union Pay International Company Ltd.	Shanghai, China	2076/03/30	
4	Visa Worldwide Private Ltd.	Singapore	2076/04/29	
5	Nepal Payment Solution Ltd.	Kamalpokhari, Kathmandu	2076/07/19	
6	Master Card Asia/Pacific Pte Ltd.	Singapore	2076/08/24	
7	Fonepay Payment Services Ltd.	Pulchowk, Lalitpur	2076/10/26	
8	First Pay Technology Pvt. Ltd.	Hattisar, Kathmandu	2076/11/13	
9	Gateway Payment Service Pvt. Ltd.	Banasthali, Kathmandu	2077/11/03	
Payme	nt Service Providers (PSPs)			
1	Prabhu Technology Pvt. Ltd.	Gairidhara, Kathmandu	2074/03/04	
2	IME Digital Solution Ltd.	Panipokhari, Kathmandu	2074/03/05	
3	eSewa Ltd.	Pulchok, Lalitpur	2074/03/05	
4	Cellcom Pvt. Ltd.	Airport, Kathmandu	2075/09/08	
5	CG Pay Nepal Pvt. Ltd.	Sanepa, Lalitpur	2075/09/13	
6	Khalti Pvt. Ltd.	Pulchok, Lalitpur	2076/01/02	
7	Pay Nep Pvt. Ltd.	Naxal, Kathmandu	2076/04/15	
8	QPay Pvt. Ltd	Baluwatar, Katmandu	2076/05/19	
9	Nepal Pay Time Pvt. Ltd	Putalisadak, Kathmandu	2076/05/19	
10	Smart Card Pvt. Ltd	Madhyapur Thimi, Radheradhe, Bhaktapur	2076/06/29	
11	Focusone Payment Solutions Pvt. Ltd.	Kamaladi, Kathmandu	2076/11/29	
12	Kurakani Pay Pvt. Ltd.	Sanepa, Lalitpur	2077/02/29	
13	PayWell Nepal Pvt. Ltd.	Anamnagar, Kathmandu	2077/06/11	
14	Goldmine Business Group Pvt. Ltd.	Baneshwor, Kathmandu	2077/08/29	
15	We Pay Pvt. Ltd.	Sundhara, Kathmandu	2077/09/15	
16	Fintech International Pvt. Ltd.	Thamel, Kathmandu	2077/10/20	
17	Lenden Sewa Pvt. Ltd.	Teku, Kathmandu	2077/10/20	

Annex 1: Licensed Institutions (PSOs and PSPs) (As of Mid-July 2024)

S.N.	Name	Address	Licensed Date (B.S.)
18	Digi Pay Pvt. Ltd.	Anamnagar, Kathmandu	2077/11/18
19	Nepal E-Biz Management Pvt. Ltd.	Sundhara, Kathmandu	2077/11/18
20	I Pay Pvt. Ltd.	Khichapokhari, Kathmandu	2077/11/21
21	I Cash Pvt. Ltd.	Jamal, Kathmandu	2077/12/03
22	Nepal Digital Payments Company Ltd.	Tripureshwor, Kathmandu	2077/12/03
23	Sulav Pay Pvt. Ltd.	Kuleshwor, Kathmandu	2077/12/05
24	Chitto Paisa Pvt. Ltd.	Sanepa, Lalitpur	2077/12/05
25	Sajilo Pay Payment Services Pvt. Ltd.	Baluwatar, Kathmandu	2077/12/17
26	City Wallet Pvt. Ltd.	Kamaladi, Kathmandu	2080/07/15

* Excluding BFIs licensed as PSPs.

Annex 2: Commercial Banks Licensed as Payment Service Providers (PSPs) (As of Mid-July 2024)

S.N.	Name	Address	Licensed Date (B.S.)
1	Nepal Bank Ltd.	Dharmapath, Kathmandu	2073/12/17
2	Agricultural Development Bank Ltd.	Ramshahpath, Kathmandu	2073/12/17
3	Global IME Bank Ltd.	Kamaladi, Kathmandu	2073/12/17
4	NIC Asia Bank Ltd.	Thapathali, Kathmandu	2073/12/17
5	Prime Commercial Bank Ltd.	Kamalpokhari, Kathmandu	2073/12/17
6	NMB Bank Ltd.	Babarmahal, Kathmandu	2073/12/20
7	Laxmi Sunrise Bank Ltd.	Hattisar, Kathmandu	2073/12/20
8	Nabil Bank Ltd.	Beena Marg, Kathmandu	2073/12/24
9	Prabhu Bank Ltd.	Babarmahal, Kathmandu	2073/12/24
10	Kumari Bank Ltd.	Tangal, Kathmandu	2073/12/24
11	Nepal Investment Megha Bank Ltd.	Durbarmarg, Kathmandu	2073/12/24
12	Siddhartha Bank Ltd.	Hattisar, Kathmandu	2073/12/24
13	Himalayan Bank Ltd.	Kamaladi, Kathmandu	2073/12/24
14	Machhapuchhre Bank Ltd.	Lazimpat, Kathmandu	2073/12/24
15	Sanima Bank Ltd.	Naxal, Kathmandu	2073/12/29
16	Citizens Bank International Ltd.	Narayanhitipath, Kathmandu	2073/12/29
17	Rastriya Banijya Bank Ltd.	Singh Durbar Plaza, Kathmandu	2073/12/29
18	Standard Chartered Bank Nepal Ltd.	Naya Baneshwor, Kathmandu	2073/12/30
19	Everest Bank Ltd.	Lazimpat, Kathmandu	2073/12/30
20	Nepal SBI Bank Ltd.	Keshermahal, Kathmandu	2073/12/30

S.N.	Name	Address	Licensed Date (B.S.)
1	Shangrila Development Bank Ltd.	Baluwatar, Kathmandu	2075/01/21
2	Garima Bikash Bank Ltd.	Lazimpat, Kathmandu	2075/02/22
3	Excel Development Bank Ltd.	Birtamod, Jhapa	2075/04/17
4	Saptakoshi Development Bank Ltd.	Dhankutabazar, Dhankuta	2075/06/15
5	Shine Resunga Development Bank Ltd.	Butwal, Rupandehi	2075/09/20
6	Miteri Development Bank Ltd.	Dharan, Sunsari	2075/11/30
7	Sindhu Bikash Bank Ltd.	Barhabise, Sindhupalchowk	2076/03/03
8	Kamana Sewa Bikash Bank Ltd.	Gyaneshwor, Kathmandu	2076/03/30
9	Muktinath Bikash Bank Ltd.	Kamaladi, Kathmandu	2076/05/16
10	Green Development Bank Ltd.	Pokhara, Kaski	2076/05/25
11	Lumbini Bikas Bank Ltd.	Dillibazar, Kathmandu	2076/09/23
12	Jyoti Bikas Bank Ltd.	Kamaladi, Kathmandu	2077/10/25
13	Mahalaxmi Bikas Bank Ltd.	Durbarmarga, Kathmandu	2078/11/23
14	Corporate Development Bank Ltd.	Birgunj, Parsa	2079/10/05
15	Karnali Development Bank Ltd.	Nepalgunj, Banke	2080/01/11
16	Narayani Development Bank Ltd.	Rattnagar, Chitawan	2080/03/05
17	Salapa Bikas Bank Ltd.	Diktel,Khotang	2081/03/28

Annex 3: Development Banks Licensed as Payment Service Providers (PSPs) (As of Mid-July 2024)

Annex 4: Finance Companies Licensed as Payment Service Providers (PSPs) (As of Mid-July 2024)

S.N.	Name	Address	Licensed Date (B.S.)
1	Pokhara Finance Ltd.	Pokhara, Kaski	2074/09/13
2	ICFC Finance Ltd.	Tangal, Kathmandu	2075/01/16
3	Gurkhas Finance Ltd.	Dillibazar, Kathmandu	2075/02/24
4	Goodwill Finance Ltd.	Hattisar, Kathmandu	2075/08/17
5	Manjushree Finance Ltd.	Naya Baneshwor, Kathmandu	2076/08/25
6	Progressive Finance Ltd.	Tinkune, Kathmandu	2076/09/23
7	Reliance Finance Company Ltd.	Pradashanimarg, Kathmandu	2077/10/25
8	Samridhi Finance Company Ltd.	Hetauda, Makawanpur	2078/01/14
9	Best Finance Company Ltd.	Chabhil, Kathmandu	2078/01/19
10	Guheshwori Merchant Banking and Finance Company Ltd.	Pulchowk, Lalitpur	2078/01/31
11	Central Finance Ltd.	Kupandol, Lalitpur	2078/05/27
12	Nepal Finance Ltd.	Kamaladi, Kathmandu	2078/05/27
13	Janaki Finance Company Ltd.	Janakpurdham, Dhanusa	2079/02/16
14	Multipurpose Finance Ltd.	Rajbiraj, Saptari	2079/02/16
15	Shree Investment and Finance Company Ltd.	Dillibazar, Kathmandu	2079/05/09

Annex 5: Microfinance Financial Institutions as Payment Service Providers (PSPs) (As of Mid-July 2024)

S.N.	Name	Address	Licensed Date (B.S.)
1	Laxmi Laghubitta Bittiya Sanstha Ltd.	Maharajgunj, Kathmandu	2079/03/19
2	Chhimek Laghubitta Bittiya Sansthan Ltd.	Old Baneswor, Kathmandu	2079/05/09
3	Nirdhan Utthan Laghubitta Bittiya Sasthan Ltd.	Naksal, Kathmandu	2079/05/21
4	Mirmire Laghubitta Bittiya Sasthan Ltd.	Banepa, Kavrepalanchowk	2079/08/14
5	Sworojkar Laghubitta Bittiya Sasthan Ltd.	Banepa, Kavrepalanchowk	2079/08/21
6	Unnati Sahakarya Laghubitta Bittiya Sasthan Ltd.	Siddharthanagar, Rupandehi	2079/08/21
7	Swablamban Laghubitta Bittiya Sansthan Ltd.	Kamalpokhari, Kathmandu	2079/09/24
8	Jeevan Bikas Laghubitta Bittiya Sansthan Ltd.	Katahari , Morang	2080/05/10
9	Suryodaya Womi Laghubitta Bittiya Sansthan Ltd.	Banepa, Kavrepalanchok	2080/07/27
10	NIC ASIA Laghubitta Bittiya Sansthan Ltd.	Banepa, Kavrepalanchok	2081/2/28
11	Mahila Laghubitta Bittiya Sansthan Ltd.	Banepa, Sanga, Kavrepalanchok	2081/2/25

	FY 2022	2/23	FY 2023	/24	Change (%)		
Particulars	No. of Transactions	Total Amount (NPR Million)	No. of Transactions	Total Amount (NPR Million)	No. of Transactions	Total Amount	
RTGS	815,180	34,289,975	809,769	38,520,229	(0.66%)	12.34%	
ATM-Cash Withdrawal	122,052,298	968,397	130,542,215	1,057,847	6.96%	9.24%	
ECC	12,348,969	6,207,166	11,976,235	5,899,069	(3.02%)	(4.96%)	
IPS	15,380,646	2,135,705	27,458,863	2,435,888	78.53%	14.06%	
connectIPS	50,252,944	4,114,628	70,501,884	5,665,121	40.29%	37.68%	
Debit Cards	131,774,747	1,010,493	139,817,383	1,100,398	6.10%	8.90%	
Credit Cards	2,868,591	18,351	3,243,907	21,733	13.08%	18.43%	
Prepaid Cards	744,620	4,840	1,145,510	7,542	53.84%	55.85%	
Internet Banking	3,216,663	156,828	3,512,720	169,738	9.20%	8.23%	
Mobile Banking	283,420,597	2,185,999	424,047,710	3,478,668	49.62%	59.13%	
Branchless Banking	878,368	18,049	873,608	18,579	(0.54%)	2.93%	
Wallet	213,367,144	219,807	294,543,696	302,694	38.05%	37.71%	
QR-Based Payments	78,029,200	245,412	169,346,467	499,795	117.03%	103.66%	
Point of Sales (POS)	12,315,919	59,045	12,171,542	64,158	(1.17%)	8.66%	
E-Commerce*	990,135	6,182	1,474,296	8,816	48.90%	42.61%	

Annex 6: Usage of Payment Systems

* Online payments using cards

Cards	Issuer	Mid-July	Mid-July	Mid-July						
Carus	Issuel	2016	2017	2018	2019	2020	2021	2022	2023	2024
	Commercial	4,142,390	4,694,066	5,307,970	6,454,285	7,062,472	8,459,435	10,274,413	11,358,426	11,757,746
	Banks	1,112,390	1,091,000	5,507,970	0,151,205	7,002,172	0,159,155	10,271,115	11,550,120	11,757,710
	Development	479,318	260,225	206,589	216,991	231,287	348,411	538,672	826,506	1,076,072
Debit Card	Banks	179,510	200,225	200,509	210,771	231,207	510,111	550,072	020,500	1,070,072
	Finance	35,417	26,667	29,694	37,245	35,443	32,009	43,272	60,553	59,710
	Companies	55,117	20,007	29,091	57,215	55,115	52,009	13,272	00,000	57,710
	Total	4,657,125	4,980,958	5,544,253	6,708,521	7,329,202	8,839,855	10,856,357	12,245,485	12,893,528
	Commercial	52,014	68,966	104,721	123,146	160,297	192,370	238,794	283,126	287,365
	Banks	52,014	00,700	104,721	123,140	100,277	172,370	230,774	203,120	207,505
Credit Card	Development	_	-	_	_	_	_	_	646	1,874
Caru	Banks								0+0	1,074
	Total	52,014	68,966	104,721	123,146	160,297	192,370	238,794	283,772	289,239
	Commercial	82,797	101,458	96,816	67,386	63,775	65,786	105,121	135,626	178,216
	Banks	02,797	101,150	90,010	07,500	05,115	05,700	105,121	135,020	170,210
Prepaid Card	Development	_	_	_	_	_	_	_	1,494	1,875
	Banks								1,777	1,075
	Total	82,797	101,458	96,816	67,386	63,775	65,786	105,121	137,120	180,091

Annex 7: Number of Payment Instruments Issued by BFIs

Channel	Institutions	Mid-July 2016	Mid-July 2017	Mid-July 2018	Mid-July 2019	Mid-July 2020	Mid-July 2021	Mid-July 2022	Mid-July 2023	Mid-July 2024
	Commercial Banks	1,661	1,874	2,552	2,951	3,759	3,983	4,235	4,465	4801
ATM	Development Banks	230	177	209	318	296	301	323	346	348
Terminals	Finance Companies	17	30	30	47	51	41	44	44	44
	Total	1,908	2,081	2,791	3,316	4,106	4,325	4,602	4,855	5193
	Commercial Banks	1,604,578	2,438,222	4,711,097	7,406,802	10,115,313	12,638,366	16,091,464	18,438,455	21,141,088
Mobile	Development Banks	133,561	217,432	351,796	909,512	1,100,743	1,500,050	2,114,559	2,772,852	3,275,906
Banking	Finance Companies	16,427	14,078	23,176	30,873	90,741	56,423	101,232	152,682	231,852
	Total	1,754,566	2,669,732	5,086,069	8,347,187	11,306,797	14,194,839	18,307,255	21,363,989	24,648,846
	Commercial Banks	489,835	766,958	816,074	888,268	1,001,866	1,115,532	1,279,475	1,347,970	1,325,072
Internet	Development Banks	23,036	14,634	14,634	24,124	23,332	37,063	394,563	494,753	578,387
Banking	Finance Companies	2,594	2,159	3,594	4,952	6,029	7,726	10,272	13,472	15,863
	Total	515,465	783,751	834,302	917,344	1,031,227	1,160,321	1,684,310	1,856,195	1,919,322

Annex 8: Number of ATM Terminals and Customers of Mobile and Internet Banking

Торіс	Accomplishments		
Strengthening the	• Implemented:		
legal and regulatory	 Licensing Policy for Payment-related institutions/mechanisms, 2016 		
framework	✤ RTGS System Rules		
	✤ ILF Procedure, 2019		
	✤ Payment and Settlement Bylaw, 2020		
	Nepal QR Standardization Framework and Guidelines, 2021		
	 Digital Lending Guidelines, 2022 		
	Furthermore, National Payment Board and National Payment System Recommendation Committee have been institutionalized as per		
	Payment and Settlement Act, 2019 and Payment System Inspection and Supervision Bylaws, 2021.		
Deepening Digital	• Fair and transparent pricing, defined via Directive No. 5, in close coordination with the stakeholders.		
Retail Payment	• Video KYC for remote onboarding of customers in use.		
System	• Maximum transaction fees specified by the NRB through Directive No 5 of Payment-system related Unified Directives.		
	• PSPs are allowed to use agent network to provide payment-related services. The agent network is useful for financial inclusion and		
	enhancing the access.		
	• USSD-based payment system in operation through one of the licensed PSPs. A study report has been published highlighting the		
	appropriate implementation modality for USSD-based payment system in Nepal.		
	• A guideline on interoperability of payment systems issued to foster wider acceptance of payment systems in Nepal.		
	Guidelines issued to implement app in Nepali language to promote the use of digital payments		
Directing government	Revenue Information Management System (RMIS) integrated with NCHL's connectIPS and IPS system for real and non-real time		
and remittance	government payments.		

Annex 9: Accomplishment of RPS, 2019

Торіс	Accomplishments		
payments to	• Person-to-government (P2G) payments such as traffic fine payments, tax payments, etc. can be made through e-wallets.		
transaction accounts	• Remittance can be channeled through wallets		
	• VAT refund process in the process of implementation		
Settlement in Central	• All direct and indirect participants have access to settlement in central bank money via RTGS system. The direct participants have		
Bank Money	access to portals to directly use reserve accounts for large value payments, while indirect participants (especially the members of		
	ECC system) have access to settlement in the central bank money through the Retail Payment Switch, operated by NCHL.		
Financial Awareness	NRB carrying out financial literacy programs such as		
	 Celebrating fiscal year 2021/22 and 2022/23 as the Electronic Payments Promotion Year 		
	 Every Tuesday, releasing localized literacy messages through NRB's social media sites 		
	 Celebrating Global Money Week every year 		
	 Issuing frequently asked questions (FAQs), knowledge kits, etc. 		
	 BFIs direct to invest in Financial Literacy programmes. 		
	 PSOs/PSPs directed to include digital financial literacy campaigns in their annual work plan 		
	• The following initiatives have been undertaken to foster customer confidence and grievance handling:		
	 PSOs/PSPs directed to implemented a dedicated help desk (at least 16 hours) to support customers. 		
	 PSOs directed to maintain toll free numbers of at least two telecom service providers. 		
	Cunaso portal (gunaso.nrb.org.np) implemented by NRB, allowing customers to raise and track their complaints related		
	financial services provided by licensed institutions.		
Promote Oversight	The following policy arrangements have been made to promote oversight of payment related institutions in Nepal:		
	Payment System Oversight Framework, 2018		
	Payment System Oversight Manual, 2021		

Торіс	Accomplishments	
	Payment System Inspection and Supervision Bylaws, 2021	
	Cyber Resilience Guidelines, 2023	
	• Procedure for Onsite Inspection of Payment-related Activities of Banks and Financial Institutions, 2024	
Cooperation Between	NRB has collaborated with Nepal Telecommunication Authority (NTA) through National Payment Board to facilitate digital financial	
Authorities	services through telecom companies.	
	Similarly, an MOU has been signed between Public Debt Management Office (PDMO) and NRB to integrate the Debt Operation Management Software (DOMS) with the RTGS system.	
	NRB is coordinating with National ID and Civil Registration Department of the Government of Nepal to implement the eKYC system in Nepal	
	Furthermore, the collaboration with different authorities and international agencies such as the World Bank, Alliance for Financial Inclusion (AFI), International Monetary Fund (IMF), International Financial Corporation (IFC), South East Asian Central Banks (SEACEN), and others is done on a need basis.	

The Retail Payment Strategy, 2019 consisted several strategies, divided in short term, medium term, and long term period and planned over a period of 3 years.

Annex	Particulars	Institution	Frequency	Submission
No.	I al ticulai s	Institution	Frequency	Deadline
10.1.1	Details of Branchless	BFIs	As per the	Within the
	Banking Centre		need	7 th day of
10.1.2	Details of ATM	BFIs		operation
	Location Centre			
10.1.3	Account Detail- BLB	BFIs	Monthly	Within the
	wise			7 th day of
10.1.4	Electronic Transaction	BFIs		the next
	of BFIs			month
10.1.5	Transactions Report for	PSPs		
	PSPs			
10.1.6	Statement of Success	PSPs		
	and Failed Transactions			
10.1.7	Reconciliation	PSPs		
	Statement of e-Money			
	and Settlement Bank			
10.1.8	Customer Details of	PSPs		
	PSPs			
10.1.9	Transactions Report of	PSPs		
	PSPs' Agent			
10.1.10	Transactions Report of	PSOs		
	PSOs			
10.1.11	Transactions Report of	PSOs		
	PSOs			
10.1.12	Transactions Report of	NCHL		
	Clearing House			
10.1.13	Number Transaction	PSOs/PSPs		
	Reported to Financial			
	Intelligence Unit(FIU)			

Annex 10: Accomplishment of RPS, 2019

S.N.	Name of Institution	Nature of Institution
1.	Smart Choice Technology Ltd.	PSO
2.	Nepal Payment Solutions Ltd.	PSO
3.	Nepal Clearing House Ltd.	PSO
4.	E-sewa Ltd.	PSP
5.	Cellcom Pvt Ltd.	PSP
6.	E-net Payment Pvt. Ltd.	PSP
7.	Kurakani Pay Pvt Ltd.	PSP
8.	I Pay Pvt Ltd	PSP
9.	Sulav Pay Pvt Ltd.	PSP
10.	IME Digital Solutions Ltd.	PSP
11.	Pay Nep Pvt Ltd.	PSP
12.	C.G Pay Nepal Pvt.Ltd.	PSP
13.	Q Pay Pvt Ltd.	PSP
14.	Prabhu Technology P. Ltd.	PSP
15.	Goldmine Business Pvt Ltd	PSP
16.	Sajilo Pay Payment Services Pvt Ltd	PSP
17.	Nepal Paytime Pvt Ltd	PSP
18.	Smart Card Nepal Pvt Ltd	PSP
19.	Paywell Nepal P. Ltd	PSP
20.	Digi Pay Pvt. Ltd.	PSP
21.	Khalti Pvt. Ltd.	PSP
22.	E-sewa Ltd.	PSP

Annex 11: Onsite Inspection 2023/24

S.N.	Name of Institution	Nature of Institution
1.	Reliance Finance Limited	BFI
2.	Siddhartha Bank Limited	BFI
3.	Prabhu Bank Limited	BFI
4.	NMB Bank Limited	BFI
5.	Manjushree Finance Limited	BFI
6.	Miteri Development Bank Limited	BFI

Annex 12: RTGS System Related Inspection in FY 2023/24

Annex 13: Off-site Supervision in FY 2023/24

S.N.	Name of Institution	Nature of Institution
1.	Nepal Clearing House Ltd. (NCHL)	PSO
2.	Smart Choice Technologies Ltd. (SCT)	PSO
3.	Nepal Electronic Payment Systems Ltd. (NEPS)	PSO
4.	Nepal Payment Solution Ltd.	PSO
5.	Fonepay Payment Service Ltd.	PSO
б.	Gateway Payment Service Pvt. Ltd.	PSO
7.	IME Digital Ltd.	PSP
8.	E-sewa Ltd.	PSP
9.	Cellcom Pvt. Ltd.	PSP
10.	CG Pay Nepal Pvt. Ltd.	PSP
11.	Khalti Pvt. Ltd.	PSP
12.	Pay Nep Pvt. Ltd.	PSP
13.	Smart Card Nepal Pvt. Ltd.	PSP
14.	Prabhu Technology Pvt. Ltd.	PSP
15.	Focusone Payment Solutions Pvt. Ltd.	PSP
16.	Kurakani Pay Pvt. Ltd.	PSP
17.	I-Pay Pvt. Ltd.	PSP
18.	Goldmine Business Group Pvt. Ltd.	PSP
19.	We Pay Pvt. Ltd.	PSP

S.N.	Name of Institution	Nature of Institution
20.	Fintech International Pvt. Ltd.	PSP
21.	Lenden Sewa Pvt. Ltd.	PSP
22.	DG Pay Pvt. Ltd.	PSP
23.	I-Cash Pvt. Ltd.	PSP
24.	Nepal Digital Payment Company Ltd. (NDPC)	PSP
25.	Sulav Pay Pvt. Ltd.	PSP
26.	Chhito Paisa Pvt. Ltd.	PSP
27.	Q-Pay Pvt. Ltd.	PSP
28.	DG Pay Pvt. Ltd.	PSP

Annex 14 : Not Granted Approval for the publication of Financial Statements in FY 2023/24

S.N.	Name of Institution	Remarks
1.	Nepal E-Biz Management Pvt. Ltd.	In Process of Voluntary Liquidation.
2.	Sajilo Pay Payment Services Pvt. Ltd.	Regulatory Non-Compliance
3.	Paywell Nepal Pvt. Ltd.	Regulatory Non-Compliance