

# Promoting Safe and Efficient Payment and Remittance Systems

Payment and remittance systems are vital to the modern economy. They help people and businesses make transactions conveniently, such as to buy groceries, shop online, pay suppliers and send money overseas. Given their importance, we regulate these systems and supervise industry players to promote the safety, efficiency, reliability and integrity of payment and remittance systems.

The key priority for the Bank in 2020 was to ensure that payment and remittance systems continued to operate at high levels of safety, efficiency, reliability and integrity, amid the challenging operating environment brought about by the pandemic. Significant efforts were also devoted towards accelerating the adoption of electronic payment (e-payment) and electronic remittance (e-remittance) services, particularly among the underserved communities and small businesses. This effort is part of the broader digitalisation agenda to ensure that households and businesses are better positioned to manage the risks and capitalise on the opportunities in the new normal. We also continued to foster development of key payment infrastructures to ensure they remain effective and relevant to cater to the needs of the Malaysian economy.

## Key payment and remittance trends

In 2020, RENTAS<sup>1</sup>, Malaysia's large value payment system, and the retail payment systems continued to operate smoothly without any major disruptions,

<sup>1</sup> Real-time Electronic Transfer of Funds and Securities System.

recording a high system availability of above 99.9%. Usage of e-payment services grew significantly during the year (Diagram 1). Notwithstanding the decline in economic activities as a result of the pandemic and movement restrictions, the total number of e-payment transactions continued to record a double digit growth of 14% to 5.5 billion transactions in 2020. On average, a person in Malaysia made 170 e-payment transactions in 2020, up from 150 transactions in 2019. Meanwhile, the usage of cheques and cash recorded a sharper decline in 2020. The number of cheques cleared declined to 59.9 million cheques, down 29% from the previous year. Likewise, cash withdrawn from Automated Teller Machine (ATM), a proxy of cash usage, declined to 768.7 million transactions valued at RM377.3 billion in 2020, down 9% and 12% respectively compared to 2019<sup>2</sup>.

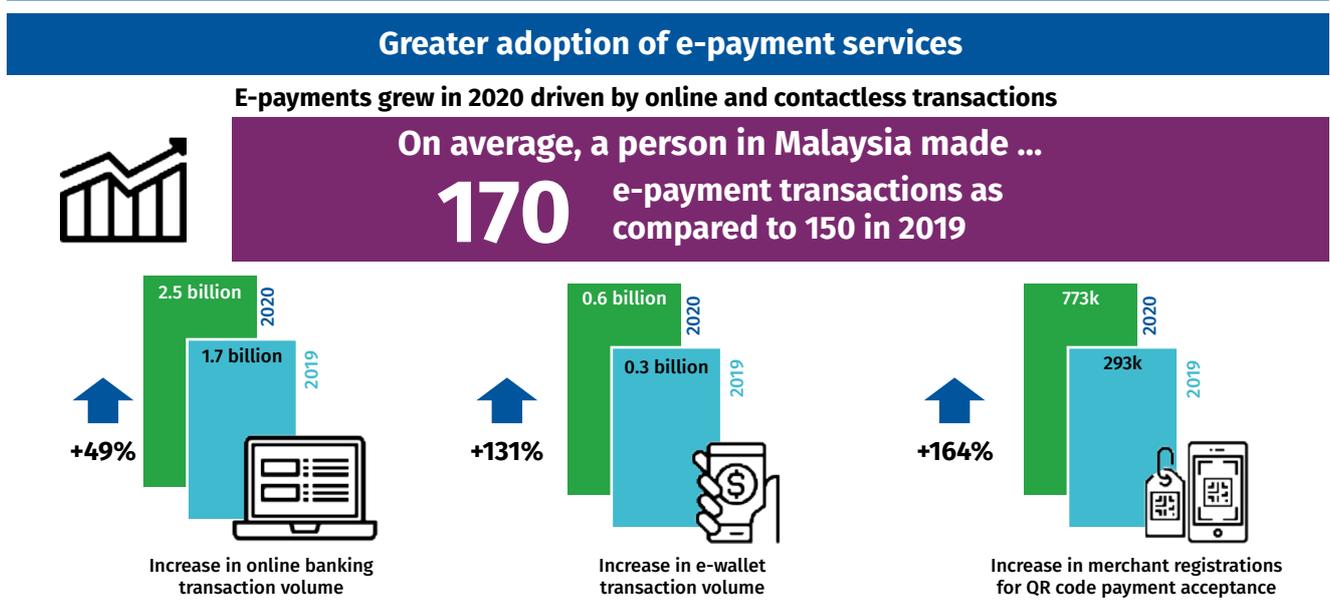
The increased adoption of e-payment services was driven primarily by the increasing shift by consumers towards contactless and online payment methods. These payment methods are safer and more convenient as they help minimise contact and reduce the need for visits to physical premises. For payment at physical premises, contactless card transactions accounted for 1 out of every 2 card transactions in 2020, up from 1 out of every 3 transactions in 2019. Meanwhile, online banking transactions registered a 49% increase to 2.5 billion transactions (2019: 1.7 billion). E-wallet<sup>3</sup> transactions on the other hand, increased by 131% to 0.6 billion transactions (2019: 0.3 billion). More merchants also signed up to accept e-payments with the number of Quick Response (QR) code payment registrations increasing by 164% to 773,484 as at end-2020, up from 292,969 registrations as at end-2019<sup>4</sup>.

<sup>2</sup> As explained in the chapter on Issuing Currency, the higher growth of currency-in-circulation (CIC) recorded in 2020 is likely driven by precautionary holdings of cash. Members of the public were holding extra cash for comfort and security in light of the economic uncertainty brought about by the pandemic. This experience was not unique to Malaysia, as many other countries reported a similar phenomenon.

<sup>3</sup> Network-based e-money.

<sup>4</sup> Based on data reported by five major issuers of network-based e-money.

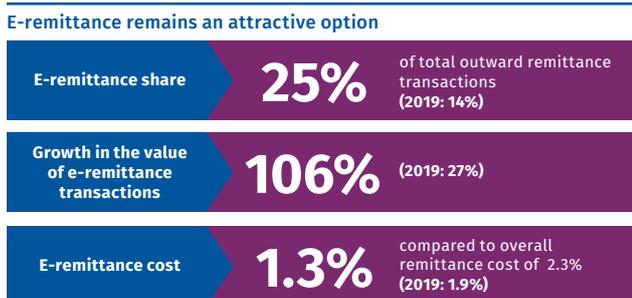
Diagram 1: Greater e-payment adoption



Source: Bank Negara Malaysia

Similarly, adoption of e-remittance services offered by remittance providers<sup>5</sup> grew significantly (Diagram 2). In 2020, the total value of e-remittance transactions more than doubled to RM6.6 billion, accounting for 25% of total outward remittances (2019: RM3.2 billion, 14%). This was supported, among others, by the lower cost of e-remittance services and convenience of electronic on-boarding processes (i.e. e-KYC) that provided a more seamless and convenient user experience. The ability of remittance providers to offer e-remittance services also supported the industry’s swift recovery from the impact of the pandemic, registering RM26.5 billion in total outward remittances, up by 12% from 2019. While remittances by foreign workers were lower due to subdued economic conditions, outward remittances conducted via remittance providers continued to grow, driven by individual and business remittances which grew by 9% and 89% respectively compared to the previous year.

Diagram 2: Greater e-remittance adoption



Source: Bank Negara Malaysia

<sup>5</sup> Refer to licensed non-bank remittance service providers.

## Ensuring safety and fostering confidence in payment and remittance systems

### Oversight activities on payment and remittance systems

Due to the challenging operating environment brought about by the pandemic, our oversight activities in 2020 were focused on ensuring the operators of RENTAS and key retail payment systems were able to maintain business continuity that took into account the unique challenges posed by the containment measures and movement restrictions. These included ensuring readiness of their recovery centres and instituting split operations and secure remote access capabilities to mitigate infection risks. We also required the operators to increase their vigilance over IT & cybersecurity risks, and ensure critical resources were available from third party service providers, as needed, to sustain operations and facilitate the timely resolution of issues.

During the year, our supervisory reviews on RENTAS, major retail payment systems<sup>6</sup> operated by PayNet<sup>7</sup>, and other industry players, including electronic money (e-money) issuers, merchant acquirers and remittance providers, were similarly focused on

<sup>6</sup> These refer to the Real-time Retail Payments Platform (RPP), the Interbank GIRO (IBG) and the Financial Process Exchange (FPX).

<sup>7</sup> Payments Network Malaysia Sdn. Bhd. (PayNet) is the operator of the country’s shared payment systems and financial market infrastructures, which is jointly owned by the Bank and 11 domestic banks.

operational, IT and cyber risks. The reviews aimed to ensure the robustness of the risk management practices adopted by the operators and industry players in mitigating operational disruptions, security vulnerabilities and breaches. For the major retail payment systems, the focus areas also included governance and level of compliance with the relevant Principles for Financial Market Infrastructures (PFMI) issued by the Committee on Payments and Market Infrastructures (CPMI) of the Bank for International Settlements (BIS) and the International Organization of Securities Commissions (IOSCO). We also issued periodic communications on cybersecurity to increase the industry’s awareness on the latest cyber threats. In addition, compliance with anti-money laundering and counter terrorism financing (AML/CFT) requirements remains a key focus area, supported by risk-based supervision of industry players.

As the pandemic curtailed on-site supervision and surveillance activities, we leveraged extensively on new technology and data analytics to support our supervisory activities on remittance providers as well as surveillance on illegal operators to mitigate money laundering and terrorism financing risks. We also continued to explore the potential of cloud-based and automated machine learning services to complement and enhance our surveillance capabilities. In addition, the Bank continued to increase its investments in the recruitment and training of talent with data analytics skills and knowledge.

**Policy responses to emerging risks and market developments**

We continually issue, review and enhance our policies to ensure that they remain effective and relevant to address emerging risks and market developments. In 2020, we issued a policy document on risk-based authentication for online payment card transactions. This will lead to better customer experience facilitated by a more seamless authentication flow and strengthen fraud management through the use of data driven technology and analysis. In addition, we are reviewing the Bank’s policies on e-money, merchant acquiring and e-remittance business to enhance the management of key risks, in particular fund management risk, settlement risk, technology and cyber risk, and fraud risk. The review also aims to foster innovation and promote the development of market players that can help enhance Malaysia’s payment ecosystem.

**Promoting greater adoption of e-payment and e-remittance services**

The Bank and the industry intensified communication and outreach efforts to promote e-payment and e-remittance services as a safer and more convenient way of making payments. We launched the #GoDigital Campaign to educate the public on the benefits and steps to adopt e-payment and e-remittance services (Diagram 3). Communication materials including short videos and infographics were shared via mainstream and social media channels. For e-remittance services, a targeted approach to reduce barriers and increase confidence in using formal remittance channels among foreign workers continued to be pursued. This includes broadcasting videos in their native languages via social media channels. To preserve trust and confidence in the adoption of e-payments, we also stepped up financial education and awareness on basic hygiene measures that the public should take to protect themselves against financial scams and fraud.

We also worked with the industry and other stakeholders to address pain points and facilitate migration to e-payments. The progress has been encouraging, especially in the public sector, where e-payments made up 60% of total Government collection in 2020 (2019: 52%)<sup>8</sup>. A notable example is the Immigration Department of Malaysia which successfully enabled e-payment acceptance at all Immigration counters nationwide. This has facilitated a higher uptake of e-payments which accounted for 84% of the total collection received by the Immigration Department of Malaysia in

Diagram 3: #GoDigital Campaign infographics



Source: Bank Negara Malaysia

<sup>8</sup> Source: Malaysian Administrative Modernisation and Management Planning Unit (MAMPU).



*MyDebit Campaign by PayNet in collaboration with Ministry of Health Malaysia*

2020, compared to 48% in 2019<sup>9</sup>. Efforts were also made to engage state governments and merchant associations to encourage greater adoption by small businesses. For instance, the Bank collaborated with the Penang State Government to implement the *Cashless Pasar Awam* initiative to expand e-payment adoption across 56 wet markets in Penang. Another example was in Pasar Payang, a popular market area in Terengganu, where in collaboration with local traders associations

and the industry, we helped 329 traders to start accepting e-payments.

### Fostering development of key payment infrastructures

To drive greater efficiency and promote innovation in payment and financial services, the Bank worked with the industry and relevant stakeholders to issue the ISO 2022 migration strategy for Malaysia.



*A trader in Pasar Payang, Terengganu who was on-boarded to accept QR code payments*

<sup>9</sup> Source: Immigration Department of Malaysia.

The Real-time Retail Payments Platform (RPP) is a shared payment infrastructure that facilitates instant and seamless payments between bank accounts and e-money accounts. Two services are currently offered on the RPP. The first service, DuitNow, enables a sender to transfer funds by referencing the mobile phone number, National Registration Identity Card (NRIC) number or the business registration number of the

recipient. The second service, DuitNow QR, is a national QR payment solution which enables a merchant to accept payments from customers of all participating e-wallet operators using a unified QR code.

In 2021, more services will be offered progressively under the RPP. These will include DuitNow Request, DuitNow AutoDebit, DuitNow Online Banking/

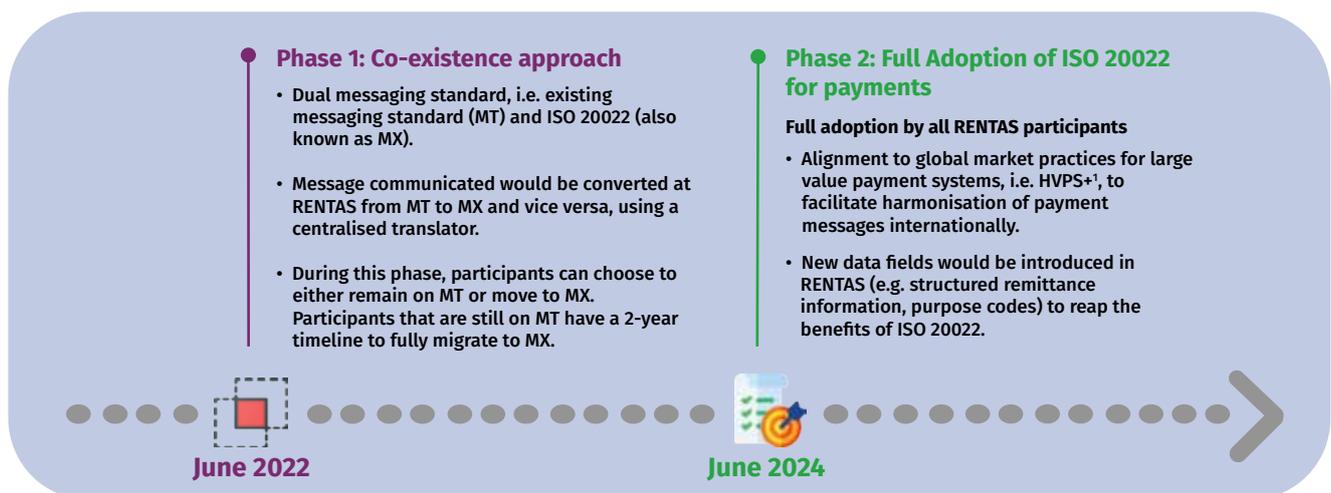
## ISO 2022 migration strategy: Migration approach and next steps

ISO 2022 is an internationally recognised messaging standard for the financial industry with enhanced data content, structured messaging format and flexibility to adapt to new technologies. The adoption of ISO 2022 presents an opportunity for the financial industry in Malaysia to enhance payment efficiency, facilitate better risk management as well as offer value-added services and products to customers.

The migration to ISO 2022 also helps to mitigate potential disruptions to payment transactions. This is especially so for cross-border payments, where the loss of information through data truncation may lead to non-compliance with anti-money laundering and counter terrorism financing requirements. Globally, major jurisdictions such as the European Union, the United Kingdom, the United States and several ASEAN countries are set to migrate to ISO 2022 within the next few years.

In June 2020, the Bank finalised and issued the ISO 2022 migration strategy for payment systems in Malaysia after consultation with industry players and relevant stakeholders. The strategy reflects several guiding principles which include consideration on industry readiness, ensuring effective safeguards against operational and compliance risks, cost effectiveness and the ability to reap the benefits of ISO 2022 as early as possible. The migration exercise will be done in two phases starting in June 2022 (Diagram 4).

Diagram 4: Two-Phased Approach for ISO 2022 Migration for RENTAS



<sup>1</sup> A global market practice for ISO 2022 messaging standards to harmonise usage of ISO 2022 for large value payment systems

Source: Bank Negara Malaysia

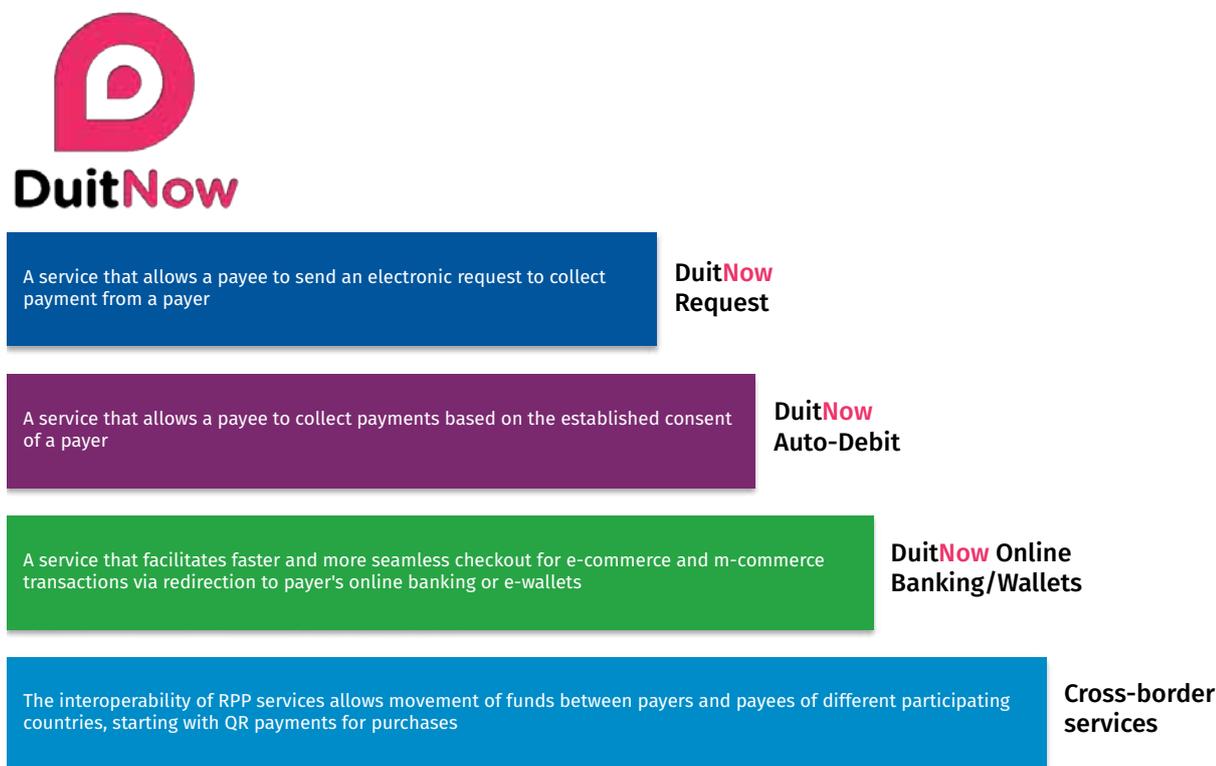
The message specifications for the Real-time Retail Payments Platform (RPP), which is currently using a proprietary ISO 2022 standard, would also be aligned with the new messaging specifications to be adopted for RENTAS (HVPS+). This is expected to enhance efficiency for financial institutions that participate in both RENTAS and RPP, as they only need to handle one single messaging standard for both large value and retail payment transactions.

Wallets, and cross-border payment services (Diagram 5). Further progress has also been made to facilitate cross-border real-time QR payments with neighbouring countries within the ASEAN region starting with Thailand, Indonesia, and Singapore. These are expected to go live in 2021. Linking the region's real-time payment systems will promote greater convenience, efficiency and healthy competition in cross-border payments. This includes providing consumers and merchants with potentially faster and more cost-effective alternatives to traditional modes of payments such as correspondent banking arrangements and payment cards.

### Going forward

In 2021, we will continue to direct our efforts to ensure that key payment and remittance systems operate smoothly with high levels of safety, efficiency, reliability and integrity. With greater traction in the adoption of e-payments and e-remittance services in a post-pandemic world, we will continue to work with the industry to reduce barriers to adoption, especially among the underserved segments while ensuring that our regulatory framework continues to remain effective in facilitating innovation.

Diagram 5: New services to be introduced under the RPP



Source: PayNet