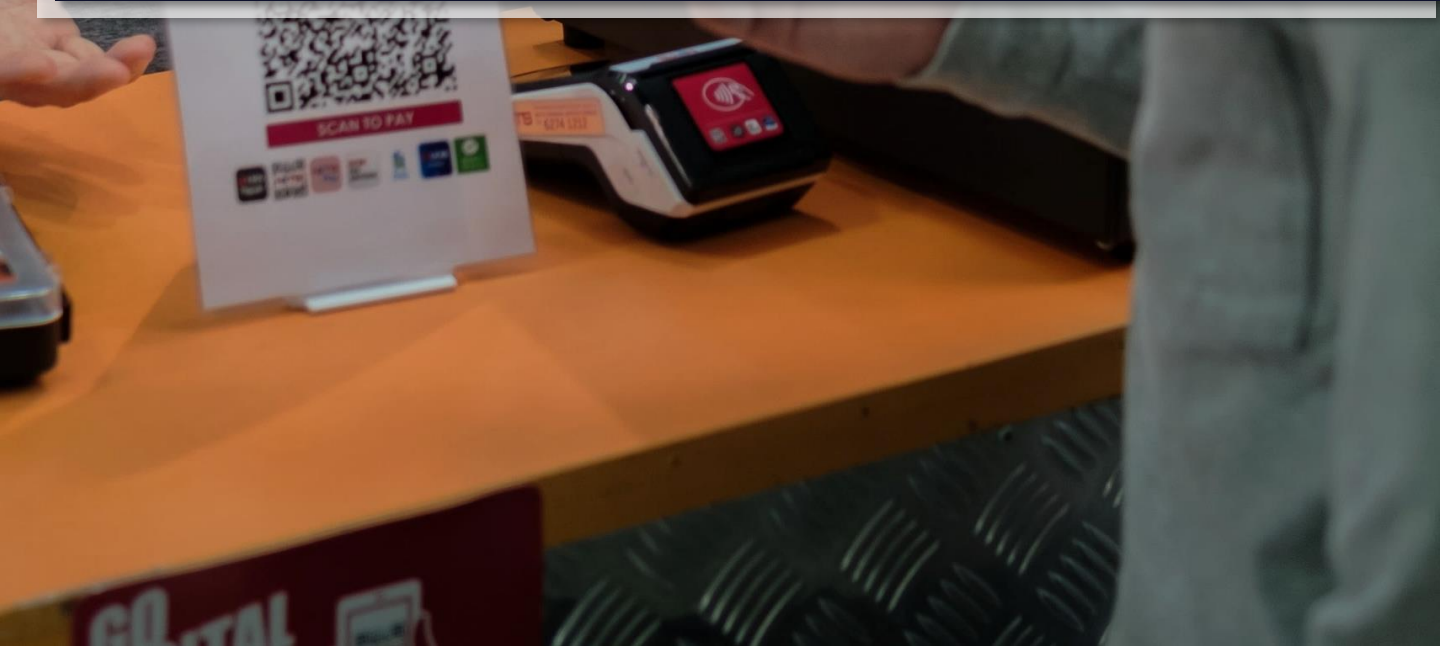




Interoperable QR Payments in Singapore

Proof of Concept Report



Contents

03	PREFACE
04	EXECUTIVE SUMMARY
05	A) SGQR+ POC SURVEY FINDINGS
08	B) SGQR+ POC TRACK 1: INTEROPERABLE SWITCH BY LIQUID GROUP
11	C) SGQR+ POC TRACK 2: MASTER MERCHANT ACQUIRER BY NETS
14	D) CONCLUSION: HEALTHY DEMAND FOR INTEROPERABLE QR PAYMENTS IN SINGAPORE
16	E) ACKNOWLEDGEMENTS
17	F) ANNEXES
	Annex 1: POC Participants
	Annex 2: Hawkers Go Digital
	Annex 3: Liquid Group SGQR+ POC Transaction Flow
	Annex 4: NETS SGQR+ POC Transaction Flow
	Annex 5: Additional Findings from SGQR+ POC Survey

Preface

On 31 October 2023, Banking Computer Services (a subsidiary of NETS) and Ernst & Young Solutions LLP (EY) jointly published the “Interoperable QR Payments in Singapore” whitepaper which outlined the concept of an interoperable Singapore Quick Response Code Scheme (SGQR+) and presented a proof of concept (POC) with potential solutions for Singapore’s future QR payments infrastructure. This report presents the results of the POC launched by the Monetary Authority of Singapore (MAS), in collaboration with Banking Computer Services, Liquid Group and NETS. The POC was conducted in November 2023 alongside the Singapore FinTech Festival (SFF) 2023, with the objective of exploring the feasibility of enabling merchants in Singapore to accept QR payments from different payment schemes through a single merchant acquirer. Consumers were able to make QR payments at participating merchants using any payment app partnered with Liquid Group (as a switch operator) or NETS (as a master merchant acquirer) across more than 1,400 merchant acceptance points.

This report presents the analysis and insights based on transactional data of the POC and findings collected through a post-POC survey of the participating financial institutions (FIs) and merchants. The report assesses the market demand for the SGQR+ solution and considers the appropriate commercial and technical arrangements that could be employed for the future implementation of interoperable QR payments in Singapore.

You can read more about the launch of the SGQR+ POC in the media release on the MAS website [here](#).

Details on the SGQR+ solution, the POC and its constituent tracks can be found in the whitepaper published on the MAS website [here](#).

Executive Summary

The SGQR+ POC has demonstrated that it is commercially feasible to deploy an efficient and inclusive interoperable QR payment experience for both users and merchants in Singapore.

SGQR+ enables merchants to accept multiple payment schemes by registering with a single merchant acquirer, resulting in a more streamlined transaction journey. Through their preferred primary merchant acquirer, merchants are able to optimise payment acceptance processes with the continued service of on-us transactions, and the enablement of off-us transactions. The interoperable QR payment scheme will also allow merchants to partner a single merchant acquirer for all its payment requirements, eliminating the need to manage multiple merchant acquirer relationships and unifying the reconciliation processes.

Interoperability among payment schemes will also enhance the payment experience of consumers by increasing the number of payment apps and e-wallets merchants can accept. Consumers and foreign visitors will be able to conveniently transact using their desired payment apps and e-wallets at a wider range of merchant stores. Please refer to Annex 1 to see the full list of participants that took part in the POC.

This report presents the results and analysis of the POC, as well as Liquid Group's and NETS' respective plans for the commercialisation of SGQR+.

Highlights from the POC are as follows:

- i. Participation from 453 participating merchants, with 23 local and international payment schemes and 1,416 payment acceptance points.
- ii. Acceptance of all supported payment schemes via a single merchant acquirer for every participating merchant.
- iii. Participating merchants collected a total of 65,204 transactions amounting to SGD 1.29 million in value in the month long POC. This represents a 105%[#] and 212%[#] increase in transaction volume and value respectively compared to the preceding month.
- iv. A 93.9%[#] increase in transaction volume compared to the preceding month for the top 10 participating merchants with the highest transactions.
- v. An increase in the number of accepted payment schemes per participating merchant from an average of 3 to 12 payment schemes.

The top three payment schemes with the largest number of transactions are in the order of NETS, GrabPay and LiquidPay. Foreign payment schemes formed a small part of the total transaction volume, with Alipay and WeChat as the top two foreign payment schemes accounting for 88% of all foreign payment transactions.

The commercial solutions from Liquid Group and NETS are intended to be rolled out by mid-2025, with details of their commercialisation plans found in Sections B and C.

[#] Percentage shown accounts for the seasonality differences for the month of November 2023.

A) SGQR+ POC Survey Findings

This chapter presents findings from surveys conducted with (i) merchants; and (ii) FIs including issuers, merchant acquirers and payment scheme operators, between 6 December 2023 and 9 February 2024 after the conclusion of the SGQR+ POC. These findings provide insights and understanding in respect of participants' motivations for joining this POC, the benefits, challenges, and areas for improvement.

Merchant Survey Findings

Around a quarter of merchants that participated in the SGQR+ POC responded to the survey. The profile of respondents is diverse with representation from different industries and scale of operations.

The survey findings indicated a generally positive reception towards the SGQR+ POC, with merchants satisfied with the increased efficiency and ease of sign-ups to multiple payment schemes. About 75% of the respondents expressed interest to continue using SGQR+ post-POC. For the remaining respondents, a small number of respondents cited costs and limited benefits as the top two reasons for not adopting SGQR+ at this point in time.

- i. 75% of the merchants indicated an interest to continue participating in SGQR+ with the main perceived benefits of SGQR+ being:
 - a. Increased efficiency (69%)
 - b. Ease of sign-up to multiple payment schemes (58%)
 - c. Simplified reconciliation (34%) and
 - d. Reduced costs (21%)

- ii. Of the remaining merchants, 22% were uncertain and 3% would not want to continue with the adoption of SGQR+. Main reasons for not wanting to continue included:
 - a. Cost (12%)
 - b. Not much perceived benefit from SGQR+ (8%)
 - c. Challenges from reconciliation and settlement (4%)
 - d. Technical issues (4%)

- a. Cost (12%)
- b. Not much perceived benefit from SGQR+ (8%)
- c. Challenges from reconciliation and settlement (4%)
- d. Technical issues (4%)

FI Survey Findings

All participating FIs, including issuers, merchant acquirers and payment scheme operators, responded to the survey.

The survey findings indicated a generally positive reception towards SGQR+, with most FIs satisfied and interested to continue with their participation. However, there were also some feedback on areas for improvement, which included broader merchant coverage, a longer POC period and expanding participation to beyond a single track by either Liquid Group or NETS.

- i. The objectives for FIs joining the SGQR+ POC were primarily to assess the potential benefits of interoperable QR payments to their merchant and customer base, explore potential commercial and pricing arrangements, and expand their reach to more merchants in Singapore. In addition, a sizeable number of FIs were keen to determine if SGQR+ was aligned with their future business plans and to explore the potential for offering more value-added services.

Benefits of participation

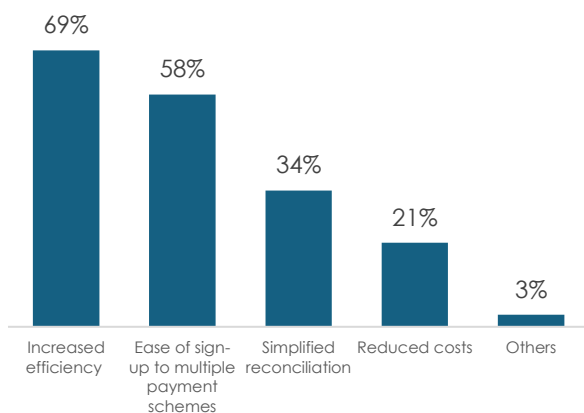


Figure 1: Perceived benefits of SGQR+

Objectives of joining SGQR+ POC

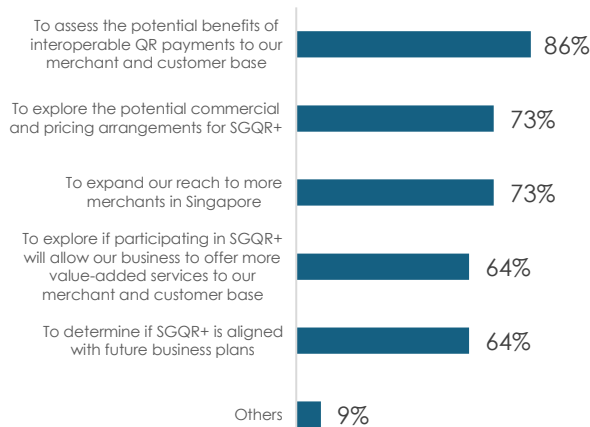


Figure 2: Primary objectives of joining SGQR+ POC

- ii. 95% of the FIs indicated that the POC achieved or somewhat met their POC objectives. The feedback from the remaining 5% highlighted the limitations of the POC such as a small base of participating merchants, the short duration of 1-month and a single-track participation (i.e. FIs could only partner with either Liquid Group or NETS) being too restrictive as they hoped to achieve scalability and expand their reach of merchants.
- iii. 86% of FIs agreed it was easy to integrate into the POC track they participated in, indicating a positive user experience.
- iv. 82% of FIs expressed their intention to continue participating in SGQR+ if it is rolled out to more participating merchants after the POC, with the remaining 18% uncertain about their future participation. Key reasons cited by respondents who were uncertain include:
 - a. Commercial and cost considerations (14%)
 - b. Limited adoption or use of SGQR+ among their merchant or customer base (9%)
 - c. Limited perceived benefits of interoperable QR payments to their merchant or customer base (9%)
 - d. Technical challenges faced in implementing SGQR+ solutions (9%)
- v. 86% of FIs provided suggestions to improve the value proposition of SGQR+. Suggestions include:
 - a. Enabling broader access to a diverse range of merchant types (i.e. expanding usage from hawkers to other commercial retailers), and for payment schemes (e.g. PayNow & credit cards) to expand service availability and user adoption.
 - b. Promoting greater interoperability to include more payment schemes and enabling access to the entire SGQR+ network, as merchants were previously limited to one of the partners (Liquid Group or NETS).
 - c. Providing a simpler contract process and a more seamless technology integration to facilitate backend connection.
 - d. Improving the value proposition through the integration of rewards redemption across platforms and the waiver of monthly fixed costs until critical mass is achieved.
 - e. Offering more clarity on commercials for greater transparency.

More information on POC survey findings can be found in Annex 5.





B) SGQR+ POC Track 1: Interoperable Switch By Liquid Group

About Interoperable Switch by Liquid Group

Liquid Group's network switch facilitates interoperable QR payments across diverse e-wallets and payment schemes. This system supports both e-money "push" transactions and card scheme-linked "pull" QR payments, enabling seamless interactions between various merchant acquirers and issuers.

Operating Models & Benefits

E-money "push" interoperability enables e-money issuers to access 3rd party merchant acquirers for QR payment acceptance. In this model, Liquid Group's roamQR serves as a centralised routing and settlement switch for all participants, facilitating seamless transactions across different platforms.

Card scheme-linked "pull" payments enable QR payments through e-wallets linked to scheme cards like Mastercard and Visa. It allows participating merchants in Singapore to accept various card scheme-linked QR payments from multiple local and overseas payment apps for the first time. In this model, Liquid Group operates as a QR gateway, called XNAP, which bridges apps with card scheme-linked e-wallets and card scheme merchant acquirers. The merchant acquirers retain full responsibility for the merchant-acquirer relationship, managing core functions including merchant onboarding, settlement, and reconciliation.

Benefits to consumers and merchants include:

- QR payments with rewards – Consumers can pay using their e-money or scheme cards for QR payments while enjoying rewards and incentives provided by individual e-wallet and payment app issuers.
- Simplified customer journey – Consumers of participating e-wallets and payment apps will just have to look out for any of the roamQR partner logos displayed on the merchants.

Benefits to e-wallet and payment app issuers include:

- Enabling interoperability for issuers of local and overseas e-wallets and payment apps – roamQR allows e-wallet apps to pay all

merchants under this track without needing to integrate with each merchant acquirer individually.

- Expanding the merchant acceptance base – After integration, participating merchant acquirers can enable their merchants to access a wider base of e-wallet and payment app issuers, offering consumers more payment options and expanding their customer base.

Commercialisation

Liquid Group's potential commercialisation plan stems from the successful POC that validated the expansion potential of QR payments for card schemes in Singapore and other markets. The POC demonstrated the successful adoption of QR payments for card schemes via Changi Pay and Liquid Group's XNAP app in Singapore, while also achieving interoperability between various local and overseas e-wallets (i.e. Fazz, GLN, Kris+, LiquidPay, Moolahgo), and multiple merchant acquirers (i.e. Diners Club Singapore, FavePay, FOMO Pay, QFPay, and UQPay) under Liquid Group's track.

Building on this success, Liquid Group is exploring various avenues to enhance Singapore's QR payment ecosystem. This includes exploring collaborations with a range of partners, including point-of-sale vendors, payment gateways, e-wallets, merchant acquirers and payment networks onto Liquid Group's roamQR hub. These collaborations are intended to create a more robust, interoperable and comprehensive ecosystem that spans various industry segments.

Liquid Group is planning to commercialise SGQR+ by Q1 2025.

Safe and Secure Payments

Liquid Group conducts thorough due diligence when onboarding partners and merchants onto its network, while merchant acquirers perform similar checks when onboarding their own set of merchants. roamQR can reject payments if the associated QR code is invalid.

roamQR processing platform is built on state-of-the-art industry and security standards. It employs the latest encryption and authentication algorithms to support API-driven integrations of e-wallet issuing and acquiring partners.

The platform's operating rules and processes have been refined based on feedback from participating e-wallets and merchant acquirers as well as consumer and merchant usage behaviour from the POC, ensuring a safe, secure, and seamless payment experience.

To maintain the highest security standards, the platform is PCI DSS¹ and ISO 27001² certified and undergoes regular, extensive security testing.

The platform removes the need for bilateral arrangements between merchant acquirers, e-wallet issuers and payment networks. Refer to Annex 3 that covers the details of the transaction flow.

Alignment of SGQR+ with Cross-border QR

As part of Liquid Group's 2024 roadmap to introduce diverse scheme integration, Liquid Group plans to incorporate more card schemes, national QR schemes, as well as local and overseas e-wallets. To scale up the ecosystem and drive market diversification, Liquid Group aims to forge new partnerships and integrate with other networks, enhancing interoperability and expanding its user base.

With the entry into markets like China, Korea, and the Philippines, Liquid Group is to further expand into other APAC markets, including Cambodia and Hong Kong by H2 2024. In 2025, Liquid Group plans to continue its international expansion, and penetrate into markets such as Brazil, India, Japan, Malaysia, and Taiwan. This geographical growth strategy aims to significantly increase the company's market share and strengthen its position as a key player in the global digital payment landscape.



¹ Payment Card Industry Data Security Standard

² International Standard for Information Security Management Systems



C) SGQR+ POC Track 2: Master Merchant Acquirer By NETS

About Master Merchant Acquirer by NETS

NETS provides interoperable QR payments that enable merchants to accept payments supported by multiple domestic and international payment schemes, allowing both local and foreign consumers to use their preferred payment app to make payments seamlessly. In the SGQR+ POC, NETS' interoperable QR payment solution demonstrated the use of an established common standard between the participating e-wallets and the master merchant acquirer to offer a consistent and user-friendly journey for consumers and merchants. The interaction of the participating entities and transaction flows can be found in Annex 4.

Benefits

Under this track, NETS is the only merchant acquirer for all the participating issuers and merchants. NETS provides interoperable QR payment as the master merchant acquirer, allowing merchants to accept multiple payment methods. This provides customers with a seamless way to transact domestically and across borders using their preferred payment app. It is an extension of the current Hawkers Go Digital model, which has more than 11,500 merchants who are already receiving digital payments from 21 participating local and foreign schemes/issuers. More information on Hawkers Go Digital can be found in Annex 2.

Benefits to merchants and consumers include:

- Wider payment acceptance – Participating merchants will be able to accept payments from a more diverse range of local e-wallets and payment apps, as well as various foreign national payment partners.
- Seamless user experience – The user journey remains unchanged for merchants and consumers using a foreign or local e-wallet or payment app in Singapore. Additionally, there will be no changes required in existing operational setups for merchants.
- One-stop reconciliation – The NETS Merchant Portal offers integrated reports and validation for merchant transactions and settlement.

Benefits to e-wallet and payment app issuers include:

- Access to a large merchant base – As the leading merchant acquirer in Singapore, NETS provides issuers with the advantage of connecting with a wider merchant base through its nationwide payment infrastructure, which comprises over 35,000 static QR merchant acceptance points (inclusive of hawkers).
- Ready to go – No additional integration is required for existing e-wallet issuers currently capable of reading the NETS QR payload.

Commercialisation

As the primary acquirer for merchants, NETS will assume full responsibility for the merchant-acquirer relationship, overseeing core functions such as onboarding, settlement, and reconciliation.

Details of the participating local and foreign schemes/issuers under the NETS track are as follows:

For Hawkers Go Digital

Payment Schemes	Alipay, Alipay+, AMEX, DuitNow, EZ-Link, GrabPay, LiquidPay, NETS, PromptPay, QRIS, ShopeePay, Singtel Dash, UnionPay, Weixin Pay
Local Issuers	DBS PayLah!, dtcpay*, EZ-Link, GrabPay, LiquidPay, Maribank*, Maybank2u SG (Lite), NETS, OCBC Digital, SCMobile, ShopeePay, Singtel Dash, UOB TMRW
Issuers of these International Schemes	Alipay, Alipay+, DuitNow, PromptPay, QRIS, UnionPay, Weixin Pay

**Target Live 2nd Quarter of 2025*

For SGQR+

Payment Schemes	Alipay, Alipay+, DuitNow, EZ-Link, NETS, PromptPay, QRIS, ShopeePay, Singtel Dash, UnionPay, Weixin Pay
Local Issuers	DBS PayLah!, dtcpay*, EZ-Link, Maribank*, Maybank2u SG (Lite), NETS, OCBC Digital, SCMobile, ShopeePay, Singtel Dash, UOB TMRW
Issuers of these International Schemes	Alipay, Alipay+, DuitNow, PromptPay, QRIS, UnionPay, Weixin Pay

**Target Live 2nd Quarter of 2025*

NETS is planning to commercialise SGQR+ based on the timeline below:

- Technical Live: 4th Quarter of 2024
- SGQR+ Live: 2nd Quarter of 2025 onwards

Existing Security Features in Place

NETS has implemented the following features to ensure security for both merchants and consumers:

- Know Your Customers (KYC) assessment for all NETS merchants.
- A QR query security function for NETS e-wallet issuers so that consumers can verify the merchant's name via the e-wallet/bank app before authorising the payment.
- Live transaction notification to merchants via NETSBiz app.
- Regular training and risk education programmes for partners.

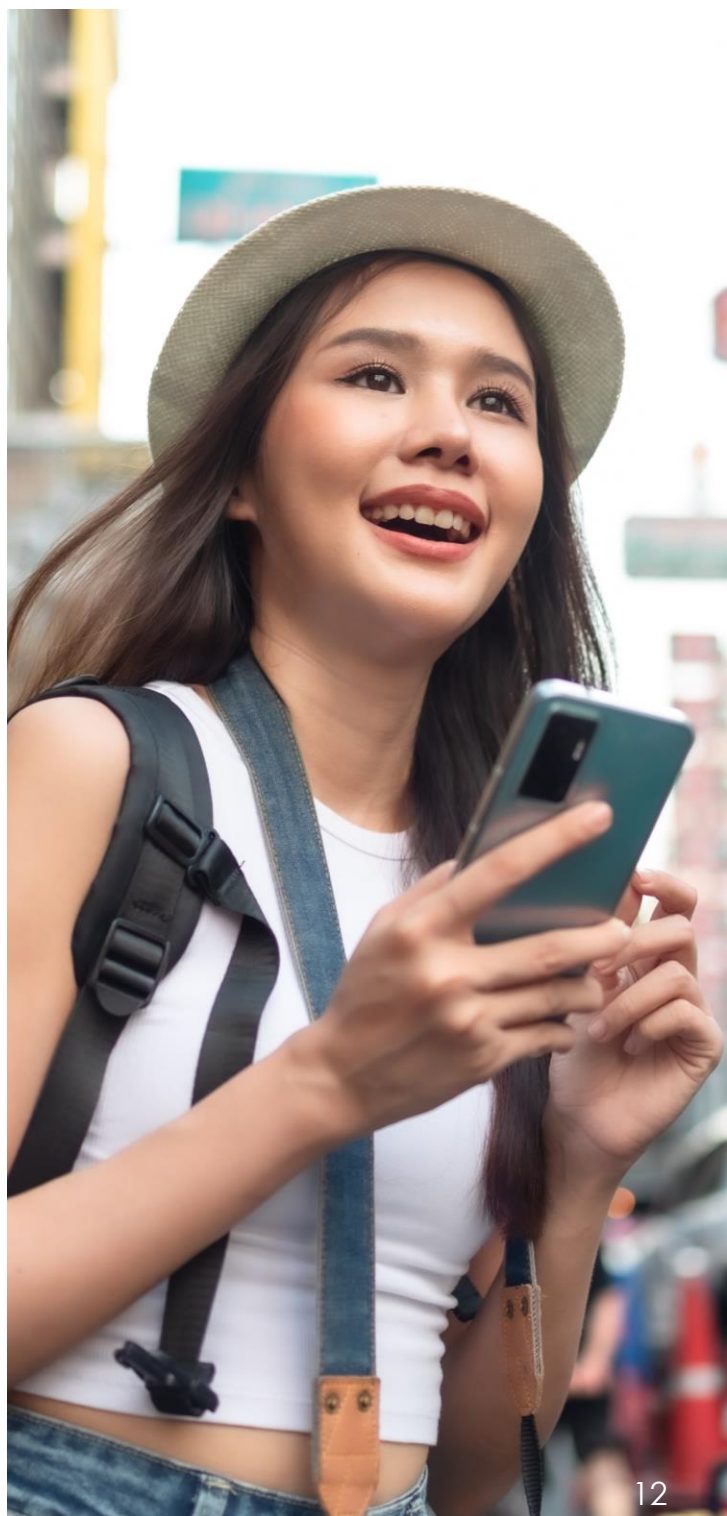
NETS provides participating merchants with a NETSBiz mobile app. The NETSBiz app allows merchants to receive payment notifications whenever QR payments are successfully transacted. During the onboarding, merchants are guided to honour the release of goods and services only upon receiving a successful QR payment notification.

In addition, NETS has implemented a "QR query" security function for the e-wallet issuers to verify the merchant's name during QR payments. This function allows consumers to confirm that they are

initiating payments to the intended merchant by verifying the merchant's name appearing on their e-wallet app, effectively preventing scammers from hijacking QR payments of legitimate businesses.

Alignment of SGQR+ with Cross-border QR

NETS is actively working closely with other regional countries, international schemes, and overseas e-wallets on bilateral QR connectivity – including but not limited to SGQR+ in Singapore.





D) Conclusion:

Healthy Demand for Interoperable QR Payments in Singapore

The SGQR+ POC has demonstrated the technical and operational feasibility of interoperable QR code payment solutions in Singapore. The POC enabled merchants to accept multiple payment schemes through a single merchant acquirer, simplifying payment acceptance processes and reducing operational complexities. Over the month-long POC, transaction volume increased by 105%, while transaction value grew by 212%, providing useful insights into the potential functionality of this model in practice.

There was also healthy industry demand for the SGQR+ solution, with encouraging feedback from participants. Around 75% of participating merchants expressed interest to continue with their adopted SGQR+ solution beyond the POC, citing improved efficiency and ease of integration with multiple payment schemes. FIs also responded favourably, with 82% expressing willingness to support a broader rollout of SGQR+, underscoring the value of interoperable QR payment solutions in the market.

The commercialisation of SGQR+ solutions by Liquid Group and NETS represents a significant step towards making interoperable QR payments widely available in Singapore for consumers, merchants and payment service providers, both domestically and internationally. The expansion of acceptance points for payment apps and wallets will allow both domestic and foreign consumers to use their preferred payment app to seamlessly transact with a wide network of participating Singapore merchants. SGQR+ not only directly benefits the local payments ecosystem, but also enables easier cross-border payment connectivity, with potential to further streamline complex cross-border trade activities in future.





E) Acknowledgements

The POC Report is authored by:

Supported by:



Monetary Authority
of Singapore

SGQR+ POC Report Acknowledgement:

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F) Annexes

Annex 1: POC Participants



Proof Of Concept (POC)

Project Owner



Project Manager and Knowledge Partner



Track I Switch Operator



Track II Master Merchant Acquirer



Co-Knowledge Partner



Merchant Acquirers

Fave | FOMO Pay | Liquid Group | NETS | UQPAY

Payment Schemes

ActiveSG | Alipay | Alipay+ | Changi Pay | Diners | Discover
DuitNow | EZ-Link | GLN | Google Pay (via XNAP) | GrabPay | iAPPS
LiquidPay | Mastercard | Moolahgo | NETS | PromptPay | ShopeePay
Singtel Dash | UnionPay | Visa | WeChat | XNAP

Local Issuers

ActiveSG | Changi Pay | DBS PayLah!
Diners | EZ-Link | Fazz | GrabPay
iAPPS | LiquidPay | Moolahgo
NETS | NETSPay | OCBC Digital
SCMobile | ShopeePay | Singtel Dash
UOB TMRW | XNAP

Issuers of Participating International Schemes

Alipay | Alipay+ | Diners
DuitNow | GLN | Google Pay (via XNAP)
Mastercard (via XNAP) | PromptPay
UnionPay | Visa (via XNAP) | WeChat

Annex 2: Hawkers Go Digital

Rise of e-payment adoption among stallholders through the Hawkers Go Digital programme.

Stallholders enjoy usage and benefits of e-payment solution

1. Stallholders at NEA hawker centres, HDB coffeeshops and JTC industrial canteens have been adopting and benefitting from e-payment transactions since 2018 through the United e-payment Solution (UePS) initiative, subsequently known as the 'Hawkers Go Digital' (HGD) programme.
2. To kickstart the adoption of e-payment, the Government rolled out a single QR code in 2018 for stallholders to accept payments from 25 wallets and cards at a Merchant Discount Rate (MDR)³ of 0.5%, where all eligible stallholders were given support for the MDR incurred⁴. NETS was appointed as the master acquirer and key partner for the HGD⁵ programme.
3. Good progress has been made under the HGD programme. To date, over 11,500 stallholders are offering e-payments. In August 2024, monthly transaction value and volume reached \$60 million and 7.6 million respectively, compared to \$45 million and 5.4 million in August 2023. This represented a 30% to 40% increase in both monthly transaction value and volume across the span of a year.

SGQR+ ecosystem to include stallholders, merchants and more

With the roll out of SGQR+ by MAS, NETS will continue to support stallholders and their patrons via the improved e-payment system. Currently, all issuers on SGQR+ will be extended to the hawker segment with no change to the MDR. This provides a seamless transition for stallholders to continue to leverage e-payments for their business transactions.

1. Mr Low Yong Pheng, 66, and his wife, run Yi Jia Teo Chew Porridge stall at Maxwell Food Centre. They appreciate the flexibility SGQR offers customers through the multiple

acceptance modes and payment options. Most importantly, SGQR serves as a convenient form of payment for the stall, which mainly caters to the digital-savvy lunch crowd and overseas tourists.

2. Mdm Fauziah Isnin, 56, is the stall owner of Rendang Nation stall at One Punggol Hawker Centre. Her experience with SGQR has been positive. The implementation process has been smooth, and the payment method is easy to use, providing added convenience for her customers.
3. Since he started using SGQR, Mr Mohamad Yasin, 55, the stall owner of Haji's Store at Marine Terrace Market, has seen a 25% increase in his business. He plans to continue with SGQR as he sees a growing trend of younger customers and seniors using e-payment, which will drive the continued usage of SGQR.

Acknowledgements

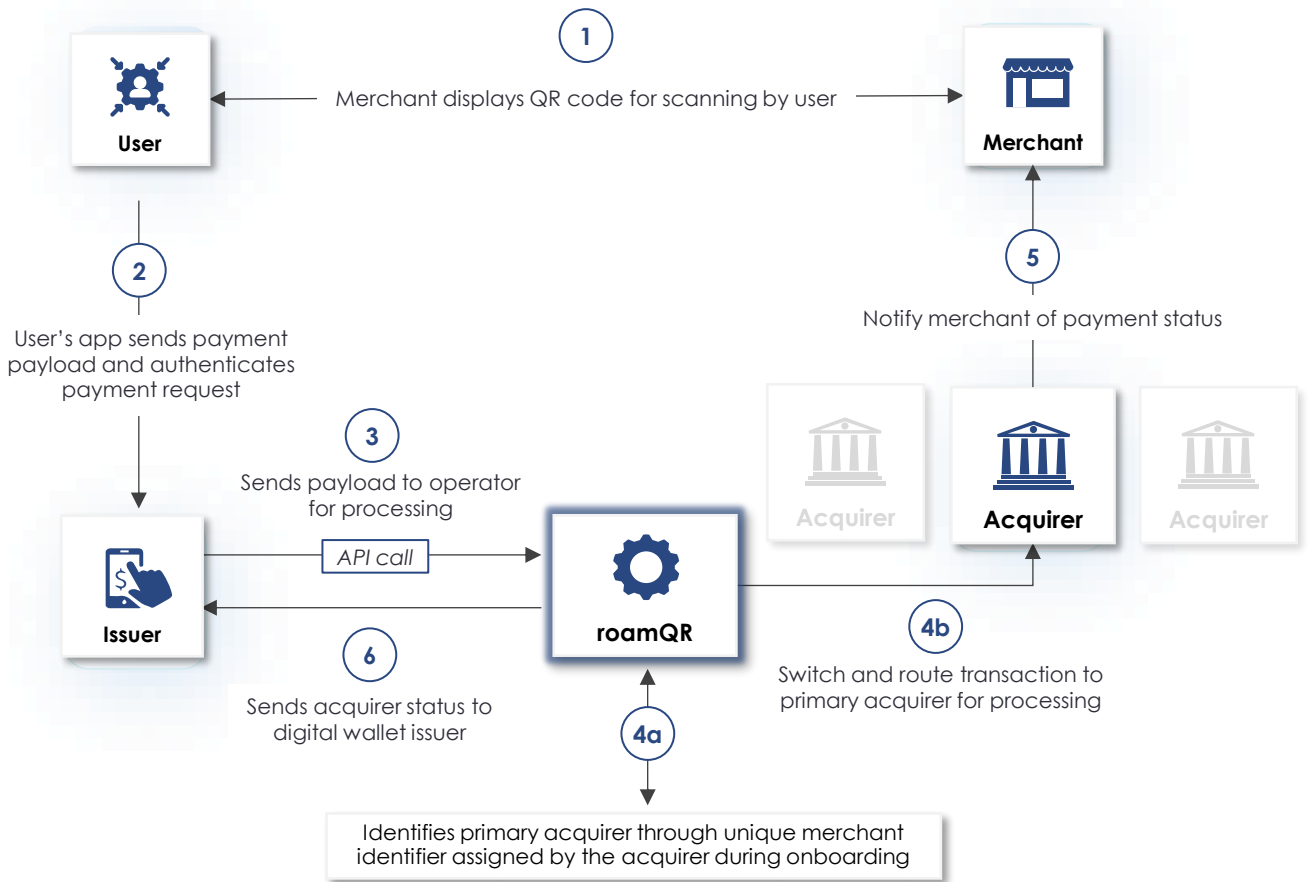
The Hawkers Go Digital programme is a multi-agency effort by Enterprise Singapore (EnterpriseSG) and the SG Digital Office (SDO) under Infocomm Media Development Authority, supported by Housing & Development Board (HDB), JTC Corporation (JTC) and National Environment Agency (NEA).

³ MDR refers to the fee paid by stallholders to NETS for e-payment transactions under the HGD programme. The MDR is currently 0.5% of the monthly e-payment transaction value. The 0.5% MDR incurred by all eligible stallholders has been subsidised by the Government, up to the first \$20,000 of e-payment transactions per stall per month, since 13 September 2018.

⁴ The Government will continue the subsidy under the HGD programme until end-2025. This follows feedback from hawkers and aims to encourage them to continue adopting e-payments while easing into a non-subsidised payment structure, especially against the backdrop of rising operating costs in the current environment. Full media release available [here](#).

⁵ A master acquirer refers to the appointed entity that handles the payment transactions of merchants across the multiple payment schemes. The entity will act as the main touchpoint to accept e-payments and facilitate reconciliation of accounts and earnings with participating merchants.

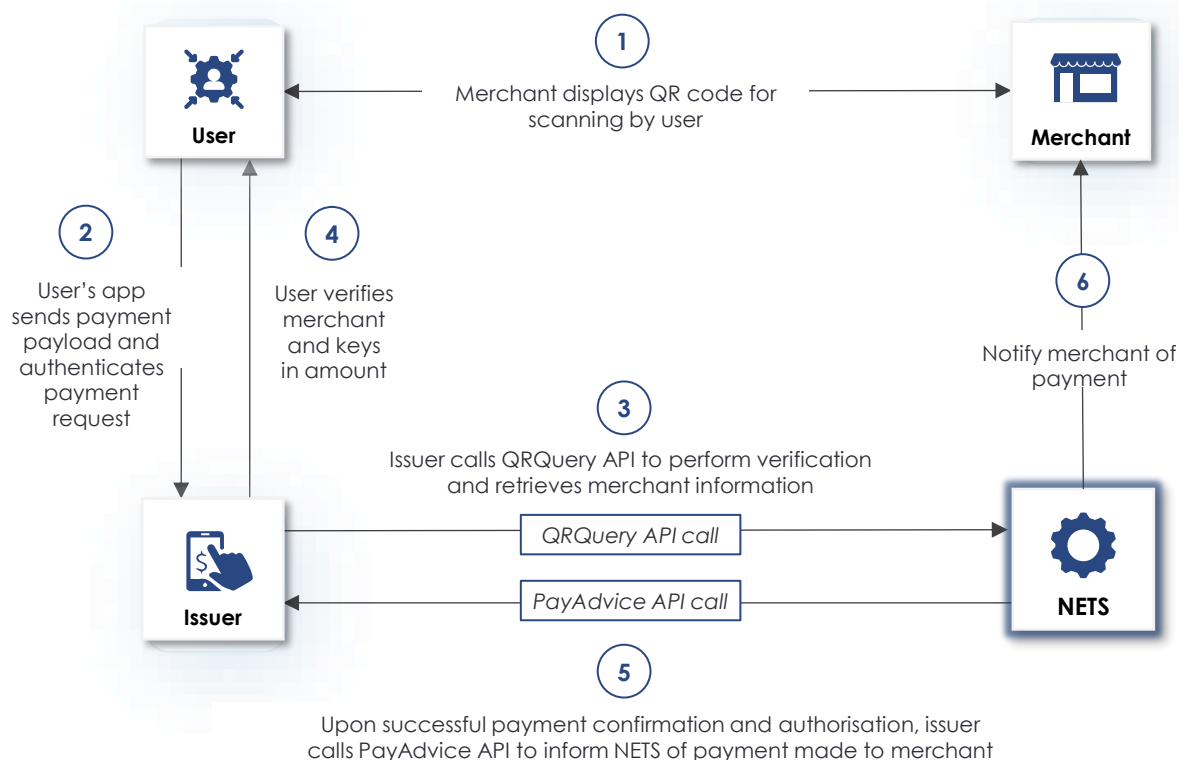
Annex 3: Liquid Group SGQR+ POC Transaction Flow



roamQR identifies the merchant acquirer for each merchant and subsequently directs and verifies a payment transaction through the following sequence:

1. Once a user scans the QR code presented by the merchant, the e-wallet issuer app decodes and recognises the roamQR QR code payload.
2. The merchant's name, merchant category code, and currency code are displayed on the app. Users can then enter the amount and confirm payment.
3. The e-wallet issuer sends a payment notification to roamQR through an API call for transaction processing.
4. roamQR identifies the acquirer of the merchant through its unique merchant identifier submitted in the payment notification API. Payment notification is then forwarded to the relevant primary acquirer.
5. The acquirer acknowledges the payment notification sent by roamQR and forwards the notification to the merchant. This triggers a successful payment completion response to roamQR.
6. roamQR sends the acquirer status in response to the e-wallet issuer to complete the payment cycle.

Annex 4: NETS SGQR+ POC Transaction Flow



NETS directly processes and verifies payment transactions for all merchants through the following sequence:

1. The user identifies their issuing e-wallet logo on the SGQR+ label, scans it to read the NETS payload.
2. The issuer receives a payment request from the user and proceeds with merchant authentication and verification.
3. The issuer calls QRQuery API to verify NETS' acquisition of the merchant and retrieves merchant information from NETS' database.
4. Upon verification, merchant information will be displayed on the issuer app. Users can then enter the transaction amount and confirm payment.
5. Upon successful payment confirmation and authorisation, the e-wallet host calls PayAdvice API to inform NETS of the payment made to the merchant. In the event of a timeout exception, the issuer can trigger a PayQuery API to check and confirm transaction status through NETS.
6. NETS sends a payment notification to the merchant via its NETSBiz app, which merchants can use to query their last successful transaction status.

Annex 5: Additional Findings from SGQR+ POC Survey

Merchant Survey Findings

- i. The food & beverage industry saw the highest response rate at 59% while a lower response rate was observed for fashion and footwear at 8%, beauty and personal care at 4%, and optical or eye care at 3%.

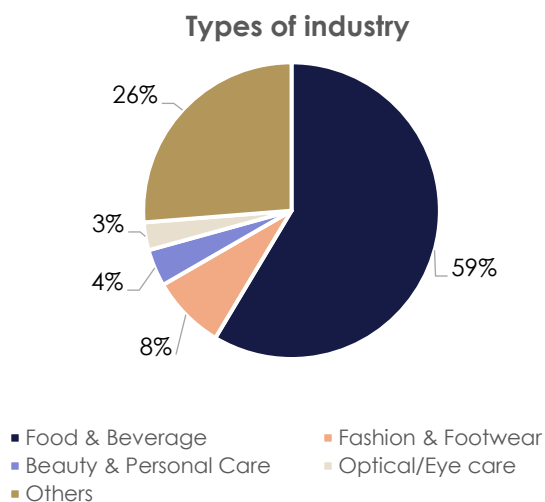


Figure 3: Respondent Profile

- ii. In terms of the scale of operations, 41% of merchants that participated in the survey had 1-2 outlets, 28% had 3-10 outlets, 20% had more than 10 outlets, and 11% had no outlets⁶.

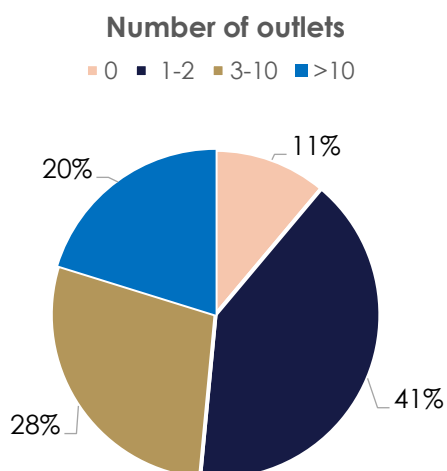


Figure 4: Scale of operations

⁶ No outlets refer to merchants who have self-identified as not having physical retail stores, including suppliers, wholesalers, and online retailers.