Bank of Namibia

Position Paper on Interoperability in the National Payment System

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1. Background

1.1. Interoperability has been achieved to a large extend across the retail payment streams i.e. Cheque, Electronic Fund Transfers (EFT) and Card, while Electronic Money (e-money) issued by both banks and non-banks remains closed loop (not interoperable). To ensure an efficient and cost effective National Payment System (NPS), it is the objective of the Bank of Namibia to achieve 70% interoperability of all payment instruments by 2020 as envisioned in the NPS Vision 2020, and to ensure that full interoperability is achieved by 2025.

2. Purpose

2.1. This paper aims to analyse interoperability in the National Payment System (NPS) and provide the Bank of Namibia's (the Bank') position on interoperability. The position paper aims to have the following effects:

- **2.1.1.** To ensure that 70% interoperability, especially in respect of e-money is achieved by 2020, as envisioned in the NPS Vision 2020;
- **2.1.2.** To inform the NPS industry that the Bank will consider mandating interoperability in the NPS by 2025;
- **2.1.3.** To ensure effective cooperation and collaboration between banks and non-banks in achieving full interoperability of payment instruments;
- **2.1.4.** To ensure a level playing field among all e-money issuers (banks and non-banks);
- **2.1.5.** To ensure that the NPS industry agreed upon standards for interoperability conform to international best practises and are in the public's interest; and
- **2.1.6.** To provide guidance, principles, conditions and limitations to be considered by the NPS industry in achieving interoperability.

3. Definition of interoperability

3.1. **Interoperability is the ability of different payment systems to connect with one another"[1].** In simple terms, interoperability enables a user of one e-money issuers scheme to send to or receive money from another user on a different e-money issuer's scheme. Interoperability normally requires technical compatibility between systems and networks, hence the need for common rules, standards and commercial agreements. Without interoperability, senders and recipients of e-money are restricted to a single e-money issuer's scheme i.e. services, systems and infrastructure such as ATMs and POS devices which might not be available country wide. With interoperability, a user will have the option to send e-money and perform financial transactions across e-money schemes and channels (ATM, POS device or merchant) belonging to different e-money issuers without being a client of all the e-money issuers.

3.2. **Interoperability has the capability of enabling e-money users to send money between wallets and bank accounts (when both banks and non-banks integrate) of different institutions and vice versa.** In this regard, interoperability has the potential of ensuring that e-money as a payment instrument operates and integrates with other payment instruments such as card and EFT, affording e-money customers different access points, options and convenience. Interoperability prevents fragmentation and can lead to a more co-ordinated and competitive payments ecosystem. The current rise of non-interoperable e-money schemes restrict consumer choice, as they are either forced to receive funds using an institution chosen by the sender or institutions with limited availability.

3.3. **Interoperability also has the potential of playing a key role in the continued expansion of e-money and financial inclusion**. E-money services normally allow people with access to mobile phones and remote e-money outlets to access basic financial services and perform person-to-person (P2P) and person-to-business (P2B) transactions. With interoperable e-money services, the unbanked and people with limited access to basic financial services have the opportunity to use any channel (e.g. ATMs, POS devices or agents) to perform financial transactions without being clients of all the available service providers. This has the potential of enhancing financial inclusion as the banked and financially included population can send money to the non-banked and financially excluded population who have access to mobile phones and network coverage.

[1] [1] www.cgap.org/sites/default/files/interoperability.pdf

3.4. Interoperability of e-money services can lead to the following:

3.4.1. Ability to integrate e-money issuers platforms;
3.4.2. Ability to integrate e-money and other interoperable payment instruments;
3.4.3. Directly transact between wallets of different e-money issuers;
3.4.4. Directly transact between e-money wallets and bank accounts;
3.4.5. Settle the funds emanating from e-money transactions across schemes and between schemes and banks; and
3.4.6. Implement common risk management practices that preserve the integrity of the individual mobile money schemes.

4. Overview of the National Payment System

4.1. The Namibian NPS landscape has over the past 15 years undergone tremendous change and achieved key milestones. Namibia's real time gross settlement system i.e. NISS was introduced in 2002 while the domestic automated clearing house i.e. Namclear was established in 2003. NISS is a settlement system owned and operated by the Bank to process and settle time critical payments and retail payment transactions between system participants in the NPS. Scheme interoperability is currently achieved across the three interoperable payment streams at Namclear namely, the EFT stream since 2004, the code line processing (CLS or Cheque) stream since 2005, and the card payment stream (NamSwitch) since 2008. Scheme interoperability refers to an open looped payment system whereby banks and/or non-banks join a scheme and agree to be bound by the rules of the scheme, e.g. the ability of different payment streams offered by different banks (Cheque, EFT and Card) to exchange information and interact. However, the electronic money service provision remains close-looped.

4.2. The absence of interoperability in e-money can be attributed to a lack of collaboration among e-money issuers and the fact that e-money is a relatively new payment instrument in Namibia. E-money issuers recently started to cooperate and leverage on synergies in offering e-money services. E-money activity between 2010 and 2013 was limited for any meaningful interoperability to happen. The Determination on Issuing Electronic Money (PSD-3) which became effective on 1 March 2012 does not mandate interoperability, but requires e-money issuers to use technical standards and specifications that ensure that interoperability is feasible at low cost in the future. This requirement has to date not been enforced and none of the e-money issuers have provided proof that their e-money services and systems have the technical capabilities and specifications to become interoperable. E-money issuers especially non-banks were at an infancy stage of issuing e-money and mandating interoperability at that early stage of e-money services development in Namibia would have been counterproductive and thus hamper innovation.

4.3. **The number of e-money issuers, as well as the volumes and values of e-money in Namibia has grown over the past 5 years (2013-2017).** In this regard, the number of e-money issuers grew from 1 non-bank e-money issuer in 2010 to 8 e-money issuers comprising of both banks (3) and non-banks (5), at the end of 2017. Equally, e-money transaction volumes rose from 8.3 million in 2013 to 17.8 million in 2017 while transaction values rose from N$1.5 billion to N$10.6 billion over the same period. There has also been an expansion in the type of e-money services and value addition services namely e-commerce payments, merchant payments, subscriptions, airtime and utility payments i.e. water and electricity. The lack of interoperability of e-money services increases inefficiencies and may hamper financial inclusion objectives of holistically bridging the gap between the banked and unbanked population. In this regard, interoperability is considered important because it allows e-money issuers to offer e-money customers more flexible and accessible payment options which could further increase the number of transactions and speed of money circulation in the NPS and in the end enhance financial inclusion.

5. Position on Interoperability in the National Payment System

While the Bank is supportive of an industry-led approach in achieving the aims and objectives of the NPS Vision 2020, it is also the Bank's role to induce change. In this instance, it is the Bank's intention to mandate interoperability by the year 2025 through the issuance of a regulation. As part of its approach to ensure stakeholder inclusivity and transparency, the Bank will continuously consult and engage the NPS industry on its readiness and strategies to spearhead interoperability by 2025. To ensure that full interoperability is achieved by 2025, the NPS industry is advised to have due regard to the following:

5.1.1. Given the lack of interoperability in the e-money stream, e-money issuers should ensure effective cooperation and collaboration to achieve full interoperability in the NPS.

5.1.2. The Bank will not support nor will it endorse exclusive agreements between clearing houses, system participants or non-bank e-money issuers in as far as the issuance of payment instruments and related services are concerned.

5.1.3. The Bank supports and will endorse cross border and regional interoperability of payment instruments subject to an assessment and approval process by the Bank and relevant regional regulatory body.

5.1.4. E-money issuers and relevant service providers are required to collaborate and agree to common technical and other relevant standards, or to incorporate international technical standards and operating rules so that they can be applied industry-wide, rather than through bilateral agreements between different institutions.

5.1.5. An e-money payment clearing house (PCH) committee must be established under the relevant structures of the Payment System Management Body, and must establish operating rules, standards and conditions to ensure that the interoperability of e-money benefits all e-money issuers and the NPS as a whole.

6. **The Bank will maintain a cautious approach in the adoption of interoperability to ensure that the introduction of a regulation does not stifle innovation and the smooth functioning of the NPS.**

7. **The NPS industry is encouraged to act in accordance with this position.**

8. **The Bank reserves the right to add more principles in the envisaged regulation not contained in this position paper.**

9. **The Bank further reserves the right to amend this position from time to time or use any regulatory tool i.e. guidelines, determinations or directives to mandate interoperability.**