

Chapter 10

Case Studies



Case Studies

Key points

The Commonwealth FinTech Toolkit closes with four case studies of fintech interventions promoting growth and development. In doing so, it aims to highlight the sensitivity with which governments should apply fintech in their own distinct contexts.

The case studies are as follows:

- Case Study 10.1 The Journey of Emerging Technologies: Blockchain in Papua New Guinea
- Case Study 10.2 Pioneering Mobile Money in Kenya
- Case Study 10.3 Digital Assets Businesses in Bermuda
- Case Study 10.4 Malta's Support for Virtual Financial Assets

Drawn from primary research in the form of interviews with representatives of Commonwealth governments (see Appendix 1), these case studies have been selected to highlight the use of fintech in developing economies and small states. Given that the vast majority of Commonwealth countries are developing, rather than developed, nations, the focus is on these. While nations such as the United Kingdom, Canada and Australia have taken sophisticated and highly evolved approaches to fintech (among them, digital banking in the UK, digital identity in Canada and digital assets trading in Australia), case studies of these would be unlikely to be applicable or portable to a small sub-Saharan African country or a Caribbean island nation.

These examples illustrate different types of fintech policy and implementation, across blockchain and digital identity, mobile money and digital assets. In addition, an effort was made to look both at mature policies and environments (such as Kenya's work with mobile money over ten years or

more) and at those on the cutting edge of emerging technology (such as Papua New Guinea's incorporation of biometrics and blockchain into a digital identity system).

Case Study 10.1 The Journey of Emerging Technologies: Blockchain in Papua New Guinea

10.1.1 Introduction

This case study relates to the Bank of Papua New Guinea (BPNG), the country's central bank, and its exploration of distributed ledger technology (DLT)—that is, blockchain—and the application of emerging technologies in its pursuit of financial inclusion.

10.1.2 Context

One of the pillars in the BPNG's 2016–20 Strategic Plan was the pursuit of financial inclusion for all PNG citizens.¹ As regulator of the economy, BPNG is duty-bound to investigate new and emerging technologies, to understand the impact that they have on banking regulations, and to develop a culture of embracing new and emerging technologies.

Quick Facts

Country: Papua New Guinea (PNG)

Population: 8.606 million

Gross domestic product (GDP), 2018: US\$23.43 billion/£19.05 billion

GDP per capita, 2018: US\$4,298.70/£3,494.90

Top three industries: petroleum and natural resources; logging and agriculture; fisheries and marine

Source: World Bank (2018). 'Papua New Guinea' [online]. Retrieved from: <https://data.worldbank.org/country/papua-new-guinea>

10.1.3 Challenges/Problems

- PNG is one of the largest and most mountainous islands in the world, and these distances and terrain create telecommunications issues.
- There are approximately 8 million people in PNG, of whom only 18 per cent live in urban centres, making reaching all citizens difficult.
- There are more than 800 unique languages spoken in PNG, making basic interpersonal communications difficult.
- Some 85 per cent of the population do not have a bank account and hence the drive for financial inclusion.
- Birth registration is at less than 5 per cent and therefore identity is a major impediment to financial inclusion.
- Only 20 per cent of the population have access to electricity, while internet connectivity is poor, unreliable and not widely available.
- More than 75 per cent of the population have an SMS-capable mobile phone,

but less than 5 per cent of the population have a smartphone.

10.1.4 Policy Intervention

In late 2016, BPNG began to explore DLT and the potential impact that virtual currencies—especially Bitcoin—might have for the regulator.

Under the leadership of BPNG Governor Loi Bakani, a research programme was tasked with understanding these in more detail and investigating how DLT might be used towards greater financial inclusion. This included sponsorship of and participation in the Fintech Worldwide London Blockchain Conference and Hackathon in 2017—an event that led to the winning concept of a handheld, SMS-driven device. Initially labelled 'The Papuan Box', but later renamed 'IdBox', the device incorporated a biometric reader, ran on solar power and did not require internet connectivity—overcoming three challenges specific to digital identity in the PNG operational environment.

Field Trials

With funding from the Australian Department of Foreign Affairs (DFAT) and the Asian Development Bank (ADB), this and further iterations of the device and its successor were brought to PNG for field trials.

Successful proofs of concept emerged from trials in the villages of Lalaura, Abau District,

and Vesulogo, Bisiatabu District, both in Central Province (Exhibit 10.1).

Exhibit 10.1 Papuany Box field trials.



Notes: Solar power pack; IdBox identity device; fingerprint reader; SMS SIM card number; combined and encrypted
Source: Central Bank of Papua New Guinea

Exhibit 10.2 PNG Digizen prototype field trial.



Notes: Any Android device; scan and issue modes; encrypted card; KYC/e-KYC compliance; two-factor authentication; biometric-ready; no need for mobile ownership; online/offline capability; multipurpose card
Source: Central Bank of Papua New Guinea

A revised version using near-field communication, biometric and photographic recognition, and a trust-based hierarchy of know your customer (KYC) compliance (Exhibit 10.2) was the last to undergo final field trials before submission in January 2020 to testing in the BPNG regulatory sandbox—the first regulatory sandbox to be launched in the South Pacific.

The BPNG Regulatory Sandbox

The BPNG regulatory sandbox was expected to:

- provide an opportunity to test innovations in a safe environment;
- stimulate the interest of local and international innovators and investors in fintech; and

- protect consumers interested in trying new technologies.

In this way, the PNG government aimed to lower financial services fees and speed up processes, while insisting that those successful in the sandbox deploy their initiative in PNG within nine months of the trial ensures that PNG citizens reap the reward of the BPNG's investment.

In-house solution architects designed the BPNG sandbox, aiming to emulate—but not duplicate—many of the features found in the sandboxes of:

- the Australian Securities and Investment Commission (ASIC);
- Bank Indonesia;
- Bank Negara Malaysia;
- Bank of Thailand;
- Central Bank of Bahrain (CBB);
- Monetary Authority of Singapore (MAS);
- the UK's Financial Conduct Authority (FCA); and
- Hong Kong Monetary Authority (HKMA).

Technical advisers and subject-matter experts from the ADB provided quality assurance of this design. In addition, the BPNG entered into discussion with the six other members of the Pacific Islands Regional Initiative (PIRI) Financial Technology Regional Regulatory Sandbox (i.e., the central banks of Fiji, Samoa, Solomon Islands, Timor-Leste, Tonga and Vanuatu). As a result, the BPNG hopes that its own regulatory

sandbox will facilitate interoperability across jurisdictions in the future.

The BPNG will be welcoming interest in participation in its sandbox from any of the following, subject to their fulfilment of BPNG's entry criteria and principles:

- authorised financial institutions already active in PNG and hence already subject to BPNG's regulatory review;
- any institution not currently under BPNG's purview, but whose innovation is such that it may come to require licensing or regulatory approval;
- actors from outside the financial services sector who are developing solutions that can accelerate financial and social inclusion, in recognition of the relationship of financial services with industries such as technology, telecommunications and health care;
- local fintech developers, such as new entities in PNG that have developed or are developing solutions/concepts outside traditional business models with positive potential impact on inclusion; and
- overseas fintech developers, such as start-ups and other entities domiciled outside PNG that have developed or are developing solutions/concepts outside traditional business models that may represent new possibilities.

A communications and awareness programme was therefore targeted at members of PNG's National Payments Council first, then financial institutions and finally fintech developers.

To date, there has been no central government participation in the development of the BPNG regulatory sandbox.

10.1.5 Outcomes

Recognising its role in education, the BPNG has been active in ensuring that both government and industry engage with and are educated about key fintech concepts and their potential to drive financial inclusion. The BPNG convened and hosted the very first blockchain seminar in PNG and facilitated establishment of an industry body (the PNG Digital Commerce Association) in March 2019, which sponsored and facilitated the training of 24 locally recruited software developers in developing DLT-based solutions—another first for PNG.

In addition, the BPNG has attended and participated in two additional London blockchain hackathons and conferences, and been invited to speak at a large number of financial services forums across the world.

The BPNG regulatory sandbox originally and primarily targeted one of the Bank's key strategic business objectives: financial inclusion. In pursuing this objective, BPNG has aimed to:

- reduce financial transaction prices and service fees;
- provide a safe and protected environment for the design and testing of fintech innovations;

- make PNG more attractive to innovators and investors, and improve interoperability across jurisdictions; and
- protect consumers keen to use new technologies, but wary of risking their hard-earned savings.

Within nine months of the conclusion of successful testing in the sandbox, the BPNG requires participants to implement their solution in PNG. To do so, they must comply with PNG's regulatory framework, as would be the case had they not participated in the sandbox.

Applicants are then free to market their solution in any jurisdiction.

10.1.6 Conclusion

The BPNG takes pride in its leadership in exploring new technology for financial inclusion and is eager to push the boundaries and harness technology to improve financial inclusion in a challenging environment.

Case Study 10.2 Pioneering Mobile Money in Kenya

10.2.1 Introduction

This case study looks at Kenya's development of a mobile money solution known as M-Pesa, as a collaboration between both the public and private sectors, aiming to drive inclusion for its population.

Quick Facts

Country: Kenya

Population: 51.393 million

Gross domestic product (GDP), 2018: US\$87.908 billion/£71.470 billion

GDP per capita, 2018: US\$3,461.40/£2,814.10

Top three industries: agriculture; industry and manufacturing; services (wholesale and retail trade, transport, government, financial, professional and personal services)

Source: World Bank (2018). 'Kenya' [online]. Retrieved from: <https://data.worldbank.org/country/kenya>

10.2.2 Context

The Central Bank of Kenya (CBK) has set out a series of priorities around digital finance and the digital economy. These priorities emerged out of its work on promoting financial inclusion.

10.2.3 Challenges/Problems

- When work on financial inclusion began, in the early 2000s, there was very limited access to formal financial services in Kenya: the country had a population of about 30 million, but only about 2.5 million had bank accounts.
- At that time, banks were closing branches and withdrawing entirely from rural areas, further restricting Kenyan people's access to financial services.
- In 2006, a financial access survey found that only 27 per cent of respondents had access to even basic formal financial services, such as for transferring money.

10.2.4 Policy Intervention

The Central Bank of Kenya (CBK) was initially supported in its efforts with seed funding from the UK's Department for International Development (DfID). In 2004–05, DfID

offered a prize of approximately £1 million for innovative solutions to the inclusion challenge. A consortium of private sector actors, including CBA Bank, Safaricom and various microfinance players, collaborated to propose M-Pesa.

In the process of evaluating and creating the framework to support M-Pesa, CBK looked to the practices of a variety of other jurisdictions, including advanced economies such as the European Union, United States and Australia. The Bank found, however, that the situation in the Philippines was most closely analogous with its own and hence served as the most useful model in focusing on a similar set of issues with a similarly excluded population.

At the outset, the Kenyan government recognised that it did not yet have in place the regulatory framework necessary to support the solution. The government therefore enacted a package of legislation to create an enabling environment, including laws focusing on:

- anti-money-laundering (AML);
- consumer protection; and
- payments systems.

More recently, the government has moved to license many more players in the market to increase competition, promote interoperability between systems and most recently, in 2019, issue additional guidance regarding cybersecurity.

10.2.5 Outcomes

Financial inclusion in Kenya has soared from 27 per cent in 2006 to 82 per cent in 2019, according to the latest survey. The CBK also tracks, on a monthly basis, the number of accounts holding balances of mobile money, the number of agents helping to facilitate those accounts and other metrics showing that the intervention has actually integrated into daily life. In doing so, it takes care to look at meaningful activity rather than at 'zero balance bank account' inclusion—that is, at bank accounts held but not necessarily used.

The government has now begun to broaden the platform created by mobile money to align with other government objectives, such as digital finance and the digital economy. The enabling ecosystem and the CBK's supporting activities have evolved considerably over the years—and they continue to evolve. While the initial focus was on access, for example, the CBK is now looking at promoting usage and quality of service (QOS) while amplifying consumer protection.

10.2.6 Conclusion

Kenya's journey into mobile money revealed that the effective inclusion is not only about regulation and policy; both public and private actors must co-ordinate their efforts if inclusion is to be achieved. The public sector will create an enabling environment, but the private sector must invest in marketing, product development, distribution, consumer engagement and customer services, etc. The public sector

will take the lead on delivering digital infrastructure, while the private sector ensures continuous improvement of its products to meet continuously evolving customer needs.

As Kenya looks back at more than a decade of success and looks towards the next, it will be clear that mobile money is a foundation for a broader set of financial services. While the legacy focus has been on payments, a progressive plan will incorporate a broader set of higher-value financial services, such as credit, savings, insurance and pensions.

As this focus shifts, the needs that the products must meet become more sophisticated, reflecting more closely the everyday lives of Kenyans. For example, one of the biggest challenges for families is the concept of 'shocks'—that is, of unexpected events, such as a costly health emergency and/or long-term health issues that impact negatively on income. Traditional forms of health and other insurance are unlikely to meet the needs of those who have, until recently, been financially excluded; hence there is a need for public and private actors to explore financial flexibility and the potential ways in which fintech might be leveraged to deliver greater resilience to the household.

By looking more holistically at the framework, Kenya can now start to build on successfully established mobile money foundations to transform the lives of Kenyan citizens.

Case Study 10.3 Digital Assets Businesses in Bermuda

10.3.1 Introduction

This case study considers how the government of Bermuda has built a

supportive ecosystem in which businesses that focus on digital assets (such as

cryptocurrencies and other kinds of tokens built on blockchain) can thrive.

Quick Facts

Country: Bermuda

Population: 61,000

Gross domestic product (GDP), 2018: US\$6.127 billion/£4.981 billion

GDP per capita, 2018: US\$99,363/£80,783

Top two industries: international business (primarily financial services); tourism

Source: World Bank (2018). 'Bermuda' [online]. Retrieved from: <https://data.worldbank.org/country/bermuda>

10.3.2 Context

In 2017, Bermuda elected a premier who had a background in both information and communications technology (ICT) and economics. As one of his policy priorities, David Burt said that he wanted to make Bermuda more technology-friendly.

10.3.3 Challenges/Problems

Evaluating the Bermudian economy and finding space for diversification, the economic development arm of the Bermuda government began to explore new opportunities. Within the five years to 2017, token issuances had seen significant capital raised as the cryptocurrency market began to develop, but blockchain-related companies struggling to find jurisdictions friendly to these new types of security.

10.3.4 Policy Intervention

In September 2017, the Government of Bermuda established a task force dually focused on business development and policy, mandated with conceptualising ways

of helping fintech to develop. The premier and the minister of national security both attended Davos in January 2018, where they met with influential players, inviting several blockchain innovators to the island a few days later to map out the industry's needs.



A **sandbox licence** enables entrepreneurs to test an aspect of the business model if the entity is not yet sufficiently mature to seek a full licence.

In creating an enabling environment for fintech, Bermuda sought to leverage its long history in insurance and reinsurance. In that instance, the government had brought policy-makers, regulators and industry together to shape an environment to drive innovation and manage risk. It used this same approach to draft the Digital Assets Business Act 2018 (DABA).

The needs of the digital assets industry, on which the DABA centred, reflect the shifts that occur when new technology is applied to traditional finance. For example, new technology introduces cybersecurity risk, while new technology demands new approaches to compliance with global requirements such as know your customer (KYC) rules and rules countering the financing of terrorism (CFT). Custody risks that would formerly attach to traditional paper certificates are complicated by the unique characteristics of an asset that can be digitally copied or an asset that could be lost if cryptographic keys were lost.

The DABA anticipates that a business will contemplate business model risk, document its policies and procedures, and both (a) provide for risk mitigation and (b) respond effectively after a risk event occurs.

The DABA provides for a three-tier structure through which a digital asset business progresses.

At its apex is the **full licence**—available to a mature business such as Circle, which has been granted a full ‘Class F’ licence (one of five classes set out in the DABA).²

A **sandbox licence** is a modified licence with reduced scope and volume, granted to enable entrepreneurs to test an aspect

of the business model if the entity is not yet sufficiently mature to seek a full licence. An example would be a licence allowing a business to test its compliance policy under the close eye of the regulator.

In the very first instance, a business might participate in an **innovation hub**. At this stage, the business will not yet have fleshed out its business model or have proof of concept and while it wants to work closely with the regulator to develop both, it is not ready for the heavy constraints of the regulatory sandbox. The effect is that a start-up can begin to test its direction with the support and advice of the regulator, while minimising business model risk.

10.3.5 Outcomes

The DABA has been reasonably successful in generating interest from a number of companies. Several companies, including Circle, have successfully applied for licensing and the government has proposed amendments to the Act to bring derivative exchanges within its purview. While Bermuda came later to the fintech table than some jurisdictions, it has more confidence in longevity of the businesses that it is licensing because it has set a high bar in terms of risk management—a bar that is an industry benchmark.

10.3.6 Conclusion

Bermuda’s DABA is part of a multipronged fintech strategy that incorporates numerous elements aiming to foster growth within the financial services ecosystem. The government is already learning from its experiences, shaping amendments to the Act and consultation papers to refine the regulatory framework, on the one hand, and planning for other fintech-related initiatives, on the other.

Case Study 10.4 Malta's Support for Virtual Financial Assets

10.4.1 Introduction

This case study explores the series of regulations that Malta has passed

to support businesses engaged in the issuance and management of virtual financial assets (VFAs), such as cryptocurrencies.

Quick Facts

Country: Malta

Population: 483,530

Gross domestic product (GDP), 2018: US\$14.542 billion/€11.823 billion

GDP per capita, 2018: US\$42,567.20/€34,607.50

Top three industries: tourism; manufacturing; financial services

Source: World Bank (2018). 'Malta' [online]. Retrieved from: <https://data.worldbank.org/country/malta>

10.4.2 Context

Malta has been a notable banking centre for many years, offering the flexibility of a small state while complying with European Union (EU) regulatory standards. As digital assets such as cryptocurrencies emerged, the Maltese government sought to engage with this new segment of the financial sector to optimal effect.

10.4.3 Challenges/Problems

- Digital assets—or VFAs, as Malta terms them—are an emerging business and regulatory domain built on the technological innovation of blockchain.
- The international regulatory response to VFAs has been varied, with a high degree of uncertainty involved in the classification, regulation and oversight of the entities issuing these assets and the assets themselves.
- Entrepreneurs and investors have been seeking regulatory clarity and guidance

on compliance when working with VFAs.

10.4.4 Policy Intervention

On 30 November 2017, the Malta Financial Services Authority (MFSA) published a Discussion Paper on Initial Coin Offerings, Virtual Currencies and related Service Providers.³ This followed the general principles set out in a statement issued by the European Securities and Markets Authority (ESMA) on 13 November 2017.⁴ As the Discussion Paper explained, while certain initial coin offerings (ICOs), distributed ledger technology (DLT) assets—previously referred to as virtual currencies (VCs)—and related activities could fall within the scope of existing financial services legislation, others would be likely to fall outside that scope and hence be unregulated.

The Discussion Paper proposed a policy whereby the MFSA would create a high-level principles-based regulation—in line with the high-level objectives set out

supranationally—of ICOs and certain service providers (namely, intermediaries that act as brokers, exchanges, investment advisers and market makers) in relation to DLT assets that currently fall outside the scope of existing financial services regulation. The MFSA received ample positive feedback on the proposals and proceeded to draft the Virtual Financial Assets Bill. The Bill was enacted on 20 July 2018 and the Virtual Financial Assets Act came into force on 1 November 2018. The Act regulates the following activities when conducted in or from within Malta:

- the offering of a VFA to the public by an issuer;
- the application, by an issuer, for admission of a VFA to trading on a DLT exchange;
- the activity of a VFA agent; and
- the provision of VFA services.

On 4 July 2018, the MFSA published a Consultation Paper on secondary legislation to be issued under the Act (the Virtual Financial Assets Regulations), which set out detailed provisions on exemptions, fees, control of assets, and administrative penalties and appeals. The consultation closed on 20 July 2018 and, after feedback, the VFA Regulations were published on 2 November 2018.

Having set out the legislative and regulatory framework, the MFSA followed up with rules detailing its application to operators in this field of financial services. The MFSA's Virtual Financial Assets Rulebook comprises three chapters:

- Chapter 1 Virtual Financial Assets Rules for VFA Agents

- Chapter 2 Virtual Financial Assets Rules for Issuers of VFAs
- Chapter 3 Virtual Financial Assets Rules for VFA Service Providers

At the same time, the MFSA also consulted on achieving a higher degree of investor protection under the VFA Act and raising the bar for VFA agents.

One of the key points outlined in the MFSA's 2017 Discussion Paper was a Financial Instrument Test to determine whether a DLT asset, based on its specific features, is included in the scope of the existing EU legislation and corresponding national legislation or the VFA Act, or is otherwise exempt. In early 2018, the MFSA consulted on the test, which was to be applicable both within the context of an ICO and during the intermediation of DLT assets in or from within Malta.

When published on 13 April 2018, the Financial Instrument Test was accompanied by detailed guidance.⁵

Further guidance followed in 2019:

- Guidance Notes on Cybersecurity, as a minimum set of best practices and risk management procedures to be followed to effectively mitigate cyber risks; and
- Guidance for Credit Institutions, Payment Institutions and Electronic Money Institutions opening accounts for FinTechs.⁶

Anti-Money-Laundering (AML) and Countering the Financing of Terrorism (CFT) Rules

VFAs In relation to anti-money-laundering (AML) and countering the financing of terrorism (CFT) rules, VFA agents, issuers

and licence holders are all considered to be 'obliged entities' under Malta's Prevention of Money Laundering and Funding of Terrorism Regulations 2018 (PMLFTR).

The Maltese national framework goes beyond what is provided for under the EU's Fifth Money Laundering Directive (5AMLD).⁷ Whereas 5AMLD defines obliged entities as only (a) custodian wallet providers and (b) providers engaged in exchange services between virtual currencies and fiat currencies (leaving crypto-to-crypto exchanges outside of its scope), the Maltese framework defines obliged entities as VFA agents, VFA issuers and VFA service providers, including exchanges and service providers involved in VFA-to-VFA transactions.

The MFSA has introduced the role of VFA agent as an additional AML/CFT filter to ensure that the national financial system is secured. Indeed, those who can be appointed as VFA agents will already have a good understanding of these AML/CFT obligations, and will be able to guide both VFA issuers and VFA licence holders in terms of their legal obligations.

Forthcoming guidance will both explain how these different crypto asset operators are to meet their AML/CFT obligations and highlight particular risk factors and red flags that might emerge during risk assessment or when monitoring customer activity. For example, in relation to VFA, issuers and licence holders:

- must apply customer due diligence whenever interaction between a customer and a VFA issuer or licence holder is characterised by only occasional transactions; and
- must have systems in place to verify the origin of any VFAs they accept from

customers (e.g., to check whether these assets have ever been used on the dark Web or as ransomware).

As obliged entities, VFA agents, issuers and licence holders have ongoing obligations to monitor any business relationships they establish. Moreover, independently of that monitoring, all three also have reporting obligations to the Financial Intelligence Analysis Unit (FIAU) that are triggered whenever they suspect that:

- a transaction involves the proceeds of criminal activity or is related to the funding of terrorism; or
- a person may have been, is or may be likely to be connected with money laundering or the funding of terrorism.

DLT Assets Other than VFAs To the extent that a DLT asset does not qualify as a VFA but as either a financial instrument or electronic money, any provider of a related service (i.e., investment services and electronic money institutions) will also be considered to be an obliged entity. This means that they too must abide by the PMLFTR and submit reports to the FIAU.

Malta Digital Innovation Authority (MDIA)

Mandated by the Malta Digital Innovation Authority Act 2018, the Malta Digital Innovation Authority (MDIA) is an autonomous public body established with objectives that blend consumer protection and business development in the field of innovative technology arrangements and services (ITAS). The MDIA Act vests the MDIA with functions that include regulation, supervision, policy, education and business development. Within the context of the regulation of VFAs, the MDIA is the competent authority under the Innovative Technology Arrangements and Services Act

2018, which provides among other things for the authorisation of systems auditors, who have a specific role in ITAS cybersecurity.

As was the case with the VFA Act, a set of guidance notes aims to help ITAS providers when approaching the MDIA for registration and certification. The guidelines clarify and explain some of the processes, and reflect questions asked during public consultation, helping to increase stakeholder engagement.

10.4.5 Outcomes

While Malta's VFA activities are relatively new, they are stirring excitement among the blockchain entrepreneurial community, and some companies are either taking steps to domicile in Malta or contemplating registration and certification there, with positive potential impact on Malta's economy.

10.4.6 Conclusion

If small states are to take advantage of emerging market opportunities with meaningful financial corridors, they require a sophisticated regulator and a system of continuous improvement that allows them to respond as the emerging technology intersects with an emerging area of international regulation. Malta, in particular, is a model of best practice, straddling both the Commonwealth and the EU, and engaging in ongoing dialogue with regulatory bodies in each of these domains, as well as other authorities and international co-operating bodies (such as the Organisation for Economic Co-operation and Development,

or OECD), aiming to harmonise its response and regulatory framework with international standards.

Endnotes

- 1 BPNG (2014). *Strategic Plan: Bank of Papua New Guinea—2016–2020* [online]. Retrieved from: www.bankpng.gov.pg/wp-content/uploads/2014/06/Final-BPNG-Strategic-Plan-2016-2020.pdf
- 2 Pitcher D (2019). 'Premier Announces that Circle Has Achieved a Digital Asset Business License'. *FinTech Bermuda*, 22 July [online]. Retrieved from: <https://fintech.bm/premier-announces-that-circle-has-achieved-a-digital-asset-business-license/>
- 3 MFSA (2017). *Discussion Paper on Initial Coin Offerings, Virtual Currencies and Related Service Providers* [online]. Retrieved from: www.mfsa.mt/publication/discussion-paper-on-initial-coin-offerings-virtual-currencies-and-related-service-providers/
- 4 ESMA (2017). 'ESMA Alerts Firms Involved in Initial Coin Offerings (ICOs) to the Need to Meet Relevant Regulatory Requirements'. Statement, 13 November [online]. Retrieved from: www.esma.europa.eu/sites/default/files/library/esma50-157-828_ico_statement_firms.pdf
- 5 MFSA (undated). 'Guidance' [online]. Retrieved from: www.mfsa.mt/fintech/virtual-financial-assets/guidance/
- 6 *Ibid.*
- 7 Directive (EU) 2018/843 of the European Parliament and of the Council of 30 May 2018, amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, and amending Directives 2009/138/EC and 2013/36/EU, 19 June 2018, OJ L 156/43.