



**STAKEHOLDERS' CONSULTATIVE PAPER ON POLICY FRAMEWORK FOR
IMPLEMENTATION OF A REGULATORY SANDBOX TO SUPPORT
FINANCIAL TECHNOLOGY (FINTECH) INNOVATION IN THE CAPITAL
MARKETS IN KENYA**

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ABBREVIATIONS

AFS	-	Australian Financial Services
ASIC	-	Australian Securities and Investment Commission
DFS	-	Digital Financial Services
FCA	-	Financial Conduct Authority
FI	-	Financial Institution
FinTech	-	Financial Technology
FSS	-	Financial Services Sector
MAS	-	Monetary Authority of Singapore
MTP II	-	Medium Term Plan II
NIFC	-	Nairobi International Financial Centre

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1. BACKGROUND AND RATIONALE FOR REGULATORY SANDBOX

1.1 Kenya's Vision 2030 and Fintech

Kenya's vision 2030 identifies the Financial Services Sector (FSS) as a critical pillar to achieving economic freedom of the country. The aspiration articulated for the FSS in the vision is to "Create a vibrant and globally competitive financial sector that will promote a high level of savings to finance Kenya's overall investment needs." The economic plan requires that the sector stimulates significant increase in investments and savings through mobilizing both domestic and international resources. Vision 2030 Second Medium Term Plan (MTP II) 2013-2017 specifically identifies Capital Markets as key drivers of the FSS and lays out ambitious targets on the dimensions of access, stability and efficiency for the capital markets.

In line with the Capital Markets Masterplan, to attract regional and international activity and investment, Kenya aims to develop and build on centers of excellence. The country already has well-established strengths in agriculture, infrastructure, financial services and technology and real estate, and is developing strengths in sectors like oil and gas, metals and mining. It aims to develop strengths in more sophisticated financial services, such as asset management, private equity/venture capital, private placements and Islamic finance. These are important components of the Master Plan that will position Kenya as a centre of excellence for raising sophisticated funding.

Over the years, the Kenyan financial sector has experienced introduction of innovative technologies such as MPESA that have resulted in the sector's exponential growth and an increase of financial services uptake. Under the domestic Capital Market context, the CMMP has identified FinTech as one of the areas for potential exploitation to build on the recently witnessed innovations.

The success of the aforementioned ambitions and aspirations largely depends on the quality and responsiveness of regulation that is balanced with mandates to ensure the integrity of products, services and transactions in the capital markets space through the imposition of clear duties and obligations upon market participants. It is however acknowledged that the development of strict compliance requirements and their effective

enforcement although ensuring reduction of risk may be more suited to maintaining the status quo and catering for well-established products and services.

Despite Kenya's renowned stature as a hub of innovation, the country's capital markets have sub-optimally utilized the opportunity presented by Fintech innovations to push capital market activity to the next level. Against the foregoing background, the aspiration of Kenya's capital markets to be a gateway to East and Central Africa heavily depends on the quality and responsiveness of regulation to issuer and investor needs when balanced against the mandate of the Authority to ensure the integrity of products, services and transactions in the capital markets through the observance of clear rules, duties and obligations by the market participants.

The Third Pillar of the Capital Markets Master Plan emphasizes the need to have in place for the Kenyan capital markets, a sound, responsive regulation and a legal framework that inspires confidence. This has led to the examination of the country's legal and regulatory framework to ease market access through the introduction of principles-based regulation, vide amendments to relevant sections of the law to give a legal basis for principle-based approval and issuance of industry Policy Guidance Notes (PGNs). The regulatory nimbleness, flexibility and responsiveness provided by principle-based regulation is even more important in the FinTech sector where thriving innovation is the lifeline of a vibrant business enterprise.

1.2 Kenya's Capital Markets - Existing supportive regulatory framework for Principle-based regulation

The Authority amended its Act vide Capital Markets Amendment Act No. 48 of 2013 to introduce the foundations for principle based regulation. The Amended Act under section 12A gives the Authority the mandate to issue such guidelines and notices as it may consider necessary for it to better carry out its functions for the regulation of capital markets activities and products, subject to the assessment of the extent to which they appropriately cater for efficient, orderly and fair operation of the segment, product or intermediaries; adequate provisions for risk management and controls on market misfeasance; proper protection of investor interests and appropriate level of disclosure and a facilitative environment for transparent operations. This provision creates the basis on which new products and services can be evaluated, and where appropriate approved, subject to the issuance of guidelines to ensure transparency and consistency.

To facilitate the implementation of in-principle approvals, the Authority developed seven (7) broad guidelines as highlighted below:

- 1. Capital Adequacy:** A firm shall at all times demonstrate and maintain overall financial resources, including capital resources and liquidity resources, which are adequate, both as to amount and quality, to ensure that there is no significant risk that its liabilities cannot be met as they fall due.
- 2. Risk management and mitigation:** A firm shall document a description of the broad business strategy, its view of its principal risks and its approach to measuring, managing and mitigating the risks. This description should include the role of stress testing, scenario analysis and contingency planning in managing risk. A firm shall satisfy itself that the systems (including IT) are sufficiently sound to support the effective management and, where applicable, the quantification of the risks that could affect it. There is need for an investor compensation fund (ICF). In the case where contribution to the ICF is not a requirement, full disclosure of the risks to the investors must be exercised prior to tests being done;

3. **Competence, skill and integrity:** A Firm shall demonstrate and maintain an appropriate level of professional expertise and perform professional duties in accordance with relevant laws, regulations, and technical standards. The firm must also refrain from engaging in any conduct that would prejudice the carrying out of its duties ethically and abstain from engaging in or supporting any activity that might discredit the Kenyan Capital Markets. The firm shall mitigate actual conflicts of interest, regularly communicate with business associates to avoid apparent conflicts of interest as well as advise all parties of any potential conflict. A firm shall ensure that its key personnel are fit and proper.
4. **Corporate Governance:** The Board of the firm shall: steer the company to meet its business purpose in both the short and long term; have an appropriate mix of skills, experience and independence to enable its members to discharge their duties and responsibilities effectively; communicate with the firm's shareholders and other stakeholders, at regular intervals; ensure a fair, balanced and understandable assessment of how the firm is achieving its business purpose and meeting its other responsibilities; guide the business to create value and allocate it fairly and sustainably to reinvestment and distributions to stakeholders, including shareholders, directors, employees and customers; lead the firm to conduct its business in a fair and transparent manner that can withstand scrutiny by stakeholders.
5. **Fair, orderly and efficient conduct of business:** A firm shall demonstrate and document all the policies and procedures (internal controls) adopted by the management of an entity to assist in achieving management's objective and ensure as far as practicable, the orderly and efficient conduct of its business, including adherence to management policies, the safeguarding of assets, the prevention and detection of fraud and error, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information.
6. **Protection of investor interest:** The firm shall not unfairly place its interests above those of its clients, and where it has control of client's assets, or is otherwise responsible for safeguarding of assets belonging to a client, shall arrange proper protection for them by way of segregation, specific identification or any other suitable method, in accordance with the responsibility it has accepted. **Disclosure**

requirements: The firm shall deal with its regulator in an open and co-operative manner and keep the regulator promptly informed of anything concerning the firm which it might reasonably expect to be disclosed to the regulator. The firm shall take reasonable steps to give the clients it advises, in a comprehensive and timely fashion, any information needed to enable them make a balanced and informed decision. The firm shall also ensure that clients are made aware of any risks/responsibilities they take on, and the limits to which the firm accepts responsibility and/or liability for any recommendations. The firm should make clear at all times the capacity in which it acts in this regard, and clients should be made aware of the level of service the firm is offering. The Authority could set up a list of compulsory disclosure requirements that participants must adhere to.

1.3 Emergence of Financial Technology (Fintech) as a new focus area

A recent IOSCO¹ report on Fintech found that Fintech evolution is taking place in the context of global trends fueled by growth in computing power thus enabling analysis of ever larger data sets, broader accessibility of goods and services and disintermediation and re-intermediation. These trends are in turn taking place against the backdrop of demographic and generational changes.

Common Capital Market-based FinTech types - FintechCM

The impact of FinTech has been more pronounced in other select sectors of financial services than in Capital markets. However, capital markets are now increasingly taking a proactive and collaborative approach to engaging alternative Fintech business models to benefit from FinTech innovations.

The most commonly known FintechCM approaches

There are two broad ways in which FintechCM² can be viewed;

- i. Technology disruptors – A technology, or a business model that has proven itself in another vertical creating a new market and value network and eventually disrupting

¹ International Organization of Securities Commissions: IOSCO is the international standard setter for securities market regulation.

² <http://celent.com/reports/financial-technology-fintech-trends-capital-markets>

an existing market and value network, displacing established market leading firms, products, alliances and infrastructural arrangements

- ii. Firms with point solutions that solve difficult problems with greater automation, effectiveness or better leveraging of data.

As markets evolve, FintechCM is also evolving with its various components including; Increasing use of mobile phones, more automation of capital markets services through RegTech, InvestmentTech, Alt-Data, artificial intelligence, and distributed ledger technology to both remap existing business models and partner with market participants to create a more robust market system.

1.3.1 Increasing use of mobile phones

The world over, Issuers and investors are increasingly adopting the mobile phone as the preferred FinTech device of communication and conducting financial transactions.

Interestingly this has been driven by increased capacity of smart phones in many markets but in Kenya the mobile payments transformation has been built around ensuring access by even the most rudimentary handsets allowing for the linkage of both inclusion and innovation.

1.3.2 Capital markets-based Fintech innovations

i. RegTech

According to the Financial Conduct Authority, it is a sub-set of FinTech that focuses on technologies that may facilitate the delivery of regulatory requirements more efficiently and effectively than existing capabilities.

Now, there is a range of companies offering these kinds of services. Some offer solutions for banks to help them comply, while others are aimed at helping policymakers monitor those they are regulating. Regtech companies emerged due to increased focus on managing risk and complying with stricter rules in the post-financial crisis period, given that the financial industry needed to find new ways to adapt. Regtech companies were therefore the result of a combination of rapid regulatory change and the need for more efficient technology.

ii. Big-Data

Big-Data is a phrase used to describe the growth in the volume of structured and unstructured data, the speed at which it is created and collected, and the scope of how many data points are covered. Big data often comes from multiple sources, and arrives in multiple formats. The increase in the amount of data available presents both opportunities and problems. Big Data has the potential to help companies improve operations and make faster, more intelligent decisions through in-depth analysis. While better analysis is positive, big data can also create overload and noise. Companies have to be able to handle larger volumes of data; all the while determining which data represents signals compared to noise. Determining what makes the data relevant becomes a key factor. Structured data, consisting of numeric values, can be easily stored and sorted. Unstructured data, such as emails, videos, and text documents, may require more sophisticated techniques to be applied before it becomes useful.

iii. Artificial intelligence and Investments Tech

This is the use of artificial intelligence and machine learning in the financial markets. This may be used in portfolio and investment management, advisory services (robo-advisers or cyborg finance), algorithmic trading, social data analysis, information security, fraud detection, loan and insurance underwriting as well as customer services and sales. A robo-adviser is an online wealth management service that provides automated, algorithm-based portfolio management advice without the use of human financial planners. They are typically low-cost, have low account minimums, and attract younger investors who are more comfortable doing things online. On the other hand, Algorithmic trading also referred to as algo trading and black box trading is a trading system that utilizes advanced and complex mathematical models and formulas to make high-speed decisions and transactions in the financial markets. Algorithmic trading involves the use of fast computer programs and complex algorithms to create and determine trading strategies for optimal returns.

iv. Distributed Ledger Technology(DLT) (Blockchain technology)

This is a decentralized/distributed database which serves as a (public, in the case of virtual currency) online ledger keeping record of transactions that cannot be changed. Each

business has a ledger containing all records on transactions: purchases and sales etc. transacted by that business. When a transaction happens, for instance paying another business, there is an intermediary who validates it. In payments, this is, for instance, a bank. The blockchain removes the need of such an intermediary or better: replaces the intermediary with a (peer-to-peer) computer network. Blockchain can, as such, speed up the settlement times of many payments transactions.

Distributed Ledger Technology is an example of a rapidly developing technology in the financial services industry which offers exciting potential to support the needs of consumers and the market. DLT may also present new challenges and potential risks. For example, how regulated firms allocate responsibilities for systems shared among them.

Most financial industry participants and technology firms are increasingly exploring ways to develop and deploy DLT arrangements for use in payments, clearing, and settlement.

v. Cryptocurrency

A cryptocurrency is a digital or virtual currency that uses cryptography for security. A cryptocurrency is difficult to counterfeit because of this security feature. A defining feature of a cryptocurrency, and arguably its most endearing allure, is its organic nature; it is not issued by any central authority, rendering it theoretically immune to government interference or manipulation. Cryptocurrencies make it easier to transfer funds between two parties in a transaction; these transfers are facilitated through the use of public and private keys for security purposes. These fund transfers are done with minimal processing fees, allowing users to avoid the steep fees charged by most banks and financial institutions for wire transfers.

However, because cryptocurrencies are virtual and do not have a central repository, a digital cryptocurrency balance can be wiped out by a computer crash if a backup copy of the holdings does not exist. Since prices are based on supply and demand, the rate at which a cryptocurrency can be exchanged for another currency can fluctuate widely.

1.3.3 Peer to Peer (P2P) Finance

P2P finance (also referred to as crowdfunding) is an alternative form of finance for projects or ventures by raising money from a large number of people who each contribute a

relatively small amount, typically online. The contribution can be in the form of donation and rewards, typically non-financial return models that fall outside the purview of regulators; and equity and loan-based models which are typically regulated in most countries globally. P2P finance has evolved as a modern and dynamic method of online business and investment financing across borders.

According to Mckinsey Global Institute, as early as 2012, over 80% of online browsers across the globe frequently used social networks. The growth and global acceptance of P2P finance has seen many investors devoting parts of their assets to P2P finance. The concept is attracting the attention of both angel investors and venture capitalists since it permits efficient private investment. Angel affiliates can exploit P2P finance platforms to improve performance and productivity. On the other hand, risk aversion is typical of venture capital creating a space for innovation and business start-ups. P2P finance is perceived to be a viable mechanism for linking angel investors and venture capital.

It is now common for Fintech Participants to offer competing products and services to many of the key business lines of traditional brick-and-mortar intermediaries, including payments, wealth management, investment banking, retail banking, lending and treasury functions. In addition, there is the potential for even more novel business models ahead, including artificial intelligence-driven research, investment and trading; and decentralized, borderless ledgers combined with self-executing contracts.

In light of the above information, Kenya intends to introduce a regulatory sandbox i.e. an environment that provides for both market confidence and an expressive environment for innovation. The regulatory sandbox aims to create a 'safe space' in which businesses can test innovative products, services, business models and delivery mechanisms in a live environment without immediately incurring all the normal regulatory consequences of engaging in the activity in question. Ideally, the experimental set up of the regulatory sandbox is envisioned to see more products see the light of day by way of providing a structured and incremental roadmap for regulatory compliance. This strategy is intended to leverage Kenya's global visibility as the global leader in mobile money and is a further step towards the emergence of Nairobi as a competitive International Financial Centre (NIFC).

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2 SCOPE OF THE REGULATORY SANDBOX IN THE KENYAN CONTEXT

2.1 Introduction to Regulatory Sandbox

A regulatory sandbox is a tailored framework that allows firms deploying innovative technology in the financial services sector (“FinTech participants”) to conduct their activities in a controlled and cost-effective environment. It is also known as a regulatory laboratory or a “Reg lab”. The regulatory sandbox enables Financial Institutions or any interested firms to experiment with innovative FinTech solutions in an environment where actual products or services are provided to the customers within a well-defined regulatory space and for a specified duration.

2.2 Benefits of Regulatory Sandbox

Regulatory sandbox has several benefits some of which are listed below:

2.2.1 Reduced time-to-market at potentially lower cost:

Delays driven by regulatory uncertainty disproportionately affect first-movers and discourages innovation. Evidence shows that time-to-market can be increased by about a third in this way, at a cost of about 8% of product lifetime revenue.

2.2.2 Better access to finance:

Financial innovation relies on investment, much of it through equity funding. Regulatory uncertainty at a crucial growth stage means that FinTech firms find it harder to raise funds and achieve lower valuations as investors try to factor in risks that they are not well placed to assess. Evidence shows that valuations may be reduced by about 15% due to regulatory uncertainty.

2.2.3 More innovative products reaching the market:

Due to regulatory uncertainty, some innovations are abandoned at an early stage and never even tested. As the sandbox framework enables firms to manage regulatory risks during the testing stage, more solutions may be tried and later potentially introduced into the market.

2.2.4 Contained consequences of failure:

A regulatory sandbox approach can be used to carve out a safe and conducive space to experiment with FinTech solutions within which the consequences of failure can be contained. The Sandbox however, cannot remove all risks, as failure is an inherent

characteristic of innovation. In this regard, the Sandbox aims to provide an environment where if an experiment fails, its impact on consumers and on financial stability will be limited.

2.2.5 Reaching the best solution for the customer:

Since regulatory sandboxes provide a chance to test the solution, they provide a leeway to defer the end-result until the best solution for customers is reached. Given that any test of the product comes with time and money expenditures, with sandboxes, start-ups get a chance to develop the best possible solution with reduced costs and risks.

Regulatory sandboxes have therefore proven to be a useful tool for pilot testing promising innovations. Without regulatory Sandboxes, promising innovations may be stifled and opportunities missed due to firms being unclear on whether a new product or service complies with legal and regulatory requirements, leading them choosing not to pursue their new product or service further. Regulatory Sandboxes therefore aim at providing new and potential entrants to the capital market industry a safe space to test products, services, business models and delivery channels without the need to meet all regulatory requirements and incurring the considerable costs of putting in place the complex structures and processes to successfully apply for regulatory authorization.

2.3 Salient Characteristics of Fintech

2.3.1 Customer-centric

Fintech has been seen to provide simple, easy-to-use, high-convenience products and services. Similarly, Fintech solutions tend to be needs focused propositions designed around particular consumer use. It therefore means that in the process of developing Fintech, there is substantial degree of customer engagement.

2.3.2 Legacy Free

- Purpose-built systems designed around digital channels and fulfilment
- Little drag from discontinued products, prior acquisitions or regulatory liabilities

2.3.3 Asset Light

- Low fixed-asset base creating significant operating leverage
- Balance sheet frequently rented or outsourced to other parties

2.3.4 Scalable

- Scalability built into the business model by leveraging partnerships, distribution and simplicity.
- Low capital requirements.

2.3.5 Simple

- Fundamentally simple customer proposition
- Highly focused and transparent business processes

2.3.6 Innovative

- Innovation across the spectrum, e.g., new business models, products and services and delivery models.

2.3.7 Compliance Light

- Simple and unbundled models that are often designed so as to avoid the need for authorization

2.4 Risks of Regulatory Sandbox

The risks of regulatory sandbox are intertwined with the risks and problems of a digital economy. Digital economies are overly reliant on the fortitude of their systems as is the case in the regulatory sand box scenario. The following are the main risks:

- 1. Resilience of Systems:** Widespread adoption of technology is likely to be limited by vulnerabilities in the design and management of systems and infrastructure. There is a chance that the systems may be adequate for the test environment only to lose resilience when deployed in the open market.
- 2. Cyber Crimes:** Cyber-attacks are increasing and pose risks to consumers and markets. Some attacks are likely to be successful and firms may not have adequate defenses or effective plans to identify and respond to them.
- 3. Circumvention of existing laws:** Given that relaxing regulatory requirements is a hall mark feature of a regulatory sand box, it is possible that unscrupulous individuals may attempt to procure regulatory reprieve on unjustifiable grounds. As such, there exists a risk of circumventing existing laws through the sandbox.

The following additional risks are specific to financial return model of P2P finance platforms that fall within the Authority's regulatory ambit and which will be key candidates for the Kenyan Regulatory Sandbox.

4. **Risk of conducting general solicitation/ unlicensed activities:** Platforms may contend that they do not engage in regulated activities. However, the fact that the platform and the offerings on it may be widely accessible, that it offers a large series of tools to investors, and that it receives compensation for these services, may lead the platform to cross the line into the realm of "regulated activities", including possibly general solicitation, advising on securities, broker-dealer activities, or offering of collective investment schemes. The definition and boundaries of these regulatory concepts, and, as a result, the protection of investors, varies considerably among jurisdictions.
5. **Disclosure risks.** Investment proposals on P2P lending and Equity Crowd Funding (ECF) platforms may lack standardization and provide less detail than securities in the public markets. For example, not all P2P lending platforms disclose clear and comparable default data on their loan portfolios. Disclosure practices in relation to Equity Crowd Funding also vary considerably.
6. **Cross-border risk.** A few platforms have started cross-border activities whereby they distribute loans/ securities of individuals and firms from certain jurisdictions to lenders/ investors based in other jurisdictions. It may be unclear in such cases under which law the lender/ investor can seek redress in case of default/ bankruptcy.
7. **Race to the bottom/Arbitrage.** This captures the risk of entities settling for Jurisdictions having a sandbox framework with the lowest eligibility criteria from which to operate from across borders, effectively evading more stringent regulation.

3 APPLICATION OF REGULATORY SANDBOXES IN OTHER JURISDICTIONS

Across the globe, jurisdictions have taken different stances towards the structure of a regulatory sandbox. Some regulators are exploring the possibility of introducing “regulatory sandbox” frameworks, under which Fintech companies offering financial services may be granted certain regulatory flexibilities in order to experiment with Fintech solutions in a defined environment within specified timeframes. Other regulators consider that a sandbox may contribute to creating an uneven playing field across market participants by creating a different compliance standard for those innovative firms selected to be part of the sandbox program, and are of the view that sound regulation may help firms win the confidence of investors. Finally, some regulators have set up labs and accelerator programmes to explore whether certain new technologies (RegTech) can assist the regulator itself in better achieving its regulatory objectives.

Regulatory sand box is a fairly new terminology but the practice is not as novel. In the past, developing nations have been known to adopt a “test and learn” approach to foster innovation especially in the financial sector. The Tanzanian and Philippine governments are notable examples. This “test and learn” was an inevitable consequence of the realization that regulation and development objectives are sometimes not aligned. In most cases, development is sacrificed at the altar of regulation. By letting regulation follow change, the central banks of the Philippines and Tanzania created space for innovating with digital financial services (DFS) to glean a better understanding of the business, its operational risks and mitigating factors. Both countries authorized reputable early implementers to try new products and business models under close monitoring and frequent contact, rather than imposing a predetermined regulatory framework upfront.

In the same vein, several nations have come to appreciate the significance of experimental setups in the fast changing Fintech space, and have commissioned regulatory sandboxes to test ideas and products outside the regulatory purview.

3.1 FCA UK

The regulatory sandbox established by the UK Financial Conduct Authority (FCA) was opened up to FinTech on 9 May 2016. The first cohort of the regulatory sandbox closed to applications on 8 July 2016 with a total of 69 applications from a diverse range of sectors, geographies and sizes. 24 applications were deemed to meet the sandbox eligibility criteria and were accepted to develop towards testing, including early stage start-ups, challengers and incumbent firms.

The eligibility criteria include the following:

- **Whether the firm is in scope:** Is the firm looking to deliver innovation which is either regulated business or supports regulated business in the UK financial services market. Innovation must be intended for the UK market.
- **Is it a genuine innovation :** is the innovation ground-breaking or constitute a significantly different offering in the marketplace
- **Consumer benefit:** Does the innovation offer a good prospect of identifiable benefit to consumers (either directly or via heightened competition)
- **Is there need for the sandbox:** Does the business have a genuine need to test the innovation on real customers and in the FCA sandbox. The innovation does not easily fit the existing regulatory framework, thus making it difficult or costly to get the innovation to market.
- **Is the firm ready for testing:** is the business ready to test their innovation in a live environment, should have well developed testing plans with clear objectives, parameters and success criteria and sufficient resources to conduct the test.

It is estimated that the UK's FinTech sector generates about £20bn in revenue annually, with a total market of £3.6bn in 'disruptive' FinTech (small, innovative firms disintermediating incumbent financial services firms with new technology). Half of the promising 'disruptive' FinTech start-ups in Europe are in the UK. To remain Europe's leading FinTech Hub, UK has to continue to be an attractive market with an appropriate regulatory framework. The sandbox enables the FCA to work with innovators to ensure that appropriate consumer protection safeguards are built into their new products and services before these reach a mass market.

3.2 ASIC: AUSTRALIA

The government of Australia believes that a 'sandbox' is a crucial component to assist Australia become a leading market for FinTech innovation in Asia. It has been working with the Australian Securities and Investments Commission (ASIC) on the development of a 'regulatory sandbox' for Australian FinTech start-ups. The objective of the Australian 'regulatory sandbox' was to allow Fintech innovators to overcome regulatory uncertainty and costs that may otherwise see innovative offerings not go ahead. According to feedback from the Australian industry what was sought is an effective 'sandbox' that will enable firms to manage regulatory risks during the testing stage, reducing the cost and time to market. At the same time, any 'sandbox' will need to provide for important consumer outcomes such as fit and proper checks, dispute resolution and consumer redress arrangements.

In line with this, Australia's regulatory regime is flexible and the legislative framework makes it possible for ASIC to grant waivers (or relief) from the law to facilitate business. During 2014–15, ASIC approved 1,473 relief applications. Among other matters, existing waiver powers enable ASIC to grant relief from Australian Financial Service (AFS) licensing requirements, provide exemptions from disclosure or reporting obligations, and issue no-action letters where ASIC does not intend to take regulatory action over a particular instance of non-compliance. Further, in 2015, ASIC established an Innovation Hub to help FinTech start-ups navigate the regulatory laws it administers. In February 2017, ASIC issued Regulatory Guide 257 for financial technology (Fintech) businesses seeking to test products and services before they obtain an Australian financial services (AFS) license or Australian credit license.

Australia's 'regulatory sandbox' framework which allows for Fintech products or services to be tested without a license has three components:

- a) existing flexibility in the regulatory framework or exemptions provided by the law which mean that a license is not required;
- b) ASIC's 'Fintech licensing exemption' provided under ASIC Corporations (Concept Validation Licensing Exemption) Instrument 2016/1175 and ASIC Credit (Concept Validation Licensing Exemption) Instrument 2016/1176, which apply to certain products or services—this option is unique to the Australian market; or

- c) tailored, individual licensing exemptions granted by ASIC to a particular business to facilitate product or service testing—individual exemptions of this nature are similar to the ‘regulatory sandbox’ frameworks established by financial services regulators in other jurisdictions

The Fintech License exemption is a conditional relief to allow Fintech businesses to test certain products and services for 12 months without holding a license under either the Corporations Act or the National Credit Act. The exemption is reviewed within 12 to 18 months of operation to see if it should be broadened or changed in any other way. Relying on the Fintech licensing exemption does not mean an entity has received a license or authorization from ASIC to provide financial services or credit. Accordingly, an exempted entity must not suggest to consumers that their business or their business model has been licensed, authorized or approved by ASIC. The terms and conditions for the exemption include:

- **Scope:** providing general financial service advice and personal advice; and dealing in a financial product, except by issuing a financial product or credit services (credit assistance and acting as an intermediary) but not provision of credit;
- **Product type:** All listed or quoted Australian securities, all debentures, stocks or bonds issued or proposed to be issued by the Australian Government, a simple managed investment scheme is a registered scheme that invests at least 80% of its assets in a bank account where funds can be withdrawn within three months, or in arrangements where the investments can be realized at market value within 10 days and all deposit products, home contents insurance products and personal and domestic insurance products (home building insurance, motor vehicle, travel, consumer credit insurance, sickness & accident and life insurance do not apply). For payment products Relief is limited to advising and dealing in products issued by Authorized Deposit-Taking Institutions (ADIs). The exemption does not apply to credit contracts that are secured over residential property, subject to additional responsible lending obligations under the National Credit Act or consumer leases. Other products excluded from the exemption include derivatives, illiquid products of those that cannot be easily reversed, products with a long term focus and products that have previously been targeted at vulnerable consumers.

- **Client limits:** testing businesses relying on the Fintech licensing exemption can provide services to up to 100 retail clients. There is no client limit for wholesale clients
- **Exposure limits:** the exposure of each retail client to deposit products, simple managed investment schemes, securities, government bonds and payment products in relation to which testing services are provided does not exceed \$10,000; the amount of credit under a credit contract in relation to which services are provided does not exceed \$25,000; and the sum insured under a general insurance contract in relation to which testing services are provided does not exceed \$50,000. There is no individual exposure limit for wholesale clients. The total maximum exposure for all clients is \$5 million during the testing period.
- **Consumer protection measures:** must give their retail clients some of the information normally contained in a Financial Services Guide and Credit Guide, such as information about their services, remuneration and dispute resolution procedures. They must also comply with the 'responsible lending' obligations.
- **Adequate compensation arrangements:** as a minimum requirement PI insurance policy must have a limit of at least \$1 million for any one claim and for aggregated claims; and 'run-off' cover for a period of 12 months.
- **Dispute resolution:** must have in place internal dispute resolution procedures approved by ASIC and membership of one or more ASIC-approved External Dispute Resolution schemes for the duration of testing and a run off period of 12 month.

Through the innovation hub, it was noted ASIC does the following;

- Engages with the FinTech community by hosting and attending industry events at FinTech hubs and co-working spaces for startup businesses.
- Provides eligible businesses with a designated contact to help understand the regulatory framework, prepare licensing applications and provide ongoing support.
- Provides key information through the Innovation Hub website, which is a one-stop shop to access information and services.
- Addresses innovation issues with a coordinated approach through its established Innovation Hub Taskforces, comprising senior staff across ASIC.

- Consults with experts drawn from a cross-section of the FinTech community through their Digital Finance Advisory Committee (DFAC), to help inform how to focus efforts in this area.
- Meets regularly with international equivalents to discuss innovation developments and policy proposals.

3.3 Monetary Authority of Singapore (MAS)

MAS is encouraging more FinTech experimentation so that promising innovations can be tested in the market to have a chance for wider adoption in Singapore and abroad. The regulatory sandbox will enable FIs as well as FinTech players to experiment with innovative financial products or services in the production environment but within a well-defined space and duration. It shall also include appropriate safeguards to contain the consequences of failure and maintain the overall safety and soundness of the financial system. MAS issued regulatory Sandbox Guidelines on 16th November 2016. The guidelines are expected to improve the clarity, flexibility and transparency of the regulatory sandbox in the following ways:

- Improved clarity** - The guidelines include examples and elaborations to illustrate MAS' expectations on the sandbox such as the evaluation criteria for entry into the sandbox;
- Greater flexibility** - The guidelines have been refined to allow greater flexibility, including through relaxation of a number of evaluation criteria for firms looking to enter a sandbox, and allowing room for adjustments during experimentation as firms learn from market responses;
- Increased transparency** - MAS will work closely with sandbox applicants in the evaluation and experimentation process.

Depending on the financial service to be experimented, the applicant involved and the application made, MAS will determine the specific legal and regulatory requirements which it is prepared to relax for each case. Upon approval, the applicant becomes the entity responsible for deploying and operating the sandbox (the "sandbox entity"), with MAS providing the appropriate regulatory support by relaxing specific legal and regulatory

requirements prescribed by MAS, which the sandbox entity will otherwise be subject to, for the duration of the sandbox³. Upon successful experimentation and on exiting the sandbox, the sandbox entity must fully comply with the relevant legal and regulatory requirements. One of the salient features in the MAS guideline is the requirement for the sandbox entity to provide evidence of preliminary testing of the proposed financial service as part of the sandbox application, identifying the risks discovered and the mitigating measures.

Some of the legal requirements that MAS requires the sandbox entity to maintain during the test period include:

- Confidentiality of customer information;
- Fit and proper criteria particularly on honesty and integrity;
- Handling of customer's moneys and assets by intermediaries; and
- Prevention of money laundering and countering the financing of terrorism

Examples of requirements that MAS is willing to relax include:

- Asset maintenance requirement
- Board composition
- Cash balances
- Credit rating
- Financial soundness
- Fund solvency and capital adequacy
- License fees
- Management experience
- MAS Guidelines, such as technology risk management guidelines and outsourcing guidelines
- Minimum liquid assets

3.4 ABU DHABI REGULATORY SANDBOX

The Financial Services Regulatory Authority (FSRA) of Abu Dhabi Global Market (ADGM) on 10th May 2016 published a public consultation Policy paper setting out its proposal for a "Regulatory Laboratory" ("Reglab"), a tailored framework that allows firms deploying

³ <http://www.mas.gov.sg/Singapore-Financial-Centre/Smart-Financial-Centre/FinTech-Regulatory-Sandbox.aspx>

innovative technology in the financial services sector ("FinTech participants") to conduct their activities in a controlled and cost-effective environment. This was subsequently followed by a consultative paper on the regulatory framework. Some of the key issues raised in the consultations include:

- **Setting up of co-working space within Abu Dhabi Global Market (ADGM)** - co-working spaces constitute an important part of Fintech ecosystem. They offer businesses synergies where co-existing ventures can feed off each other for ideas and technology advancements. Financial Services Regulatory Authority (FSRA) is working with relevant partners on options of establishing co-working spaces within ADGM.
- **Interaction between Fintech participants and Non-ADGM persons**- the law does not prohibit Fin Tech participants authorized under the RegLab from dealing with non-ADGM users and clients subject to federal law restrictions. When a FinTech solution is ready to be tested, the FinTech Participant may conduct presentations within ADGM to potential investors and clients on its prototype. FSRA will facilitate this with relevant stakeholders with whom the FSRA has signed Memoranda of Understanding through seminars or workshops.
- **Scope of activities to be conducted within ADGM**- interactions with investors and clients and live testing of the FinTech solution subject to submitting a detailed testing plan to FSRA. FSRA may also require presence of its FinTech Supervisory Team during such tests. If not feasible to conduct tests within ADGM then the entity can consult FRSA.
- **Validity period for sandbox**- FSRA noted that the 2year validity period provided is adequate in comparison to other jurisdictions such as UK-FCA, MAS and ASIC whose limit is between 6 and 18 months. However, the period maybe extended on case by case basis as determined by the regulator.
- **Authorization criteria for FinTech** -In terms of how the assessment on the viability of FinTech model, guidance and examples to the kind of ventures which may qualify for the RegLab authorization, the ADGM model of admission is based on a case by case review and does not provide a minimum criteria for admission to

the sandbox. As part of authorization process the FSRA assesses availability of necessary safeguards, risk management and control systems.

- **On-going monitoring and updating of RegLab activities** - As part of its obligations under the RegLab, the FinTech Participant will be required to periodically report to the FSRA on the development of its FinTech Proposal and progress of the live-tests. The FSRA may from time to time share its thematic findings with the industry arising from its supervision of FinTech Participants in the RegLab (including information and statistics on the state of the industry, key milestones, compliance issues, and the like). FSRA has committed to draw on the lessons learnt from the implementation of RegLab and periodically review and update its FinTech regulatory framework to ensure it remains risk - appropriate and relevant for the FinTech industry and caters to new/emerging business models or technologies.

On 31st August 2016, FSRA issued the Consultation Paper No. 3 of 2016 on Legislative Framework for Innovative FinTech. The Consultation paper invited public feedback and comments on the proposed legislative framework to support participants deploying innovative technology within the financial services. The framework introduced a new Regulated Activity in Chapter 17A, Schedule 1 of the Financial Services and Markets Regulations 2015 (“FSMR”) that specifically caters for the development of the financial technology services. All interested FinTech participants are required to apply to FSRA for permission to operate within the RegLab. The regulatory framework introduced aims at encouraging rather than front-running innovation and to facilitate time-to-market new FinTech solutions in a cost efficient environment.

4 COLLABORATIVE INITIATIVES UNDERTAKEN BY THE CMA ON FINTECH

The Authority has undertaken the following preparatory work as it seeks to implement the regulatory sandbox:

4.1 Crowdfunding Policy & Regulation: Market Development in East Africa

Through collaboration and joint efforts of the CMA (Kenya) with the Financial Sector Deepening Kenya(FSDK), the Cambridge Center for Alternative Finance, Anjarwalla and Khana Advocates as well as EAC member states' capital markets regulators, a policy advisory paper on approach to crowdfunding oversight has been developed for the East African region, with the following key recommendations, which are still under discussions:

- **Mapping, Education and Engagement-** this will involve developing a detailed database of existing platforms, model employed and contact details; FinTech Regulator capacity and awareness building by industry experts and regulator engagement forums with the industry, practitioners, experts, potential funders and fundraisers, to bring national regulators up to speed on industry developments and begin the process of consultation as to the best course of action to take forward.
- **Crowdfunding Ecosystem and Trust-inducing Initiatives–** It is not recommended that any bespoke regulation is enacted at this time, given the current size of the market. Rather, there is an array of other proactive initiatives that can be taken to see how the market develops while ensuring effective consumer protection safeguards are in place. These would include:
 - ✓ Encouraging crowdfunding industry groups to implement self-governing regulations and rules.
 - ✓ Establish a register of Regulator-acknowledged Firms and Regulator Endorsement could be established and hosted on a common website.
 - ✓ Establish an EAC RegLab.
 - ✓ Identify start-ups that specialize in digitizing information, documentation and processes, in order to facilitate a standardization of paperwork.
- **Government Support and Endorsement-** through public-private co-investment by seeking out opportunities for public or private funding bodies that will match-fund; develop a public-private fund to help mitigate currency fluctuations and provide a clear, regulator-endorsed, verified and sanctioned signposting process to guide new

crowdfunding businesses, seeking to operate in East Africa, through the existing regulatory and licensing requirements for each jurisdiction.

4.2 Engagement with ICT Business incubators

The Authority engaged I-Hub during Quarter 1 2017 with the aim of gaining a practical understanding of incubators, accelerators and innovative technologies modus operandi.

Nairobi's most famous tech hub, I-Hub, was founded in 2010, and has become the unofficial headquarters for Kenya's tech start-ups; providing workspace, funding, mentorship and networks for some of the country's brightest entrepreneurs. I-Hub has banked on the ability of Kenyan tech entrepreneurs to create innovative solutions to pressing problems that has grown the country's reputation globally. Some of the country's top start-ups that have emerged from iHub, including BRCK, Weza Tele, Kopo Kopo and Eneza Education.

Over the years, I-Hub has been joined by other start-up hubs, offering everything from co-working space (the largest being Nairobi Garage) – to incubators, providing hands-on mentoring and seed funding.

Worth noting is that the government has proven that it is increasingly eager to prioritize the country's digital entrepreneurs.

Some of the key risks faced by start-ups in the business incubator include:

1. Product designs- getting the appropriate product design has been a hindrance to successful business incubation.
2. Technical assistance-challenges have been encountered with provision of appropriate technical assistance.
3. Challenges in bringing the ecosystem to understand the product design at the initial inception stages.
4. High risks posed by early stage companies
5. Intellectual property protection- this has been bridged through signing non-disclosure agreements with start-up companies.

From the engagement, it was noted that for successful implementation in the incubation space, there is need to:

1. Develop a structured approach towards incubation.
2. Identify potential areas of innovation.

3. Get basic infrastructure in place and heavily invest in technology
4. Provide a methodology for companies to provide solutions, services and products.
5. Create a support environment for small enterprises and startups using an evidence based approach.
6. Develop fintech products aside from payments that is more advanced products and solution in the securities market.
7. Enhance financial literacy and education to onboard people to market early enough
8. Ensure end to end testing of products to minimize of chances of failure.
9. Develop a de-risking framework in the FinTech and incubation space.
10. Learn to value intellectual property and non-disclosure agreements.

The Authority has also engaged Nailab, a business incubator based in Nairobi that offers entrepreneurship program focusing on growing innovative technology driven ideas. The fund tries to lower the entry barriers for ICT entrepreneurs who want to start and scale their businesses in Kenya. It was launched in 2011 by Nailab Ltd in partnership with the crowdfunding platform 1%CLUB. The ICT Board and Ministry of Information and Communications have supported the growth of Nailab. It is a six -month program spilt into 2 as follows:

- i. Business development; and
- ii. Product development.

The fund invests in East Africa start-ups that make use of technology. The investment will be a convertible note of up-to KES 2.5 million with a maturity of 24 months and a 6-month grace period. The start-up has to fulfill the following criteria:

- i. Product validation/proof of concept should be in place.
- ii. The team should consists of driven and committed entrepreneurs.
- iii. The product should be highly scalable.
- iv. The idea should be technologically driven.
- v. The business should be duly registered and operational in Kenya.
- vi. Idea/product should demonstrate a clear social or economic.
- vii. Idea/product should be ready to launch within six months.
- viii. The start-up should have an innovative product or service.

Currently, a few start-ups have graduated from the Nailab, including Tusqee, a mobile app that allows schools to send children's grades to their parents by SMS, and MyOrder, an app that allow street vendors to open their own mobile web shop, allowing customers to order and pay by mobile phone.

4.3 Engagement with other regulators and other international standard setting bodies

According to IOSCO's FinTech Report of February 2017, due to the global nature of FinTech and the innovative offerings which may cut across different sectors at national level there is potential risk for regulatory arbitrage. To address this challenge regulators have engaged in greater multilateral and bilateral collaboration and greater national regulatory coordination.

In October 2016, the Authority and the Australian Securities and Investments Commission (ASIC) signed a Co-operation Agreement which aims to promote innovation in financial services in their respective markets. The agreement sets up a framework for co-operation between the CMA and ASIC in the expanding space of innovation in financial services. The parties have agreed to share information in their respective markets including on emerging market trends and regulatory issues arising from the growth in innovation. ASIC has developed an Innovation Hub and is keen to share best practices in terms of how to address regulatory issues pertaining to innovation in financial services.

On 9th March 2017, the Fintech Issues Group of the Financial Stability Board (FSB) benefited from 14 presentations on FSB members' and non-members' (including Kenya) regulatory approaches to FinTech. This work will inform the FIG's stock-take of current and planned policy frameworks for its final report. CMA participated in this workshop and gave insights into how mobile technology has been used in the capital market sector as a distribution channel for securities, most notably M-Akiba Bond. Kenya stands to benefit from the proposed FSB policy framework on Fintech which may give direction on matters which regulators should focus on from a financial stability perspective. Other areas of focus are likely to include: capacity and skill sets of supervisors; the assessment of data and model integrity and the impact of cyber risk as well as cross-border issues, legal uncertainties and macro financial risks.

The rising use of technology in the delivery of financial services may increase the complexity of supervision, surveillance and enforcement. Regulators may face challenges addressing Fintech development while fulfilling their regulatory mandate, such as promoting investor protection, market fairness and financial stability. Regulators need to leverage the increase in available data, as well as the potentially greater capability to access and process this data, including through the use of data analysis tools and software to evaluate compliance with regulatory requirements. Regulators may also explore leveraging new compliance software and surveillance tools.

Fintech has enabled new distribution and business models for products and services through internet or mobile based interfaces. Emerging from this is the shift towards digital customer onboarding and e-KYC, which can reduce compliance costs and increase accessibility to a broader investor base. Generally, in those jurisdictions where the laws and regulation allow for non-face-to-face customer identification/verification, it is subject to conditions that appropriate anti-money laundering and counter-terrorist-financing (AML/CFT) safeguards (including customer identification and verification, and KYC documentation) are in place.

Cyber security and data protection concerns associated with Fintech and increasing internet connectivity have been exacerbated by the frequency and sophistication of cyber-attacks and breaches observed in both developed and emerging markets. Several emerging market regulators have developed or are in the process of developing cyber security frameworks and guidelines.

Also, as innovative start-ups and technology firms may not necessarily be familiar with the financial sector and how their products or services intersect with financial regulation, several regulators have established dedicated Fintech offices, contact points and hubs.

5 Table 1. Comparative Sandbox Criteria in Various Jurisdictions

Area of focus	United Kingdom	Australia	Malaysia	Singapore	Abu Dhabi
Impact of innovation	<ul style="list-style-type: none"> ✓better outcomes for consumers through, for example, an increased range of products and services, reduced cost, and improved access to financial services. 	<ul style="list-style-type: none"> ✓Promotes innovation 	<ul style="list-style-type: none"> ✓improve accessibility, efficiency, security and quality in the provision of financial services; ✓enhance the efficiency and effectiveness of risk management ✓address gaps in or open up new opportunities for financing or investments in the Malaysian economy; 	<ul style="list-style-type: none"> ✓Includes new or emerging technology, or uses existing technology in an innovative way. ✓Addresses a problem, or brings benefits to consumers or the industry 	<ul style="list-style-type: none"> ✓Promote significant growth, efficiency or competition in the financial sector ✓Promote better risk management solutions and regulatory outcomes for the financial industry; ✓Improve the choices and welfare of clients.
Intended participants	<ul style="list-style-type: none"> ✓A restricted authorization and sandbox umbrella will not apply to carrying out activities outside the FSMA: e.g. payment services and e-money 	<p>To be eligible one MUST NOT</p> <ul style="list-style-type: none"> ✓ be banned from providing financial services; ✓already hold an AFS license/credit license; ✓already be an authorized representative of an AFS/credit licensee or ✓be a related body corporate of an AFS licensee/credit licensee 	<ul style="list-style-type: none"> ✓Financial institution, FinTech company that partners with a financial institution and a FinTech company intending to carry on authorized business as defined in the Financial Services Act 2013, IFSA 2013 and MSBA 2011 	<ul style="list-style-type: none"> ✓Firms that are looking to apply technology in an innovative way to provide financial services that are or likely to be regulated by MAS including but not limited to FIs, FinTech firms, and professional services firms partnering with or providing support to such businesses. ✓NOT applicable to financial service similar to those that are already being offered in Singapore, unless the applicant can show that either: 	<ul style="list-style-type: none"> ✓Those who have a FinTech product that is untested in the UAE market ✓Those who may already be offering their FinTech product in the market, but wish to continue researching and developing it, and to live-test and offer any product enhancements, variations or new features on a limited rollout basis within the confines of the RegLab. ✓NOT intended for firms to launch an established FinTech product which complies with all relevant regulatory requirements to a wider market

Area of focus	United Kingdom	Australia	Malaysia	Singapore	Abu Dhabi
				<ul style="list-style-type: none"> ▪ a different technology is being applied; or ▪ the same technology is being applied differently. 	
Authorization requirements	<p>✓Whether the firm is in scope: Is the firm looking to deliver innovation which is either regulated business or supports regulated business in the UK financial services market. Innovation must be intended for the UK market.</p> <p>✓Is it a genuine innovation : is the innovation ground-breaking or constitute a significantly different offering in the marketplace</p> <p>✓Consumer benefit: Does the innovation offer a good prospect of identifiable benefit to consumers (either directly or via heightened competition)</p> <p>✓Is there need for the sandbox: Does the</p>	<p>✓No authorization/application required just a notification to ASIC- the exemption does not mean you hold a license and this must be disclosed to consumers</p>	<p>✓The integrity, capability and track record of the financial institutions or fintech companies</p> <p>✓adequate and appropriate assessment to demonstrate the usefulness and functionality of the product, service or solution and identified the associated risks;</p> <p>✓necessary resources to support testing in the sandbox.</p> <p>✓realistic business plan to deploy the product, service or solution on a commercial scale in Malaysia after exit from the sandbox;</p> <p>✓the provision of the product, service or solution is either wholly or partly</p>	<p>✓Intention and ability to deploy the proposed financial service in Singapore on a broader scale after exiting the sandbox</p> <p>✓Test scenarios and expected outcomes of the sandbox experimentation should be clearly defined, and the sandbox entity should report to MAS on the test progress based on an agreed schedule</p> <p>✓appropriate boundary conditions sufficient to protect the interests of consumers and maintaining the safety and soundness of the industry</p> <p>✓Significant risks arising from the proposed financial service should be assessed and mitigated</p> <p>✓An acceptable exit and transition strategy</p> <p>✓Demonstrate that it has done its due diligence, including testing the proposed financial service in a laboratory environment and knowing the legal and regulatory requirements for deploying</p>	<p>✓Adequate and appropriate resources, including financial resources, to develop and test its FinTech Proposal;</p> <p>✓The applicant is fit and proper</p> <p>✓The applicant has relevant technical and business knowledge and experience to develop and test the FinTech Proposal</p> <p>✓Sufficiently advanced stage of development to mount a live test.</p> <p>✓Ability to clearly define the FinTech Proposal's test parameters, control boundaries, key milestones and intended outcomes;</p>

Area of focus	United Kingdom	Australia	Malaysia	Singapore	Abu Dhabi
	<p>business have a genuine . need to test the innovation on real customers and in the FCA sandbox. The innovation does not easily fit the existing regulatory framework, thus making it difficult or costly to get the innovation to market.</p> <p>✓Is the firm ready for testing: is the business ready to test their innovation in a live environment, should have well developed testing plans with clear objectives, parameters and success criteria and sufficient resources to conduct the test.</p>		<p>incompatible with laws, regulations or standards administered by the Bank.</p> <p>✓The applicant is led and managed by persons with credibility and integrity.</p>	the proposed financial service.	
Duration of sandbox	6 months	12 months with possible extension for another 12 months	12 months with extension on case by case basis	Not prescribed in regulations/guidelines determined on case by case	2 years with extension on case by case basis
Minimum No of clients & Exposure	Determined on case by case	Up to 100 retail clients. Exposure limits for retail clients for different products	Determined on case by case	Determined on case by case	Determined on case by case

Area of focus	United Kingdom	Australia	Malaysia	Singapore	Abu Dhabi
limits		prescribed. No limits for wholesale clients The limits may be varied on request			
Reporting	Reporting requirements are agreed with the innovator depending on the nature of the innovation. The starting position is generally weekly reports on agreed testing milestones, key findings and risk management during testing.	Reports within 2 months after end of testing period	Interim reports on an agreed schedule and final report 30 days after expiry of testing period	Not clear from the available literature	Acceptable reporting schedule to report to the Regulator on the status and progress of development and testing
Dedicated supervisory team	None	None	None	None	Yes
Conditions and Limitations	<ul style="list-style-type: none"> ✓The FCA cannot waive requirements derived from EU law ✓The FCA's power to issue waivers is limited by the FSMA waiver test. ✓FSCS cover is available only if there is a breach of general law requirements (e.g. negligence, misrepresentation) ✓Waivers could affect 	<ul style="list-style-type: none"> ✓Scope-providing general financial service advice and personal advice; and dealing in a financial product, except by issuing a financial product or credit services (credit assistance and acting as an intermediary) but not provision of credit ✓Specific limitations to product types also apply e.g. derivatives and illiquid products are excluded ✓must give their retail 	<p>Adequate safeguards such as:</p> <ul style="list-style-type: none"> ✓Disclosure of potential risks ✓limiting the number of customers participating in the sandbox and/or the aggregate value or frequency of transactions; ✓restricting the participation of customers to a 	<p>Requirement that must be maintained</p> <ul style="list-style-type: none"> ✓Confidentiality of customer information ✓Fit and proper criteria particularly on honesty and integrity ✓Handling of customer's moneys and assets by intermediaries ✓Prevention of money laundering and countering the financing of terrorism <p>Requirements that can be</p>	<p>Regulator may impose restrictions on :</p> <ul style="list-style-type: none"> ✓ Number and type of clients ✓Type and size of client transactions ✓Suitability assessment and client's written consent ✓Ability to hold and control client money ✓Participant's handling and ✓protection of Client information; ✓manner and type of financial promotion that the FinTech Participant may ✓undertake and the associated

Area of focus	United Kingdom	Australia	Malaysia	Singapore	Abu Dhabi
	<p>FOS assessment if the firm otherwise acted in accordance with its obligations, and fairly and reasonably</p>	<p>clients some of the information normally contained in a Financial Services Guide and Credit Guide, such as information about their services, remuneration and dispute resolution procedures.</p> <ul style="list-style-type: none"> ✓ They must also comply with the 'responsible lending' obligations ✓ Adequate compensation arrangements: as a minimum requirement PI insurance policy must have a limit of at least \$1 million for any one claim and for aggregated claims; and 'run-off' cover for a period of 12 months. ✓ Dispute resolution mechanism – IDR procedures approved by ASIC and membership to one or more ASIC-approved EDR schemes 	<p>certain segment or profile of customers;</p> <ul style="list-style-type: none"> ✓ limiting the duration of the testing period; ✓ providing a consumer redress mechanism, including the possibility for financial compensation claimable against the sandbox participants under clearly specified circumstances; and ✓ Committing adequate and competent resources to undertake the testing and ✓ Implement risk mitigation solutions that have been proven to be effective in containing the consequences of failure. 	<p>waived:</p> <ul style="list-style-type: none"> ✓ Asset maintenance requirement ✓ Board composition ✓ Cash balances ✓ Credit rating ✓ Financial soundness ✓ Fund solvency and capital adequacy ✓ Licence fees ✓ Management experience ✓ MAS Guidelines, such as technology risk management guidelines and outsourcing guidelines ✓ Minimum liquid assets ✓ Minimum paid-up capital ✓ Relative size ✓ Reputation ✓ Track record 	<p>disclosures to clients</p> <ul style="list-style-type: none"> ✓ key information required in client agreement ✓ AML & CFT measures ✓ Capital requirements ✓ any other safeguards to protect the interests of Clients or maintain the safety ✓ and soundness of the financial system as
Cancellation		No framework in the guidelines	BNM can revoke approval before end	MAS is not satisfied that the sandbox has achieved its	✓ the FinTech Participant is failing, or is likely to fail, to satisfy the

Area of focus	United Kingdom	Australia	Malaysia	Singapore	Abu Dhabi
			<p>of testing for:</p> <ul style="list-style-type: none"> ✓ failure to carry out the safeguards ✓ submits false, misleading or inaccurate information, or has concealed or failed to disclose material facts in the application ✓ contravenes any applicable law administered by the Bank ✓ is undergoing or has gone into liquidation; ✓ breaches data security and confidential requirements; ✓ carries on business in a manner detrimental to customers or the public at large ✓ fails to effectively address any technical defects, flaws or vulnerabilities <p>30 days' notice for</p>	<p>intended purpose, based on the latest test scenarios, expected outcomes and schedule mutually agreed with the sandbox entity;</p> <p>b. the sandbox entity is unable to fully comply with the relevant legal and regulatory requirements at the end of the sandbox period. If such a situation is anticipated, the sandbox entity is encouraged to engage MAS earlier;</p> <p>c. a flaw has been discovered in the financial service under experimentation where the risks posed to customers or the financial system outweigh the benefits of the financial service under experimentation, and the sandbox entity acknowledges that the flaw cannot be resolved within the duration of the sandbox;</p> <p>d. MAS terminates the sandbox due to reasons such as the sandbox entity breaching any condition imposed for the duration of the sandbox; or</p> <p>e. the sandbox entity has informed MAS of its decision to exit the sandbox at its own</p>	<p>Threshold Conditions, authorization requirements or limitations and conditions</p> <p>✓ the FinTech Participant has committed a contravention of the FSMR or any Rules made under the FSMR.</p>

Area of focus	United Kingdom	Australia	Malaysia	Singapore	Abu Dhabi
			revocation unless delay in revoking would be detrimental to public/financial system	discretion.	
Exit		<p>After the 12-month testing period ends operations cease unless:</p> <ul style="list-style-type: none"> ✓One is granted an AFS or credit license; ✓entered into an arrangement to provide services on behalf of an AFS or credit licensee ;or ✓individual relief extending testing period is granted 	<p>✓Upon completion of testing the Bank will decide whether to allow the product, service or solution to be introduced in the market on a wider scale or prohibit due to</p> <ul style="list-style-type: none"> ▪ Unsuccessful testing ▪ Unintended negative consequences for the public and or financial stability 	<p>✓At end of test period and the legal and regulatory requirements relaxed by MAS will expire,</p> <p>✓Can apply for extension 1 month prior to expiry</p> <p>✓deploy the financial service under experimentation on a broader scale, provided that:</p> <ul style="list-style-type: none"> ▪ MAS and the entity are satisfied that the sandbox has achieved its intended outcome ▪ The entity can fully comply with relevant legal and regulatory requirements <p>Any existing obligations to clients must be fully fulfilled before exit or discontinuation.</p>	<p>✓At expiry of two year period</p> <p>✓Can apply for extension 3 months prior to expiry</p> <p>✓At Commercialization- migrate to the full authorization and supervisory regime under the FSMR</p> <p>✓Employ exit strategy- either cease operations or transfer product and clients to an authorized financial institution</p>

From the comparison above, it is apparent that there is a lot of commonality apart from Australia which seems to have very specific requirements. Some of the key criteria that seem common relates to: demonstration of innovation; Benefits to consumers; Adequacy of resources; and mitigation of risks.

DRAFT

6 REGULATORY FRAMEWORK

Regulatory sandbox regulation should generally fall into the following categories:

Stage	Details of the Category
Application Process	<i>Unauthorized firms:</i> Useful for unauthorized firms that need to become authorized before being able to test their innovation in a live environment.
	<i>Authorized firms:</i> Useful for authorized firms looking for clarity around applicable rules before testing an idea that does not easily fit into the existing regulatory framework.
Acceptance and progression	<p>If the Authority is convinced that the application meets all the evaluation conditions, it informs the applicant in writing about the acceptance of the application. Essentially, this effectively marks the start of the operationalization stage. The Authority will inform an applicant of its eligibility to participate in sandbox within 21 working days of receiving a complete application and thereafter engage the participants in the following:</p> <ul style="list-style-type: none"> ✓ testing parameters such as the scope and duration of the test, regulatory flexibilities requested and frequency of reporting; ✓ specific measures to determine the success or failure of the test at the end of the testing period; ✓ an exit strategy should the test fail or be discontinued; and <p>a transition plan for the deployment of the product, service or solution on a commercial scale upon successful testing and exit from the sandbox.</p>
Operationalization	<p>The operationalization stage describes the period when the privileges of the regulatory sand box are extended to the firm. At this stage, the Authority decides on one of three approaches to the regulatory sandbox as well as specifies the conditions and terms that the firms are bound by while under the sandbox. The Authority can use any of the following approaches</p> <ul style="list-style-type: none"> • Individual guidance: setting out how the Authority interprets relevant rules in the context of the test. This creates a safe space because, if you act in accordance with the guidance of the Authority, it is assumed that the firm has complied with the aspects of the rules that the guidance relates to. • Waivers or modifications to rules: if an applicant's test may breach a rule, the Authority may waive or modify it where it is unduly burdensome or not achieving its purpose, and a waiver or modification would not adversely affect the advancement of any of its

Stage	Details of the Category
	<p>objectives. However, the Authority may not be able to waive national or international laws.</p> <ul style="list-style-type: none"> • No enforcement action letters: this letter would give firms some comfort that as long as they dealt with the Authority openly, kept to the agreed testing parameters and treated customers fairly, then, the Authority accepts that unexpected issues may arise and it would not expect to take disciplinary action. The use of this tool is reserved for cases where it is not possible to give individual guidance or waivers. It is justified by circumstances and characteristics of different sandbox tests.
Exit Strategy	<p>Once the testing is complete, the firms submit a final report about the outcome of the testing and the Authority reviews this report within 30 days from the expiry of the testing period. Once the review of the final report is complete, the firm must then decide whether or not to offer the new solution in the wider market outside the sandbox. The sandbox entity should ensure that any existing obligation to its customers of the financial service under experimentation must be fully fulfilled or addressed before exiting the sandbox or discontinuing the sandbox. The report should contain the following information:</p> <ul style="list-style-type: none"> ✓ Key outcomes, key performance indicators against agreed measures for the success or failure of the test and findings of the test; ✓ A full account of all incident reports and resolution of customer complaints; and <p>In the case of a failed test, lessons learnt from the test.</p>
Expiry of Approval	<p>Upon expiry of the testing period, an approval to participate in the sandbox and any regulatory flexibility accorded to the participants will automatically expire, unless the participant has obtained prior written approval from the Authority for an extension of the testing period.</p> <p>The initial testing period shall not exceed 12 months from the start date of the test. To extend the testing period, a written application must be submitted by the participants to the Authority no later than 30 calendar days before the expiry of the testing period. The application should state the additional time required and clearly explain reasons for requiring the extension. To minimize market distortion, the Authority will not generally approve a protracted extension of the testing period unless the solution has tested positively in general and it can be demonstrated that the</p>

Stage	Details of the Category
	<p>extended testing is necessary to respond to specific issues or risks identified during initial testing. Extension may be granted under the following circumstances:</p> <ul style="list-style-type: none"> ✓ Additional time is needed to make changes to the financial service under experimentation after taking into account customer feedback ✓ To rectify identified flaws ✓ The sandbox entity requires more time in order to fully comply with the relevant legal and regulatory requirements <p>Upon the completion of the testing, the Authority will decide whether to allow the product, service or solution to be introduced in the market on a wider scale. Where allowed, participating fintech companies intending to carry out regulated businesses will be assessed based on applicable licensing, approval and registration criteria under the Capital Markets Act.</p> <p>The Authority may also prohibit deployment of the product, service or solution in the market upon the completion of the testing due to the following reasons:</p> <ul style="list-style-type: none"> ✓ in the event of an unsuccessful testing based on agreed test measures; or ✓ the product, service or solution has unintended negative consequences for the public and/or financial stability.
<i>Revocation of approval</i>	<p>The Authority may revoke an approval to participate in sandbox at any time before the end of the testing period if the participant -</p> <ul style="list-style-type: none"> ✓ Fails to carry out the safeguards as agreed; ✓ Submits false, misleading or inaccurate information, or has concealed or failed to disclose material facts in the application; ✓ Contravenes any applicable law administered by the Authority or any applicable law in Kenya which may affect the participant's integrity and reputation. If such a situation is anticipated, the sandbox entity is encouraged to engage CMA earlier and see if anything can be done to encourage compliance afterwards. ✓ is undergoing or has gone into liquidation; ✓ Breaches data security and confidential requirements; ✓ Carries on business in a manner detrimental to customers or the public at large; or

Stage	Details of the Category
	<ul style="list-style-type: none"> ✓ Fails to effectively address any technical defects, flaws or vulnerabilities in the product, service or solution which gives rise to recurring service disruptions or fraud incidents; ✓ Authority is not satisfied that the sandbox has achieved its intended purpose, based on the latest test scenarios, expected outcomes and schedule mutually agreed with the sandbox entity; ✓ A flaw has been discovered in the financial service under experimentation where the risks posed to customers or the financial system outweigh the benefits of the financial service under experimentation , and the sandbox entity acknowledges that the flaw cannot be resolved within the duration of the sandbox; and ✓ The participant has informed the Authority of its decision to exit the sandbox at its own discretion <p>Before revoking an approval to participate in the sandbox, the Authority will –</p> <ul style="list-style-type: none"> ✓ Give the participant 30 days’ notice in writing of its intention to revoke the approval; and ✓ Provide an opportunity for the participant to respond to the Authority on the grounds for revocation. <p>Where any delay in revoking the approval would be detrimental to the interests of the participant, their customers, the financial system or the public generally, the Authority may revoke the approval immediately and provide the opportunity for participant to respond after the effective date of revocation. If the response is accepted the Authority may reinstate the approval to participate in the sandbox.</p> <p>Upon revocation of an approval, the participant must –</p> <ul style="list-style-type: none"> ✓ Immediately implement its exit plan to cease the provision of the product, service or solution to new and existing customers; ✓ Provide notification to customers informing them of the cessation and their rights to redress where relevant; <p>Comply with obligations imposed by the Authority to dispose of all confidential information including customer personal information.</p>

7 OPTIONS IN INTRODUCING THE KENYAN REGULATORY SANDBOX

Solutions to a regulatory sandbox can only be delivered by industry acting out of mutual purpose and interest collectively (financial services firms, software developers, technology companies, accelerators etc.) to help address the challenges that innovators face when introducing a new FINTECH product or service to market.

There are four options towards the introduction of a sandbox in the Kenyan Capital Markets

- a. Virtual Sandbox
- b. Sandbox Umbrella
- c. New Regulated Activity
- d. Amending specific sections of the CMA Act
- e. The Authority may adopt a hybrid approach to a virtual sandbox where a physical space may be considered for hardware fintech related innovations and a virtual sandbox is considered for software solutions;

	Description	Advantages and Disadvantages	Jurisdictional Review	Fintech Items under each Jurisdiction
1.	Virtual sandbox A virtual sandbox could be introduced by the industry. This would be an environment to enable firms to test their solutions virtually without entering the real market. Several large	Advantages ✓ An environment to enable firms to test their solutions virtually without entering the real market. ✓ No or less risk of consumer detriment, risk to market integrity or financial stability while testing.	U. K ✓ Part of FCA recommendations is that the industry considers establishing a virtual sandbox, which allows firms to experiment in a virtual environment using their own or publicly available data, and a	✓ innovative products, ✓ innovative services, ✓ business models; and ✓ delivery mechanisms ✓ payments companies, ✓ distributed ledger technology ✓ blockchain companies,

	Description	Advantages and Disadvantages	Jurisdictional Review	Fintech Items under each Jurisdiction
	<p>firms already have similar solutions for testing technologies but these operate separately from each other and with data only from the owners of these sandboxes. A virtual sandbox could be, for example, a cloud-based solution set up and equipped in collaboration between the industry, which businesses then could customize for their products or services</p> <p>A virtual sandbox could be used by all innovators regardless of whether they are authorized or not.</p>	<p>✓ A virtual sandbox could be used by all innovators regardless of whether they are authorized or not.</p> <p>✓ It will probably be most useful for small start-ups who cannot build their own sandboxes.</p> <p>✓ This environment could also allow collaboration between several businesses and other interested parties to develop innovative solutions quicker and in a more informed way.</p> <p>Disadvantages</p> <p>✓ This option could be complex to set up</p> <p>✓ It does not allow testing on consumers that are not aware of being involved in a test</p> <p>✓ The CMA might have less oversight of testing activities</p>	<p>sandbox umbrella company.</p> <p>✓ The environment enables firms to test their products and services in a virtual space without entering the real market (for example, by testing with publicly available data sets, or with data provided by other firms through the virtual sandbox).</p> <p>✓ A virtual environment could also allow collaboration between a number of businesses and other interested parties to develop innovative solutions quicker and in a more informed way.</p> <p>✓ In the long-term, it is necessary for the CMA to set up the virtual sandbox; the industry has potential to set up a useful virtual testing environment itself. However, it is crucial to facilitate collaboration between interested parties and provide support when the virtual sandbox is being developed.</p> <p>✓</p>	<p>✓ online securities platforms,</p> <p>✓ online lenders, and</p> <p>✓ Online banking services companies.</p>
2.	Sandbox umbrella	Advantages	UK	
	<p>A not-for-profit company could be set up by industry to act as a sandbox umbrella that allows unauthorized innovators to offer their services under its shelter as</p>	<p>✓ It could be quicker and simpler for innovators to use than restricted authorization (innovators would not have to meet authorization requirements on their own)</p>	<p>✓ This involves the creation of a Private Sector led sandbox umbrella company.</p> <p>✓ The umbrella company would need to be authorized with appropriate</p>	<p>✓ Robo-Advice</p> <p>✓ Blockchain technology; and</p> <p>✓ Adoption of RegTech.</p>

	Description	Advantages and Disadvantages	Jurisdictional Review	Fintech Items under each Jurisdiction
	appointed representatives.	<ul style="list-style-type: none"> ✓ Consumer protection apply if activity is in scope ✓ Kenya's law requirements have less impact on this option than on restricted authorization ✓ Industry is well placed to set up the umbrella and monitor innovators, so innovators can also be helped with commercial matters <p>Disadvantages</p> <ul style="list-style-type: none"> ✓ This option could be complex to set up ✓ The appointed representative regime has scope limitations ✓ The Authority might have less oversight of testing activities 	<p>permissions and then supervised by the CMA as other authorized firms or licensed institutions.</p> <ul style="list-style-type: none"> ✓ The umbrella company would monitor its appointed representatives. ✓ This option would take some time to implement but it would be faster and simpler for the capital market to use than the restricted authorization option. 	
3.	New Regulated Activity			
	This option could enable CMA to create a new sandbox regime (with new authorization requirements and rules) that is more flexible than the current regulatory regime in Kenya. The drawbacks to this option are that firms still need to become authorized before being able to test and this could take some time. A policy guidance note to facilitate introduction of a	<p>Advantages</p> <ul style="list-style-type: none"> ✓ CMA can create a new regime for sandbox firms that is more flexible ✓ CMA introduce additional rules to those required under law ✓ Authorization (even if only for sandbox) can encourage investors ✓ If legislative/rules change it provides for, consumer rights and protection. ✓ Provides consumers with confidence while not unnecessarily restricting the opportunities for innovation. <p>Disadvantages</p>	<p>UK</p> <ul style="list-style-type: none"> ✓ The CMA Act could be amended to introduce a new regulated activity of 'sandboxing' for testing. This option could enable the Authority to create a new sandbox regime (with new authorisation requirements and rules) that is more flexible than the current legislation does not apply or where the CMA can have additional rules to those that exist under CMA Act through a policy guidance ✓ Thus, it could allow for a streamlined authorisation process and 	<ul style="list-style-type: none"> ✓ credit institutions, ✓ some insurance and reinsurance companies, ✓ insurance and reinsurance intermediaries, firms who provide 'investment services or activities' under MiFID, ✓ some payment institutions and e-money institutions, ✓ UCITS and their management companies, ✓ Alternative Investment ✓ Fund Managers, ✓ Mortgage lenders,

	Description	Advantages and Disadvantages	Jurisdictional Review	Fintech Items under each Jurisdiction
	regulatory sandbox into the market is suitable in this option.	<ul style="list-style-type: none"> ✓ Firms still need to apply for authorization before being able to test new solutions ✓ CMA Act limits the flexibility that the new regime can provide (e.g. set capital requirements) ✓ Legislative changes take significant time and resource to introduce ✓ This option will not apply to firms that are not regulated under CMA (e.g. payment institutions and e-money firms) 	potentially less regulatory requirements to comply with when testing.	<ul style="list-style-type: none"> ✓ Administrators ✓ Brokers ✓ Creditors.
4.	Amending specific sections of the CMA Act			
	<p>CMA's power to issue waivers is limited in relation to requirements of the law. The Authority could consider changing the waiver conditions (if need-be) to make it easier to waive rules for a firm within the sandbox. This could be achieved by introducing a new test for sandbox firms.</p> <p>This approach should put into consideration the risks associated with the product and or service being offered by the applicant. A policy guidance note to facilitate introduction of a regulatory</p>	<p>Advantages</p> <ul style="list-style-type: none"> ✓ These options would enable firms to stay outside the scope of Kenya's financial act; therefore, sandbox firms would not be subject to authorization requirements or financial regulation while testing ✓ It would allow more flexibility than the other options 	<p>MAS</p> <ul style="list-style-type: none"> ✓ A firm submits a license application to MAS and indicates the specific exemptions required. Given the novelty of the solution and that the firm does not have a track record comparable with established FIs, MAS is likely to take a longer time to understand and clarify the potential risks. ✓ Meanwhile, the firm can only wait, and the uncertainty remains. ✓ With the existing approach, the scenario could potentially develop into the following ✓ outcomes, whereby promising innovations were being stifled and the doors to potential 	<ul style="list-style-type: none"> • Crowdfunding • Credit Rating • Block Chain Technologies

	Description	Advantages and Disadvantages	Jurisdictional Review	Fintech Items under each Jurisdiction
	sandbox into the market is suitable in this option.		<ul style="list-style-type: none"> ✓ opportunities were being closed: ✓ A prolonged processing with no certainty ahead; ✓ The firm may drop the idea and stick to business-as-usual; or ✓ The firm may consider deploying the solution outside of Singapore where the ✓ regulatory environment is perceived to be more conducive. ✓ 	

9 CONCLUSION AND RECOMMENDATIONS

9.1 CONCLUSION

Kenya is increasingly getting recognized on the world stage for its capacity to innovate and provide better solutions to life's challenges in Fintech. To further buttress the gains made in Fintech in Kenya, a Sandbox regime that aims to create a 'safe space' for businesses to test innovative products, services, business models and delivery mechanisms in a live environment without immediately incurring all the normal regulatory consequences of engaging in the activity in question, would go a long way in unlocking the country's immense economic potential through innovation. Subsequently, innovation could transform into competition in the market, with the net benefits trickling to the consumer in form of among others, better quality services, reduced prices and a general improvement in their welfare.

The benefits of innovation notwithstanding, there still are regulatory impediments in the country that barricade the materialization of these benefits. Investors are afraid to commit themselves with resources without regulatory certainty. As such, the introduction of a regulatory sand box could not be done at a better time. A regulatory sand box is also expected to bolster Kenya's international and global aspirations. Kenya aims to increase its global visibility, and this can only be achieved through taking a bold lead roles in the development of the country's capital markets. This flexibility to growth and improvement is an ideal attraction to global players. Further, in keeping with this global trend, we fortify our intent and desire to be an international financial center and the heart of the African Capital Markets. In addition to this, global investors will have faith in the Kenya's Capital Markets for pursuing regulatory architectural designs that allow expression of new ideas.

9.2 RECOMMENDATIONS

1. Kenya has a choice to make on the most suitable option for the country's Fintech Sandbox regime between:

Either

- a. **Developing a Sandbox regulatory approach as a new regulated activity:** If adopted, this approach would see CMA create a new sandbox regime (with new

authorization requirements and rules) that would be flexible, in line with in-principle approaches to regulation. This would necessitate the development of a Policy Guidance Note to facilitate introduction of a regulatory sandbox into the market.

OR

- b. **Amending specific sections of the Capital Markets Act:** If adopted, this approach would lead to CMA issuing waivers that would be limited in relation to requirements of the law. The Authority could consider changing the waiver conditions (if need-be) to make it easier to waive rules for a firm within the sandbox. This could be achieved by introducing a new test for sandbox firms. The approach would also necessitate the development of a Policy Guidance Note to facilitate introduction of a regulatory sandbox into the market.

These options would require collection of evidence about the specific needs of innovative firms during the testing of new Fintech innovations. This evidence would enable CMA to gain a better understanding of the Fintech innovations and the specific rules or legislation that firms may have been struggling with when testing innovative solutions and then analyze the effect such legislative changes could have on market operations.

2. To mitigate against FinTech players not having a clear understanding of the kind of services offered in the regulatory sandbox, the Authority should embark on continuous focused sensitization of the participants. The Authority should continuously provide guidance on regulatory uncertainties by establishing a dedicated FinTech desk that can receive inquiries from the sandbox participants;
3. In the short term, a checklist should be developed to facilitate approval of the already pending FinTech applications on crowdfunding and related FinTech innovations.
4. After the second consultative forum, the Authority should develop a Policy Guidance Note to facilitate introduction of a regulatory sandbox into the Kenyan capital markets. The PGN should address among others, the following:
 - i. **Applicability of the PGN:** The extent to which the PGN should be applicable to the FinTech Companies and the Authority's existing licensees or authorized institutions;

- ii. **Application process:** The process to be followed by potential applicants and the eligibility criteria (for instance as outlined in Chapter 5 above).
- iii. **Period of consideration of application:** The Authority should approve or decline to grant consent or require that the applicant re-applies with recommended refinements within a specified period (e.g. 21 days).
- iv. **Duration:** The test duration should be long enough to allow for the determination of trends and patterns, but short enough to remain within manageable costs. Because business needs may vary therefore, it is recommended that the time duration be a reasonable range (say 6 to 12 months) or as shall be deemed necessary when evaluating the applicant. The Authority should issue temporary licenses to fintech participants within the regulatory sandbox. These licenses can be given bandwidths e.g. 6, 12 or 24 months and may have a chance for extension depending on the level of innovation;
- v. **Extension:** In the event that the sandbox entity requires an extension of the sandbox period, the sandbox entity should give sufficient notice (preferably at least 1 month) before the expiration of the sandbox period and provide reasons to support the application for extension. These should also be accompanied by relevant checklists to facilitate assessment of the application.
- vi. **Fees:** It should be determined what fees (if any) should be levied. The Authority is should consider oversight costs when considering the maximum number of participants of the sandbox at any one time;

It is recommended that the admission criteria should enable the smallest qualifying startup to enter, creating a level playing field where larger more established players compete fairly with new entrants.

- 5. Working Group 2 of the CMMP should discuss the draft policy framework and the Guidance Note (as and when it is ready) as part of stakeholder consultation.
- 6. Approaching the introduction of a regulatory sandbox through a dedicated task-force charged with the responsibility of spearheading the implementation of the innovation hub and regulatory sandbox would be instrumental in the success of the sandbox.

7. **Collaboration with Other Regulatory entities:** For any Fintech applications whose activities may impact on capital markets but are not under the purview of the CMA, the Authority should work with the relevant financial sector regulator(s) for requisite approvals. The Authority should expand the regulatory sandbox to include all financial regulators. This will ensure sustained concerted regulatory efforts in regulating cross cutting financial products. There might be need for setting up of an advisory committee with representation from all financial regulators and the ICT Ministry which will analyze the suitability of products that cut across different financial institutions and their impact on the overall financial service sector. In the long term, noting the interconnected nature of financial services and increased capacity of FinTech to integrate and consolidate cross sectoral service offerings, the joint financial sector regulators in Kenya should engage to develop a consolidated financial services sandbox offering that would cater for the incubation and acceleration of a wider spectrum of FinTech solutions than would be eligible to operate within a capital markets sandbox.
8. The Authority to sign the IOSCO Enhanced Multilateral Memorandum of Understanding (EMMoU) which would play an important role in investigation, enforcement and international cooperation by setting new standards to address demands posed by modern markets. In addition the Authority should continue with peer review and assistance in development of the consultative papers and the PGN by regulators with whom it has some relationship as well as continued information sharing.
9. The Authority should facilitate the convening of an annual Capital Market Fintech day to allow key players sample the latest products/services/innovations etc. in the field of Fintech in Capital markets.
10. The Authority may adopt a hybrid approach to a virtual sandbox where a physical space may be considered for hardware FinTech related innovations and a virtual sandbox is considered for software solutions;
11. The Authority should explore facilitating interactions with multiple technology communities that enhance the value of the RegLab for startups and enrich the FinTech space including a Blockchain Working Group, and others. Regular interactions and alliances with these groups shall be of great value in promoting development of

innovative products that are acceptable both locally and globally. This could be achieved through Fintech services providers establishing an association to be able to lobby for their interests with regulators, and other statutory institutions.

12. The Authority could engage FinTech experts/consultants to provide advisory services on whether a product should be licensed or not since the regulators might not have the necessary expertise to accurately appraise the FinTech products. The external advisory committee's membership could be drawn from the industry, academia and consumer representative group which acts as the Authority's liaison point with the FinTech community.
13. Continue engagement with established Innovation Hubs and Incubators since they are in a better position to offer crucial support in providing linkages, capacity development, technical input, mapping of potential capital market related FinTech and stakeholder mapping for FinTech startups. The engagement will also be instrumental in development of a support toolkit for the establishment of the sandbox that will be of great value to startups and can enhance the chances of success for those that benefit from the sandbox.

APPENDICES

Table 3: Fintech Assessment Criteria

	Criteria	Key Considerations	Yes/No	Comments
1.	Is the firm in scope	The innovation must be 'fit for purpose' for the Kenyan capital markets		
		The innovating firm's relevant activity should be regulated by the Capital Markets Authority (CMA) or is intended for firms regulated by the CMA		
2.	Is it genuine innovation	Desk research should show that there have been very few or no comparable offerings already established on the market		
		Internal experts within CMA should without any doubt believe that it constitutes a genuinely innovative technology / approach / product or service		
		The scale of the innovation impact should be step-change in nature.		
3.	Is there a consumer benefit	The innovation must lead to a better deal for consumer directly or indirectly, e.g. through higher quality services or lower prices due to enhanced efficiency		
		The entity must have an elaborate risk management framework in place		
		The innovation must demonstrate it will promote effective competition		
4.	Is there a need for a sandbox	There must be clear demonstration that the innovation does not easily fit the existing regulatory framework, thus making it difficult or costly to get it to the market		
		There must be a clear need for a sandbox tool in order to test this product in a live environment		
		The entity must demonstrate that there is no alternative way to test the innovation without the CMA support		

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Evaluation Criteria, Non-Eligibility Circumstances and FCA eligibility criteria

<https://www.google.com/>