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# **TABLE OF CONTENTS**

Foreword	
Acknowledgements	
Executive summary	
1. Introduction	1
2. Legal frameworks in other jurisdictions	2
2.1. Broader regulatory considerations	
2.2. Japan	
2.3. United Kingdom (UK)	
2.4. Europe	
2.5. Switzerland	
2.6. Liechtenstein	
2.7. Russia	
2.8. Hong Kong	
2.9. Dubai	
2.10. Singapore	
3. Pilot study and use-cases	6
Case Study 1: Bond Tokenization by HongKong	
Case Study 2: Project Guradian	
Case Study 3: Libeara: Tokenization Platform by Standard Charter Unit	
Case Study 4: Citigroup's Pilot Program for Tokenized Deposits	
Case Study 5: UBS's Tokenized Fund Pilot on Ethereum	
Case Study 6: Expobank's Diamond Tokenization Under Russia's DFA Regi	me
Case Study 7: HSBC's Gold Tokenization Platform	
4. Regulation of VDAs in India	9
4.1 IMAI Judgement, 2020	
4.2 VDA specific Bills	
4.3 VDA Taxation	
4.4 Exceptions to VDAs	
4.5 Asset Tokens as an exception to VDA	
4.5 PMLA Amendment	
4.6 MSM REIT for fractional ownership of Real estate	
4.7 Why MSM REIT should not apply to Asset Tokens	
5. Classification Of Asset Tokens in India	13
5.1 Securities law and VDAs	
5.2 Discussion and conclusion	
5.3 Appropriate Regulating authority	
6. Recommended regulatory approach	15
Phase I: Operating under the existing regulatory framework	
Phase II: ICO Guidelines and Pilot testing	
Phase III: Digital securities and Digital exchanges	

# **FOREWORD**

In the dynamic landscape of contemporary finance and technology, the transformative potential of asset tokenization stands as a beacon, heralding a new era of ownership, trading, and investment. This report navigates the intricate tapestry of the Asset Tokenization Framework, unraveling the threads that weave together the promise of a \$10 trillion future. As we delve into the realms of tokenization, it becomes clear that this paradigm shift is not merely a technological advancement but a fundamental redefinition of how we perceive and interact with assets.

The anticipation surrounding tokenization is not without merit. Roland Berger's conservative estimate of the total market value of tokenized assets exceeding USD 10 trillion by 2030 underscores the magnitude of the impending disruption. This transformation is poised to extend its impact across diverse sectors, from traditional realms of finance to the far reaches of manufacturing, real estate, and even the realm of art. The technology driving this revolution—blockchain and distributed ledger technologies (DLTs)—is serving as the catalyst for the digitization and tokenization of a myriad of assets.

At its core, 'asset tokenization' embodies the creation of digital twins, representing interests in underlying assets, encapsulating everything from securities and commodities to tangible and intangible assets. Through contractual distributions facilitated by blockchain and smart contracts, multiple individuals can now co-own tokenized assets, unleashing novel possibilities for decentralized ownership structures.

The transformative power of asset tokenization lies not only in the creation of digital assets but in the efficiencies it introduces. Automation, transparency, digitization, disintermediation, and faster clearing and settlement are the hallmarks of this evolution. It is in this context that we embark on an exploration of the regulatory landscape, recognizing that the potential for disruption comes hand-in-hand with the need for a robust and adaptable framework.

Presently, the global consensus on regulating tokenized assets remains elusive. As jurisdictions grapple with diverse legal characteristics and regulatory nuances, a call for comprehensive frameworks becomes imperative. This report recognizes the multifaceted nature of asset tokens and advocates for a nuanced regulatory approach that prioritizes substance over form.

Guided by insights from regulatory surveys across jurisdictions, this framework proposes essential components. ICO guidelines, tailored for registration with the IFSCA, will ensure proper disclosure and compliance. Recognition of digital securities and the establishment of regulated digital security exchanges mirror the approaches undertaken by progressive nations such as Switzerland and Japan. Emphasizing the need for clarity in defining stakeholders, from issuers to custodians and valuers, we seek to delineate their roles to prevent conflicts of interest and safeguard the rights and liabilities of all parties involved

Additionally, the framework calls for amendments in existing laws to recognize digital transactions, ensuring the legal enforceability of transactions executed through smart contracts. This comprehensive approach not only addresses the immediate challenges posed by asset tokenization but sets the stage for a regulatory environment that is agile, responsive, and conducive to fostering innovation.

As we embark on this journey into the future of finance, this report serves as a guiding compass, navigating the uncharted waters of asset tokenization. Through careful consideration of the presented framework, stakeholders, regulators, and innovators alike can contribute to shaping a landscape where the potential of tokenization is harnessed responsibly, ushering in an era defined by efficiency, transparency, and equitable access to global assets.

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# **EXECUTIVE SUMMARY**

The application of DLTs and smart contracts for asset tokenisation introduces efficiencies in the form of automation, transparency, digitisation, disintermediation and faster clearing and settlement. Based on the nature and functions of a particular digital asset, regulations introduced in multiple jurisdictions recognise three broad types of tokens: a. Payment or exchange tokens; b. Utility tokens; and c. Security tokens. Asset Tokens, whose value is backed by or referenced to any asset, value or right or a combination thereof, may fall under any of the three categories depending on the functions discharged, manner and method of tokenization and the extent of rights and obligations created through the tokens.

Leading economies are aggressively exploring appropriate use-cases for Asset Tokenization and have provided required regulatory clarity to enable innovation and wide scale adoption. Global consensus on regulatory approach towards asset tokenization is still lacking, but many countries have issued detailed regulations for issuance, offer and sale of asset tokens. Many jurisdictions are also conducting pilot studies to explore promising use-cases of asset tokenization in the domain of banking and financial market and services. Project Guardian started by MAS Singapore, which also involves UK, Japan and Switzerland, is one noteworthy example in this regard which symbolizes a collaborative initiative to formulate policy towards asset tokenization. Pilot or live projects on tokenization of bonds, funds, gold, diamond and customer deposits are also ongoing in different countries.

India lacks a specific legislation on regulation of Virtual Digital Assets (VDAs) which makes it difficult to ascertain the legal characteristics of Asset Tokens in India. Existing legal provisions only regulate taxation and AML related aspects of VDAs. Amendments in the Prevention of Money-Laundering Act, 2022 (PMLA) and subsequent guidelines by Financial Intelligence Unit, India (FIU) mandates registration and prescribes certain disclosure, reporting and monitoring obligations on entities engaged in notified activities relating to VDAs. But, there are no comprehensive guidelines on issuance of any type of VDAs.

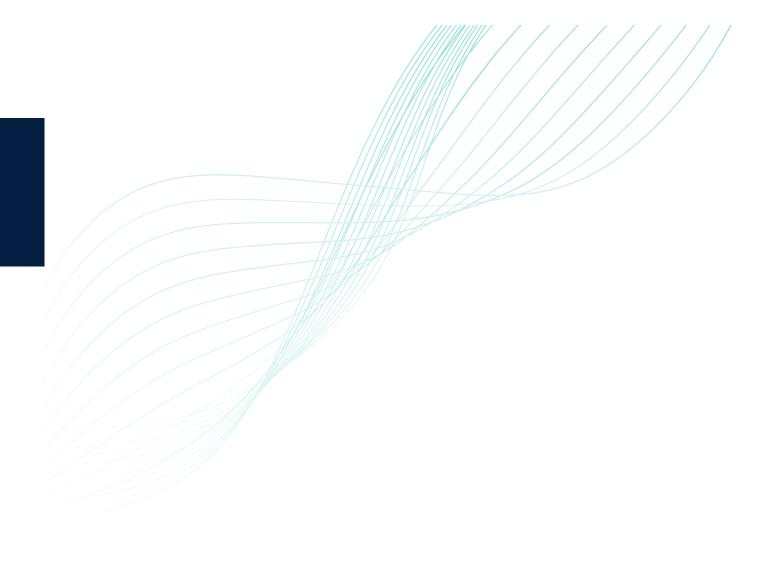
Asset Tokens include a wide spectrum of tokens, some of which may classify as securities depending on the nature of underlying asset and the totality of circumstances in which such tokens are issued and offered for sale. It is, therefore, critical that FIU should share the details submitted by any token issuing entity with SEBI to enable SEBI to determine if such tokens are likely to be classified as securities. Regulatory landscape in India should subsequently include separate provisions for asset tokens which classify as securities. Digital securities can facilitate development of innovative banking and financial products.

This report proposes a phased regulatory approach to transition from the present regulatory vacuum to fostering a vibrant DLT based dedicated digital exchange ecosystem having instant settlement and increased efficiency.

In the first phase, entities may issue Asset Tokens underlying assets which are not a security and in a manner which does not classify as a CIS after complying with the registration and other requirements prescribed by FIU. However, issuance and offering of VDAs under schemes or in a manner falling under CIS will be subject to securities law, and compliance with FIU Guidelines will not suffice. In addition to compliance with FIU Guidelines, issuers should identify or establish a Self Regulatory Organization (SRO) and adhere to the best practices suggested by the SRO.

TIn Phase II, ICO Guidelines should be released by FIU or SEBI, prescribing eligibility, threshold, disclosure, reporting, and compliance requirements for different types of VDAs based on risk-based approach. SEBI, in consultation with RBI, should also conduct pilot testing of tokenization of certain existing securities market products to understand, optimize, and calibrate DLT based transfer and settlement of digital securities.

In Phase III, A separate regulatory framework should be created specifically for VDAs which mirror securities, are referenced to INR or other fiat currencies or exhibit characteristics of securities ("Digital Securities"). Based on the experience and learning from the pilot studies, SEBI should authorise any existing stock exchange or VDA exchange or a new exchange to operate as a digital exchange to issue, trade, custody, sell and settle Digital Securities leveraging DLT based technology. Authorised digital exchange should exclusively deal in Digital securities.



# 1. INTRODUCTION

The growing adoption of blockchain and distributed ledger technologies (DLTs) has catalysed demand for digitization or tokenization of different types of assets. Generally put, 'asset tokenisation' refers to the creation of digital tokens which represent interests in an underlying asset ("Asset Tokens"). Asset Tokens may be understood as digital twins of such assets which can be stored 'on-chain'. Any kind of interest - including those in securities (shares, bond, debentures, derivatives), commodities (gold, silver, oil etc.), tangible assets (real estate, vehicles etc.) or intangible assets (intellectual property, contracts etc.) - can in principle be tokenized. Multiple persons can 'co-own' tokenized assets in the form of fractional ownership through contractual distributions of interests in the underlying asset.

The application of DLTs and smart contracts for asset tokenisation introduces efficiencies in the form of automation, transparency, digitisation, disintermediation and faster clearing and settlement. Based on the nature and functions of a particular digital asset, regulations introduced in multiple jurisdictions recognise three broad types of tokens: a. Payment or exchange tokens; b. Utility tokens; and c. Security tokens. Asset tokens may fall under any of the three categories depending on the functions discharged, manner and method of tokenization and the extent of rights and obligations created through the tokens.

Leading economies are aggressively exploring appropriate use-cases for Asset Tokenization and have provided required regulatory clarity to enable innovation and wide scale adoption. India lacks a specific legislation on regulation of Virtual Digital Assets (VDAs) which makes it difficult to ascertain the legal characteristics of Asset Tokens in India. Existing legal provisions only regulate taxation and AML related aspects of VDAs. Amendments in the Prevention of Money-Laundering Act, 2022 (PMLA) and subsequent guidelines by Financial Intelligence Unit, India (FIU) mandates registration and prescribes certain disclosure, reporting and monitoring obligations on entities engaged in notified activities relating to VDAs. But, there are no comprehensive guidelines on issuance of any type of VDAs. Internal mechanisms should also be developed for information sharing between FIU and SEBI.

VDA specific legislation is a quintessential regulatory response to define, classify and regulate issuance, offer and sale of different types of VDAs. However, Securities Exchange Commission of India (SEBI) and Reserve Bank of India (RBI) are sufficiently empowered statutorily to frame interim guidelines regulating initial coin offerings (ICO) of different types of VDAs on a risk-based approach. This report discusses the existing legal and regulatory framework applicable to VDAs in India and suggests a phased regulatory approach based on the regulatory surveys of a few leading jurisdictions. A calibrated, balanced and phased regulatory approach will foster innovation leveraging disruptive DLT technology in a gradual manner with help of pilot studies without compromising consumer interest and market integrity.

# 2. LEGAL FRAMEWORK IN OTHER JURISDICTIONS

# 2.1. Broader regulatory considerations

Presently, there seems to be no global consensus on the manner and form of regulating tokenized assets. Legal characteristics of such tokens also vary depending on the underlying asset and the jurisdiction in question. The OECD, in a comprehensive report on the subject, highlighted two important policy considerations for regulators: <sup>1</sup>

#### a. Substance over form:

Asset tokenisation should be regulated considering the substance of the token or structure and not the form of the token. This approach ensures that if a particular asset token has the characteristics of a recognised instrument, e.g. security, the token should be regulated accordingly.

### b. Technology neutrality:

Regulations should follow a technology agnostic approach which does not discriminate between different technologies being used in a particular product or service.

# 2.2.Japan

Japan introduced an amendment to the Financial Instruments and Exchange Act of Japan (FIEA) which came into effect in 2020 to regulate ICOs. The Amendment introduced a new definition of "Securities Tokens" <sup>2</sup>(denshi kiroku iten kenri) which are defined to create an interest in collective investment schemes which are represented by tokens. <sup>3</sup>The definition of securities was expanded to include membership rights or other rights in an incorporated association the holder of which can receive dividends of profits arising from business that is conducted using the money contributed or a distribution of the assets of the business. ICO of token securities are subject to licensing and disclosure requirements and token securities are considered as a type of security.

# 2.3. United Kingdom (UK)

The Financial Conduct Authority (FCA) released its Policy Statement on 'crypto assets' (PS 19/22) in July 2019, which divides 'crypto assets' into three subcategories: unregulated tokens, e-money tokens; and security tokens. However, the Financial Services and Markets Act, 2023 ("FSMA"), which was passed primarily on the lines of Markets in Crypto-Assets Regulations (MiCA) passed by the European parliament, does not regulate issuance of crypto assets. Crypto assets fall in the regulatory framework of FSMA as 'regulated activities' on account of extended definition of 'investment' and specific activities relating to crypto assets may be subjected to prior approval requirement whence required. FSMA also defines Digital Settlement Assets, which seem to be directed towards stablecoins, and gives powers to HM Treasury to introduce future regulations for such assets. Broader regulatory approach under FSMA seems to prioritize flexibility over specific detailing.

UK is also part of project Guardian wherein FCA is working with the Monetary Authority of Singapore (MAS). The Technology Working Group of Asset Management Taskforce, which is an industry-led group observed by FCA and HM Treasury Treasury, released an interim report in November, 2023 titled "UK Fund Tokenisation: A blueprint for implementation".

### **UK Digital security Sandbox**

HM Treasury announced a digital security sandbox to test and adopt digital securities across financial markets. The sandbox will allow industry participants to engage in activities involving digital securities under a temporarily modified regulatory framework.

# 2.4 Europe

MiCA, adopted in May 2023, creates a separate category of tokens called 'Asset referenced tokens'. Asset-referenced token refers to a crypto-asset that "purports to maintain a stable value by referencing another value or right or a combination thereof, including one or more official currencies" and covers all crypto-assets whose "value is backed by assets". The definition is very wide and comprehensive and will cover tokens having any underlying rights over assets, commodities, crypto-assets and even instruments like securities or IPRs which have certain value or rights. MiCA stipulates detailed guardrails for entities issuing asset-referenced tokens in form of disclosure requirements in whitepaper, details of the amount of asset-referenced tokens in circulation, the value and composition of the reserve assets and disclosure of any event which is likely to have significant impact on the value of such tokens

White paper of an asset-referenced token should inter alia include details of investment policy of the issuer, custody arrangement, stabilisation mechanism and the nature and extent of rights provided to the token holders. Other obligations include disclosure of conflict of interest, governance structure, grievance redressal mechanism, requirement to have own funds and extending permanent right of redemption to token holders.

#### 2.5. Switzerland

Swiss Financial Market Supervisory Authority (FINMA) ICO Guidelines 2017 and guidelines issued in 2018 for enquiries regarding the ICO create three categories of tokens namely - Payment tokens, utility tokens and asset tokens. Further, depending on the economic functions being discharged by a token, it may also be considered as a 'hybrid token'.

FINMA treats asset tokens as securities if they represent an uncertificated security and the tokens are standardized and suitable for mass trading. An asset token qualifies as a security if the value of the token or corresponding rights depends on the underlying asset and the token is standardized. A contractual right may be securitised in an asset token as a ledger-based security. Once securitised, such rights can only be transferred by transfer of the asset token. ICO of tokens which are categorised as securities are subject to prospectus and disclosure requirements.

Country	Regulatory approach / Pilot study
Japan	Tokens which create an interest in CIS are categorised as securities token.
United Kingdom	FSMA, 2023 gives powers to HM Treasury to regulate crypto assets, but no detailed regulations are issued yet.
Europe	MiCA creates a separate category of tokens called 'Asset referenced token' and prescribes detailed regulations and compliances for the issuer.
Switzerland	An asset token qualifies as a security if the value of the token or corresponding rights depends on the value of the underlying asset and tokens are standardised and suitable for mass trading.
Leichtestein	A detailed legal framework for tokenization of any kind of asset or rights are provided under TVTG Act, 2019.
Russia	Law on Digital Financial Assets includes tokens having underlying assets under the definition of Digital Financial Assets which can be issued under license from the central bank.
Hong Kong	SFC circulars detail out requirements for tokenization of traditional securities as well as investment products.
Dubai	Asset referenced tokens having underlying assets can be issued subject to prior approval from VARA.
Singapore	Project Guardian has been launched by the Monetary Authority of Singapore to design a framework for implementation and issuance of asset-backed security tokens.

#### 2.6 Liechtenstein

Liechtenstein is one of the few jurisdictions which have established a detailed legal framework for tokenization of any kind of asset or rights under the Token and Trustworthy Technology Service Provider Act, 2019 (TVTG Act), thus creating legal certainty in this domain. Tokens represent the ownership and possession rights to a previously tokenized tangible or intangible asset.

Trustworthy technologies (TT) are defined as "technologies through which the integrity of tokens, the clear allocation of tokens to a TT identifier, and the transfer of tokens can be ensured." To ensure a smooth 'phygital' ecosystem, 'physical validators' identify token holders and ensure that the represented rights and duties are contractually enforced and the tokens and underlying assets are always synchronized.

Tokens are "information on a TT system that can represent claims or rights of membership vis-à-vis a person, rights in rem, or other absolute or relative rights, and can be allocated to one or more TT identifiers."

A TT identifier is "an identifier that allows for the clear allocation of tokens."

Other salient features of the Token Act include:

- TT Service providers are required to get registered with FINMA and may require a license under Financial market authority act.
- TT Protectors need to obtain a license under Trustee Act.
- Minimum share capital requirement, internal control mechanism and mandatory local registered office and residence.

#### 2.7. Russia

On July 31, 2020, the Russian president signed the law on digital financial assets, digital currency and amendments to certain Russian legislations. These provisions regulate issuance, recording and circulation of digital financial assets (DFAs). DFAs, as defined by the new law, are digital rights that function like issued securities but are stored on a blockchain. Tokens having underlying assets are covered under the definition of DFA and can be issued under license from the central bank. Moscow Exchange, which was the first entity to receive such a license, has announced plans to list tokenized real estate as DFA in 2024. Another DFA issuer, Expobank, recently announced plans to tokenize diamonds.

# 2.8. Hong Kong

Securities and Futures commission (SFC) has introduced two circulars dated November 2, 2023 pertaining to tokenization of securities and SFC authorized investment products. These circulars detail out requirements for tokenization of traditional securities as well as investment products which are authorized by SFC. <sup>8</sup>

#### 2.9. Dubai

The Virtual Asset Regulatory Authority ("VARA") updated its virtual asset issuance Rulebook in September, 2023 to modify its regulatory position on Asset Reference Tokens. Fiat Referenced Virtual Assets will require a license while other categories of asset tokens can be issued subject to prior disclosure and approval.<sup>9</sup>

# 2.10. Singapore

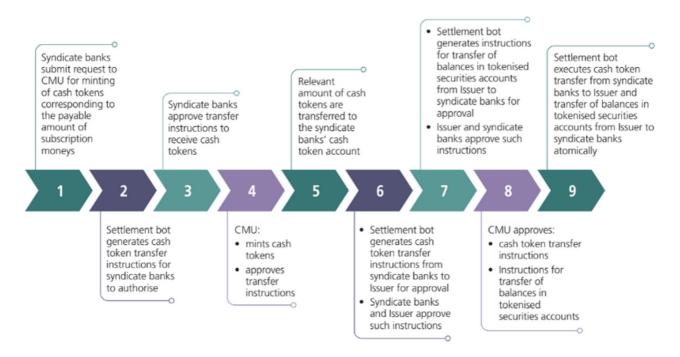
MAS issued a Guide to Digital Token Offerings in 2020 which states that MAS will regulate issuance and offer any Digital Tokens which are financial market products including inter alia securities, derivatives and CIS. A detailed licensing regime has been established under subsequent legislations in the form of Payment Services Act, 2019 and Financial Services and Markets Act, 2022. MAS is actively testing the feasibility of tokenization of various assets including securities and other financial market products under Project Guardian.

# 3. Pilot Study and Use-cases

# **CASE STUDY 1: Bond Tokenization by HongKong**

TThe Hong Kong Monetary Authority (HKMA) collaborated with the Bank of International Settlements (BIS) in 2021 on project Genesis to explore tokenized green bonds. In 2022, HKMA launched project Evergreen which involved security tokens representing beneficial interest in green bonds issued by the government. <sup>10</sup>

The project's primary goal is to rigorously assess Hong Kong's financial infrastructure, legal, and regulatory frameworks for their adaptability to DLT, thereby laying a foundation for future market participants interested in tokenized issuances.



[Figure 1: Workflow of allocation, closing and settlement in project Greenflow. Source <u>HKMA</u> Press Release ]

# **CASE STUDY 2: Project Guardian**

MAS has set up Project Guardian which includes Japan's Financial Services Agency (FSA), the U.K's FCA and the Swiss FINMA to identify risks and gaps in policy and develop common standards for asset tokenization. Bank's and other industry players have been authorised by FCA and MSA to conduct pilot study on tokenisation of bond and funds among other usecases

# Portfolio management powered by Tokenization by JP Morgan

#### **Project Vision**

Project is started with an objective to build the next generation Portfolio Management (PM) solutions leveraging blockchain, tokenization and smart contracts.

#### **Overview**

Wealth management is a \$5.5 trillion industry helping millions of investors to get exposure to different segments of financial markets with the help of experts. Use of the proposed technology layer will allow PMs to effect changes to all portfolios by adjusting their reference model portfolios. Technology stack aims to improve efficiency and scalability of order execution and settlement across multiple asset classes and ownership registries and break limitations imposed due to fragmentation and lack of interoperability. Standardised technology protocols will integrate different ownership registries and make them interoperable.

#### **Problem Statement**

Portfolio management with public and private assets requires multiple systems, manual processes, and multiparty reconciliations. Alternative investment funds are not commonly included in model portfolios due to operational processing requirements and limited liquidity. Access to and distribution of tokenized assets is fragmented across blockchain networks due to isolation and low liquidity.

#### Solution

MAS conducted the a proof of concept under Project Guardian with Avalanche, Onyx by JP Morgan and Apollo alongside other partners to explore asset tokenization and cross chain interoperability on permissioned blockchain networks.

Technology infrastructure: Onyx Digital Assets was used as the base chain that connected to other blockchain networks in the project via designated interoperability solutions. Selected traditional and alternative investment strategies from J.P. Morgan, Apollo and WisdomTree were tokenized on three blockchain networks: Onyx Digital Assets, Avalanche and Provenance. A standardized token, the Onyx Digital Assets Fungible Asset Contract (ODA-FACT), was used to enable consistent interaction and represent funds on each network.

#### **Benefits**

PMs can update asset allocations for a model, and the system automatically rebalances investor portfolios based on that model. This system can also place orders for redemption and subscription of funds, regardless of asset types or chains. By tokenizing funds and representing discretionary portfolios as smart contracts, thousands of portfolios can be linked to representative models.

Source: https://www.ipmorgan.com/onyx/documents/portfolio-management-powered-by-tokenization.pdf

# **CASE STUDY 3: Libeara: Tokenization Platform by Standard Charter Unit**

SC Ventures from Singapore has announced the launch of Libeara, a tokenization platform, subject to approval from MAS and other relevant authorities. Libeara stands out as a separate entity, focusing on bringing real-world assets onto the blockchain and issuing regulated security tokens. <sup>12</sup> Libeara has collaborations with Fireblocks for asset custody, Chainalysis and Chekk for compliance, and Fazz through StraitsX for fiat and stablecoin conversions form the backbone of its operational framework. It has partnered with FundBridge Capital, a Singapore-regulated fund platform, to create a tokenized Singapore-dollar government bond fund, primarily aimed at accredited investors.

# **CASE STUDY 4: Citigroup's Pilot Program for Tokenized Deposits**

Citigroup has launched its pilot program to tokenize customer deposits under its initiative - Citi Token Services. Leveraging a private blockchain owned and managed by Citigroup, this service is designed to facilitate instantaneous global transfers, processed through blockchain-based payment channels. Tokenization of bank deposits will enhance the efficiency of cross-border transactions and will help in meeting the growing demand for 24/7 high-liquidity banking services among institutional clients.<sup>13</sup>

#### **CASE STUDY 5: UBS's Tokenized Fund Pilot on Ethereum**

Under the umbrella of Project Guarding, UBS Asset Management launched its pilot of a tokenized money market fund on the Ethereum blockchain. This pilot, utilizing UBS's inhouse tokenization service, UBS Tokenize, allows the testing of essential fund activities such as subscriptions and redemptions on-chain, demonstrating a practical application of blockchain in fund management. 14

# **CASE STUDY 6: Expobank's Diamond Tokenization project**

Expobank, a pioneering financial institution from Russia, has embarked on a groundbreaking project by tokenizing diamonds. The project involves the fractionalization of a three-carat diamond valued at 9 million rubles into 5,000 tokens.  $^{15}$ 

### **CASE STUDY 7: HSBC's Gold Tokenization Platform**

HSBC announced the launch of a gold tokenization platform last month . Custody of the underlying gold will be handled by the bank while the platform will allow trading of gold bullion with easy tracking and enhanced transparency and efficiency compared to over-the-counter markets.  $^{16}$ 

# 4. Regulation of VDAs in India

India does not have yet a VDA specific legislation, though taxation and certain activities relating to VDAs are regulated through amendments into existing statutes. RBI issued public notices in 2012 and 2014 cautioning retail investors to deal in virtual currency at their own risk and subsequently issued a Circular in 2018 directing the banks and other regulated entities to not deal in VDAs or provide services for facilitating any person or entity in dealing with or settling VDAs.

### 4.1 IMAI Judgement, 2020

RBI's 2018 Circular was challenged before the Hon'ble Supreme Court in the case of Internet and Mobile Association of India v. Reserve Bank of India [Writ Petition (Civil) No.528 of 2018] (IMAI judgment). Apex court acknowledged the power of the RBI to regulate VDAs, but still struck down the Circular on the ground of 'proportionality' stating that RBI could not establish any loss caused or adverse impact created by cryptocurrencies on the regulated entity and, therefore, the action taken by RBI was disproportionate to the harm.

RMoreover, in the IMAI judgment, the Apex Court attempted to delineate the characteristics of the VDAs by extensively referring to the position of law in other jurisdictions, but eventually left the question open for legislative action.

#### 4.2 VDA specific Bills

On the legislative front, "Banning of Cryptocurrency and Regulation of Official Digital Currency Bill, 2019" and "Cryptocurrency and Regulation of official digital currency bill, 2021" were drafted but could never be introduced in the Parliament. The 2019 Bill aimed to ban the mining, generation, holding, selling, dealing in, issuing, transferring or disposing of crypto currency in India. On the other hand, the regulatory approach adopted in the 2021 Bill is still unknown as the Bill was never made public.

#### 4.3 VDA TAXATION

Finance Act, 2022 introduced a few amendments in the Income tax Act, 1961 with respect to taxability of VDAs. Section 2(47A) was introduced to define Virtual Digital Assets. Section 115BBH levied tax on income from transfer of VDAs and Section 194S mandated to deduct TDS at 1% from the consideration paid for transfer of VDAs. Section 115BBH further disallows any deduction of expenses, except the cost of acquisition, and also prohibits setting-off of any loss from transfer of VDAs against any other income.

"virtual digital asset" means -

- a) any information or code or number or token (not being Indian currency or foreign currency), generated through cryptographic means or otherwise, by whatever name called, providing a digital representation of value exchanged with or without consideration, with the promise or representation of having inherent value, or functions as a store of value or a unit of account including its use in any financial transaction or investment, but not limited to investment scheme; and can be transferred, stored or traded electronically;
- b) any non-fungible token; and
- c) any other digital asset notified by the Central Government

### 4.4 Exceptions to VDAs

Definition of VDA u/s 2(47A) is comprehensive and wide and seemed to also cover existing instruments or products like vouchers, coupons, reward points, gift cards etc. and, therefore, many such products were excluded from the scope of VDA by CBDT Notification No. 74/2022 dated June 30, 2022. On the same date, another crucial exception was introduced by CBDT Notification No. 75/2022 to exclude non-fungible tokens ("NFT") "whose transfer results in transfer of ownership of underlying tangible asset and the transfer of ownership of such underlying tangible asset is legally enforceable" from the definition of VDA. Thus, an NFT must satisfy two requirements to fall under this exception a. Transfer of NFT should result in transfer of ownership of underlying tangible asset; and b. such transfer of ownership should be legally enforceable. The intent and purpose of this exception seems to suggest that if transfer of NFT results in legally enforceable transfer of ownership in the underlying asset, then the tax treatment should depend on the underlying asset.

### 4.5 Asset Tokens as an exception to VDA

Tests envisaged under Notification No. 75/2022 are based on factual circumstances which may not be satisfied by all Asset Tokens. For instance, the exception only applies if the underlying asset is a 'tangible' asset. Similarly, transfer of certain assets in India (e.g. vehicles) must be done in a specific manner prescribed by law and, therefore, transfer of any Asset Tokens having such underlying assets will not result in transfer of ownership in such underlying assets without completing the prescribed legal procedure. In case of fractional ownership, satisfying both the tests will also depend on the totality of circumstances including the custody arrangement and contractual relationship formulated at the time of issuance of the Asset Token.

#### 4.6 PMLA Amendment

Ministry of Finance vide Notification dated March 7, 2023 (S.O. 1072 (E)) has designated entities participating in the offer and sale of a virtual digital asset to be a 'reporting entity' under the provisions of the Prevention of Money-laundering Act, 2002. Consequently, the Financial Intelligence Unit (FIU), Ministry of Finance has issued "AML & CFT Guidelines for Reporting Entities Providing Services Related to Virtual Digital Assets ("FIU Guidelines").

Reporting entities are required to register with FIU and implement robust and effective AML/CFTC policies, controls and mechanisms under a risk-based approach. FIU Guidelines prescribe specific standards for KYC, Customer due diligence, Enhanced due diligence norms, suspicious transaction monitoring and reporting and maintenance and retention of records.

#### 4.7 MSM REIT for fractional ownership of Real estate

Tokenization of real estate leads the asset tokenization momentum in India. Significant increase in the number of online Fractional Ownership Platforms (FOPs) offering fractional ownership of real estate prompted SEBI to issue a consultation paper on the "Regulatory framework for Micro, small & medium REITs" (MSM REITs) in May, 2023 proposing to regulate FOPs under the existing REIT framework.

SEBI noted that fractional ownership is facilitated by splitting the cost of acquisition of real estate among several investors who invest in the securities issued by a Special Purpose Vehicle (SPV) which owns and manages the underlying real estate. FOPs obtain interest from public by listing limited details of the identified property and on receiving interest from sufficient investors for the total cost of acquisition, 'placement memorandum to subscribe to the securities issued by the …SPV which will purchase the real estate asset or which own the real estate asset are forwarded to the investor'. FOPs follow diverse structures and modus operandi, but an illustrative representation of the structure, based on study of existing FOPs, was indicated in the Consultation paper (See Figure 3).

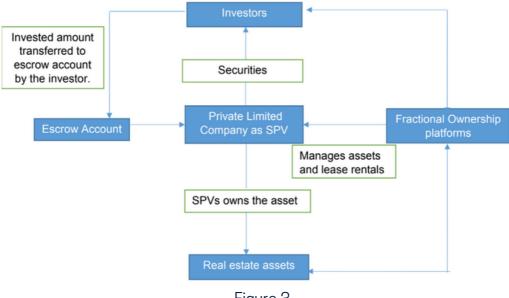


Figure.3

Pertinently, the consultation paper focused only on fractional ownership of real estate, but some of the observations may apply to the broader context of tokenization of any asset. SEBI noted that the manner in which FOPs obtain interest of participation from the public, "it is entirely possible that the SPV may have undertaken a deemed public issue" or that such offering "may amount to unregistered collective investment schemes (CIS)".

Proposed framework prescribes a separate chapter in the REIT Regulations for MSM REIT having lower minimum asset value and minimum amount of investment, but the broader reporting, disclosure and listing procedures are the same as applicable to issuance of REIT units. SEBI board has reportedly approved the proposed framework, but the exact regulations are yet to be notified.

### 4.8 Why MSM REIT should not apply to Asset Tokens

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Model of FOPs, as noted by SEBI, involved offering shares in the SPV to the certain members of the public and may alternatively also amount to CIS. Prices of real estate assets are significantly higher than many other real world assets (e.g. art pieces, carbon credits, paintings, collectibles etc.) which can be tokenized. Creating a separate entity to tokenize each item which is not very expensive will not be commercially efficient. In practice, REIT frameworks globally are exclusively designed only for the real estate industry and do not apply to fractional ownership of any other asset. If the nature and modus operandi of issuance of a particular Asset Token signifies characteristics of securities, it should be regulated as such, but under a regulatory framework specifically designed for digital securities. Similar approach seems to have been adopted in various jurisdictions including Dubai, Europe, Switzerland and Singapore. VDA specific legislation or ICO Guidelines prescribe sufficient guardrails to protect consumer interest and market integrity on the lines of securities market regulations, yet take a differentiated approach by designing regulations technologically feasible for securities token.



# 5. CLASSIFICATION OF ASSET TOKENS IN INDIA

In absence of any VDA specific legislation, there is no clarity on general legal classification of VDA except for taxation and AML laws. Particularly, there are no guidelines regulating issuance and sale of VDAs prescribing any disclosure, compliance or reporting requirements for the issuing entities.

Asset tokenization may involve tokenization of different types of assets (tangible or intangible assets, movable or immovable assets), commercial instruments like invoice, bills, negotiable instruments, or even securities like shares or bonds. Considering the wide range of possible underlying assets and diverse manner and structures of tokenizing such assets, it cannot be ruled out that at least some of the Asset Tokens may amount to securities. The definition of VDA under Income tax, which is also imported to PMLA by reference, is broad enough to include any and all types of Asset Tokens. However, securities law should act as an overarching principle to guide the regulatory framework for Asset Tokens. Issuance of Asset Token in a manner or method which signifies characteristics of securities must be subjected to securities laws even if such tokens also fall under the definition of VDA.

"...various courts in different jurisdictions have identified virtual currencies to belong to different categories ranging from property to commodity to non-traditional currency to payment instrument to money to funds. While each of these descriptions is true, none of these constitute the whole truth. Every court which attempted to fix the identity of virtual currencies, merely acted as the 4 blind men in the Anekantavada philosophy of Jainism, who attempt to describe an elephant, but end up describing only one physical feature of the elephant.

Indian Supreme Court in IMAI vs. RBI (Para 6.85)

#### 5.1 Securities law and VDAs

Section 2(h) of SCRA, 1956 provides an inclusive definition of securities which inter alia includes shares, bonds, debentures, derivatives and collective investment schemes (CIS). Asset Tokens which represent or tokenize shares, bonds, debentures or any other securities will certainly be regulated as securities. Additionally, irrespective of the nature of the underlying asset, the scheme or arrangement under which an Asset Token is offered may classify the token as CIS - a securities. A scheme or arrangement is considered as CIS under Section 11AA of the SFBI Act if:

- i. Contributions from investors are pooled and utilized for the purposes of the scheme or arrangement;
- ii. Contributions or payments are made with a view to receive profits or income;

iii. the property or contributions are managed on behalf of the investors; and

iv. the investors do not have day-to-day control over the management and operation of the scheme or arrangement.

Evidently, the essential ingredients of the definition outline the characteristics of the 'scheme' or 'arrangement' under which the contribution or payment is received irrespective of the nature of underlying asset or instrument which is sold under the scheme. Parameters contained in the definition of CIS in India are akin to factors identified by the US Supreme court under Howey Test. In the case of Ripple v. SEC, district court of New York emphasised that what matters in Howey test is the "totality of circumstances" surrounding sale and not merely the subject matter (e.g. crypto, gold, silver, assets etc.) of the investment.

#### 5.2 Discussion and conclusion

Many Asset Tokens are likely to be classified as security. Issuing entities should be required to disclose certain specific details relating to the underlying assets/instruments, functioning of the tokens, potential use of the funds raised by sale of tokens and other relevant information to enable the authorities to assess the legal characteristics of the particular Asset Token.

Issuance and sale of VDAs are specifically regulated by most of the countries through ICO / IEO Guidelines which generally excludes any VDAs which are offered as investment contract / CIS or otherwise exhibit characteristics of securities. Asset tokens referenced to any securities product or offered in a manner falling under CIS, it is likely to be regulated under securities law and compliance with FIU regulations in such cases will not suffice. Tokens which do not fall under this category are likely to be regulated under FIU Guidelines or any subsequent ICO Guidelines or VDA specific legislation as may be issued by authorities. Certain Asset Tokens may also fall under the exceptions provided under the definition of VDA and legal treatment of such tokens are likely to be driven by the nature of underlying asset and the manner and method of issuance and sale of the tokens.

### **5.3 Appropriate Regulating Authority**

Entities participating in or engaged in provision of service relating to issuer's offer and sale of VDA are designated as 'reporting entity' and are under regulatory purview of FIU whereas SEBI is authorised to regulate any form of securities or raising of funds from the public. So far, SEBI has not issued any guidance or regulation related to VDA. Considering the legislative framework and subject matter expertise of SEBI, FIU should share details of Asset Tokens proposed to be issued with SEBI to enable SEBI to assess if the token will classify as securities.

# 5. RECOMMENDED REGULATORY APPROACH

Amendment in PMLA Act and subsequent Guidelines issued by the Financial Intelligence Unit (FIU) prescribes mandatory registration and other reporting and disclosure requirements. However, these Guidelines are restricted to addressing concerns relating to AML/CFTC issues and do not comprehensively regulate issuance of VDA from the perspective of investor protection and market stability.

**Wide spectrum of Asset Tokens**: Asset Tokens represent a wide spectrum which requires a nuanced and differentiated regulatory approach depending on the nature of the underlying assets and the totality of circumstances relating to issuance/sale of tokens.

**Phased regulation:** Regulatory intervention should be introduced in a phased manner to ensure a fine balance between fostering innovation and protecting consumer interest. Industry players can operate in the first phase within the existing regulatory framework of FIU India and should endeavor to formulate and comply with additional safeguards and compliance under self regulation. The second phase should involve issuing detailed regulations for issuance and sale of Asset tokens and doing pilot study and testing of digital securities and trading platforms for such securities. Second phase will facilitate the establishment of a vibrant ecosystem of digital securities based on DLT which can be traded and settled instantly on regulated digital exchanges.

### Phase I: Operating under the existing regulatory framework

Entities can issue and offer Asset Tokens in India complying with the registration and other requirements under PMLA and FIU Guidelines. Definition of VDA is broad and will include Asset Tokens. However, issue and offer of Asset Tokens under a scheme or in a manner which falls under CIS will be subject to securities law and compliance with FIU Guidelines will not suffice in such cases. As SEBI is currently not involved in regulation of VDAs, an internal mechanism should be developed to mandate and facilitate information sharing between FIU and SEBI. Details of any new VDA issued by any entity should be shared by FIU to SEBI.

In absence of any regulatory framework for issuance and offer of VDAs, issuing entities should endeavor to identify or establish a Self Regulatory Organization (SRO) which should formulate best practices and standards for compliance. Practices formulated by SRO should broadly prescribe standard of disclosure in the white paper and other documents, grievance redressal mechanism, ongoing disclosure requirements, segregation of consumer funds and recommended method of custody management.

#### Phase II: ICO Guidelines and Pilot testing

FIU or SEBI should release detailed guidelines on issuance and offer of Asset Tokens prescribing eligibility, threshold, disclosure, reporting and compliance requirements. VDAs should be classified in different categories based on a risk-based approach and different compliance and regulatory standards should be prescribed depending on the category of the VDA. Asset Token may be defined as any VDA whose value is backed by or referenced to any asset, value or right or a combination thereof, but should exclude tokens which are referenced to INR or any fiat currency. The ICO Guidelines must cover the following broad aspects:

- **Eligibility**: Registered office in India, minimum capital requirement and contribution of fund based on the issue size) and the requirement to have the underlying asset situated within India.
- **Disclosure:** Details required to be disclosed in the whitepaper, ongoing disclosure, event based disclosure, information about proposed use of collected funds, details of the underlying assets/rights and nature and scope of rights granted to the token holders and proposed governance structure of the entity.
- **KYC/AML:** Issuers will be required to follow the KYC and AML standards prescribed by FIU and RBI for reporting entities.
- **Custody:** Underlying assets should be required to be held in the custody of a regulated independent custodian. Banks having required license can be engaged by the issuers for the said purpose.
- **Compliance and operations:** Restriction on commingling and use of investor funds, segregation of underlying assets from the funds/assets of the issuing entity.
- Payment and settlement: CBDC should be prescribed as the preferred mode of payment to subscribe Asset Tokens from the issuers. This will facilitate smooth onboarding and undisrupted banking support for customers and will also provide increased visibility to regulators to monitor suspicious transactions.
- **Technical security:** Issuers should be required to follow the reasonable security standards and practices as prescribed under Information technology law and applicable regulations. VDA service providers are also required to follow relevant guidelines issued by CERT-in.
- **Investor protection:** Guidelines should prescribe certain common inherent rights available to the investors against the issuer of Asset Token. These rights may include right of redemption, right to receive proceeds of sale of underlying assets, right to receive rental or similar proceeds, if any, and right to participate in material decisions impacting the use of underlying assets.
- Compliance with FEMA: Asset Tokens will create an interest over the underlying asset situated in India and, therefore, the offer and sale of such tokens to a non-resident must be in compliance with the provisions of FEMA and related regulations issued by RBI.
- **Grievance redressal:** Issuing entity must provide a robust grievance redressal mechanism to all token holders.

**Pilot testing:** SEBI, in consultation with RBI, should conduct pilot testing of tokenization of certain existing securities market products to understand, optimize and calibrate DLT based transfer and settlement of digital securities. Similarly pilot studies are being conducted by many leading economies including Singapore, UK, Japan, Switzerland and Hong Kong. Indian authorities may also join forces to conduct a collaborative exercise with any suitable partner country. Considering the progress made by various countries, these pilot studies will position India strongly to launch DLT based exchange and market infrastructures reducing settlement time, robust security and increased automation.

#### Phase III: Digital securities and Digital exchanges

A separate regulatory framework should be created specifically for VDAs which mirror securities, are referenced to INR or other fiat currencies or exhibit characteristics of securities ("Digital Securities"). Based on the experience and learning from the pilot studies, SEBI should authorise any existing stock exchange or VDA exchange or a new exchange to operate as a digital exchange to issue, trade, custody, sell and settle Digital Securities leveraging DLT based technology. Authorised digital exchange should exclusively deal in Digital securities.

### **Digital Exchanges**

**Russia**: Total ten digital entities including Moscow Exchange and Expo bank have received licenses to operate and function as digital exchange.

**Switzerland**: FINMA granted license to Six Digital Exchange (SDX) to operate as a digital exchange based on DLT technology in 2021. SDX issued tokenized bonds for trading in 2022.

**Japan**: Oshaka Digital Exchange has received approval from Japan's financial regulatory authority to launch digital securities trading platform

#### **Endnotes**

- 1. OECD (2021), Regulatory Approaches to the Tokenisation of Assets, OECD Blockchain Policy Series, www.oecd.org/finance/Regulatory-Approaches-to-the-Tokenisation-of-Assets.htm
- 2. The expression 'Securities Tokens' has not been used in the legislation.
- 3. "New Regulations in Japan on Security Token Offerings", by Koichiro Ohashi, Makoto Koinuma, Yukari Sakamoto and Sayaka Uno, published on The National Law Review on July 24, 2019, available at <a href="https://www.natlawreview.com/article/new-regulations-japan-security-token-offerings">https://www.natlawreview.com/article/new-regulations-japan-security-token-offerings</a>.
- 4. Para 18, European Parliament legislative resolution of 20 April 2023 on the proposal for a regulation of the European Parliament and of the Council on Markets in Crypto-assets and amending Directive (EU) 2019/1937 (COM(2020)0593 C9-0306/2020 2020/0265(COD)) available at <a href="https://www.europarl.europa.eu/doceo/document/TA-9-2023-0117">https://www.europarl.europa.eu/doceo/document/TA-9-2023-0117</a> EN.html
- 5. https://cis-legislation.com/document.fwx?rgn=126432
- 6. Tokenized real estate to be issued on Moscow Exchange in 2024, published on October 16, 2023, available at <a href="https://www.ledgerinsights.com/tokenized-real-estate-moscow-exchange-russia/">https://www.ledgerinsights.com/tokenized-real-estate-moscow-exchange-russia/</a>
- 7. Russia's Expobank tokenizes Diamonds, published on November 6, 2023, available at <a href="https://www.ledgerinsights.com/tokenize-diamonds-russia-expobank/">https://www.ledgerinsights.com/tokenize-diamonds-russia-expobank/</a>
- 8. Securities and Futures Commission, Hong Kong, "Circular on tokenisation of SFC-authorised investment products" https://apps.sfc.hk/edistributionWeb/gateway/EN/circular/doc?refNo=23EC52.
- 9. Virtual Asset Issuance rulebook, 2023, available at https://rulebooks.vara.ae/
- 10. https://www.hkma.gov.hk/media/eng/doc/key-information/press-release/2023/20230824e3a1.pdf
- 11. https://scventures.io/sc-ventures-launches-libeara-to-provide-tokenisation-platform/
- 12. <a href="https://ripple.com/ripple-press/ripple-to-showcase-real-estate-asset-tokenization-use-case-as-part-of-the-hong-kong-monetary-authoritys-inaugural-e-hkd-pilot-programme/">https://ripple.com/ripple-press/ripple-to-showcase-real-estate-asset-tokenization-use-case-as-part-of-the-hong-kong-monetary-authoritys-inaugural-e-hkd-pilot-programme/</a>
- 13. <a href="https://www.citigroup.com/global/news/press-release/2023/citi-develops-new-digital-asset-capabilities-for-institutional-clients">https://www.citigroup.com/global/news/press-release/2023/citi-develops-new-digital-asset-capabilities-for-institutional-clients</a>
- 14.<u>https://www.ubs.com/global/en/media/display-page-ndp/en-20230927-first-blockchain-native.html?caasID=CAAS-ActivityStream</u>
- 15. https://www.ledgerinsights.com/tokenize-diamonds-russia-expobank/
- 16. https://news.bitcoin.com/hsbc-launches-tokenization-platform-for-gold-markets/

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