REGULATORY APPROACH TOWARDS TOKENIZATION OF REAL-WORLD ASSETS

Consultation Paper

February 2025

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Introduction

Background

The Government of India set up India's maiden International Financial Services Centre (IFSC) in GIFT City, Gujarat (GIFT IFSC) with the aim of making India a global leader in the realm of international financial services. Subsequently, the International Financial Services Centres Authority Act, 2019 [1] was enacted, leading to the creation of the International Financial Services Centres Authority (IFSCA), the unified regulator for GIFT IFSC. IFSCA has been entrusted with the development and regulation of financial products, financial services and financial institutions in the IFSCs in India, cutting across the realms of banking, capital markets, asset management, insurance and more.

IFSCA is committed to providing a comprehensive and consistent regulatory framework that is based on global best practices for the holistic development of the financial and technological ecosystem in GIFT IFSC. In order to fulfil this commitment, IFSCA has adopted a consultative approach, gathering opinions and feedback from industry participants, academicians, subject experts and other stakeholders, in an open and collaborative manner. Such an approach garners greater significance, given the fast-paced innovation being seen in certain pockets of international finance.

One such emerging idea, with immense importance for the international financial landscape is tokenization. IFSCA recognizes and acknowledges the transformative potential of tokenization in the fields of asset ownership, asset management, cross-border payments and settlement etc. IFSCA wishes to leverage the unique position of GIFT IFSC and its accompanying advantages for the creation of a thriving digital asset ecosystem in GIFT IFSC.

[1] Act No. 50 of 2019. The Act is available on IFSCA's website here

Tokenization is already starting to transform how financial services operate. Banks, asset managers, lenders, payment providers and even corporate treasurers and finance departments are tokenizing a broad array of real-world assets, from bank deposits to securities, commodities to documentation. Some banks have even been building the blockchain technology stack in-house with an eye to further tokenization initiatives, such as collateral settlement, multiparty trade finance, interbank cash settlements and more. Many high-value projects result from collaboration between digital natives offering innovative tech solutions and established financial institutions equipped with capital, scalability, an attractive user experience and rigorous risk management.[2]

Smart contracts and automated processes in different areas could propel estimated annual global infrastructure operational cost savings of ~$15-20 billion. The need for shortened settlement cycles – which improve liquidity, enhance market efficiency and lower systemic risk – and the demand for 24/7 market operations will require a new infrastructural backbone. Today's financial systems use different technologies and lack the atomic network connectivity of blockchain networks, thereby creating technology silos that create friction when processing of transactions. Furthermore, by using distributed ledger technology for collateral management, financial institutions can free up substantial capital estimated at more than $100 billion annually.[3]

Tokenization could also enhance banks' origination and distribution of trade finance and make them more capital efficient, and benefits can be passed on to their client companies. Tokenisation can make the trade finance instruments, or even cash payment instruments smarter and can bring transparency and traceability that are inherited benefits of the blockchain technology. Companies engaged in trade tokenization could extend the

[2] PwC - Tokenization in financial services: Delivering value and transformation: https://www.pwc.com/us/en/tech-effect/emerging-tech/tokenization-in-financial-services.html
[3] WEF: How tokenization is transforming global finance and investment: https://www.weforum.org/stories/2024/12/tokenization-blockchain-assets-finance/

benefits of supply chain finance across suppliers or cut risks by using tokenized bills of lading and tokenized deposits.[4]

IFSCA constituted the Expert Committee on Asset Tokenization[5] (the Committee) in September 2023, with the objective of recommending measures for the development of a digital asset ecosystem in GIFT IFSC. The Committee, inter-alia, comprised of eminent experts from the domains of computer science, capital markets, securities law, and seasoned officers with rich regulatory experience.

The Committee, leveraging the immense knowledge and deep expertise of its members, carried out detailed deliberations on various aspects of the tokenization space. As part of its efforts, the Committee has interacted with market participants and gleaned relevant insights from these interactions. The Committee has also carefully considered the regulatory developments in other relevant jurisdictions and noted emerging trends in the tokenization space. The Committee's experience and valuable observations/ suggestions have enriched IFSCA and enabled the publishing of this consultation paper.

Objective

The objective of this consultation paper is to elucidate the viewpoint of IFSCA on the need, approach and suitable measures to be adopted for the regulation of tokenization of certain real world assets, including financial securities such as funds[6], bonds[7], stocks, etc.,

[4] Asian Banking & Finance: Tokenization of trade assets to bridge financing gap (2024): https://asianbankingandfinance.net/banking-technology/exclusive/tokenization-trade-assets-bridge-financing-gap

[5] The list of members as well as terms of reference of the Expert Committee on Asset Tokenization can be found at https://ifsca.gov.in/IFSCACommittees

[6] BCG: Tokenized Funds: The Third Revolution in Asset Management Decoded (2024): https://www.bcg.com/press/29october2024-tokenized-funds-the-third-revolution-in-asset-management-decoded

[7] HKMA - An Assessment on the benefits of Bond Tokenisation (2023) - https://www.hkma.gov.hk/media/eng/publication-and-research/research/research-memorandums/2023/RM04-2023.pdf

financial products such as payments[8], deposits[9], bills receivables[10], precious metal bullion[11], commodities, intellectual property[12] and commercial real estate[13]. Simultaneously, IFSCA wishes to put forth the regulatory hurdles and challenges identified by it and by the Expert Committee on Asset Tokenization, to the wider audience of relevant stakeholders and domain experts, in order to identify proportional, reasoned and acceptable means of tackling these challenges.

This is being done in keeping with the collaborative and consultative approach to regulation adopted by IFSCA, with the aim of formulating an appropriate legal and regulatory response to the emerging domain of tokenization of real-world assets.

Invitation to Comment

IFSCA, by way of this consultation paper, hereby seeks comments/ views from various market participants, academicians, domain experts and other public stakeholders on certain questions pertaining to the subject of tokenization of real-world assets.

IFSCA's approach and regulatory concerns pertaining to tokenization of real-world assets are laid out in the upcoming parts of this consultation paper. The views are interspersed with relevant questions (demarcated in coloured boxes), as and where appropriate. The

[8] RBA: Tokenisation of Card Payments (2023): https://stripe.com/in/resources/more/payment-tokenization-101
[9] KPMG: Deposit Tokens: Bridging traditional banking and the digital economy: https://kpmg.com/xx/en/our-insights/value-creation/deposit-tokens-bridging-traditional-banking-and-the-digital-economy.html
[10] Andrea Frosinini (2024): https://medium.com/@tradefin101/invoice-tokenization-unlocking-the-potential-of-deep-tier-supply-chain-finance-9c407112526b
[11] HSBC tokenises Gold: https://www.ledgerinsights.com/hsbc-tokenizes-gold/
[12] Tokenisation of Intellectual Property: https://ripl.law.uic.edu/news-stories/tokenizing-ip-how-david-bowie-and-blockchain-set-the-stage-for-creating-a-digital-exchange-for-intellectual-property-assets/
[13] Terazo and Tokeny Join Forces for India's First Regulated Tokenization Project: https://tokeny.com/terazo-and-tokeny-join-forces-for-indias-first-regulated-tokenization-project/

consolidated list of questions emerging from the consultation paper may be found at Annexure I of this document.

Respondents are requested to submit their responses vide email to **Mr. Praveen Kamat, General Manager, Department of Capital Markets, IFSCA, at praveen.kamat@ifsca.gov.in with a copy to Mr. Matam Satya Prateek, Assistant Manager, Department of Capital Markets, IFSCA, at prateek.matam@ifsca.gov.in**, latest by March 20, 2025 in the format specified below. Respondents are also requested to indicate the organisation/ interests they represent and include their contact details. In case a respondent wishes to remain anonymous, they are required to explicitly state the same in their email.

<Name and details of the organization represented>

S. No.	Question No.	Response

<Contact details of the respondent>

Regulatory Approach towards Tokenization of Real-World Assets

Intent of the proposed Regulatory Approach

The intent of the proposed regulatory approach towards tokenization of assets is to:

1. Provide legal and regulatory recognition to 'digital tokens', representing rights of ownership or beneficial interest in underlying real-world assets.
2. Evolve robust and reliable mechanisms for:
    a. Issuance of digital tokens.
    b. Trading in digital tokens.
    c. Custody of digital tokens.
    d. Clearing and settlement of trades in digital tokens.

    in a safe, efficient and reliable manner for orderly development of the digital token market.
3. Develop a suitable framework for efficient market infrastructure to be put in place, supporting the digital token market.
4. Identify the activities to be regulated in the digital token market and suitably calibrate the regulatory requirements to be imposed on the entities performing regulated activities in a proportionate and risk-based manner.
5. Evolve an appropriate risk management framework for the digital token market, with special focus on AML/KYC, governance, technology and cyber risks.
6. Address investor protection concerns and impose adequate standards of due diligence, disclosure and grievance redressal on the entities performing regulated activities in the digital token market.
7. Foster continuous innovation and growth in the tokenization space, including by means of regulatory dispensations, self-regulation and disclosure-based regime.

In this regard, IFSCA seeks comments/ views from the public on the questions laid out in the subsequent sections. The questions (demarcated in coloured boxes) are preceded by a purposed explanation/ guidance (in unformatted text format), that aims to set the context and clarify the need to address the questions that follow. While the explanation delineates the outlook and key regulatory concerns of IFSCA, the readers of this consultation paper may add to or differ from the explanation provided, at the time of answering the questions. IFSCA is under no obligation to adhere to/ comply with any assumptions, approaches or suggestions made in the explanation provided.

For the ease of the readers of this consultation paper, the questions have been categorized into four thematic sets. In each of these sets, IFSCA aims to address a set of related questions, the scope of which is laid out in the explanation immediately following the start of the respective set. The thematic sets and the questions within have been ordered and numbered in a logical sequence. The readers of this consultation paper are free to choose any number of questions from any of the thematic sets and provide a response to IFSCA.

Note: This consultation paper by IFSCA pertains to the tokenization of real-world assets; and does not cover other digital assets such as central bank digital currencies, cryptocurrencies or crypto assets referencing non-financial virtual assets, such as artwork (including Non-Fungible Tokens). IFSCA does not intend to regulate, permit trading in or otherwise endorse any cryptocurrencies/ crypto assets. Any actions referencing IFSCA or this consultation paper, with an intent to falsely represent its contents, advertise cryptocurrencies/ crypto assets or mislead the public about the risks involved in investing or trading in cryptocurrencies/ crypto assets will be liable for action under the law.

Question Set 1: Definition and some key characteristics of Digital Tokens

[This set of questions pertain to regulatory concerns and approaches to defining a digital token, in the form and manner that is conducive to orderly development of the tokenization space.]

The definition of a digital asset or token varies across jurisdictions. Additionally, the definition employed by several regulatory and governmental agencies differs, basis the purpose which the definition is required to serve. Therefore, the definition of a digital asset by a central bank may include the functions of a currency, that of a securities market regulator might include the features of a security and that of a tax authority may be limited in scope, for taxation purposes.

For instance, the US Securities and Exchange Commission (SEC) has opined that "A digital asset should be analyzed to determine whether it has the characteristics of any product that meets the definition of '*security*' under the federal securities laws" and used the famed Howey Test for this purpose[14]. Government of India under the Income Tax Act, *inter-alia* defines a "virtual digital asset" as "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"[15].

[14] For more information, see https://www.sec.gov/about/divisions-offices/division-corporation-finance/framework-investment-contract-analysis-digital-assets

[15] For the complete definition, see section 2(47A) of the Income-tax Act, 1961 (No. 43 of 1961) as amended from time to time at https://incometaxindia.gov.in/pages/acts/income-tax-act.aspx

A common taxonomy is critical for ensuring legal, tax and regulatory certainty in the digital token market. However, the varied characteristics of different types of digital tokens and the risks associated with each of them, makes appropriately defining the digital token a nuanced task. The key characteristics of a digital token, which underpin the kind of regulatory treatment and risks they entail, are elaborated below.

For the purposes of this consultation paper, readers may consider tokenization to refer to "a process that involves utilising new technologies, such as distributed ledger technology (DLT), to issue or represent assets in digital forms known as tokens"[16].

Type of asset underlying a digital token

The paper (Carapella et al., 2023) [17] elaborates five design features underlying the process of asset tokenization, the choice of "reference asset" being one among them. The asset underlying the digital token can either be a real-world asset or an asset that resides on the distributed ledger (i.e. 'native' to the distributed ledger). Real-world asset can be further categorized into tangible assets (such as bullion or real estate) and intangible assets (such as financial securities). However, as previously mentioned, the scope of this consultation paper is limited to tokenization of real-world assets – whether tangible or intangible. Hence, for the purposes of this consultation paper, the discussion pertains to tokenization of real-world assets and not to assets which are native to the distributed ledger.

[16] Financial Stability Board report dated 22 October 2024 titled "The Financial Stability Implications of Tokenisation"
https://www.fsb.org/2024/10/the-financial-stability-implications-of-tokenisation/

[17] Carapella, Francesca, Grace Chuan, Jacob Gerszten, Chelsea Hunter, and Nathan Swem (2023). "Tokenization: Overview and Financial Stability Implications," Finance and Economics Discussion Series 2023-060. Washington: Board of Governors of the Federal Reserve System, https://doi.org/10.17016/FEDS.2023.060

Within real-world assets, depending on the asset underlying the digital token, different structures may be required to enable issuance and trading of tokens. Accordingly, the activities that need to be regulated, the risks that need to be considered and means of addressing said risks have to be suitably modified.

In the case of digital tokens issued against real-world asset, the following regulatory considerations may be noted:

a. Asset classes to be enabled[18]: Tokenization may be seen as a technological process, which can create an organized marketplace of real-world assets, potentially extending several advantages such as improving liquidity, reducing entry barriers (fractionalization), providing newer avenues for diversification etc. to investors. However, not all asset classes are amenable to tokenization. The reasons for this may include behavioural characteristics of the underlying asset class, legal restrictions around ownership, lack of public demand, non-fungibility of issued tokens, lack of reliable and periodic flow of information etc.

Question 1.1a.1

What are the classes of real-world assets that may be considered for tokenization?

[18] (Carapella et al., 2023, Table 2) presents a list of tokenization examples along with the underlying reference assets for the tokens issued
https://doi.org/10.17016/FEDS.2023.060

Question 1.1a.2

What are the characteristics of a given real world asset class, which can potentially determine the level of market acceptance, liquidity, and suitability for tokenization of the asset class?

Question 1.1a.3

For each of the given real world asset classes, what are the key legal and regulatory challenges that need to be addressed prior to enabling tokenization of the same?

b. Maintenance of the real-world asset: As there is a real-world asset underpinning the issuance of digital tokens, it is a corollary that the maintenance, upkeep and safety of the underlying asset influences the price/ value of the tokens. Hence, there is a need to create an appropriate framework for safe custody, upkeep and maintenance of the underlying real-world asset, on behalf of the investors/ holders of tokens issued against the asset.

Question 1.1b.1

What are the possible legal structures that may be employed for the safety, upkeep and maintenance of real-world assets, by third-party service providers, for the benefit of token holders/ investors?

Question 1.1b.2

What are the key obligations and responsibilities that may be imposed on the third-party service providers, providing custody and maintenance services for real-world assets underlying digital tokens?

c. Ensuring legal and regulatory certainty: Let us assume that a real-world asset is placed in the custody of a third-party service provider under trust, and digital tokens have been issued against it. Subsequently, changes can arise in the ownership/ beneficial interest of the real-world asset, as a result of trades that have been executed involving tokens of the asset. There is a need to ensure that such changes are given effect in the real world.

Question 1.1c.1

What are the possible legal structures that may be employed for ensuring legal recognition to changes in the ownership/ beneficial interest of the real-world asset, as a consequence of successfully executed trades in tokens of the underlying real-world asset?

d. Redemption/ exit from investment: In order to ensure market stability and investor protection, market participants who own or trade in digital tokens, need to have options for reasonable exit from their investment at all times. The constraints to such an exit may arise due to restrictions on sale of tokens, lack of demand/ liquidity for the tokens, lack of divisibility of the underlying asset etc.

Question 1.1d.1

What are the possible safeguards/ measures that may be mandated for ensuring that investors/ token holders are able to exit their investment (by way of cash settlement) or redeem their tokens (by way of change in ownership of underlying real-world asset), without significant loss of time or detrimental impact to the value of their holdings?

Rights represented by digital tokens

Ownership of a digital token must entitle the investor/ token holder to some sets of rights. It is assumed that it is the value of these rights, linked to an underlying real-world asset, that gives value to the digital tokens. Digital tokens issued against a real-world asset commonly entitle the token holder to proportional ownership of the underlying real-world asset, or beneficial interest in the revenues generated by an underlying asset. IMF's Working Paper titled "Digital Tokens: A Legal Perspective"[19], rightly classifies tokens based on the rights it affords, and explores the implications, feasibility and enforceability of different types of rights accorded to digital tokens. Hence, there is a need to carefully consider the types of rights that a digital token entitles its holder/ investor to, as the same must be a part of informed decision making of market participants at the time of investment or trading.

[19] Garrido, J. M., 2023, Digital Tokens: A Legal Perspective, IMF WP/23/151, https://www.imf.org/en/Publications/WP/Issues/2023/07/28/Digital-Tokens-A-Legal-Perspective-537041

Question 1.2.1

What are the possible types of rights that digital tokens may be allowed to represent? What factors may determine whether a given right can be tokenized, effectively traded and ultimately enforced, in a safe and reliable manner?

Question 1.2.2

What are the possible mechanisms for ensuring that the rights represented by digital tokens are transferred in an efficient and reliable manner, as and when the trades in the digital tokens occur?

Question 1.2.3

What are the appropriate disclosures that need to be made to potential investors/ token holders, pertaining to the rights represented by digital tokens?

Question 1.2.4

Should the ownership of digital tokens entitle the token holders to rights to participate in the decisions pertaining to the underlying real-world asset (such as administration or sale of the asset, de-tokenization of the asset/ extinguishing of the tokens etc.)? If yes, what are such decisions which are relevant to the token holders, and what mechanisms can be employed to give effect to such decisions?

Manner of recognizing ownership of digital tokens

There are multiple modes of recognizing ownership of digital tokens. One broad distinction which can be made is whether the token ownership is recognized in bearer form or registered form. Bearer form implies that the token holder is the owner of the tokens and by extension, entitled to the ownership rights/ beneficial interest represented by the tokens, simply by virtue of holding the token in his/ her custody or control. Registered form implies that the ownership of digital tokens at any given point in time, is being recorded in a ledger (say, by the issuer of tokens) and the disbursement of benefits and entitlements, recognition of the beneficial owner, successful execution of trades etc., be recorded and effected by means of the said ledger. For instance, a guidance document[20] published by the International Swaps and Derivatives Association, makes a similar distinction between the tokenization structures (categorized as "Bearer", "Registered" and "Claims" structures) for the purposes of use and transfer of "Tokenized Collateral" as collateral in transactions.

Question 1.3.1

Should the ownership form of digital tokens be restricted to registered form, to bearer form, or shall encompass both the types? What are the factors influencing the suitability of a given form of ownership to the digital tokens of a particular type/ given real-world asset class?

[20] "Guidance for memorandum of law examining the validity and enforceability of collateral arrangements using the ISDA model provisions for tokenized collateral", published on 21 May 2024, by ISDA

Question 1.3.2

What are the different advantages and disadvantages of recognizing a particular form of token ownership? What are risks associated to each of the forms of ownership?

Question 1.3.3

What are the kinds of benefits and entitlements, which may need to be disbursed to the investors/ token holders, basis ownership records? What are the advantages and disadvantages of a particular form of ownership in this regard?

Question Set 2: Evolving appropriate mechanisms for Issuance, Custody, Trading, Clearing and Settlement of Digital Tokens

[This set of questions pertain to regulatory concerns and approaches pertaining to the issuance, custody and secondary market trading of Digital Tokens.]

Jurisdictions across the world are yet to arrive at a consensus on the appropriate regulatory treatment for issuance, custody and secondary market transactions in digital tokens. OECD's report titled "Regulatory Approaches to the Tokenisation of Assets"[21], which categorises and summarises the approaches taken in various jurisdictions states that "Policy makers in different jurisdictions have approached tokenisation in different ways, either by applying existing financial regulations to tokenised assets; by introducing

[21] OECD (2021), Regulatory Approaches to the Tokenisation of Assets, OECD Publishing, Paris, https://doi.org/10.1787/aea35466-en

new tailor-made regulatory frameworks or by adapting existing rules to accommodate the application of DLTs in tokenisation."

Regulating the real-world asset tokenization space is, justifiably, a complex and layered problem. However, addressing it holds the key to bringing the domain of real-world asset tokenization under the regulatory ambit, leading to a secure and organized digital asset ecosystem, and unlocking the value and benefits of tokenization to the world.

There are several financial sector regulators, national governments and supra-national bodies which are conducting pilot projects and coming up with limited-purpose policy recommendations for appropriate regulation of the tokenization space. (Carapella et al., 2023, Section 2)[22] provides some specific examples of tokenization projects undertaken till date. IFSCA is a keen observer and willing contributor to the evolution of an appropriate regulatory framework for tokenization. In furtherance of these efforts, IFSCA, in collaboration with the Expert Committee on Asset Tokenization, has tried to envisage an entirely new architecture for issuance, custody, and secondary market transactions of digital tokens. The key aspects of a regulated and organized digital token marketplace, identified as a result of this process, are elaborated below.

Issuance of Digital Tokens

Issuance of Digital Tokens refers to the minting of new digital tokens in a regulated digital token market. Inherent to the process of token issuance are the risks of illegitimate/ faulty issue of tokens. The illegitimate issue may be due to a cyber breach, issuer malfeasance or lack of adequate regulatory control over issue of such tokens. This can adversely impact the price of tokens already being traded in the market, leading to loss

[22] Carapella, Francesca, Grace Chuan, Jacob Gerszten, Chelsea Hunter, and Nathan Swem (2023). "Tokenization: Overview and Financial Stability Implications," Finance and Economics Discussion Series 2023-060. Washington: Board of Governors of the Federal Reserve System, https://doi.org/10.17016/FEDS.2023.060

of investor confidence and market stability. Therefore, the activity of "validation" of digital tokens has emerged as a specialized function performed by some entities in the tokenization space. IFSCA is of the view that issuance of digital tokens can be a suitably regulated activity. In this regard, the following key regulatory considerations may be noted:

Question 2.1.1

Do you agree that issuance of digital tokens should be a regulated activity? Give reasons in favour of your opinion.

Question 2.1.2

What is the nature of interaction/ relationship between the owner of an underlying asset (who wishes to engage an Issuer for issuance of tokens against a real-world asset) and the Issuer? Is there a requirement to regulate this relationship?

Question 2.1.3

What are the appropriate regulatory requirements that may be imposed on the Issuer of digital tokens, in order to ensure that genuine assets are tokenized by legitimate owners of the underlying real-world asset?

Custody of Digital Tokens

Custody of digital tokens refers to the act of safekeeping and management of digital tokens. Custody may be with the investor or beneficial owner directly (i.e., self-custody), or with a custodian, who holds the tokens on behalf of an investor, in trust (i.e., custody as a service). (OECD, 2021, Section 4.2)[23] discusses various approaches to regulating the role of custodianship in the tokenization space. IFSCA is of the view that provision of custody services can be a suitably regulated activity. In this regard, the following key regulatory considerations may be noted:

Question 2.2.1

Do you agree that provision of custody services for digital tokens should be a regulated activity? Give reasons in favour of your opinion.

Question 2.2.2

Should custody be restricted to self-custody, to regulated custody service providers, or be permitted in both formats? What are the risks associated with each of these forms of custody?

[23] OECD (2021), Regulatory Approaches to the Tokenisation of Assets, OECD Publishing, Paris, https://doi.org/10.1787/aea35466-en

Question 2.2.3

What are the appropriate regulatory requirements that may be imposed on the custody service provider?

Trading, Clearing and Settlement of Digital Tokens

A key component of any vibrant digital asset ecosystem is the secondary marketplace for transactions in digital tokens. Without a safe, efficient and reliable marketplace, market participants would not be confident to invest and transact in digital tokens, i.e., vibrancy in the secondary market and vibrancy in the primary/ issuance market complement each other. Instilling investor confidence and public trust in the regulatory and technological architecture underpinning the digital token market is, therefore, of paramount importance for the success of digital asset ecosystem.

IFSCA, therefore, wishes to re-imagine the digital token market from first principles and identify possible market participants and appropriate regulatory treatment for each of them. In this regard, the following regulatory concerns pertaining to the digital token market (irrespective of the technology used in the market infrastructure) may be noted:

Question 2.3.1

What comprises the market infrastructure for a digital asset market? Does it differ from the market infrastructure in the traditional securities market? If yes, please elaborate.

Question 2.3.2

What are the key functions of market infrastructure in a digital asset market? Does it differ from the key functions of market infrastructure in the traditional securities market? If yes, please elaborate.

Question 2.3.3

What are the key regulatory requirements that need to be imposed on market infrastructure institutions in a digital token market? Does it differ from the regulatory requirements imposed on market infrastructure institutions in the traditional securities market? If yes, please elaborate.

Question 2.3.4

What are the various market participants involved in a digital asset market? Are they different from the market participants in the traditional securities market? If yes, please elaborate.

Question 2.3.5

What are the key functions of market participants in a digital token market for real-world assets? Are they different from the functions of respective market participants in the traditional securities market? If yes, please elaborate.

Question 2.3.6

What are the key regulatory requirements that need to be imposed on market participants in a digital token market for real-world assets? Are they different from the regulatory requirements imposed on respective market participants in the traditional securities market? If yes, please elaborate.

Question 2.3.7

What are the various factors which determine the level of public trust and investor confidence in a market?

IFSCA endeavours to uphold the principle of "same risk, same regulation" to the extent possible, in its regulatory treatment of market infrastructure in the digital token market. With this in mind, IFSCA, in collaboration with the Expert Committee on Asset Tokenization, has undertaken a careful study and consideration of the operational mechanisms employed by Distributed Ledger Technology (DLT) based market infrastructure. Consequently, IFSCA has noted that DLT based market infrastructure (with the embedded use of Smart Contracts) deserves a differentiated treatment from non-DLT based market infrastructure. This is in keeping with the principle of "same risk, same regulation", as the risks in a DLT based market are different in form and magnitude, compared to those in a non-DLT based market. Such a differentiated treatment is also warranted, as treating DLT based market infrastructure in the same manner as non-DLT based market infrastructure can negate the potential benefits of DLT (such as transparency and immutability), while not adequately addressing the limitations and risks involved (such as scalability issues, lack of separation of roles, technology risk, legal

risk). (OECD, 2021)[24] recognizes the prevalence of this view among policy makers when it states that "Policy makers in a number of jurisdictions have opted for bespoke, tailor-made rules for (parts of) tokenised asset markets, sometimes in spite of a general technology-neutral approach to financial regulation, as they recognise that the combination of technologies such as DLTs with finance could give rise to the potential for new types of risks".

Question 2.3.8

Should market infrastructure be categorised into Distributed Ledger Technology (DLT) based and non-DLT based categories? Is there any other manner of categorising the market infrastructure for the purposes of differentiated regulatory treatment? If yes, please elaborate on the same.

Question 2.3.9

Do you agree with the view that Distributed Ledger Technology (DLT) based market infrastructure should be accorded differentiated regulatory treatment as compared to non-DLT based market infrastructure? What are relevant reasons for such a differentiation?

[24] OECD (2021), Regulatory Approaches to the Tokenisation of Assets, OECD Publishing, Paris, https://doi.org/10.1787/aea35466-en

Question 2.3.10

What are the characteristics/ features of Distributed Ledger Technology (DLT), which warrant a differentiated regulatory treatment of market infrastructure? What are the associated limitations and risks that need to be addressed in this regard?

Consequently, the key regulatory considerations specific to the use of DLT in market infrastructure are as follows:

a. Separation of trading, clearing and settlement functions: In many a case, the use of DLT and Smart Contracts can eliminate the distinction between the clearing and settlement of a trade and the trade itself. While this brings in efficiencies, there are several attendant limitations and risks, pertaining to settlement finality, multilateral netting etc. (Priem, 2020) [25] discusses the benefits, risks and regulatory implications of using DLT in the clearing and settlement of securities.

Question 2.3.11a.1

In the case of Distributed Ledger Technology (DLT) based market infrastructure, is there a need to redefine the processes of clearing and settlement? If yes, please elaborate.

[25] Randy Priem (2020), "Distributed ledger technology for securities clearing and settlement: benefits, risks, and regulatory implications"
https://jfin-swufe.springeropen.com/articles/10.1186/s40854-019-0169-6

Question 2.3.11a.2

What are the inherent risks and limitations of automatic clearing and settlement of trades in a Distributed Ledger Technology (DLT) based market infrastructure?

Question 2.3.11a.3

What are the major hurdles to ensuring legal and regulatory certainty to transactions effected by smart contracts on Distributed Ledger Technology (DLT) based market infrastructure?

b. Change in the process of issuance and custody: With the use of DLT based market infrastructure and smart contracts, there is a need to reconsider the processes that comprise issuance and custody of digital tokens. For instance, if digital tokens are issued/ transferred (say, by accident or fraud) and the said transactions have been recorded on the distributed ledger successfully, it may subsequently become challenging to separate a genuine transaction from a fraudulent one, because of the immutability of the distributed ledger.

Question 2.3.11b.1

In the case of Distributed Ledger Technology (DLT) based market infrastructure, is there a need to redefine the processes of issuance and custody? If yes, please elaborate.

Question 2.3.11b.2

What are the inherent risks and limitations of issuance and custody of digital tokens on a Distributed Ledger Technology (DLT) based market infrastructure?

c. Change in roles of market participants: With the use of DLT based market infrastructure and smart contracts, there is scope for disintermediation between the end investors/ token holders and the market infrastructure. This brings about changes in the roles performed by market participants, when compared to the traditional securities market and non-DLT based digital token market. For instance, the role of a custody service provider may differ and an intermediary such as Broker-Dealer may not be required anymore. Recognizing the regulatory concerns in this regard, (OECD, 2021)[26] states that "It can sometimes be difficult to know with certainty whether tokenisation is fully captured by the regulatory perimeter, especially given the novel nature of some new business models and processes involved. Potential gaps in the regulatory treatment of tokenisation may give rise to regulatory arbitrage opportunities and/or give rise to novel risks that may arise from the application of innovative technologies, such as DLTs. It is therefore important to identify whether existing regulation may need to apply to new actors present in tokenised assets markets and/or whether new requirements may be needed to be added to existing policies".

[26] OECD (2021), Regulatory Approaches to the Tokenisation of Assets, OECD Publishing, Paris, https://doi.org/10.1787/aea35466-en

Question 2.3.11c.1

What are the various market participants involved in a Distributed Ledger Technology (DLT) based digital token market for real-world assets? Are they different from the market participants in a non-DLT based digital token market? If yes, please elaborate.

Question 2.3.11c.2

What are the key functions of market participants involved in a Distributed Ledger Technology (DLT) based digital token market for real-world assets? Are they different from the functions of respective market participants in a non-DLT based digital token market? If yes, please elaborate.

Question 2.3.11c.3

What are the key regulatory requirements that need to be imposed on market participants in a Distributed Ledger Technology (DLT) based digital token market for real-world assets? Are they different from the regulatory requirements imposed on respective market participants in a non-DLT based digital token market? If yes, please elaborate.

d. Characteristics/ Features unique to Distributed Ledgers: It is possible to make a distinction among distributed ledgers based on various characteristics. Some characteristics such as whether the distributed ledger is public or private, permissioned or permissionless, have significant relevance to the risks involved

in their use, thereby needing differentiated regulatory treatment[27]. Additionally, challenges such as interoperability among distributed ledgers have significant relevance to their suitability for market infrastructure.

Question 2.3.11d.1

What are the characteristics of a Distributed Ledger that have a significant bearing on their suitability for market infrastructure?

Question 2.3.11d.2

Do you agree with the view that certain characteristics of Distributed Ledgers impact the form and magnitude of risks they pose, when employed in a digital token market? What are the relevant characteristics of Distributed Ledgers and their respective risks which need regulatory consideration?

Question 2.3.11d.3

What are the possible regulatory requirements that may be considered for addressing the risks emanating from the use of different types of Distributed Ledgers in a digital token market?

[27] A February 2017 publication by BIS's Committee on Payments and Market Infrastructures provides for an analytical framework for evaluating DLT in payment, clearing and settlement systems, based on technical and institutional design elements of the DLT employed. It is available here

Question Set 3: Evolving an appropriate Risk Management Framework for Digital Tokens

[This set of questions pertain to regulatory concerns and approaches to evolving an appropriate risk management framework for ensuring orderly development and stability of the digital token market.]

Evolving an appropriate risk management framework is key to the development of a secure and reliable digital token market. Given the rapid pace of evolution in the domain of tokenization, limited regulatory capacities and lack of adequate consumer awareness, some jurisdictions have been wary of regulating the tokenization space and have resorted to outright bans instead. However, such outright bans have their own limitations, such as stifling innovation and lack of a swift recourse for defrauded victims. IFSCA believes that it is possible to evolve a comprehensive risk management framework that enables the evolution of a regulated digital token market. With this in mind, IFSCA, in collaboration with the Expert Committee on Asset Tokenization, has identified the following focus areas for the proposed risk management framework:

a. Governance risks: Given the wide range of business use-cases surrounding tokenization of real world assets, there is lack of clarity on governance of the market infrastructure institutions and the market participants involved. The absence of adequate legal and regulatory controls, lack of separation of roles, conflicts of interest, over-emphasis on technological aspects in these new age institutions, has led to understatement of the risks that may emanate from poor governance in these institutions. Financial Stability Board, in its report titled "Decentralised financial technologies: Report on financial stability, regulatory and governance implications"[28] has elaborated on this aspect.

[28] Financial Stability Board report dated 6 June 2019 titled "Decentralised financial technologies: Report on financial stability, regulatory and governance implications"

Question 3.a.1

What are the key governance risks in market infrastructure institutions and market participants in a digital token market for real-world assets? Are they different from the governance risks in respective institutions in the traditional securities market? If yes, please elaborate.

Question 3.a.2

What are the possible regulatory requirements that may be imposed on market infrastructure institutions and market participants, so as to ensure good standards of corporate governance?

Question 3.a.3

What are the possible conflicts of interest for various market participants in the digital token market? What possible regulatory measures may be imposed on the market participants to address the same?

b. Technology risks: In the digital token market, there is a heavy reliance on technology for performing several functions, which were hitherto performed by distinct entities which specialize in such functions. In this regard, (OECD, 2021)[29]

https://www.fsb.org/2019/06/decentralised-financial-technologies-report-on-financial-stability-regulatory-and-governance-implications/

[29] OECD (2021), Regulatory Approaches to the Tokenisation of Assets, OECD Publishing, Paris, https://doi.org/10.1787/aea35466-en

states that “At the same time, the application of DLTs in tokenised markets may give rise to important risks and challenges stemming from the novel nature of some of the business models and processes involved in tokenisation, and the innovative character of the technology itself. Operational vulnerabilities related to the technology deployed include scalability (given the significant throughput that would be required for the scale of global financial markets); potential uncertainty over settlement finality (i.e. final and irrevocable settlement of payment instructions with deterministic finality); interoperability between different networks that will allow for connectivity of different infrastructures, as well as interoperability of DLT-based infrastructure with traditional one;”. When DLT-based infrastructure is complemented by Smart Contracts, the chances of technological limitations being realized only after market’s reliance on them reaches criticality, is a very real and persistent risk. Hence, appropriate means of handling technology risks is crucial for the development of a secure digital token market.

Question 3.b.1

What are the key technology risks in market infrastructure institutions and market participants in a digital token market? Are they different from the technology risks in respective institutions in the traditional securities market? If yes, please elaborate.

Question 3.b.2

What are the possible regulatory requirements that may be imposed on market infrastructure institutions and market participants, so as to adequately limit technology risks?

Question 3.b.3

Do you agree that use of Distributed Ledger Technology (DLT) and Smart Contracts by market infrastructure institutions and market participants changes the form and magnitude of technology risks posed to the digital token market? If yes, please elaborate.

Question 3.b.4

What are the possible regulatory requirements that may be imposed on market infrastructure institutions and market participants using Distributed Ledger Technology (DLT) and Smart Contracts, so as to adequately address the technology risks arising from the same?

c. Cyber risks: Though it may be argued that cyber risks are a subset of technological risks, nevertheless, IFSCA believes that the regulatory concerns surrounding cyber risks deserve special attention. The heavy reliance on cryptography and other forms of technology-enforced security in the digital token market creates significant cyber risk. In the case of Distributed Ledger Technology (DLT) and Smart Contracts, the decentralization and disintermediation may lead to concentration of high amounts of risk in critical pieces of infrastructure or code. (OECD, 2021)[30] notes this concern by stating that "The auditability of the code of smart contracts and relevant permissions to change the code are other areas of concern". The leakage of personally identifiable information, which can help link a person's identity with his/ her public key, may allow all participants on a

[30] OECD (2021), Regulatory Approaches to the Tokenisation of Assets, OECD Publishing, Paris, https://doi.org/10.1787/aea35466-en

Distributed Ledger to track that person's transactions. Hence, addressing the cyber risks involved is crucial for ensuring reliability of a digital token market.

Question 3.c.1

What are the key cyber risks in market infrastructure institutions and market participants in a digital token market? Are they different from the cyber risks in respective institutions in the traditional securities market? If yes, please elaborate.

Question 3.c.2

What are the possible regulatory requirements that may be imposed on market infrastructure institutions and market participants, so as to adequately limit cyber risks?

Question 3.c.3

Do you agree that the use of Distributed Ledger Technology (DLT) and Smart Contracts by market infrastructure institutions and market participants changes the form and magnitude of cyber risks posed to the digital token market? If yes, please elaborate.

Question 3.c.4

What are the possible regulatory requirements that may be imposed on market infrastructure institutions and market participants using Distributed Ledger Technology (DLT) and Smart Contracts, so as to adequately address the cyber risks arising from the same?

d. Money Laundering/ Terrorist Financing risks: The legal and regulatory framework for the digital token market is still a work in progress in several jurisdictions. Due to the absence of regulatory guardrails, regulators and national governments are understandably concerned about the Money Laundering/ Terrorist Financing (ML/TF) risks posed by the digital token market. The cross-border nature of transactions, anonymity afforded by the use of certain technologies, scope for regulatory arbitrage, differential privacy and Know-Your-Customer (KYC) standards etc. further compound this problem. (OECD, 2021)[31] states that "Risks related to AML/CFT are prominent in DLT-based systems and are particularly high in tokenised markets that are based on public permissionless networks". Hence, IFSCA believes that the ML/TF risks posed by a digital token market deserve special regulatory consideration.

Question 3.d.1

What are the key Money Laundering/ Terrorist Financing (ML/TF) risks posed by a digital token market? Are they different from the ML/TF risks in the traditional securities market? If yes, please elaborate.

Question 3.d.2

What are the possible regulatory requirements that may be imposed on market infrastructure institutions and market participants, so as to adequately limit Money Laundering/ Terrorist Financing (ML/TF) risks?

[31] OECD (2021), Regulatory Approaches to the Tokenisation of Assets, OECD Publishing, Paris, https://doi.org/10.1787/aea35466-en

Question 3.d.3

Do you agree that the use of Distributed Ledger Technology (DLT) and Smart Contracts by market infrastructure institutions and market participants changes the form and magnitude of Money Laundering/ Terrorist Financing (ML/TF) risks posed by the digital token market? If yes, please elaborate.

Question 3.d.4

What are the possible regulatory requirements that may be imposed on market infrastructure institutions and market participants using Distributed Ledger Technology (DLT) and Smart Contracts, so as to adequately address the Money Laundering/ Terrorist Financing (ML/TF) risks arising from the same?

Question Set 4: Providing suitable catalysts for organic growth and development of the Digital Tokens market

[This set of questions pertain to regulatory concerns and approaches to enabling the organic growth and development of a digital asset ecosystem.]

Tokenization is an idea that has the potential to reshape the financial ecosystem as we know it. However, this domain has also suffered several setbacks in its journey of becoming a mainstay on the stage of international finance. There are several reasons for this - lack of regulatory oversight, poor governance standards, over-reliance on technology, innovation at a breakneck pace and lack of public awareness, among them.

Possible roadblocks to tokenisation identified in a OECD (2025) paper[32] are associated with the lack of liquidity and absence of an ecosystem for tokenised assets; the absence of evidence around measurable materialised benefits at large scale and the lack of investment rationale for the transition towards DLTs; the need for payment rails integrated in DLTs or wholesale CBDCs to exist for the payment leg of settlement; the drawbacks of instant and simultaneous 'atomic' settlement; the lack of custodians to onboard investors and assets; the complexity of the underlying DLT infrastructure; the absence of identification solutions and the lack of industry standardisation practices around tokenisation. Other limitations include legal issues, such as the fact that ownership of a token does not necessarily accord ownership to the underlying asset; the legal status of smart contracts; or limits with regards to settlement finality when using DLTs.

IFSCA believes that there is a need for certain catalysts to be provided for the organic growth and development of the digital token market. In the tokenization domain, there are several tough problems being tackled by the entities, industry associations and supra-national bodies through trial and error, and constant innovation. At times, these experiments require regulatory dispensations and relaxations. However, in the quest of safeguarding investor interests and public trust in the digital token market, regulatory bodies may adopt a hardline approach, often stifling innovation.

On the other hand, the absence of adequate regulation also does not inspire public confidence in the digital token market. It is important that both the industry and regulatory bodies realize the need for collaboration and consultation, for stable and organic growth of the digital token market. In this spirit, IFSCA wishes to explore appropriate means to minimize the compliance burden, foster innovation and inspire

[32] OECD (2025): Tokenisation of Assets and Distributed Ledger Technologies in Financial Markets - https://www.oecd.org/content/dam/oecd/en/publications/reports/2025/01/tokenisation-of-assets-and-distributed-ledger-technologies-in-financial-markets_be149012/40e7f217-en.pdf

public trust, for accelerated development of the regulated digital token market. The key regulatory considerations in this regard are as follows:

a. Ensuring investor protection and awareness: It is in the interest of orderly development of the digital token market that potential investors and token holders are adequately protected. (OECD, 2020)[33] opines that "Wider use of tokenised securities raises potential financial consumer protection and market conduct issues, the handling of which will be essential to safeguard investors' interests and ensure a fair and orderly market for tokenised assets. Recourse and redress in case of damage due to a technical issue, theft or non-existent real asset backing the tokenisation is only one example of such investor risk involved". Hence, due emphasis on suitable disclosures, due diligence requirements and grievance redressal mechanisms is necessitated for upholding the interests of investors.

Question 4.a.1

What are the key investor protection concerns in a digital token market? Are they different from the investor protection concerns in the traditional securities market? If yes, please elaborate.

[33] OECD (2020), The Tokenisation of Assets and Potential Implications for Financial Markets, OECD Blockchain Policy Series, https://www.oecd-ilibrary.org/finance-and-investment/the-tokenisation-of-assets-and-potential-implications-for-financial-markets_83493d34-en

Question 4.a.2

What are the key investor education/ awareness concerns in a digital token market? Are they different from the investor education/ awareness concerns in the traditional securities market? If yes, please elaborate.

Question 4.a.3

What are the key disclosures to be made by market infrastructure institutions and market participants in the digital token market for ensuring investor protection and awareness? Are they different from the disclosures being made in the traditional securities market? If yes, please elaborate.

Question 4.a.4

What are the key due diligence requirements to be imposed on market participants in the digital token market for ensuring investor protection and awareness? Are they different from the due diligence requirements on the market participants in the traditional securities market? If yes, please elaborate.

Question 4.a.5

What are the suitable avenues for grievance redressal that may be provided to investors in a digital token market? Are they different from the grievance redressal mechanisms in the traditional securities market? If yes, please elaborate.

Question 4.a.6

Are there any other suitable measures for furthering the cause of investor protection and awareness in the digital token market? If yes, please elaborate.

b. Developing industry-wide best practices and standards: In a nascent industry such as the tokenization space, it is important that adoption of best practices and standard-setting be undertaken at the industry level. This can reduce the compliance burden on the entities, accelerate the pace of innovation and ensure orderly development of the digital token market. IFSCA believes that the task of evolving a code of advertising and code of conduct/ code of ethics is best left to the industry.

Question 4.b.1

Do you agree that industry-level associations and bodies are well suited to develop best practices and common standards for the participants in the digital token market? Please give reasons supporting your opinion.

Question 4.b.2

Do you agree that market participants in the digital token market are well suited to evolve a Code of Advertising/ Code of Marketing for themselves? Please give reasons supporting your opinion.

Question 4.b.3

Do you agree that market participants in the digital token market are well suited to evolve a Code of Conduct/ Code of Ethics for themselves? Please give reasons supporting your opinion.

Question 4.b.4

Are self-regulatory organizations or industry-level associations well suited for enforcing the best practices and common standards evolved for market participants in the digital asset domain? Please give reasons supporting your opinion.

c. Reducing the compliance burden for market participants: Given that the tokenization space is fast-evolving and constantly experimenting, there is a need for light-touch regulation and regulatory dispensations, for fostering innovation and reducing the compliance burden for the market participants. In this regard, disclosure-based regime and sandbox approach may be suitably employed.

Question 4.c.1

What are the suitable avenues for imposing a disclosure-based regime on the market infrastructure institutions and market participants in the digital token market? Please elaborate.

Question 4.c.2

Do you agree that sandbox approach is useful for lowering the compliance burden and fostering innovation in the digital token market? Please give reasons supporting your opinion.

Question 4.c.3

What are other possible measures that may be adopted for lowering the compliance burden on the market infrastructure institutions and market participants in the digital token market? Please elaborate.

Question 4.c.4

What are other possible measures that may be adopted for fostering innovation in the digital token market? Please elaborate.

Annexure I: Consolidated list of questions

Question Set 1: Definition and some key characteristics of Digital Tokens		
Question No.	Question	Reference
Question 1.1a.1	What are the classes of real-world assets that may be considered for tokenization?	Page 11
Question 1.1a.2	What are the characteristics of a given real world asset class, which can potentially determine the level of market acceptance, liquidity, and suitability for tokenization of the asset class?	Page 12
Question 1.1a.3	For each of the given real world asset classes, what are the key legal and regulatory challenges that need to be addressed prior to enabling tokenization of the same?	Page 12
Question 1.1b.1	What are the possible legal structures that may be employed for the safety, upkeep and maintenance of real-world assets, by third-party service providers, for the benefit of token holders/ investors?	Page 12
Question 1.1b.2	What are the key obligations and responsibilities that may be imposed on the third-party service providers, providing custody and maintenance services for real-world assets underlying digital tokens?	Page 13
Question 1.1c.1	What are the possible legal structures that may be employed for ensuring legal recognition to changes in the ownership/ beneficial interest of the real-world asset, as a consequence of successfully executed trades in tokens of the underlying real-world asset?	Page 13

Question 1.1d.1	What are the possible safeguards/ measures that may be mandated for ensuring that investors/ token holders are able to exit their investment (by way of cash settlement) or redeem their tokens (by way of change in ownership of underlying real-world asset), without significant loss of time or detrimental impact to the value of their holdings?	Page 14
Question 1.2.1	What are the possible types of rights that digital tokens may be allowed to represent? What factors may determine whether a given right can be tokenized, effectively traded and ultimately enforced, in a safe and reliable manner?	Page 15
Question 1.2.2	What are the possible mechanisms for ensuring that the rights represented by digital tokens are transferred in an efficient and reliable manner, as and when the trades in the digital tokens occur?	Page 15
Question 1.2.3	What are the appropriate disclosures that need to be made to potential investors/ token holders, pertaining to the rights represented by digital tokens?	Page 15
Question 1.2.4	Should the ownership of digital tokens entitle the token holders to rights to participate in the decisions pertaining to the underlying real-world asset (such as administration or sale of the asset, de-tokenization of the asset/ extinguishing of the tokens etc.)? If yes, what are such decisions which are relevant to the token holders, and what mechanisms can be employed to give effect to such decisions?	Page 15

Question 1.3.1	Should the ownership form of digital tokens be restricted to registered form, to bearer form, or shall encompass both the types? What are the factors influencing the suitability of a given form of ownership to the digital tokens of a particular type/ given real-world asset class?	Page 16
Question 1.3.2	What are the different advantages and disadvantages of recognizing a particular form of token ownership? What are risks associated to each of the forms of ownership?	Page 17
Question 1.3.3	What are the kinds of benefits and entitlements, which may need to be disbursed to the investors/ token holders, basis ownership records? What are the advantages and disadvantages of a particular form of ownership in this regard?	Page 17
Question Set 2: Evolving appropriate mechanisms for Issuance, Custody, Trading, Clearing and Settlement of Digital Tokens		
Question No.	Question	Reference
Question 2.1.1	Do you agree that issuance of digital tokens should be a regulated activity? Give reasons in favour of your opinion.	Page 19
Question 2.1.2	What is the nature of interaction/ relationship between the owner of an underlying asset (who wishes to engage an Issuer for issuance of tokens against a real-world asset) and the Issuer? Is there a requirement to regulate this relationship?	Page 19
Question 2.1.3	What are the appropriate regulatory requirements that may be imposed on the Issuer of digital tokens, in order to ensure that genuine assets are tokenized by legitimate owners of the underlying real-world asset?	Page 19

Question 2.2.1	Do you agree that provision of custody services for digital tokens should be a regulated activity? Give reasons in favour of your opinion.	Page 20
Question 2.2.2	Should custody be restricted to self-custody, to regulated custody service providers, or be permitted in both formats? What are the risks associated with each of these forms of custody?	Page 20
Question 2.2.3	What are the appropriate regulatory requirements that may be imposed on the custody service provider?	Page 21
Question 2.3.1	What comprises the market infrastructure for a digital asset market? Does it differ from the market infrastructure in the traditional securities market? If yes, please elaborate.	Page 21
Question 2.3.2	What are the key functions of market infrastructure in a digital asset market? Does it differ from the key functions of market infrastructure in the traditional securities market? If yes, please elaborate.	Page 22
Question 2.3.3	What are the key regulatory requirements that need to be imposed on market infrastructure institutions in a digital token market? Does it differ from the regulatory requirements imposed on market infrastructure institutions in the traditional securities market? If yes, please elaborate.	Page 22
Question 2.3.4	What are the various market participants involved in a digital asset market? Are they different from the market participants in the traditional securities market? If yes, please elaborate.	Page 22

Question 2.3.5	What are the key functions of market participants in a digital token market for real-world assets? Are they different from the functions of respective market participants in the traditional securities market? If yes, please elaborate.	Page 22
Question 2.3.6	What are the key regulatory requirements that need to be imposed on market participants in a digital token market for real-world assets? Are they different from the regulatory requirements imposed on respective market participants in the traditional securities market? If yes, please elaborate.	Page 23
Question 2.3.7	What are the various factors which determine the level of public trust and investor confidence in a market?	Page 23
Question 2.3.8	Should market infrastructure be categorised into Distributed Ledger Technology (DLT) based and non-DLT based categories? Is there any other manner of categorising the market infrastructure for the purposes of differentiated regulatory treatment? If yes, please elaborate on the same.	Page 24
Question 2.3.9	Do you agree with the view that Distributed Ledger Technology (DLT) based market infrastructure should be accorded differentiated regulatory treatment as compared to non-DLT based market infrastructure? What are relevant reasons for such a differentiation?	Page 24
Question 2.3.10	What are the characteristics/ features of Distributed Ledger Technology (DLT), which warrant a differentiated regulatory treatment of market infrastructure? What are the associated	Page 25

	limitations and risks that need to be addressed in this regard?	
Question 2.3.11a.1	In the case of Distributed Ledger Technology (DLT) based market infrastructure, is there a need to redefine the processes of clearing and settlement? If yes, please elaborate.	Page 25
Question 2.3.11a.2	What are the inherent risks and limitations of automatic clearing and settlement of trades in a Distributed Ledger Technology (DLT) based market infrastructure?	Page 26
Question 2.3.11a.3	What are the major hurdles to ensuring legal and regulatory certainty to transactions effected by smart contracts on Distributed Ledger Technology (DLT) based market infrastructure?	Page 26
Question 2.3.11b.1	In the case of Distributed Ledger Technology (DLT) based market infrastructure, is there a need to redefine the processes of issuance and custody? If yes, please elaborate.	Page 26
Question 2.3.11b.2	What are the inherent risks and limitations of issuance and custody of digital tokens on a Distributed Ledger Technology (DLT) based market infrastructure?	Page 27
Question 2.3.11c.1	What are the various market participants involved in a Distributed Ledger Technology (DLT) based digital token market for real-world assets? Are they different from the market participants in a non-DLT based digital token market? If yes, please elaborate.	Page 28
Question 2.3.11c.2	What are the key functions of market participants involved in a Distributed Ledger Technology (DLT) based digital token market for real-world assets?	Page 28

	Are they different from the functions of respective market participants in a non-DLT based digital token market? If yes, please elaborate.	
Question 2.3.11c.3	What are the key regulatory requirements that need to be imposed on market participants in a Distributed Ledger Technology (DLT) based digital token market for real-world assets? Are they different from the regulatory requirements imposed on respective market participants in a non-DLT based digital token market? If yes, please elaborate.	Page 28
Question 2.3.11d.1	What are the characteristics of a Distributed Ledger that have a significant bearing on their suitability for market infrastructure?	Page 29
Question 2.3.11d.2	Do you agree with the view that certain characteristics of Distributed Ledgers impact the form and magnitude of risks they pose, when employed in a digital token market? What are the relevant characteristics of Distributed Ledgers and their respective risks which need regulatory consideration?	Page 29
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Question 3.a.3	What are the possible conflicts of interest for various market participants in the digital token market? What possible regulatory measures may be imposed on the market participants to address the same?	Page 31
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Question 3.b.2	What are the possible regulatory requirements that may be imposed on market infrastructure institutions and market participants, so as to adequately limit technology risks?	Page 32
Question 3.b.3	Do you agree that use of Distributed Ledger Technology (DLT) and Smart Contracts by market infrastructure institutions and market participants changes the form and magnitude of technology risks posed to the digital token market? If yes, please elaborate.	Page 33
Question 3.b.4	What are the possible regulatory requirements that may be imposed on market infrastructure institutions and market participants using	Page 33

	Distributed Ledger Technology (DLT) and Smart Contracts, so as to adequately address the technology risks arising from the same?	
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Question 3.c.2	What are the possible regulatory requirements that may be imposed on market infrastructure institutions and market participants, so as to adequately limit cyber risks?	Page 34
Question 3.c.3	Do you agree that the use of Distributed Ledger Technology (DLT) and Smart Contracts by market infrastructure institutions and market participants changes the form and magnitude of cyber risks posed to the digital token market? If yes, please elaborate.	Page 34
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Question 3.d.2	What are the possible regulatory requirements that may be imposed on market infrastructure institutions and market participants, so as to adequately limit Money Laundering/ Terrorist Financing (ML/TF) risks?	Page 35
Question 3.d.3	Do you agree that the use of Distributed Ledger Technology (DLT) and Smart Contracts by market infrastructure institutions and market participants changes the form and magnitude of Money Laundering/ Terrorist Financing (ML/TF) risks posed by the digital token market? If yes, please elaborate.	Page 36
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Question 4.a.6	Are there any other suitable measures for furthering the cause of investor protection and awareness in the digital token market? If yes, please elaborate.	Page 40
Question 4.b.1	Do you agree that industry-level associations and bodies are well suited to develop best practices and common standards for the participants in the digital token market? Please give reasons supporting your opinion.	Page 40
Question 4.b.2	Do you agree that market participants in the digital token market are well suited to evolve a Code of Advertising/ Code of Marketing for themselves? Please give reasons supporting your opinion.	Page 40

Question 4.b.3	Do you agree that market participants in the digital token market are well suited to evolve a Code of Conduct/ Code of Ethics for themselves? Please give reasons supporting your opinion.	Page 41
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Question 4.c.4	What are other possible measures that may be adopted for fostering innovation in the digital token market? Please elaborate.	Page 42