



**IOSCO – Policy Recommendations for Decentralized  
Finance (DeFi) – *Consultation Report***

**Adan's response**

---

## EXECUTIVE SUMMARY

*In septembre 2023, the International Organisation of Securities Commissions (IOSCO) has published a [consultative report](#) on the regulatory treatment of decentralised finance, building on initial work published in March 2022.*

The report includes 9 specific policy recommendations for securities regulators to take into consideration when setting down rules for the sector – in what is considered a first attempt of its kind among international standard setters. Among others, these include:

- Applying “same activity, same risk, same rules” approach to regulating DeFi products, services and activities – which in turn requires ample understanding of the sector and the technology by competent authorities.
- Ensuring proper accountability – this includes competent authorities identifying the natural persons or entities part of a DeFi arrangement that could be subject to its regulatory framework.
- Striving for regulatory convergence on DeFi – by ensuring that regulators use and apply existing or new frameworks in line with IOSCO standards.
- Assessing potential conflict of interests – by requiring providers of DeFi products and other responsible persons to identify and manage them, with regulators being equipped with the possibility to legally separate or unbundle certain activities or functions.
- Identifying and addressing material risks of DeFi products and services – particularly those related to their operation and technology such as the security of DeFi protocols or the concentration of critical service providers and other participants within DeFi.
- Introducing clear and accurate disclosure requirements – largely due to the inherent complexity and opaqueness of DeFi products, services and activities. This includes information on the business arrangements, operations, governance, risks, conflicts of interest, and financial condition of the provider in question.
- Enforcing to the largest extent possible applicable laws – with regulators having sufficient power and capabilities to enforce applicable regulatory, supervisory and oversight requirements, including authorization and licensing requirements, and the ability to undertake inspections or examinations, as appropriate and consistent with their respective mandates.
- Promoting cross-border cooperation and information between regulators – due to the inherent global nature of DeFi products, services and activities. This includes allowing regulators to provide broad assistance in enforcement investigations and related proceedings and, as appropriate, the authorization and supervision of regulated DeFi market participants.

- Assessing interconnectedness between DeFi, broader crypto-asset market and traditional financial markets – with a particular focus on risks relating to investor protection and market integrity.

From an EU perspective, fully decentralised crypto-asset services without any intermediary are out of the scope of the Markets in Crypto-Assets (MiCA) regulation – leaving significant room for diverging interpretation by regulators, creating some level of legal uncertainty. As such, these recommendations by IOSCO will feed into the thinking of the European Commission (EC), who is already expected to review MiCA and the issue of DeFi by end-2024/early 2025.

Adan thanks IOSCO for submitting its draft recommendations on decentralised finance to all industry stakeholders. Adan hereby submits a set of elements in response, representing the voice of Web3 players, with the objective that a proportionate framework adapted to the paradigm shift proposed by DeFi will be adopted at a worldwide level.

## CONSULTATION RESPONSE

### Q1 – Do you agree with the Recommendations and guidance in this Report? Are there others that should be included?

The table below covers our comments on the recommendations submitted for consultation by the IOSCO.

Reference	Comments
<p>Recommandation 1 “Analyze DeFi Products, Services, Arrangements, and Activities to Assess Regulatory Responses”</p>	<p>Adan agrees with the need for national regulators to dedicate resources to the analyze and study of DeFi products, services, arrangements, and activities. In jurisdictions where national regulators have started to do so, such as France, we note that the development of innovative projects is bolstered by their ability to engage with specialized teams within the regulatory agencies.</p> <p>Applying the principle “same activity, same risk, same regulatory outcome” is indeed the correct way for national regulators to analyze specific DeFi arrangements that are active in their jurisdiction. However, we want to emphasize the fact that this assessment should be made on a case-by-case basis. While certain DeFi arrangements provide services that seem alike to traditional financial services, we consider that, in most cases, the characteristics of DeFi products and services are materially different from the services that are regulated under the existing regulation.</p> <p>In the IOSCO consultation report, we note that there is an underlying assumption that, in most cases, DeFi arrangements “mimic traditional finance,” and therefore can already be regulated under the existing regulation of financial products and services. We strongly differ from that point of view. Traditional finance is inherently characterized by both intermediation and asymmetry of information. Those characteristics justify the implementation of regulatory frameworks that aim at protecting investors, since their inability to access directly the underlying financial infrastructure forces them to use the services of financial intermediaries. Such is not the case for DeFi, where direct interaction with the infrastructure itself (i.e. the protocol) is possible for all users.</p>

<p>Recommandation 2 “Identify Responsible Persons”</p>	<p>Through various publications and answers to consultations (see for example, <a href="#">“DeFi: 50 shades of decentralisation”</a>), Adan underlined that decentralisation is both a spectrum and a process:</p> <ul style="list-style-type: none"> <li>• a spectrum since the actual decentralization of a DeFi project can vary based on various elements, such as the role of the governance and the upgradability of the smart contracts, and sorting DeFi projects based on their decentralization level can be complicated; and</li> <li>• a process since many DeFi projects will start to operate in a rather centralized way, but will seek to increase their decentralization level as the project becomes more mature. The final goal of certain DeFi projects (such as MakerDAO) is indeed to become as decentralized as possible.</li> </ul> <p>At Adan, we consider that the criteria used in the consultation report to determine who has control or sufficient influence over a particular DeFi arrangement are relevant.</p> <p>However, since they are based on the initial analysis of the FATF in its 2021 guidance, national regulators should implement these criteria in a way that is not excessively intrusive. We note that the goals of the AML legislation – which guide the analysis of the FATF – and those of the financial regulation are not the same. While combating money laundering and terrorism financing require the implementation of dedicated tools, including investigative methods, we consider that financial regulators should refrain from that kind of approach and prioritize a way to identify Responsible Persons that doesn’t endanger the privacy of individuals, considering the importance of anonymity for many participants.</p> <p>In addition, when trying to identify Responsible Persons, we think that national regulators should also take into account the possibility that some DeFi projects can be actually decentralized, and refrain from designating as Responsible Persons individuals or entities that do not operationally control the DeFi arrangement.</p> <p>For example, in the case of a DeFi arrangement that (i) is based on smart contracts that are immutable and not upgradable by any address with administrative rights, and (ii) has not implemented governance mechanisms, we consider that designating as Responsible Persons the founders or</p>
--	--

	<p>developers of the project, the holders of governance tokens and/or voters, and/or any person that “profits through fees paid by users of the protocol” would be unfair.</p> <p>While we understand that this might limit the ability of national regulators to apply the relevant rules, we urge them to consider that possibility. It is clear to us that some DeFi arrangements are not effectively “controlled” by anyone: they were created and deployed by identifiable persons, but these persons may not have any ability to control the protocol after its deployment. In that case, considering certain participants as Responsible Persons and requiring them to comply with the relevant regulation is not advisable, since these participants will not be able, in practice, to apply such regulation.</p>
<p>Recommendation 3 <i>“Achieve Common Standards of Regulatory Outcomes”</i></p>	<p>The consultation report’s recommends national regulators to “seek to achieve regulatory outcomes for investor and customer protection and market integrity that are the same as, or consistent with, those that are required in traditional financial markets.” While some DeFi arrangements may justify a regulatory treatment that is similar to that of traditional finance, we consider that most DeFi projects are materially different from traditional finance and should not be treated in the same way. Applying the same goals and methods as those used for traditional finance may not be relevant for those DeFi projects.</p> <p>Indeed, the issue of investor protection should be treated differently since the investors in traditional finance and the users of DeFi arrangements are not the same. While investors in traditional finance theoretically include the entire population (whether they invest directly or indirectly, through mutual funds or pension funds), the use of DeFi by individuals remains very limited. The overwhelming majority of individuals using DeFi products are sophisticated investors, since in any case the access to DeFi protocols requires the use of complex technological tools.</p> <p>Similarly, the risk for market integrity and stability seems very limited.</p> <p>Additionally, the lists included of potential regulatory qualifications included in Recommendation 3 seems overly broad. While such assessment would need to be made by national regulators based on their own regulation, there is a broad</p>

	<p>consensus among market participants that at least some of the main DeFi verticals remain outside of the scope of existing regulations.</p> <p>We warn national regulators against the temptation to use an excessively flexible understanding of their regulatory qualifications to reach the conclusion that most DeFi services are already covered by the existing regulation. Indeed, doing so would subject DeFi arrangements to a set of regulatory obligations that has not been made for them, and with which they cannot comply without completely overhauling their models.</p> <p>Barring the obvious case of DeFi arrangements that openly mimic traditional financial services (for which the application of existing rules is commendable), our position is that a tailor-made regulation of DeFi activities must be developed and implemented. Such regulation could take into account the many specificities of DeFi arrangements and facilitate their compliance with newly established rules, rather than forcing them to comply with rules that were made for traditional intermediaries.</p>
<p>Recommandation 4 “Require Identification and Addressing of Conflicts of Interest”</p>	<p>Adan agrees with the consultation report's observation that the apparent transparency of DeFi arrangements may hide conflicts of interests between market participants.</p> <p>However, we do not believe that implementing a comprehensive set of rules dedicated to conflicts of interest is a priority, considering the proclaimed goals of the IOSCO initiative (i.e. investor protection and market integrity).</p> <p>As we outlined above, determining who are the actual Responsible Persons in relation with a DeFi arrangement can be complicated, and national regulators may be tempted to designate as Responsible Persons individuals or entities who do not operationally control the protocol. With that in mind, applying to Responsible Persons a duty to identify, manage and mitigate conflicts of interest may be excessive in many cases.</p> <p>In addition, regarding the conflicts of interest “that do not directly involve the providers but have an adverse impact on their users/investors”, we think that the implementation of conflicts of interest rules would be excessive. For example, while we fully share the focus of the consultation report on MEV, we consider it excessive and impracticable to “hold a provider of a DeFi product or service responsible</p>

	<p>for identifying and, to the extent practicable, managing and mitigating the impact of MEV strategies.” MEV may indeed amount to market manipulation or other abusive behavior, in certain cases. But in the overwhelming majority of cases, DeFi arrangements are themselves victims of these behaviors and cannot prevent them. In these cases, the duty to comply with relevant rules should fall upon the users of the protocols, and more specifically the traders that engage in MEV-based strategies.</p>
<p>Recommandation 5 “Require Identification and Addressing of Material Risks, Including Operational and Technology Risks”</p>	<p>Overall, Adan shares the general assessment that a provider of DeFi services should be responsible for identifying, managing, and mitigating risks, including operational and technology risks.</p> <p>However, various elements presented in the guidance of Recommendation 5 seem questionable:</p> <ul style="list-style-type: none"> <li>• Imposing fit &amp; proper standards to DeFi arrangements as a way to identify, manage, and mitigate risks (as mentioned in page 33) does not seem relevant. Fit &amp; proper standards ensure that the managers and shareholders of regulated entities are experienced and reputable, but we do not see how such assessment can improve the ability to anticipate and manage these new categories of risk.</li> <li>• With respect to oracles and bridges, imposing an obligation for DeFi arrangements to apply procedures based on the regulation of outsourcing seems excessive (see page 34). The reliance of DeFi protocols on bridges and oracles is indeed a risk, but we consider that a tailor-made approach would be more relevant to mitigate them.</li> </ul>
<p>Recommandation 6 “Require Clear, Accurate and Comprehensive Disclosures”</p>	<p>Adan shares the consultation report’s overall analysis on the need for adequate and accurate disclosure by the operators of DeFi projects. We note that most significant DeFi projects already publish detailed documentation on the protocol itself, the governance, and the tokenomics.</p> <p>However, requiring such DeFi arrangements to publish prospectus-like documents for any crypto-asset involved in the product or service seems excessive. Protocols can involve many crypto-assets, and many protocols allow any market participant to “extend” the protocol to a new crypto-asset. (For</p>



	<p>example, creating a liquidity pool for a new crypto-asset on Uniswap does not require the prior authorization of the entity operating the Uniswap protocol – if there was even one.)</p> <p>Similarly, requiring DeFi arrangements to identify key persons seems excessive. While this may limit the effective application of the regulation, the DeFi sector values anonymity, and forbidding anonymous individuals from contributing to DeFi projects would not be compatible with the sector’s ethos.</p>
<p>Recommandation 7 “Enforce Applicable Laws”</p>	<p>Adan encourages national regulators to engage with the actors of the DeFi sector and develop a tailor-made regulatory framework, rather than applying directly the regulation of traditional finance, and especially in relation with enforcement actions.</p> <p>Even though the services and products provided by DeFi arrangements may seem similar to those of traditional finance, it is clear for us that the regulation of traditional finance cannot be transposed to DeFi without a thorough review and adaptation. While regulation often claims to be “technology neutral,” it is obviously not the case for that of traditional finance: the applicable rules have been drafted for (and often by) traditional actors, and incorporate operational and technological modalities of their business models in the regulation itself.</p> <p>In addition, we strongly disagree with the consultation report’s assumption that “DeFi market participants may seek to structure their arrangements and activities to avoid regulation [...]” Decentralization is a goal in itself, but avoiding the regulation is not, even if it was the consequence of building decentralized projects. There are many examples of DeFi projects which build open infrastructure that are akin to “common goods” and serve as the base layer for other projects. We encourage national regulators to further engage with DeFi actors that openly work towards decentralization.</p> <p>Otherwise, we indeed encourage national regulators to obtain the appropriate tools and resources to better analyze and understand DeFi. As we pointed out in several of our past contributions, the use of analytical tools that were created by and for the DeFi industry can help regulators further their knowledge and understanding of that sector.</p>

<p>Recommandation 8 “Promote Cross-Border Cooperation and Information Sharing”</p>	<p>In Adan’s report “<a href="#"><i>Regulating DeFi in Europe: issues for consideration</i></a>”, we underlined that one of the main challenges that DeFi poses to regulators is its inherent transnational nature. Protocols only exist on blockchains, and blockchains are stored and accessible globally. Therefore, determining which regulatory authority or legal system has jurisdiction over a DeFi project can be complicated. As the consultation report notes, the governance and management of a DeFi project can be distributed (even though it is not decentralized).</p> <p>We encourage the national regulators to carefully consider that transnational nature before starting to enforce their national rules to market participants. If the fact that a DeFi protocol is accessible by users that reside in a certain country means that this country’s laws apply to that protocol, then each DeFi protocol could theoretically be required to comply simultaneously with dozens of national frameworks. It is indeed impossible for a single protocol to comply simultaneously with several sets of comparable rules.</p> <p>To better apply a jurisdiction’s rules to a DeFi project, other kind of approaches should be envisaged, such as regulating commercial intermediaries that give access to a DeFi protocol while marketing their services in a specific jurisdiction. (As noted in the consultation report, such intermediaries would likely be CASPs, and may more easily comply with the financial regulation.)</p>
<p>Recommandation 9 “Understand and Assess Interconnections Among the DeFi Market, the Broader Crypto-Asset Market, and Traditional Financial Markets”</p>	<p>Adan agrees that national regulators should understand and assess risks relating to the exposure to DeFi of traditional financial market participants, although this exposure appears to be quite limited.</p>

---

**Q2 – Do you agree with the description of DeFi products, services, arrangements, and activities described in this Report? If not, please provide details. Are there others that have not been described? If so, please provide details.**

Adan agrees with the description of the main products available on the decentralised finance market as set out on page 6 and with the more granular mapping of the main use cases available on the market in Annex G. At this stage, it seems that this is the first time that an international body has presented the ecosystem with such precision, which we encourage to continue to take into account the economic and governance particularities of the thousands of protocols publicly available. Regarding the terminology used, two points of attention seem necessary :

The notion of « service » often refers to a commercial activity offered by a company, which does not always reflect the reality of Decentralised Finance protocols, since users of a DeFi protocol are generally initiating economic transfers of crypto-assets on their own via a self-hosted wallet (although various persons are involved in the prior process to code the protocol and finance its development). In this sense, the term "service" should be used very carefully when considering DeFi arrangements, which can not be qualified as "crypto-asset services" (as described in the IOSCO recommendations on crypto-assets or in the MiCA regulation).

The desire to apply the "same activity, same risk, same regulation" principle to all DeFi-related activities - as indicated in recommendation 1 - may sometimes seem inappropriate, given that this market sometimes offers - in particular the protocols known as "the state-less governance-less protocol immutable protocols" - a new paradigm which would not fit in well with these principles.

Indeed, traditional finance has led to regulation based on the supervision of providers, distributors and infrastructures. This regulation is generally sector-specific. Despite the diversity of players, their regulation is generally based on the same type of rules, such as prudential standards, organisational requirements and rules of conduct.

These types of requirements could perfectly well apply to the DeFi arrangement, but without formally transposing the same rules. In Europe, the regulatory framework applicable to crypto-assets in Europe - with the Market in Crypto-Assets Regulation - was largely inspired by the main principles of banking and financial sector regulation, and did not apply the same regulations to DeFi as to TradFi because the same risks existed.

This is justified because decentralised finance and the services it offers cannot be approached in the same way as the crypto-asset services offered by CASPs/VASPs or investment firms.

---

**These are not the same activities.** Indeed, whereas the services offered by CASPs are entirely intermediated by platforms that hold their clients' funds, DeFi operates using a different methodology. It involves protocols hosted on one or more interfaces (i.e. front-ends) that users use without being considered as customers. These protocols are owned by a community (the holders of governance tokens who provide governance for the protocol).

**These are not the same risks, nor the same risk management.** While DeFi mitigates some of risks of traditional finance, it creates new ones, mainly technological. Thanks to integrated regulation, DeFi can detect (via the transparency of blockchain networks) and block crypto-asset theft and scam addresses, and it can also improve market integrity by preventing market abuse. The use of technology to offer a more protective DeFi market for users seems to have been well identified by IOSCO.

**Applying the same regulations does not make sense.** Decentralised finance requires a reconsideration of the traditionally accepted regulatory paradigm for centralised stakeholders. Regulatory initiatives should enable project developers to incorporate new compliance methods that take advantage of the opportunities offered by blockchain networks and their use cases.

As far as DeFi is concerned, IOSCO's recommendations could strengthen cooperation and regulatory observatory initiatives between the competent national authorities and the various people involved in the "Big Picture", both nationally and internationally, as decentralised finance is by nature a cross-border ecosystem that has no territorial footprint and as members of the community wish to strengthen dialogue with regulators. This cooperation will enable the implementation of a suitable and effective framework for decentralised financial services while providing real guarantees for financial stability. Regulation of DeFi without prior coordination will be at best ineffective and at worst destructive for countries that take the initiative of introducing legislation on this ecosystem. We could therefore envisage setting up experimental regimes that would establish a lighter, time-limited framework before envisaging - if DeFi experiences a meteoric rise in the years to come - a framework more suited to a market that has reached maturity.

**Q3 – Do you agree with the Report’s assessment of governance mechanisms and how they operate in DeFi? If not, please provide details.**

Adan agrees with IOSCO's approach suggesting that decentralised governance is a spectrum and cannot be seen as a binary notion. This spectrum can be trivially described, but not restricted to, four main stages :

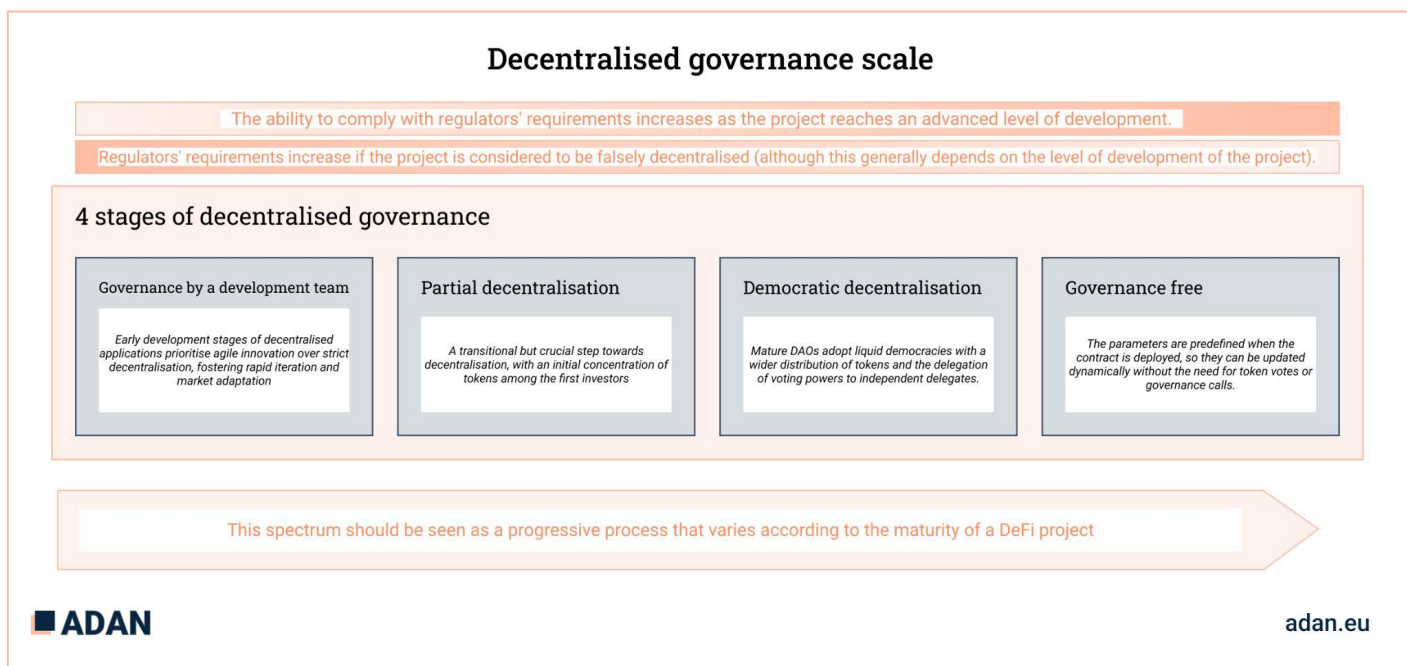


Table 1: Adan’s decentralised governance scale

**1. Governance by a development team**

Most decentralised applications begin their development at this stage. Here, the development team has almost total control over the project, with little or no control mechanisms. While this may seem counter-intuitive for a decentralised application, this stage allows for quick development and iteration. It gives the team the opportunity to build minimum viable products and to strive for market fit.

**2. Partial decentralisation**

As a decentralised application develops towards this stage, decentralisation begins to take shape, although it is still perfectible. This stage generally follows funding cycles, and the supply of tokens is concentrated among early investors. This stage is a delicate balance between maintaining efficiency while gradually introducing decentralisation. For a protocol that aims to be fully decentralised, it is not destined to be a long-term solution.

**3. Democratic decentralisation**

As a DAO matures, projects evolve towards liquid representative democracies. This stage can only be achieved if the supply of tokens is sufficiently distributed to dilute the influence of the restricted group of users envisaged in stage 2. The distribution of tokens often occurs through early investor exits, airdrops, liquidity mining and stake rewards (which therefore requires some implementation time). Another approach observed is the delegation of voting powers from the users mentioned in step 2 to independent delegates with increasing degrees of decision-making independence. These delegates now play a crucial role in the neutral governance of a protocol.

#### 4. Governance free

This stage represents the Holy Grail of decentralisation. It is extremely difficult to achieve and is best suited to fully mature projects or those focused on specific 'DeFi bricks'. As with a stateless society, the idea of reaching this stage without perfect code and execution is unrealistic. At the moment, only a few protocols can fit into this stage 4, while others are undergoing a degovernance transition.

#### Adan's position

In the context of a DeFi framework, the role of the regulator is to facilitate a healthy transition between the above-mentioned stages, by adapting its practices on a case-by-case basis but following an overall framework that is clear enough not to get lost in its regulatory approach. In this respect, the binary rationale (application of the recommendations for CASPs/non-application of the recommendations for CASPs) seems limited because the decentralisation of a protocol very often depends on the protocol structuring stage.

Given the growing importance of DAOs and to address the points raised in the report, it is essential to establish a well-defined legal framework to ensure the responsible growth of DAOs and their sustainability. This framework should include the following key elements:

- Limitation of liability: defining limits of liability for participants, protecting their personal assets and ensuring that they are not exposed to undue financial or legal risk
- Regulatory compliance: DAOs could comply with regulatory requirements for activities for which it could be held liable;
  - Proposal: IOSCO should invite national regulators to secure the legal framework for DAOs to avoid exposing token holders to liabilities that are not supposed to concern them.

Such a framework would support individual projects through the various stages of decentralisation and recognise that the move from one stage to another should not be forced and that one set of rules should apply directly rather than another.

IOSCO should then encourage regulators to implement a gradual process, characterised by a healthy dilution of power and control in order to reduce the illusion of decentralisation, rather than proposing rules that are potentially inappropriate for their business model (i.e. it seems that CASP rules are not suitable for a staking or lending protocol, for example).

At the same time, other elements central to access to a protocol are destined to be centralised and must be carefully managed to ensure the protection of users in the sector. This is particularly true of the front-ends that host these decentralised protocols and whose level of responsibility towards the user is central.

**4. Do you agree with the risks and issues around DeFi protocols identified in this Report? If not, please provide details. Are there others that have not been described? If so, please provide details. How can market participants help address these risks and/or issues, including through the use of technology? How would you suggest IOSCO members address these risks and/or issues?**

Adan agrees with most of the risks mentioned in the IOSCO report. Indeed, DeFi presents risks similar to those of traditional finance (liquidity, leverage, information asymmetry, etc.) and new risks generally linked to the potential default of the underlying smart contracts or problems in the governance protocol.

However, the Association would like to raise a number of considerations:

- **Regarding financial stability risks**, the risks that DeFi may pose to financial stability should be approached with parsimony. Indeed, as the FSB explained, DeFi could undermine financial stability depending on the growth scenario for this ecosystem in the future. Today, DeFi is still limited in terms of interconnection with traditional financial markets and continues to develop while maintaining a negligible capitalisation compared with traditional markets. Thus, DeFi's regulation through this risk requires constant monitoring by the competent bodies, but does not seem to justify any particular requirement at the level of the competent national authorities.
- **IOSCO assimilates "nascent stage of development" as a risk.** It does not appear that this can be considered a risk in itself, although a nascent stage of development can lead to exposure to the other risks mentioned in the same passage.

- Regarding Anti-money laundering and counter financing of terrorism risks (AML/CFT), while AML/CFT is an absolute necessity, the existence of proven cases of fraud through decentralised finance projects are still assimilated to hacks. Money laundering remains limited and terrorist operations have not yet been proven in the DeFi space.

In this respect, requiring DeFi projects to implement traditional AML/CFT systems (i.e. the same as CASPs) seems unnecessary for a several reasons:

- In order to enter or exit crypto-assets from a DeFi protocol, the user first acquires crypto-assets via a CASP, which already implements a traditional AML/CFT system (customer identification, verification of the origin of funds, freezing of assets, etc.).
- The user holds his crypto-assets on a self-hosted wallet which will be subject to the travel rule provided for in the FATF recommendations in the context of CASP/VASP activity, enabling an exchange of information with DeFi users.

**5. Do you agree with the description of data gaps and challenges in the Report? If not, please provide details. Are there others that have not been described? If so, please provide details. How can market participants address these data gaps and challenges, including through the use of technology? How would you suggest IOSCO members address data gaps and challenges?**

Regarding the data gaps and challenges highlighted in the IOSCO report on DeFi, Adan agrees on the necessity for regulators to address the various critical aspects related to data processing to ensure effective regulation and proper oversight of the DeFi ecosystem.

First of all, given that DeFi is based public blockchains, DeFi's information is accessible to all – and this is perfectly mentioned in the report. This accessibility can raise concerns about the quality and accuracy of the data available or the complexity of the data in the DeFi ecosystem, which often requires technical expertise to analyse.

It is therefore crucial to recognise that data accuracy is a fundamental element to ensure an adequate and appropriate market structuration. Requirements should therefore be put in place to ensure that the data used by market players is reliable and accurate, in order to minimise the operational risks arising from the use of inaccurate data.

To address these gaps and challenges, market participants need to demonstrate that they have the necessary data management arrangements in place. This involves putting in place robust processes, adequate resources and effective safeguards to ensure the reliability and availability of the data used.



If a market participant relies on a data provider, it is also crucial that the provider demonstrates a robust operational infrastructure, with well-defined processes, adequate resources and business continuity plans to ensure the reliability of the data provided.

It is therefore essential that regulatory considerations take into account the question of data origin. Some requirements could therefore apply to data providers, through guidelines, the implementation of compliance labels and the establishment of specific regulatory statutes, similar in purpose to those used on the financial markets. These measures would guarantee the reliability and transparency of the data used in the DeFi market, facilitating more effective regulatory oversight and better protection for market players.

**6. Do you agree with the application of IOSCO Standards to DeFi activities contained in this Report? Are there other examples of how IOSCO Standards can apply?**

Most of the elements needed to answer this question can be found in questions 1, 8 and 9.

**7. Is there any additional guidance that you would find relevant to help IOSCO members comply with these Recommendations? If so, please provide details.**

No.

**8. Given the importance of the application of IOSCO Standards to DeFi activities, are there technological innovations that allow regulators to support innovation in DeFi/blockchain technologies while at the same time addressing investor protection and market integrity risks? If so, please provide details.**

There are indeed many ways to use technological opportunities to limit the investor protection and market integrity risks mentioned in the IOSCO report and implement requirements in line with market practices.

**1. On financial crime**

To better identify responsables of these infringements, it would be relevant to invite the national authorities to (i) set up direct collaboration between the DeFi protocols and the CASPs to facilitate the implementation of the travel rule (in particular by working jointly on the use of digital identity tools using cryptographic solutions that protect privacy) and (ii) encourage more broadly the authorities to promote the technological specificities of DeFi in

the implementation of their regulatory framework through a case-by-case approach. For example, it is possible to set up blocking systems on the main frontends hosting DeFi protocols to restrict access to people involved in crimes.

## 2. On liquidity risk

Liquidity risk is not clearly mentioned in the section on risks (or at least not directly, although this section mentions the FSB report which addresses these risks) but many projects have incorporated policies for managing these risks which could provide inspiration for regulators.

DeFi protocols manage liquidity risk in a variety of ways to maintain the availability of assets and ensure the smooth running of the system. Here are some of the key methods used to manage liquidity risk in DeFi protocols:

- **Adjustable borrowing interest rate:** DeFi protocols adjust borrowing interest rates according to the use of funds. When funds are plentiful, interest rates are kept low to encourage borrowing, while when they are scarce, interest rates rise to encourage debt repayment and additional supply. This keeps the use of funds in balance and helps maintain the liquidity of the protocol.
- **Variable and stable interest rate models:** Some DeFi protocols offer variable and stable interest rate models. Variable interest rates move with usage, while stable interest rates remain constant until specific rebalancing conditions are met. This provides borrowers with a degree of interest rate predictability, although stable interest rates are generally higher than variable interest rates.
- **Monitoring and adjusting to market conditions:** DeFi protocols constantly monitor market conditions and adjust parameters accordingly to align with market yield opportunities. This ensures that interest rates remain competitive with other investment opportunities in the market, helping to attract borrowers and lenders.
- **Alternative liquidity sources:** Some DeFi protocols, such as Aave, create liquidity pools on third-party platforms such as Uniswap and Balancer. These liquidity pools offer alternative sources for users who wish to exchange their assets, even when the protocol's internal liquidity is limited. This helps to maintain the fluidity of transactions even in difficult liquidity conditions.

## 3. On flash loans

Flash loan attacks can be dangerous for smart contracts because they exploit the ability of contracts to borrow temporary funds without collateral, which can potentially cause significant damage. To guard against such attacks, the following measures can be taken, based on the information provided in the text:

- **Implement appropriate access control mechanisms:** Access control mechanisms, such as OpenZeppelin's Ownable library, can limit the critical functions that can be accessed, thereby reducing potential entry points for attackers.
- **Keep abreast of best security practices:** Regular monitoring of best security practices in the field of decentralised finance can help to keep abreast of the latest techniques and take appropriate preventive measures. facilitate the use of digital identity tools using cryptographic solutions that protect privacy.
- **Validate authorised addresses for use of flash loan features:** By verifying authorised addresses, access to flash loan features can be restricted, reducing the risk of fraudulent activity.
- **Carry out in-depth audits and tests of contracts:** In-depth third-party audits can identify potential vulnerabilities and help strengthen the security of smart contracts. In addition, comprehensive testing can help identify potential weaknesses in the code.
- **Use reliable and diverse oracles:** Using multiple oracles can help provide accurate and secure price information, while reducing the risks associated with price manipulation.

**9. Are there particular methods or mechanisms that regulators can use in evaluating DeFi products, services, arrangements, and activities, and other persons and entities involved with DeFi? If yes, please explain.**

Evaluating the products, services, agreements and activities of DeFi, as well as the other people and entities involved in DeFi, is crucial in determining whether or not a project falls within IOSCO's recommendations on DeFi or whether it falls within the more traditional framework of recommendations on crypto-assets.

In this respect, several tools exist to conduct detailed analyses of a project. These tools are varied and can provide market data (liquidity, volume, explanation of major market events, etc.), a map of the majority of projects (with their TVL, their main use case, and other basic information), information on the DAOs of various projects (treasury, top treasury tokens, main treasury chain, token holders amount, proposals and votes amount, etc.), a rating of specific projects or assets according to a formal methodology, etc.

Authorities should move closer to these tools. In Europe, for example, the European Commission launched a pilot project to develop, deploy and test a technological solution for embedded supervision of decentralised finance activity. However, these tools are not always sufficient to fully identify the people and entities involved in a protocol. On this point, the desire to identify the people involved in a project must not lead to abusive surveillance of users and project leaders, which would contravene existing fundamental legal principles.

---

**10. Do you find the interoperability between this report and the IOSCO CDA Report to be an effective overall framework? If not, please explain.**

First of all, Adan considers that the application of the IOSCO Objectives and Principles of Securities Regulation are not necessarily adapted to DeFi arrangements as the activities covered by these principles do not seem to perfectly match the reality of the DeFi market.

Regarding the interoperability between the IOSCO recommendations on DeFi and those on crypto-assets, we believe that there may be cases in which a company developing a DeFi protocol could also be subject to CASP requirements because of their business model. This is particularly the case for decentralised applications designed for institutional players. For example, in France, the Atlendis project has an IT development company and a regulated entity called 'ATLENDIS FLOW SAS' which recently obtained CASP registration by the AMF. This demonstrates that such interoperability is possible and makes sense.

However, as our table 1 shows, it seems that in the way interoperability is thought of, the less mature entities would be subject to more regulatory requirements due to their inferior decentralisation justified by their still nascent stage of maturity. Adan therefore draws IOSCO's attention to the issue that this illustration must be dealt with carefully by the regulatory authorities on a case-by-case basis to avoid any abuses in relation to smaller, high-potential players that are likely to decentralise quickly.

## About Adan

Adan brings together more than 200 professionals in France and Europe - new players and established companies - who develop innovation and use cases for the decentralized web in all areas of the economy on a daily basis. By removing the obstacles to their growth and competitiveness, Adan is working towards the emergence and influence of French and European champions in the service of our digital sovereignty. Adan promotes an appropriate, proportionate and catalytic framework for innovation, as well as a better understanding of new blockchain and Web3 technologies and their opportunities.

### Contact:

- Faustine Fleuret, President and CEO: [faustine.fleuret@adan.eu](mailto:faustine.fleuret@adan.eu)
- Mélodie Ambroise, Head of Strategy and Institutional Relations: [melodie.ambroise@adan.eu](mailto:melodie.ambroise@adan.eu)
- Hugo Bordet, Regulatory Affairs Manager: [hugo.bordet@adan.eu](mailto:hugo.bordet@adan.eu)

Website: [www.adan.eu](http://www.adan.eu)

LinkedIn: [@adaneu](https://www.linkedin.com/company/adaneu)

Twitter : [@adan\\_asso](https://twitter.com/adan_asso)

Mail: [contact@adan.eu](mailto:contact@adan.eu)

~