



Digital Finance Forum

Community Highlights

Wednesday 23 October 2024



Digital Finance Forum

Global Policy & Regulatory Updates

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The global policy and regulatory landscape for digital assets in 2023 saw more developments than any year prior. Given the continued rapid pace of innovation, 2024 has also seen many consultations and policy developments continue at pace. Notably, from the standard setters in the past couple months the following consultations and updates have been of note:

Bank of International Settlements (BiS)

The BIS published a [report](#) detailing a joint project with the Bank of England (BoE) that focuses on monitoring the backing of stablecoins. Project Pyxtrial would aim to provide analysis that could enhance the supervisory practices for stablecoins facilitate risk monitoring.

The BIS also released a [paper](#) considering the risks related to operations and security, governance, legal, compliance (including money laundering/financing of terrorism) and settlement finality related to banks that transact on permissionless blockchains or similar distributed ledger technologies (DLTs). The paper notes that new risk management strategies and safeguards may be required and while current practices for mitigating these risks remain in various stages of development, they feel that these practices have not been sufficiently tested under stress.

The BIS also released a [paper](#) about Artificial Intelligence (AI) and its impacts on the economy and central banks. The paper focuses on data availability, the role of central banks regarding monetary policy and financial stability, as well as how central banks themselves can use AI.

Related to this, the BIS also recently published a [speech](#) by Governor of the Bank of Canada, Tiff Macklem, on how AI will affect the global economy. Mr Macklem reflected on how AI and ongoing digitalisation will affect workers, consumers, the economy and inflation.

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Bank of International Settlements (BiS)

The BIS shared a [paper](#) on the financial stability implications of multifunction cryptoasset intermediaries (MICs). They noted that while most MICs have analogues in traditional finance, often in tradfi the services are not provided by the same entity or are provided only under significant restrictions or controls to prevent conflicts of interest and promote market integrity, investor protection and financial stability.

The BIS also published a [speech](#) from Dr Joachim Nagel, President of the Deutsche Bundesbank, on a digital euro. The speech covered benefits of CBDCs in digital payments and cross-border transactions.

The BIS also [released some of their research](#) related to quantum computing and the financial system. The paper explores the potential of quantum mechanics and its applications to the financial system, including the potential benefits as well as the main risks. It also discusses Project Leap, started by the BIS Innovation Hub, the Banque de France and Deutsche Bundesbank and aims to address potential risk related to quantum computing.

The Islamic Financial Services Board (IFSB)

has IFSB published the [Islamic Financial Services Industry \(IFSI\) Stability Report 2024](#). The report focuses on current market conditions, the landscape of crypto and digital assets, climate-related financial risks and considerations for Islamic financial institutions.

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International Monetary Fund (IMF)

The International Monetary Fund (IMF) released two papers on CBDCs. One [paper](#) explores data use and privacy protection for CBDCs including analysis on interoperability, financial inclusion, innovation, transparency & trust in central bank money. The second [paper](#) concentrated on the cyber resilience and analysed the cybersecurity issues implicit by specific CBDC design and technology choices as well as providing an overview of requirements and best practices that are optimal for the digital money ecosystem.

The IMF also [published](#) a blog based on Chapter 3 of the IMF's recent Global Financial Stability Report, on advances in AI and the implications for capital markets. It considers the impact of AI transformation and makes policy recommendations.

Organisation for Economic Co-operation and Development (OCED)

The Organisation for Economic Co-operation and Development (OCED) released a [paper](#) on the benefits and risks of AI, as well as assessing different regulatory approaches to AI in finance across 49 OECD and non-OECD jurisdictions.

OECD & Financial Stability Board (FSB)

The OECD & FSB have now [published](#) the findings published the key findings from their May 2024 roundtable. Findings highlight that AI presents potential efficiencies for supervision, risk modelling & Other areas alongside potential concerns relating to data protection, governance, privacy and ethics, as well as potential financial stability risks.

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Financial Stability Board (FSB)

The FSB published a [paper](#) on the Financial Stability Implications of Tokenisation. The report analyses recent developments in DLT-based tokenisation, including the potential uses of tokenised assets and their interaction with the traditional financial system. The report sets out the FSB's view that tokenisation could cause several financial stability vulnerabilities including liquidity and maturity mismatch; leverage; asset price and quality; interconnectedness; and operational fragilities. The report reviews the financial stability implications of these identified vulnerabilities and sets out considerations for the FSB and relevant standard-setting bodies.

International Organization of Securities Commissions (IOSCO)

IOSCO published its [final report](#) on investor education in crypto-assets. The report summarises the results of their survey which was circulated in autumn 2023 and focused on retail investor behaviour, demographics, and experiences with crypto-assets. The report highlights examples of regulatory changes and enforcement activity since December 2020, and proposes specific investor education messages that IOSCO members may wish to consider when delivering education regarding crypto-assets in their local jurisdictions.



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Regional – Key Takeaways

Wednesday 23 October 2024

United Arab Emirates



The ADGM proposed regulatory a framework for Fiat referenced tokens

The ADGM published a consultation paper on their Proposed Regulatory Framework for the Issuance of Fiat Referenced Tokens (e.g., stablecoins). This continues their enhancement of regulatory frameworks for digital assets and an encouragement for innovation and new financial products and services. GDF's MENA working group responded to this consultation [paper](#) and is in support of the outcomes noted. Read the full GDF response [here](#).

Passporting Regime Between VARA and the SCA

The Securities and Commodities Authority (SCA) signed a [cooperation agreement](#) with Dubai's Virtual Assets Regulatory Authority (VARA) to bolster the UAE's position as a leading global hub for virtual assets, in alignment with the 'The Principles of the 50' and the government's visionary aspirations to build the world's best and most dynamic economy. The two parties agreed that VASPs operating in/from Dubai, or wishing to service the emirate of Dubai require to obtain a license from VARA, and can be registered by default with the SCA to service the wider UAE.

UAE Exempts Crypto from Value Added Tax (VAT)

The United Arab Emirates has [announced](#) an exemption for crypto transactions from Value-Added Tax (VAT), a move that could boost the country's attractiveness as a crypto hub. By exempting crypto transactions from VAT, the UAE aims to foster innovation and growth in the digital asset sector, and boost their proactive approach to embracing digital finance and positioning itself as a leader in the global crypto market.

Qatar

QFC and QFCRA introduce new regulatory frameworks for digital assets

Qatar Financial Centre (QFC) Authority and Qatar Financial Centre Regulatory Authority (QFCRA) rolled out the new QFC Digital Assets Framework 2024 which is in line with the Qatar Central Bank's Third Financial Sector Strategy. The framework aims to establish comprehensive legal and regulatory foundation for digital assets within the QFC, addressing key areas such as tokenization, smart contracts, and digital asset custody. The package published today includes:

1. [Digital Asset Regulations](#)
2. [Investment Token Rules 2024](#)
3. [Revised Non-Regulated Activities Rules](#)
4. [User Guide](#)
5. [Guidelines](#)

Azerbaijan

Azerbaijan Explores Cryptocurrency Regulations

Azerbaijan is beginning to [explore](#) regulatory frameworks to support and govern its use. Economist Vugar Bayramov highlighted that the Central Bank's monetary policy includes exploring blockchain technology and virtual currency circulation.

Russia

Putin Legalizes Crypto Mining in Russia

Russian President Vladimir Putin has signed a law [legalizing](#) crypto mining, marking a significant shift in the country's stance on digital assets. The Central Bank of Russia is also pushing forward with the digital ruble, aiming for mass implementation by July 2025. While the law facilitates crypto mining, it also includes stringent anti-money laundering measures to mitigate associated risks.

China

China Expands AML Laws

China's Supreme People's Court and Supreme People's Procuratorate have [updated](#) the Anti-Money Laundering (AML) laws to include virtual assets. China aims to maintain tight control over financial transactions and prevent the circumvention of capital controls through digital currencies.

Hong Kong

Hong Kong Launches Project Ensemble Sandbox

The HKMA have also [launched](#) the Project Ensemble Sandbox to test tokenisation use cases and enables industry to explore the application of tokenisation in real-life business scenarios.

Hong Kong Monetary Authority (HKMA) review of virtual banks

The HKMA also released a [report](#) reviewing Virtual Banks on desired outcomes, market acceptance, performance, challenges and next steps.

Hong Kong Enhances Regulatory Framework for Stablecoins

The HKMA [announced](#) plans to develop legislation related to stablecoins within the following 18 months.

Hong Kong

HKMA GenAI Sandbox

HKMA issued a [circular](#) to invite authorised institutions to participate in the Generative Artificial Intelligence Sandbox announced in collaboration with the Hong Kong Cyberport Management Company Limited. The Sandbox aims to provide a risk-controlled environment for AIs to develop, test, and pilot innovative artificial intelligence-based solutions in real world banking scenarios.

India

India Adjusts Regulatory Approach to Crypto

The Indian government does not plan to regulate the sale and purchase of cryptocurrencies. The [approach](#) is expected to foster innovation while ensuring consumer protection.

Japan

Japan's FSA has expressed hesitation in approving cryptocurrency ETFs

The Japanese Financial Services Agency (FSA) is concerned about the potential risks and volatility associated with crypto exchange-traded funds (ETFs). The FSA is concerned about the potential risks and volatility associated with crypto ETFs. Despite growing interest from investors, the regulator is taking a cautious approach to ensure market stability. This [stance](#) may delay the introduction of crypto ETFs in Japan.

Thailand

Thailand SEC launched its digital asset regulatory sandbox

The [Securities and Exchange Commission](#) (SEC), Thailand launched its digital asset regulatory sandbox which covers 6 types of digital asset services: (1) Exchanges; (2) Brokers; (3) Traders; (4) Fund Managers; (5) Consultants; (6) Custody Providers. To qualify, businesses must contribute to the innovative development of digital assets in the Thai capital market or participate in a pilot project with a financial market regulator. Applicants must clearly define the scope of operations and receive outcomes within 60 days.

Cambodia

Cambodia Launches Tourist DLT Payment App

The DLT-based payment [application](#) aims to enhance the tourism sector's efficiency and security, allowing tourists to make seamless transactions using digital currency, reducing reliance on cash and improving transaction transparency.

Indonesia

Indonesia Proposes New Tax Rules

Indonesia is preparing new [tax rules](#) to reclassify crypto as digital financial assets rather than commodities. The new rules are expected by early 2025.

Australia

Australia Reviewing AML Regulations

Australia is now [reviewing its AML regulations](#) with an extension of the definition of designated services from the virtual assets sector, new VA definition, application of the TR and obligation for VASPs to take steps to identify self hosted wallets and report transactions to unverified self hosted wallets to Austrac.

CBDC & Digital Money in Australia Paper

The Reserve Bank of Australia (RBA) and the Treasury have released a [report](#) on central bank digital currency (CBDC), concluding that there is currently no strong case for a retail CBDC in Australia. The report does however suggest that a wholesale CBDC could potentially enhance the efficiency of Australia's financial markets when combined with other forms of digital money.

Zimbabwe

Zimbabwe Begins to Develop Crypto Regulation

Zimbabwe is [developing](#) its first set of cryptocurrency regulations, signaling a significant shift in its approach to digital assets. The new regulation aims to address key issues such as consumer protection, anti-money laundering, and the prevention of illicit activities.

Dominican Republic

Dominican Republic Issues Crypto Warning

The Dominican Republic's top financial regulator has issued a warning about the risks associated with cryptocurrency investments, emphasizing the lack of regulatory oversight. This advisory aims to protect consumers from potential fraud and financial losses, as the crypto market remains highly volatile and speculative.

El Salvador

New Crypto Regulations Proposed

El Salvador's President Nayib Bukele has unveiled a proposal to amend the Digital Assets Emission Law. This new initiative aims to enhance the country's cryptocurrency framework by expanding the role of the National Digital Assets Commission (CNAD).

Uruguay

New Crypto Law in Uruguay

Uruguay passed a new law for crypto regulation, aiming to provide legal clarity and foster innovation in the digital asset space. The legislation sets out guidelines for the operation of crypto exchanges and service providers, ensuring consumer protection and market integrity.

Brazil

Solana ETF Gets Greenlight

Brazil's Securities and Exchange Commission (CVM) has approved the launch of a Solana-based exchange-traded fund (ETF). The Solana ETF aims to provide investors with exposure to the Solana blockchain.

Brazil

LATAM E-commerce Giant Mercado Libre Launches MELI Dollar Stablecoin in Brazil

Mercado Libre, a leading e-commerce platform in Latin America, has [launched](#) the MELI Dollar, a stablecoin pegged to the US dollar, in Brazil. This stablecoin aims to facilitate seamless transactions within Mercado Libre's vast network, enhancing financial inclusion and reducing currency volatility risks. The introduction of MELI Dollar reflects the increasing adoption of stablecoins by major corporations to streamline cross-border commerce and payments. Mercado Libre's initiative signals a significant step towards integrating stablecoins into mainstream economic activities, potentially influencing other e-commerce platforms.

United States

U.S. Securities and Exchange Commission (SEC)

The Securities and Exchange Commission (SEC) released a [press release](#) regarding the charging of a Crypto-Focused Advisory Firm Galois Capital for Custody Failures. The firm also misled investors about its redemption practices.

The House Financial Services Committee

Chairman McHenry of the House Financial Services Committee announced the Digital Assets, Financial Technology and Inclusion Subcommittee [hearing](#) entitled, "Decoding DeFi: Breaking Down the Future for Decentralized Finance." The hearing took place on September 10, 2024 at 10:00 a.m. (ET). Additional information regarding the hearing - including the livestream, committee memo, relevant legislation and witness list - will be updated soon following the hearing taking place.

United States

IRS Shares New Crypto Tax Form

The IRS has released a new tax [form](#) specifically for cryptocurrency transactions and is inviting input from crypto businesses and tax professionals to refine the form and address any concerns. The form aims to simplify the reporting process for crypto investors and ensure accurate tax compliance. This initiative reflects the IRS's ongoing efforts to adapt to the evolving crypto landscape and improve regulatory clarity.

US money redefined to include crypto and digital

The US Department of the Treasury [amended](#) their definition of money as part of their semiannual regulatory agenda.

US SEC Puts in Place new Requirements for Reporting on ETFs and Mutual Funds

The SEC [approved](#) new rule changes on Wednesday requiring mutual funds and exchange-traded funds to report portfolio holdings on a monthly basis rather than four times a year, a move officials said would bring greater transparency to investors. The requirements would also apply to crypto ETFs.

FINRA Flags Potential Crypto Pitfalls

FINRA published an [article](#) and follow-up [update](#) flagging potential problem areas related to members' dealings in crypto-assets as part of a wider update on the supervision of firms. The update does not introduce new regulatory requirements or alter existing interpretations, but it could provide some guidance for firms implementing their compliance procedures.

United Kingdom



Financial Conduct Authority (FCA)

The FCA [DRCF AI and Digital Hub](#) (the 'Hub') is a new informal advice service setup by the ICO, CMA, Ofcom and FCA, designed to support innovators with their cross-regulatory queries. This service provides a unique opportunity to help bring innovations to market responsibly, faster, and with greater confidence. The Hub will run for a one-year pilot period ending in March 2025.

Law Commission & High Court Rulings

The Law Commission published a [report and draft bill](#) clarifying that digital assets can be legally treated as personal property. The draft bill serves to reduce regulatory uncertainty and provide guidelines for cases such as insolvency/bankruptcy of digital asset holders.

Separately, the High Court [also ruled](#) that a digital Stablecoin constitutes personal property.

Bank of England & FCA MOU

The Bank of England (Bank) and Financial Conduct Authority (FCA) have signed a memorandum of understanding ([MoU](#)) to facilitate effective supervision and policy making by the authorities. The MoU allows for the exchange of information between the authorities and promotes efficiency by minimizing duplication of regulatory activities regarding FMIs. The Bank and FCA are also agreeing a separate MoU setting out how they intend to co-operate with each other in relation to the operation and supervision of the Digital Securities Sandbox (DSS). This DSS MoU will be published before supervision in the DSS commences.

European Union

ESMA Delivers Opinion to Support the Convergent Application of MiCA

The European Securities and Markets Authority (ESMA) published an [opinion](#) and [press release](#) addressing the risks presented by global crypto firms seeking authorization under the Markets in Crypto Assets (MiCA) Regulation while keeping a substantial part of their group activities outside the EU regulatory scope. The key recommendations include the assessment of business structures of global firms to ensure obligations established in MiCA are met and a case-by-case assessment outlining more specific requirements.

ESMA Working paper on smart contracts

ESMA also released a [paper](#) evaluating the technological complexities and risks surrounding smart contracts as they pertain to trends and changes in Defi that need to be monitored.

ECB published a paper exploring the unattractiveness of stablecoin deposits for banks

A recent [paper](#) by the European Central Bank (ECB) examines why stablecoin deposits may not be attractive for traditional banks.

- The paper highlights concerns about the stability and regulatory compliance of stablecoins;
- it also discusses the potential impact of stablecoins on the banking sector's liquidity and financial stability.

The ECB's findings could influence future regulatory approaches to stablecoins in the European Union

European Union

European Banking Authority (EBA)

The European Banking Authority released a [paper](#) on the optimal design of stablecoin frameworks as they pertain to investors, consumers and regulators. There is a particular focus on transparency standards and requirements and the incentives and disincentives they create. This focus intends to show how to mitigate the risk of mass withdrawals of stablecoins so that they can fulfil their purpose of maintaining a value pegged to a stable fiat currency or commodity.

Norway: Recent Research Finds Crypto Tax Evasion is 'Pervasive'

Tom Meling, Magne Mostad and Vestre released a [paper](#) just published by the National Bureau for Economic Research. The paper estimates that 88 per cent of all Norwegian crypto holders fail to declare their crypto assets to the tax authorities.



Digital Finance Forum

Feature Presentation - Navigating
Risks in the Staking and Block-Building
Ecosystem



XReg.Consulting



Block-building, staking, and **Pre-chain Risk** Considerations - and **Solutions**

GDF Digital Finance Forum - October 23, 20224

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Navigating Risks in the Staking and Block-Building Ecosystem

July 2024

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Agenda

- 01** Background: Why publish this research?

- 02** Block-building and Staking - Primer

- 03** State of Staking Regulation

- 04** Staking - what are the risks?

- 05** Staking and block building risk mitigation

Why publish this paper?

Is an institutional validator staking ETH at risk of unintentionally facilitating illicit financial activity?

And many other looming questions as institutions engage with the PoS block-building ecosystem

Navigating Risks in the Staking and Block-Building Ecosystem

July 2024

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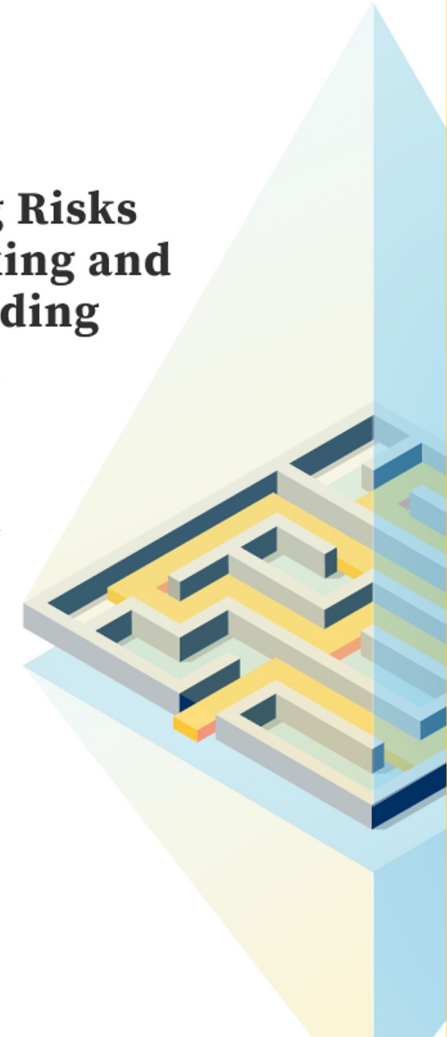
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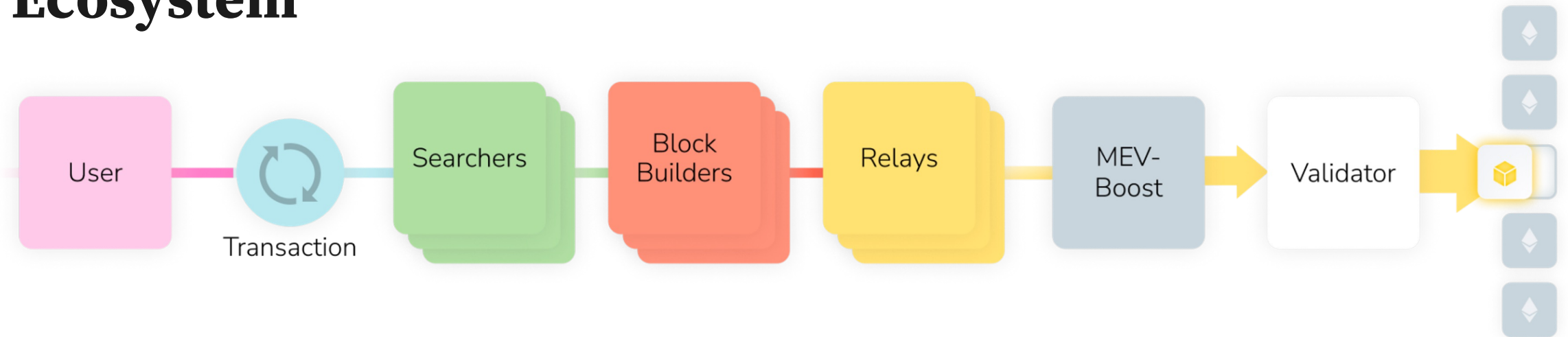


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The Staking Ecosystem

The value-chain of outsourced block-building on Ethereum via MEV-Boost



● Searchers

use bots and algorithms to identify transactions that could yield MEV. They create **bundles** — ordered sets of transactions

● Block Builders

creates most profitable block from public transactions, private transactions, and bundles received from searchers

● Relays

gather blocks received from Builders and **share the most profitable blocks** with Validators

● MEV Boost

enables validators to **source blocks** from a marketplace of builders

○ Validators

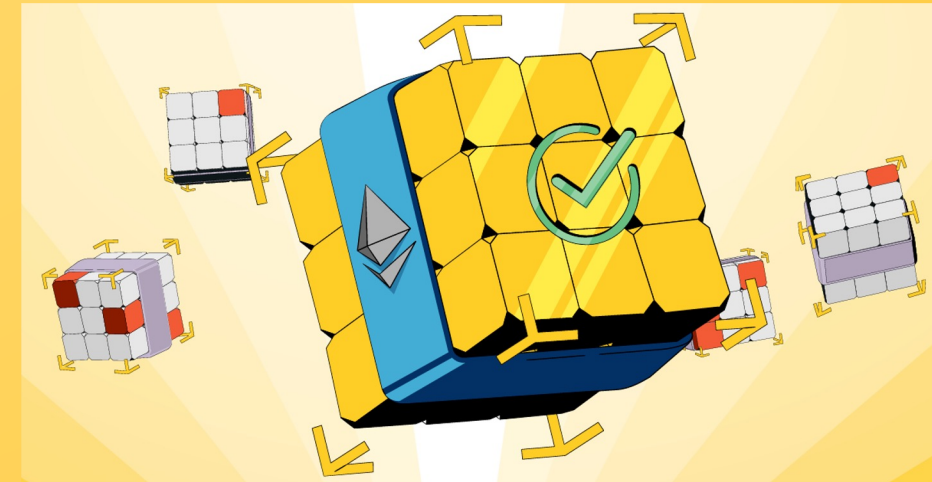
propose new blocks to the network



Staking - the different flavours

- Technical staking - Participants stake their own ETH
- Staking-as-a-service (Staas) - Service providers manage technical aspects of staking for clients
- Pooled/delegated staking - Stake is delegated to a third party, non-custodial in traditional sense, but slashing risk is present
- Centralised/custodial staking - Assets are entrusted to a third party who stake funds on behalf of clients
- Liquid staking - Staked assets are tokenised

Generally - more centralised = higher regulatory risk



Staking - state of regulation and enforcement

- All regulators are thinking about these questions - led by IOSCO
- Focus on custodied and intermediated solutions
- Staking specific regimes in Dubai, Bahamas, Switzerland
- Incoming consultations/policy papers in the UK, Europe, and other juris.
- Noteworthy enforcement action: DoJ's first pre-chain action in May 2024



 CoinDesk

What the DOJ's First MEV Lawsuit Means for Ethereum

The US Department of Justice charged two brothers with orchestrating an attack on Ethereum trading bots, charging them with conspiracy to commit wire fraud.

May 15, 2024

 CryptoSlate

Why staking was removed from Ethereum ETFs to get SEC approval

The removal of staking from Ethereum ETFs has been driven by regulatory pressures from the US Securities and Exchange Commission (SEC).

May 24, 2024

Validators' Illicit Finance Risk

The block building process exposes Institutional Validators to two types of illicit finance risk:

1

Legacy Compliance Risks

AML, CFT, Sanctions, CSAM risk

2

Native Onchain Threats

Hacks, exploits and toxic MEV



Risks & Challenges in Block-building

The block-building process exposes Validators to risks that can be considered within the framework of:

1

What's in your blocks?

What are the sources of your rewards?

2

Who builds your blocks?

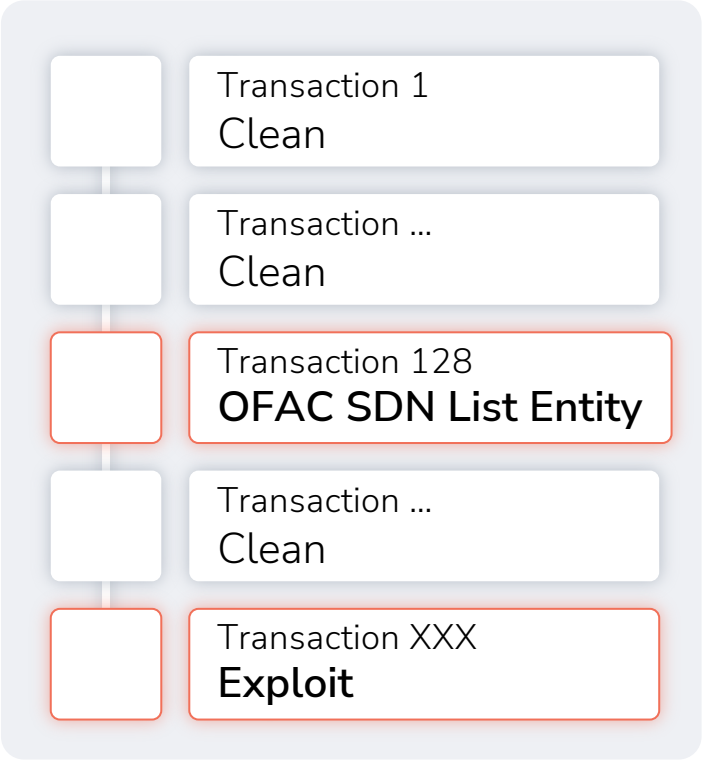
From whom do you directly receive your rewards?



What is in your Block?

What are the sources of your rewards?

Validated Block:



0x209b101599da870c...	Execute	18264075	2023-10-02 16:35:11	0x7a65Ca...81017ffb	Uniswap: Universal Ro...	0 ETH	0.00644309
0x13bd9d6f261b11f21...	Transfer	18264075	2023-10-02 16:35:11	0x58aF1C...0C376DE7	0xDB11ab...D4026Cc5	1.1501 ETH	0.00056503
0x072a753cc01932ac...	Bid	18264075	2023-10-02 16:35:11	0xE81cCA...39e9FcA5	0x352EF1...C843E092	0.024 ETH	0.00142537
0x0b67828d202546cc...	Transfer	18264075	2023-10-02 16:35:11	karamjamen.eth	0x8211BA...D10eb2b3	0.3 ETH	0.00056503
0x3e8922e0b232e815...	Approve	18264075	2023-10-02 16:35:11	0x3Aa913...cFecCFE2	Tether: USD Stablecoin	0 ETH	0.00130499
0xf54669f1e5b470621...	Transfer	18264075	2023-10-02 16:35:11	0xCD531A...9531Ca7b	Circle: USDC Token	0 ETH	0.00176574
0x55c2e863309b4fe17...	Transfer	18264075	2023-10-02 16:35:11	0xCc0C47...Eea8570a	0xD55192...351873b4	14.570277211 ETH	0.00056503
0x5706774c5cf21ced3...	Execute	18264075	2023-10-02 16:35:11	0x884B2f...d10cc9FE	Uniswap: Universal Ro...	0.5 ETH	0.00351773
0xa050a7c6a955f90e1...	Transfer	18264075	2023-10-02 16:35:11	0xc305FB...55df3d66	0xC59f23...58d6341f	295.584119936 ETH	0.00056503
0xc084f339641111635...	Transfer	18264075	2023-10-02 16:35:11	0x580ca3...677ce195	0x16fAf3...c3F7B13D	0.008898579 ETH	0.00056503
0x5c849caf1035fcd5b...	Transfer	18264075	2023-10-02 16:35:11	0xF74cad...45246129	Uniswap Protocol: UNI...	0 ETH	0.0009506
0x5ef5b35bd5849d928...	Transfer	18264075	2023-10-02 16:35:11	0x29f5ba...2E078176	Orbiter Finance: Bridge 2	0.0062 ETH	0.00056503
0x56ae169a3c394fc32...	Transfer	18264075	2023-10-02 16:35:11	0xd9AdeC...44eDAc82	0x96a901...0b7886b5	0.056617098 ETH	0.00056503
0x8f1a145a945f71928...	Transfer	18264075	2023-10-02 16:35:11	0x8A2a98...864386F7	Tether: USD Stablecoin	0 ETH	0.00124063

Block Height:	18264075
Status:	Finalized
Timestamp:	63 days 21 hrs ago (Oct-02-2023 04:35:11 PM +UTC)
Proposed On:	Block proposed on slot 7453374, epoch 232917
Transactions:	150 transactions and 78 contract internal transactions in this block
Withdrawals:	16 withdrawals in this block
Fee Recipient:	rsync-builder in 12 secs
Block Reward:	0.048316724291930341 ETH (0 + 0.420796343785561789 - 0.372479619493631448)
Total Difficulty:	58,750,003,716,598,352,816,469
Size:	106,924 bytes
Gas Used:	13,895,094(46.32%) -7% Gas Target
Gas Limit:	30,000,000
Base Fee Per Gas:	0.000000026806556292 ETH (26.806556292 Gwei)
Burnt Fees:	0.372479619493631448 ETH
Extra Data:	rsync-builder.xyz (Hex:0x7273796e632d6275696c6465722e78797a)
Ether Price:	\$1,662.80 / ETH



Who Builds Your Blocks?

From whom do you directly receive your rewards?

Validators receive block rewards directly from Builders.

Limited visibility into Builder's policies, business practices, and in most cases, identity.

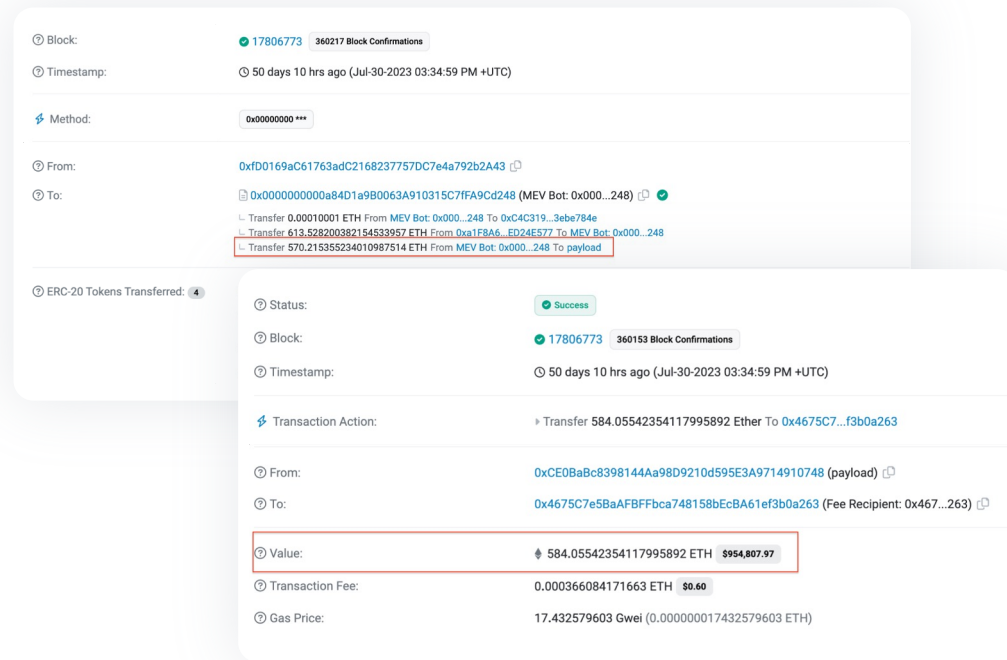
Validators only have the ability to dictate which Relay(s) they connect to, not which Builders.

Block Height:	16847782 < >
Status:	Unfinalized
Timestamp:	41 secs ago (Mar-17-2023 01:19:11 PM +UTC)
Proposed On:	Block proposed on slot 6019594, epoch 188112
Transactions:	231 transactions and 88 contract internal transactions in this block
Fee Recipient:	Flashbots: Builder in 12 secs
Block Reward:	0.084891595817971063 ETH (0 + 0.543154861224454775 - 0.458263265406483712)
Total Difficulty:	58,750,003,716,598,352,816,469
Size:	74,593 bytes

A total of 231 transactions found							
				First	<	Page 1 of 5	> Last
Txn Hash	Method	Block	Date Time (UTC)	From	To	Value	Txn Fee
0xd6d10b53fc2bca8f7...	Transfer	16847782	2023-03-17 13:19:11	Flashbots: Builder	Fee Recipient: 0xe68.....	0.09362228 ETH	0.00048...
0x1ca012cd8430fb7f8...	Transfer	16847782	2023-03-17 13:19:11	< soool.eth	0x9761a6...dC39C9F8	0.12 ETH	0.00048...
0x5a57da0ab4c32452...	Transfer	16847782	2023-03-17 13:19:11	0xe57d03...E75Bc55d	Shiba Inu: SHIB Token	0 ETH	0.001091
0x6a3427aa9bd767d3f...	Transfer	16847782	2023-03-17 13:19:11	0x82BD14...06060f8f	Liquity LUSD: LUSD Tok...	0 ETH	0.00109...
0xf12add3db3755888...	Transfer	16847782	2023-03-17 13:19:11	0x1198e9...75A5ec98	Decentraland: MANA T...	0 ETH	0.00125...
0x50bb5f7b6d4e0faf2...	Cancel	16847782	2023-03-17 13:19:11	< cryptojoe.eth	Seaport 1.4	0 ETH	0.00088...



CASE STUDY



- On July 30th, 2023 several Curve liquidity pools were exploited, causing the incorrect calculation of balances in token pairs that were designed to trade 1:1.
- Inaccurate token prices created artificial arbitrage opportunities that MEV bots competed to capture.
- One MEV searcher paid 570 ETH (~\$1M) to a Validator to be the first to trade on these imbalances.

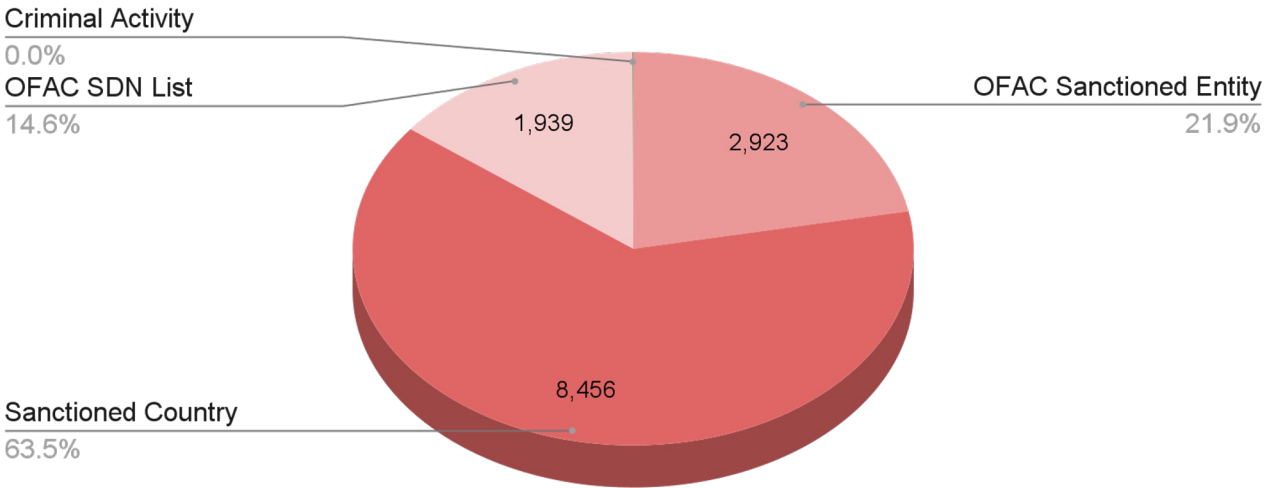
Solidus Staking Guard helps to determine that the large MEV payment was made to profit from the Curve exploit, constituting illicit enrichment.

Risky Blocks

Month to Date

General

- **150,474** - total number of blocks over time period
- **11,337** - number of unique risky blocks
- **7.53%** - percentage of risky blocks



Category

	Count	Percentage
OFAC Sanctioned Entity	2,923	21.94%
Sanctioned Country [Exchange / Financial Service]	8,456	63.46%
OFAC SDN List	1,939	14.55%
SOLIDUS LABS CSAM	0	0.00%





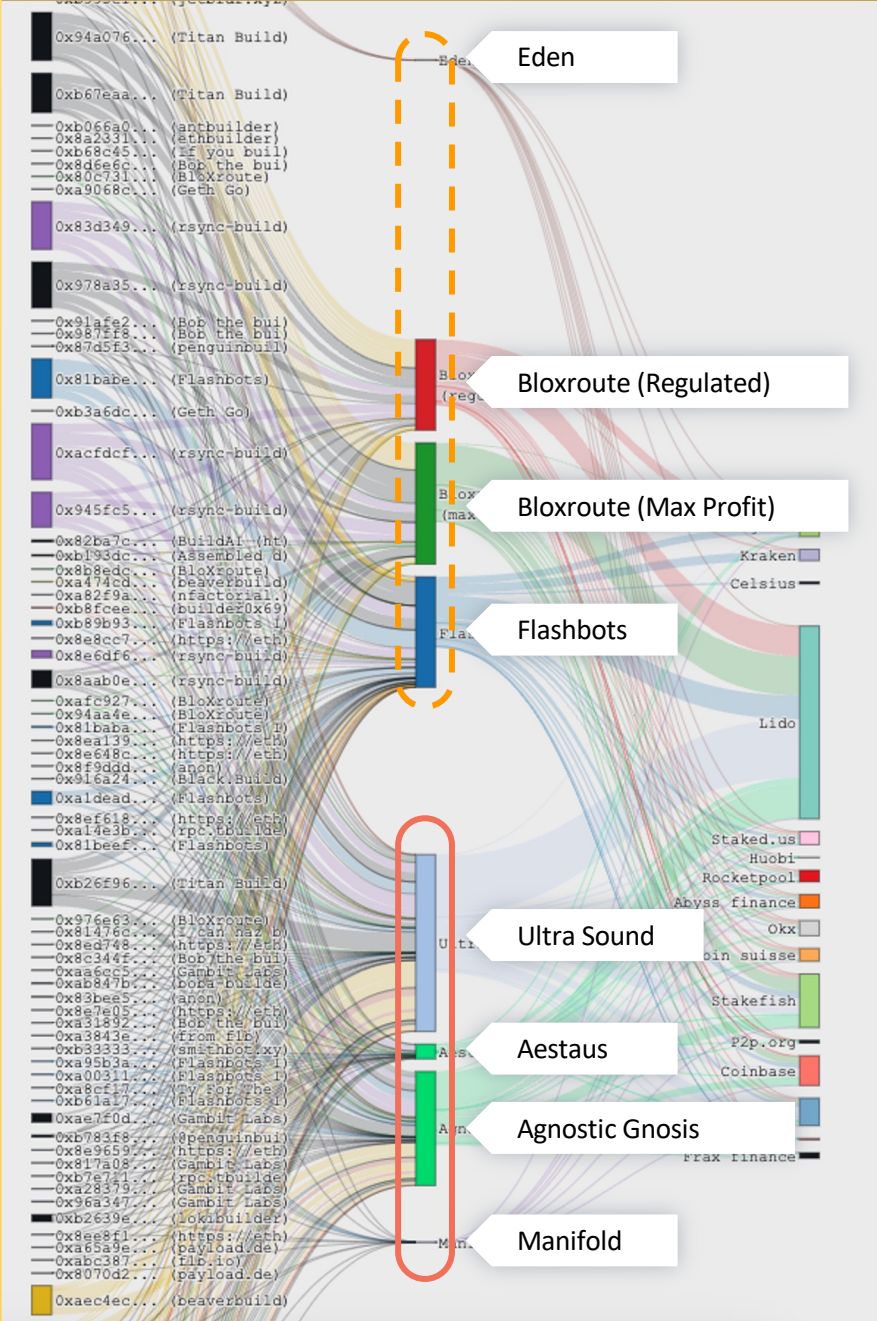
Risk Mitigation in the Market Today

Limited to excluding transactions involving direct addresses on the OFAC SDN list.

Only four out of the nine existing Relays aim to prevent inclusion of these transactions, while the remaining Relays do not seek to mitigate this risk.



-  Filters out OFAC SDN list (Direct addresses only)
-  No filtering



CASE STUDY - *NOBITEX*

- Large spike in flagged transactions June 14-16 from our average of ~300.
- June 14 = 2,502 flagged txns
- June 15 = 14,172 flagged txns
- June 16 = 14,540 flagged txns
- Majority of flagged txns involved two addresses
 - 0x6bD...A19
 - 0xf46...9C1
- Both addresses belong to Nobitex Exchange in Iran

TAKEAWAY

These addresses are not on the OFAC SDN list and would not have been filtered out by any block-building solution in the market

Total Nobitex Stats over those 3 days:

*Txns: **29,892***

*Unique Blocks: **6,707***

31.05% of blocks on ethereum from June 14 - 16 contained at least one transaction directly related to Nobitex Exchange



Case Study: *COMPLIANT RELAY*

Example Block: OFAC SDN Address

Block Number: **18,303,349**

Builder: **Blockbeider**

Relay: **BloXroute Regulated**

Transaction Hash:

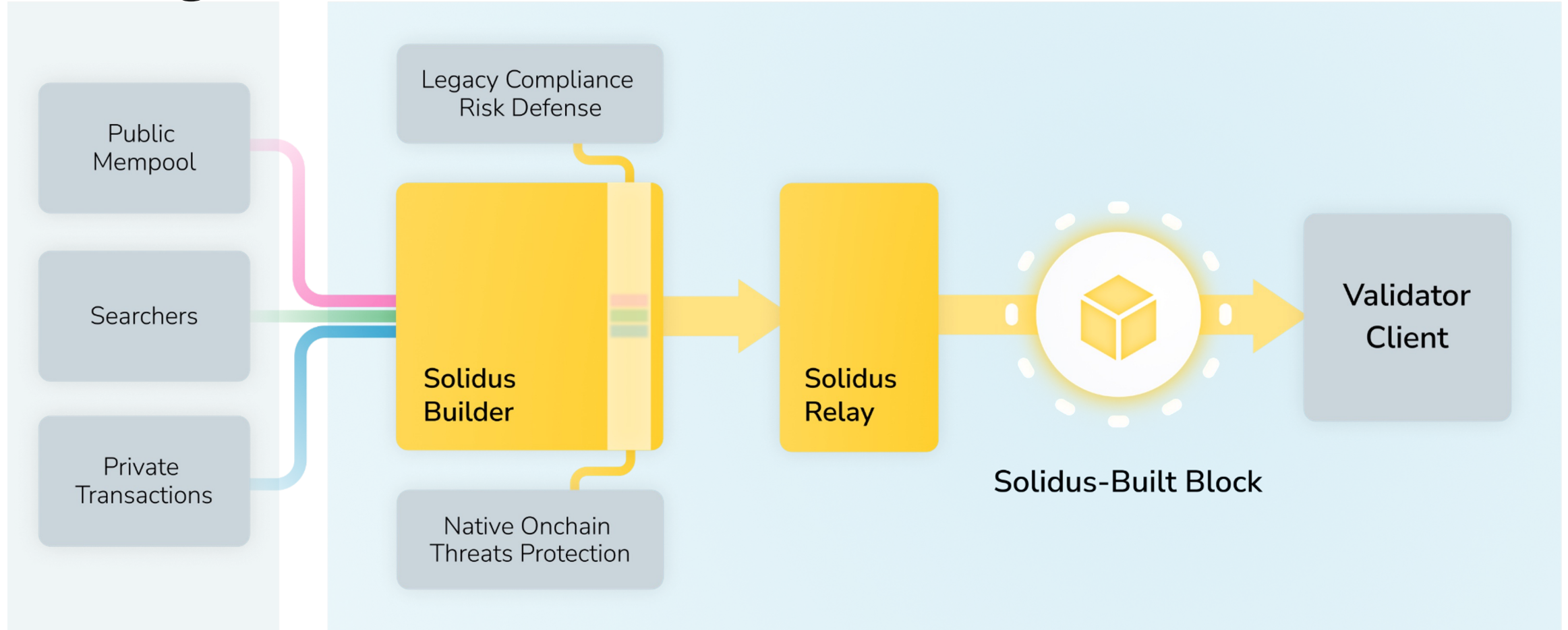
0xdc7b6b12d7921278ed0a360466dccc65b9e650fc4e27d5434b9e4630d35877fb

OFAC SDN Address:

0xd90e2f925DA726b50C4Ed8D0Fb90Ad053324F31b (Tornado Cash)

Transaction Hash:	0xdc7b6b12d7921278ed0a360466dccc65b9e650fc4e27d5434b9e4630d35877fb
Status:	Success
Block:	18303349 477997 Block Confirmations
Timestamp:	66 days 21 hrs ago (Oct-08-2023 04:22:23 AM +UTC) Confirmed within 10 secs
Transaction Action:	Call Deposit Function by 0x667534...4D0Ed665 on Tornado.Cash: Router
From:	0x667534a7994FeDB1e22de14F224E0A314D0Ed665
To:	0xd90e2f925DA726b50C4Ed8D0Fb90Ad053324F31b (Tornado.Cash: Router) Transfer 10 ETH From Tornado.Cash: Router To Tornado.Cash: 10 ETH
Value:	10 ETH \$22,540.11
Transaction Fee:	0.01022846 ETH \$23.06
Gas Price:	11 Gwei (0.000000011 ETH)

Staking Guard



Solidus Labs Staking Guard Solution

An opt-in solution, Staking Guard directly provides compliant, yet competitive, blocks to Validators, establishing the necessary safeguards for long-term institutional participation while also acting as a net-benefit to the ecosystem.



Solidus Builder & Solidus Relay

- Insulated MEV-Boost Relay that accepts block proposals solely from the Solidus Builder
- Bespoke Builder enhanced with Solidus' protection logic



Protection Logic

- Robust, high-performance, low-latency filtering engine
- Trailblazing onchain threats remediation without censorship to protect against illicit enrichment



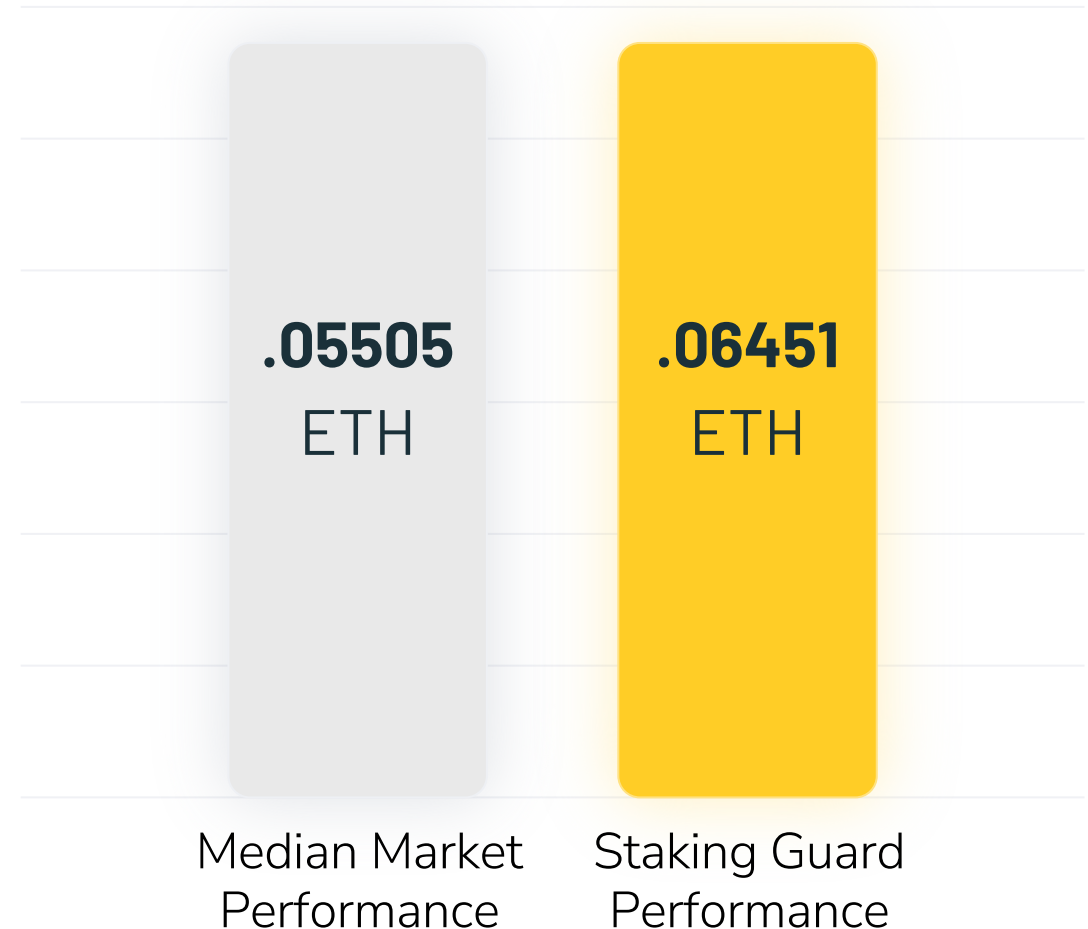
Reporting Tools

- Reports displaying all transactions included within your proposed blocks
- Monthly risk summary, broken down by category



Staking Guard's Performance: In Line With The Market

Performance Metrics:
Median Block Reward
957 Blocks≈



Excluding Legacy Illicit Finance Risk Has No Material Impact on Rewards

0.00%

Rewards Variance - Max Reward
(Solidus 279.01204 <> Titan 279.01204)

0.55%

Rewards Variance - Average Reward
(Solidus 0.07601 <> Titan 0.07643)



Big Philosophical Questions

- The big base layer neutrality questions
- Is choosing not to include a transaction censorship?
- How can the industry get ahead of debilitating regulation?
- Comparisons to the internet, the millenium act and what can this mean in a web3 world?
- Tools are one thing - what about standards?

Navigating Risks in the Staking and Block-Building Ecosystem

July 2024

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Digital Finance Forum

Feature Presentation - Preparing for the
Implementation of MiCA Sustainability
Disclosures



MiCA sustainability compliance for CASPs

An introduction

Kirsteen Harrison, Sustainability Director
Website: zumo.tech

zumo[®]

Agenda

- What is the MiCA sustainability disclosure requirement for CASPs?
- Who has to comply?
- When does the requirement go into effect?
- How should requirements be addressed?

The what

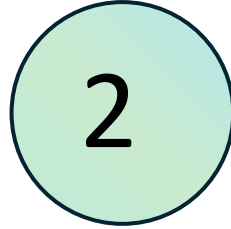
MiCA Title V, Chapter 2: Obligations for all crypto-asset service providers

Art. 66 (5) 'Crypto-asset service providers shall make publicly available, in a prominent place on their website, information related to the principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism used to issue each crypto-asset in relation to which they provide services.'

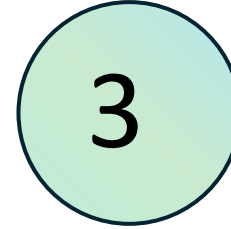
The who



EU footprint?



MiCA qualifying
cryptoasset service?



MiCA qualifying
cryptoasset?

The when

30 December 2024

MiCA Title V enters application

This include the CASP obligation to be compliant with sustainability disclosure requirements

1 July 2026

MiCA transitional phase ends

All cryptoasset service providers requiring MiCA authorisation must be authorised and compliant from this date.



‘MiCA does not foresee a delayed application of requirements on sustainability disclosures ... As a result ... ESMA also expects market participants to comply with the requirements on sustainability disclosures in line with the application deadline set out in MiCA.’

ESMA Final Report, [p.10 \(10,11\)](#)

The how

Reporting requirements

- Publicly available on CASP website
- Free of charge, downloadable, reviewed/updated at least annually
- To allow public comparison of sustainability indicators for all serviced assets
- To apply methodologies that are rigorous, capable of validation and applied continuously
- To include cited data sources, legal entity identifier and descriptive information



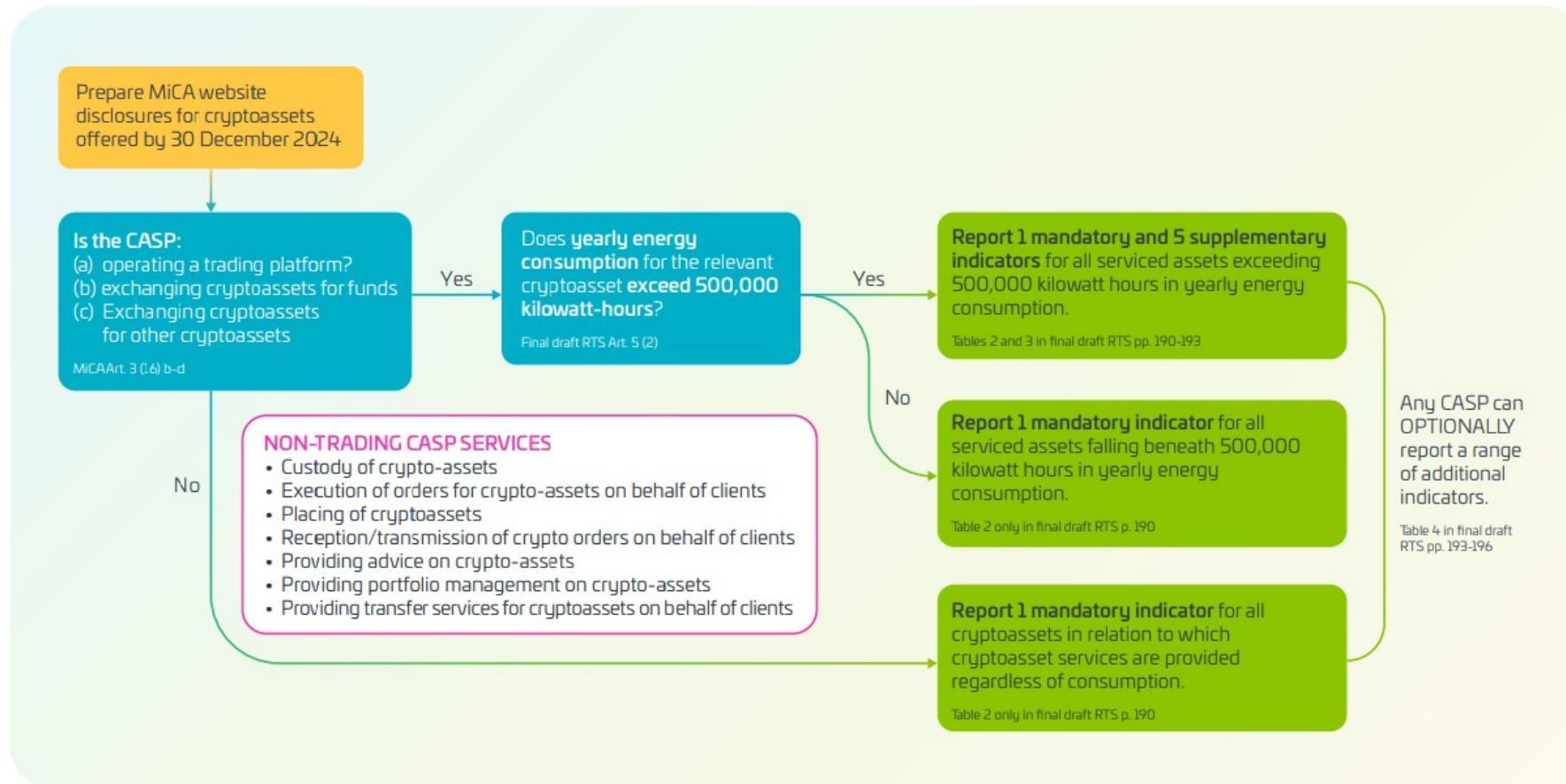
Table 2

Mandatory information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism

N	Field	Content to be reported	Format and standards to be used
General information			
S.1	Name	Name reported in field A.1, B.2 or C.1 of table 2 of the Annex II to the [Implementing Regulation (EU) 2024/XXX on standard forms and templates for the crypto-asset white paper], in field A.1 of table 3 or table 4 of that Annex, or name of the crypto-asset service provider	Free alphanumerical text
S.2	Relevant legal entity identifier	Identifier referred to in field A.2, B.3 or C.2 of table 2 of the Annex II to the [Implementing Regulation (EU) 2024/XXX on standard forms and templates for the crypto-asset white paper], in field A.3 of table 3 or table 4 of that Annex, or identifier of the crypto-asset service provider referred to in Article XX of the [Delegated Regulation (EU) 2024/XXX on authorisation of crypto-asset service providers]	Free alphanumerical text
S.3	Name of the crypto-asset	Name of the crypto-asset, as reported in field D.2 of table 2 of the Annex II to the [Implementing Regulation (EU) 2024/XXX on standard forms and templates for the crypto-asset white paper], in field B.1 of table 3 or table 4 of that Annex, where relevant	Free alphanumerical text
S.4	Consensus Mechanism	The consensus mechanism, as reported in field H.4 of table 2 of the Annex II to the [Implementing Regulation (EU) 2024/XXX on standard forms, formats and templates for the crypto-asset white paper], in field E.4 of table 3 of that Annex, in field E.5 of table 4 of that Annex, where relevant, including the information referred to in Article 6(1), point (b) of this Regulation.	Free alphanumerical text
S.5	Incentive Mechanisms and Applicable Fees	Incentive mechanisms to secure transactions and any fees applicable, as reported in field H.5 of table 2 of the Annex II to the [Implementing Regulation (EU) 2024/XXX on standard forms and templates for the crypto-asset white paper], in field E.5 of table 3 of that Annex, in field E.6 of table 4 of that Annex, where relevant. For persons drafting a crypto-asset white paper pursuant to Articles 6, 19 or 51 of Regulation (EU) 2023/1114, the information may be provided by including a cross-reference to the aforementioned fields.	Free alphanumerical text
S.6	Beginning of the period to which the disclosure relates	Beginning of the period to which the disclosure relates	{DATEFORMAT}
S.7	End of the period to which the disclosure relates	End of the period to which the disclosure relates	{DATEFORMAT}
Mandatory key indicator on energy consumption			
S.8	Energy consumption	Total amount of energy used for the validation of transactions and the maintenance of the integrity of the	Amount in kilowatt-hours (kWh) {DECIMAL-18/5}

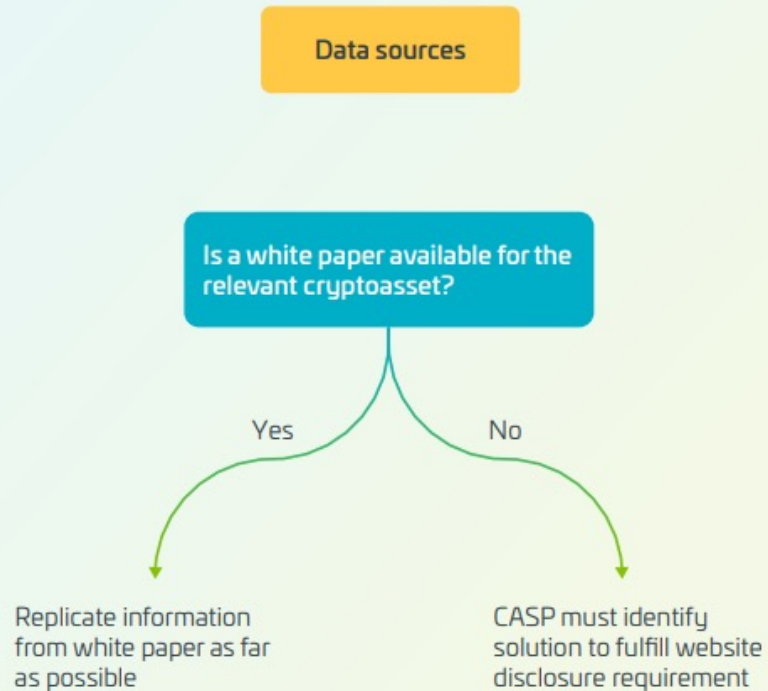
The how

Asset/service distinctions



The how

Data sources



"ESMA proposes that CASPs are **explicitly encouraged to use white papers to fulfil their website disclosure requirements** where available. Past the transitional period provided for under Article 143 of MiCA (during which it can be anticipated that there might be cases of CASPs already authorised under the definitive MiCA regime providing services in relation to crypto-assets whose issuers are not yet required to produce a white paper), ESMA expects that there will be few cases of a CASP falling under the scope of Article 5 of the draft RTS without there being an existing white paper under Article 4 of the draft RTS. In such a case however, the CASP would need to disclose on their website information on sustainability impacts as required by Article 5 of the draft RTS, despite the absence of a white paper."

Final draft RTS, pp. 11-12



Find out more

Web: zumo.tech/mica-compliant-sustainability-disclosure/

Email: hello@zumo.tech



Digital Finance Forum

Fireside Chat – Travel Rule Update
with GDF Board Advisor Malcolm
Wright

Fireside Chat



Malcom Wright – GDF Board Advisor

Listen [here](#) to the full fireside chat here where Malcolm and Elise discuss the latest on the Financial Action Task Force's (FATF's) Travel Rule including how firms should prepare, what the most pressing issues are for interoperability and compatibility, as well as some upcoming next steps for how industry can work together to meet Travel Rule Requirements.



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