Regulatory Updates

Binance and CZ

Changpeng Zhao (CZ), the CEO of Binance, has resigned following his guilty plea to charges of money laundering. This decision comes as the United States (US) Department of Justice (DOJ) imposed a hefty penalty of $4.3 billion on Binance, citing the crypto-exchange's role in facilitating sanction violations globally. The department highlighted Binance's involvement in transactions between users in the US and those in Iran, Syria and Russian-occupied regions of Ukraine, amounting to nearly $900 million.

As part of the settlement, Binance is now required to report any suspicious activities to federal authorities, aiding in investigations of cybercrimes and terrorism fundraising, including those involving cryptocurrency exchanges supporting groups like Hamas. Richard Teng, previously the head of regional markets at Binance, has been appointed as the new CEO.

([source1](#))

FTX trial

Sam Bankman-Fried (SBF), the founder of the cryptocurrency exchange FTX, was convicted on 2 November 2023 of orchestrating a multibillion-dollar fraud. This conviction comes as a significant development in the legal proceedings against him following the collapse of FTX. Bankman-Fried faced a total of seven charges, which included two counts of fraud and five counts of conspiracy. These charges encompassed wire fraud conspiracy, wire fraud, conspiracy to commit money laundering, conspiracy to commit commodities fraud and conspiracy to commit securities fraud.

The verdict marked the culmination of a year-long legal saga, which gained widespread attention due to the dramatic and high-profile nature of FTX's downfall. The case was handled in the Southern District of New York, a jurisdiction known for its rigorous prosecution of financial crimes. Bankman-Fried's sentencing is scheduled for 28 March 2024. US District Judge Lewis Kaplan, who presided over the case, has noted that Bankman-Fried could potentially face a 'very long sentence', given the severity and complexity of the crimes. The sentencing will be based on several factors, including his personal history and the nature of the crime.

In addition to this conviction, Bankman-Fried is scheduled to stand trial in March on separate charges, including paying a $40 million bribe to Chinese officials and conspiring to make over 300 illegal political donations in the US. Bankman-Fried's legal team is expected to appeal the conviction. They have previously attempted to argue for acquittal during the trial, claiming that the prosecutors failed to prove their case, but this motion was denied by Judge Kaplan. SBF is expected to remain in Brooklyn's Metropolitan Detention Center until his sentencing.

([source1](#))

EU

The European Securities and Markets Authority (ESMA) released an extensive second consultative paper on Markets in Crypto-Assets (MiCA) on 5 October. This document seeks input from stakeholders on various key aspects, including sustainability criteria for distributed ledger technologies and initiatives to improve trade transparency. This effort by ESMA is part of a broader strategy to establish a regulatory framework that effectively addresses the complexities of the cryptocurrency market, aiming to submit the final technical standards to the European Commission by 30 June 2024.

Observing the dynamic nature of cryptocurrency regulation, ESMA acknowledged that the scope of the MiCA, particularly in the context of the recent downturn in the crypto market, would have been approached differently. The MiCA framework, adopted in April, is a significant development in Europe's digital asset regulatory landscape. It includes strict regulations for stablecoins, anti-money laundering measures and data security protocols.

Additionally, EU Member States have approved the world's first extensive rules for regulating crypto assets. These regulations, set to be implemented from 2024, will require licensing for entities involved in issuing, trading and safeguarding crypto assets, tokenised assets and stablecoins. The rules also introduce measures to combat tax evasion and misuse of crypto assets in money laundering, marking a substantial move to protect European investors and align with global financial crime prevention efforts. In the backdrop, Spain announced its plan to implement the MiCA regulations 6 months ahead of the July 2026 deadline set for all EU Member States. This indicates a proactive approach by an EU Member State in adopting the new regulatory framework for cryptocurrencies. The country plans to enforce EU crypto rules starting in December 2025.

Finally, the EU banking watchdog proposed liquidity rules for stablecoin issuers, currently in the public consultation phase. If approved, these guidelines are expected to come into effect in June 2024. This initiative represents an effort to further regulate the stablecoin sector, which has gained significant attention in the context of broader cryptocurrency regulations.

([source1](), [source2](), [source3]())

United Kingdom

In the United Kingdom (UK), the regulatory approach towards cryptocurrencies is evolving through various publications from the Financial Conduct Authority (FCA) and the Bank of England (BOE). The FCA's discussion paper explores potential applications for retail and wholesale stablecoins, as well as audit and reporting requirements. The BOE's paper examines the integration of sterling-based, retail-focused stablecoins in systemic payment systems. These initiatives underscore the UK's dedication to forming a comprehensive regulatory framework for crypto assets, anticipated to be in place by 2025.

However, the UK Treasury's proposed cryptocurrency regulations, applicable to all companies including those based overseas, have raised concerns. The industry is advocating for regulatory exemptions similar to those granted to traditional finance (TradFi) firms from abroad, a request currently not being considered by the government. This stance might discourage international companies from entering the UK market, potentially impacting its goal of becoming a global centre for digital assets.

([source1](), [source2](), [source3](), [source4]())

United States

In the US, 2022 and 2023 have seen increased enforcement actions in the cryptocurrency domain by the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC). The SEC has stepped up its scrutiny of the crypto market, with a rise in enforcement actions and penalties.

A key regulatory focus of the SEC is on staking services. The SEC's proceedings against the crypto exchange Kraken regarding its staking services suggest that such offerings may be classified as securities, requiring registration and adherence to disclosure norms. This interpretation poses questions about the future of staking services in the US market.

Furthermore, the DOJ and the Treasury have broadened their enforcement activities in the cryptocurrency sector. The DOJ continues to prosecute violations of federal criminal laws related to cryptocurrency, while the Treasury, through its Office of Foreign Asset Controls, oversees cryptocurrencies in international transactions.

The White House has issued a statement detailing the administration's strategy for addressing risks associated with digital assets. This includes proposals for Congress to enhance regulatory authority and improve transparency requirements for cryptocurrency firms. It is anticipated that 2023 may witness congressional action on cryptocurrency, with several bills proposed to regulate stablecoins and digital commodities.

([source1](#), [source2](#), [source3](#), [source4](#))

Technological Trends & Developments

Ethereum's Holesky Testnet launches

On Thursday 28 September, Ethereum's new public Testnet, the Holešovice Testnet, was finally launched. As was mentioned in our previous September 2023 report, Holešovice, or simply Holešky/Holesky, failed to succeed in its scheduled launch on 15 September, because of a misconfiguration in one of the genesis files of the network. The Holesky Testnet replaced the Goerli Testnet serving as a testing environment for staking features, infrastructures and protocols, while the Sepolia Testnet remains the recommended testnet for the testing of decentralised applications. In general, Holesky will be more suitable for experimentations with infrastructure than Sepolia or Goerli – with the latter being en route to being deprecated by 2024 – since way more validators than even those in the Ethereum Mainnet – 1.4 million to 700,000 – will operate in it, and also because it will host a supply of tokens much larger than the one that was offered by Goerli, something that led many times to developers and users having issues when performing actions requiring significant testing funds. Claiming Holesky ETH tokens (HolETH) is possible from the Holesky PoW Faucet and the Quicknode Faucet, with the PoW faucet offering a maximum of 33 HolETH available for claim, whereas the Quicknode Faucet is limited to five.

LUKSO Blockchain's Universal Profiles on Mainnet

On Wednesday 8 November, Universal Profiles went live on LUKSO Blockchain's Mainnet network. The LUKSO blockchain is a Layer-1 co-founded by Fabian Vogelsteller, the inventor of the ERC-20 Token Standard, and was designed with the consideration of creative economy in mind, meaning that it revolves around concepts of modern lifestyle content creation and enables the space to drive innovation around the core themes of future creative work. LUKSO is directly linked to a user-friendly experience, aiming to facilitate beginners – and generally all kinds of users – onboard the blockchain world. As was mentioned in our previous September 2023 report, the new feature of Universal Profiles went live on LUKSO's Testnet, but it is now live on the Mainnet as well. Universal Profiles are

interoperable blockchain-based profiles, different from the traditional externally owned accounts that are adopted by large blockchains such as Ethereum and Bitcoin, which enable verifiable identities in the web3 world. Different levels of access methods can be added, including access to dApps and other environments, as well as different reactions to the reception of either tokens or digital assets. These features are enabled by the use of LUKSO Standards Proposals (LSPs), which standardise decentralised identity, asset representation and smart contract interaction with the goal of facilitating functionality within the blockchain ecosystem.

Consensys Truffle and Ganache reach EOL

On Thursday 21 September, Consensys, the renowned private company behind some of the most prominent software projects released in the blockchain space, announced the sunset of the Truffle and Ganache products. Consensys was founded back in early 2015 and started as a company mainly focusing on decentralised services and applications that operate on the Ethereum blockchain. Among these services were Truffle and Ganache, two widely adopted, fully open-source tools for dApp development and testing. Truffle in itself was a suite of tools for end-to-end dApp development, with the Truffle CLI providing the options of building, testing, debugging and deploying smart contracts' code. Truffle could also fire up a private Ethereum blockchain running locally, with autogenerated pre-funded accounts available for management, for the purpose of testing complex business scenarios for the applications, in a totally controlled and secure sandbox environment. This functionality was afterwards incorporated in the Ganache product, which at some point was also provided with a GUI version for easier configuration of the personal blockchain. Network configuration options included choosing the Mainnet update the user wanted their chain to operate with, automining blocks and other advanced mining controls, inspecting the state, receiving a constant stream of log outputs, and exploring blocks and transactions. Consensys will partner with HardHat to support the migration of old web3 application projects to HardHat's own suite of dApp development tools, while the Consensys team will also be supporting, until 20 December, developers who wish to explore HardHat and/or other solutions. By 20 December, Truffle's and Ganache's codebases will remain available as public archives.

Base announces Pessimism monitoring system

Base, the team behind the Ethereum Layer-2 by the same name, and the popular Coinbase cryptocurrency exchange, announced on 19 September the launch of Pessimism, a monitoring system for the OP Stack, Optimism Superchain and the EVM compatible blockchains. Pessimism is an open-source, public good monitoring service, with some development processes still currently taking place, that makes assessments for real-time threats using custom defined user heuristic rule sets. This means that, essentially, Pessimism collects, analyses and interprets data to ensure that everything is functioning as expected, sending alerts when any abnormal activity or event perceived as a security threat is detected. Before its release as open-source, Pessimism was tested on the Base Mainnet and its Layer-2 and was used to provide insights on the chain's performance by its monitoring of response times, throughput and error rates, as well as guarantee its security by identifying and mitigating threats and vulnerabilities. These insights help the teams behind the chains' development spot the issues and malfunctions and take action for their resolution, in real time. Future work for the project will include enhanced monitoring of the bridges from Ethereum to its Layer-2s.

BIS report on Project Mariana

In the final week of September 2023, the Bank of International Settlements (BIS) released its final report on Project Mariana, a major enterprise project to provide a solution on the cross-border exchange of wholesale central bank digital currencies (CBDCs) using automated market-makers (AMMs). Foreign exchange (FX) is the largest financial market in the world, trading about $7.5 trillion a day, and the purpose of Project Mariana was essentially the continuation of previous projects run on distributed ledgers, exploring the possibilities, the procedures and the design of a potential future in which FX is performed using central bank-issued CBDCs. Project Mariana was finalised with a proof of concept (PoC) of a global interbank market for spot FX, featuring both AMMs and wholesale CBDCs (wCBDCs).

In the PoC, wCBDCs circulated on domestic platforms and so-called bridges that allowed them to be moved on a transnational network that hosts the AMM. For the purposes of this project, the AMM is a decentralised exchange using a bonding curve and a liquidity pool to price and exchange tokenised assets. Project Mariana examines if this new approach can simplify existing interbank FX processes and whether this approach can contribute to enhancing cross-border payments through improved transparency and reduced settlement risk. Overall, the project showcased that the use of AMMs for the cross-border exchange of wCBDCs was technically feasible, while also fulfilling central bank requirements and broader principles set by the FX Global Code (FXGC), and also that central and commercial banks did not necessarily have to operate or control the underlying infrastructure, something that can lead to smaller risks and higher efficiency.

OP Labs develops Fault Proof System

On Tuesday 3 October, OP Labs, the team behind the OP Stack and the Superchain, delivered its first fault proof system on the OP Goerli Testnet. For many technical experts and developers, the lack of such an element was a significant omission in the release of the initial OP Stack SDK. Fault proofs are at the core of optimistic rollup technology and their absence was rendering efforts for widespread development of the Superchain risky and jeopardous. Still in its Alpha release, the fault proof system comprises three main components, a Fault Proof Program (FPP), a Fault Proof Virtual Machine (FPVM) and a dispute game protocol. These components will work together to challenge malicious or faulty activity on the network to preserve trust and consistency within the system. Eventually, the fault proof system should be fully implemented on the OP Stack, and also guarantee security for ZK-powered rollups, as was initially promised in the OP Stack introduction.

Avail announces incentivised testnet

Avail, the modular blockchain and competitor of Celestia, announced on 7 November the deployment of the Clash of Nodes incentivised testnet. Avail is a blockchain seeking to solve the 'data availability' and scalability issues that blockchains such as Ethereum are currently facing, regarding the congestion of data when transactions are queued in order to be validated. Avail uses a decentralised, scalable and efficient platform for data availability to provide a rollup-centric future for all kinds of blockchain projects. Networks such as Avail and Celestia even aim to provide solutions for major blockchain issues such as the transaction burdens on Ethereum from its tangled Layer-2 ecosystem. The Clash of Nodes incentivised testnet presents a preview of the to-be-deployed Mainnet, and is a place where validators, light client operators and anyone else can help validate the network. These actors are competing with each other on the continuous and correct validation of the chain, and on the completion of other similar challenges, such as helping to simulate 'disaster scenarios', in order to claim and earn more rewards.

Lightning Labs releases Taproot Assets

On Wednesday 18 October, Lightning Labs, the developers behind Bitcoin's Layer-2 scalability solution by the same name, announced the release of the Taproot Assets protocol upgrade on the main Bitcoin network. This upgrade will enable the issuance of stablecoins and other assets on Bitcoin, with support for Lightning being planned for the immediate future. This is a long-anticipated move by members of the popular Layer-1 blockchain, since it adds more functionality options and, at the same time, respects the core values and philosophy of Bitcoin. The Taproot Assets daemon provides a feature-complete developer experience for issuing, managing and exploring these assets on Bitcoin, while also beginning forward (future) compatibility, meaning that no major changes to disrupt the circulation of these assets will be released. The newly introduced transactions with Taproot Assets on Lightning will route through the existing Bitcoin liquidity at the core of the network, allowing routing nodes to forward Taproot Assets transactions on Lightning without ever knowing it, extending Bitcoin's robust security foundations. The end goal of Taproot Assets is to make Lightning a multi-asset network, providing stablecoin support for users in a borderless financial world, and being the new major hub for instant FX transactions.

Market Updates

Austria's Raiffeisen Bank to Launch Bitcoin Trading Next Year

Raiffeisen Bank International, a major banking institution based in Vienna with $215 billion in assets, is set to introduce cryptocurrency trading services to its vast customer base across the EU and eastern Europe. The service, which is scheduled for launch by January 2024, is a result of the bank's partnership with Bitpanda, a platform regulated by Austria's Financial Market Authority and Germany's Federal Financial Supervisory Authority.

([Source5](#))

Germany's Commerzbank Wins Crypto Custody License

On 15 Nov 2023, Commerzbank, a German full-service bank, was granted a crypto custody licence pursuant to Article 1 Section 1a Sentence 1 No 6 German Banking Act (KWG). The licence will enable the bank to build up a broad range of digital asset services, with particular emphasis on crypto assets.

([Source6](#))

Binance and CZ plead guilty but SEC lawsuit remains

Binance and its CEO have pled guilty to felony charges related to violations of the Bank Secrecy Act, failure to register as a money services business and failure to maintain an effective anti-money laundering programme. Under the conditions, Changpeng Zhao (CZ) has been forced to resign as Binance's chief executive. The crypto exchange will pay $4.3 billion in order to resolve these criminal charges. He will be allowed to maintain majority ownership of the crypto exchange that he founded in 2017. However, he has been barred from holding an executive role at the firm. However, the SEC's case against Binance lives on. The SEC still alleges that BNB is a security, that Zhao-controlled entities were responsible for suspect flow of funds between Binance and Binance US, and that these Zhao-owned entities engaged in massive wash-trading.

([Source7](#))

Justin Sun-related crypto platforms hacked 4 times in 2 months

Sun's HTX crypto exchange has been hacked at least twice since the platform rebranded from Huobi on 13 September 2023. The first HTX hack occurred just a few days after the rebranding, with an unknown attacker stealing nearly $8 million in crypto on 24 September 2023. In its second hack, HTX lost $30 million due to a hot wallet breach that was initially reported to be $13.6 million. Previously known as Huobi, HTX was acquired by Sun in October 2022. The hackers have also focused on other Sun-related cryptocurrency platforms, including Sun-owned cryptocurrency exchange Poloniex and HTX Eco Chain (HECO) bridge. Poloniex suffered a significant security breach on 10 November when attackers stole at least $100 million in cryptocurrency from the exchange. Sun, who acquired the business in 2019, reported on X (formerly

Twitter) that Poloniex disabled the wallet. According to the blockchain security firm CertiK, the incident was likely a 'private key compromise'.

([Source8](#))

Bank of Korea Announces CBDC Pilot Program for 100,000 Citizens

One hundred thousand Korean citizens will be invited to use deposit tokens to purchase products as part of a CBDC pilot programme, according to the Bank of Korea (BOK). Beginning 'around September to October' of 2024, testing will continue for 3 months. As per a report by the Korea Times dated 23 November, users will be limited to utilising the CBDC exclusively for payment purposes, with no provision for storing, exchanging or transmitting it to other users. The objective of the pilot phase is to assess the efficacy and viability of currency distribution and issuance. To test the viability of delivery versus payment transactions, the BOK will also collaborate with the Korea Exchange to integrate its new digital currency into a simulation system for carbon emissions trading.

([Source9](#))

Belgium leads charge to renew EU blockchain infrastructure project

Belgium plans to accelerate the development of a European blockchain infrastructure during its presidency of the Council of the European Union in early 2024. The proposal aims to facilitate the secure storage of official documents like driving licences and property titles. The development of a public blockchain for pan-EU infrastructure is among the four priorities of Belgium's upcoming presidency, the country's Secretary of State for Digitalization, Mathieu Michel, told Science|Business on 21 November. The remaining three initiatives will take on the matters of artificial intelligence, online anonymity and the skills necessary for the digital economy.

([Source10](#))

Proton Mail to use blockchain to verify recipient's email addresses

The latest feature will allow users to verify a recipient's email address and ensure that the sender is actually who they claim to be. In an interview with Fortune, Andy Yen, Proton VPN and Proton Mail's CEO, stated that they are using 'blockchain in its very pure form' and that it has nothing to do with shady crypto scams. By putting recipients' public keys on the blockchain, it's near-impossible for perpetrators to initiate a MitM attack. The system cross-references these entries every time an email is sent, thereby ensuring that the correct private key is used every time.

([Source11](#))

Regulations

Singapore to tighten crypto regulations for retail customers

Singapore will introduce tighter rules for cryptocurrency service providers, following feedback on its proposed regulations, said the city-state's financial authority. 'The consulted proposals detail business conduct and consumer access measures to limit potential consumer harm,' the Monetary Authority of Singapore (MAS) said in a statement on Thursday. The measures will include barring crypto service providers in Singapore from accepting locally issued credit card payments, offering incentives to trade in cryptocurrencies and providing financing, margin or leverage transactions for retail customers. The finalised measures will take effect in phases starting in mid-2024, said MAS.

([Source12](#))

Hong Kong issues asset tokenisation rules

The Hong Kong Securities and Futures Commission (HK-SFC) on 2 November issued two circulars on tokenisation of authorised investment products. The HK-SFC considers them as traditional securities with an additional tokenisation layer, and thus tokenised securities will face the same legal and regulatory requirements that apply to traditional securities. Hong Kong has been exploring tokenisation and it also issued the world's first tokenised green bond in February this year which raised around $100 million. The rules also mandate establishing compensation arrangements and adoption of protective measures to ensure security.

([Source13](#))

China classifies NFTs as property, makes theft liable for criminal charges

A Chinese government statement on 10 November declared that digital collections, like non-fungible tokens (NFTs), 'should be recognized as property' and its theft is liable to be prosecuted under criminal charges. The statement outlines three views, the first two identifying digital collections as data or property, while the third view classifies them as both data and property, and related thefts as 'co-offending'. It highlighted that stealing NFTs includes intruding the system housing it, thereby combining the criminal offence of illegally obtaining computer data and theft. The statement further stressed that 'consumers can rely on trading platforms to complete purchases, collections, transfers, destruction and other operations to achieve exclusive possession, use, and disposal capabilities.' Local media reports suggest that Xianyu, a peer-to-peer marketplace, removed censorship of 'nonfungible tokens' and 'digital asset' related keywords in its search.

([Source14](#))

Singapore announces digital asset pilots with Europe, Japan

MAS, the central bank, announced on 30 October its plans to promote joint digital asset programmes in partnership with the Financial Services Agency of Japan (FSA), the Swiss Financial Market Supervisory Authority (FINMA) and the UK FCA. The pilots will be carried out in the fields of fixed income, FX and asset management products and will build on the country's current asset tokenisation project that was launched in 2022. The collaboration aims to identify potential risks and legal gaps, explore development of common standards for digital asset networks and find best practices across jurisdictions.

([Source15](#))

UK passes bill to allow seizure of Bitcoin used in crime

The UK passed into law the Economic Crime and Corporate Transparency Act on 26 October, empowering authorities in the country to seize and freeze cryptocurrencies when used for illicit purposes. The legislation will strengthen the law enforcement's abilities to crackdown on cryptocurrency usage in cybercrime, scams, drug trafficking and terrorism. A key provision of the Act allows recovery of virtual assets related to crimes without requiring conviction, as individuals can avoid conviction by staying remote. The Act aligns with the UK's plans to regulate the crypto space and combat its illicit use as part of the government's economic crime plan in 2023-2026.

([Source16](#))

G20 adopts IMF-FSB paper on crypto regulations

Members of G20 states on 13 October unanimously accepted the digital assets regulatory roadmap proposed in a joint report by the International Monetary Fund (IMF) and the Financial Stability Board (FSB), titled 'IMF-FSB Synthesis Paper: Policies for Crypto-Assets'. The paper calls for a comprehensive oversight of digital assets, including cross-border cooperation and information sharing between regulatory bodies, governance and risk management frameworks for companies, and data access for authorities. The paper also calls for a review of implementation of the proposed measures by the end of 2025.

([Source17](#))