

## **Regulatory Updates**

#### **US SEC approves Spot Bitcoin ETF**

On January 10, 2024, the US Securities and Exchange Commission (SEC) approved the rule changes to allow regulated spot Bitcoin exchange-traded funds (ETFs) to be listed and traded. Multiple companies like Invesco Galaxy, VanEck, Fidelity, Valkyrie, BlackRock, Grayscale, and Franklin Templeton had applied to the SEC for its approval. The SEC had in the past rejected Bitcoin ETF but was forced to reconsider after a court order in a case by Grayscale Investments. Galaxy Research estimates that Bitcoin ETF inflows can reach USD 14 billion in the first year.

(source 1)

## India issues non-compliance notice, blocks major crypto exchanges

India's Financial Intelligence Unit (IND-FIU) has issued non-compliance notices against nine global crypto exchanges on allegations of operating illegally and violating the country's anti-money laundering regulations. The exchanges are Binance, KuCoin, Huobi, Kraken, Gate.io, Bittrex, Bitstamp, MEXC Global, and Bitfinex. The IND-FIU has written to the Ministry of Electronics and Information Technology to block the websites of these exchanges. Many Indian exchanges are offering fee waivers for customers to move their funds from these foreign exchanges.

(source 2)

(source 3)

## Italy, South Korea central banks agree on CBDC cooperation

On 5th December 2023 Banca d'Italia, Italy's central bank, announced that it has signed a memorandum of understanding with the Bank of Korea, South Korea's central bank, for information and knowledge sharing on information and communication technology. A major focus of the agreement is real-time settlement systems and central bank digital currencies (CBDCs). Both countries have been exploring various aspects of CBDCs in the past years. While Italy has been working on interoperability for settling distributed ledger technology-based transactions, South Korea started piloting its CBDC infrastructure technology in October.

(source 4)

## EBA extends anti-money laundering guidance to crypto

The European Banking Authority (EBA) on January 16th 2024, extended its Anti-Money Laundering and Counter-Terrorist Financing guidelines to Europe-based crypto companies aimed at identifying











their exposure risk to financial crimes. The guidelines will apply from 30th December 2023 and outline financial crime-fighting measures for crypto service providers, including the use of blockchain analytics tools.

(source 5)

### South Korean officials obliged to declare crypto holdings from 2024

South Korea's Ministry of Personnel Management in a statement dated 27th December 2024 mandated the country's almost 6,000 public officials to disclose their crypto holdings, which will be included in the Public Official Ethics System. The country's parliament had in May 2023 amended the Public Service Ethics Act to make it mandatory for civil servants to disclosure of crypto assets. The bill was passed after a Democratic Party member was found to own USD 4.5 million worth of a token that triggered concerns of potential conflicts of interest, using insider information and money laundering.

(source 6)

#### Brazil introduces law on taxing cryptoassets

Brazil passed a law on 12<sup>th</sup> December 2023, which came into force on 1<sup>st</sup> January 2024, introducing taxes on overseas crypto holdings by the country's citizens. They will have to. Pay up to 15% of their crypto profits in taxes. Alongside cryptocurrencies, the law also applies to profits and dividends gained by the country's citizens from investment funds, platforms, real estate or trusts abroad. The government aims to collect an additional USD 4 billion in taxes based on this law in 2024.

(source 7)

# **Technological Trends & Developments**

## **Ethereum's Dencun Upgrade**

On Wednesday 29 November, 2023, Ethereum attempted to implement the Dencun upgrade (Deneb on the Beacon chain & Cancun on the execution chain) on the Goerli Testnet. The Devnet upgrade as it was called, was initially supposed to go live on Goerli as the last major upgrade of the Testnet, before its upcoming EOL (end-of-life), and in case of success, it would afterward be adopted by the Sepolia and Holesky Testnets, which are the networks that will fully replace Goerli's functionalities. November 29th upgrade push to Goerli failed, however, due to an inability of the network to finalise new blocks. The issue was mainly due to a bug in the Prysm nodes, which are widely used for transaction validation in the Beacon chain. Dencun upgrade went finally live on Goerli on January 17, with no finalisation issues, and it is part of a three-phased process, with the other two being the adoption by the Sepolia and Holesky networks, to bring forth an overall change on the Ethereum network called Danksharding, which will solve its latency issues. The upgrade introduces a first approach towards Danksharding, called proto-Danksharding, which serves as a mechanism to enhance data availability capacity while also cutting down transaction costs for Layer-2 blockchains. These supplementary networks have seen a surge in adoption over the last year as an alternative to handling transactions directly on the primary Ethereum blockchain, with analysts however pointing









out that their expansion is constrained by the high data expenses associated with the current setup. In proto-Danksharding, transactions executed in Layer-2s, are not "rolled-up" as a single transaction to be processed by the Ethereum Mainnet, but their metadata are rather included in "Blobs" attached to Ethereum blocks. The full Danksharding upgrade, which will take many more years to be completed, will include up to 64 of these "Blobs" attached to each block. Dencun will be the second major Ethereum upgrade, after the Shapella one last year, following the Merge.

(source 8)

(source 9)

## **Superchain introduces Canyon Hardfork**

On January 11, the OPLabs team went forward with the Canyon Mainnet Hardfork. This is the first major upgrade for Optimism's Superchain Blockchains. The first test had taken place in their OP Testnets on Tuesday November 14th. This network upgrade, which was implemented in collaboration with the Base and Conduit teams, includes support for the Shanghai and Capella Hardfork, and several other minor bug fixes. The upgrade involves increasing the EIP-1559 denominator from 50 to 250, to slow down the rate at which the basefee rises when blocks exceed the gas target. Under EIP-1559, the basefee adjusts in proportion to the gas used, compared to the gas target; this means that when more gas is used than the target, it will lead to a basefee increase. On the contrary, when less gas is used, it will lead to a decrease, overall aiming to decrease the basefee's rate of change. Moreover, Canyon adjusts the protocol to handle unclosed channels. Previously, only one channel could be active at a time, and if left unclosed, it would require a timeout before further progress. Post-upgrade, the op-node will prioritise the first ready channel. Additionally, a new field will be introduced to change the deposit transaction receipt encoding, addressing a bug where the deposit transaction nonce was not in consensus encoding. Finally, Canyon sets the create2Deployer bytecode, granting developers access to this commonly used contract across all OP networks, not just in the Optimism Mainnet.

(source 10)

(source 11)

## Fox releases open source "Verify" tool on Polygon

On Tuesday 9 January, Fox Corp., the company behind the well-known Fox News network, released a new open-source tool, developed in-house, called "Verify" on the Polygon Proof-of-Stake network. This tool is aimed at helping the battle against misinformation powered by Al-generated media stories or deepfakes, providing new authentication methods. "Verify", which is still in beta, establishes the history and origin of any registered media using Blockchain's "tamper-proof data" functionality, provided by Polygon. The public is allowed to contribute and fork the source code, as well as register their inputs and thus provide proof of their input's initial form. Media companies can head over to Verify to get in touch, while consumers use "Verify" to confirm the origination of digital content from participating Fox sources. Individual pieces of content are cryptographically signed onchain, allowing consumers to identify content from trusted sources using the tool. Additionally, "Verify" establishes a technological link between media enterprises and Al platforms. Through its Verified Access Point, it generates fresh commercial prospects for content proprietors, by employing smart contracts to establish programmatic terms for access to content.











(source 11)

(source 12)

### Bitcoin Core's 'v26.0' upgrade is released

On Wednesday 6 December 2023, Bitcoin Core, the main client/software for connection with the Bitcoin network, underwent its latest major upgrade, 'v26.0'. This update contains experimental support for the 'v2' transport protocol as defined by Bitcoin Improvement Proposal 324 (BIP324), which seeks to encrypt communication between nodes, reducing the risks of attacks via tampering with transactions. It aims to improve this by significantly increasing the expenses associated with carrying out such attacks, primarily achieved through the implementation of unauthenticated, opportunistic transport encryption. A significant advantage of this approach is that utilising encryption, even in its unauthenticated form, and exclusively when both endpoints support v2, hinders eavesdropping by causing the attacker to engage actively. The existing V1 transport protocol is still supported, and Bitcoin Core users must enable the 'V2' option to start using it. The update includes several modifications to remote call procedures (RPCs), including adjustments on wallets, as well as alterations to Bitcoin's graphical user interface (GUI).

(source 13)

#### **Chainlink Teams Up with Circle to Allow Cross-Chain Stablecoin Transfers**

On January 16, Chainlink (LINK), the well-known decentralised oracle service provider, announced their partnership with Circle, the creators of the USDC stablecoin, to join their Cross-Chain Interoperability Protocol (CCIP) with Circle's Cross-Chain Transfer Protocol (CCTP) to make it easy for users to transfer USDC across chains, according to a press release. Chainlink's CCIP is a crosschain communication software that allows users to message and transfer tokens across different Blockchains, while Circle's CCTP is an on-chain platform facilitating USDC transfers between chains via burning and minting. After the integration of CCTP to CCIP, developers can now develop crosschain applications using CCIP that facilitate cross-chain transactions of USDC, encompassing payment functionalities and various decentralised finance (DeFi) operations. The chains for now to utilise these functionalities are the Ethereum, Arbitrum, Optimism, Avalanche and Base Mainnets, with others to be scheduled for near-future addition.

(source 14)

(source 15)

## **Berachain launches Layer-1 Testnet**

On Thursday 11 January, the upcoming Berachain Blockchain opened its first Testnet to the public. Berachain is a meme-coin Blockchain, built as part of the Cosmos ecosystem, by mostly unknown developers. It will utilise the "proof-of-liquidity" consensus mechanism, which is an alteration of the well-known "proof-of-stake" consensus. In POL, ecosystem players help secure the network by providing liquidity to the trading infrastructure built on top of it (consisting of Dapps, smart contracts, etc.). It basically builds in the already existing idea of DeFi projects in which protocols reward their liquidity providers (LPers) with a token (in this case BGT). Any protocol that's passed a Berachain governance vote, will get a BGT, which is a governance token, meaning its holders













have validation power over the network. This token will be also liquid, meaning it won't be exchangeable, but it is planned to have some financial value, with BGT holders planned to be able to burn their assets in exchange for the equivalent amount of BERA tokens, which will be tradeable, or delegate their BGTs to others in exchange for the Berachain stablecoin called HONEY, which is said to be backed by USDC.

(source 16)

## Chainlink Data Feeds Available on Polygon zkEVM

On January 24th, the data-oracle project Chainlink announced that its data feeds are now available to Polygon's Layer-2 ZK rollup. Polygon developers will now be able to incorporate these data-feeds into their smart contracts and on-chain applications, such as liquidity protocols and decentralised exchanges. Developers utilising Polygon zkEVM can access an environment that seamlessly aligns with the Ethereum Virtual Machine (EVM) at a byte-code level. This compatibility ensures that most Ethereum-native tools and infrastructure are readily interoperable without the need for significant modifications. Consequently, developers can leverage Ethereum's robust security, a trustless zeroknowledge bridge, rapid finality, and additional advanced capabilities enabled by Polygon zkEVM. Due to multiple tiers of decentralisation within price data, oracle node operations, and oracle network structures, Chainlink data feeds offer resilience against API interruptions, anomalies during flash crashes, and malicious data tampering, such as those facilitated by flash loans. This makes them the ideal choice for security focused DeFi protocols built on Polygon zkEVM.

(source 17)

(source 18)

## **Market Updates**

## USDC user base increases by 59% while circulation drops

According to a report from Circle, the issuer of USDC stablecoin, the number of wallets with at least USD 10 worth of the USDC token grew to 2.7 million in 2023, an increase of 59% over 2022. This increase occurred despite a 44% decline in its circulation, falling from USD 45 billion to 25 billion in the first 11 months of 2023. The company attributed this to "rising interest rates, regulatory crackdowns, bankruptcies, and outright fraud". Amidst this backdrop, Circle filed for an Initial Public Offering in the USA on 11 January 2024 aiming to raise funds for developing its ecosystem and target Africa for expanding USDC usage.

(source 19)

(source 20)

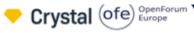
## Global crypto ATM network decreases for first time ever

The total number of crypto ATMs installed globally decreased by 11% in 2023, making it the first time ever that the number of these ATMs have registered a decline in over a decade. The number of crypto ATMs went from 37,827 in the beginning of 2023 to 33,628 in 2024, according to data from













Coin ATM Radar. The United States registered the biggest fall of 15.4%, from 32,672 to 27,631, though it still is home to 82% of crypto ATMs worldwide. BitAccess, a major ATM manufacturer, registered a decline of 26% of installed ATMs, from 9,160 in August 2022 to 6,774 in January 2024, while both General Bytes and Genesis Coin, two other major manufacturers, registered an increase in their network.

(source 21)

### **Terraform Labs files for Chapter 11 bankruptcy**

Singapore-based Terraform Labs, issuer of the now-defunct TerraUSD stablecoin famously known for starting the "crypto winter" in 2022, has filed for Chapter 11 bankruptcy in the United States. The company has listed its assets and liabilities in the USD 100-500 million range and said that it will meet its financial obligations to the employees and vendors during the proceedings without the need for additional financing. The company also plans to keep expanding its Web3 offerings. This comes in the backdrop of the US court agreeing to push the date for SEC vs Terraform Labs trial to 25<sup>th</sup> March this year.

(source 22)

#### Bitcoin ETF see trade volume of USD 14 billion in first week

Spot Bitcoin exchange traded funds (ETF) registered strong business after it began trading in the United States on 11th January. The cumulative trade volume of 11 spot Bitcoin ETF reached USD 14 billion in the first week of its inception. This amount is more than all other ETFs launched in 2023, according to Coinbase, a major crypto exchange. The funds have attracted around USD 1.2 billion of investments in the first week of trading. However, activity in ProShares Bitcoin Strategy ETF (BITO), a leading bitcoin futures-based ETF, recorded a 75% slide and a net outflow of USD 270 million over the same period.

(source 23)

## **UAE** research centre announces blockchain-based carbon trading platform

The Cryptographic Research Center of the Technology Innovation Institute, a research center affiliated with Abu Dhabi government, has built a new blockchain-powered carbon trading and tracking platform. The platform was launched on 5th December at the United Nations Climate Change Conference (COP28) and will support international trade of tokens linked to green investments. The platform can track carbon emissions from global public- and private-sector organisations. It also allows users to create tokens that measure carbon dioxide amounts removed from the environment and track it through its supply chain journey.

(source 24)













## Société Générale launches euro-pegged stablecoin

Société Générale, France's third-largest bank, on 6th December issued a Euro-pegged stablecoin, becoming the first major banking institution to issue stablecoin. The EUR CoinVertible coin is fully backed by euro reserves and launched on Bitstamp exchange. While other banks like JPMorgan, a large investment bank, have issued their own stablecoins, they are available only to a small group of institutional clients, while EUR CoinVertible will be available widely for crypto trading. The bank hopes to use their stablecoin for settling trades in digital bonds, funds, and other assets.

(source 25)

### **UNODC** report warns of rising illicit crypto use in Southeast Asia

The UN Office on Drugs and Crime (UNODC) released a report on 15th January about the illegal gambling and cyber fraud industry that has come up in East and Southeast Asia. The report details how USDT has become a popular means of payment for criminals using these compounds. It also highlights the use of USDT and Tron blockchain in money laundering as part of the growing illicit digital economy. This report follows up on a previous UNODC report released in August 2023 detailing how hundreds of thousands are being trafficked by criminal groups and forced to carry out crypto frauds like romance scams.

(source 26)

#### Kazakhstan blocks 980 crypto exchanges in 2023

Kazakhstan's Financial Monitoring Agency (FMA) blocked access to 980 crypto exchanges, including Coinbase, that were operating without registering with the country's authorities. FMA also launched nine investigations into illegal crypto exchange operations and money laundering. The Digital Assets Law which came in force in February 2023 mandates companies to obtain a national license for conducting cryptocurrency trading and exchange activities. Several major players like Binance, Bybit, CaspianEx, Biteeu and Upbit have obtained approval to operate in the country.

(source 27)









