JANUARY 2023 HIGHLIGHTS

EEA Publishes QBFT Blockchain Consensus Protocol Specification v1

This month the EEA published the QBFT Blockchain Consensus Specification v1, an evolution of the IBFT consensus protocol described in EIP-650. In particular, QBFT provides improved reliability with a small number of validators, as well as better finality speed and handling of network configuration changes.

The specification was developed over a number of years. In the specification, the algorithm is presented written in Dafny code, and formally verified for correctness by Roberto Saltini of ConsenSys.

The beginning of the work was a realization among a number of members that IBFT wasn’t in fact completely specified, as shown by the inability of implementations to work together on the same chain. More importantly, there were some configurations or situations where it would fail to reach finality.

Like all Proof of Authority consensus, it wasn’t meant for a permissionless public network. So it is unsurprising that organizations developing Enterprise Ethereum clients identified the issues. The EEA’s former Core Specifications Working Group, which was responsible for developing the EEA Enterprise Ethereum Client and Enterprise Ethereum Blockchains specifications, discussed these problems and worked on potential solutions. Alongside ConsenSys, EEA members Banco Santander, BlockApps, Clearmatics, and JP Morgan Chase, all provided substantial input and work on the issues, with JP Morgan Chase’s Henrique Moniz proposing a revision to the IBFT specification that resolved a number of the issues, and that work provided the algorithmic underpinning of the current specification.

QBFT is deployed in production by EEA members running Enterprise Ethereum Blockchains and is used on the EEA Testnet, running with both HyperLedger Besu and ConsenSys’ GoQuorum clients as validators. It is suitable for networks where a Byzantine Fault-Tolerant Proof of Authority consensus provides sufficient security - i.e. the proportion of validators that can be trusted to behave correctly does not fall below 2/3.
Another Milestone for the Baseline Protocol

The Baseline Protocol, which is managed as an EEA Community Project and technical specification through Oasis, recently announced that its third reference implementation has reached the second of its five scheduled milestones. BRI-3, as this minimal-complexity reference implementation is known, will make the use of privacy-preserving zero-knowledge cryptography in enterprises easy for developers and allow them to gain a deeper understanding of how to build any type of privacy-preserving zero-trust enterprise use case. It also lays the groundwork for SDKs and additional tooling that will enable more developers to implement zero-trust solutions. More detail on our blog.

Examining Business Models for Blockchain Projects

Vinicius (Vini) Farias Ribeiro, EEA Regional Representative for Portugal, has published a blog on the EEA site on the subject of to what extent blockchain projects should care about business models. While for-profit projects will of course be looking at ways to ensure revenue is higher than expenses, Ribeiro reminds us that projects not intended to turn a profit still have to keep the lights on. See the post for an overview of some of the more common business models they can choose from to help them do so.

Upcoming Events

European Blockchain Convention

Looking for the next thing to do after Davos? How about the European Blockchain Convention, which takes place between February 15 and 17, 2023 in Barcelona. EEA members Banco Santander, JPMorgan Chase and ConsenSys will join a host of distinguished speakers from the European Commision, Meta, Fidelity Investments and many more. If you would like to meet EEA Technical Programs Director Chaals Nevile while he is there, please contact EEA.
Who’s Going to ETHDenver 2023?

Dan Burnett, James Harsh and Chaals Nevile will be attending ETHDenver, which takes place this year from February 24 to March 5. We are finalizing our travel plans and your input will be helpful to ensure more successful, informal EEA Member meet-ups at another high-profile Industry event!

Please let us know what your plans are and we’d be glad to meet up!

Ways to connect:

- Email James at james.harsh@entethalliance.org
- Access our ETHDenver Google sheet and input your event and attendance details.
- Join our EEA Member Only ETHDenver2023 Slack Channel and begin sharing details here and invite your EEA colleagues to join.

Ethereum Zurich

Switzerland, home of the Ethereum Foundation, is finally getting its own major Ethereum-focused event. Held in conjunction with the University of Zurich and organized by the same team that has been organizing ETHPrague, Ethereum Zurich is scheduled to take place between April 14 and 16, 2023.

The EEA, which is one of a number of event sponsors, will have two team members attending: Chaals Neville is scheduled to speak, and Tom Lyons will be moderating some panels. Both will be available to meet members. If you are in Zurich during that time and would like to catch up, just reach out to Tom at tom.lyons@entethalliance.org.

EEA at Consensus by CoinDesk 2023

Team EEA also plans to be back at Consensus by CoinDesk. The event takes place in Austin, Texas April 16-28. If you plan to attend or would like to know more, just reach out to James.
Working Groups and Interest Groups all had something of a break over the end of 2021 and start of 2022, but are now all back working.

- The **DRAMA (Defi Risk Assessment, Management and Accounting) Working Group** published a survey, seeking feedback from DeFi investors on how important they consider various potential risks. The group requests feedback from any organisation (or individual) investing in DeFi assets. They are now back to focusing on the development of their discussion paper about different risks that need to be assessed both before investing as part of due diligence, and through the lifetime of an investment to manage it appropriately.

- The **EthTrust Security Levels Working Group** has been revising the specification to take account of new issues that have been discovered since the publication of version 1 in the middle of last year, as well as casting an eye over the big security stories of the last year or so and checking that the issues that gave rise to them are covered in the specification draft. As always, the very latest Editor’s draft - which is a constantly evolving snapshot of the Work in Progress - is publicly available for review, as well as the released version of the Specification.

- The **Authority to Operate Working Group** have revised their working documents, and are considering the demand for Authority to Operate in the current Ethereum space. This field is evolving, with the shift to Quantum-Safe Cryptography an important consideration for both the Government and the Ethereum ecosystem.

- The **Crosschain Interoperability Working Group** have been developing their draft Messaging specification, and the draft Crosschain Identifier specification (also available as EIP-3220) that aims to provide a deterministic and automatically verifiable identifier for as many types of blockchain as possible, specifically ensuring that those properties will hold for any Ethereum blockchain. They are also continuing to establish links with other groups working on similar projects, including the IETF’s SATP group considering relay-based transfers between chains, the CAIP and the L2 EEA Community Project who are attempting to provide some form of chain identifier, the former for any chain and the latter for Ethereum blockchains, to share resources and avoid unnecessary duplication of work.
• The **EthTQ Working Group** is about to launch the 'EthTQ Resource Repository', which will allow the public to view EEA member recommended education and training resources- keep an eye out for the form to submit your resources. The work group is excited to turn the commonly used phrase "DYOR", do your own research, into a series to share member’s insights on how to conduct research in such a rapidly growing space, reach out to [EthTQ@entethalliance.org](mailto:EthTQ@entethalliance.org) to be part of the series. EthTQ is always looking for new educators, industry professionals, and enthusiasts to bring in various perspectives in the effort to standardize education in the Ethereum and Web3 ecosystem. See full information at [https://entethalliance.github.io/EthTQ/](https://entethalliance.github.io/EthTQ/).

• The **Testnet Group** is working on documentation to enable participation in the EEA Testnet, which currently runs GoQuorum and Hyperledger Besu nodes as validators, on a permissioned network using QBFT consensus. EEA Members are able to claim accounts with sufficient network ETH for almost any purpose, and are invited to use the testnet or to request that it be run in a specific configuration for testing purposes.

• The **Mainnet Interest Group** is working to develop some in-depth explanatory material for Layer 2 systems, which is anticipated will be in the form of video presentations of different types of L2 answering common questions such as what use cases the system is designed to support, and what about the technological approach makes it the appropriate choice.

• The **DeFi Interest Group** continues its series of frank discussions among members on topics of interest in the space. These are not recorded, to encourage participants to value presenting their thoughts honestly - and hearing those of others - over polished presentations reviewed by a PR department. The meetings are open to all EEA members, who are also welcome to propose specific topics for discussion.

• The **L2 EEA Community Project Working Group** is working on a specification to address the significant lack of standardization around the definition and listing of tokens on Layer 1 (L1), Layer 2 (L2), and Sidechain systems (see the [Canonical Token List (draft specification)](https://entethalliance.github.io/EthTQ/), as well as the [EEA Community Project L2 Token List Version 1.0](https://entethalliance.github.io/EthTQ/)). The group is also working on EVM-based address aliasing, which is a critical prerequisite for interoperability between EVM-based L1s, L2s, and Sidechains. More in the [EEA Community Project 1st draft of EVM based address aliasing specification](https://entethalliance.github.io/EthTQ/).
DRAMA WG Defi risk survey

The DRAMA WG has published a survey primarily seeking to understand how important Defi investors consider different categories of potential risk. There are 13 categories of risk described, ranging from security of the smart contracts that implement the protocol to the risks associated with unclear taxation status. (As well as some statistical information to understand whether the results depend on the size of the investment or similar factors - that will not be used for any other purpose. Nor will identifying information be made available to the public).

The request is that any investor in DeFi provides feedback. The simplest way is by filling in the survey directly. However we invite investors to contact the EEA and have a DRAMA working group member offer to go through the survey with you - because we expect that will provide the group with a richer understanding of how the industry evaluates different kinds of risk.

Member News

Despite the challenging times around the world, the EEA continues to attract Industry leaders and innovators dedicated to the growth, development and overall health and success of the Ethereum Ecosystem!

Please reach out and welcome our new members below as well as check out our current EEA Member Roster to learn, network and build your connections around the globe!

EEA would like to welcome its newest members:

- **Cryptio** - Enterprise-grade accounting, audit and tax software for your digital assets.
- **LiFi** - Cross-chain bridging, swapping and messaging will drive your multi-chain strategy and attract new users from everywhere.
- **VTR Services** - Real Estate Technology Provider looking to leverage Ethereum in the Real Estate Industry.
- **Entersoft Security** - Cyber security company with experience in Application Security and Code Audits. Since 2016, they have been working in crypto currency and smart contract audit security space helping to secure the web3 ecosystem.
- **Ambire Wallet** - A self-custodial crypto wallet designed with power and ease of use in mind.
- **Koding Kingdom** - Leading force in the education technology space in Asia. We have been providing education technology services to over 50,000 students, teachers, enterprises and NGOs in the region.
**Member News and Updates:**

EEA Members EY and Polygon have reached a milestone with the latest beta in the development of Nightfall, providing rollups based on zero-knowledge proofs to manage privacy while notarising transactions on the Ethereum Mainnet. A release is anticipated for the EY Summit in May.

EEA member VMWare has dropped its Beta 1 release of VMware Blockchain for Ethereum. For more information, read the blog post.

We appreciate your support by following and actively contributing to our social channels listed above!

Please be sure to submit any news you’d like to share with the EEA Member Community and beyond. We will include it in our EEA Member and Non Member Newsletters, EEA Twitter and EEA LinkedIn Public and Member-Only Networking Group.


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**In the News**

**Our Members in the News**

Microsoft Cloud Supply Chain & Finance is a finalist in Alexander Hamilton Treasury Awards for its blockchain work.

**Other Global News of Interest**

- The European Council’s Eurogroup provided updates on a potential digital euro: it cannot be programmable and must be automatically convertible to traditional assets.

- South Korea Launches Metaverse Replica of Seoul. South Korea has been expanding its metaverse initiatives as part of its "Digital New Deal" political initiative. In February 2022, the nation announced plans to earmark about $200 million to fund metaverse projects, giving out grants to universities and companies to help expand their technologies. The Bank of Korea also reportedly completed a test of central bank digital currencies in November.