Newly published analysis identifies secure alternatives to current proposal to solve Ethereum Classic's 51% attack vulnerability

- IOHK and the ETC Cooperative have published an analysis of the proposed solutions to Ethereum Classic's 51% attack vulnerability
- The analysis reveals flaws in the ETC Labs-proposed 'MESS' solution, and identifies Checkpointing and Timestamping solutions as superior due to robust and proven security
- The report also proposes a decentralized treasury solution for ETC, allowing it to fund independent developer teams to create useful solutions on the platform, broadening its appeal.

20th October, 2020: The ETC Cooperative, the body tasked with financially supporting the growth and development of the Ethereum Classic protocol, and leading engineering research and development company IOHK, have published a joint analysis of the different options and proposals from across the ETC community to mitigate against 51% attacks and secure the ETC network. The report concludes that the Checkpointing and Timestamping solutions proposed to the ETC community provide far greater - and importantly *formally proven*, security against attacks.

With exchanges like [OKEx threatening to delist ETC](#) should the community not improve its security, and others taking a 'watch-and-wait' approach to possible delisting, finding a robust solution to these 51% attacks is crucial. A number of developer teams have proposed solutions, and IOHK curated a series of crowdcasts, providing teams with a platform to present their solutions.

ETC Cooperative and IOHK undertook an analysis off the back of these presentations, released today, which concludes that the 'MESS' solution implemented by ETC Labs will not provide robust security required in order to protect against further 51% attacks. The analysis reveals that alternative proposals - Checkpointing and Timestamping - provide significantly more security against attacks and have been formally described and proven to be secure.

The report also proposes implementing a decentralized treasury to secure the future of the ecosystem. This would provide a permanent, ongoing source of funding for the development of the ETC platform, ensuring it is more useful and ultimately making the ecosystem more valuable as a whole. A democratic and transparent funding mechanism will also allow the ETC community to determine its future direction by allowing it to choose which innovations are incorporated into the ETC product offering, allowing it to keep pace with and exceed the capabilities of other platforms.

The ETC Cooperative and IOHK believe these steps will attract the best developer minds to launch the ETC network into a new era of network growth, community growth and sustainable innovation.

Bob Summerwill, Executive Director of the Ethereum Cooperative, said:

"ETC has a bright future, which we believe is why major stakeholders such as exchanges have shown incredible patience following previous attacks. However, if, as a community, we claim to have fixed these issues only for them to appear again in the future, this patience could run out, and we could see these shareholders cut their losses and depart from the network and the community. As a result, we can't

afford to rely on unstudied solutions. Any 51% attack mitigation must be provably robust in order to give absolute certainty to ETC holders, users, and service providers that their transactions will be secure.

"We hope this analysis, along with the proposed decentralized treasury, is the first step in a move away from centralised leadership and decision-making, to a model which uses the multitude of talented brains in the ETC ecosystem, allowing technical and other ecosystem proposals to be essentially peer reviewed, improving them and ensuring they are sound."

Charles Hoskinson, CEO of IOHK, added:

"Having worked closely with the ETC community over recent years, we were well placed to both provide an open platform for developers of potential solutions to ETC's 51% attack vulnerability to present their solutions, and to provide a concise technical assessment of all the proposed solutions. Recent weeks have illustrated the vibrant nature of the ETC community, the platform's great potential for widespread adoption, and the community's desire for a mechanism to attract the world's brightest minds to opportunities to develop solutions for the platform, broadening its appeal. We believe that a treasury, to fund that innovation, is the solution to that challenge.

"We believe that challenging times call for collaboration, not competition, which is why this paper isn't just for the ETC community, but is designed to educate the wider crypto community on how to mitigate against future attacks on other proof of work chains. The blockchain space is not only large enough to sustain collaboration, but actually needs increasing levels of collaboration in order to reach its goals of widening and democratising global access to financial services."