ZeU Files Patent for Post-Quantum Encryption with Universal Applications

-FOR IMMEDIATE RELEASE-

Montréal, January 14, 2019 – **ZeU Crypto Networks, Inc. (CSE: ZEU)** is delighted to announce that its encryption team has completed the testing of its new symmetric asynchronous generative encryption or *SAGE*, a ground-breaking post-quantum encryption algorithm.

The Company has filed this week a provisional patent application with the US Patent Office titled *'Symmetric Asynchronous Generative Encryption.'* The development of the algorithm was spearheaded by a joint team of shared resources between ZeU and VSEKUR. As a result of the joint effort, Jean-Philippe Beaudet and co-inventor, Frank Dumas, will assign the IP to ZeU, and ZeU will issue a perpetual license to VSEKUR. The mechanics of the license and the mutual royalties are being negotiated, and further disclosure will be provided in due time.

The algorithm uses random number generation, currently ZeU's Patented RNG (other inputs could be used), a codex, and an encryption key to ensure the security of data. Furthermore, the key mutates every time it is used, always keeping data ahead of decryption. In addition, it does all this without sacrificing performance.

Current encryption methods rely on the difficulty of resolving a problem related to ECC (Electrical Curve Cryptography) or RSA (Rivest–Shamir–Adleman) to maintain a high level of security. In the classical computing paradigm, cracking the code is nearly impossible or requires immense computing power coupled with up to a century to spare.

However, the emergence of quantum computers tasked with the exponential increase in calculation power creates severe vulnerabilities to the security ensured by the classical computing paradigm. Some experts believe that, within 5-10 years, quantum computers could break classical encryption in minutes, if not seconds. Malicious actors could preserve a copy of sensitive records (for example, medical records) to be deciphered in the future, making post-quantum data encryption needed today.

The Mechanics

Alice wants to communicate with Bob. She generates her genesis and initiator half-key and sends Bob a communication channel request by submitting two half-keys. Bob receives the request, generates his genesis and initiator half-key, which he sends to Alice. Once Alice receives Bob's half-keys, they both generate a common codex from the combination of the genesis and initiator keys. The communication channel can now send and receive messages. Alice creates a message, encodes it, then her key permutates, and she sends it. Bob receives the message, decodes it, then his key permutates in relation to Alice's latest key permutation. This continues as messages are sent back and forth, the keys permutating with each use. Only persons involved in the message chain receive the updated permutations.

Case Study

A Government has spent several years and several billion dollars developing new satellite technology. However, with the emergence of quantum computing, the Government is concerned that its current encryption will be cracked before the end of the lifespan of the satellite. Using *SAGE* as the encryption, the Government can rest assured that the data it receives from the satellite will be secure and uncorrupted for the foreseeable future.

"(...) While we created this technology to encrypt data and to keep it secure, we believe that it has a multitude of uses. For example, at ZeU and VSEKUR, we believe that there is a fundamental right to be forgotten. Until all governments have enshrined in law the mandatory deletion of data, encryption - the inability for outsiders to access that data - is the next best option (...) SAGE combines the DNA of ZeU and VSEKUR (...) The response that we've received from the community so far has been incredible," said Jean-Philippe Beaudet, ZeU's CTO.

"(...) This is the first tech that we hardcoded and tested extensively with third parties before filing for a patent. (...) Conceptually it was perfect, the proof of concept was perfect (...) we felt it was too good to be true and went the extra step of coding it to test it in a fully functional real-world environment (...) We already received interest from third parties to code it in different coding languages to integrate it into their suite of applications (...) this tech is a fantastic achievement for us. It has the potential to make ZeU mainstream (...)," commented Frank Dumas, ZeU's CEO.

ZeU is currently exploring options to expand *SAGE* to other applications. The Company is presently testing *SAGE* for signature file authentication. It is also looking into using *SAGE* as a blockchain-distributed certificate authority.

ON BEHALF OF THE BOARD OF DIRECTORS

"Frank Dumas"
Frank Dumas
President & CEO

About ZeU

ZeU is a forward-thinking Canadian technology company that has developed a state-of-the-art blockchain protocol, providing the foundation for the next-generation of crypto networks. Thanks to its high level of sophistication, ZeU's technology maximizes transparency, security and scalability as well as big data management. ZeU's strategy is to monetize blockchain transactions in diverse sectors such as payment, gaming, data, and healthcare.

The Canadian Securities Exchange (CSE) has not reviewed and does not accept responsibility for the adequacy or the accuracy of the contents of this release.