



Centre for Air Power Studies (CAPS)

Forum for National Security Studies (FNSS)

Title: **BURGEONING AND EVOLVING BITCOIN ECOSYSTEM: CHALLENGES AND CONCERNS FOR NATIONAL INTEREST**

Chairperson: Wg Cdr **BS Nijjar**, Research Fellow, CAPS

Speaker: Gp Capt **Ashish Gupta**, Senior Fellow, CAPS

Discussant: Mr. **E.Dilipraj**, Associate Fellow, CAPS

Rapporteur: Mr. **Gideon Kharmalki**, Research Associate, CAPS

Date: 20 January 2017

- The world was introduced to the Bitcoin on October 31, 2008. Several hundred members of a mailing list comprising cryptography experts and enthusiasts received an e-mail from a source under the nom de plume Satoshi Nakamoto. The transaction of 'tokens' or Bitcoins was intended to take place outside the traditional banking structure and facilitated transfer of digital money directly to each other—peer to peer.
- The most defining and impactful feature of Bitcoin is its completely decentralised nature. This ensures Bitcoin network survivability. Every Bitcoin user is an integral part of Bitcoin ecosystem and it would amount to almost a cleaning of Augean stables to shut down everyone at the same time.
- As of November 2016, there were about 15.97 million bitcoins in circulation, with a total market capitalization of \$ 11.2 billion (at an exchange rate of about \$704 per bitcoin). There are currently over 279,015 Bitcoin transactions per day. Yet, critics remain apprehensive about its robustness and scalability to cater to transaction needs of large number of users.



- The rapid growth and mainstream proliferation of Bitcoin has made it a national security concern of high priority.
- Bitcoin has emerged as a threat that could derail the national economy. Firstly, all transactions facilitated using Bitcoins are anonymous and are not traceable. Secondly, accumulation of Bitcoin as assets by an individual or a group cannot be frozen, confiscated or seized as part of punitive actions under the existing provisions of law. Thirdly, transactions and purchases made using Bitcoin can no longer be regulated or controlled through any central financial or institutional authority. These have exponentially increased the threat of cyber-crime and cyber terrorism, since a globally accepted, anonymously transacted and virtually intractable digital currency is available to terrorist and cybercrime syndicates to oil their terror and crime machinery.
- The recognition of Virtual Currencies (VCs) to be worthy as a fully-fledged competitor to centrally managed fiat currencies in countries with stable economies, established institutions and low political risks, is still a distant possibility. The current penetration and proliferation of Bitcoin is too small to pose a formidable challenge to fiat currency and existing macroeconomic framework based on fiat-currency systems. However, in the face of a wilting economy, unstable macroeconomic conditions and social-political volatility it is very likely for Bitcoin to gain traction and entrenchment in overall economic ecosystem.
- On the issue of legal status of bitcoin, there is no global consensus on the specific set of laws or regulations that govern Bitcoins' transactions, investment, or remittances. The law on Bitcoin varies from country to country and the regulatory framework on Bitcoin in different countries is either fragmented or non-existent and in most cases still evolving. In some countries, Bitcoin can be used for trading and purchasing while in some the use of Bitcoin is either banned or restricted.
- In India, the regulatory environment for Bitcoins is still fragmented which is inhibiting the emergence of an explicit legal framework capable of addressing and resolving the full gamut of issues related to Bitcoin.

- The lack of regulatory structure and oversight is causing uncertainties and perplexities for both: the users and law enforcement agencies. The Income Tax department in India is in the midst of serious contemplation over how to impose tax on Bitcoin miners in India in the long run. However, until the RBI comes out with clear guidelines, Bitcoin regulatory mechanism will not be fully aligned with the overall goal of regulating its exchange, transfer and trading and protection of individual's interests.
 - Bitcoin offers ease of transactions to legitimate users, but the threats to the national security are worrisome. There is a pressing need to enunciate and formulate new strategies for regulation of Bitcoin and other virtual currencies to mitigate the threat to national security and financial interests.
-

