**Constraints**

* The bandwidth requirements of the blockchain must be lower than the capacities of about 75% of the network nodes in the system. (If the requirements are too high, only some of the nodes will be able to process blocks which will lead to centralization of control.)
* The timestamp contained in each block, which indicates its creation time, must have at most three hours of deviation.
* There must be a uniform access among all network nodes such that no network node must wait for another node to transmit more than one block.
* The blockchain must not accept a transaction which has more data than the maximum size of a block.
* The blockchain must not accept a block which does not a contain a particular key which indicates its validity.
* The time required for creating a new block must be less than 20 minutes.
* The block size must not be more than 1 MB.
* The blockchain size must not be more than 40 GB.
* The contents of the transactions must not be open to third parties.
* There must not be any method for decrypting the cryptography algorithm used for transactions except for brute force attack.
* Brute force attack to decrypt the cryptography algorithm must theoretically require at least 10000 years to execute.
* The speed of encryption algorithm must be at least 20 MB/s.

<http://www.multichain.com/blog/2016/03/blockchains-vs-centralized-databases/>

<http://www.jenitennison.com/2015/05/21/blockchain.html>

<http://www.cs.wustl.edu/~jain/cse567-06/ftp/encryption_perf/>