**Delegated Proof of Stake**

* Delegated Proof of Stake (otherwise known as DPoS) is a consensus algorithm maintaining irrefutable agreement on the truth across the network, validating transactions and acting as a form of digital democracy. It is the protocol of choice at Lisk and with very good reason.
* Delegated proof of stake uses real-time voting combined with a social system of reputation to achieve consensus.
* It can be seen to be the least centralized consensus protocol compared to all others as it is the most inclusive. Every token holder can exercise a degree of influence about what happens on the network.



The roles of delegates revolve around:

* Ensuring their node is always up and running.
* Collecting the transactions across the network into blocks.
* Signing and broadcasting those blocks, validating the transactions.
* If there are issues in regard to consensus, DPoS allows these to be resolved in a fair and democratic way.

**Implementations of Delegated Proof-of-Stake**

* At this point it is important to mention that there exists numerous ways in which DPoS as a consensus mechanism can be implemented.
* It then becomes important to read the documentation released by projects in order to properly understand the manner in which it is being applied.

**Advantages of Delegated Proof-of-Stake**

Delegated Proof-of-Stake offers advantages over the more well-known consensus algorithm, Proof-of-Work (PoW). These advantages include:

* Saving on energy costs
* Promotes decentralization

**Disadvantages of Delegated Proof-of-Stake**

* Sufficient decentralization can never be achieved
* Successful existence of the network requires participation and coordination of genuinely interested community for effective governance of the panel of witnesses by voting them in and out.
* DPoS systems are vulnerable to centralization as a number of witnesses is strictly limited.
* DPoS blockchain is exposed to flaws of classic real-life voting. For example, DPoS users with small stakes can decide that their vote doesn't matter in comparison with votes of bigger stakeholders.

EOS

* EOS is a **blockchain platform** with the use of the delegated proof-of-stake (DPOS).
* EOSIO is a next-generation, **open-source blockchain protocol** with industry-leading transaction speed and flexible utility. Introduced in May 2017, it has since been widely recognized as the first performant blockchain platform for businesses across the world.