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BLOCKCHAIN AND COMPETITION LAW

Blockchain technology is called the new digital revolution which will fundamentally change our work processes and business models. Here is what you need to know about the interaction between blockchain and competition law.

WHAT IS A BLOCKCHAIN?

A blockchain (Distributed Ledger Technology) may be described as a chain of blocks containing transactions. These blocks are linked via cryptographic references. This means that each block is characterised by a cryptographic unique signature with a time stamp (hash) referring to the previous block. The transactions are verified and validated by the network, thereby ensuring that the transactions are correct. A blockchain may be a publicly available system or a private system. A blockchain functions without an intermediary as it is organised in a decentralized manner and distributed between all the participants of the network.

Consequently, a blockchain is a decentralised and openly distributed file which makes the transactions verifiable and effective. A blockchain may therefore not be manipulated without this affecting previous blocks so that the signatures no longer match. Blockchains have therefore very quickly become popular within the financial sector as a payment instrument.

WHERE CAN I USE BLOCKCHAIN?

Blockchain may be used in a number of areas. Most popularly as cryptocurrency, e.g. Bitcoin or Ethereum, but blockchain are also used within other sectors. Another example is the shipping industry where there are high requirements for security and complex processes involving many entities, authorities and companies. According to a press release from 2019, Mærsk uses blockchain for the handling of its documentation of freight and transportation.

Another example is property transactions where documentation must be sent securely between the different parties of the transaction. This process may be streamlined by storing the documents on a blockchain. Part of the process is then automated, and all parties will have access to the same information and updated documents due to the decentralised distribution.

The blockchain technology has obvious advantages making it easier to carry out transactions and verify data. The technology is therefore also expected to be used in a wider way in the future.

CHALLENGES IN TERMS OF COMPETITION LAW

Even though blockchainis a new way of carrying out transactions, the competition rules also apply to blockchain. It is therefore important to consider how the competition rules may come into play so that new initiatives are implemented in accordance with the competition rules.

Exchange of information

A blockchain is not in itself anti-competitive, but it may form the basis of a violation of competition rules due to its technical design. This is due to the fact that a blockchain may be designed as an open network and distribute the data "in real-time" where all participants have access to all data and transactions.

There may therefore be a significant risk that competing companies may exchange data via a system using blockchain. It is therefore necessary to carefully consider the use, the participating parties and the data exchanged.

Unlawful agreements

Blockchain make it possible to automate processes. For instance, a smart contract may be performed automatically when specific requirements have been fulfilled. This means that the technology may also be used to implement processes between different parties.

It is not unlawful to use a blockchain to automate processes or cooperation relationships. However, problems relating to competition law may arise if a blockchain is used for the implementation or carrying out of a joint decision on price development or production quantities between competitors. The same applies to the situation where a smart contract is performed automatically due to anti-competitive parameters. It is e.g. unlawful if a smart contract implies that the market is distributed between competitors.

Finally, it is unlawful to participate in a cartel in the virtual world as well as the physical world.

Access to and behaviour on a blockchain

Another challenge may arise when using a private blockchain. This is a blockchain which gives access only to a specific group of people after approval of the network. Other persons may be excluded from participating.

In general, companies may freely choose their cooperation partners. But, as in the physical world, other rules apply to companies with a dominant market position. These companies may have difficulties limiting access or excluding specific companies from a blockchain if the network or the infrastructure is necessary to participate on the market. This results in entry barriers, prevents competition and may be considered an unlawful refusal to deliver.

CONTACTS

Marie Løvbjerg
Senior attorney
+45 33344383
mal@horten.dk

Sarah Maringele
Legal Advisor
+45 33344352
sam@horten.dk