Smarter container logistics through blockchain

T-mining is an independent Tier 2 technology provider building a trusted community collaboration platform for container logistics by leveraging blockchain technology, enabling:
- increased operational efficiency driven by more intense collaboration;
- lowered administrative costs thanks to reduced paperwork & manual interventions;
- increased security and reduce risk thanks to blockchain technology;

Today, in the Port of Antwerp, **3 blockchain services are piloted**. Secure Container Release, our first use case, facilitates the secure transfer of the right to pick-up a container across the supply chain so the container is released only to the driver that holds the right on the blockchain, leveraging chainwise security. Building further on this, a second use case has been developed around Chainwise Collaboration, facilitating the exchange of data by parties involved in the chain, unlocking operational efficiencies. A third use case focuses on the secure workflow of documents and certificates, reducing paperwork and automating the underlying workflow.

The blockchain network supports the hosting of the **Smart Contract Platform** for Logistics. This platform contains a library of pre-made smart contracts (i.e. programmed business logic) for the shipping and logistics industry. The Smart Contract Platform also contains modules for caching, monitoring and file-management to support the usage of the blockchain network for shipping-related use cases.

Our solution is based on a **permissioned (i.e. closed) blockchain network** that uses the Ethereum Virtual Machine with a proof of stake, Byzantine fault tolerant (BFT) consensus algorithm. Individual blockchain nodes are hosted by the different partners in the project. This node helps to strengthen the network, and validates data as it is submitted to the blockchain. Additionally the node serves as a local entry point to the API which allows the partner to make a smooth integration with its own legacy systems.

By using an **open technology architecture**, API's, and platform-structure, our Smart Contract Platform is accessible for other parties to connect to, integrate, or even build custom solution and extensions.

The company was **founded in December 2016**. All 3 founders have extensive experience in container operations, logistics software and business development. On top, the company is funded with smart money from senior business angels and imec, next to a government loan and grants. We have offices in Antwerp and Singapore and currently employ 10 people, hiring further the coming months.

More info can be found on t-mining.be, twitter via @tmingbc or LinkedIn https://www.linkedin.com/company/t-mining or contact us via info@t-mining.be.