

held various trial runs in 2017 using a system developed by Samsung. Other initiatives include Blockfreight,³⁴ the SAP ocean shipping project³⁵ and Quasa,³⁶ an open blockchain platform for cargo transportation companies in Russia and the Commonwealth of Independent States. These are only a few of the projects that are being developed in this field.

The number of smart port projects with a blockchain component is also increasing rapidly. In Europe alone, ports such as Hamburg, Antwerp and Rotterdam are all looking at the potential of Blockchain to help them streamline their activities and improve the sharing of logistical and contractual information between parties.

Initiatives are flourishing in every corner of the globe, leading some observers to note that Blockchain is about to revolutionize the world of transportation and logistics.³⁷ Some of the projects being developed could, in fact, have an even broader impact. The attempts of certain companies to work with government authorities to develop platforms that would connect all actors along the supply chain could be revolutionary – but are not without challenges.

With 90 per cent of goods traded internationally transported by sea, maritime transportation plays a critical role in global trade. One of the leading players in the sector, Maersk, has been working actively with IBM to develop a Blockchain-based global trade platform, called TradeLens,³⁸ that aims to connect the various parties involved in international trade – from freight forwarders to government authorities – and to digitalize the supply chain from end to end, with a view to streamlining and facilitating procedures (see Figure 10). The platform was officially launched in August 2018 after having been piloted for several months (Wass, 2018b). A cross-industry advisory board will be established with a view to taking into account the specific needs of the various sectors concerned in designing the platform in an effort to develop an industry-wide platform. The trade document module, called ClearWay, enables importers, exporters, customs brokers, and trusted third parties, such as customs and other government agencies, to collaborate in cross-organizational business processes, and allows for the automation of various business processes such as import and export clearance via smart contracts. The success of the platform will ultimately depend on whether the various actors involved in international trade are willing to sign up. At the time of its launch, more than 20 port and terminal operators across the globe, accounting for more than 230 marine gateways, as well as two other ocean carriers (Pacific International Lines and Hamburg Süd), several freight forwarders and customs brokers, and customs authorities in Australia, the Netherlands, Peru, Saudi Arabia and Singapore, were already participating, or had announced that they would participate, in the platform.³⁹ This is a promising start. However, no banks are part of the project at this stage, and the TradeLens platform is not the only one of its kind.