

phytosanitary certificate. The importance of putting in place single windows has been highlighted in the WTO TFA.¹⁴

However much remains to be done. In a recent study, UNESCAP estimates that the global average implementation rate of “paperless trade” measures stands close to only 50 per cent, with more advanced paperless trade measures such as electronic single windows and electronic application and issuance of preferential certificates of origin remaining at a relatively early stage (UNESCAP, 2017). The latter has only been fully or partially implemented by only slightly more than 40 per cent of economies. The implementation of cross-border paperless measures is even lower. Measures such as electronic exchanges of sanitary and phytosanitary certificates have been fully or partially implemented in less than 30 per cent of the surveyed economies, with developed countries doing slightly better on average than developing economies, except Latin America and the Caribbean, which are leading on several fronts.

Blockchain is seen with hope by many actors involved in international trade as a new opportunity to further facilitate and digitalize international trade transactions. Cross-border transactions involve exchanges of data and documents between two main categories of actors: businesses (B) – importers, exporters, banks, and transportation and logistics companies – and government authorities (G). Electronic single windows are increasingly used to facilitate G2G processes at the national level (i.e. exchanges between national government agencies) and B2G processes, but cross-border G2G processes remain complex. Can Blockchain facilitate such processes, improve cross-border G2G interactions for issues such as sanitary and phytosanitary certification, and move closer to truly paperless trade? While the technology presents interesting features to facilitate certain aspects related to border procedures, moving to a truly global paperless blockchain-based system will require more than simply the technology.

(i) Blockchain could facilitate national G2G and certain B2G border procedures

Because it allows information to be exchanged and processed with all those authorized in real time and in a highly secure manner, and processes to be automated through the use of smart contracts, thereby minimizing coordination costs and delays, Blockchain could enhance the efficiency of a number of B2G processes, enhance inter-agency cooperation at the national level and help to administer single windows, where they exist, in a more efficient way. In particular, it could prove useful with regard to the following: