(iv) Regulatory issues

Going paperless requires more than simply the technology and technical interoperability. It requires a conducive regulatory framework that provides for e-authentication methods and the recognition of e-signatures, e-documents and e-transactions; that recognizes the authority of other government entities (both national and foreign) to issue required documentation, such as certificates; and that allows for the sharing of certain types of information between government authorities. This is true at the national level, where many electronic exchanges cannot be sent from one agency to another because the proper framework has not been put in place, but even more so at the international level.

National legislation may have to be comprehensively examined and adjusted to give legal recognition to e-signatures and e-documents. To date, only a limited number of countries have legal provisions for such recognition. Most countries – as well as commercial buyers/importers – continue to request paper versions of documents. Likewise, in many countries, national legislation has to be adjusted to authorize the access and sharing of information with another administration, even at the national level. A first step should be to recognize e-signatures and electronic transactions on a national basis, and subsequently to explore accepting such messages from other countries. Recognizing e-documentation issued by another country's entity requires case-by-case agreements (UNNExT, UNECE, UNESCAP, 2012).

Only a few truly paperless exchange channels exist to date, such as the exchange of health certificates between the Netherlands and China for dairy products and of phytosanitary certificates between the Netherlands and Colombia for flowers.[29] Building such channels is complex and time-consuming, not least because regulatory issues have to be settled product by product.

Moving to Blockchain would still require definition of the regulatory parameters that allow data to be exchanged among competent authorities. The technology may be new, but the same old regulatory hurdles remain. However, the inherent characteristics of Blockchain and the possibility of using smart contracts to limit access to information only to those authorized could potentially facilitate the establishment of such channels by creating a secure and trusted environment for the exchange of data – provided there is political will.

Although Blockchain can help accelerate the digitalization of trade and enhance the efficiency of border procedures, the road to truly paperless trade remains long. High-level political support is needed to drive trade integration and help establish a legal framework conducive to paperless trade. One of the obstacles to greater trade integration may, in fact, be political. Today, only a limited number of single windows