working with specialized companies (Sapient Consulting and United Solutions) to develop a proof of concept to speed up the fast-lane review process for IT contracts through automation and bring it down to "single digits in terms of days" (Friedman, 2017). Japan is currently testing a blockchain-based system for processing government tenders to improve the efficiency of public procurement processes. The system would connect the various government offices involved in a tender to facilitate the sharing of data (Tian, 2017). Mexico recently launched an initiative to deploy Blockchain within the public sector, including for tender processes.<sup>71</sup> The United Arab Emirates wants blockchain technology to power its entire government by 2020, which would make Dubai the first "city built on blockchain" (Lohade, 2017).

While Blockchain potentially holds interesting promises to enhance government procurement processes, manage public contracts, and fight fraud, it remains to be seen whether these proofs of concept are conclusive and whether the use of Blockchain can bring e-GP to a more secure and automated level at a cost that justifies the transition to a blockchain-based system. The use of smart contracts in government procurement processes will also require the clarification of liability issues (see Section 4.2(c)), and interoperability issues will need to be addressed before parties to the WTO GPA can put in place such systems.

As the various examples presented in this chapter show, Blockchain offers interesting opportunities to improve the efficiency of international trade transactions that involve multiple actors in various areas covered by the WTO, including trade finance, border procedures, transportation and logistics, financial services, insurance, retail distribution, IP and government procurement, while providing for a secure environment. It can enhance transparency, ease tracking of transactions, and speed up processes, including through the use of smart contracts, which allow for the automation of transactions. It is therefore seen by many as the most promising technology to digitalize trade.

The number of trade-related blockchain applications – developed by established companies and startups, often working hand-in-hand in a collaborative manner within consortia in what could be deemed a "cooperative competition" setting, as well as by government authorities – has boomed in recent years. Not without a reason: the technology can only work at its full potential if the various dimensions of international trade, from trade finance, to customs operations and logistics, are digitalized and if common approaches and standards are developed. Smart trade requires more than just the technology. It requires standardization and a conducive regulatory environment, which calls for a holistic, cooperative approach that breaks down existing silos.