

Other international organizations are looking into technical and semantics interoperability issues. In June 2017, the ICC Banking Commission launched a working group composed of industry leaders from banking, fintech and corporate companies to establish a set of minimum standards to which fintech companies can adhere to help address the “digital island problem” (International Chamber of Commerce, 2017c). Work is also underway at the International Telecommunications Union (ITU) and the International Organization for Standardization (ISO). The ITU Telecommunication Standardization Sector established a Focus Group on Application of Distributed Ledger Technology in May 2017. The group will, among other things, develop a standardization roadmap for interoperable DLT-based services, taking into consideration the activities underway in the ITU and in other standards-developing organizations, forums and groups.<sup>22</sup> As for the ISO, it created a committee in 2016 (committee ISO/TC 307) to develop standards to “stimulate greater interoperability, speedier acceptance and enhanced innovation in [the] use and application” of blockchain technology. This committee, which counted 35 participating countries and 13 observers in July 2018, held its inaugural meeting in Sydney, Australia, in May 2017. Several working groups have been established to discuss issues related to use cases, governance, interoperability, security, privacy, identity and smart contracts, and to develop standards (Naden, 2017). Ten ISO standards are currently under development.

The stakes are high. Indeed, the development of incompatible systems would not only run counter to the whole purpose of blockchain technology, which aims at greater integration of processes in a transparent and dynamic manner, but it could also prove counterproductive because it would lock processes into technical silos, and failing to align the semantics would negate the benefits that Blockchain could bring. Addressing interoperability issues both at a technical and a semantic and data level is therefore crucial.

### (c) Legal issues

The wide-scale deployment of Blockchain requires more than technology. It requires frameworks that not only ensure the interoperability of networks, but also clarify the legal status of blockchain transactions, and regulate responsibilities and the way data can be accessed and used. Without this regulatory layer, blockchain technology could well be confined to pilot projects.

Legal issues raised by the use of Blockchain are of two types: general issues such as the legal status of blockchain transactions and questions of jurisdiction; and specific issues linked to the use of Blockchain for particular cases. For some customs matters, for example, an authorization delivered by a particular entity may be required to automate certain processes through smart contracts. These specific