

Lack of coordination and of common understanding on how best to regulate blockchain technology at an international level could well result in a spaghetti bowl of regulations that could ultimately be more harmful than the lack of regulation itself. The decentralized and potentially global nature of Blockchain requires a global approach to regulation, and hence appropriate governance frameworks (see Section 4.2(d)).

(ii) What applicable law and liability framework?

Both permissionless and permissioned blockchains raise issues of applicable jurisdiction, although in slightly different terms. Blockchains, whether permissionless or permissioned, can span several jurisdictions, which poses the question of which national law applies in the event of a dispute or fraud.

Potentially, one could argue that every transaction could fall under the jurisdiction of the location of each participant in the network. However, in the case of public blockchains, nodes can be located anywhere in the world, and the anonymous nature of the platform makes it extremely difficult, if not almost impossible, to identify the processing entity and to pinpoint the place where the contentious transaction is located. The problem is less acute in the case of permissioned blockchains, as participants are known, but the issue of the applicable jurisdiction remains key in the event of blockchains crossing several jurisdictional boundaries.

Likewise, the use of Blockchain raises issues related to the liability framework applicable to blockchain transactions should something go wrong, and the resolution mechanism in case of conflict, technical problems or unintentional action. In the absence of a central entity administering the platform, who is responsible for the functioning of distributed ledgers and the information contained therein in the event of a dispute or unintentional action having adverse consequences? And if a smart contract fails to work as expected, which party is liable?

Do these regulatory hurdles risk impeding the deployment of the technology on a large scale? In the context of permissioned blockchains, many issues related to jurisdiction and liability allow for a technical workaround. Depending on the actual case and the position of the stakeholder, one solution could be to have a "real", conventional contract that would govern the parties' relationship, covering both what the blockchain is supposed to do (e.g. allowing damages to be claimed in the case of a wrongful code in a smart contract), as well as formal legal aspects like jurisdiction or applicable law. This contract, which would be legally binding, would be stored on the blockchain, thereby ensuring that the latest version would be available and immutable, unless changes were agreed upon by the stakeholders (using the time-stamping function of the blockchain to check on latest version) (Deloitte,