Digital protection on the path to net zero

Digitalisation will have a widespread impact on construction companies. From the way they collate, store and share information to the way they collaborate with their client and other project team members, as well as the consequent responsibilities and rights of all concerned.

The ongoing important consideration of these issues and the contractual consequences, often do not get the attention they deserve on the path to net zero. For example, if a party is sharing data and information using a newly developed format or platform, is it complying with all its regulatory obligations in relation to the transfer of data both domestically and internationally? If an employer has certain requirements relating to the use or output of the technologies or digital processes being used, is it clear who is responsible for an unintended amendment, mistake or any loss of the data and information? Is it clear to the parties who owns the different elements of the data and other outputs being produced from the processes?

International legal systems are necessarily reactive. It is important for laws and regulations to be accurate and reflect the best practices for the area concerned. However, this is only possible once there has been sufficient use of the digital technology to learn from real-life experiences and views. There still remain very few laws and regulations aimed at specific digital technologies, for example, smart contracts and Building Information Modelling (BIM).
From a legal perspective, the contract negotiation stage is the key time to deal with the parties’ legal risks. When moving into unchartered waters, clear contract terms on parties’ rights and responsibilities will provide a safety net. The FIDIC suite of contracts promotes standardisation and interoperability in digitalisation efforts and aim to improve project efficiency, data management and governance.

**Cyber security on the path to net zero**

The UK’s GCHQ National Cyber Security Centre (NCSC) noted, when issuing guidance aimed at the construction industry, that “Due to the particular cyber risks facing the construction sector, the NCSC has advised businesses that cyber security measures are as vital as wearing a hard hat on site”.

There have been an ever-increasing number of cyber-attacks in the construction industry with many businesses within the industry being viewed as easy targets that hold a huge amount of sensitive data. Additionally, due to the extensive use of subcontractors and suppliers involving large numbers of high value payments, construction businesses are an attractive target for cyber-attacks such as spear phishing, when attackers send a targeted email pretending to be from a legitimate organisation, in an attempt to trick the construction business into paying money into a criminal's account.

This FIDIC State of the World report has highlighted some of the exciting new ways in which the collaborative use of technology in virtual environments is helping to create more sustainable buildings and reduce carbon footprints. However, access to data, systems and services needs to be protected.

Understanding who or what needs access to data and under what conditions, is just as important as knowing who needs to be kept out. Construction companies must choose appropriate methods to establish and prove the identity of users, devices, or systems, with enough confidence to make access control decisions.

**Shifting the mindset – a collaborative journey**

There was a photograph of an advertisement on a giant billboard around an under-construction building that went viral recently. The ad by a Belgian employment agency for construction professionals read as follows: “Hey ChatGPT, finish this building…Your skills are irreplaceable”. It is a humorous advertisement campaign that highlights one of the key points being made in this State of the World report, that there is a need to “shift the mindset” in the construction industry and recognise that technological advancements and digitalisation are not threats, but rather opportunities. In that instance, the key takeaway may be that artificial intelligence and skilled labour do not need to be mutually exclusive and should complement and collaborate with each other in certain situations.

To facilitate the necessary progress on the path to net zero, the construction industry needs to make informed advancements. Our advice to the industry in embracing this era of digitalisation and new technologies is to work collaboratively from the outset of a project with in-house legal teams and external legal advisors. A lawyer’s role is to help businesses safely achieve their commercial objectives. In order to realise sustainable and long-lasting progress, it will be essential to ensure that the teams driving that progress have a wide variety of skillsets, including legal expertise, to anticipate and plan for the challenges that lie ahead and create a safe and robust framework for the responsible and sustainable use of digital technologies in the construction sector.