

The Land Code

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Key words: Access to land; Cadastre; Digital cadastre; e-Governance; Geoinformation/GI; Professional practice; Security of tenure; blockchain, digital revolution, big data, Internet of things, deep learning

SUMMARY

Traditionally, the documentation and management of the territory relied on a specific form of representation: the map. With the arrival of computers and databases, these representations continued to evolve by virtually adding layers representing different topics and attributes and providing a more detailed and sophisticated representation. With this, a new discipline of geographic information management emerged: geomatics engineering.

Today, everything is still accelerating with the latest technologies of the digital revolution including Big Data, Internet of Things, Blockchain, predictive algorithms of Deep Learning, etc. These techniques offer analytical tools for introducing the notions of anticipation and prediction into land administration and management. The new technologies of the digital revolution bring even more opportunities and do not stop at the mere consideration of Big Data. Blockchain, for example, through their chain-based structure of documenting and operating transactions, will allow the management of deeds and land records in a whole new way. This may bypass the work and services, which are currently provided by notaries and municipal offices responsible for operating registers. When observing these transformations, it becomes apparent that the representation of territories and their management and governance might again face dramatic changes.

This paper, therefore, proposes a whole new approach to master the new options. One can imagine a representation (codification) of the territory that can be called the "Land Code". The choice of this term refers to the fact that the proposed model would have both computational and legal aspects. Block-chains would support and document transactions of land parcels, buildings, or any other land objects, and thus provide a legal guarantee. Inspired by the request for comment (RFC) of the Internet, one can imagine the creation of a "Land Code" both at an international and national level. The land code would be derived from the computational codes and be implemented in new

adminis-trative processes and services of nations, potentially replacing land records. The role of governments would consequently be to provide standards and plat-forms that are open to and encourage the establishment of land codes. The different stakeholders and parties of land administration and management could then plug into the ecosystem (platform) set up by governments.

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FIG Working Week 2017
Surveying the world of tomorrow - From digitalisation to augmented reality
Helsinki, Finland, May 29–June 2, 2017