







22-26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"



Let us speak about the Future of Developed Cadastres

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Let's start with LADM

Land Administration:

"Process of determining, recording, and disseminating information about the relationship between people and land.

NOTE

In many countries, land administration information is determined, recorded and disseminated under the umbrella of cadastre and land registry. Both institutions can be unified in a single (state) organization"

Cadastre is a PROCESS







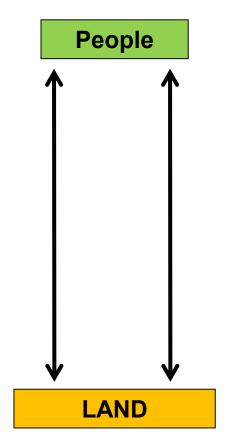


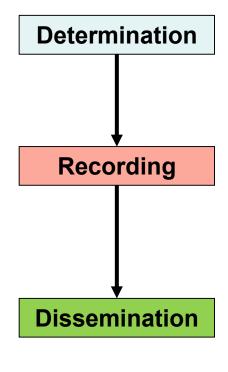
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Determination of Geometric Information













- Fast development in positioning techniques
- Sensors
- Laser Scanning
- Remote Sensing
- Augmented reality
- Mobile Mapping Systems
- Crowdsourcing
- Etc.

The future cadastres will act as a validation organization for crowdsourced data?









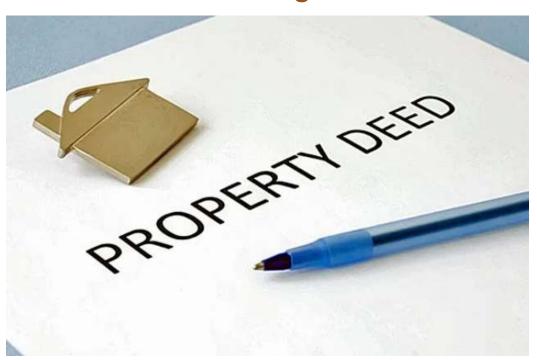


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Determination of Legal Information



- **Forms**
- Digital documents
- Style-sheets
- Automated processing?
- Smart contracts?
- Blockchain?









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FINTECH in LA

- Blockchain ??
 - High energy requirements
 - Stable (looks like)
 - Private or Public?
 - Other financial techniques (e.g Hashgraph, less energy, faster transactions, mathematically better than blockchain)
 - Scaling (blockchain: 4-7 transactions/sec (comp. with VISA etc.)









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Public Trust

- A cadastral system is successfully operating, if all parties acts in the cadastral processes (people, banks, notaries, lawyers etc.) have trust in the system
- The trust is independent from any technical or legal solutions
- Fintech does not modify the core process of cadastres, the recording of information (but could help it)
- Introduction of fintech into developed cadastres could be dangerous as well, because it could risks the trust in the system, which is independent from any technology.









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3D Cadastre

- Handling, managing and registration of 3D RRRs together with geometry
- New procedures, new constrains and new connections
- E.g. relative positions of different legal spaces (these intersections, overlaps and others could generate other RRRs and legal spaces)
- 3D cadastre could revolutionize the recording process of developed cadastres









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Conclusion

- The greatest challenge, and revolution in cadastral systems would be the implementation of 3D Cadastre
- In the determination and dissemination of cadastral information the technological development causes real, huge changes, but this fact does not influence the essence of cadaster, the recording process.









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Thank you very much for your kind attention

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