Surveying the future: mapping the bitcoins

Session #1 - Surveying the future: Mapping the bitcoins

Is it possible to publish a land transaction completely transparent, secure, legal, open and reliable using bitcoins?!

In this session we apply the principles of the innovative and game-changing concept of bitcoins and the blockchain. You never heard of it before? But you are curious to learn more. Then this is the session to be! Instead of using bitcoins as a tool for currency transactions, why not use it as tool to register the transaction of property. Google Maps for the cadastral mapping, LinkedIn for the Legal Register and Bitcoins for the transactions. Imagine what happens if you see one square meter in a land transaction equal to a bitcoin. This sounds impossible to you - it doesn’t to us! Within this session we want to challenge all surveyors, young and experienced, to verify how bitcoins and blockchains contribute to the
Volunteer?

A transaction is about

• Trade
• Currency
• Trust
What is a bitcoin?

- Open source
- Digital currency
- Decentralised system
- No bank or institute required
- Transaction verified by network of multiple users
- Transaction is recorded in a public ledger (block chain)
- Maximum number: 21 million
Blockchain: one single source of truth

- All transactions are logged
  - Time
  - Date
  - Type of transaction
  - Amount
- It is public
- Everybody can access the ledger
- Multiple users verify
- There is only one version, one truth

1 Bitcoin

- 100,000,000 units with unique id
- Each unit is programmable
- Each unit can represent (a different) property
- Unit can be specified / labelled
1 bitcoin

- Money
- Share in a company
- Energy
- Certificate of ownership
- Oil
- Votes
- ....or land!

Transactions with bitcoins and blockchains

- Innovative
- Efficient
- Transparant
Challenges in Land Administration

- 70% to be done
- Complex institutional setting
- Corruption / Transparency
- Automation
- Trustworthy Parties
- Trend: decentralisation
Bitcoins
- for land administration -
Imagine

- Land Rights and right holders at LinkedIn?
- Spatial Units on Google Maps (or:....)?
- Transactions via blockchains...

Social Tenure Domain Model

STDM AS A CONCEPT

There is a gap in the conventional land administration systems such that customary and informal tenure cannot be easily handled. There is a need for complimentary approaches in land administration.

The concept of the Social Tenure Domain Model is to bridge this gap by providing a standard for representing ‘people – land’ relationships independent of the level of formality, legality and technical accuracy.
Open Tenure

The Open Tenure initiative seeks to address the need of people in many countries to have their tenure rights recognized at a community level through the use of mobile devices and crowdsourcing techniques.

The FAO SOLA Team has recently begun development of Open Tenure and will be regularly posting development versions of the software to ot.flossola.org.

The FAO SOLA Team invite members of the SOLA community to review and comment on Open Tenure through the Open Tenure discussion group. Be aware that the software is under development and it is not yet fully functional. Development of Open Tenure is expected to continue until October 2014.
Impact

- Everybody can see all transactions
- Locations are linked to units of transactions
1 bitcoin = 1 sq land unit

=
Grid

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From the wisdom of the ages to the challenges of modern world.
Can we use the bitcoin & blockchain as tool to register transaction of land right?
Discussion Group & Questions

1. What are the pros and cons of using bitcoins/blockchain?

2. Are trusted parties (institutions) needed?