Development of cadastral system in Ukraine: blockchain initiatives

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Content of the presentation

- Ukraine & StateGeoCadastre: general information
- Public Cadastral Map of Ukraine
- Development of E-services in Ukraine
- Cadastral map: extracts and innovative initiatives
- Blockchain and State Land Cadastre in Ukraine
Ukraine: General Information

- One of the biggest countries in Europe - 603,549 km²
- 5.7% of the European territory
- Population – over 42 million
- 1/3 of European black soils and plough lands
- Over 18.7 million land parcels registered in State Land Cadastre
StateGeoCadastre: Overview

State Service of Ukraine for Geodesy, Cartography, and Cadastre:

- Managed by the Cabinet of Ministers of Ukraine via Minister of Agrarian Policy and Food of Ukraine

StateGeoCadastre is mandated to implement government policy in the matter of topography, geodesy, cartography, land management, state land cadastre and land protection

- 25 regional offices (in each oblast)
- 10,000 employees
- 1,600 cadastral officers
- State-owned entities: 28 topography enterprises, 27 land management institutes, and State Land Cadastre Centre
Cadastral Data in Ukraine

National Cadastre System was launched in 2013 (World Bank Project)

Public Cadastre Map:

- Administrative boundaries
- Index cadastral maps
- Ortho-photo
- Land parcels
- Agro-industrial soil groups
- Digital maps, e.g. heights cartogram etc.

www.map.land.gov.ua
StateGeoCadatsre: E-Services 2016-2017

- Access to personal data of land owners (more than 200,000 requests in the first day)
- Access of the notaries to the State Land Cadastre system
- Online extracts from the cadastre and land evaluation reference request
- On-line applying for Certificate of Engineer and Land Manager
- Extracts from State Registries

- 3.9 million requests per year (2016)
- 432 officers connected (2017)
- 10.9 thousand on-line requests for error correction
- 30 thousand visitors daily

www.e.land.gov.ua
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Extracts from State Land Cadastre

Amount of issued extracts from State Land Cadastre in 2017

Amount of issued extracts from State Land Cadastre from 01 January 2013
Issued extracts from the State Land Cadastre via e-services in 2017

- January: 7435 (Paper form), 2488 (Digital form)
- February: 11153 (Paper form), 4025 (Digital form)
- March: 12955 (Paper form), 3614 (Digital form)
- April: 10673 (Paper form), 3485 (Digital form)
- May: 12606 (Paper form), 3745 (Digital form)
- June: 11861 (Paper form), 3318 (Digital form)
- July: 12699 (Paper form), 3778 (Digital form)
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How did we start?

June 2017

The Cabinet of Ministers of Ukraine adopted the Resolution on transformation of the State Land Cadastre system to the blockchain.

July 2017

Study visit was conducted to National Agency of Public Registry in Georgia by the Technical Staff from StateGeoCadastre and State Land Cadastre Centre.

Sep. 2017

State Land Cadastre on the blockchain was jointly presented to the public by Ministry of Agrarian Policy, StateGeoCadastre, State E-Government Agency and Transparency International Ukraine.
Blockchain technology means...

A distributed database that supports permanently growing amount of records (so-called blocks).

It is protected from:

- Forgery
- Alteration
- Deleting
- Unlawful manipulations
Implementing Blockchain to SLC in Ukraine

I stage – Pilot project

II stage – hashing of SLC data

III stage – hashing of all operations with data
Pilot project for Blockchain in SLC

Abstract
from State Land Cadastre on the land plot

Hash map

79c591fbc6c1ce30779322351d8abcf74dbcbfaea89b4ff06c62db88f54234

Date created: 22.08.2017 12:31:16

Owner: State Land Cadastre

Number of the plot: ZB-00000012472017

Date of the plot: 22.08.2017

Owner: Земельна Діяльність 3221282800:05:009:0014

hash map
Requisites search of the document

Search the document by the requisites:

Document number  НВ-XXXXXXXXX

9900003032015

Document date:

24-03-2010

Enter security code:

All lines marked should be filled in
Download and browse

Notification

After the document by the No. XXXXXXX as of 22.08.2017 is ready for downloading you will be informed via the e-mail. To download the document is possible via personal cabinet at chapter History.
Validity check of the existing document

Checking

File

Or

Hash of the file

Hash map 4c51022c7ffa4079099a4eb67c861db23b529d35efb6a66ee24338a44cb011b1

Date of creation: 18-08-2017 12:37:07
No of extract: HB-5101081022017
Date of extract: 18-08-2017
Object: Земельна ділянка 5123755800:01:002:3196
No of request: ZB-5101169482017
Date of request: 18-08-2017
Customer: ТОВ "Перевірка"
Blockchain audit

The data are duplicated on the auditor’s side

Anyone can become an auditor
Benefits of Blockchain technologies

Authority  
Transparent

Public  
Available

Business  
Secure
Thank you for your attention!

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