Stakeholder engagement through scenario study on future land administration

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Chair UNECE Working Party for Land Administration

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Agenda

1. Introduction to WPLA
2. Objectives with the study
3. Methodology
4. Imperative for transformation
5. The Scenarios
6. Guiding principles 2035
7. Self-assessment framework
8. Consultation and stakeholder engagement
56 member States in Europe, Central Asia and North America

Albania
Belarus
Croatia
Finland
Hungary
Kazakhstan
Luxembourg
Norway
Russian Federation
Spain
Turkey
Uzbekistan
Andorra
Belgium
Cyprus
France
Iceland
Kyrgyzstan
Malta
Poland
San Marino
Sweden
Turkmenistan

Armenia
Bosnia and Herzegovina
Czech Republic
Georgia
Ireland
Latvia
Malta
Monaco
Portugal
San Marino
Switzerland

Austria
Bulgaria
Denmark
Germany
Israel
Liechtenstein
Montenegro
Republic of Moldova
Slovak Republic

Azerbaijan
Canada
Estonia
Georgia
Greece
Italy
Lithuania
Netherlands
Roma

Russian Federation
San Marino

Serbia
Switzerland
Tajikistan
The former Yugoslav Republic of Macedonia
United Kingdom of Great Britain and Northern Ireland
United States of America

United Nations Economic Commission for Europe (UNECE)

56 member States in Europe, Central Asia and North America
The Working Party for Land Administration (WPLA)

- Overall objective: Promotion and improvement of land management and administration in the ECE region
- Adhere to and support Agenda 2030 and New Urban Agenda
- Activities are based on cooperation and exchange of experience and best practices among ECE member states through:
  - Workshops and conferences (>= 2 per year)
  - Land administration reviews upon request from governments
  - Publications of studies and guidelines on specific topics
  - Benchmarking
- Collaboration with UN-GGIM, EuroGeographics, FIG, FAO, UN-Habitat, PCC, World Bank etc.
WPLA Task Group Activities 2018-2019

- Continuous benchmarking of land administration systems – cost study
- Informal settlements buildings and constructions
- Fraud in land administration
- Perceived tenure security (Prindex)
- PPP for land administration (FIG Com 7)
- Emerging technology forum (HMLR)
- Scenario study for future land administration
Objectives

• Provide LA authorities with an Operational Framework based on scenario analysis and used to explore their future and to facilitate national LA strategies

• Understand emerging developments expected to shape the future

• Support LA authorities to identify common challenges and opportunities, share best practices for solutions and risk mitigation measures and to improve preparedness for future disruptive changes

• Contribute with relevant thought leadership to the long-term strategic work of the authorities for them to stay relevant, liable and provide trustworthy and future-proof services
Methodology

1. Identify global megatrends and score their relative importance and anticipated impacts on LA within the next 10-15 years
2. Identify specific trends/aspects in the LA domain
3. Define future scenarios
4. Feedback from member states and beyond
5. Operational Framework
   • Trends applied (mega/specific)
   • Scenario descriptions
   • Guiding principles 2035
   • Self-assessment framework
6. Consultation workshop in Geneva, 3 March 2020
7. UNECE Operational Framework, dynamically updated
Global Megatrends +

Define what we do, how we do things and what is possible to do

- The digital Transformation
- Globalisation
- Urbanisation
- Technological advancement
- New Business Ecosystems
- Climate Change
- Individualisation
- Knowledge-based Society
- Diversity and Pluralism
- Agenda 2030
User Expectations +

- People want to make informed judgements for themselves
- Land information on demand
- Mobile device for property transactions and geospatial data capture
- Origin of data clearly defined
- More complex people-to-land relations
- Managing legal complexity
- e-services
Expanded Role of Land Authority +

- Smart cities
- Climate change initiatives
- Integrate planning and building process
- e-government (key registers)
- Blockchain technology
- NSDI
- Utilisation of UAVs
- 3D/4D and closing the gap between BIM and GIS
- Open data

Consequences for the land authority:
- Increased interaction
- More complex decision-making processes
- New competences
- Increased business intelligence and international collaboration
Constraints to Evolve +

- Fossilised systems, legislations and processes
- Human resources constraints
- Financial constraints
- No holistic land policy
- Limited political will
- Weak performance of services
- Siloed data and institutional overlaps/competition
- Low/uncertain data quality and coverage
- Limited access to information
How to Stay Relevant?

- Holistic
- User-centric
- Digital trust
- Automation and process improvement
- Integration
- Data-driven decision
- Resilience, definitive, authoritative
Journey of Transformation

Transformation

- Legacy Processes
- Historical Mapping
- First registration
- Digital Plans
- Revised Datums
- Paper Records
- Scanned Paper
- Automated Processes
- Integrated Workflows
- Continuum of land rights
- Data integration
- Structured Data
- Digital Trust
- NSDI
- User-centric e-services
- E-government

Evolution

- Correlated, definitive, authoritative data
- Smart Contracts
- Blockchain
- GIS/BIM
- Complex people-to-land relations
- Big Data analysis
- Data-driven valuation
- Self-sustaining
- 3D Titles/RRRs
Legal and policy strategy

Sensitive information

- Secret
- National security
- Privacy
- Intellectual property rights
- Open

“Public” information

Extensive barriers

- Control
- Legal mechanisms
- Trust

No barriers

- Avoid having fundamental data at this level
- General rather than detailed regulations
- Systematic framework for risk management

Data protection

Openness
Prioritize the global megatrends according to their respective impact on LA arrangements (distribute 25 points)
## Megatrend Analysis

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Feedback Comments

Business ecosystems:

“Open data and less motivation for citizens to pay for the services. We do not have customers but open data”

“Enable new ways for land administration, especially due to platform economy and sharing”

Urbanization:

“Need for better tools for planning, information in 3D/4D. Also increased need for tools to deal with illegal buildings and slums”

“Will lead to increased importance of rights, responsibilities and restrictions affecting land, real estate and infrastructures”
Feedback Comments

Digital transformation:
“We are moving into an age where our core business will be delivering ‘digital trust’. Digital networks may become so strong that the land agencies may have no added value anymore if they keep operating in the ‘classical’ way”

Differentiated livelihoods:
“The shift towards a more liberal direction regarding the perception of the relationship between citizens and public institutions result in that the rights and obligations nowadays start from the individual and it is then for the public institutions to respond to the citizens' preferences”

Decentralized environments:
“PPP. Authorities needed only for “stamps”, private companies’ role is increased”
Specific Trends/Aspects Related to the LA Domain

- Information *security* and *integrity* aspects related to new technologies (the cloud, AI, blockchain, digital identity…), legislations (GDPR, PSI…), and policies (open data, EIF…)
- Respond to next-generation demands requires new digital workflows and new financial, information and business models (not just converting existing work processes into digital); scalable, evolutionary and trusted
- Policies, legal frameworks and governance are in many countries legacies of the passed preventing innovation and development rather than enabling it
- Crowd-sourcing
- Innovation through Open source, Policy hack, Society Hack…
- Geospatial as a facilitator and information carrier for e.g. integrated land development processes
- Risk inclination vs cost and trust as a government authority
- Ethical implications - human in charge vs machine-to-machine
- FELA, IGIF and Agenda 2030
Prioritize the LA specific trends/aspects according to their respective impact on land administration arrangements (distribute 25 points)
Digitally enabled ecosystem: data-driven; user-centric; system of key registers; wider sets of information; interconnected business models; data of different quality, information-oriented

Traditional/hierarchical: rule based; silo approach; non-integrated information products and services; centralized; one or few data-owners; process-oriented

LA Scenarios
Platform LA - Interoperability Solutions and Common Frameworks for Public Administration

The European Interoperability Framework (EIF)
Where would you position Land Administration in your country today?

Land Administration TODAY

- Traditional/Hierarchical: 0
- Digitally enabled ecosystem: 0
Guiding principles 2035

• Ensure that land administration systems create, increase and deliver value with respect to relevance, liability and trustworthiness related to land market activities and to policy and societal issues that is governed/supported by land administration arrangements
Self-assessment framework

• Based on FELA Principles
  • Strategic Enablement
  • Transparent and Accountable
  • Reliable, Accessible and Easily Used
  • Collaboration and Cooperation
  • Integrative Solution
  • Sustainable and Valued
  • Leadership and Commitment

• A set of strategic questions to each principle to assess the value of each of the four scenarios for a given nation and its land administration arrangements
Next Steps

• The Operational Framework
  – Trend analysis
  – Scenario descriptions
  – Guiding principles 2035
  – Country assessment framework
• Consultation workshop, Geneva, 3 March 2020
• UNECE Report

Objective: To be used as a tool to explore the future of land administration and to facilitate national LA strategies in order for the authorities to stay relevant
Thank you for your attention

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