Transforming Land Administration – a Scenario Study for Future Land Administration

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Chair UNECE Working Party for Land Administration

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Agenda

1. WPLA introduction
2. Objectives with the study
3. Methodology
4. Imperative for transformation
5. Results to date
6. Next steps
United Nations Economic Commission for Europe (UNECE)

56 member States in Europe, Central Asia and North America

Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Canada
Croatia
Cyprus
Czech Republic
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Georgia
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Liechtenstein
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands
Netherlands
Norway
Poland
Portugal
Republic of Moldova
Romania
San Marino
Serbia
Slovak Republic
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Turkey
Turkmenistan
Ukraine
The former Yugoslav Republic of Macedonia
United Kingdom of Great Britain and Northern Ireland
United States of America
Uzbekistan

UNECE
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
- Land consolidation
- Informal settlements
- Fraud in land administration
- Future scenarios for land administration
  - Define activities for 2020-2021
Objectives

• Understand emerging developments expected to shape the future
• Support land administration authorities to identify common challenges, share best practices for solutions and risk mitigation measures and to improve preparedness for future disruptive changes
• Ultimately the study is aimed at contributing 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. Define future scenarios
3. Feedback from member states and beyond
4. UNECE report
   • Trend analysis
   • Scenario analysis and descriptions
   • Guiding principles towards 2030
   • Suggested outline for Country strategy report
5. Specific studies
6. Annual review/dialogue
Global Land Administration 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

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

- Unsustainable custom-made systems
- Human resources constraints
- Financial constraints
- No holistic land policy
- Limited political will
- Weak performance of services
- Siloed data and institutional overlaps/competition
- Low data quality and coverage
- Legal barriers
- Paper-based systems
- Exclusion from formal system
- Access to information
- Not fit-for-purpose
How to Stay Relevant?

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

 Authority/country Experience

 Transformation
 Legacy Processes
 Historical Mapping
 First registration
 Digital Plans
 Revised Datums
 Paper Records
 Scanned Paper

 Evolution
 Automated Processes
 Integrated Workflows
 Continuum of land rights
 Data integration
 Structured Data
 Digital Trust
 User-centric e-services
 NSDI
 E-government

 Smart Contracts
 Blockchain
 GIS/BIM
 Complex people-to-land relations
 Big Data analysis
 Data-driven valuation
 Self-sustaining
 3D Titles/RRRs

 Correlated, definitive, authoritative data

 Digital Trust
 Complex people-to-land relations

 Self-sustaining

 3D Titles/RRRs
# 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”
**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

As a service
- Defined services
- Process-oriented
- Regulated
- Centralized
- Data custodians
- PPP arrangements

Distributed
- Multiple actors and data sets
- Less or no regulation
- Open data
- Automated decisions
- Distributed value
- Crowdsourced
- Organic, evolutionary

Conventional
- Centralized, hierarchic
- Regulated
- Process-oriented
- Silo
- Robust but difficult to evolve
- Non-integrated information and services

Platform
- Integrated gvt data, products and services
- E-government
- Once-only-principle
- Customer-oriented
- National
- Economies of scale
Next Steps

• Member States consultations in autumn
• UNECE Report, October
  – Trend analysis
  – Scenario analysis and descriptions
  – Guiding principles towards 2035
  – Self-assessment framework and tools
  – Suggested outline for Country strategy report

... Annual review
Thank you for your attention

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