Stakeholder engagement through scenario study on future land administration



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Chair UNECE Working Party for Land Administration

# Agenda

- 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







## 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	Bulgaria	Canada
3		Herzegovina		
Croatia	Cyprus	Czech Republic	Denmark (	Estonia
Finland	France	Georgia	Germany	Greece
Hungary /	lceland 🔭	Ireland	Israel	Italy
Kaza <mark>khstan</mark>	Kyrgyzstan	Latvia	Liechtenstein	Lithuania
Luxembourg	Malta	Monaco	Montenegro	Netherlands
Norway	Poland	Portugal	Republic of	Romania
			Moldova	
Russian	San Marino	Serbia	Slovak Republic	Slovenia
Federation			. 18 11	•
Spain	Sweden	Switzerland	Tajikistan	The former
1		My yell .	0	Yugoslav
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	1-0			Macedonia
Turkey	Turkmenistan	Ukraine	United Kingdom	United States of
			of Great Britain	America
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	38		Ireland	
Uzbekistan	A. C.			



### 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
- Activites 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 <u>stay relevant</u>, 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

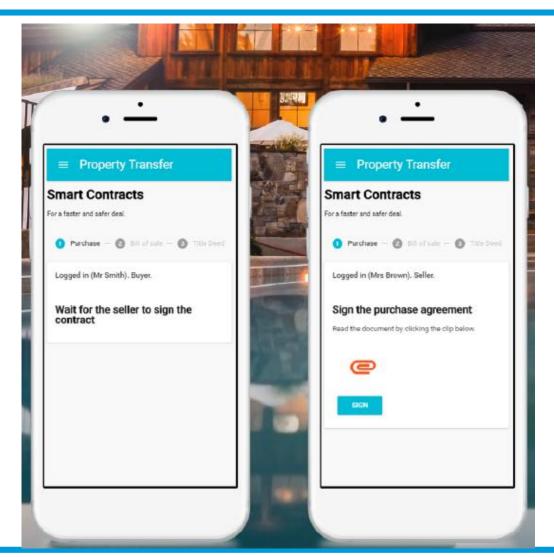


Agenda 2030



# 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

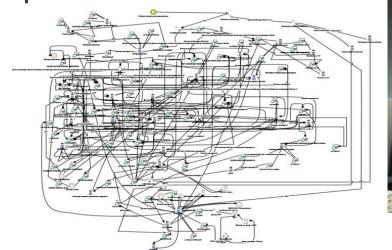
#### **Consequences for the land authority:**

- 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



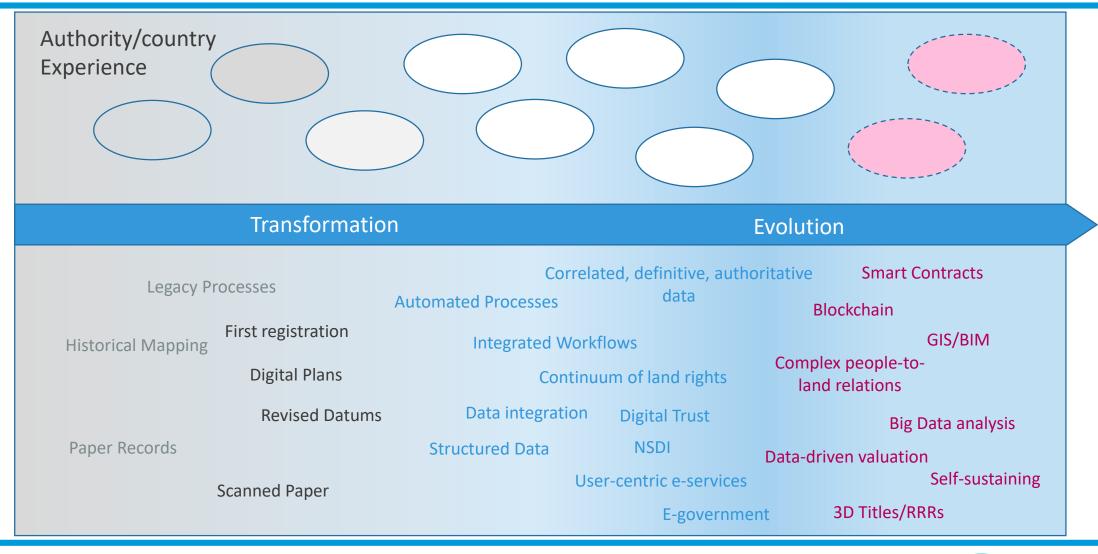




# How to Stay Relevant?

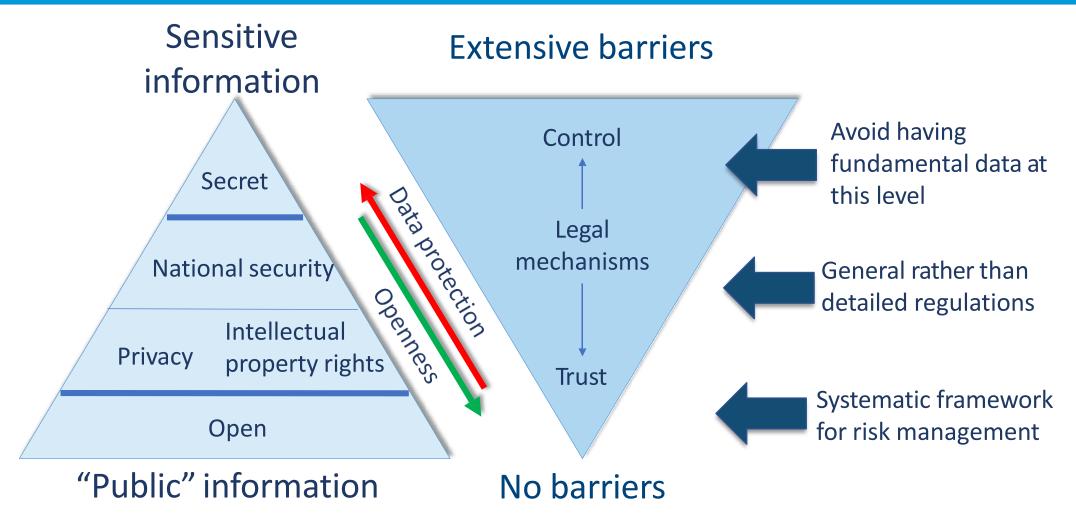


# Journey of Transformation



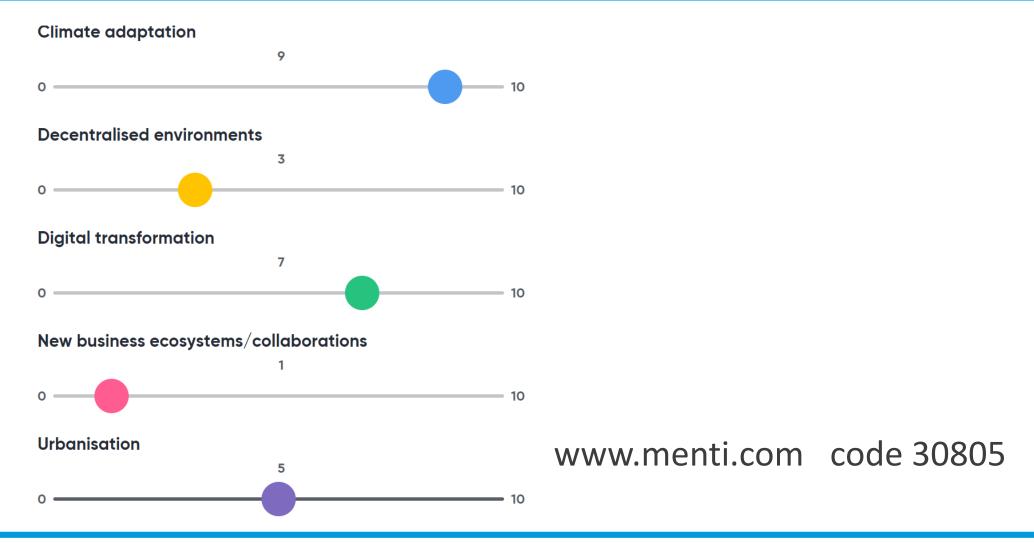


# Legal and policy strategy





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





# Megatrend Analysis

Megatrend	R1	R2	R3	R4	R5	R6	R7	R8	Average	Ranking
1. Demographic change	4	3	6	6	3	8	7	2	4.9	7
2. Societal disparities	3	2	6	4	6	5	4	3	4.1	8
3. Differentiated Lifeworlds	2	2	2	2	8	2	7	6	3.9	10
4. The digital transformation	10	10	10	10	10	10	8	10	9.8	1
5. Volatile economy	8	6	3	7	8	4	5	3	5.5	6
6. Business Ecosystems	8	7	8	8	10	4	8	10	7.9	3
7. Anthropogenic Environmental										
Damage	5	8	7	7	8	2	8	6	6.4	5
8. Decentralised environments	8	6	5	5	10	6	6	8	6.8	4
9. New political world order	3	5	3	3	3	7	6	2	4.0	9
10. Global/regional power shifts	3	5	5	4	2	-	4	3	3.7	11
11. Urbanisation	7	5	9	8	10	-	8	10	8.1	2
Average	5.5	5.4	5.8	5.8	7.1	5.3	6.5	5.7	5.9	



### 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"

#### <u>Urbanization:</u>

"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

#### <u>Digital transformation</u>:

"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"

#### <u>Differentiated livelihoods:</u>

"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"

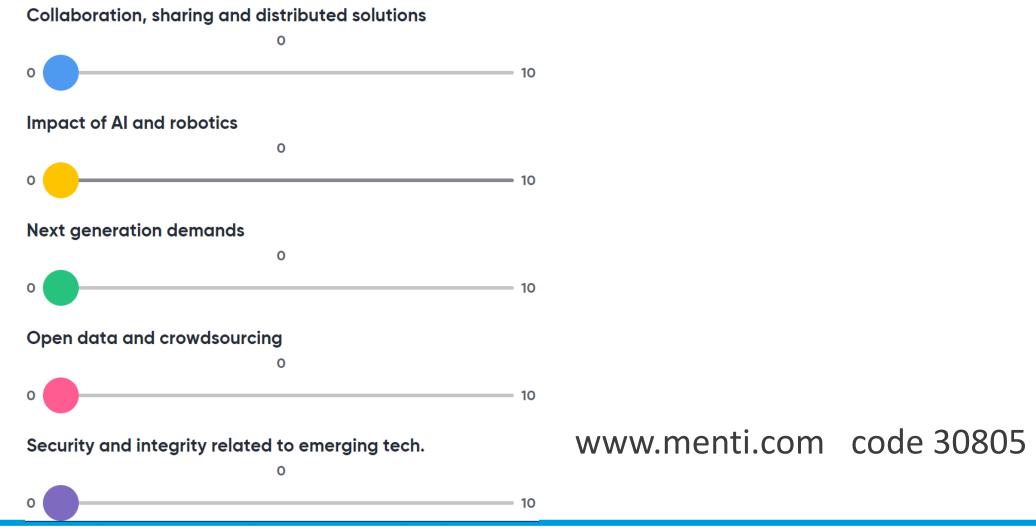


## Specific Trends/Aspects Related to the LA Domain

- 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



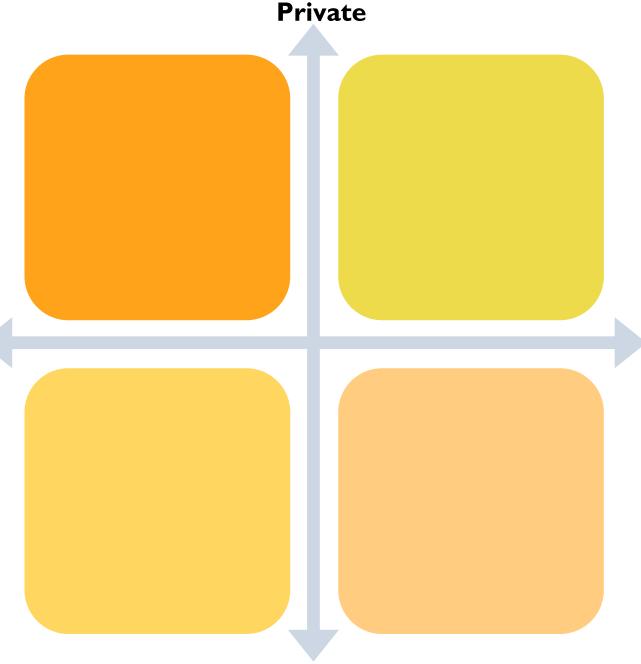
# Prioritize the LA specific trends/aspects according to their respective impact on land administration arrangements (distribute 25 points)





#### LA Scenarios

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



# Digitally enabled ecosystem:

data-driven; user-centric; system of key registers; wider sets of information; interconnected business models; data of different quality, information-oriented

#### LA Scenarios

**Private** 

Defined services
Process-oriented
Regulated
Centralized
Data custodiants
PPP arrangements



Distributed

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

Digitally enabled ecosystem

#### **Traditional/Hierarchic**

Centralized, hierarchic
Regulated
Process-oriented
Silo/redundancy
Robust but difficult to
evolove
Non-integrated information
and services

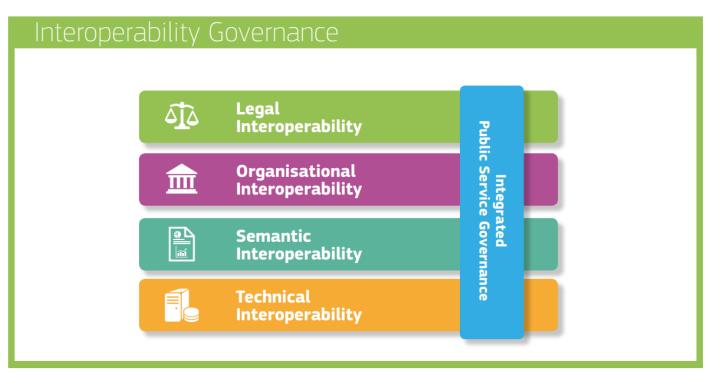


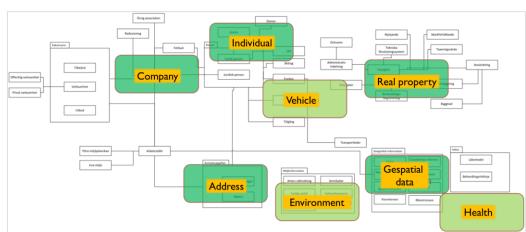


Integrated gymt data, products and services
E-government
Information-oriented
The once-only-principle
Customer-oriented
Fundamental data sets
Economies of scale

#### **Public**

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



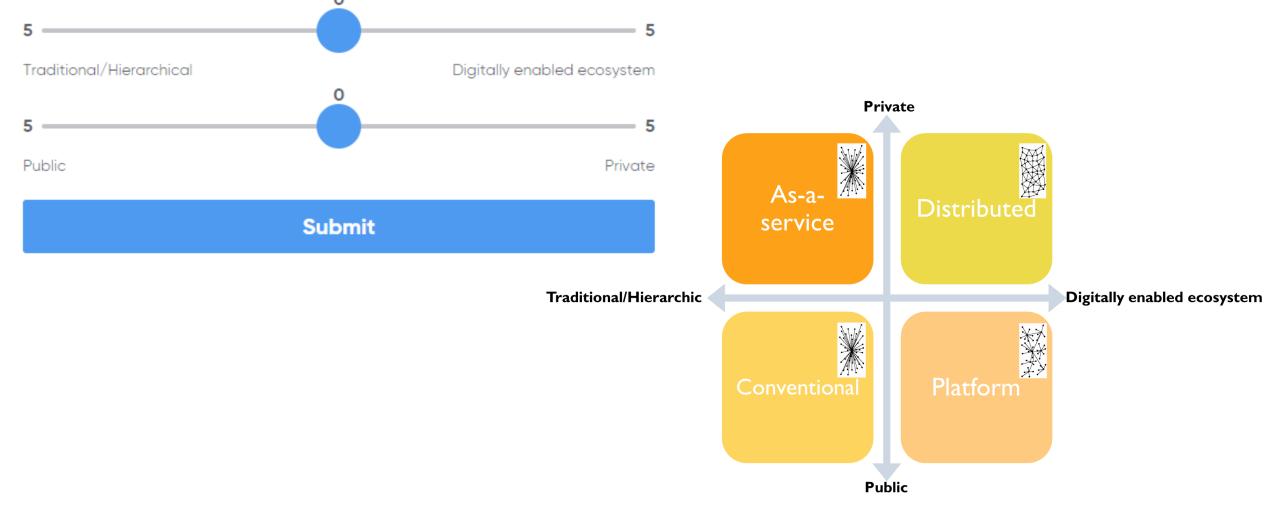


The European Interoperability Framework (EIF)

#### Menti.com code 30805

# Where would you position Land Administration in your country today?

#### **Land Administration TODAY**



# 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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