

Future Scenarios for Land Administration – a Status Report

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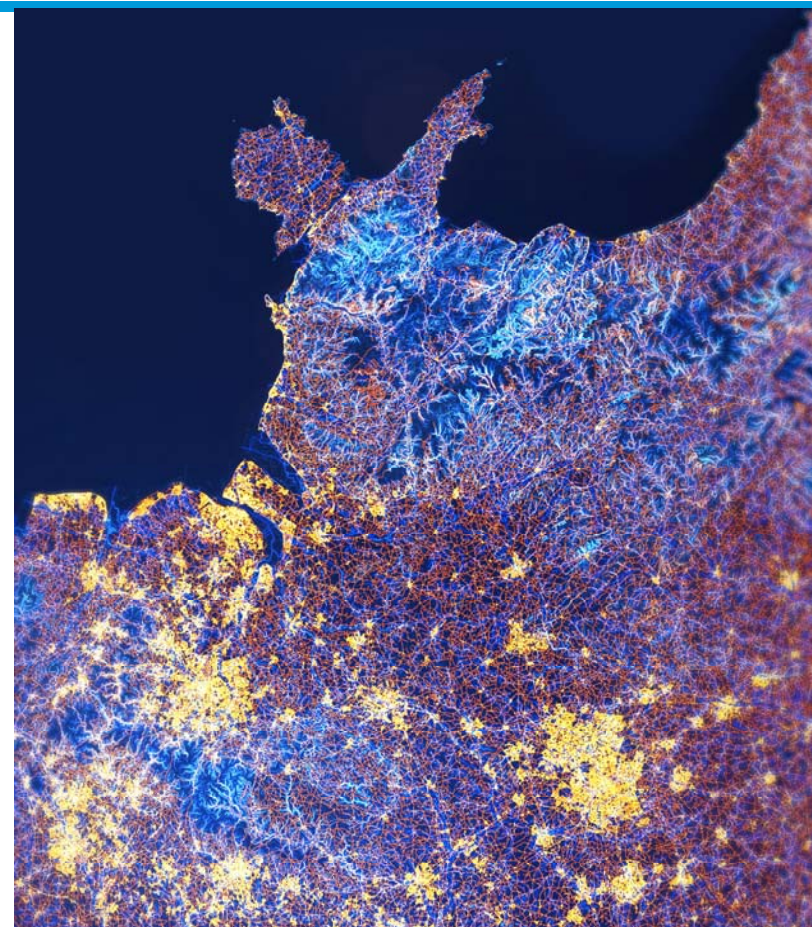
Chair UNECE Working Party for Land Administration

Athens 8 Nov 2018



Agenda

1. WPLA introduction
2. Global trends, expectations and constraints
3. Objectives with the study
4. Methodology
5. Results to date
6. Next step



United Nations Economic Commission for Europe (UNECE)

56 member States in Europe, Central Asia and North America



The Working Party for Land Administration

- Overall objective: Promotion and improvement of land management and administration in the ECE region (WPLA)
- 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
- Coordination with UN-GGIM, PCC, EuroGeographics, FIG, ELRA, FAO, UNDP, UN-Habitat, CLGE, 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

Objectives with the scenario study

- Understand emerging developments expected to shape the future
- Support land agencies 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 land agencies for them to stay relevant, liable and provide trustworthy and future proof services

Megatrends

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

The digital
transformation



Globalization



Urbanization



Technological
advancement

New business
ecosystems



Climate change



Individualization



Knowledge-based
society

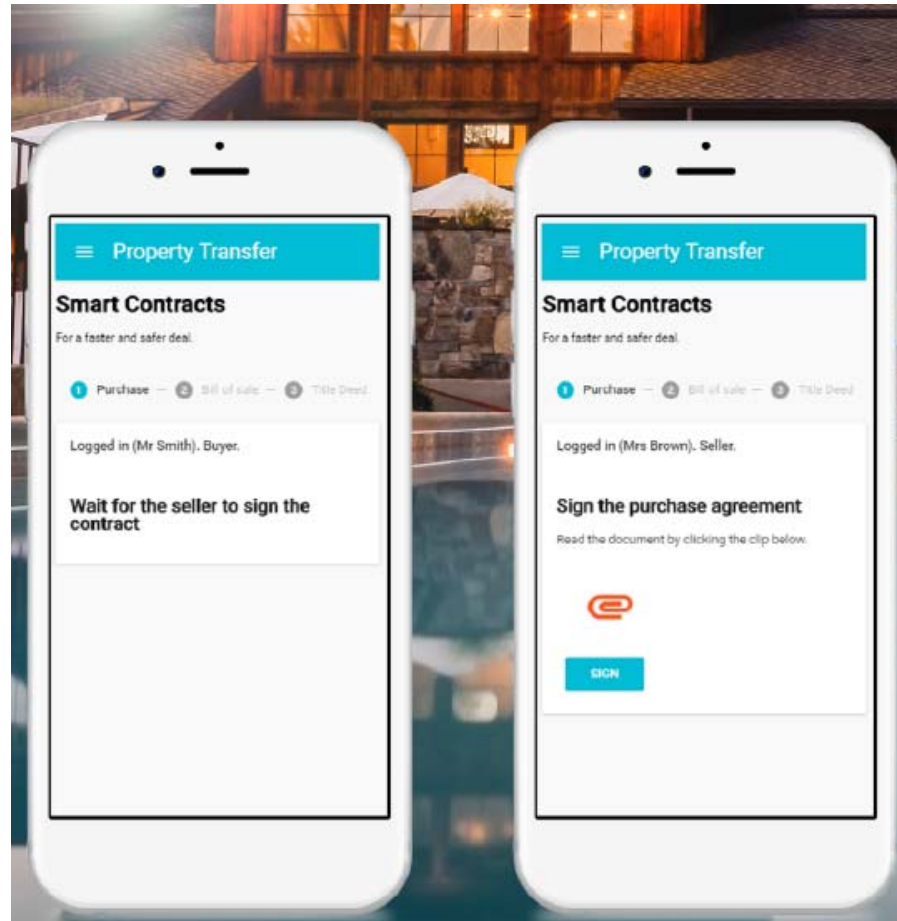


Diversity and pluralism



Agenda 2030

Expectations



Data-centric organisations - the world's most valuable resource is no longer oil, but data'

Data integration – geospatial + RRR + thematic data + key registers
Data-driven approach to facilitate decisions supporting sustainable development



Built-in evolution – scalable solutions

<p>3D/4D representation</p>		<p>GIS/BIM</p>	
	<p>Automated change detection</p>		<p>Blockchain</p>
<p>Automated feature extraction</p>		<p>Big Data</p>	
	<p>AI/AR</p>		<p>Automated generalization</p>

+ Involvement in state priorities and investigations

Housing - 700 000 in 10 yrs
Climate change initiatives
Smart cities
Digital first – speed up planning and building process
E-government
Framework for national 3D geospatial data
Blockchain technology
Standardized geospatial processes with local gvt
Update national Geospatial Strategy focusing on solving future challenges in the society
Licensing of dissemination of information from UAVs
3D/4D and closing the gap between BIM and GIS
Open data - consequence analysis

- Increased interaction
- More complex decision-making processes
- Make necessary priorities
- Control processes
- Designate accountability
- Increased business intelligence and international collaboration

+ Constraints

- Unsustainable custom-made systems
- Human resources constraints
- Financial constraints
- No holistic 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



Methodology

Dialogue of ideas and visioning among a task group of policy leaders, experts and researchers. Verification procedure through feedbacks from member states based on interviews and questionnaires

1. Identify global megatrends and score their relative importance and anticipated impacts on LA within the next 10-15 years
2. Clustering the megatrends and combine with the expert group's collective experience to define a scenario cross
3. Define four scenarios
4. Feedback from the member states including practical examples (February 2018)
5. Compile results and present at the World Bank Land and Poverty Conference (March 2019)
6. Annual fine-tuning of the scenarios

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”

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”

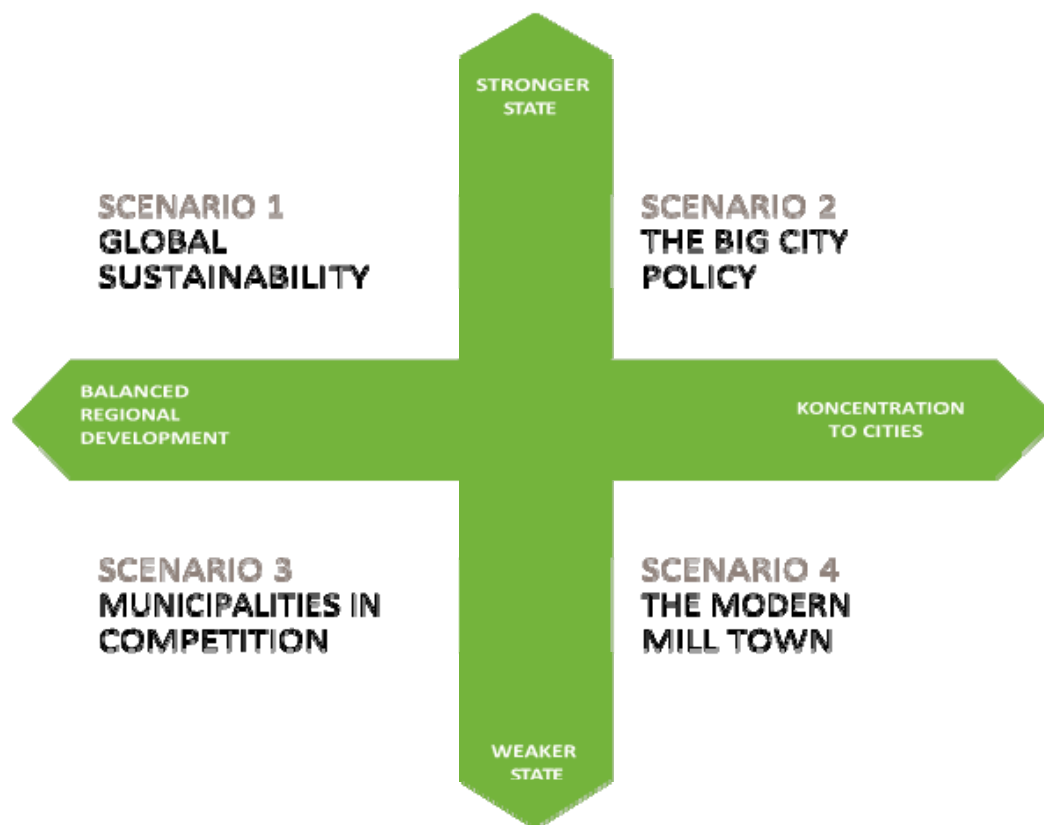
Differentiated livelihoods:

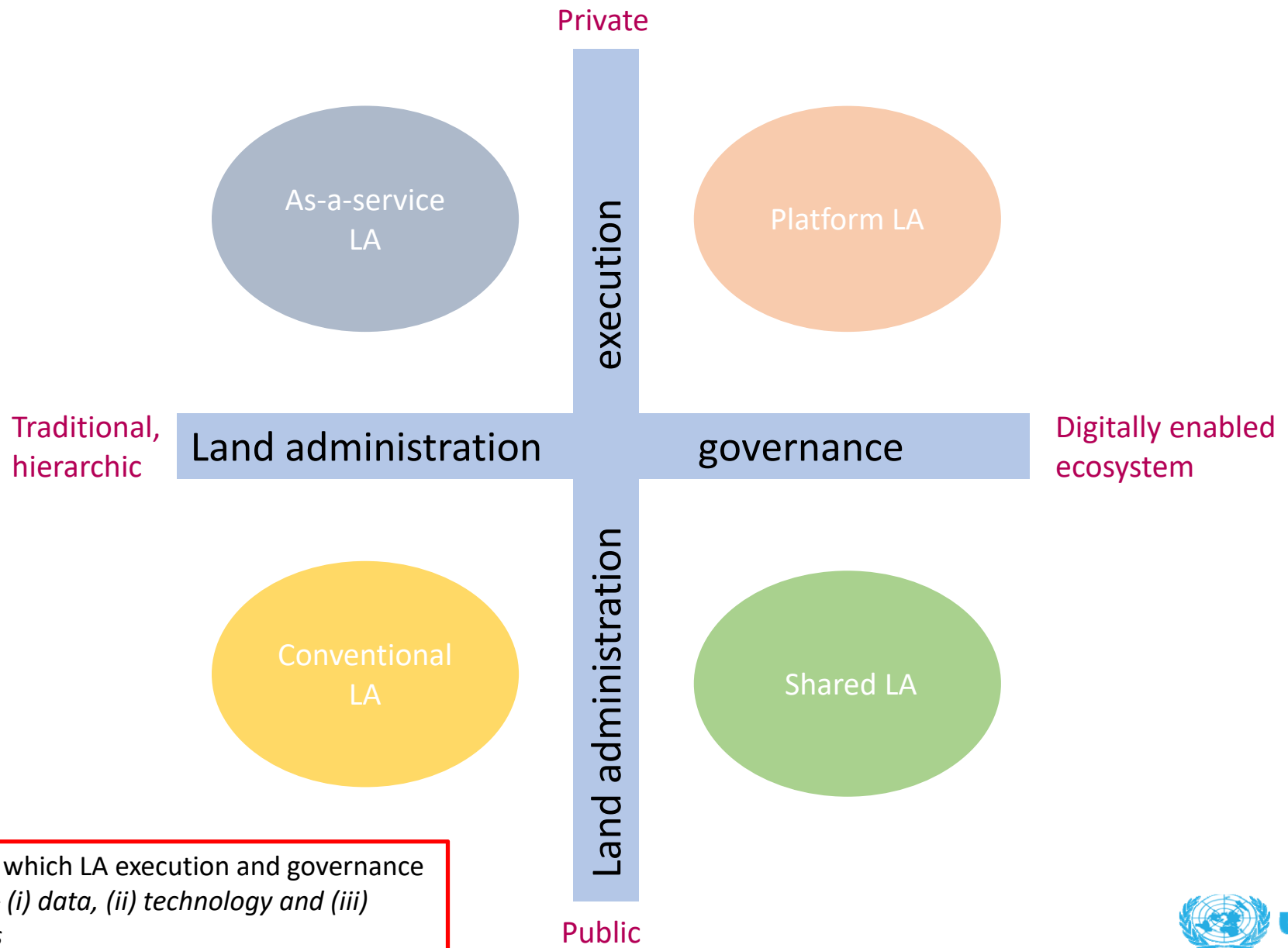
“The shift towards a more liberal direction regarding the perception of the relationship between citizens and public institutions result in that the rights and obligations nowadays start from the individual and it is then for the public institutions to respond to the citizens' preferences”

Decentralized environments:

“PPP. Authorities need only for “stamps”, private companies' role is increased”

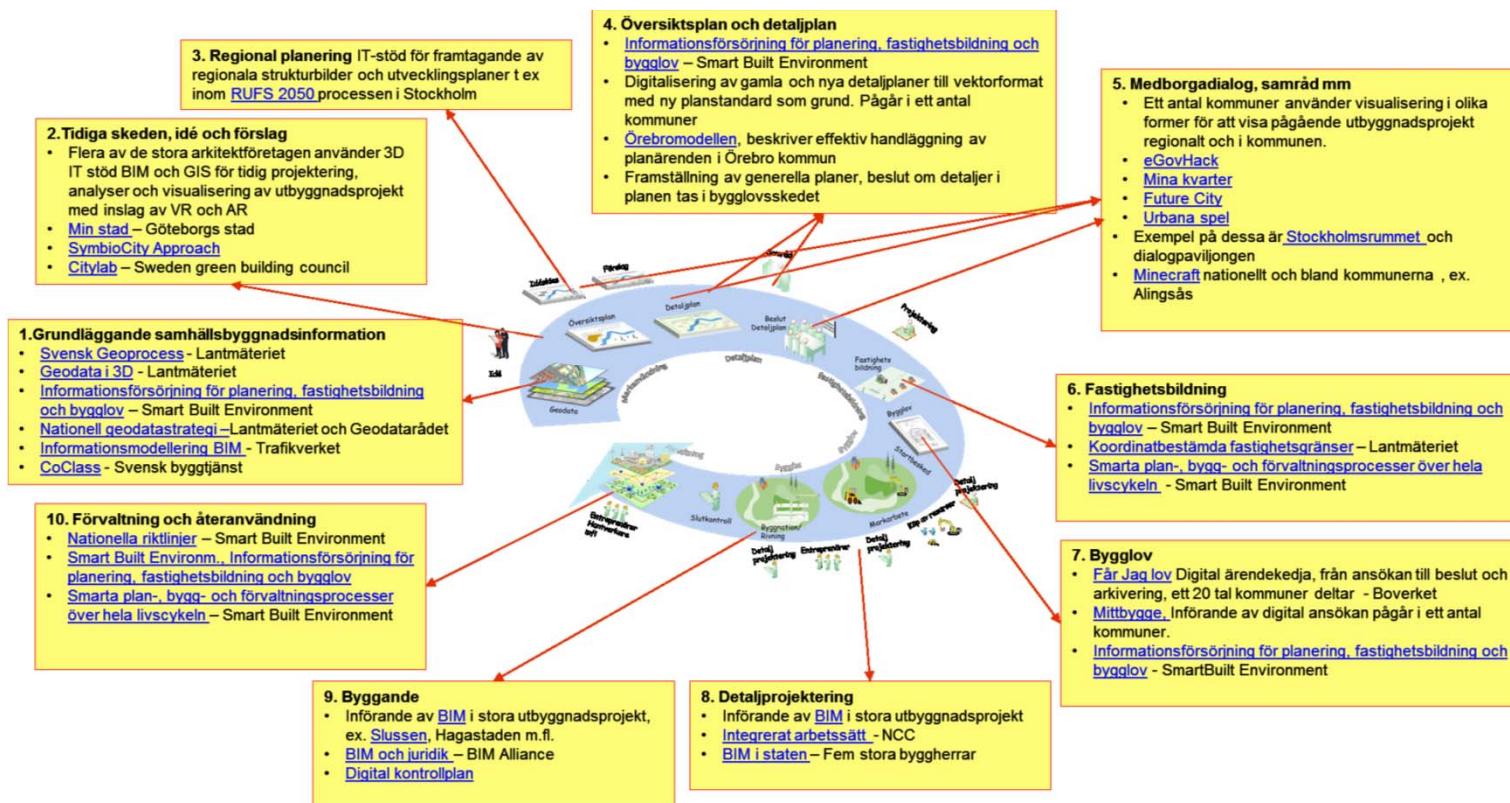
Scenario cross - example





Three *aspects* from which LA execution and governance should be studied – (i) data, (ii) technology and (iii) functions/processes

Platform for the land development and building process



Next step

- Round table in December to decide on the scenario cross
 - Develop the narrative
 - Develop the questionnaire – feedback in February
 - Present at WB L&P
- ...Annual review

Sustainable, trustworthy land administration



Thank you for your attention

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