

Presented at the FIG Congress 2022,  
11-15 September 2022 in Warsaw, Poland

# Implementing the Framework for Effective Land Administration (FELA)

XXVII FIG Congress

“Volunteering for the future – Geospatial excellence for a better living”

12<sup>th</sup> September 2022, Warsaw, Poland

Presentation is based on documents and presentations from UN-GGIM and EuroSDR

<https://ggim.un.org>; <http://www.eurohdr.net>

Presented by: Eva-Maria Unger, Kadaster, the Netherlands



UN-GGIM

United Nations Committee of Experts on  
Global Geospatial Information Management

Expert Group on  
Land Administration and Management

Positioning geospatial information to address global challenges

ggim.un.org

## Global Development Frameworks

## UN-GGIM Global Geospatial Frameworks

2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK (IGIF)



Sendai Framework for Disaster Risk Reduction 2015-2030

Paris Agreement on Climate Change

Strategic Framework on Geospatial Information and Services for Disasters

Global Statistical Geospatial Framework (GSGF)

Framework for Effective Land Administration (FELA)

*SAMOA Pathway for SIDS*  
*Addis Ababa Action Agenda*  
*Habitat III New Urban Agenda*  
*Our Ocean, Our Future: Call for Action*

*Global Fundamental Geospatial Data Themes*  
*Global Geodetic Reference Frame (GGRF)*  
*National Institutional Arrangements in Geospatial Information Management*  
*Role of Standards in Geospatial Information Management*  
*Compendium on Licensing of Geospatial Information*  
*Statement of Shared Guiding Principles for Geospatial Information Management*



# UN-GGIM

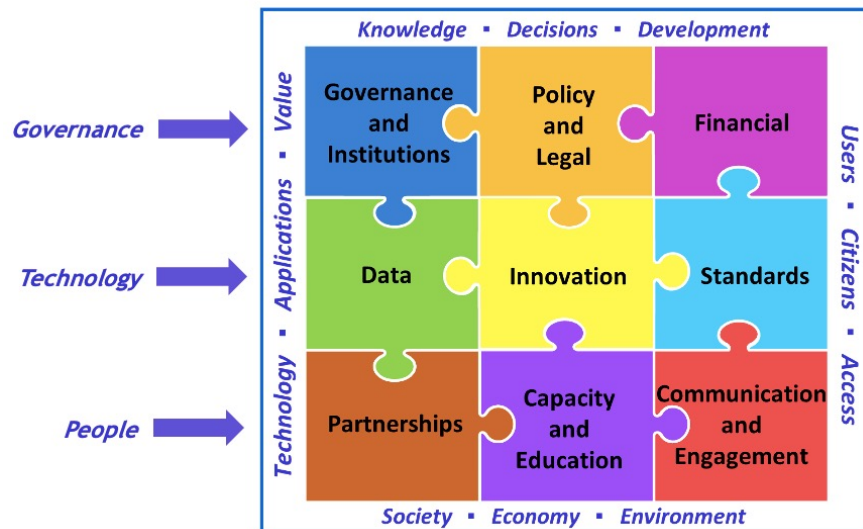
United Nations Committee of Experts on Global Geospatial Information Management



# The Framework for Effective Land Administration

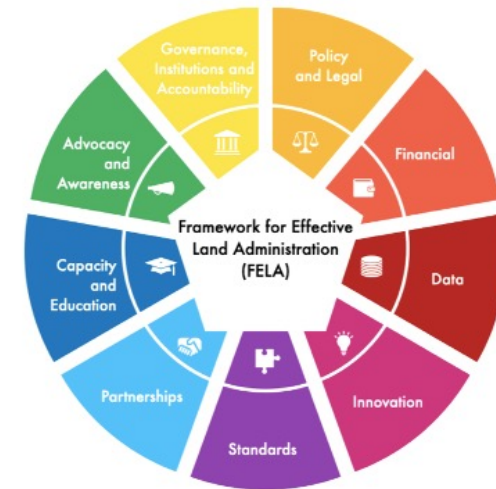
Sustainable development demands effective land administration

## Integrated Geospatial Information Framework



- Overarching Framework adopted at 8<sup>th</sup> Session
- Implementation Guide 2020 adopted at 10<sup>th</sup> Session
- 9 Strategic Pathways
- 36 Key Elements
- [IGIF](#)

## Framework for Effective Land Administration



- Adopted at 10<sup>th</sup> Session
- FELA is fully aligned with the IGIF\*
- \*I: Accountability; IX: Advocacy and Awareness
- FELA implements the IGIF for the land sector
- [FELA](#)



UN-GGIM

United Nations Committee of Experts on Global Geospatial Information Management

Expert Group on Land Administration and Management

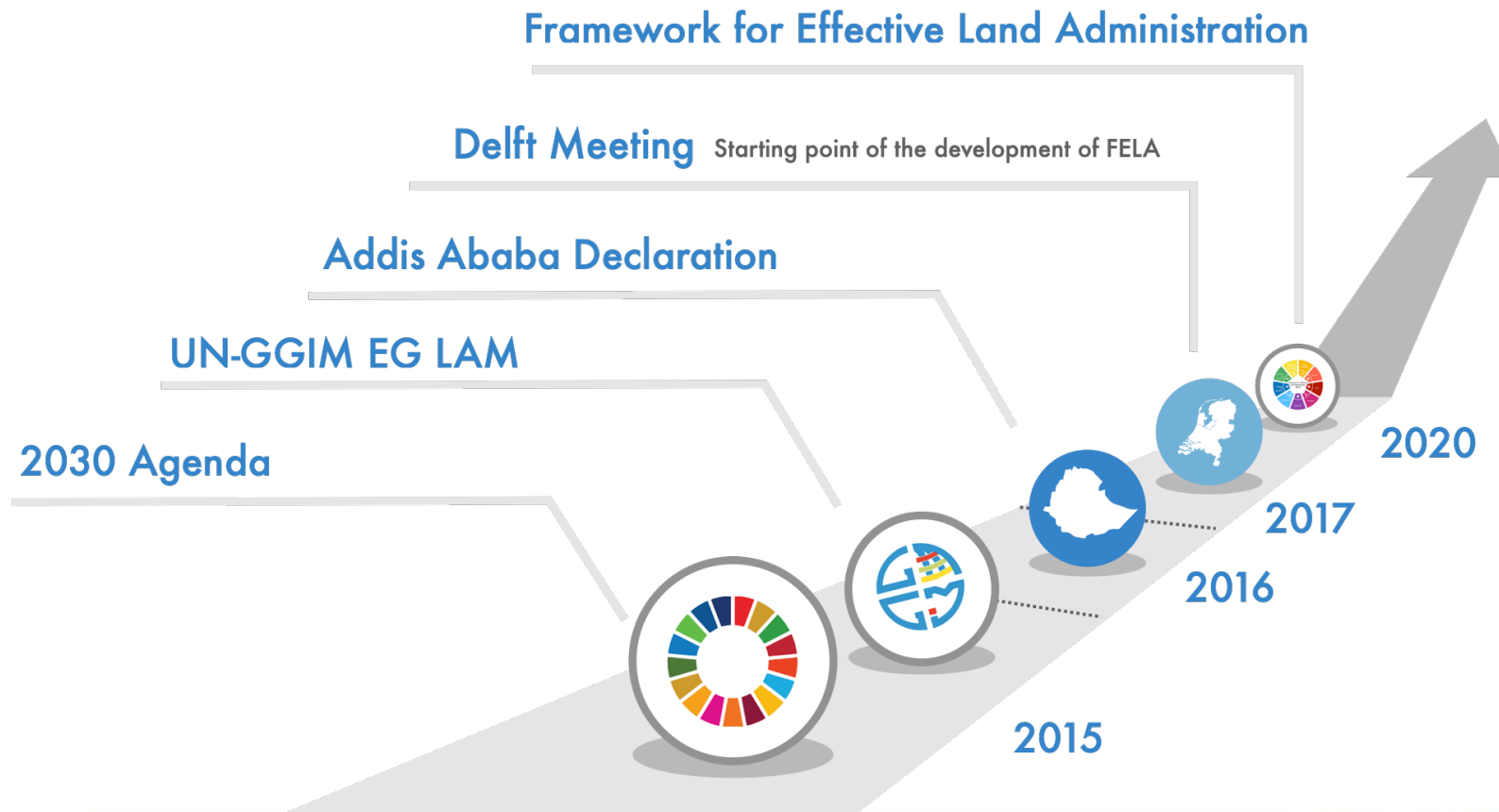
Positioning geospatial information to address global challenges

ggim.un.org



# The Framework for Effective Land Administration

Sustainable development demands effective land administration



UN-GGIM

United Nations Committee of Experts on  
Global Geospatial Information Management

Expert Group on  
Land Administration and Management

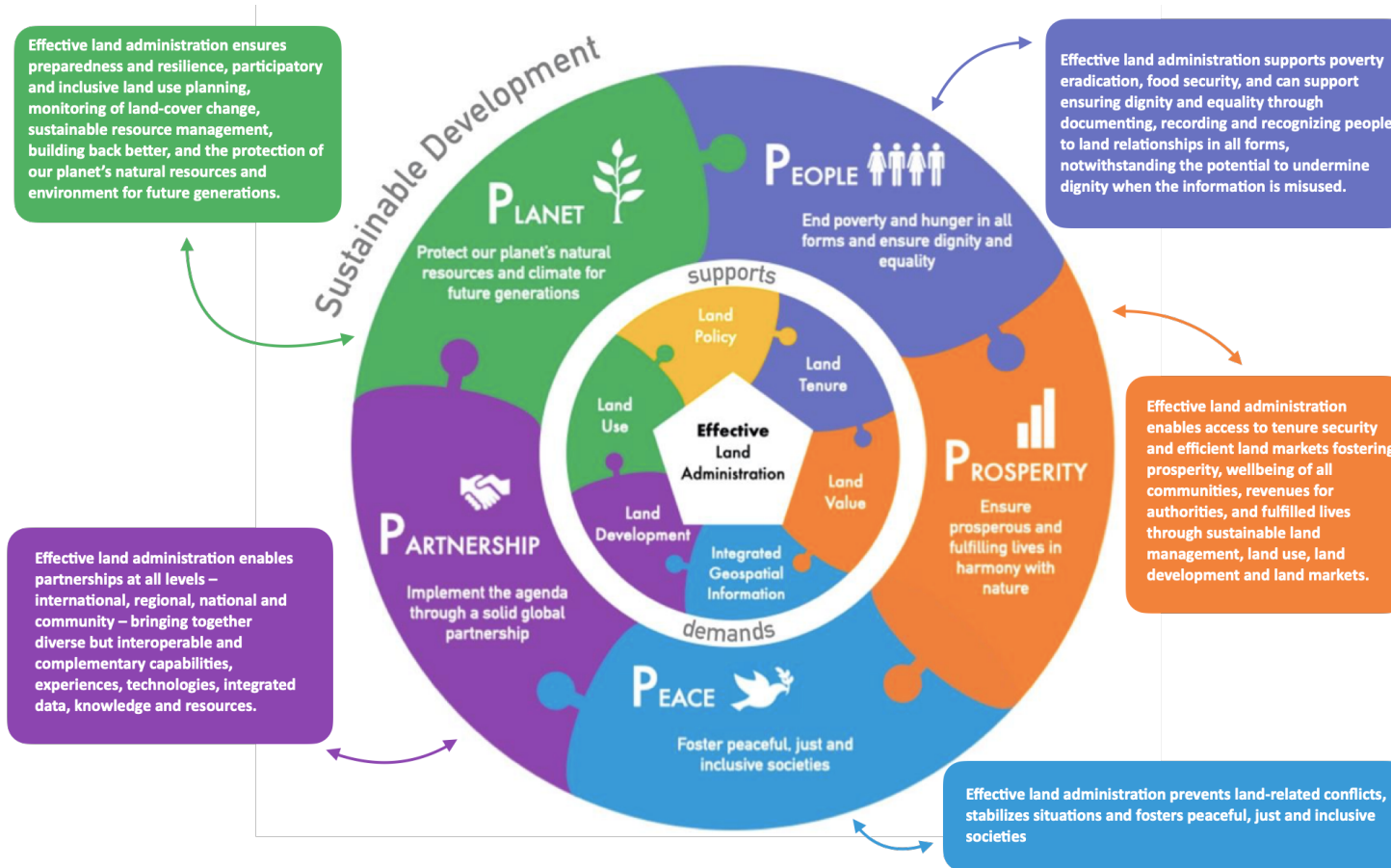
Positioning geospatial information to address global challenges

ggim.un.org



# The Framework for Effective Land Administration

Sustainable development demands effective land administration





# The Framework for Effective Land Administration

## Sustainable development demands effective land administration

Effective land administration caters to all people, and must:

- 💡 Develop confidence and trust, promote *security, safety, peace* and *peace building*;
- 💡 Accelerate the proportion of population with *tenure security*;
- 💡 Allow *economic development* by supporting land value capture revenue systems that are equitable and transparent;
- 💡 Strengthen *multi-disciplinary* and *multi-sectoral participation* to achieve integrated geospatial information;
- 💡 Contribute to *smart* and *resilient rural* and *urban societies*, with equitable spatial/land use planning, and land development;
- 💡 Ensure *participatory* and *inclusive* land use, and land use planning;
- 💡 Promote the recognition of the *inherent rights of indigenous and vulnerable peoples* to their lands, territories and resources, and *recognise collective traditions, customs and customary tenures*, consistent with existing obligations under national and international law;
- 💡 Encourage *efficient, sustainable and fair land markets*, where appropriate, that take into account land tenure, value, use and land development aspects;
- 💡 Cater to *all* circumstances, situations and people – in times of *peace and prosperity*, in times of *stress and hardship* (including disaster and conflicts, forced migration and human displacement, poverty, food and water scarcity);
- 💡 Enable *partnership, bringing and building together knowledge, skills and experiences* on land tenure, land value, land use and land development; and
- 💡 Promote *preparedness and resilience* on climate change issues and support biodiversity, conservation and ecosystem sustainability.



## Implementing the Framework for Effective Land Administration

EuroSDR with the support of UN-GGIM Europe and the UN-GGIM EG-LAM, initiated a small project in summer 2021 to raise awareness of the merits and benefits of effective land administration and to share knowledge and experience leveraging the FELA as overarching policy guidance



- Joep Crompvoets, KU Leuven, Belgium
- Anka Lisec, University of Ljubljana, Slovenia
- Frédéric Cantat, IGN, France
- Eva-Maria Unger, Kadaster, the Netherlands
- Rohan Bennett, Kadaster, the Netherlands



UN-GGIM

United Nations Committee of Experts on  
Global Geospatial Information Management

Expert Group on  
Land Administration and Management

Positioning geospatial information to address global challenges

ggim.un.org

## Implementing the Framework for Effective Land Administration

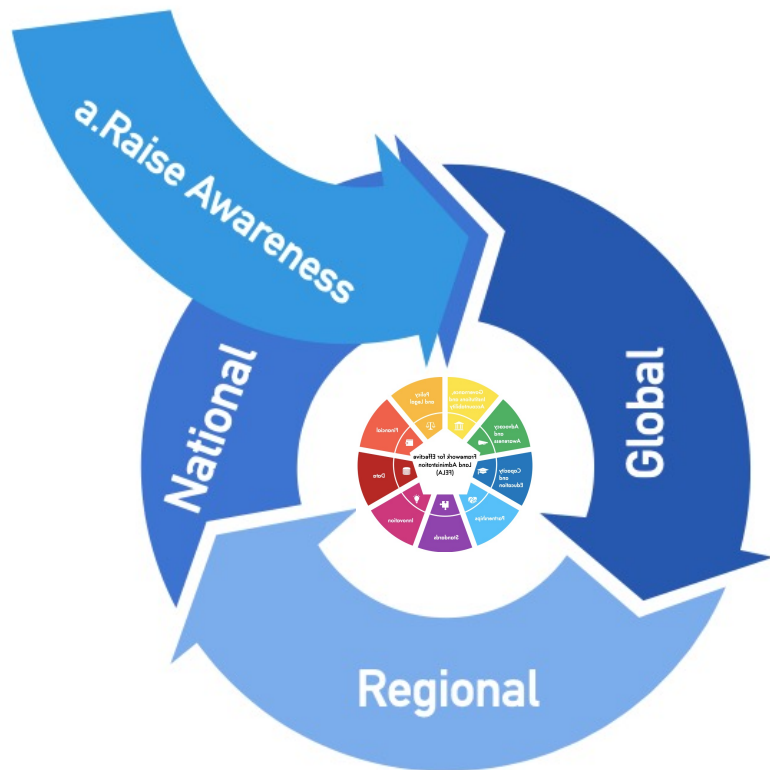


- a. Raise awareness and promote the usefulness of the FELA;
- b. Develop guidance to implement the FELA utilising the IGIF Implementation Guide;
- c. Develop an assessment mechanism to support the implementation of the FELA;
- d. Share and exchange knowledge, information, use cases, practices, experiences and examples; and
- e. Engage and collaborate with regional committees, in particular, UN-GGIM: Africa





## Implementing the Framework for Effective Land Administration



### Global

- Collate and disseminate examples, use cases, good practices
- Organise international seminars, forums and workshops etc.

### Regional

- Engage regional committees of UN-GGIM
- Contribute to regional and sub-regional engagement and activities

### National

- Get FELA onto agenda of donor projects
- Dialogue through projects with other land administrators
- Get 'buy in' from policy-makers and political leaders



UN-GGIM

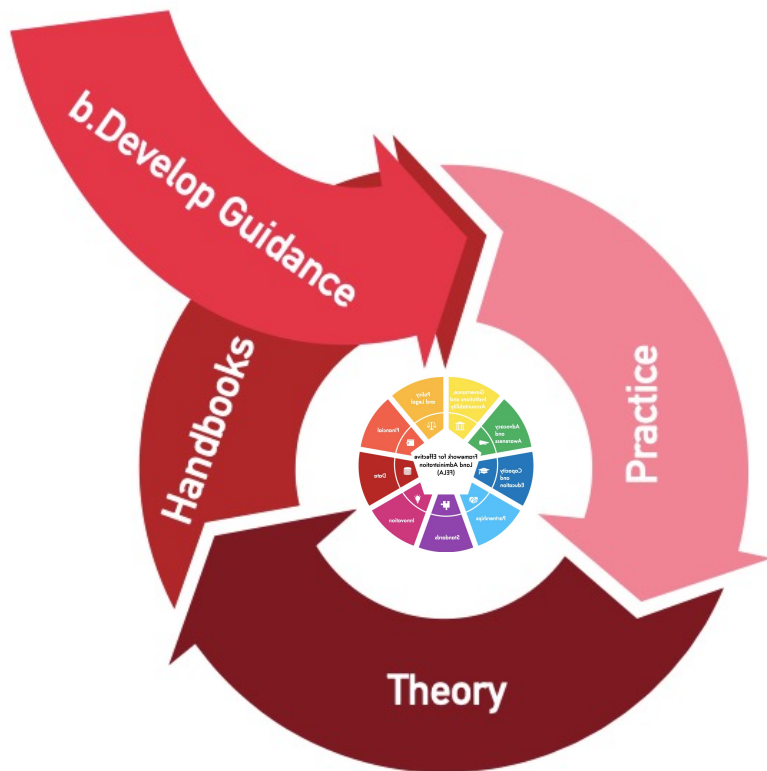
United Nations Committee of Experts on  
Global Geospatial Information Management

Expert Group on  
Land Administration and Management

Positioning geospatial information to address global challenges

ggim.un.org

## Implementing the Framework for Effective Land Administration



### Practice

- Online platform with FELA as overarching framework
- Direct links to existing and globally recognized tools
- Provide forum for practitioners



### Theory

- Involve academic and research institutions
- Engage with other relevant domains (environmental etc.)



### Handbooks

- Develop handbooks and checklists based on in-country experiences



# Implementing the Framework for Effective Land Administration



## Principles

- Elaborate guiding principles relevant to national circumstances

*\* No intention to measure and rank one over another*

## Approaches

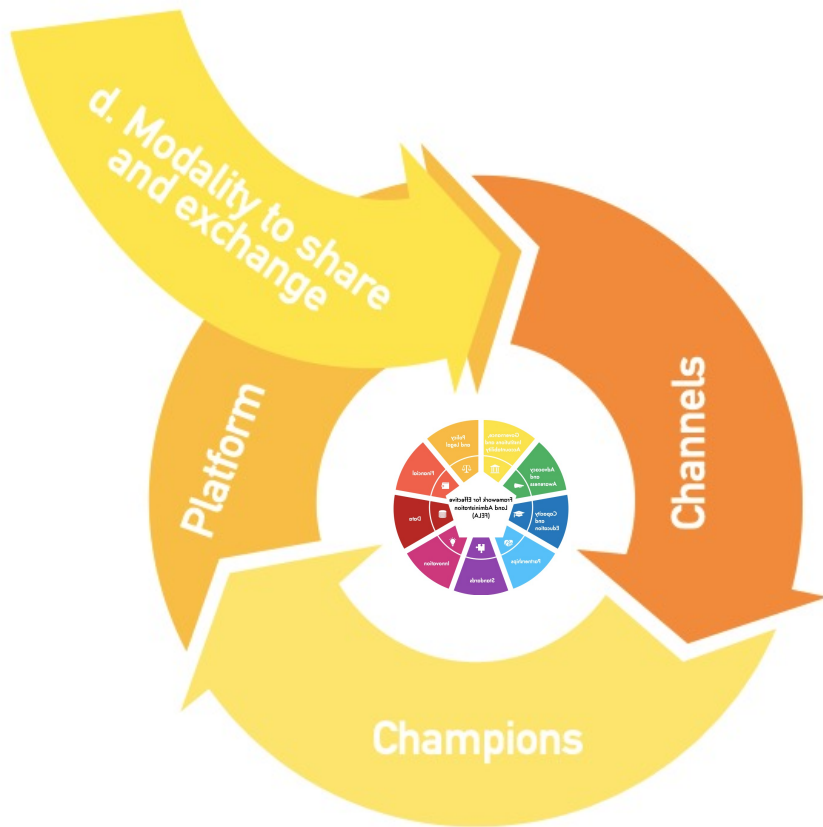
- 'No one size fits all'
- A suite of approaches that can be tailored to national circumstances for implementation
- Guidance to evaluate options according to country context

## Tools

- Develop 'light weight' resource materials, references or tools – keeping in mind country context



# Implementing the Framework for Effective Land Administration



## Channels

- Identify available and required channels
- Formal and Informal
- Strategic messages and value propositions

## Champions

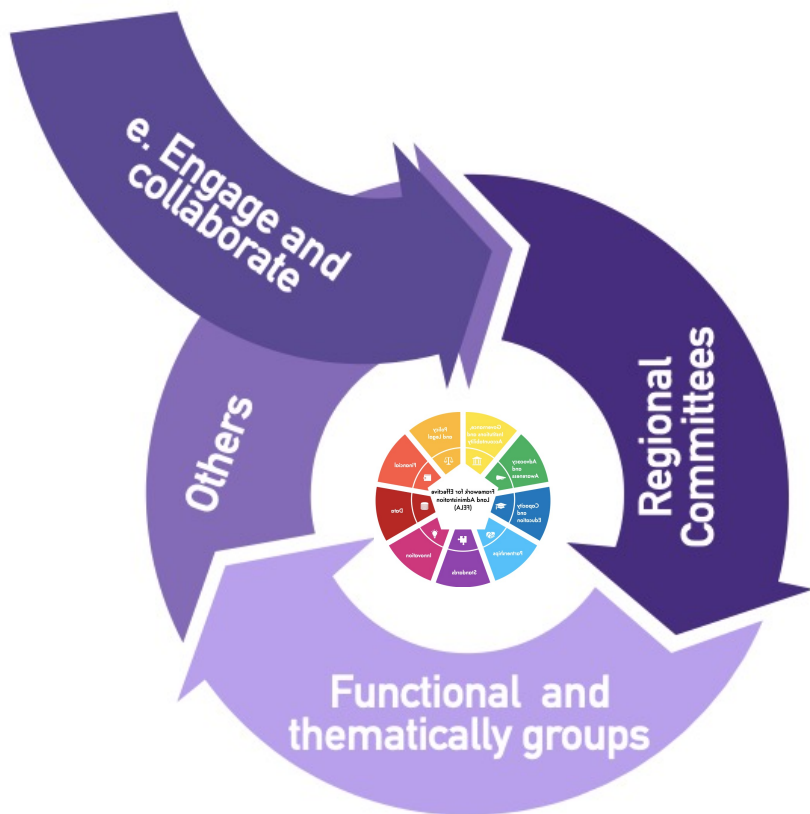
- Identify national and local champions
- Ensure those champions share and exchange experiences and lessons learnt

## Platform

- Use mechanisms/platforms which are affordable and inclusive



## Implementing the Framework for Effective Land Administration



### Regional Committees

- WG of Regional Committees
- Regional training and research institutes

### Functional and thematical groups

- Standards development organizations

### Others

- Civil society
- International and Regional Development organizations (donors)
- Philanthropic entities





# Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration

Inspired by the FIG Cadastre 2014 and subsequent Cadastral Template surveys

The objectives were to be achieved by a combined approach:

- 1) FELA was to be **widely shared and promoted**;
- 2) An **online survey** was designed and completed to gain sector-wide insights;
- 3) In-depth key-informant **interviews** are to be conducted with relevant experts;
- 4) A **workshop** is to be organised, of which the findings will serve as inputs;
- 5) A **publication** will be published as an Official EuroSDR Publication (which is scientifically indexed) and made widely available as an Open Access publication – and various other formats; and
- 6) **Knowledge transfer** via the organisation of an EduServ course



UN-GGIM

United Nations Committee of Experts on  
Global Geospatial Information Management

Expert Group on  
Land Administration and Management



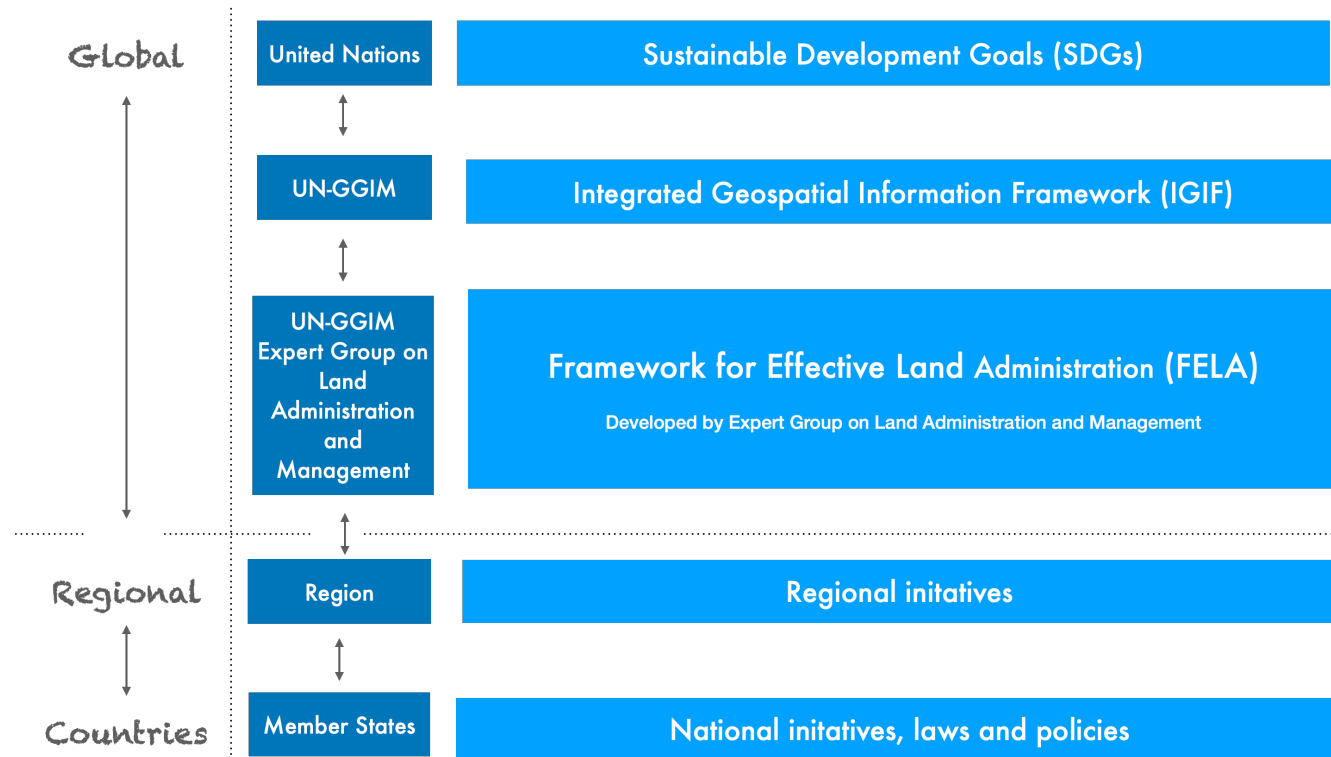
Positioning geospatial information to address global challenges

ggim.un.org



# Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration



Graphic adapted from: Unger, E.M.; Bennett, R.; Lemmen, C.; de Zeeuw, K.; Zevenbergen, J.; Teo, C.; Crompvoets, J. (2020) Global policy transfer for land administration and disaster risk management. In: Land Use Policy, December 2020

## Vertical Policy Transfer

(a) UN/UN-GGIM/EG-LAM (FELA)/Regional/National - between governance layers

**'Policy Transfer'** means the process by which actors borrow policies developed in one setting to develop programs and policies within another (Dolowitz & Marsh, 1996)

Two concepts:  
institutional and/or networked approach



UN-GGIM

United Nations Committee of Experts on Global Geospatial Information Management

Expert Group on Land Administration and Management



Positioning geospatial information to address global challenges

ggim.un.org



## Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration

The selection of participants was restricted to European countries, with an existing relationship with EuroSDR and/or UN-GGIM Europe.

### Participating countries:

- Austria,
- Belgium,
- Bosnia & Herzegovina,
- Bulgaria,
- Cyprus,
- Czech Republic,
- Denmark,
- England and Wales,
- Estonia,
- Finland,
- Germany,
- Italy,
- Latvia,
- Luxembourg,
- the Netherlands,
- Portugal,
- Scotland,
- Slovenia,
- Spain,
- Sweden
- Switzerland,

In total  
**21**  
countries  
participated

The participating countries represent all regions of Europe: Central and Eastern, Northern, Southern and Western Europe.



UN-GGIM

United Nations Committee of Experts on  
Global Geospatial Information Management

Expert Group on  
Land Administration and Management

Positioning geospatial information to address global challenges

ggim.un.org





# Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration

- Online survey approach aimed to create an **overview of the different stages of awareness and uptake** of the FELA by the Members of EuroSDR and/or UN-GGIM Europe
- Done by **converting the FELA framework into a series of questions**
- Each FELA strategic pathway question set would allow for a **mix of quantitative and qualitative data** to be collected
- Questions were created **based on insights** provided through the development of the FELA, as well as the specific context and discussions during the various EG-LAM meetings
- Survey included **both closed and open-ended questions**
  - Closed-ended question provided multiple choice answer option, therefore a set of answers was offered  
(Whilst this might be considered a constraint, it was felt the benefits of enabling comparison between countries outweighed the prescriptive nature of the responses provided)
  - Open-ended questions provided for **more in-depth insights** at a country-specific level to be provided



UN-GGIM

United Nations Committee of Experts on  
Global Geospatial Information Management

Expert Group on  
Land Administration and Management



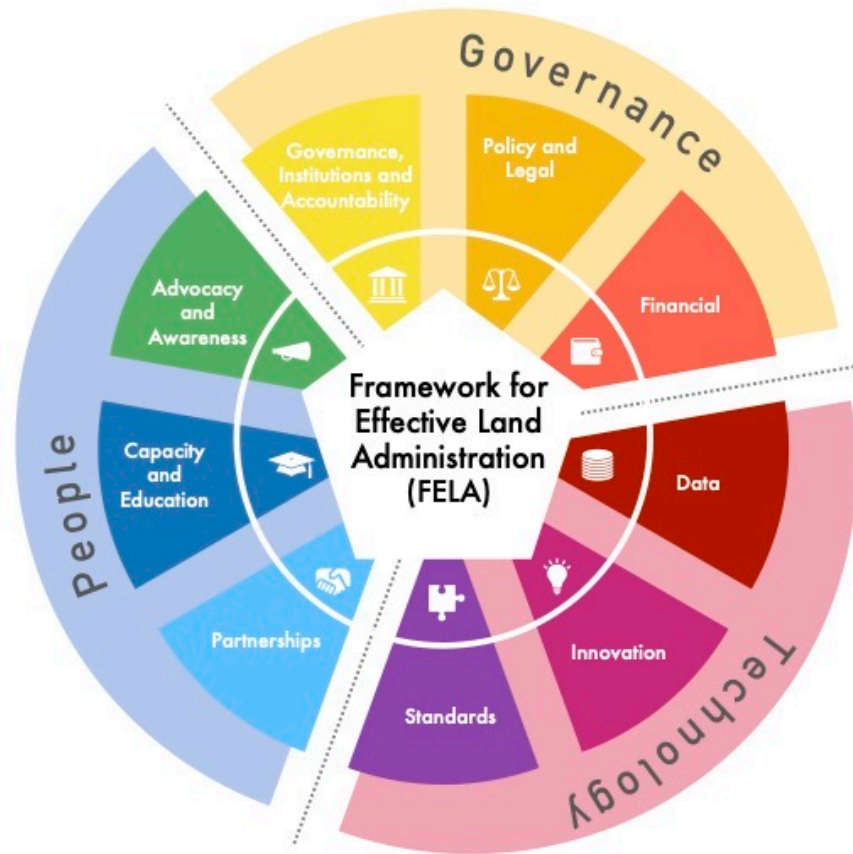
Positioning geospatial information to address global challenges

ggim.un.org



# Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration



UN-GGIM

United Nations Committee of Experts on  
Global Geospatial Information Management

Expert Group on  
Land Administration and Management

Positioning geospatial information to address global challenges

ggim.un.org

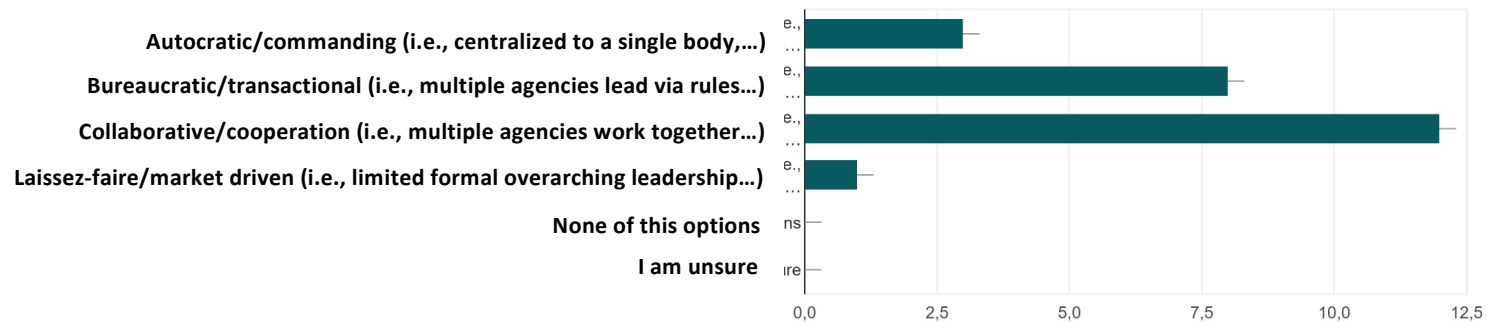


# Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration

This question relates to the FELA Pathway I 'Governance, Institutions and Accountability' – FELA calls for clear governance models, leadership, institutional structure and a clear value proposition. FELA describes the importance of the political endorsement to strengthen the institutional mandate.

Which option best describes leadership in the land administration sector in your jurisdiction?



Both bureaucratic and collaborative leadership styles were the two most frequently mentioned, (collaborative way being the main trend). Going further, qualitative answers revealed there is cases of mixed leadership with some tasks being defined through laws (most of the time the overall mandate) and others by collaboration with other key stakeholders.



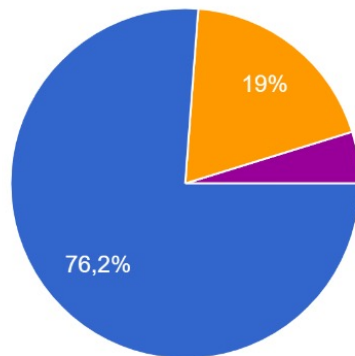


## Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration

This question relates to the FELA Pathway II ‘Policy and Law’ – FELA calls for the creation and existence of sound policy and legal frameworks relating to land tenure, land use, land value, and land development is fundamental.

Does your jurisdiction have a clear, concise, comprehensive and integrated land policy(s)?



- Yes
- No
- Partially (i.e., there is a recognized land policy, but there are many other competing or overlapping policies)
- I am unsure
- Clear, comprehensive land policies

Most respondents suggest the jurisdiction in question does have a clear, concise, and integrated land policy. This was perhaps above what was expected, given the historical divergence in aspects of land management and governance in many jurisdictions. Important here is that it was observed, based on the qualitative data that the land policy seems to be very clear and concise but when overlapping issues such as spatial planning, environmental impact etc. mandates as well as political interest differ.





## Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration

This question relates to the FELA Pathway III 'Finance' – FELA stresses the necessity for sound, accountable and transparent financial governance and management to focus on the importance of understanding the implementation costs and the required ongoing financial commitment necessary for maintenance,

How does the land administration sector sustain itself financially in your jurisdiction?



From the variety of responses it is clear that there are different methods to sustain services and maintain data. Majority presents a combination of taxes and/or levies, user payment and market-based approaches separate state budgets or allocated budgets are also still dominantly presented.





## Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration

Appears to be a level of homogeneity in the surveyed countries with respect to governance structures, leadership, laws, and finance. Perhaps expected due to historical origins of systems and the recent influence of European Commission

There are outliers though. These could indicate different interpretations of the question, or that a given jurisdiction is taking a substantially different approach to land administration – therefore in-depth interviews

In general, it could be assumed that most countries are (or until now) have been moving towards a more collaboration and diversification in land administration decision making and mandate.



UN-GGIM

United Nations Committee of Experts on  
Global Geospatial Information Management

Expert Group on  
Land Administration and Management



Positioning geospatial information to address global challenges

ggim.un.org



## Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration

Need to analyze thoroughly the qualitative data, and assess its alignment with the quantitative results, the need to refine the survey further, apply inferential statistics

It has been shown that it is possible to convert FELA into a tool for assessment and awareness raising

This work is part of a broader activity/collaboration between UN-GGIM Europe and EuroSDR. It is positive to see this kind of policy transfer work taking place



UN-GGIM

United Nations Committee of Experts on  
Global Geospatial Information Management

Expert Group on  
Land Administration and Management



Positioning geospatial information to address global challenges

ggim.un.org



## Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration

FELA is seen as enabler for partnerships

FELA is 'maturity-agnostic', and 'no one size fits all' approach

FELA fosters continual improvement

FELA does not measure one country against another

FELA helps to assess the 'as is' and the 'wants to be' situation, through trend analysis

FELA provides common language, to sit around the table



UN-GGIM

United Nations Committee of Experts on  
Global Geospatial Information Management

Expert Group on  
Land Administration and Management

Positioning geospatial information to address global challenges

ggim.un.org





# Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration

## Digital Transformation of Land Administration: Stages, Status, and Solutions

Rohan BENNETT, Australia, Suren TOVMASYAN, Armenia, Indra HUTABARAT,  
Clava PATRAMA PUTRA GINTING, Aulia LATIF, Indonesia, Eva-Maria UNGER,  
Austria, Vincent VERHEIJ and Irindayn der VEGT, The Netherlands

Key words: Armenia, Indonesia, UN-GGIM, FELA

*Presented on Tuesday 09.00 - 11.00 @ FIG Congress 2022*

Table 1. Digital Transformation opportunities and challenges

Pathway	Opportunities and Challenges
<b>Governance, Institutions and Accountability</b>	Vision for ATR/BPN digital transformation that is holistic Digital transformation <b>champions</b> at multiple levels <b>Alignment</b> of digital strategies with ATR/BPN and with external stakeholders
<b>Law and Policy</b>	Legislative and regulatory <b>harmonisation</b> Assessment of a <b>positive system</b> of land registration Ensuring workable, enforceable, and adequately resourced law
<b>Finance</b>	<b>Sustainable business model</b> exploration Government business enterprise model exploration Audit and assessment of PPP service models <b>Performance metrics</b> redesign around benefits realisation and SDGs
<b>Data</b>	Vision for data governance across ATR/BPN, post-2025 <b>R&amp;D</b> audit and review on cadastral and land registration data <b>Fast-tracking</b> mapping 126M parcels by 2025 (keep going!) Developing and implementing better <b>quality assurance</b> standards Ensuring a robust federated <b>database infrastructure</b> is developed
<b>Innovation</b>	Formalised innovation <b>bench making</b> program across ATR/BPN <b>Incentive schemes</b> at all levels Formalise <b>R&amp;D</b> collaborations across sector <b>Digital divide</b> audit
<b>Standards</b>	Audit <b>governance</b> of standards in ATR/BPN Assess range of <b>technology</b> and data initiatives in terms good practices Development of both internal and industry-wide <b>certification</b> protocols Fostering of a <b>community of practice</b> to support awareness raising
<b>Partnerships</b>	Reviewing partnership and establishment new partnership <b>ecosystem</b> (NGOs) Assess PR 38/2015 with regards to land sector <b>PPPs</b> <b>PaLaR</b> (i.e., FFPLA) review on embeddedness into PTSL <b>Donor-working group</b> creation for optimisation
<b>Capacity and Education</b>	Plan for <b>keeping capacity</b> in ATR/BPN <b>Fast-tracking skill areas</b> for maintaining the data Support professional bodies and encourage <b>self-accreditation</b>
<b>Communications and Awareness</b>	Revisit key <b>stakeholder</b> lists and related communications plans Ensure <b>World Bank</b> project comms are institutionalised Examining the current <b>monitoring and evaluation</b> mechanisms



UN-GGIM

United Nations Committee of Experts on  
Global Geospatial Information Management

Expert Group on  
Land Administration and Management

Positioning geospatial information to address global challenges

ggim.un.org



# Implementing the Framework for Effective Land Administration

Sustainable development demands effective land administration

Thank You!



UN-GGIM

United Nations Committee of Experts on  
Global Geospatial Information Management

Expert Group on  
Land Administration and Management



*Positioning geospatial information to address global challenges*

[ggim.un.org](http://ggim.un.org)



## The Framework for Effective Land Administration

Sustainable development demands effective land administration



Join at  
**slido.com**  
**#2106 612**

**FELA is referencing to various policy documents, tools, and approaches aiming to cover the diverse nature of land administration. Is there something missing in FELA? If so, please specify. What kind of next steps would you like to see for FELA?**



UN-GGIM

United Nations Committee of Experts on  
Global Geospatial Information Management

Expert Group on  
Land Administration and Management

*Positioning geospatial information to address global challenges*

ggim.un.org