EuroSDR

European Spatial Data Research

November 2025

Challenges in Relation to the UN Framework for Effective Land Administration (FELA)

EuroSDR International Workshop hosted by IGN France
with the support of UN-GGIM: Europe and EuroGeographics
June 16th-17th 2025, Saint-Mandé, France

Frédéric Cantat, Eva-Maria Morscher-Unger,
Anka Lisec, Martijn Rijsdijk, Kees De Zeeuw,
Nick Land, Vents Priedoliņš, Elisabeth Leblanc,
Joep Crompvoets, Paula Dijkstra

Official Workshop Report

The present publication is the exclusive property of
European Spatial Data Research

All rights of translation and reproduction are reserved on behalf of EuroSDR.
Published by EuroSDR

EUROPEAN SPATIAL DATA RESEARCH

PRESIDENT 2025-27:

André Streilein, Switzerland

VICE-PRESIDENT 2023-2025:

Jantien Stoter, Netherlands
Joep Crompvoets, Belgium

SECRETARY – GENERAL 2023 – 2027:

Conor Cahalane, Ireland

DELEGATES BY MEMBER COUNTRY:

Austria: Wolfgang Gold, Gottfried Mandlburger
Belgium: Eric Bayers
Croatia: Saša Cvitković, Željko Bačić
Cyprus: Elikkos Elia, Georgia Papathoma, Dimitrios Skarlatos
Denmark: Katerina Ritz, Jamal Jokar Arsanjani
Estonia: Evelyn Uuemaa
Finland: Antero Kukko, Juha Kareinen
France: Bénédicte Bucher, Aurélien Plyer
Germany: Michael Hovenbitzer, Norbert Haala
Ireland: Guillermo Castro Camba, Audrey Martin
Norway: Jon Arne Trollvik, Ivar Maalen-Johansen
Poland: Anna Bober, Krzysztof Bakuła
Portugal: Rui Reis, Marisa Silva
Slovenia: Mihaela Triglav Cekada, Peter Prešeren, Marjan Čeh
Spain: Julián Delgado Hernández, Jorge Delgado García
Sweden: Tobias Lindholm, Anders Rydén, Heather Reese
Switzerland: André Streilein, Adrien Gressin
The Netherlands: Martijn Rijsdijk, George Vosselman, Jeroen Leusink
United Kingdom: Claire Ellul

ASSOCIATE MEMBERS AND THEIR REPRESENTATIVES:

Digitaal Vlaanderen: Jo Van Valckenborgh
Esri: Nick Land, Konrad Wenzel (nFrames)
Hexagon: Layton Hobbs
ICGC: Julià Talaya
IGI: Philipp Grimm
RIEGL: Peter Rieger
Vexcel: Bernhard Schachinger
1Spatial: Dan Warner

COMMISSION CHAIRPERSONS:

Data Acquisition: Eija Honkavaara, Finland
Modelling, Integration and Processing: Ivar Oveland, Norway
Information Usage and Visualization: Martijn Rijsdijk, The Netherlands
Business Models and Operations: Frédéric Cantat, France
Knowledge Transfer: Anka Lisec, Slovenia

OFFICE OF PUBLICATIONS:

Bundesamt für Eich- und Vermessungswesen
Publications Officer: Christine Ressl
Austria
Contact via EuroSDR Secretariat

CONTACT DETAILS:

EuroSDR Secretariat
Department of Geography
Maynooth University
Maynooth
Co Kildare
Ireland

Tel.: +353 1 7083610
Email: EuroSDR@mu.ie
Web: www.eurosdr.net

The official publications of EuroSDR are peer-reviewed

In remembrance of
the Chair of the Board of Kadaster, Co-chair of UN-GGIM: Europe
and valuable contributor to this workshop
Frank Tierolff, 1968-2025

Cantat, F., Morscher-Unger, E.-M., Lisec, A., Rijsdijk, M., De Zeeuw, C.J., Land, N., Priedoliņš, V., Leblanc, E., Crompvoets, J., Dijkstra, P.

"Challenges in Relation to the UN Framework for Effective Land Administration (FELA)"

EuroSDR International Workshop hosted by IGN France
with the support of UN-GGIM: Europe and EuroGeographics
16th - 17th June 2025, Saint-Mandé, France

Table of contents

Index of Figures 7
Abstract 8
Acknowledgement 9
1 INTRODUCTION 10
2 PART I: Introduction and impregnation with the topic 11
2.1 Welcome address 11
2.2 Keynote: UN-GGIM Expert Group on Land Administration and Management 11
2.3 Introduction to UN Framework for Effective Land Administration (FELA) 13
2.4 EuroSDR FELA survey: results 15
3 PART II: Breakout session on challenges related to FELA 18
4 PART III: FELA implementation, overview with six returns on experiment 20
4.1 Effective Land Administration in the Netherlands 20
4.2 FELA implementation: French urban planning geoportal 21
4.3 FELA implementation: feedback from Latvia 23
4.4 Making Land Information Systems the cornerstone of FELA implementation in Africa 24
4.5 Improving the usage of land administration data for education and capacity building 27
4.6 The use of GIS in FELA implementations 28
5 PART IV: Panel discussion 30
6 CONCLUSIONS and TAKEAWAYS 31
References 32
Appendix A: Participating organisations 33
Appendix B: Workshop programme 34

CHALLENGES IN RELATION TO THE UN FRAMEWORK FOR EFFECTIVE LAND ADMINISTRATION (FELA)

EuroSDR International Workshop hosted by IGN France
with the support of UN-GGIM: Europe and EuroGeographics

16th - 17th June 2025, Saint-Mandé, France

With 11 figures

Frédéric Cantat [a], Eva-Maria Morscher Unger [b], Anka Lisec [c], Martijn Rijsdijk [b], Kees De Zeeuw [d], Nick Land [d], Vents Priedoliņš [e], Elisabeth Leblanc [a], Joep Crompvoets [f,] Paula Dijkstra [b]

[a] National Institute of Geographic and Forest Information (IGN France)
Saint-Mandé, France

[b] Kadaster
Apeldoorn, Netherlands

[c] University of Ljubljana
Ljubljana, Slovenia

[d] Esri Inc.
Rotterdam, Netherlands

[e] State Land Service of Latvia
Riga, Latvia

[f] KU Leuven
Leuven, Belgium

Index of Figures

Figure 1: Background, UN 2030 Agenda, EG-LAM and FELA framework 12

Figure 2: FELA in relation to the 5Ps, adapted from (UN-GGIM, 2020) 13

Figure 3: Integrated Geospatial Framework VS Framework for Effective Land Administration 14

Figure 4: Ten requirements for a key register in the Netherlands 20

Figure 5: French regulatory framework timeline for urban planning 22

Figure 6: Key areas of State Land Service of Latvia Strategy for Sustainability 23

Figure 7: Comparison between FELA and Fit-for-Purpose approaches in Land Administration..... 25

Figure 8: Draft dashboard for UgNLIS and SIGFU projects based on FELA's strategic pathways 26

Figure 9: using story maps in teacher lesson or students' projects to explain human development of coastal areas 28

Figure 10: FELA – A Framework for implementing Modern SDI and driving Effective Land Administration 29

Figure 11: GIS capabilities alignment with the nine strategic pathways of FELA (here pathway IV) 29

Abstract

The EuroSDR International Workshop on challenges in relation to the United Nation (UN) Framework for Effective Land Administration (FELA) took place on June 16 and 17 2025, at IGN in Saint-Mandé (France). This EuroSDR event supported by UN-GGIM: Europe and EuroGeographics brought together thirty participants from ten countries across Europe (and Americas for a remote keynote). The aim of the workshop was:

- To discuss the findings of the project on FELA, undertaken by EuroSDR, focusing on the results of the online surveys;
- To discuss how countries and current land administration systems can benefit from FELA;
- To discuss what are the main challenges related to the implementation of FELA principles/upgrade land administration systems;
- To look at examples of best practices in land administration and to explore how these innovations can be brought into practice in other countries, particularly in the context of national mapping and cadastral agencies;
- To discuss what are the future development trends of national land administration considering all nine FELA pathways;
- To discuss how EuroSDR, EuroGeographics, UN-GGIM: Europe and the broader geospatial international community can contribute to the development of contemporary land administration.

Over the course of the event, keynote, breakout sessions, presentations and panel discussion allowed participants to have fruitful exchanges and exchange experiences of effective land administration. They agreed that FELA is an overarching guide, not an implementation document, and also a living document which could be a very useful compass for self-assessment. They expressed the wish to continue the discussions, particularly around the study of standardised self-assessment tool following the nine pathways of the FELA.

Acknowledgement

The workshop was hosted by IGN France with the financial support of EuroSDR.

The workshop owes its success to the diligent guidance and commitment of a knowledgeable program committee. Their expertise and dedication were instrumental in bringing this event to life.

Program committee

Frédéric Cantat
IGN France, chair of EuroSDR's commission on Business Models and Operation

Joep Crompvoets
KU Leuven, Belgium, Vice-President of EuroSDR

Paula Dijkstra
Kadaster, The Netherlands

Elisabeth Leblanc
IGN France

Anka Lisec
University of Ljubljana, Slovenia, chair of EuroSDR's commission on Knowledge Transfer

Eva-Maria Morscher-Unger
Kadaster, The Netherlands

Vents Priedoliņš
State Land Service, Latvia

Martijn Rijsdijk
Kadaster, The Netherlands, chair of EuroSDR's commission on Information Usage and Visualization

1 INTRODUCTION

Although approaches to developing and implementing land administration systems vary among countries and are influenced by historical development, political and economic conditions, and other factors, there is an international consensus to develop and work on standardised approaches in land administration. An important and significant milestone for land administration globally was achieved when the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) adopted the Framework for Effective Land Administration (FELA). This accomplishment for the international land sector and land administration professionals around the world is due to continued promotion and awareness of effective land administration. Adoption of the FELA by the various UN Member States is currently underway, and this is an ideal moment to contribute and advocate for its implementation.

EuroSDR, with the support of EuroGeographics, UN-GGIM Europe, and the UN-GGIM Expert Group on Land Administration and Management (EG-LAM), initiated a small project in 2021 to raise awareness of the merits and benefits of effective land administration and to share knowledge and experience leveraging FELA as an overarching policy guidance in Europe. In addition, the project sought to support the FELA as a living document, cognizant of the changing and evolving social, economic, environmental, political, and technological landscapes and national circumstances. Within the project, three online surveys were designed to gain sector-wide insight, addressing challenges at mapping and cadastral agencies related to nine FELA pathways across Europe, i.e.:

- Pathway I - Governance, Institutions and Accountability
- Pathway II: Policy and Legal
- Pathway III: Financial
- Pathway IV: Data
- Pathway V: Innovation
- Pathway VI: Standards
- Pathway VII: Partnerships
- Pathway VIII: Capacity and Education
- Pathway IX: Advocacy and Awareness

FELA addresses relevant issues, gaps, and appropriate approaches, including access to basic datasets, to accelerate efforts in documenting, recording, and recognising people-to-land relationships in all forms. Finally, the collaboration sought to allow leveraging synergies among the national mapping and cadastral agencies, public authorities, universities, research institutes, and private companies.

To address these challenges, EuroSDR, in collaboration with IGN France, EuroGeographics, UN-GGIM Europe, organised a lunch-to-lunch workshop that took place in Saint-Mandé Paris, France, on June 16-17, 2025 and welcomed everyone interested in the challenges related to the development of contemporary land administration systems, addressing different perspectives, such as governance, technology and human capacities. An important objective of the event was also to validate the research findings and critically evaluate the project results.

The workshop was divided into four parts. First, a part for inspiration with a keynote from the co-chair of the UN-GGIM Expert Group on Land Administration and Management, an in-depth presentation of the FELA, and a presentation of the results of the three EuroSDR FELA Surveys (see Appendix B). Part 2 was a breakout session where attendees could discuss about three different topics. Part 3 gave a very interesting overview of FELA implementation with six presentations. Part 4 featured a panel session with the previous presenters to dig into their return on experience and lessons learned.

2 PART I: Introduction and impregnation with the topic

2.1 Welcome address

Nicolas Paparoditis, deputy director of IGN France, welcomed all attendees of the International Workshop on challenges in relation to the UN Framework for Effective Land Administration (FELA). He stressed the importance for IGN France to be part of international cooperation in research and innovation in the geospatial domain, e.g. the involvement of the French mapping agency in EuroSDR and EuroGeographics activities (research projects, workshops or prototypes like Open Maps for Europe 2[1], etc.). Nicolas Paparoditis emphasised the fact that, even if IGN France is not in charge of land registration nor cadastre, it is very involved besides French public bodies, to support land management policies and operations, for instance with the urban planning geoportal (GPU) developed in partnership with the French Ministry of Green Transition (see below).

Frank Tierolff, chair of the Board of Kadaster and co-chair of UN-GGIM: Europe also welcomed the participants, sharing with them his view that the UN Framework for Effective Land Administration (FELA) is a very powerful and comprehensive framework to strengthen land administration in countries. He also expressed his pleasure to further enhance this framework and discuss during the event how it can be more widely implemented.

2.2 Keynote: UN-GGIM Expert Group on Land Administration and Management

Raffaella Anilio Olguín, from the Chilean National Spatial Data Infrastructure (NSDI Chile), Ministry of National Assets, **co-chair of the UN-GGIM Expert Group on Land Administration (EG-LAM)[2]**.

She first shared[3] with the audience (Rem.: she was connected remotely) the EG-LAM (founded in 2015) and FELA framework (published in 2020) backgrounds (see figure 1 below). In 2025, EG-LAM has 39 members (including 28 UN Member States). Its **two main objectives are**:

- Play a leading role at the policy level by raising political awareness and highlighting the importance to decision makers of the need for timely and fit-for-purpose land administration and management
- Encourage the use of geospatial information tools and systems to improve the legal certainty of all citizens in the world with respect to the registration of the relation between people and land.

To achieve them, EG-LAM is acting on global, regional and local levels. To illustrate this, Raffaella Anilio Olguín detailed the 2024-2025 EG-LAM Work Plan with five focus areas (sharing past or plan events and current outcomes for each):

- **Leadership and advocacy** (Raise awareness of benefits of effective land administration, Promote and develop guidance for FELA implementation)
- **Promote and encourage FELA at country level** (Adapt UN-IGIF Guide for FELA, Support implementation aligned with national needs and Share examples, promote translations)

[1] See: https://eurogeographics.org/open-maps-for-europe/ome2-progress/
[2] See: https://ggim.un.org/Expert-Group-LAM.cshtml/
[3] See presentation: http://www.eurosdr.net/sites/default/files/images/inline/eurosdr_fela_paris_keynote-presentation_0.pdf

- **Innovation in Land Administration** (Promote ecosystem-based approaches, Address rights, restrictions, responsibilities (RRR), Explore digital access and cybersecurity and Integrate tenure, value, development, and land use data)
- **Integration of Terrestrial, Maritime, Built and Cadastral Domains** (Gain better understanding through cooperative projects)
- **Engagement and Collaboration** (Foster cooperation with regional committees, functional groups, and stakeholders)

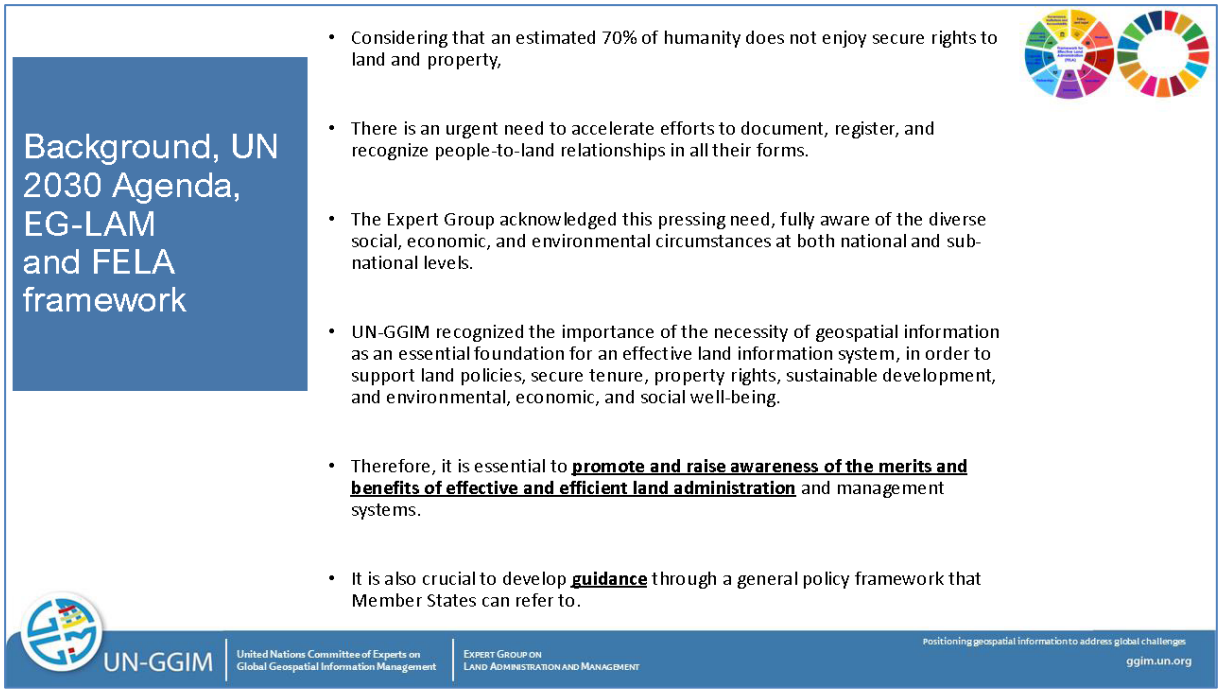

Figure 1: Background, UN 2030 Agenda, EG-LAM and FELA framework

In the last part of her presentation, Raffaella Anilio Olguín detailed the nine future and key challenges the group may face in fully achieving its objectives in 2026 and beyond, along with strategic implications:

- **Adoption of AI for land sector**: the expert group again expressed the need to embrace new technology such as GeoAI to improve the access and use of land information.
- **Enhancing Delivery Strategy**: there is a push for more resources to offer practical guidance. Discussions are underway about creating simpler documents, such as scientific papers and best practices to spread awareness about the advantages of effective land administration using FELA.
- **Diversity in expert group**: the expert group suggests expanding the diversity and representation within the expert group by inviting experts from different levels of government, academia, private sector and minority groups to provide perspectives.
- **National-Level Implementation of FELA**: while awareness of FELA has increased, actual implementation at the national level remains uneven. Countries may lack the technical capacity institutional mandate, or political support to integrate FELA. Therefore, tailored implementation guidance, national capacity-building, and stronger government engagement.
- **Engagement from underrepresented Regions**: despite dissemination and technical on person activities, FELA is still not very well known or understood in many countries. Provide more virtual activities to raise awareness, and virtual companion to reach FELA principles, involve more actors to the EG.

- **Fragmentation of Geospatial Governance**: land administration often remains and depends on several institutions with different policies and laws that do not converse with each other. Inter-agency data sharing, policy integration, and institutional cooperation are difficult. Provide short-, medium- and long-term solutions for common issues like this.
- **EG-LAM more connected**: there are several organizations, programs, UN Agencies, committees and others, that are making efforts, software etc, related to land administration. There is a gap on how to effectively connect to all this community. Involve more actors in the membership of EG-LAM, and oversee global efforts effectively.
- **Cybersecurity**: Digital transformation of land systems introduces vulnerabilities (e.g., data privacy, cyberattacks). Governments and institutions may resist incorporating new technology for this reason (not fully covered in this workplan period).
- **Development of a Centre of Excellence supporting Effective Land Administration**: proposal of the UN Centre of Excellence in Riyadh. The EG-LAM see it as a key opportunity to close the implementation gap and to help operationalise both FELA and LADM through collaboration, tailored assistance, and knowledge sharing.

2.3 Introduction to UN Framework for Effective Land Administration (FELA)

Eva-Maria Morscher-Unger is Land Administration Advisor at Kadaster International. She detailed in her presentation[4] the characteristics of the FELA and its interaction with UN-GGIM's principles.

First, she demonstrated (see Figure 2 below) that FELA makes explicit the connection between the 2030 Agenda for Sustainable. Sustainable development demands effective land administration.

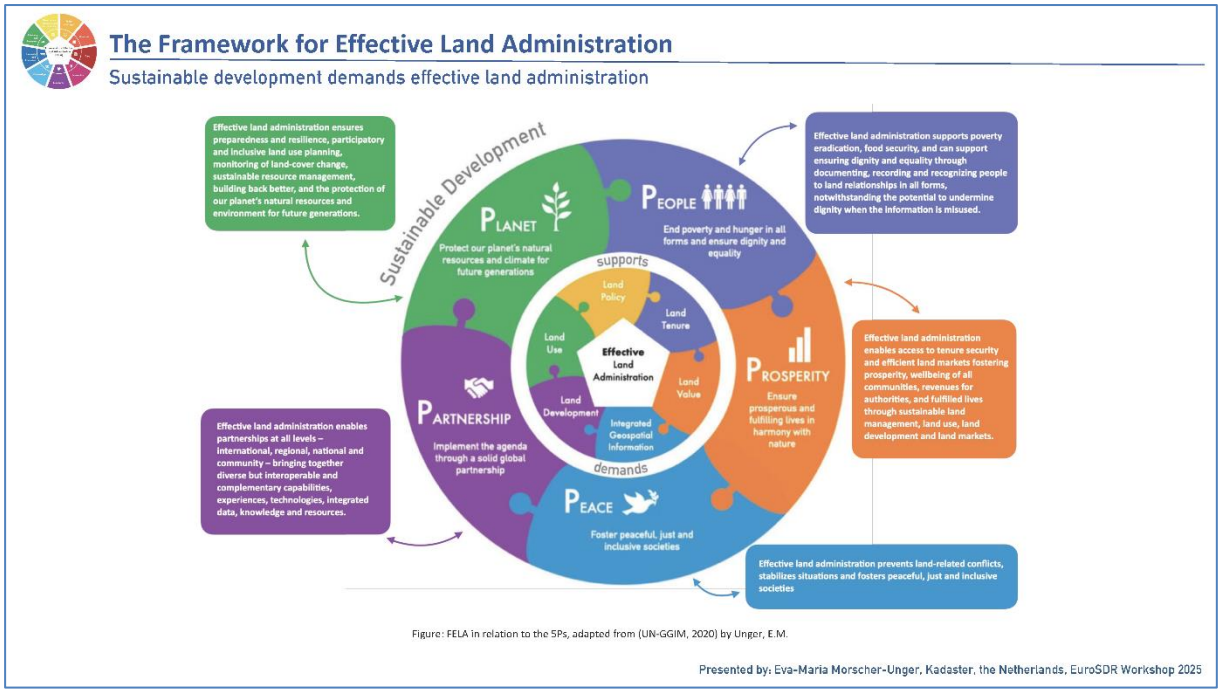

Figure 2: FELA in relation to the 5Ps, adapted from (UN-GGIM, 2020)

[4] See: http://www.eurosdr.net/sites/default/files/images/inline/eurosdr_fela_paris_intro-to-the_fela.pdf

After that, she showed the alignment between the Integrated Geospatial Information Framework (IGIF)[5] and the Framework for Effective Land Administration (see Figure 3 below). IGIF is an umbrella framework and when you work with the IGIF and entering the domain of land administration you can work with the FELA because it is all part of the puzzle. When implementing the IGIF at the country-level, FELA is preferred when you have to address land and property rights, as FELA references land related guidelines/publications and standards.

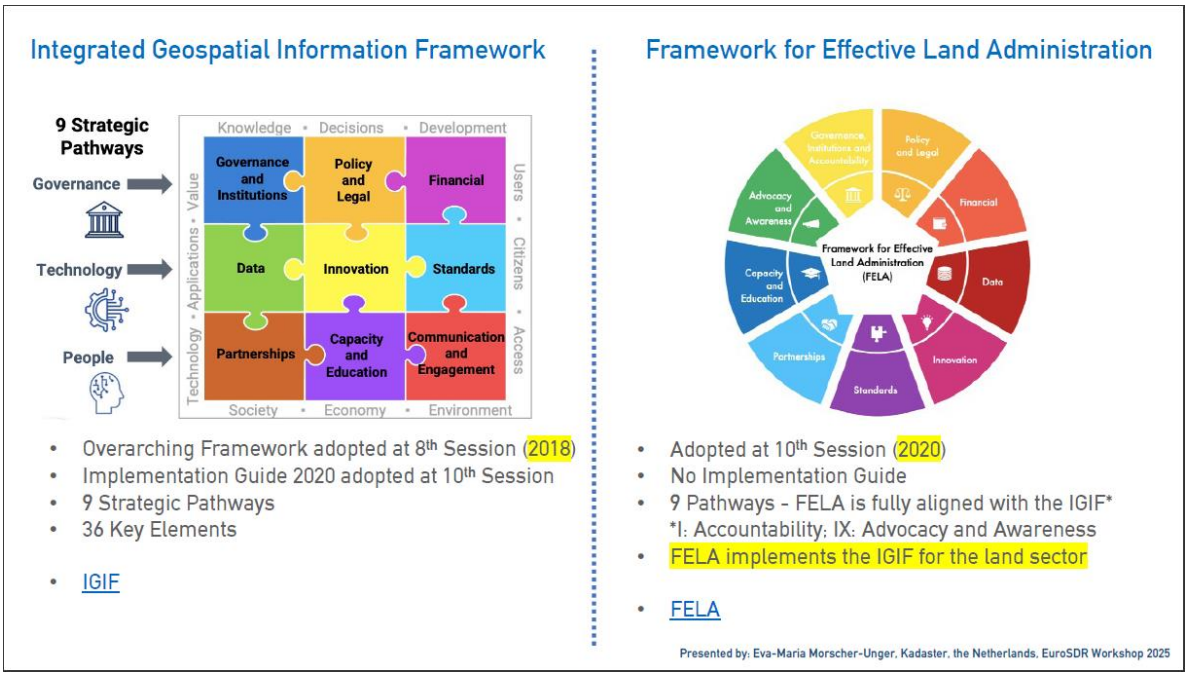

Figure 3: Integrated Geospatial Framework VS Framework for Effective Land Administration

And, she asked the audience the provocative question: "*Why does IGIF seem successful and FELA almost forgotten?*" before proposing an inventory of current gaps and challenges of FELA in one side, and its unique value proposition on other side, in order to add value in today's geospatial and land administration landscape:

- Gaps and challenges:
  - overlap with IGIF and lack of clear differentiation
  - limited awareness among stakeholders and practitioners (what can you actually do with it)
  - absence of implementation tools and country-level guidance – would that be needed or too much duplication of IGIF? – or better to ask what is missing in IGIF specifically for Land
  - insufficient alignment with donor strategies and funding priorities – though World Bank / Food and Agriculture Organisation (FAO) etc. were included
  - Update needed? (Tech, AI, map production, marine, space)
- Unique value proposition:
  - FELA is an adopted UN Framework
  - FELA provides a policy-level perspective on institutional coordination, etc. unlike more technical or thematic frameworks
  - thematic frameworks
  - FELA focuses on institutional effectivness and strategic alignment
  - FELA promotes and links to other policies, guidelines etc.

[5] https://ggim.un.org/UN-IGIF/

In the last part of her presentation, Eva-Maria Morscher-Unger recalled that 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 (core team of the research project: Joep Crompvoets, KU Leuven, Belgium; Anka Lisec, University of Ljubljana, Slovenia; Frédéric Cantat, IGN, France; Eva-Maria Morscher-Unger and Rohan Bennett, Kadaster, the Netherlands) . She proposed a process in five steps to implement the FELA.

1. Raise awareness and promote the usefulness of the framework (at global, regional and national levels)
2. Develop guidance to implement the FELA utilising the IGIF Implementation Guide (mixing practice, theory and handbooks)
3. Develop an assessment mechanism to support the implementation of the FELA;
4. Share and exchange knowledge, information, use cases, practices, experiences and examples;
5. Engage and collaborate with regional committees, in particular, UN-GGIM: Africa

The possible Impact of such initiatives are multiple from providing evidence-based insights to the GGIM Centre of Excellence on emerging trends, successful practices and existing gaps in land administration. To generate actionable knowledge to support and influence the post-2030 agenda.

2.4 EuroSDR FELA survey: results

Anka Lisec is full professor in geodesy and geoinformatics at the Faculty of Civil and Geodetic Engineering, University of Ljubljana (Slovenia), and is Head of the Department of Geodetic Engineering (2021–2025). She is chair of the EuroSDR Commission 5 (Knowledge transfer). She outlined in her presentation[6] the context and the objectives of the survey ran during the first part of the EuroSDR project. The results were prepared by the EuroSDR FELA core team, i.e. Frédéric Cantat, Joep Crompvoets, Anka Lisec, Eva-Maria Morscher-Unger and Rohan Bennett.

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. The FELA framework was converted into a series of questions, each FELA strategic pathway question set (included both closed and open-ended questions) allows 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 Expert Group on Land Administration and Management (EG-LAM) meetings.

The nine FELA pathways are grouped into three pillars: Governance (1. Governance, Institutions and Accountability; 2. Policy and Legal; 3. Financial), Technology (4. Data; 5. Innovation; 6. Standards) and People (7. Partnerships; 8. Capacity and Education; 9. Communication and Awareness). Each pillar was the subject of a specific survey.

The first survey was run in March and April 2022 and twenty-one countries participated. The detailed results could be found in *Unger et al. (2023), EuroSDR Official Publication n° 74*. Anka Lisec shared with the audience the highlights.

On the Governance pathway, one of the questions was "*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 (the collaborative way being the main trend). There are cases

[6] See: http://www.eurosdr.net/sites/default/files/images/inline/eurosdr_fela_paris_survey-results.pdf

of mixed leadership with some tasks being defined through laws (most of the time the overall mandate). Many institutions are involved in the Land Administration Sector. Cooperative and distributed roles are taken on when it comes to planning processes, building permitting, land management, spatial development etc.

To the question "*Does your jurisdiction have a clear, concise, comprehensive and integrated land policy(s)?*", 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. 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. Most countries have **support sharing and management of land data**, and the importance of data exchange protocols and standards was highlighted.

On the financial part[7], 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. In some countries, the land administration sector offers financial opportunities and support for non-public entities. Here, responses varied widely from no support to partial support being predominant. Some respondents indicated that **private partnerships were established for certain processes** (IT infrastructure, Web Services. Cadastral services).

The second survey, focused on Technology pillar, was run between February and April 2024 and twenty-two countries participated. The detailed results could be found in Mosher-*Unger et al. (2024), EuroSDR Official Publication n° 77.* Anka Lisec exposed to the attendees the highlights.

Besides the "core themes" (e.g., parcels, buildings, addresses) countries include various themes into Land Administration Sector. Varying degrees of maturity in **data** management practices within the various organisations are observed, with significant room for improvement, especially in adopting more automated systems and standardising data exchange to overcome interoperability issues. Most organisations manage data security internally (49%), while 33% use centralised, A small number outsource security fully.

The survey results regarding how the main **innovation** process is defined within organisations illustrate a diverse array of approaches. They show varying levels of government engagement with academic and private sectors in innovation processes. Only a small group (18.2%) indicates robust engagement through structured Innovation Programs involving both sectors.

Well-established frameworks for initial planning phases in **standardisation** are observed. All answers in the survey underscore the relevance of standard coordination in government operations, highlighting that there remains room for some to improve their coordination practices to enhance overall governmental functionality.

In the last part of her presentation, Anka Lisec shared **a first flavour of the results of the third survey focused on People**. It was run from March to May 2025 and fourteen countries participated. She indicated to the audience that an Official EuroSDR report would be published in Fall 2025.

The question "*How is the principle of subsidiarity applied in managing land administration data and processes in your country?*" reveals that there are different practices in land administration organisation. While some countries have a centralised Land Administration Sector, in other countries, local authorities play an essential role. The majority of countries have well-established professional and international networks – there are still opportunities to extend this collaboration. The cross-sectoral collaboration is stronger at the national level.

The key focus areas in capacity development programs aimed at government land administration officials are related to legislation/standards and new technologies, partly also to soft skills. A

[7] Question asked: "*How does the land administration sector sustain itself financially in your jurisdiction?*"

comprehensive career/cooperation development program, including ongoing education and performance evaluations, is not a common practice (yet).

Finally, the countries experience various communication approaches targeting various public. To increase public understanding of land administration roles and responsibilities, the involved organisations organised workshops, public relations campaigns, etc. Only some of the institutions periodically assess communication needs through surveys and feedback – there is still room for improvements.

As a conclusion, Anka Lisec exposed the six key takeaways from the three surveys:

- There is some homogeneity among the European countries in terms of governance structures, leadership, and laws. Much more diversity is observed in the financing aspects.
- Most countries appear to have been moving **toward greater collaboration and diversification** in land administration decision-making and mandates.
- There is **significant room for services/data management improvement**, especially in adopting more automated systems and standards to overcome interoperability issues.
- There is **opportunity to enhance the innovations** through more structured and formalised programs, potentially leading to more consistent innovation outcomes.
- There are opportunities related to **ongoing global efforts to enhance data and technology standards** that are critical for effective land management.
- There is a huge **demand for lifelong learning and capacity building** in most of the involved countries.

3 PART II: Breakout session on challenges related to FELA

The audience was divided in two groups and each group reflected on the same three topics: broadening scope of the FELA out of Europe, capacity building, and data use for the 17 Sustainable Development Goals (SDGs)[8].

In order to start the reflection and restart the discussion, the moderators had a set of questions for each topic:

- *Broadening scope outside Europe*
  - Should the survey be done outside Europe?
  - Which lessons can be taken from the survey?
  - Based on the survey findings what elements of the FELA pathways can be adapted or scaled to other regions with different land administration challenges?
  - How can these lessons be tailored to local contexts? FELA update needed?
- *Capacity Building*
  - How can FELA pathways in Europe be used for designing capacity-building programs for governments, local authorities, academia?
  - What are the most critical challenges in capacity building for land administration based on EuroSDR experiences?
- Data use for SDGs
  - FELA is not generating data - do we need to generate specific types of data to better support SDG reporting?
  - How can existing data from national cadastres and mapping agencies be better leveraged?
  - How can open data initiatives support the use of land data for the SDGs?
  - Can cooperation between agencies or countries lead to new useful datasets?
  - What actions are needed to make land administration data more impactful for SDG monitoring?

The first group recommended a phased approach for broadening the scope outside Europe:

1. **Visibility and Promotion**: first, make the survey results and key lessons learned publicly available to raise awareness and promote FELA.
2. **Collaborative Workshops**: instead of distributing the survey as-is, organise workshops in collaboration with organisations such as FIG. These workshops could also explore integrating the FELA survey into the existing cadastral template. Rather than using the current survey format, participants should be invited to review FELA and provide feedback.
3. **Living Document**: FELA should be maintained as a dynamic, continuously updated framework. Participants acknowledged its value as a visionary, high-level guide for land administration.

The second group stressed the fact that FELA is a framework, not a method or a guideline. and agreed the necessity to engage collaborative work, to due to the specificities of each country and the diversity of organisation: "*Every country has other meanings to definitions, you have first to know what for example ownership means in a special country. Every country has its own political systems and needs, so FELA differs from country to country.*".

[8] See https://sdgs.un.org/goals

Within the discussions about Capacity building challenges, the group emphasised the fact that it is a big opportunity in each country if there is a platform to bring people to talk about challenges and solving problems: from this perspective, FELA can really help to unite. FELA can also help to give an insight into the education challenges of people and employees in different countries.

The discussion about Data use for SDGs was less structured in the first group than for the first topic. However, several key points emerged:

- There is a need to define indicators that demonstrate the societal benefits of FELA, such as improved tenure security, fair taxation and valuation, better planning, conflict reduction, and decreased corruption. While FELA is strong on foundational elements, it lacks emphasis on the tangible outcomes of effective land administration.
- Communicating data effectively requires using the audience's language and exploring innovative formats like story maps, dashboards, and infographics.

The group also briefly discussed the distinction between open and closed data and the importance of determining what data should remain restricted.

The other group added that datasets are important, but different time series and timelines are needed to be fully useful. Finally, it concluded that data could help to measure and define indicators on each of the 9 FELA pathways. The benefits to have a good land administration should be insighted.

4 PART III: FELA implementation, overview with six returns on experiment

4.1 Effective Land Administration in the Netherlands

Christelle van den Berg is International Portfolio Manager at Kadaster international (Apeldoorn, the Netherlands). She started her speech with a presentation in a nutshell of Dutch Kadaster[9]: main challenges it faces in the spatial domain (housing, energy transition, climate adaptation, agriculture transformation, maintenance infrastructure, …)., mission, vision and business model (budget and customers).

She emphasized an important milestone in the development of an effective land administration in the Netherlands with the launch in 2003 of a system of key registers with a guiding principle: "*collect once – use many times*" and four objectives:

- a government that does not ask for what is already known;
- a government that is citizen/business-oriented
- a government that knows what it is talking about;
- a government that is reliable, well-organized and is cost-efficient

Each key register must follow ten requirements (see Figure 4 below).

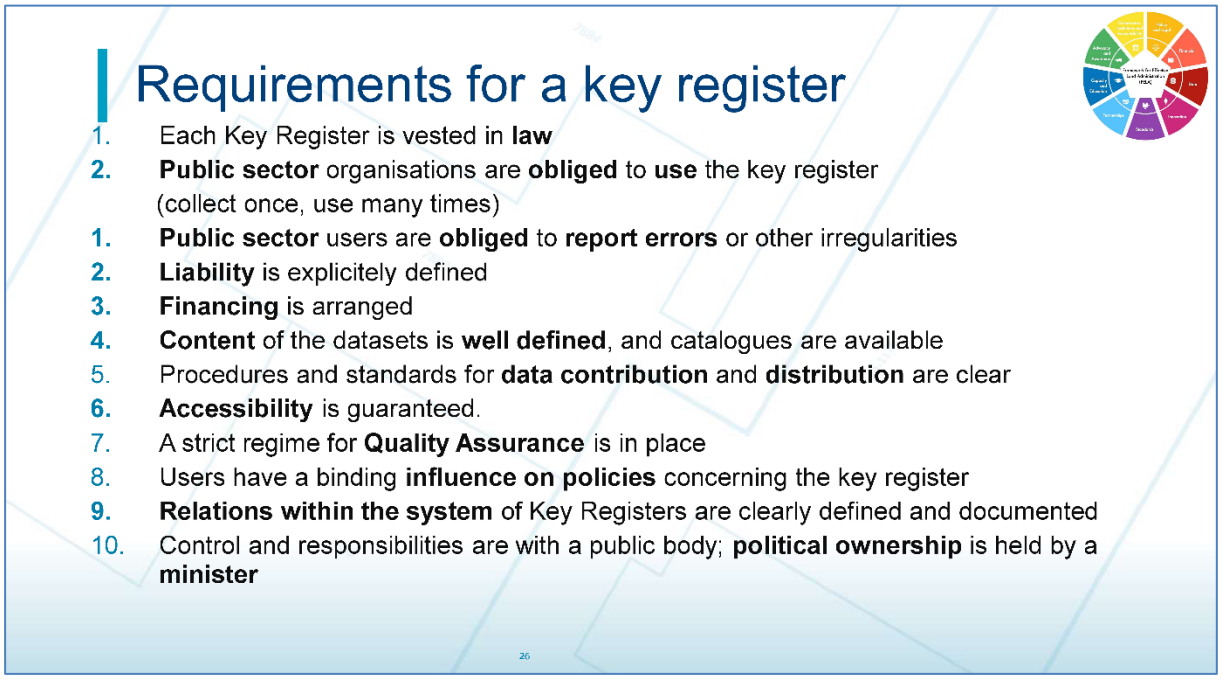

Figure 4: Ten requirements for a key register in the Netherlands

More than twenty years later, key registers (Vehicles, Cadastre and Topography, Businesses -2008, Income, Valuation, Buildings and Addresses -2009, Persons -2014, Base map -2016- and Subsurface -2018-2024) are the backbone for shared use, connectivity and single source of truth within the public sector in the Netherlands.

[9] See presentation: http://www.eurosdr.net/sites/default/files/images/inline/fela_in_the_netherlands_eurosdr.pdf

As a conclusion, Christelle van den Berg explained that Kadaster International has an international expert role in advisory roles on projects, maintaining international relationships, providing information and education, and sharing knowledge. Kadaster International has contributed to developing Effective Land Administration in various countries such as e.g.: Benin, Chad and Rwanda with the focus on three aspects:

- Systematic data collection:
  - Data must be maintained to stay reliable and make it work for society
  - Clear roles and responsibilities amongst stakeholders for ongoing data maintenance have to be assigned
  - Agreements about roles and responsibilities must be made prior to large-scale data collection initiatives
- Digitisation:
  - This is not just technology and must be an institutional reform also
  - Strengthen IT capacity and leadership
  - Choose sustainable tech solutions: open source, off-the-shelf software, …
  - Ensure data security and legal compliance
- Financial sustainability
  - Move from donor-funded to self-sustaining models
  - Asks for political choices
  - Choose viable business model for cost recovery

4.2 FELA implementation: French urban planning geoportal

Elisabeth Leblanc is responsible for partnership at IGN France. Her work focuses on territorial planning, urban development and land management issues. Moreover, she is an active participant in the French digital twin task force on territorial use cases.

She shared with the audience as an introduction to her presentation[10] the foundations of urbanism in France with "Code de l'urbanisme" (French town planning Code), which defines the general criteria to be taken into account in town and country planning. Territorial development is complex, multi-thematic and influenced by the consideration of major issues: climate, environment, economic, social, health... That's why as part of an implementation of the EU INSPIRE directive (which established the basis for a geographic information infrastructure to promote environmental protection and facilitate the dissemination, availability, use and reuse of geographic data), the French government decided to create in 2013 a national urban planning regulatory information portal, named "Géoportail de l'urbanisme" (see Figure 5 below). The first version was launched in 2016, and ongoing developments resulting from consultation phases with local authorities are making the portal more efficient and contributing to the modernisation of public services. Since January 1st 2016, local authorities have been required to make their planning documents available online (on their own websites, on Géoportail de l'urbanisme, etc.). And since January 1st 2020, the French Urban Planning Code has required the publication of new versions of urban planning documents on "Géoportail de l'urbanisme".

[10] See presentation:
http://www.eurosdr.net/sites/default/files/images/inline/eurosdr_fela_french_urban_planning_geoportal.pdf

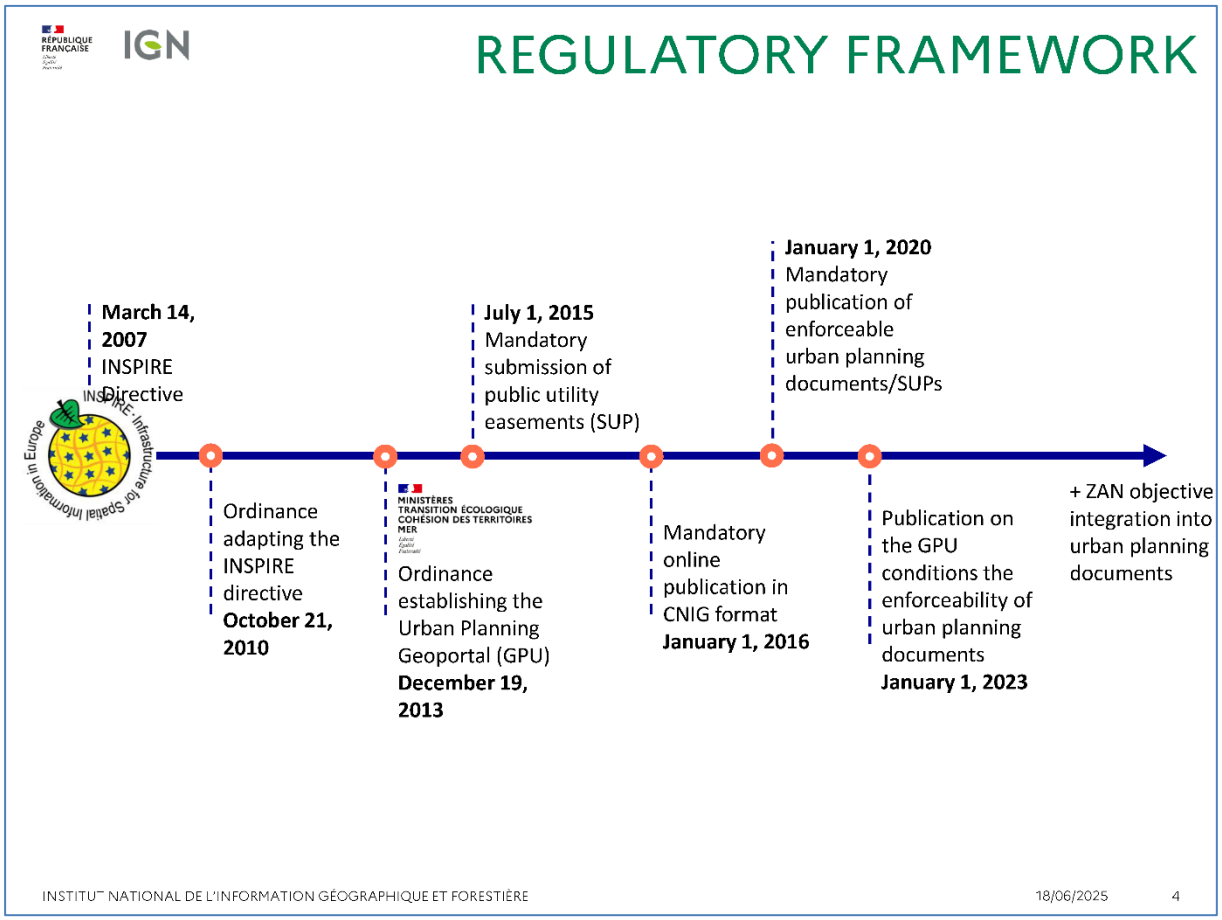

Figure 5: French regulatory framework timeline for urban planning

Any municipality wishing to plan its urban development can choose between two local urban planning documents: “carte communale” and “plan local d'urbanisme (PLU)”. “carte communale” is a simple, graphic urban planning document for small municipalities that have not drawn up a local urban plan (PLU). It enables them to designate areas where construction is permitted and issue building permits. “Carte communale” comprises a presentation report and one or more graphic documents. It includes an appendix of public utility easements affecting land use. All these documents and their cartographic representations are made available on the GPU by the local authorities. “Plan Local d'Urbanisme (PLU)” is a more sophisticated urban planning document that sets out a development project for a municipality or group of local authorities (an intercommunal PLU, known as a PLUi). It enables the municipality to adapt its regulations to the specific features of its territory in line with its urban development project. The PLU(i) comprises a presentation report, regulations (written provisions and a graphic document), and development and programming guidelines (OAP). The appendix includes public easements affecting land use.

“Schéma de coherence territoriale (SCoT)” is a long-term (around 20 years) inter-municipal strategic planning document drawn up on the scale of a large catchment area or urban area.

“Servitudes d'utilité publique (SUP)” –easement- are administrative restrictions on property rights authorized by law for the benefit of public bodies, concessionaires of public services or works, or private individuals carrying out activities of general interest. They can impose constraints and sometimes prohibit the undertaking or continuation of construction, development or demolition work.

Information is available for anyone to visualize and access, with different scales, from plot details to general land management information.

Elisabeth Leblanc shared several operational use cases: online building permit application; online information for purchasers and tenants of real estate (exposure to risks: natural hazards, etc.); analysis and decision support to support communities towards land sobriety in mainland France and overseas; uses of artificial intelligence, including optical character recognition (OCR) and machine learning, to extract the planning rules contained in PDF file; etc.

Currently, land use is the target of many French public policies, specialized actors, and complex issues to be applied locally. Tomorrow, a Digital Twin of France and its territories would help the State, local authorities and businesses as a planning and decision tool and would be a sandbox for research and anticipation.

4.3 FELA implementation: feedback from Latvia

Vents Priedoliņš is Cooperation and Development Lead at the State Land Service of Latvia and Co-chair of the EuroGeographics Cadastre and Land Registry Knowledge Exchange Network (KEN). He started his speech with a presentation in a nutshell of the State Land Service of Latvia[11]: purposes and areas of responsibility (Cadastre, Address Registry, Information system of restricted -encumbered- territories, Central database for high-detail topographic information). In the 2022-2026 strategic road map of the State Land Service, Sustainability is a pillar (see key areas in Figure 6 below), and the organisation was the first public institution honoured in 2024 with the Latvian Sustainable Governance Award for growth in sustainability (among achievements: transformation from standard to co-working offices, gradually replacement of combustion engine cars with electric cars).

Figure 6: Key areas of State Land Service of Latvia Strategy for Sustainability

[11] See presentation:
http://www.eurosdr.net/sites/default/files/images/inline/eurosdr_fela_implementation_feedbacks-from-latvia.pdf

Data migration to the State Cloud infrastructure solution, improved data exchange between Cadastre and other, new datasets available on the Latvian Open Data portal, new e-services created, modernisation of archives are also some great achievements of the current Strategic roadmap.

As a conclusion, Vents Priedoliņš outlined the upcoming challenges for the State Land Service. The main one is the enhancement of the cadastral valuation system following a three-year action plan aiming to:

- Reduce and simplify the volume of assumptions required for the cadastral valuation system, and optimise value zoning;
- Review transaction analysis and property grouping according to market segments, and improve compliance checks;
- Enhance the valuation of particularly high-value properties;
- Continue organising data on real estate usage purposes (developed land with buildings);
- Implement a unified property valuation object calculation, as well as income and cost approach methods for value calculation;
- Improve the system's transparency and the quality of supporting materials/documentation;
- Develop publicly accessible tools for analysing real estate transaction data and cadastral valuation results.

Another challenge is the unification of the Latvian building registration process by introducing the one-stop agency principle, meaning unified data and data flow design at State Land Service and State Unified Land Registry. The last two points scheduled for 2026 are the migrations of the information system of restricted territories and of the address registry to the QGIS software.

4.4 Making Land Information Systems the cornerstone of FELA implementation in Africa

Jean-Philippe Lestang is the Head of development of IGN FI. He has more than thirty years of experience in a variety of activities related to land governance, land administration, territorial, physical, spatial planning and urban development. His experience extends to being a Team Leader and senior consulting positions working with a broad range of donor agencies (World Bank, European Union, AFD, KfW, MCC).

Jean-Philippe Lestang started his presentation[12] by explaining that IGN FI (https://www.ignfi.fr/en/) is part of a Group in which each company brings specific services to provide comprehensive solutions covering the entire geographic data cycle, as well as specific business themes.

IGN FI had a 25 years' experience in Land Administration Systems (LIS) all over the world, for instance in Africa where IGN FI has supported several countries in the design and implementation of their Land Information Systems (LIS), notably through the Integrated Urban Land Management System (SIGFU) in Côte d'Ivoire (https://sigfu.gouv.ci) and the Uganda National Land Information System (UGNLIS) in Uganda (https://mlhud.go.ug/ugnlis). These two projects provide concrete feedback on the operationalisation of the FELA pillars in West and East Africa.

Before going deeper in these two projects, Jean-Philippe Lestang shared a comparison between two different approaches in Land Administration: the FELA and the Fit-for-Purpose (See Figure 7 below). The first one is more global, on a strategic level and the other one is more operational.

[12] See presentation: http://www.eurosdr.net/sites/default/files/images/inline/eurosdr_fela_lis-in-africa_feedbacks-from-ignfi.pdf

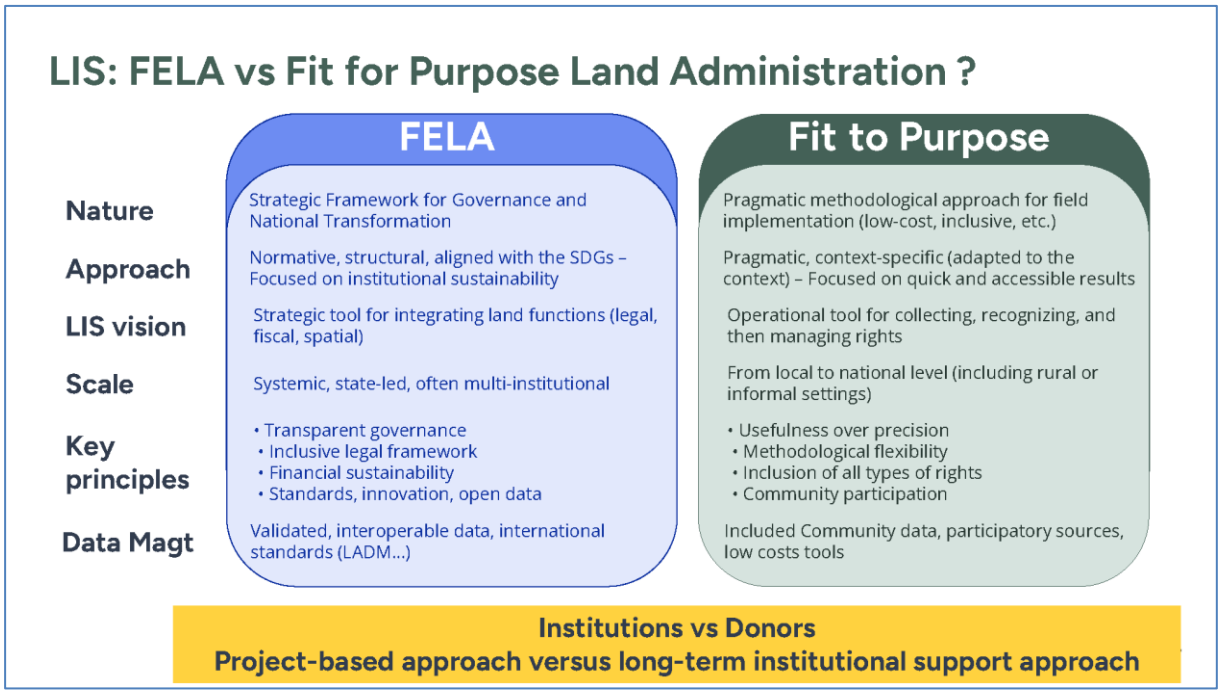

Figure 7: Comparison between FELA and Fit-for-Purpose approaches in Land Administration

The project in Uganda (UgNLIS) followed three stages from 2010 to 2024:

- 2010-2013: DeSILISOR project with a first LIS implementation across 6 pilot sites covering Uganda's most densely populated areas and digitisations, of around 500.000 existing land titles and their associated cadastral plans, and of around 80 types of land transactions.
- 2015-2020: DeSINLISI project with notably a Nationwide deployment across all 22 Ministry Zonal Offices, the launch of the first version of the public access portal, the digitization of all remaining land records and significant technology transfer with approximately 700 people trained
- 2023-2024: NaLISEP project with notably the redesign of the public portal with integrated online payment features, the development of dedicated portals for institutional users (banks, surveyors, etc.), the launch of mobile applications for broader accessibility.

UgNLIS has now reached maturity with interesting key statistics.

The Côte d'Ivoire project (SIGFU) is more recent. It started in 2021with a first stage that focused on Abidjan and Assinie areas, aiming to secure urban land tenure, streamline administrative procedures and improve the business environment. Among the key achievement of this first stage completed in 2024:

- Creation of a comprehensive land and geographic data base
- Deployment of digital tools to automate procedures
- User interfaces for real-time application tracking

The next stage planned in 2025-2026 to extend SIGFU to five major secondary cities in Côte d'Ivoire.

In the last part of its presentation, Jean-Philippe Lestang shared with the audience a draft project dashboard of his own based on the nine strategic FELA pathways, applied to Uganda and Côte d'Ivoire projects, which could be very useful for self-assessment (See Figure 8 below).

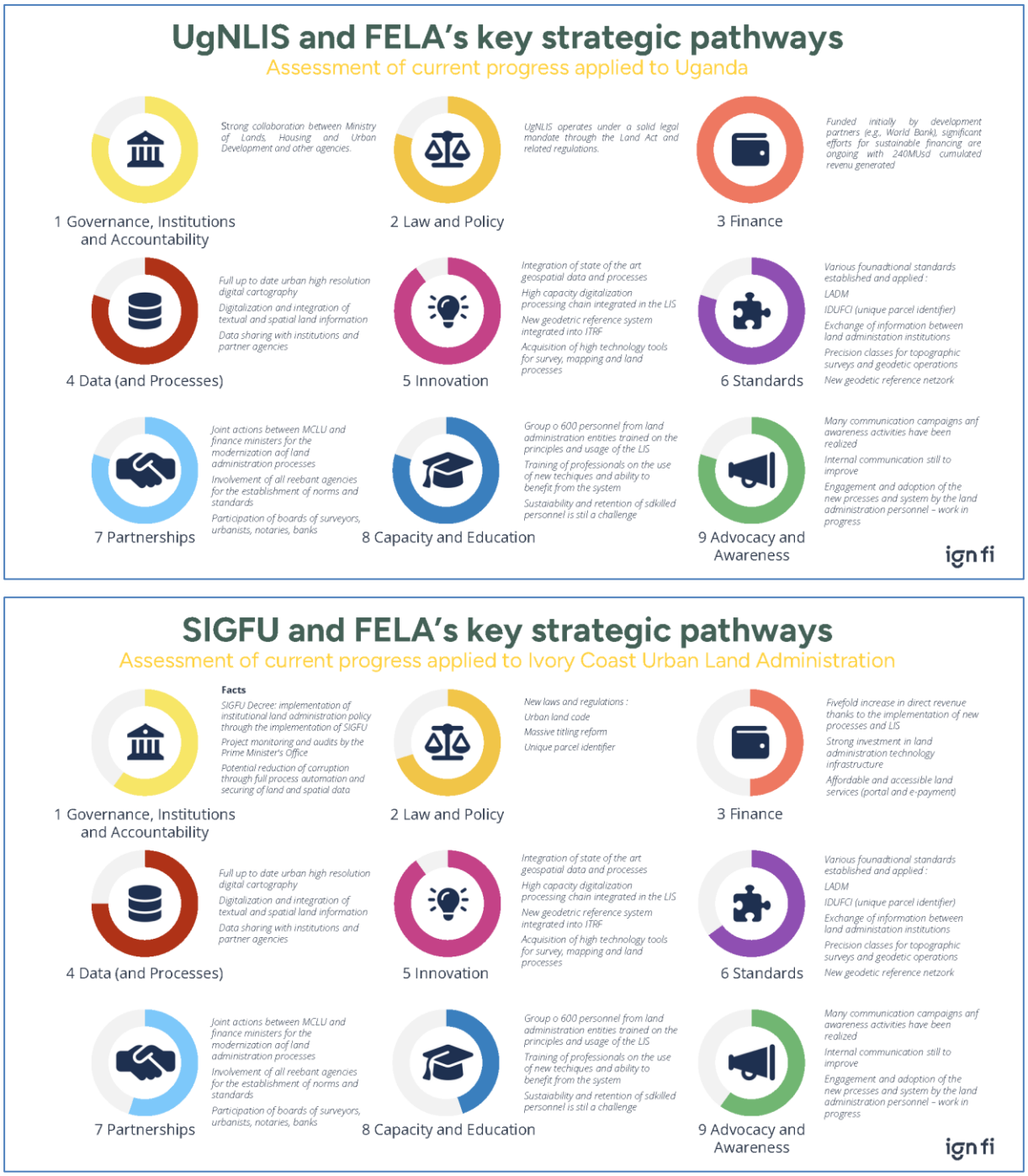

Figure 8: Draft dashboard for UgNLIS and SIGFU projects based on FELA's strategic pathways

As a conclusion, he exposed his vision of the LIS of the future, based on 6 pillars: Innovative technologies, Citizen services, Land valuation, Interoperability, Security and Field operations module. Each one could be associated with one or several FELA's strategic pathways.

4.5 Improving the usage of land administration data for education and capacity building

Bénédicte Bucher is researcher at IGN France and at the University Gustave Eiffel. Her focus is geodata distribution: users' access to the most relevant data for their decisions. **Romain Vialle is online Education Product manager at IGN France**.

The starting point of their presentation[13], as a claim, is: "*to build capacities of citizens, scientists, decision makers. And to engage with teachers to do that because very early enough, there are lessons about human decisions to manage land. We = not only legally mandated authorities but more globally the GI ecosystem and typically GIS software editors as ESRI. Teachers need our help; they don't have time, they don't have money.*".

They outlined the fact that they were presenting material from IGN France but many national mapping and cadastral agencies (NMCAs) in other countries engage with education too: see Bucher et al. (2020) and Bucher et al. (2023).

- 'Remonter le temps' (http://remonterletemps.ign.fr/) is an online web application for everyone, and particularly used by teachers to show, explain and demonstrate urban growth and others landscape trends, all other France.
- With 'Macarte' (https://macarte.ign.fr/) pupils can draw the shape of the city on the old imagery and then overlay with the latest imagery. Macarte tool was designed initially for school and now for every citizen, and is much used by municipalities. It also allows to create storymaps (see Figure 9 below).
- 'édugéo' (https://www.edugeo.fr/) is an online service designed and created to facilitate the acquisition of fundamental concepts included in geography syllabus, from Primary school to Secondary school.
- 'Minecraft® à la carte" (https://minecraft.ign.fr/) allows to use a gaming environment, with a 3D model that corresponds to the real world

As a conclusion of their presentation, Bénédicte Bucher and Romain Vialle stressed that the main flaw and reason why they present at this workshop is the need to facilitate the sharing of data and materials across countries, notably at a European level. They also shared some proposals for the future linked with FELA:

- "Pedagogic areas booklet" where the relevance of land administration is depicted with common sense words and with appropriate national or local data
- Register booklets with the national syllabus
- Favour cross-country exchanges between teachers, pupils and students

[13] See presentation: http://www.eurosdr.net/sites/default/files/images/inline/eurosdr_fela_education-capacity-building.pdf

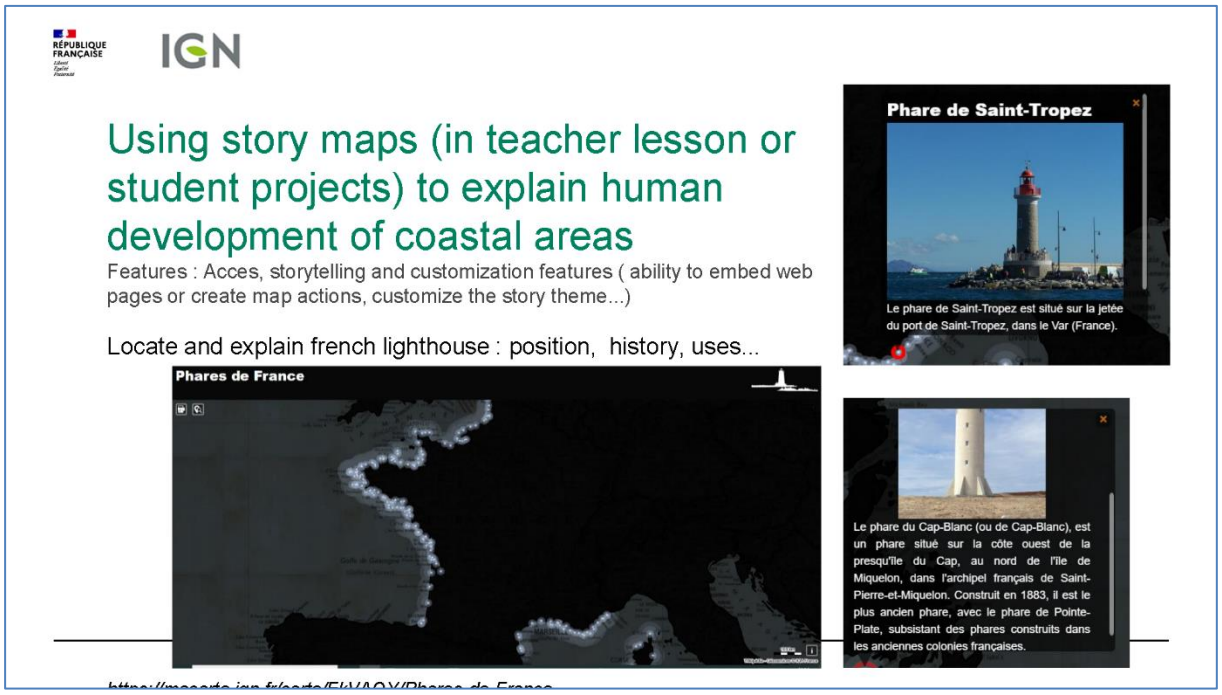

Figure 9: using story maps in teacher lesson or students' projects to explain human development of coastal areas[14]

4.6 The use of GIS in FELA implementations

Kees de Zeeuw is the Practice Lead on Land Administration at Esri Global. In his work, he has a focus on the design, implementation and use of GIS for land parcel management systems and related analysis, infrastructures and services.

As an introduction to his presentation[15], Kees de Zeeuw shared with the audience a synthetic view of the United Nations Integrated Geospatial Information Framework (IGIF) and Framework for Effective Land Administration (FELA) as a framework for implementing modern Spatial Data Infrastructure (SDI) and driving effective Land Administration (see Figure 10 below). He summarised Geographical Information System (GIS) as a set of three systems: a system of insight (Analytics), a system of engagement (Apps and Maps) and a system of Record (Transactions), with the purpose of bringing together different business workflows and content.

Kees de Zeeuw highlighted how GIS can underpin in a sustainable development and reporting on the SDGs using the example of the Geohive portal in Ireland[16]. His presentation provided a systematic demonstration of the compliance of GIS with all nine pathways of FELA (see Figure 11 below for Pathway IV). He stressed the importance of innovation highlighting the increasing possibility to leverage GeoAI and GenAI in GIS. For example, extracting information from or analysing data, and using AI assistants to generate survey forms and applications.

[14] Access to the story map on lighthouses in France: https://macarte.ign.fr/carte/FkVAQY/Phares-de-France
[15] See presentation: http://www.eurosdr.net/sites/default/files/images/inline/eurosdr_fela_use-of-gis_esri.pdf
[16] See https://www.geohive.ie/

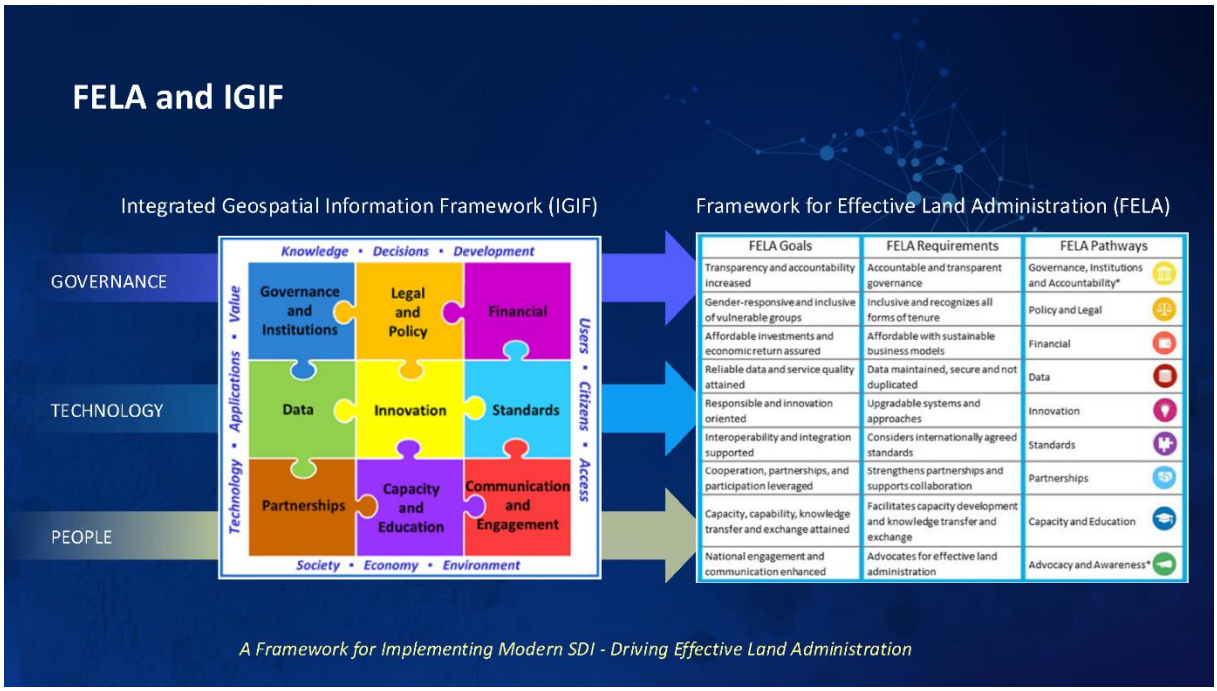

Figure 10: FELA – A Framework for implementing Modern SDI and driving Effective Land Administration

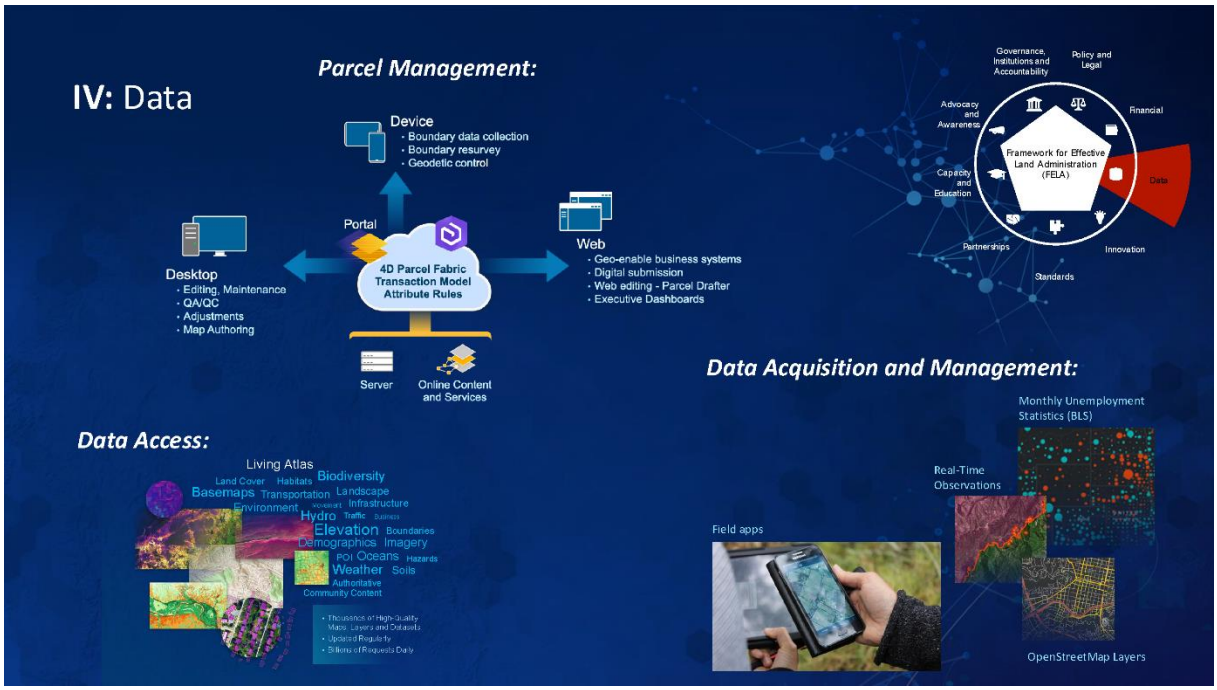

Figure 11: GIS capabilities alignment with the nine strategic pathways of FELA (here pathway IV)

In his conclusion, Kees de Zeeuw reiterated that GIS underpins all nine strategic pathways of FELA and that GIS would evolve as FELA would evolve too.

5 PART IV: Panel discussion

The speakers who have presented during the previous part of the workshop were asked to join the floor altogether for a panel session. **Martijn Rijsdijk, Head of the Data Governance and Innovation Research Department and Head of Marketing at Kadaster (Netherlands)** facilitated the discussion.

To initiate the discussion, Martijn Rijsdijk challenged the panellists with (sometimes extracted from the FELA, sometimes kindly "provocative") propositions:

- "There is a need to accelerate efforts to document, record and recognize people to land relationships in all forms. Land administration relates people to land and informs on the 'how', the 'what', the 'who', the 'when' and the 'where' of land tenure, land use, land value, and land development. It should be appropriate, accessible and affordable and recognize social, environmental, and economic circumstances at the national and sub-national levels."
- "Going forward, FELA will leverage the IGIF Implementation Guide as a reference resource that provides information for governments to design, plan, implement and maintain effective land administration in their country in such a way that positive transformational change is enabled, visible and sustainable."
- "Without FELA, there is no other management application which supports poverty eradication, food security, and economic opportunity by providing secure land tenure."
- "FELA will be never finished, developments like importance of land registration, cadastral mapping, property valuation, and land use planning for sustainable development mean that FELA must also continue in structurally innovate."
- "Without conventional undergraduate and postgraduate geospatial programs to develop land administration professionals FELA will struggle to get momentum."
- "Without the creation and harnessing of strong relations within and between public sector, private sector (via public private partnerships), academia, civil society, non-profit non-governmental organisations, professional bodies, coordinating organisations at the national and local levels, FELA will struggle to get momentum."
- Let's discover if AI can play a role in FELA, we miss this;
- Definitions of what is Land Administration is all about differs from country to country;
- Fela is a framework, not a checklist. Although, it should really be a support if a checklist will be developed.

6 CONCLUSIONS and TAKEAWAYS

The International EuroSDR Workshop on challenges in relation to the UN Framework for Effective Land Administration (FELA) took place on June 16 & 17 2025, at IGN in Saint Mandé, Paris (France). This event which was supported by UN-GGIM: Europe and EuroGeographics brought together 30 participants from 10 countries across Europe (and Americas for a remote keynote).

Participants concluded the essence of a framework and shared why it is different from a guideline. MAIN: they shared together the essence of FELA. What is it all about, where it is used for, what the benefits are, why we should continue with it.

Indeed, over the course of the event, keynote, breakout sessions, presentations and panel discussions allowed participants to have fruitful exchanges and exchange of experiences on Effective Land Administration. They agreed on that FELA is an overarching guide, not an implementation document, and also a living document (should be a digital living version) which could be used as a very useful compass for self-assessment. For this specific point, participants call for the future planning of similar events to keep sharing on practices and to try to elaborate some templates which could be transpose according the nature of the projects, the location.

References

UN-GGIM (2020) Framework for Effective Land Administration, August 2020, New York, United States. Available online: https://ggim.un.org/meetings/GGIM-committee/10th-Session/documents/E-C.20-2020-29-Add_2-Framework-for-Effective-Land-Administration.pdf (accessed on 17 July 2025)

UN-Habitat (2016) Fit-For-Purpose Land Administration: Guiding Principles for Country Implementation. Available online: https://unhabitat.org/sites/default/files/download-manager-files/Fit-For-Purpose%20Land%20Administration.pdf (accessed on 5 August 2025)

Bucher, B., Potůčková, M., Crompvoets, J. (2020) 'Initiatives for Providing Data and Tools for Research and Education', EuroSDR Survey Report

http://www.eurosdr.net/sites/default/files/uploaded_files/eurosdr_resources_for_education_and_research.pdf

Bucher, B., Cantat, F., Crompvoets, J. Lisec, A., Potůčková, M., Cahalane, C., Uuemaa, E., Chartier, M. (2023) 'Geodata and Tools for Education and Research' EuroSDR Workshop Report https://www.eurosdr.net/sites/default/files/uploaded_files/ws-report_geodatatools4educationresearch.pdf

Unger, E-M., Crompvoets, J., Lisec, A., Cantat, F. (2023) 'EuroSDR Advancing FELA - The Framework for effective Land Administration', EuroSDR official publication n°74
http://www.eurosdr.net/sites/default/files/uploaded_files/eurosdr_publication_ndeg_74.pdf

Morscher-Unger, E-M., Crompvoets, J., Lisec, A., Cantat, F. (2024) 'EuroSDR Advancing FELA II - The Framework for effective Land Administration', EuroSDR official publication n°77
http://www.eurosdr.net/sites/default/files/uploaded_files/eurosdr_offical_publication_no_77_advancing_fela_ii.pdf

Appendix A: Participating organisations

The Workshop on Challenges in relation to the UN Framework for Effective Land Administration (FELA), Saint-Mandé (France) 16th and 17th June 2025 was attended by participants from the following organisations:

General Directorate of the Cadastre (Spain)

Esri Inc (USA)

Federal Office of Topography swisstopo - Federal Directorate of Cadastral Surveying (Switzerland)

Gustave Eiffel University IGN-ENSG (France)

IGN (France)

IGN FI (France)

Kadaster (The Netherlands)

Ministry of National Assets (Chile)

National Land Survey (Finland)

Ordre des Géomètres-Experts (France)

State Geodetic Administration (Croatia)

State Land Service (Latvia)

UN-GGIM Expert Group on Land Administration and Management (EG-LAM)

University of Ljubljana (Slovenia)

Appendix B: Workshop programme

Day 1 - Monday 16th June 2025

Time	Author	Title
12:30		*Registration & Lunch*
14:00	Nicolas Paparoditis Frank Tierolff	Welcome Address
14:30	Raffaella Anilio	Keynote: UN-GGIM Expert Group on Land Administration and Management
15:00	Eva-Maria Morscher-Unger	Introduction to UN Framework for Effective Land Administration (FELA)
15:30	Anka Lisec	Results of FELA surveys
16:00	*Coffee break*	
16:30		Breakout session on: Broadening scope outside Europe, Capacity Building, Data use for SDGs
17:30	Nick Land Martijn Rijsdijk	Summary of Breakout session
18:00	Frédéric Cantat Anka Lisec	Closure of workshop (Day 1)

Day 2 - Tuesday 17th June 2025

Time	Author	Title
09:00	Frédéric Cantat Anka Lisec	Introduction and Summary of Day 1
09:20	Christelle van den Berg	Effective land administration in the Netherlands
09:40	Elisabeth Leblanc	FELA implementation: French urban planning geoportal
10:00	Vents Priedoliņš	FELA implementation: feedbacks from Latvia
10:20	Jean-Philippe Lestang	Making land information systems the cornerstone of FELA implementation in Africa
10:40	*Coffee break*	
11:00	Bénédicte Bucher Romain Vialle	Improving the usage of land administration data for education and capacity building
11:20	Kees de Zeeuw	The use of GIS in FELA implementations

	Christelle van den Berg Elisabeth Leblanc Vents Priedoliņš Jean-Philippe Lestang Bénédicte Bucher	
11:40	Kees de Zeeuw	Panel Discussion (moderation by Martijn Rijsdijk)
12:40	Frédéric Cantat	Summary of the highlights and follow-up steps
13:00		*Lunch*
14:00		Closure of workshop