



XXVII FIG CONGRESS

11-15 SEPTEMBER 2022
Warsaw, Poland

Volunteering
for the future –
Geospatial excellence
for a better living

Digital Transformation and Land Administration

Sustainable Practices from UNECE Region and Beyond

*Presenter: Rumyana Tonchovska, Senior Land Administration Officer, FAO of the UN
On behalf of FAO, UNECE and FIG*



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FIG GUIDE
Advanced Copy
FIG PUBLICATION NO 80

DIGITAL TRANSFORMATION AND LAND ADMINISTRATION

FUNDING DIGITAL TRANSFORMATION OF LAND ADMINISTRATION

FAO INVESTMENT CENTRE
INVESTMENT BRIEF

Sustainable practices from the UNECE region and beyond

Food and Agriculture Organization of the United Nations
UNECE
FIG INTERNATIONAL FEDERATION OF SURVEYORS



E-book



Investment brief

Digital Transformation and Land Administration Sustainable Practices from UNECE Region and Beyond, FAO-UNECE-FIG Guide

Funding Digital Transformation in Land Administration, FAO-FIG Knowledge for Investment Brief

Food and Agriculture Organization of the United Nations
CFS

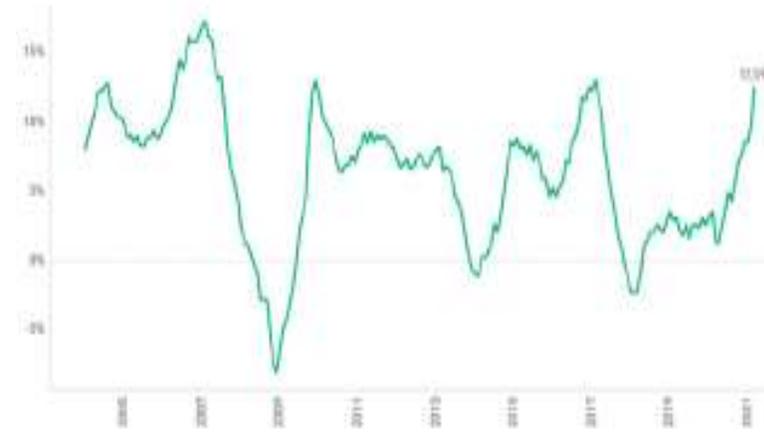
VOLUNTARY GUIDELINES ON THE RESPONSIBLE GOVERNANCE OF TENURE OF LAND, FISHERIES AND FORESTS IN THE CONTEXT OF NATIONAL FOOD SECURITY

Knowledge • Decisions • Development
Governance and institutions • Policy and Legal • Financial
Data • Innovation • Standards
Partnerships • Capacity and Education • Communication and Engagement
Technology • Applications • Value
Users • Citizens • Access
Society • Economy • Environment



Why the need for two new publications?

- Covid-19 impact on Land Administration
- Digital acceleration
- New lessons
- New challenges
- Hard to obtain funding



Norway: Stakeholder dialogue and existing digital platforms enabled property market continuity during the COVID-19 pandemic

Digital disruption is the new normal for land administration organizations

Land administration systems must be equipped to deal with disruption, whether it stems from internal or external sources

What is in the two publications?



The Guide provides various practical examples, lessons learned, challenges and suggest the way forward



The K4I Brief - Shorter, sharper, focus on action plans and funding

Aims to help communicate with economists, donors, or Finance Ministries in a language they understand.

How were they developed?

- 2020--2022 FAO-UNECE/WPLA joint webinars
- FIG/FAO/FIG Collaboration
- Funded by FAO Investment Center
- Drafting
- Review Rounds
- Splitting off into 2 documents

Who is the Audience?

- Decision makers
- Leaders and practitioners

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Addresses	*			*		*	*		*		*							
Bldgs and Settlements	*		*	*		*	*		*		*	*	*					
Elevation and depth	*	*	*			*	*				*		*	*	*			
Functional Areas	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Geographical Names	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Geology and Soils		*	*			*	*	*	*		*	*	*	*	*			
Land Cover/Land Use	*	*	*		*	*	*	*	*		*	*	*	*	*			
Land Parcels	*	*		*				*			*							
Orthoimagery		*				*			*		*			*	*			
Physical infrastructure			*	*		*	*		*		*							
Population distribution	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Transport Networks		*	*					*	*		*							
Water		*	*			*	*		*		*	*	*	*	*			
Global Geodetic Reference Framework		*				*	*	*	*	*	*	*	*	*	*	*		

UN-GGIM Global Fundamental Geospatial Data Themes and SDGs

Land Administration authorities play an important role in achieving country priorities and SDGs

Cadaster and Mapping Authorities are custodian of about **11 out of the 14** fundamental Geospatial Data Themes



Area affected by the volcano in La Palma, Spain's Canary Islands – Sept. – Dec. 2021

(Source: Geoportal. 2022. Information Affected Cumbre Vieja Volcano, <https://geoportal.registradores.org/>, accessed 20.04.2022.)

Damages:

- Over 7,000 people evacuated
- lava flows covered 1,000 hectares
- 3000 buildings destroyed
- damage bill estimated at almost MEUR 850

Land Registry:

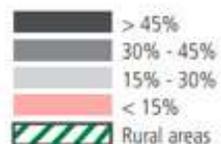
- All paper based property registers were already digitized and secured
- A special web service was set up, integrating land parcel, environmental and lava flow information, to support impacted citizens
- Land Offices assisted affected people in proving ownership claims and in delivering adequate compensation

Benefits for vulnerable groups

NORTH MACEDONIA, 2013

16.63% of records
with women as owners
or co-owners

- 18% Skopje Capital (highest)
- 7% Poloska Municipality (lowest)

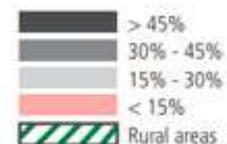


Agency for Real Estate Cadastre. 2013.
Map of North Macedonia

NORTH MACEDONIA, 2019

27.27% of records
with women as owners
or co-owners

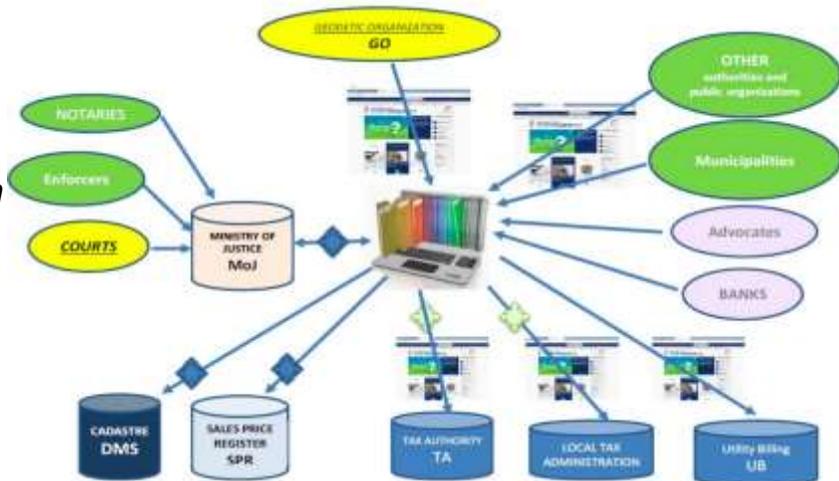
- 34.01% Skopje Capital (highest)
- 13.96% Poloska Municipality (lowest)



Agency for Real Estate Cadastre. 2019.
Map of North Macedonia

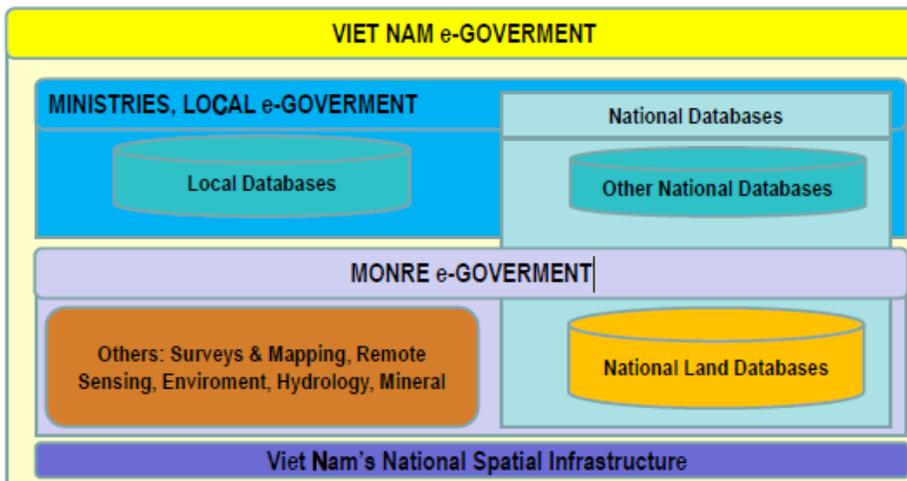
Gender disaggregated property ownership information supports monitoring of SDGs target 5.a. in North Macedonia

Serbia's land information ecosystem of allies

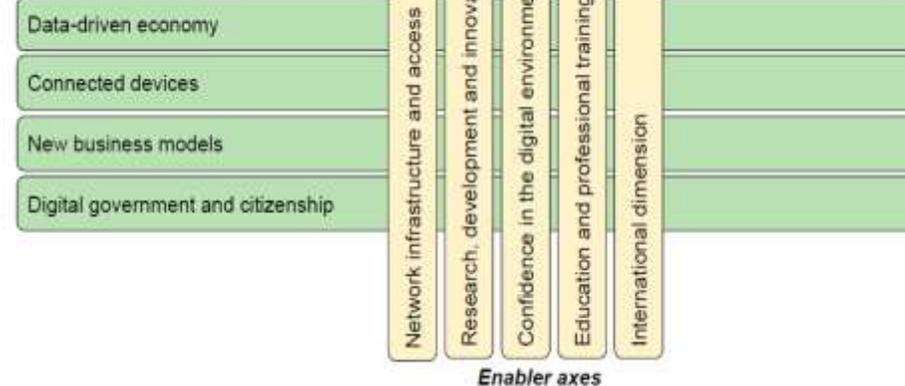


Rwanda's paperless land registration application

Viet Nam National Land Information System in e-Government Architecture

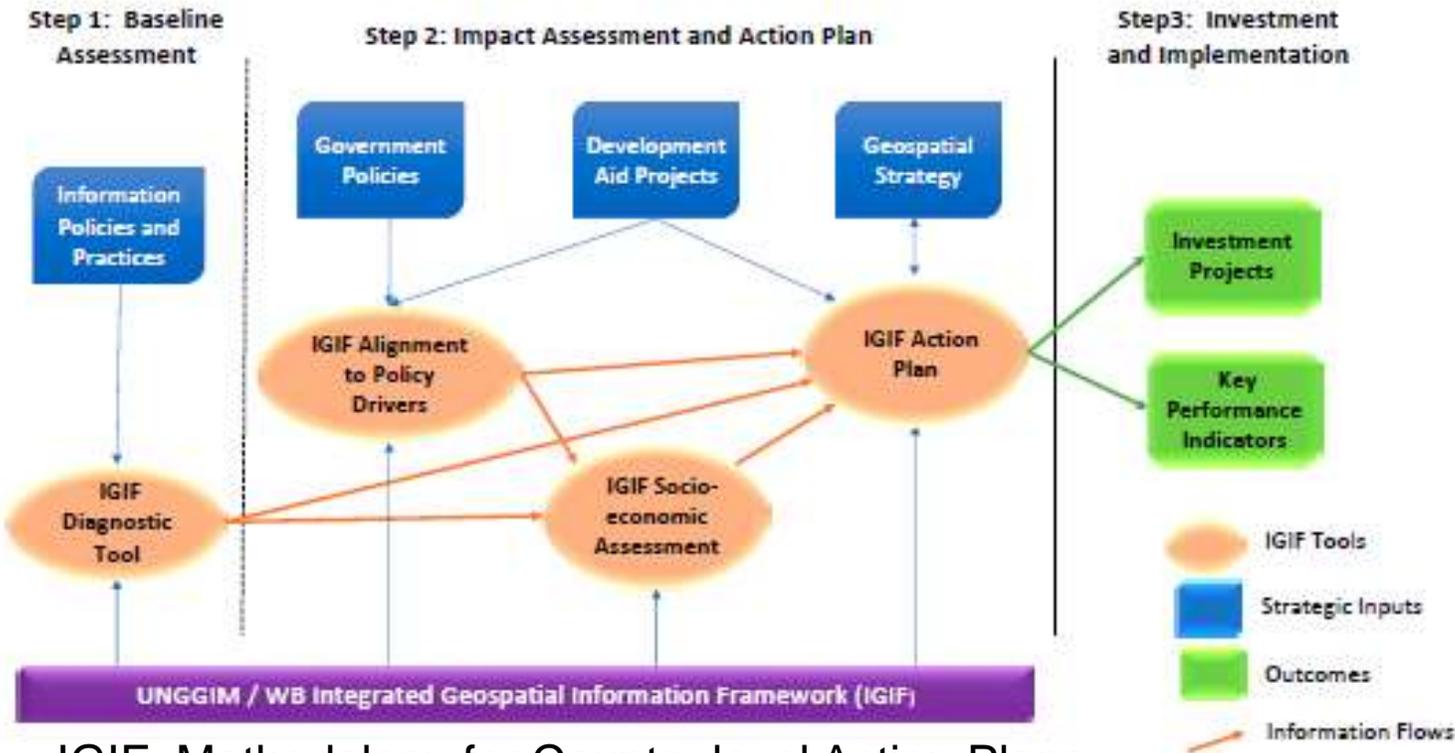


Digital transformation axes



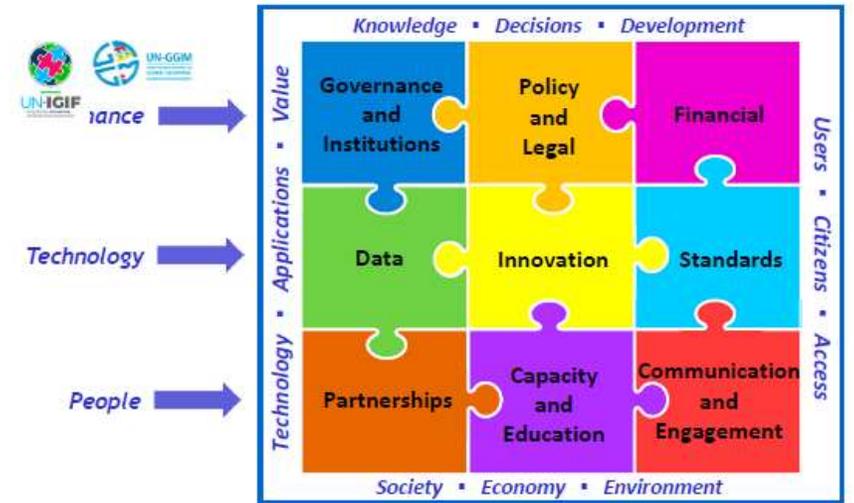
Brazil's Digital Transformation Strategy

How do we move towards implementation?



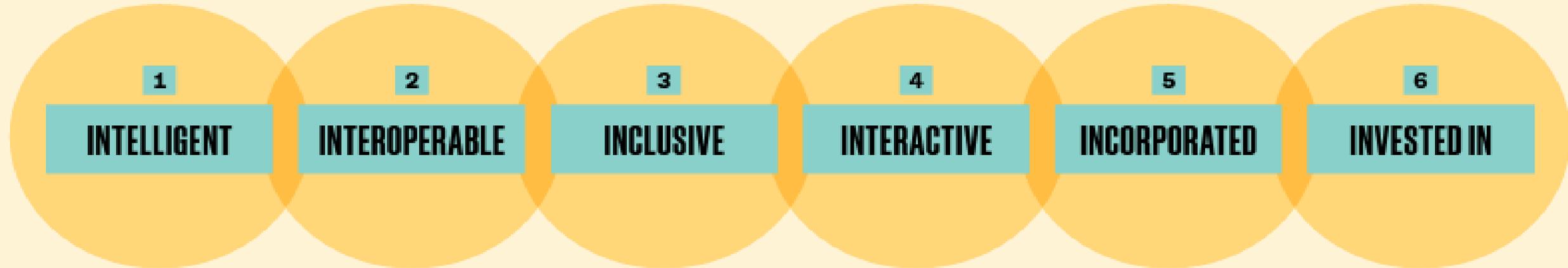
IGIF Methodology for Country level Action Plans
World Bank developed

World Bank-UN-GGIM IGIF



IGIF's 9 interlinked strategic pathways

The 6 I's - Future LAS characteristics



Taking Action Now:

The Pathway Forward

NOW (YEARS 1 AND 2)

- High-level cross-sector committee formation
- Adopt the digital disruption paradigm
- Understand the 6 I's
- Baseline assessment, socio-economic impact analysis, policy alignment check
- Develop action plan with KPIs and risk mitigation measures, investment plan, and business model
- Engage regionally and globally

NEXT YEAR (YEARS 3 AND 4)

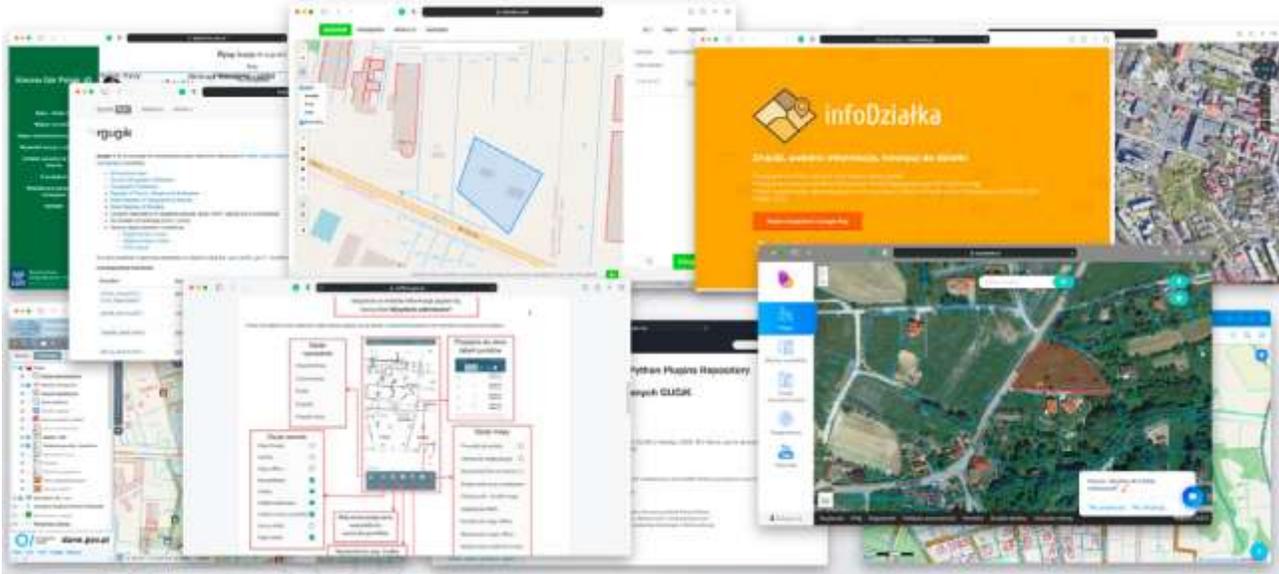
- Adopt action plans
- Seek and acquire investment
- Commence implementation; use the IGIF strategic pathways
- Embed dynamic capabilities
- Operate hybrid digital/paper systems during transition
- Measure performance, risks, and benefits

LOOKING AHEAD (YEARS 5 TO 10)

- Achieve fully digital transformation
- Continue performance monitoring
- Adapt and renew plans based on newly emerging disruptions

How should they be read and used?

Learning > advocating > communicating



Poland's open data policy activates value-added service creation

JOIN US:

**FAO-FIG-UNECE
Session:**

**TS07B: Accelerated
Digitalisation and the
Future of Land
Administration in the
UN-ECE Region and
Beyond**

Wednesday,
14 September
11:30–13:00
Ballroom "Esri",
DoubleTree by Hilton



**BROADCAST
SESSION**



TRANSLATION

Who do we need to acknowledge and thank?

Drafting Team: Rohan Bennett, Kwabena Asiama, and Claudia Stocker

Lead coordination: Rумыana Tonchovska, FAO; Louise Friis-Hansen, FIG; Amie Figureiredo and Hana Doudi, UNECE

Peer Review: Kirsikka Riekkinen, Clare Buxton, and Hartmut Mueller

Acknowledgement and thanks are also extended to all those who reviewed the publication contents:

Fabrice Edouard, John Preissing, Adriano Campolina, Marianna Bicchieri, Naomi Kenney, Brad Patterson, Morten Hartvigsen, Margret Vidar, Beth Crawford,, Pilar Verdejo Garcia, Victoria Abbot, Darko Vucetic, Frederick Zetterquist., Robin McLaren, Kathrine Kelm, Gavin Adlington, Jan Van Bennekom, Simon Hull, Mila Koeva,, Daniel Steudler, and Eftychia Kalogianni., Lovro Tomasic, Simon Hull.

Dziękuję!
Thank you!

