




Effective Land Administration in the Netherlands

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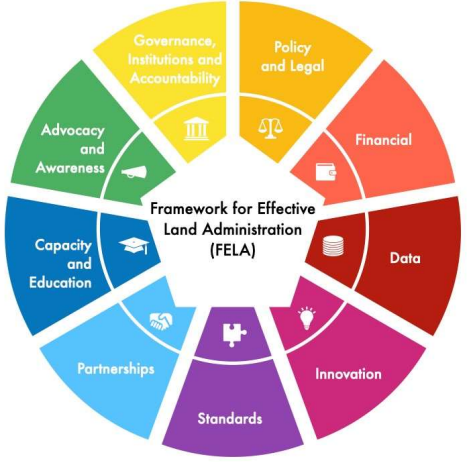
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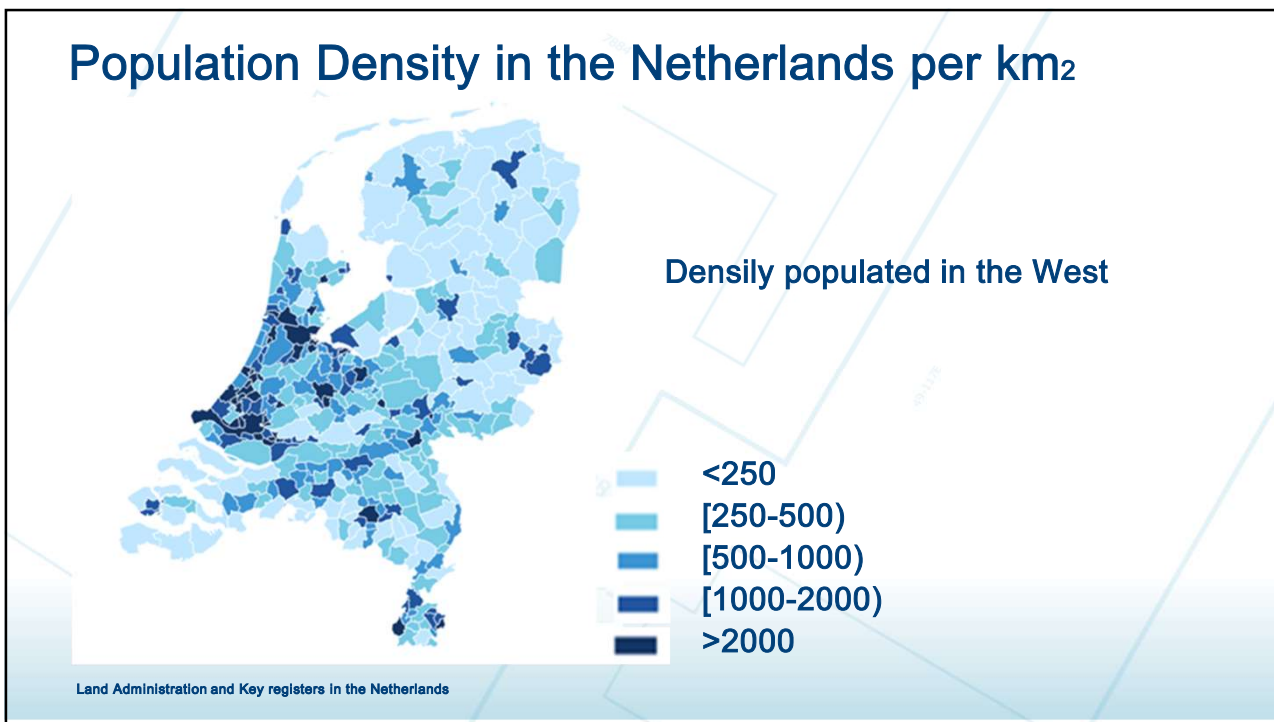


Framework for Effective Land Administration

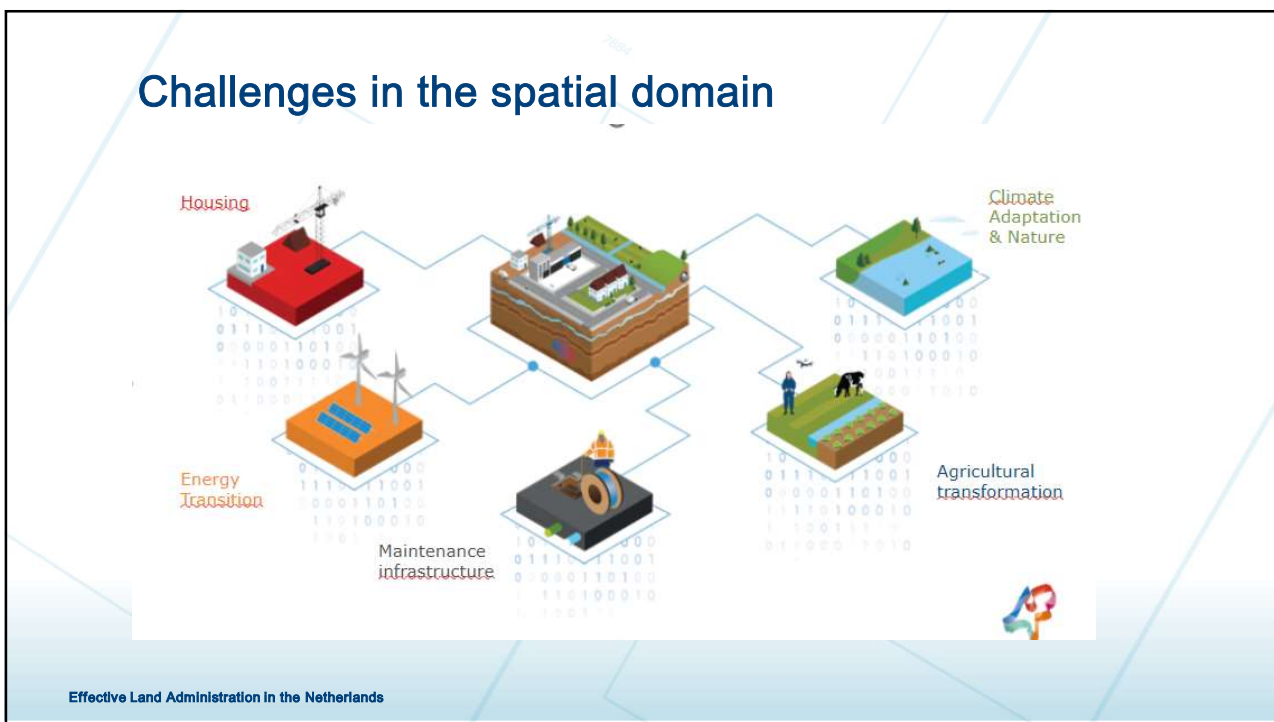
FELA Goals	FELA Requirements	FELA Pathways
Transparency and accountability increased	Accountable and transparent governance	Governance, Institutions and Accountability*
Gender-responsive and inclusive of vulnerable groups	Inclusive and recognizes all forms of tenure	Policy and Legal
Affordable investments and economic return assured	Affordable with sustainable business models	Financial
Reliable data and service quality attained	Data maintained, secure and not duplicated	Data
Responsible and innovation oriented	Upgradable systems and approaches	Innovation
Interoperability and integration supported	Considers internationally agreed standards	Standards
Cooperation, partnerships, and participation leveraged	Strengthens partnerships and supports collaboration	Partnerships
Capacity, capability, knowledge transfer and exchange attained	Facilitates capacity development and knowledge transfer and exchange	Capacity and Education
National engagement and communication enhanced	Advocates for effective land administration	Advocacy and Awareness*



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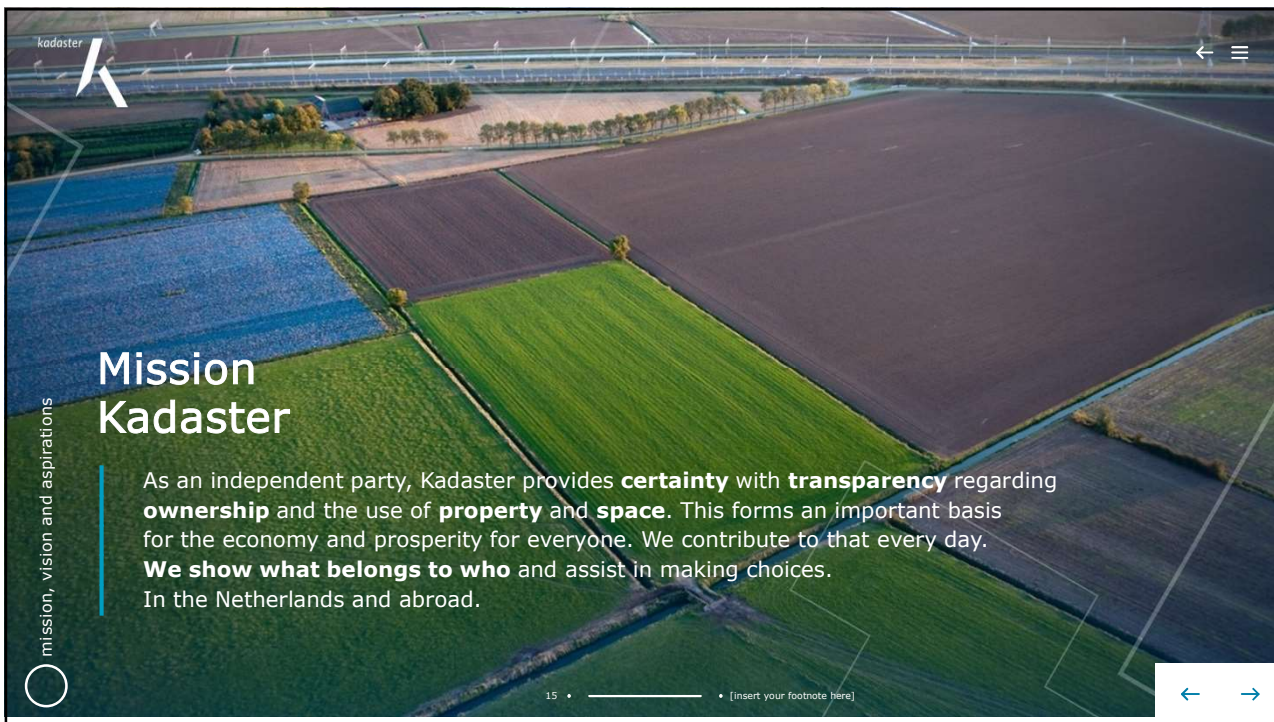
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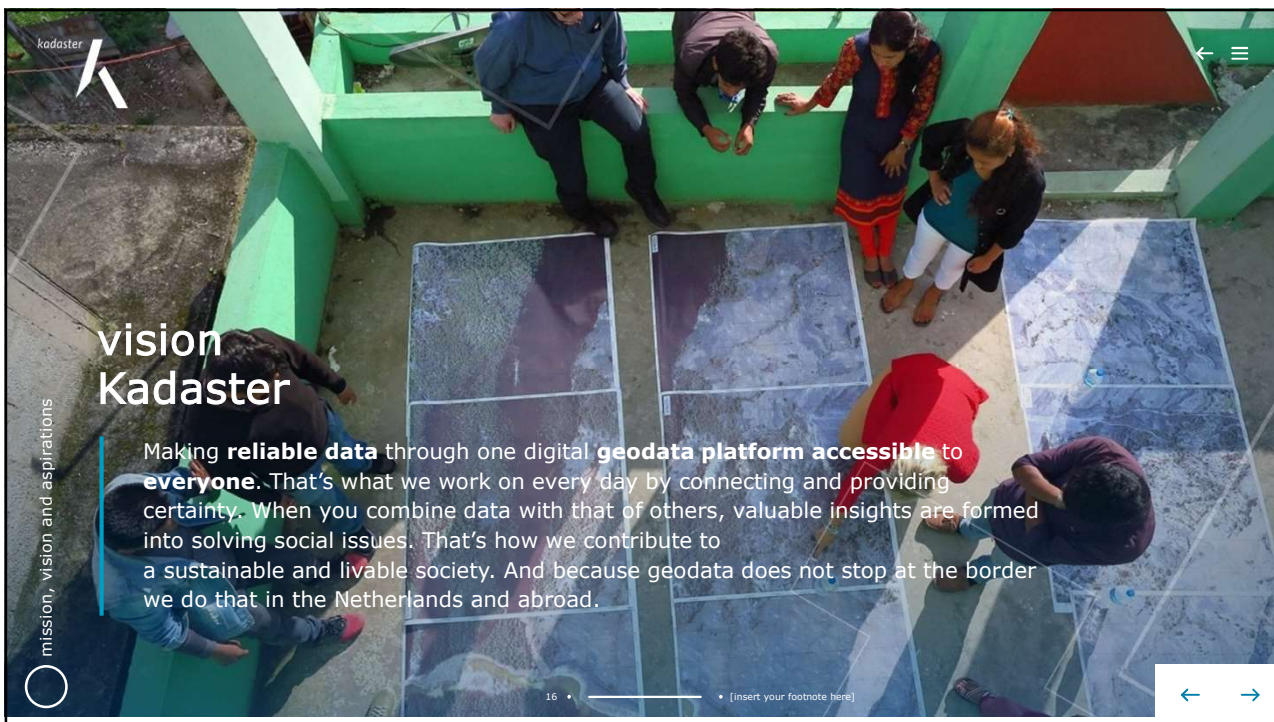
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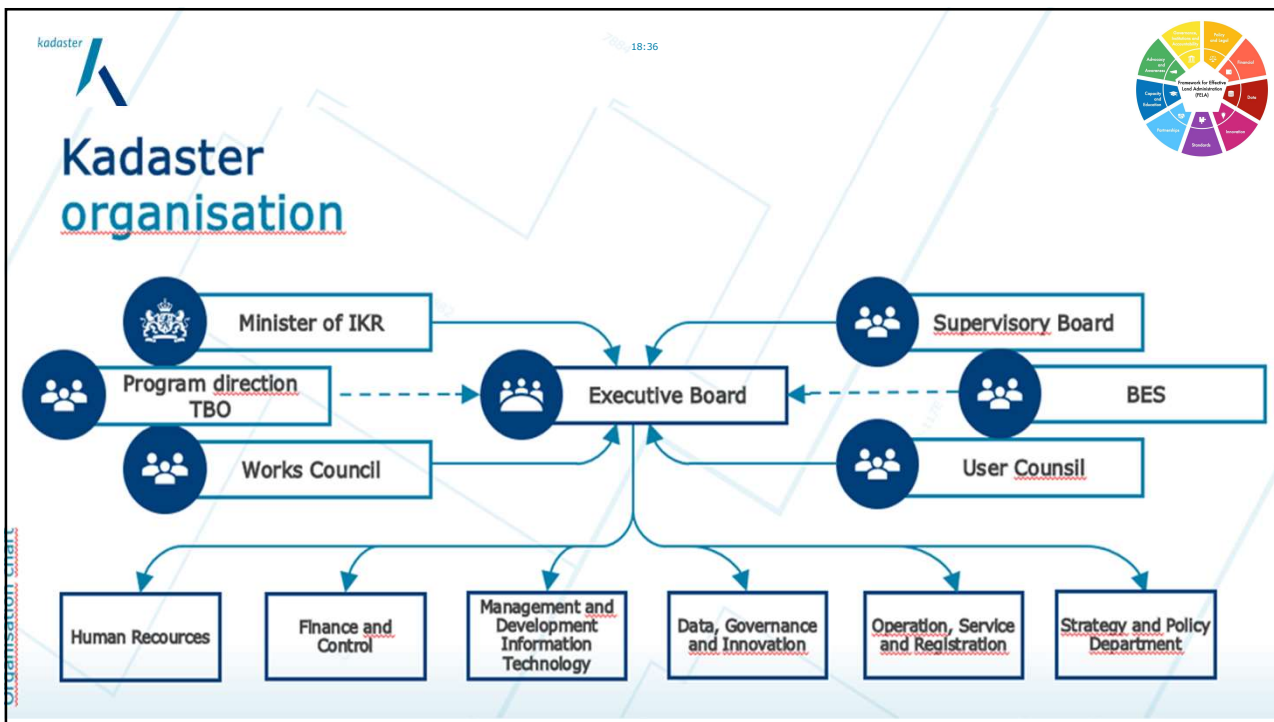
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Budget funding

- Fixed budget per year, usually declining
- Government provides funding, political influence and vulnerable for renouncement
- No flexibility for increases in work volume
- No incentive for improving services, innovation requires additional budget

Funding from fees

- Income dependent on work volume

- (professional) users provide funding and become important stakeholders
- Quality improvement and innovation can be recovered from fee income

Financial model

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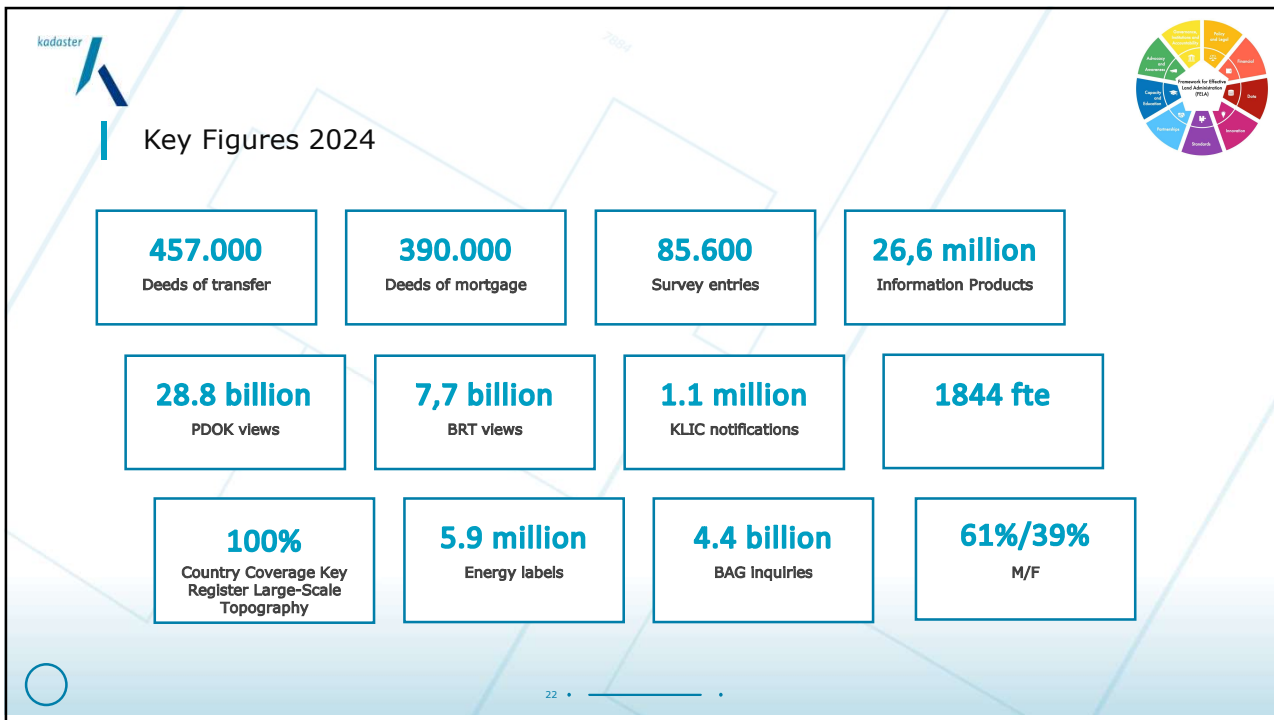
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What income covers which costs?

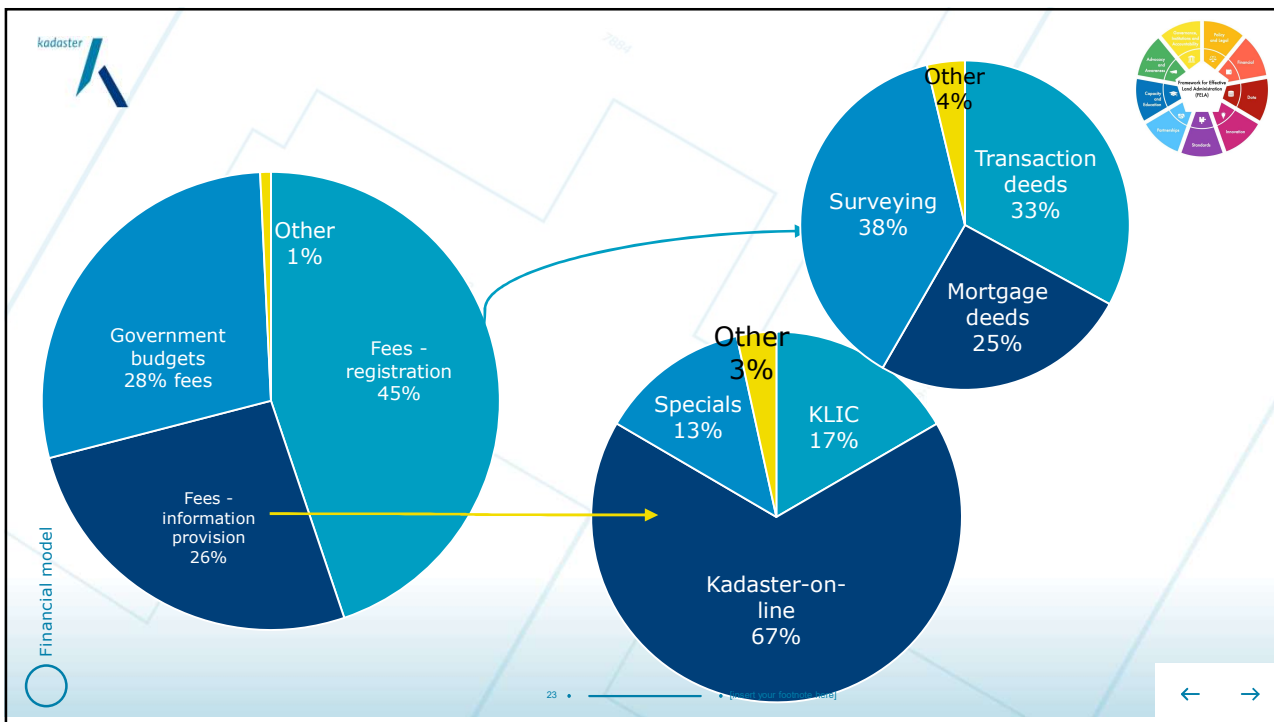
Activity	Funding
Maintenance of Land Registry, Cadastral surveys and mapping	Registration fees
Topographic mapping (annual update, including aerial photography)	Government budget
National facilities for Addresses, Buildings, Large scale Topography, Valuation, spatial planning	Government budget
NSDI/INSPIRE portal (PDOK)	Government budget
Delivery of land registry information, cadastral parcel map	Information fees
Special products	Information fees
Cable and pipeline information (KLIC)	Information fees

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Our main customers

 Government	 Notarial profession	 Brokers	 Private citizens
 Insurers	 Housing associations	 Commercial parties	 Financial Institutions
 Energy companies	 Waterboards	 Provinces / Municipalities	 Open data users

customers and figures

24 • [insert your footnote here]

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System of key registers

Starting point system of key registers: 2003

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

Guiding principle: collect once – use many times



1. The system covers the entire public sector (all layers of government)
2. The system is a set of agreements and principles; it is not an IT-system

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Requirements for a key register



1. Each Key Register is vested in **law**
2. **Public sector** organisations are **obliged to use** the key register (collect once, use many times)
 1. **Public sector** users are **obliged to report errors** or other irregularities
 2. **Liability** is explicitly defined
 3. **Financing** is arranged
 4. **Content** of the datasets is **well defined**, and catalogues are available
 5. Procedures and standards for **data contribution** and **distribution** are clear
 6. **Accessibility** is guaranteed.
 7. A strict regime for **Quality Assurance** is in place
 8. Users have a binding **influence on policies** concerning the key register
 9. **Relations within the system** of Key Registers are clearly defined and documented
 10. Control and responsibilities are with a public body; **political ownership** is held by a **minister**

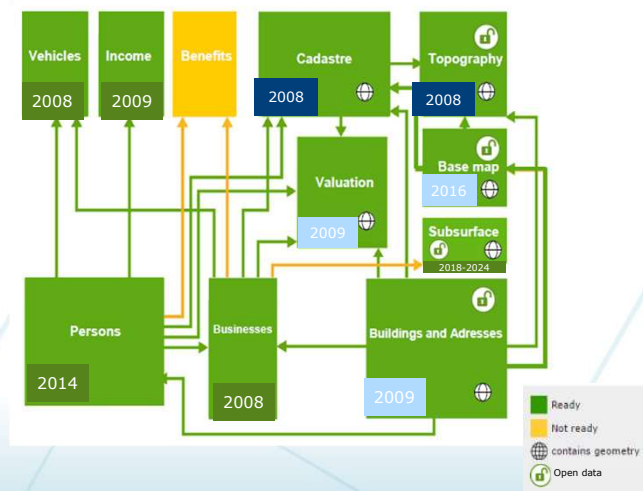
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Twenty years later




Key registers are the backbone for shared use, connectivity and single source of truth within the public sector



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Extensive use of data National GeoData Portal




PDOK is the leading platform for Dutch high-quality geodata.
Visit us at pdok.nl

Services

- PDOK Viewer
- Location Server
- Standard formats: (OGC) webservice, (OGC) API's en ATOM downloadservice

Power of PDOK



Facts & figures

Most popular datasets
BRT Achtergrondkaart, BGT, BRK and PDOK Aerial photos


214 datasets 642 services 282 INSPIRE services

Nationaal Geodata Register
26,6 million hits

PDOK datasets
22,2 billion hits

111 PDOK tweets

450 Geoforum topics



Data

3D Buildings	Cycling/walking routes	Railways	Waterways
3D Terrains	Drone no-fly zones	Road networks	Water infrastructure
Addresses & buildings	Energy	Spatial planning	World heritage
Administrative areas	Height	Topography	
Aerial photos	Nature & Environment	Transport networks	
Cadastral parcel	Provincial data	Underground	

New in 2023

- 3D Basic provision via 3D Tiles (OGC API 3D Geovolumes)
- 3D Viewer on PDOK.nl
- GEO base registers in OGC API Tiles and Styles
- 10 years of PDOK: congress 'The Great Geodata Experience'
- New datasets CBS: Squares 500 x 500 m and 1 x 1 km LAEA
- New datasets HWH: Waterboard boundaries IMSO + Waterzoning and Waterworks IMWA

Availability

99,74 % uptime

7 interruptions (> 30 min)

Metadata


NGR Nationaal Georegister

National Geodata Register is the guide for geodata in the Netherlands

INSPIRE

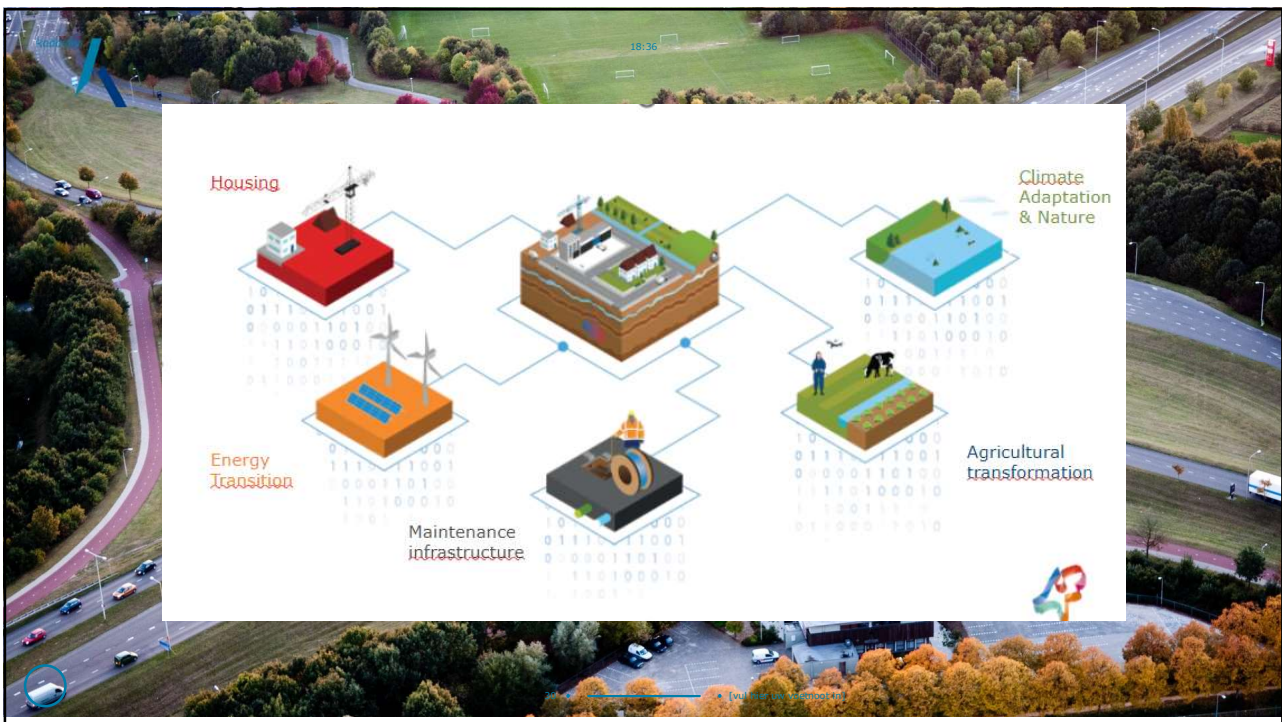
European distribution of INSPIRE datasets

Availability of 99,74 % 'INSPIRE conform'




[Link: PDOK data platform \(youtube.com\)](https://www.youtube.com/watch?v=...)


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Housing




Energy Transition




Maintenance infrastructure



Climate Adaptation & Nature



Agricultural transformation



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International

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International expert role:

- ▲ Advisory role in projects;
- ▲ Maintaining international relationships;
- ▲ Providing information and education;
- ▲ Knowledge sharing.

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Developing Effective Land Administration

Country Experiences: Benin, Chad, Rwanda

Focus on:

- Systematic Data Collection
- Digitization
- Financial Sustainability

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Digitization

- | Not just technology → institutional reform
- | Strengthen IT capacity and leadership
- | Choose sustainable tech solutions: open source, off-the-shelf software,...
- | Ensure data security and legal compliance



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Financial Sustainability

- | Move from donor-funded to self-sustaining models
- | Asks for political choices
- | Choose viable business model for cost recovery

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