



# Opening up Land Administration Data for Improved Security

UN-ECE Webinar

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# Land Portal Foundation

## Core Objectives

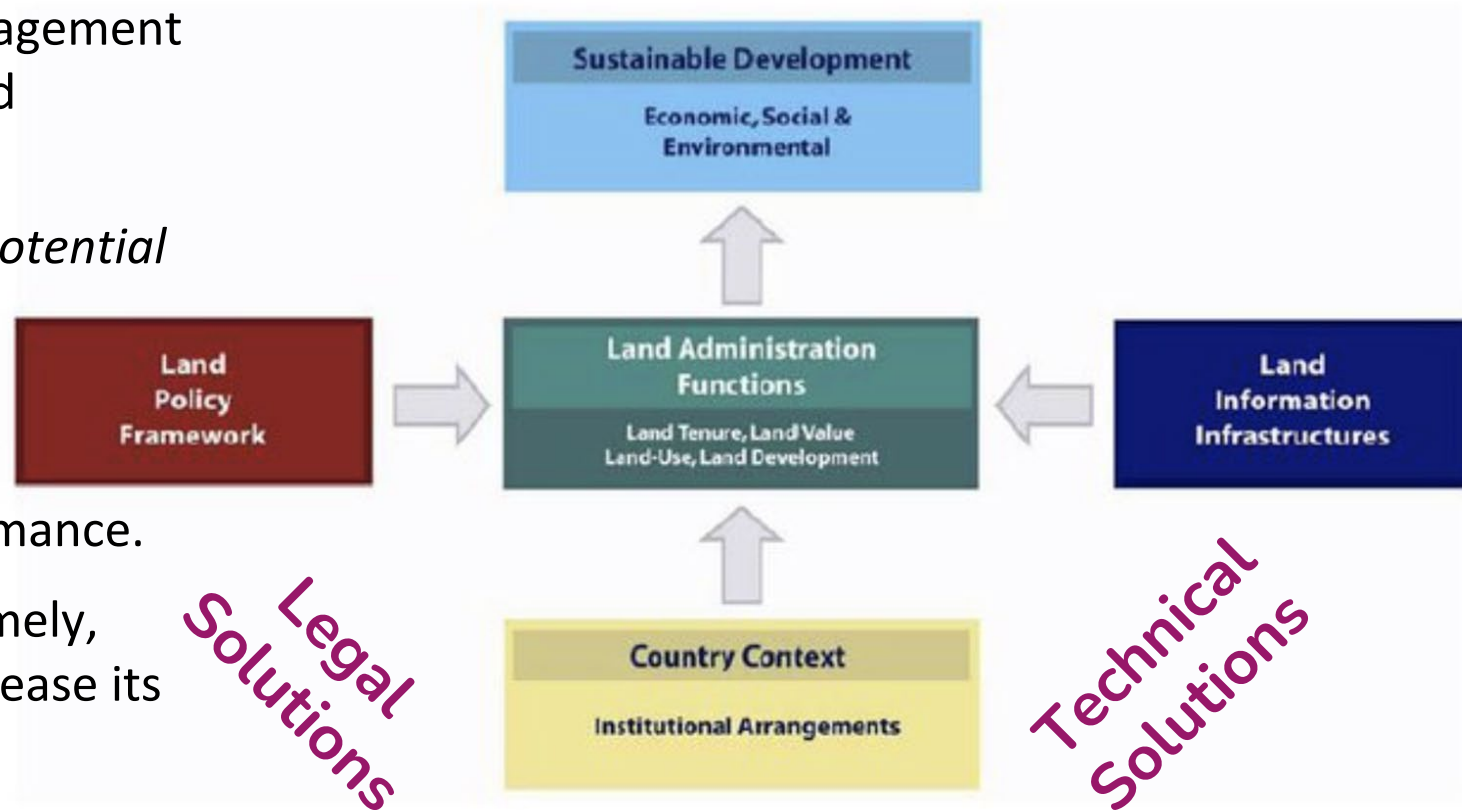
1. Improve the documentation, mapping and monitoring of land governance issues.
2. Democratize the information ecosystem and strengthen flows of land governance data, from all perspectives and all levels.
3. Promote, inform and enrich the global debate on land issues.



# Key Concepts: Land Administration

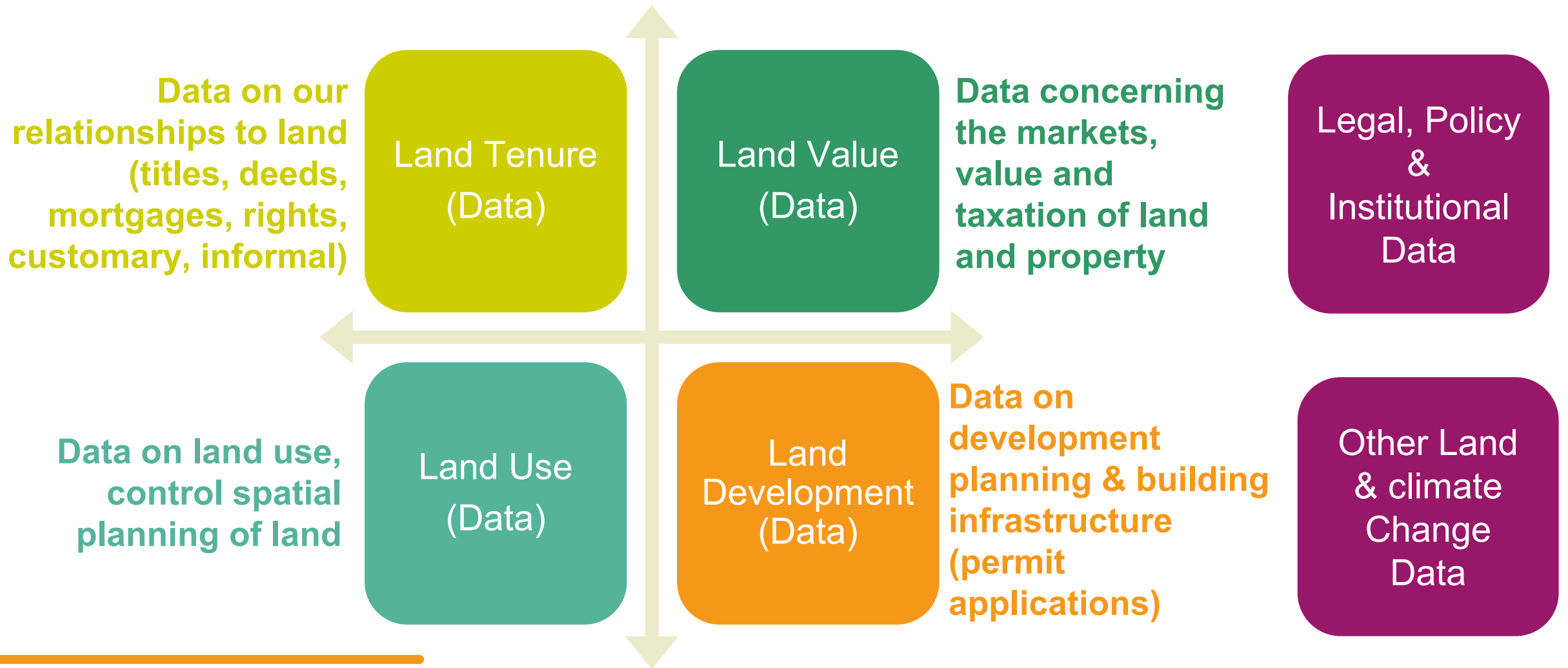
**Land Governance** - The way in which public actors use, control and provide access to land in a way that is **socially legitimate** and democratic (Borras and Franco 2010)

- **Modern land administration theory** - management of land for sustainable social, economic and environmental development.
- **Open data movement** “made explicit the potential links between open data and sustainable development.”
- Land governance data, information and indicators necessary for monitoring performance.
- Needs to be readily and freely available, timely, standardised and widely distributed to increase its impact.



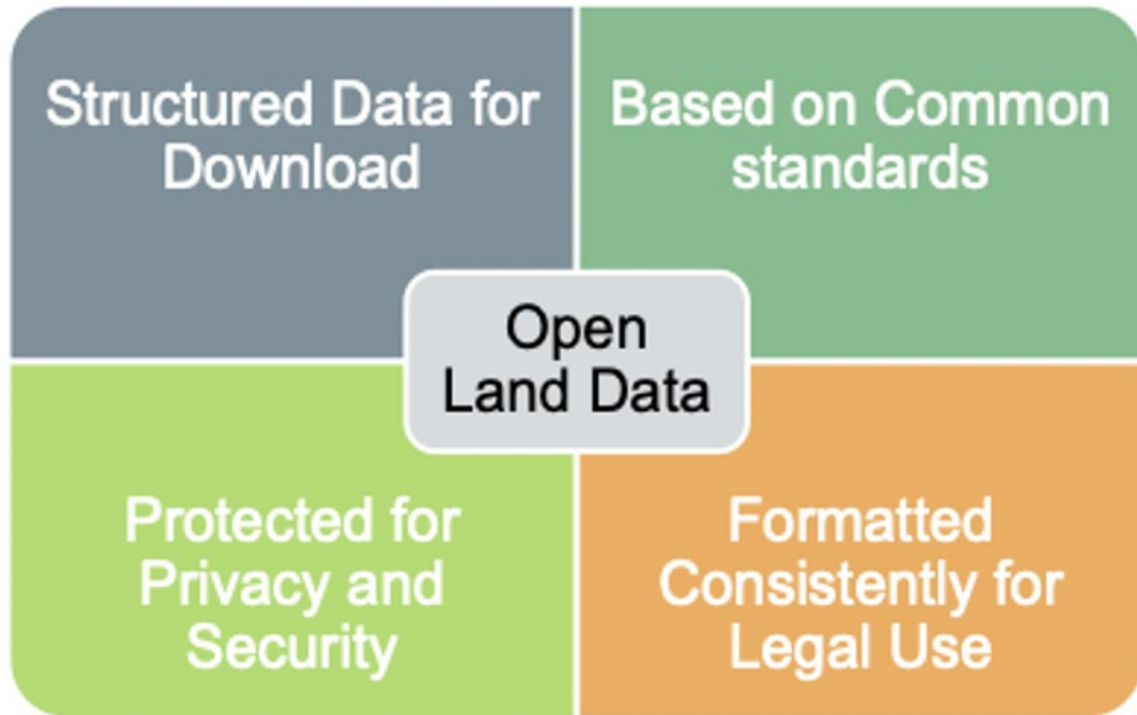
Source: Williamson, Enemark, Wallace, Rajabifard (2010)

# Key Concepts: Land Administration Data



# Key Concepts: Open Data

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## Open Land Data

**“digital land related data that is made available with the technical and legal characteristics necessary for it to be freely used, re-used and redistributed by anyone, anytime, anywhere”.**

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# Key Concepts: Security

Some scholars see **data security** as a component of **data privacy**, which is considered a broader concept. (McGeeveran, 2019), (Report on Cybersecurity Practices, 2015)

- **Data Privacy** - relates to the collection, use, and disclosure or personal data in addition to its secure storage.
- **Data Security** - protects the personal information held by an entity
- **Cyber Security** - include the integrity of the network itself and the prevention of problems.



Source: Data Privacy Data Privacy and Cyber Security = Data Protection, Sahu, S., (2023)

# Key Questions 1: Open Data to Improve Security (trust and confidence)

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## Increased Transparency

- Make data publicly accessible and understandable
- Improved (more people) review and scrutiny of the data

## Community Engagement and Trust

- Encourage collaboration and participation. from a diverse range of stakeholders.
  - Leverage collective expertise and resources to enhance data security.
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Source: [Urban Data Platform](#), 2024.

# Key Questions 1: Open Data to Improve Security (trust and confidence)

## Data Standards and Interoperability

- Smart cities require that data is shared exchanged to allow services to be provided.

## Data Quality

- Smart cities require that data is can be relied upon.



Source: [Smart Cities and Digital Technology](#), SEG International, 2024.



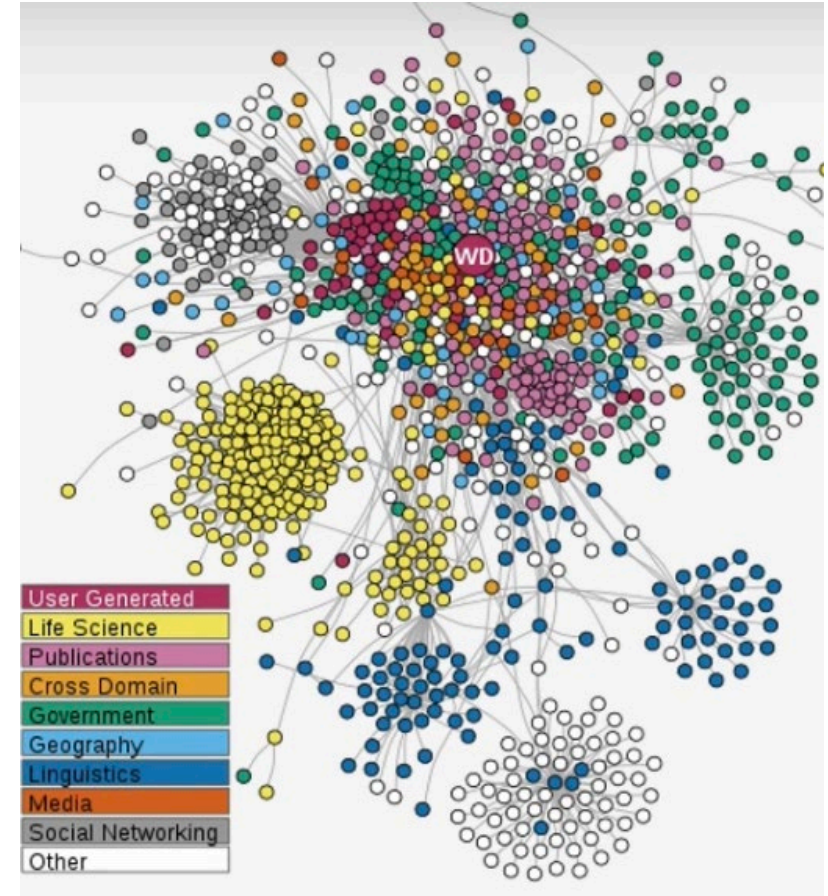
# Key Questions 1: Open Data to Improve Security (trust and confidence)

## Data Privacy Protection

- Recognize the importance of protecting individual privacy rights.
- Promoting responsible data sharing practices, mitigate the risk of privacy breaches and unauthorized access to personal data.

## Collaborative Security

- A culture of collaboration and knowledge sharing
- shared perspective of data security across the ecosystem.
- Facilitate shared security tools, resources, and guidelines to help organizations improve their data security posture.



Source: [Wikidata in the linked open data cloud](#), 2024.

# Key Questions 1: Open Data to Improve Security (trust and confidence)

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## FAIR

FINDABLE

ACCESSIBLE

INTEROPERABLE

REUSABLE

## CARE

COLLECTIVE  
BENEFIT

AUTHORITY TO  
CONTROL

RESPONSIBILITY

ETHICS

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# Key Question 2: Evolving Threats and Technological Advances

## Data Concentration

- Data Monopolies (Increasing concentration of data in the hands of a few corporations)
- Misinformation and disinformation
- Data Manipulation and Deep fakes
- Surveillance and Mass Data Collection
- Algorithmic Bias and Discrimination
- Artificial Intelligence and Decision making
- Lack of transparency or oversight on data



Impact: 38 million credit cards



Impact: 1.5 billion records leaked



*The First American Corporation*

Impact: 885 million file records leaked



5. Facebook

Date: April 2021

Impact: 530 million users exposed

Facebook / Cambridge Analytica

Date: April 2018

Impact: 50-90 million users exposed

# Concluding Remarks

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- Collective security and benefit of data initiatives
  - Complement legal and technical security issues so that we consider both "**people and purpose**" in land data security initiatives.
  - Ensures that **security enables the use and re-use** of the data to:
    - Ensure fundamental freedoms
    - provide key social and economic services on land, rather than restricts.
  - Collaboration and helps build trust about data
  - Ethics, justice and equity thus becomes central to security
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**Thank you**