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## CADASTRE OR LAND ADMINISTRATION: A CASE STUDY OF TURKEY

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### Introduction

**Main Phases in Humankind/Land Relationship**

**Evolution of Applications for Cadastre**

(Williamson and Ting, 1999)

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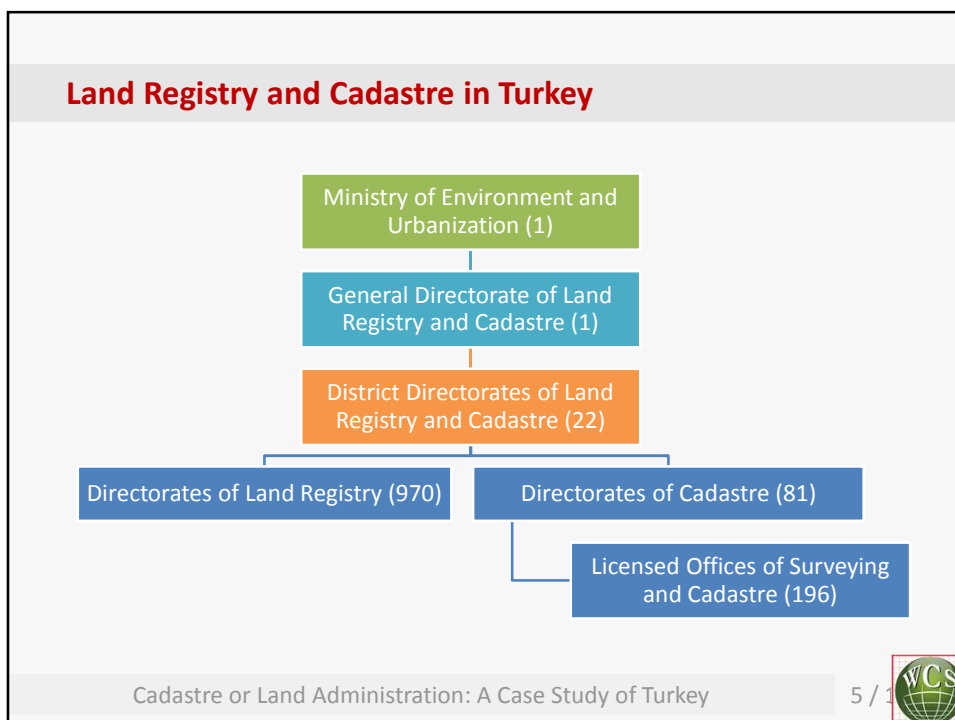
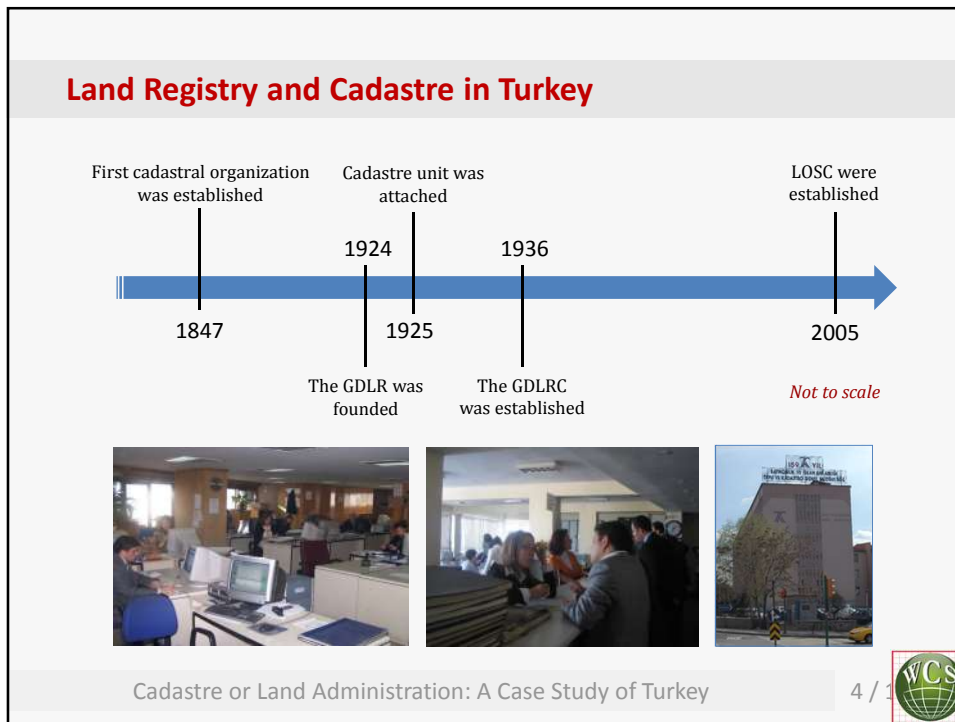
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### Introduction

- **Land Administration System (LAS)** is defined as; the processes of determining, recording and disseminating information about the **tenure, value and use of land** when implementing land management policies (UNECE, 1996).

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## Land Registry and Cadastre in Turkey

- Establishment of the LRC **completed**.
- Setting up the Turkish LRCIS is still **in progress**.
- LR data has been **digitized**.
- **Cadastral maps** are transferred into digital environment with **renovation projects** of cadastral maps.



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## Land Registry and Cadastre in Turkey

- Turkish cadastre has some **data currency** issues:
  - Some owners in the land registry are **dead people**.
  - Land use types of some parcels are **not up-to-date** in the registry.
  - Roads and buildings on the cadastral maps are **not current**.
  - Sales prices of real estates recorded in the land registry are **not real market prices**.
- Purpose of the cadastre is still limited to **secure the ownership**.



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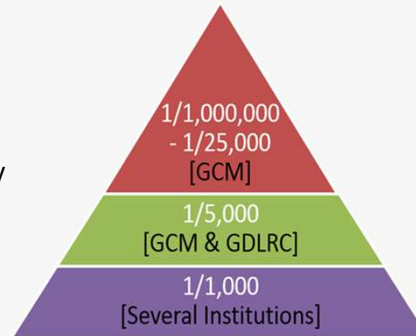
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### Topographical Mapping in Turkey

- The maps scaled between 1:25,000 and 1:1,000,000 is produced by the **Turkish General Commandership of Mapping (GCM)**.
- 1:5,000 scaled maps are produced by the **GDLRC and the GCM**.
- Topographical and technical maps with the scale of 1:1,000 are produced by **different institutions**.
- There is a need for a **national organization** to organize and manage production of maps and spatial information in all scales.



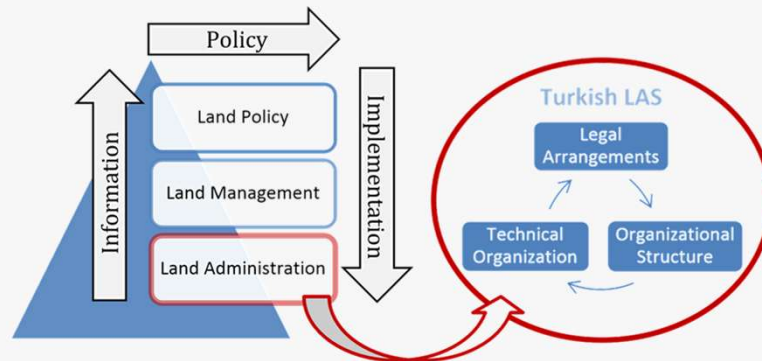
### The Need for Re-engineering

- The main duty of the GDLRC is the **determination, recording and sustaining** of the legal and geometrical situations of real estates.
- Modern trends urge extension of this duty **to include data on;**
  - **Land value,**
  - **Land use,** and
  - **Complete legal situation.**
- Considering **current issues** in the LRC, land valuation and mapping, accomplishment of all these duties with current legislation, organizational structure and technical tools of the GDLRC **seems difficult**.
- Therefore there is **need for a re-engineering** in the Turkish cadastral system.



## An Approach for Turkish LAS

- The approach is composed of **legal** arrangements, **organizational** structure, and **technical** organization.



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## Legal Arrangements

- Turkey needs for a 'Land Law' in order to;
  - re-organize existing **scattered** land related laws;
  - eliminate **duplications and gaps** in the current laws, and
  - provide an appropriate **legal basis** for a well-functioning LAS.
- The Land Law should mainly include **regulations on**;
  - land registration,
  - cadastre,
  - real estate appraisal,
  - geographical information management, and
  - land development.



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### Organizational Structure

- Turkey needs a 'leading institution' in the land administration;
  - to eliminate current **gaps and duplications**, and
  - to provide **effective coordination** in the domain.
- The leading institution will be responsible not only for LRC but also for **topographical mapping** and **real estate valuation**.
- Therefore, it should be placed on a **higher level** than a general directorate in the Turkish administrative hierarchy.

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### Organizational Structure

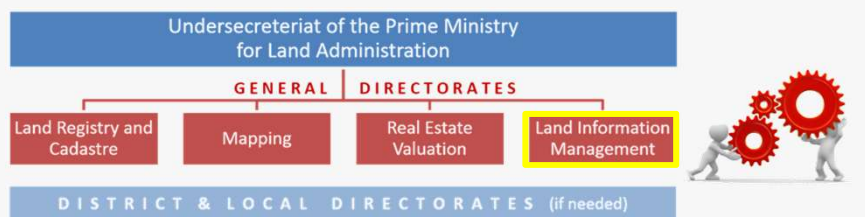
- The leading institution is advised to be established as 'the **Undersecretariat of the Turkish Prime Ministry for Land Administration**' (UPMLA).
- UPMLA should be composed of relevant **General Directorates**.

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### Technical Organization

- The proposed Turkish LAS should provide an infrastructure for an efficient **Land Information System (LIS)**.
- The Undersecretariat should make land related data available for governmental organizations and private corporations **through LIS**.
- Management of the LIS is advised to be carried out by **the General Directorate of Land Information Management**.



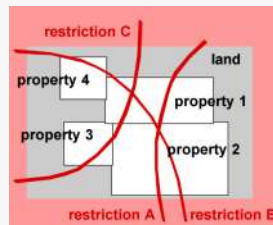
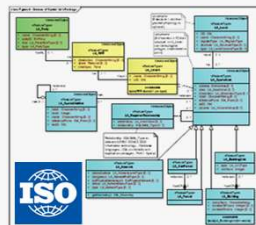
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### Technical Organization

- During technical development of the proposed Turkish LAS, some **emerging and important issues** such as;
  - Land Administration Domain Model (**LADM**),
  - **3D/4D cadastres** and
  - registration of the **Rights, Responsibilities and Restrictions (RRR)** should also be taken into consideration by the UPMLA.



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## Conclusion

- Initially designed to assist in land taxation and real estate conveyancing, modern cadastres **have been extended to LASs**.
- This forces cadastral systems to be **re-engineered** over time **to meet the change**.
- This study proposes **a new LAS approach for Turkey** in legal, organizational and technical means both to eliminate existing issues and to fill current gaps in the existing system.
- The approach **proposes** the establishment of;
  - a **Turkish land law**,
  - a **leading institution** for land administration, and
  - a well-functioning **land information system**.

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Thank you..

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