Key Registers in Finland and some views of Cadastre 2035

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Contents of Presentation

- Structure of Key Register System

- Land Information System

- Population Information System

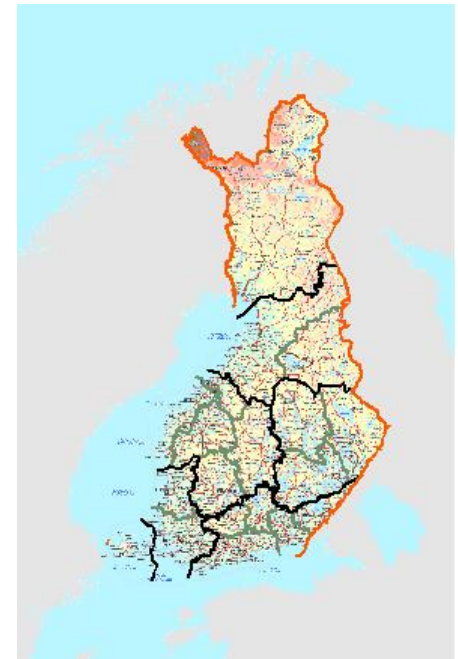- Further Development

- Finnish Cadastre in the Future

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Finland

- Area 338,417 km^2, of which
- 10% is water area,
- forests 77%,
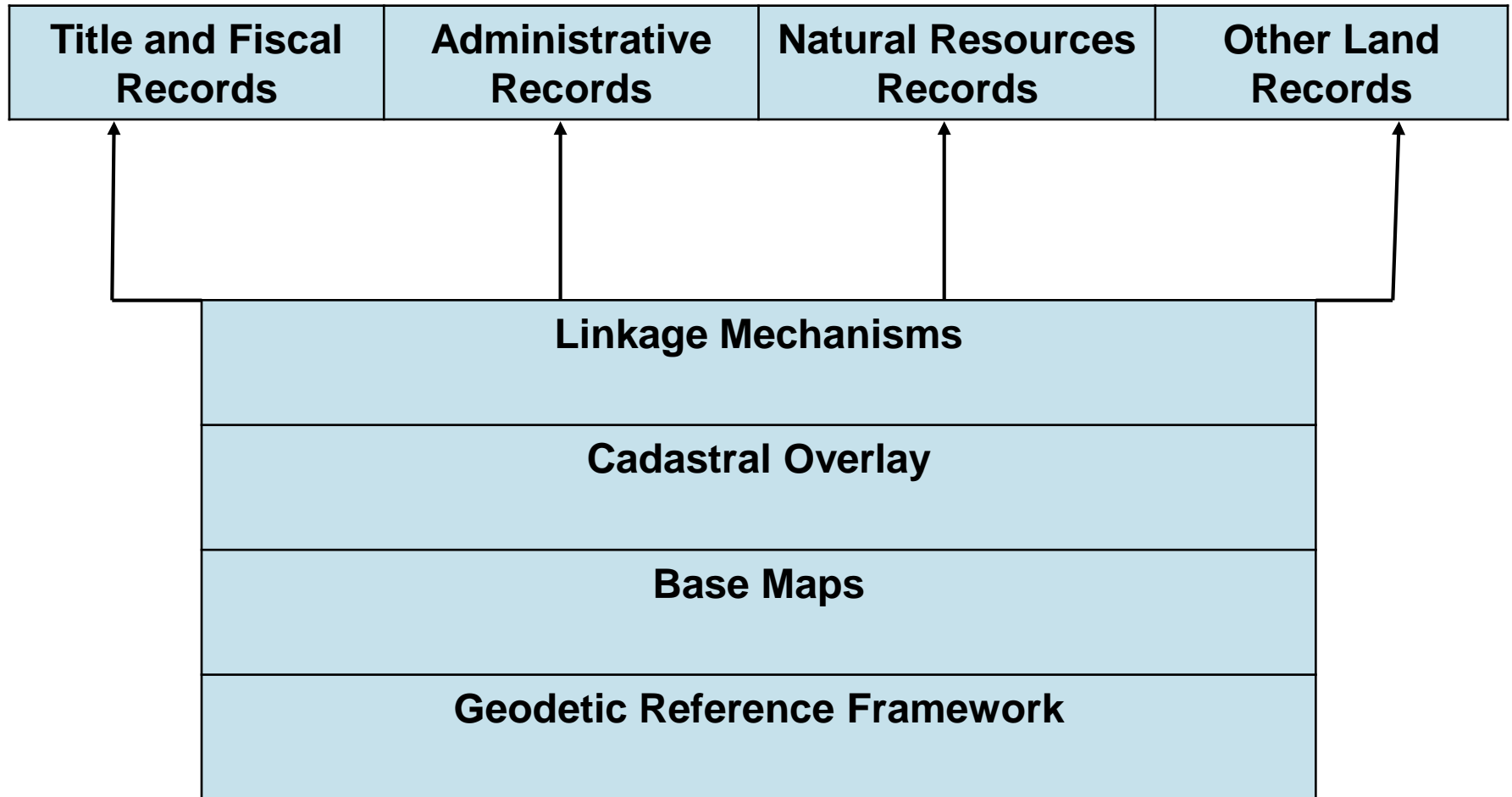- farmland 8% and
- built area 4%.

Statistics of Finland

- 5.4 million inhabitants
  - 15.8 inhabitants per km² (40.5 per square mile)
- 2.7 million real estate units
- 2.6 million buildings and dwellings
- 0.6 million enterprises and corporations
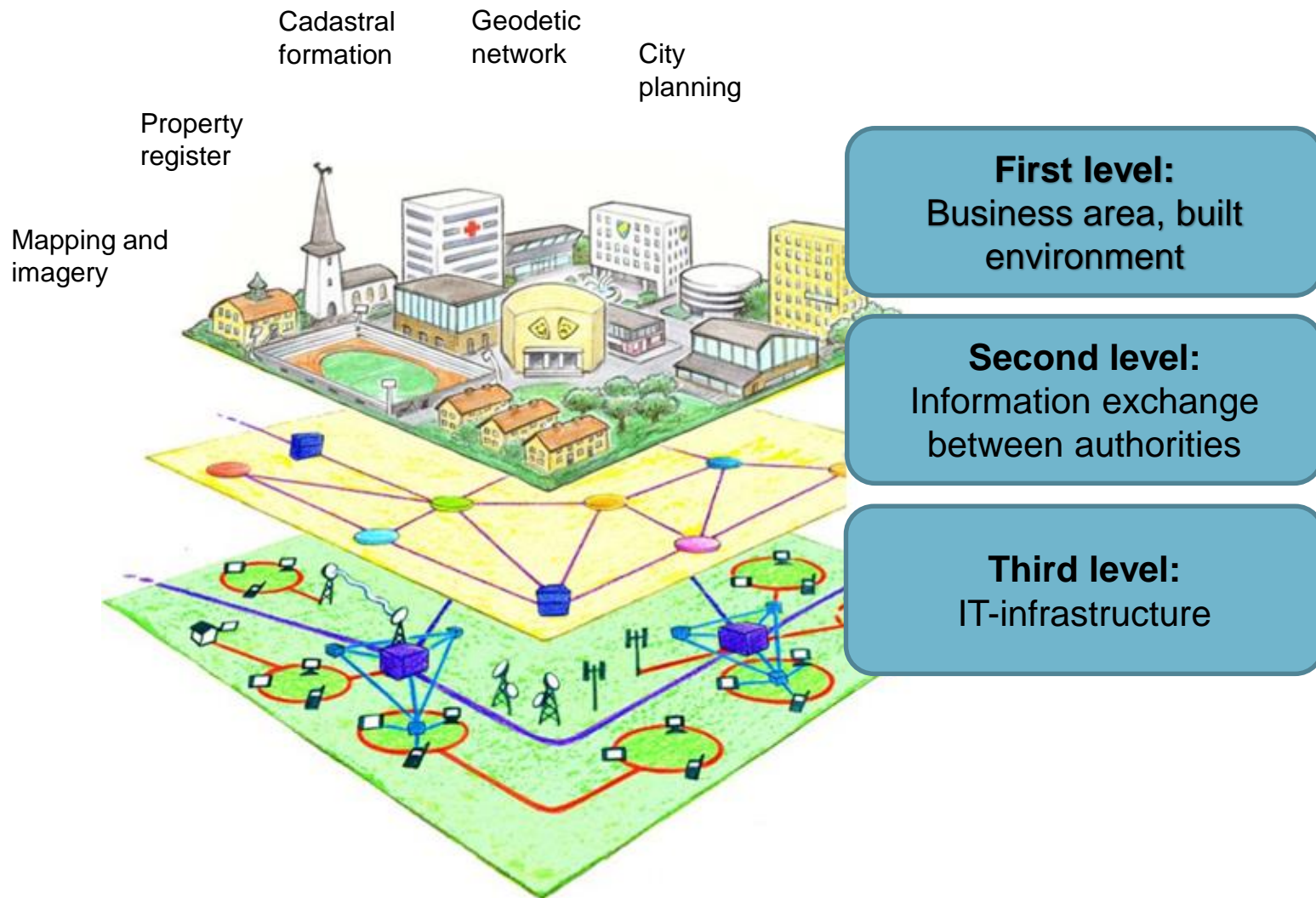- 3.7 million vehicles

Components of Multipurpose Cadastre

(USA, NRC 1980)

Title and Fiscal Records	Administrative Records	Natural Resources Records	Other Land Records

Linkage Mechanisms

Cadastral Overlay

Base Maps

Geodetic Reference Framework

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Further digital cooperation between authorites - Swedish e-delegation

Cadastral formation

Geodetic network

City planning

Property register

Mapping and imagery

First level:
Business area, built environment

Second level:
Information exchange between authorities

Third level:
IT-infrastructure

Fit-for-Purpose Land Administration
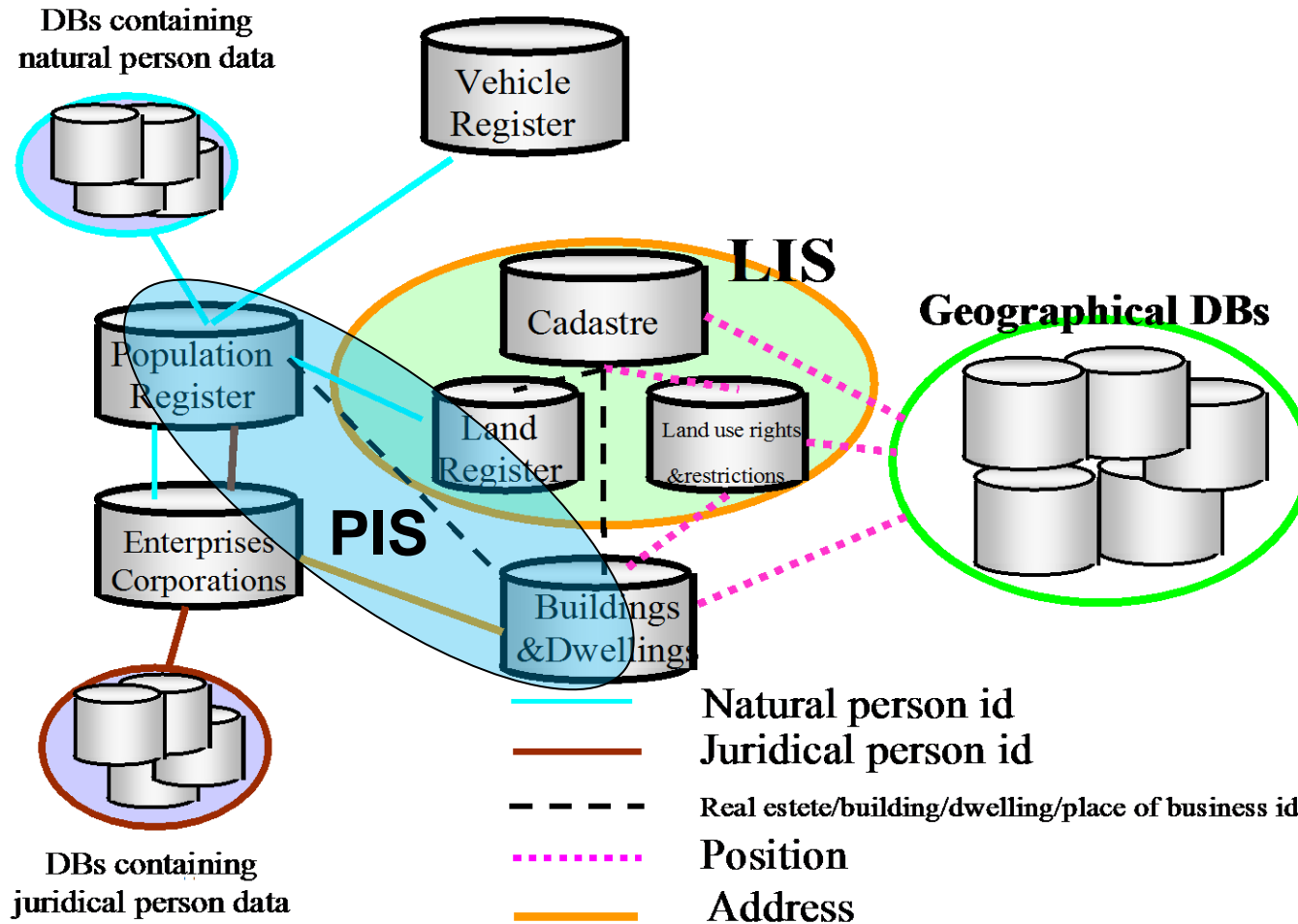
KEY PRINCIPLES		
Spatial Framework	**Legal Framework**	**Institutional Framework**
• Visible (physical) boundaries rather than fixed boundaries • Aerial / satellite imagery rather than field surveys • Accuracy relates to the purpose rather than technical standards • Demands for updating and opportunities for upgrading and on-going improvement	▪ A flexible framework designed along administrative rather than judicial lines ▪ A continuum of tenure rather than just individual ownership ▪ Flexible recordation rather than only one register ▪ Ensuring gender equity for land and property rights.	▪ Good land governance rather than bureaucratic barriers ▪ Holistic institutional framework rather than sectorial silos ▪ Flexible IT approach rather than high-end technology solutions ▪ Transparent land information with easy and affordable access for all (WB 2016 Wash. D.C.)

Key Register

Definition:

- National information system that identifies the basic units of society. These basic units include natural persons, communities, buildings and real properties.

Key Register System 2016

DBs containing natural person data

Vehicle Register

LIS

Geographical DBs

Cadastre

Population Register

Land Register

Land use rights &restrictions

PIS

Enterprises Corporations

Buildings &Dwellings

DBs containing juridical person data

—— Natural person id
—— Juridical person id
– – – Real estete/building/dwelling/place of business id
········· Position
—— Address

- Integration of register data using IDs and position as links
- 300 million handovers per year

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Key Register

- Characteristics:

  - Social significance, coverage, connection of registration numbers (identifiers), harmony, usability and data security.

  - The main characteristics are coverage and reliability. Coverage means that the register is ubiquitous and includes all the register units and their official identifications.

  - Reliability is based on the fact that it is the authorities' responsibility to maintain the registers.

  - The Key Registers are ICT-based and linked together.

  - All data from the Key Registers is available through interfaces. Part of the data is available also in web portals.

Land information system LIS

- Cadastre
  - NLS and 75 municipalities update the register
  - NLS maintains the register
  - One common register since 2005
    - Nationwide coverage
      - Both land and water areas

- Land Register
  - NLS has updated and maintained the register since 2010

- Other Agencies' data
  - Land use plans (municipalities)
  - etc.

Cadastre

- Contents of Cadastre
  - Property division
    - Incl. shares in common areas
  - Connected rights
    - Easements, usufructs, land rents
  - Cadastral index map
    - Register units, their identifiers
    and boundaries
- Part of data has negative and positive faith and credit
  - The State is obliged to pay compensation for errors in the Cadastre that are the consequence of decisions taken in cadastral surveys since 1 July 1985.
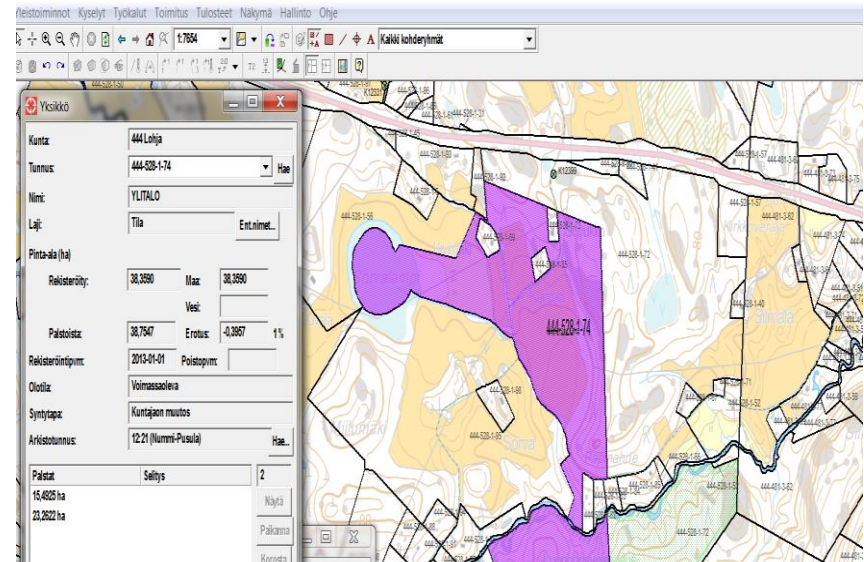
Future: three-dimensional laser scanning updated and coordinate-based cadastre

Time dimension, crowdsourcing, real estate tax values included

Land Register

- Nationwide coverage

- Contents of Land Register
  - Titles
  - Mortgages

- All data has negative and positive faith and credit
  - The State of Finland can be obliged to pay compensation for any errors

  Future: Cadastre and Land Register are one ubiquitous register with several interfaces to other databases

Population information system

- Population Register Centre and local register offices update and maintain the system

- Basic information related to the identification of people (Personal data) and buildings (Building data) is registered in the Population Information System

- The most frequently used key register in Finland

Personal data

- Name

- Personal identity code (person ID)

- Address

- Citizenship

- Native language

- Family relations

- Date of birth (and death)

Building data

- Building code

- Location

- Owner

- Area

- Facilities and network connections

- Intended use

- Year of construction

In the Future: Better compatibility with the Cadastre

Digital Register of Housing Associations

Other parts of system

- Trade Register
  - Enterprises
  - Corporations
    - Including housing associations

- Topographic Database
  - Maps of Finland are based on the Topographic Database.
  - Up-to-date information on terrain and the built-up environment
    - Power lines, water areas, place names, address data, road data, contour, etc.

- Purchase Price Register
  - Real property conveyances since the early 1980s

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Future Cadastre

- Accurate, Coordinate-based, Digitised

- Ubiquitous; incl. all easements, right of ways etc.

- Integrated

- 3–4 dimensioned

- Crowdsourcing, internet of things – smart cities

- Building Information Modelling BIM

- Utility Mapping – digital underground visualisations

- Open Access – balanced with individual privacy

- (source: Lesley Arnold WB 2016 Washington D.C.)

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More information

www.nls.fi

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