Addressing Land and Geospatial Information Needs in the Urban Agenda

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Area 338,417 km², of which

- 10% water area,
- 77% forests,
- 8% farmland and
- 4% built area
New Urban Agenda

What will it cover?

- Early documents on the New Urban Agenda suggest that it will particularly highlight what are being referred to as “development enablers” and “operational enablers”. Together, this thinking goes, these two factors will be able to further cement the relationship between urbanization and sustainable development.
New Urban Agenda

Some fragments (clauses 29 and 91)

- “We commit to promote increased security of tenure for all, recognizing the plurality of tenure types, and to develop a fit-for-purpose, and age and gender responsive solutions within the continuum of land and property rights, with particular attention to women’s land security of tenure as key to their empowerment.” (29)

- “We will promote compliance with legal requirements through strong inclusive management frameworks and accountable institutions that deal with land registration and governance, applying a transparent and efficient land use, property registration, and sound financial system. We will support stakeholders in developing and using basic land inventory information, such as cadaster, valuation maps, as well as land and housing price records to create the high-quality, timely and reliable data relevant in national context, needed to assess changes in land values.” (91, see also 124)
New Urban Agenda – ICT

Some fragments (clause 141)

“"We will promote the development of national information and communications technology policies and e-government strategies as well as citizen-centric digital governance tools, tapping into technological innovations, including capacity development programs in order to make ICT-technologies accessible to the public, incl. particularly people in vulnerable situations, to enable them to develop and exercise civic responsibility, broadening participation and fostering responsible governance, as well as increasing efficiency. The use of digital platforms and tools incl. geospatial information systems, will be encouraged to improve long term integrated urban and territorial planning and access to urban and metropolitan services."

(see also 81)
Evolution of Land Administration Infrastructure

Fiscal purposes
- 18th century: Land seen as wealth

Land transfer purposes
Late 18th century to 1940s: Land seen as commodity and wealth

Planning purposes
1940s to 1980s: Land seen as scarce resource, commodity and wealth

Multi-purpose
- Land seen as community, scarce resource, commodity and wealth
Components of Multipurpose Cadastre

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

Linkage Mechanisms

Cadastral Overlay

Base Maps

Geodetic Reference Framework
Key Registers in Finland

Population information system
- Information of natural persons in population information system

Community information system
- Trade register
- Association register
- Business ID register
- Register of enterprises and establishments

Building information system
- Register of buildings and dwellings (PRC)
- Register of buildings and dwellings (municipalities)

Land information system
- Cadastre
- Land register
Integration of the Key Registers

- Natural person
  - Personal ID

- Building
  - Building ID
    - Flat
      - Flat ID
    - Place of Business
      - Establishment ID

- Real property
  - Real property ID

- Enterprise or Corporation
  - Business ID
Cadastre

Contents

• Property division
  • Incl. shares in common areas

• Connected rights
  • Easements, usufructs, land rents

• Cadastral index map
  • Register units, their identifiers and boundaries
Future Cadastre

- Accurate, Coordinate-based, Digitized
- Ubiquitous; incl. all easements, right of ways etc.
- Integrated
- 3–5 dimensioned
- Crowdsourcing, Internet of Things (IoT) – Smart Cities
- Building Information Modelling BIM
- Utility Mapping – digital underground visualizations
- Open Access – balanced with individual privacy
Thank you!

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