CADASTRE – CORNERSTONE OF A FUNCTIONING NATIONAL ECONOMY

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• 3D real estate registration
• Residential Property Information System
• 3D buildings in Topographic Database
FACTS ABOUT FINLAND

- 5.5 M, population
- 2.8 M, real estate units
  - 20 000 cadastral surveys
  - 320 000 titles and mortgages
- 790 Bn €, value of real estates (est. 2012)
- 530 Bn €, value of mortgages in LR (2017)
- 2.6 M, buildings and dwellings
- 0.6 M, enterprises and corporations
THE SCENE

• Traditional 2D registration
• Separate agencies for individual base registers
  • Population Register Centre
    • people, buildings, apartments
  • Patent and Registration Office
    • companies, enterprises, legal persons
• NLS
  • Cadastre and Land Register
The Cadastre and Land Register have a solid history of trust in the society.
3D PROPERTY FORMATION

- First discussions 2004
- Formal proposal to the MAF 2005
- Ministry working group 2006-2007
- NLS projects 2011-2018
- New legislation Aug 1, 2018
• 3D Cadastre
  • New law August 1, 2018
  • On Cadastral Index Map the cadastral units, that are located above and under the base cadastral unit are described with different colors
  • 3D City GML file is stored in Smallworld database
DIGITAL RESIDENTIAL PROPERTY INFORMATION SYSTEM

• LLHC (Limited Liability Housing Companies) the most common way of housing in urban areas
  • ~1.5 M apartments in ~100 000 LLHCs
  • Resemble limited liability company
• LLHCs are registered in the Trade Register
  • Trade Register information available country-wide
    • Articles of association
• Information about apartments and owners is managed in LLHCs
• Share groups (1 to N shares) giving tenure to specific apartment are tradeable
• One printed share certificate per share group
MAIN GOALS OF NEW REGISTER

• Improve services on LLHC-related information
  • Availability
  • Credibility (consistency)
  • Timeliness
  • Coverage

• Enable digital services for
  • Trade
  • Collateral management
  • LLHC life cycle management
  • Management of LLHC information (e.g. maintenance)
3D BUILDINGS IN TOPOGRAPHIC DATABASE

• Data collection for the NTDB is performed by several organizations
  • Bigger cities produce their own 3D-models
  • NLS produce 3D-models from rest of the country
    • Models will correspond to LoD2

• Schedule:
  • 2019 Q4: Proof of Concept realizations of 2-4 different solutions for 3D-production
  • 2020 Q1: Tender out the implementation
  • 2020 Q2: Implementation ready
  • 2020 Q3: Testing, documentation, training of staff
  • 2020 Q4: 3D-production in NLS in progress
    • Based on point cloud data from 2020
    • 3D-buildings available nation-wide in 2026-27 (based on the schedule of the new laser scanning program)
MORE CORNERSTONES

• Evolving legislation, roles, processes, and data systems
• Digital real estate conveyancing
• 3D-real estate units, below ground and in buildings
• 3D-buildings in topographic database
• Residential Property Information System

Drive land and buildings closer together enabling the C & LR to, in an increasing scale, support the economic activities in the country.
SHOWING THE WAY