Country report
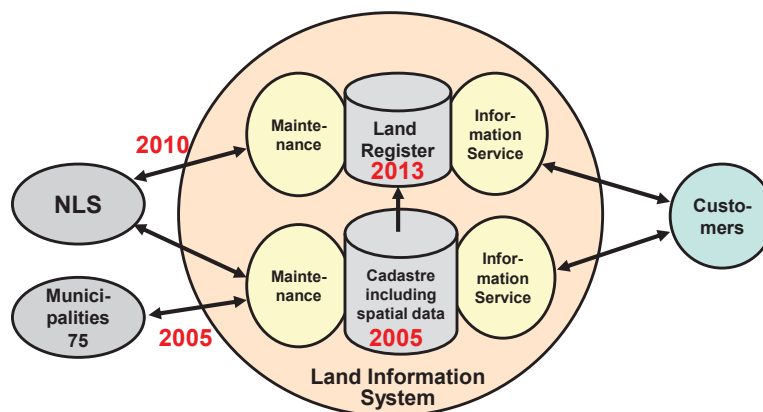# News from the Cadastre in Finland

Ari Tella

24.10.2016

FIG Commission 7 Annual Meeting, Coimbra Portugal
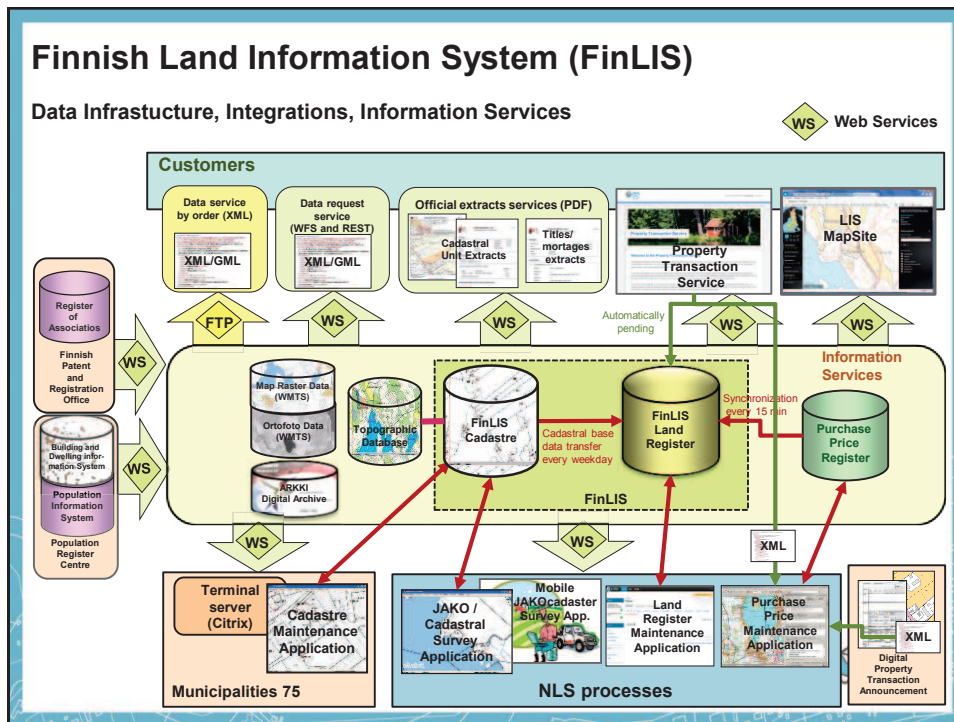
NLS NATIONAL LAND SURVEY OF FINLAND

The Land Information System

Totally digitized processes in cadastre maintenance and information services

NLS NATIONAL LAND SURVEY OF FINLAND

Finnish Land Information System (FinLIS)

Data Infrastucture, Integrations, Information Services
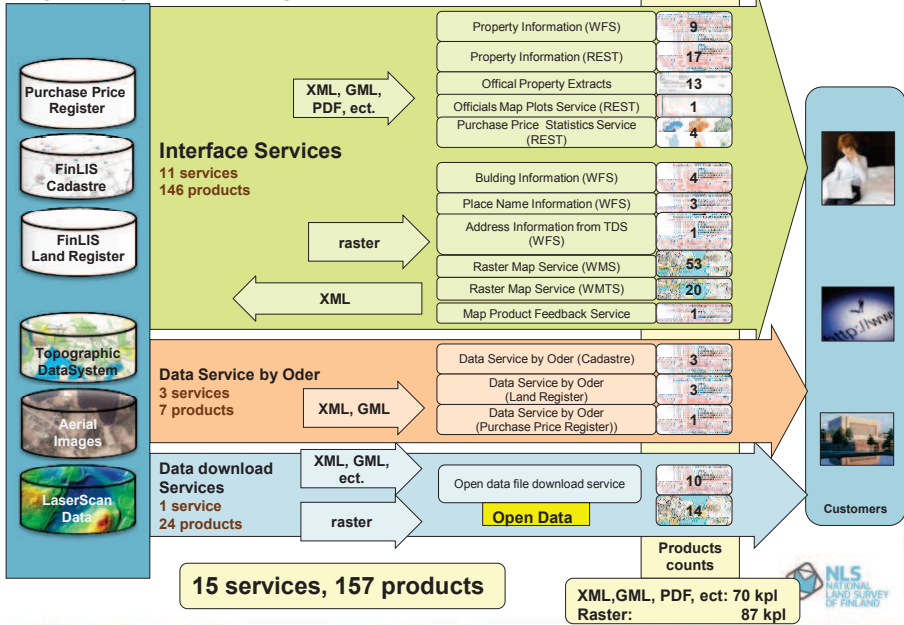

Strategic key development areas

- eServices
  - Bidirectional eServices project
  - Increasing the use of the Property Transaction Service
- Effective use of spatial data
- Cadastre
  - Development of existing cadastre
  - A new cadastral system, Cadastre 2035
- Computerised register of apartments
  - New register for condominiums

eServices

- Two-way services
- Electronic Property Transaction

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NLS Digital Web Service
(chargeable ja free of charge)

		Count
	Property Information (WFS)	9
	Property Information (REST)	17
	Offical Property Extracts	13
	Officials Map Plots Service (REST)	1
	Purchase Price Statistics Service (REST)	4
	Bulding Information (WFS)	4
	Place Name Information (WFS)	3
	Address Information from TDS (WFS)	1
	Raster Map Service (WMS)	53
	Raster Map Service (WMTS)	20
	Map Product Feedback Service	1
	Data Service by Oder (Cadastre)	3
	Data Service by Oder (Land Register)	3
	Data Service by Oder (Purchase Price Register))	1
	Open data file download service	10
	Open Data	14

Purchase Price Register

FinLIS Cadastre

FinLIS Land Register

Topographic DataSystem

Aerial Images

LaserScan Data

XML, GML, PDF, ect.

Interface Services
11 services
146 products

raster

XML

Data Service by Oder
3 services
7 products

XML, GML

Data download Services
1 service
24 products

XML, GML, ect.

raster

Customers

Products counts

15 services, 157 products

XML,GML, PDF, ect: 70 kpl
Raster: 87 kpl

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3

What can you do with the NLS Two-way services ?

Future

What can you do with the NLS Two-way services ?

Future

- Check all the basic information of your own real properties
- Activate cadastral and legal survey operations
- Take part on legal surveys and cadastral operations via web
- See all the current activities going on
- Download free: topomaps, historical maps, aerial & laser scanned data
- Order NLS products like registry certificates, printed maps, ..

Connection to national Service Architecture gateway

Future

Electronic Property Transaction System in Finland

Now

In brief

- Web-based application which enables electronic transactions related to real estate conveyance
- One ICT-service which includes both real estate transaction and mortgage management systems
- Service was launched in November 2013
- Service provided by National Land Survey of Finland

Electronic Property Transaction System in Finland

Now

Barriers to implementation

- Use is not required in legislation
  - "Paper process" can still be used (attesting notaries & applications of mortgages)
- Real estate brokers are still required to archive paper forms
- Loan related papers are stored in vaults
- ~ 3.5 million paper mortgage deeds

Next developments

Future

- Agreements with banks have been made to boost the use
- Applications of mortgages allowed only digitally in 2017

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Effective use of spatial data

- New Topographical Data System in cooperation with municipalities

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Cadastre

- Development of existing cadastre
  - A new cadastral system

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Development of existing cadastre

- 3D properties, 2017

- Scanning of all microfilms, 2017-2019

- Pilot of customer process using LEAN: connecting property transaction, title registration and survey proceedings, 2017

- Replace survey map about printout from the cadastre map

- …

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A new cadastral system

- Research project Catastre2035, 2018
- Research into coordinate based cadastre

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
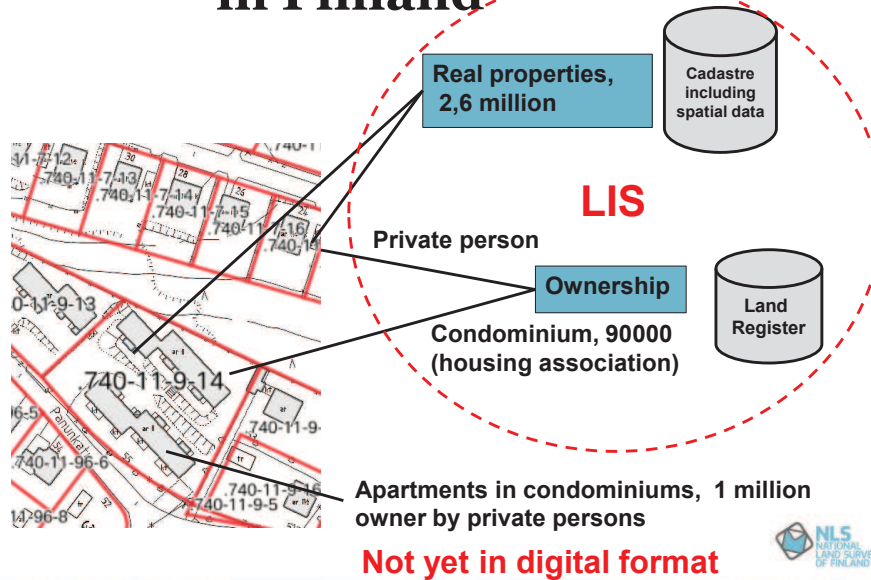- Open Access – balanced with individual privacy

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Computerised register of apartments

- New register for condominiums

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Real property / apartments in Finland

Real properties, 2,6 million

Cadastre including spatial data

LIS

Private person

Ownership

Land Register

Condominium, 90000 (housing association)

Apartments in condominiums, 1 million owner by private persons

Not yet in digital format

FIG Working Week 2017 in Helsinki 29.5.-2.6.2017
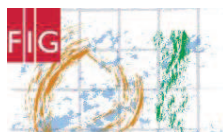
Theme:

Surveying the World of Tomorrow – From Digitalisation to Augmented Reality

- **15 November 2016 -** Deadline for authors to submit non peer reviewed abstracts
- The registration will open October 2016

(sidebar) FIG WORKING WEEK 2017 — Surveying the world of tomorrow – From digitalisation to augmented reality — Helsinki Finland — May 29 - June 2

Tervetuloa!
Welcome!