

FINLAND'S GEOSPATIAL PLATFORM ENABLES MANAGEMENT OF DATA FROM DIFFERENT PROVIDERS

Webinar 14 May 2020 – Teemu Saloriutta



CHALLENGES



Spatial data is not uniform or harmonised

LACK OF INTEROPERABILITY



Spatial data is not used to its full potential.

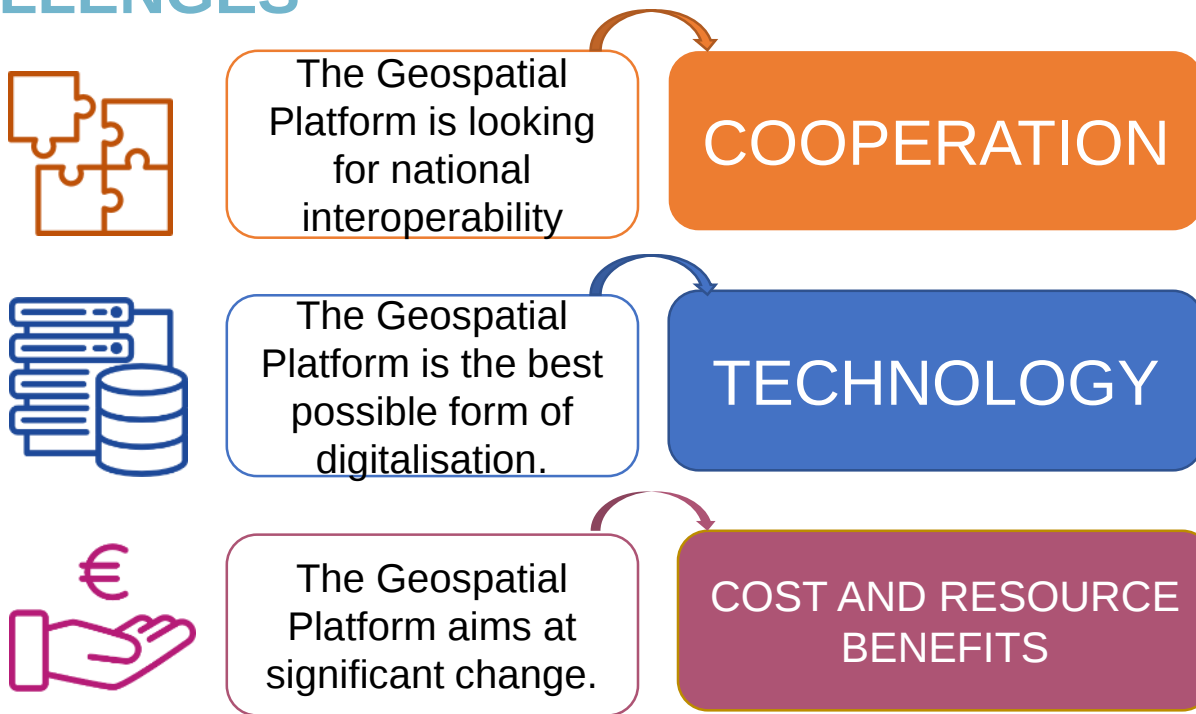
THE CHALLENGES OF DECISION-MAKING



Data processing is a laborious task

COSTS

THE GEOSPATIAL PLATFORM TO ADDRESS CHALLENGES

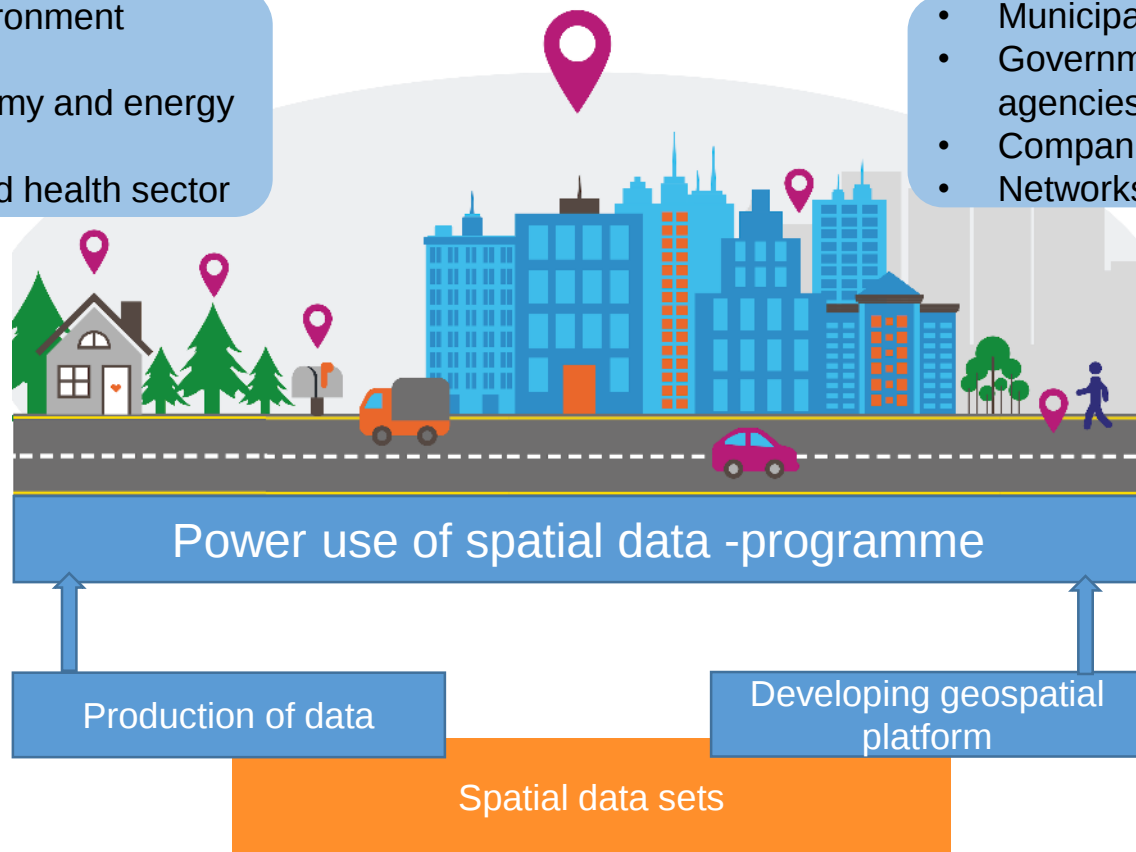


BENEFICIAL ECOSYSTEMS

- Built environment
- Traffic
- Bioeconomy and energy
- Safety
- Social and health sector

CO-OPERATIVE PARTNERS

- Municipalities
- Government administration / agencies
- Companies
- Networks and hubs



GEOSPATIAL PLATFORM DATA THEMES

Topography

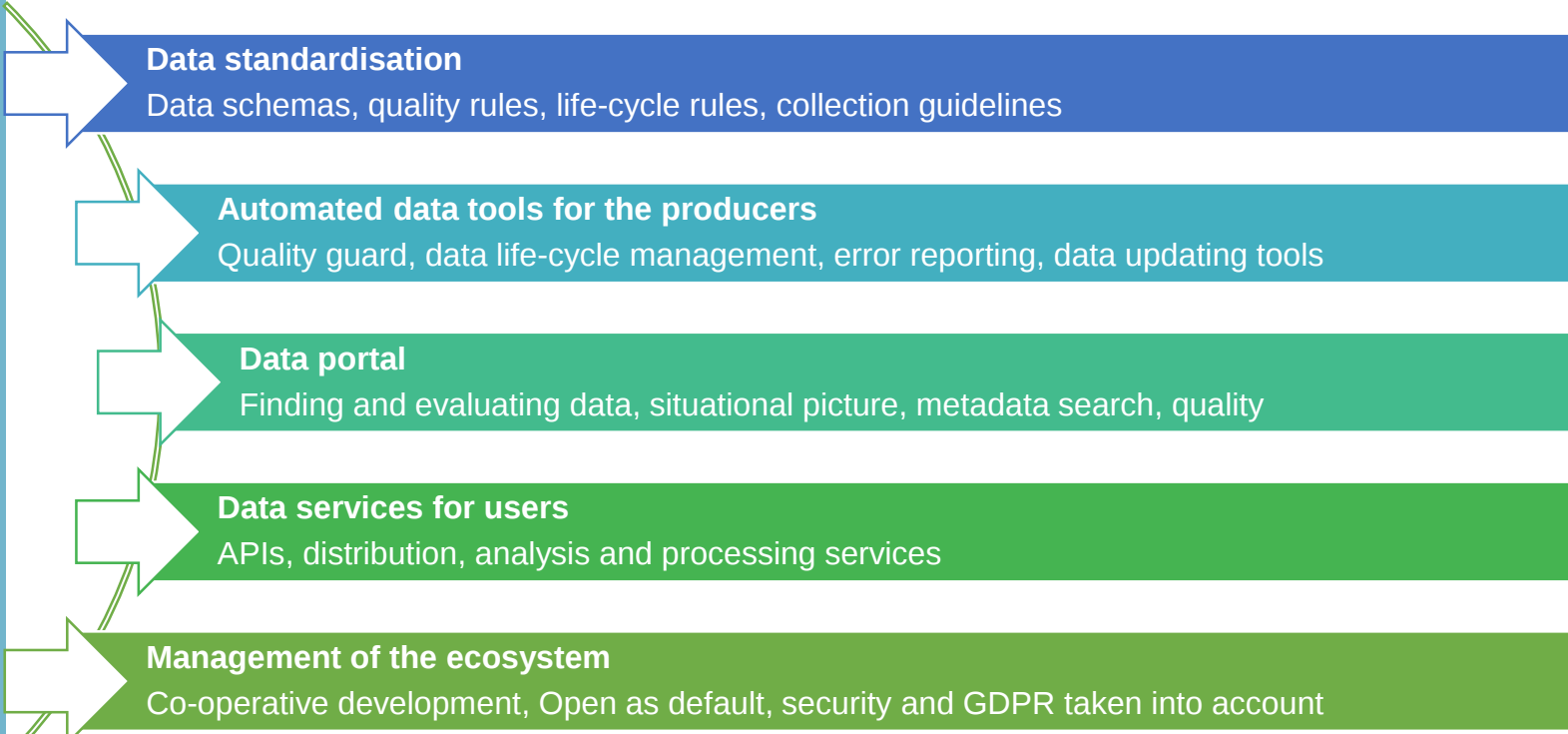
Hydrography

**Buildings &
Structures**

**Transport
Networks**

Addresses

KEY COMPONENTS OF GEOSPATIAL PLATFORM



Data standardisation

Data schemas, quality rules, life-cycle rules, collection guidelines

Automated data tools for the producers

Quality guard, data life-cycle management, error reporting, data updating tools

Data portal

Finding and evaluating data, situational picture, metadata search, quality

Data services for users

APIs, distribution, analysis and processing services

Management of the ecosystem

Co-operative development, Open as default, security and GDPR taken into account

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DATA STANDARDISATION & NATIONAL DATA MODELS

Example: Common geospatial model for **Buildings and Structures**

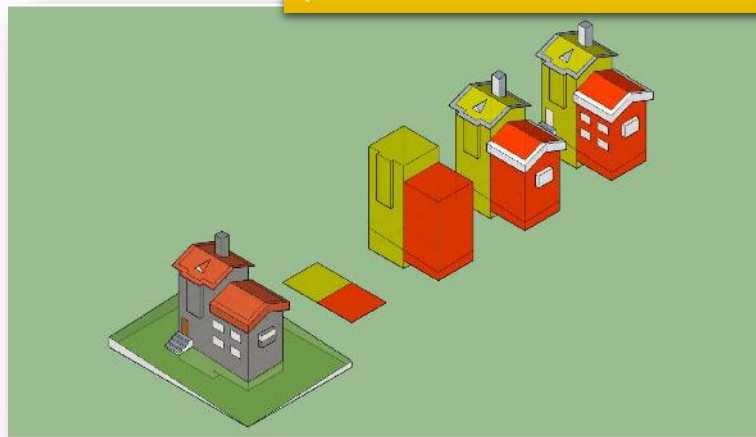
National recommendation status (JHS 210)

Links to other registries and BIM models

Data models to the Interoperability platform

Specification includes

- Semantics
- Geometry (2D,2.5D and 3D)
- Classification
- Life-cycle rules (4D)
- Selection criteria
- Quality rules
- UML model



Modelling real world to the spatial data objects. Surface (LoD0), BoX LoD1, +roof struct. (LoD2), +windows(LoD3)

AUTOMATED DATA TOOLS FOR THE PRODUCERS

The harmonized datasets are collected via **Data Upload** service

- APIs and file upload supported
- Quality evaluation by using FME-based **QualityGuard** service
- Feature-based life-cycle management and persistent IDs

Municipalities can take responsibility for their own area

- No need to collect the same data (e.g. buildings) again by National Land Survey → Cost savings

Services on geospatial platform- development and test environment

Quality Guard and Data Upload

For data producers who want to ensure data quality and contribute to the national database

Spatial Data Search

Dataset and feature search

Address Lasso

Collecting building entrances and waypoints

Findiagram

Visualising topographic data statistics

Table Joining Service

Joining statistical and spatial data

INSPIRE Validator

Services on geospatial platform- Production version 6/2020

Quality Guard and Data Upload

Spatial Data Search

DATA SERVICES FOR USERS

- Download services based on the new **OGC API – Features** standard
 - Replacing old WFS 1.1 and 2.0 implementations
- A benefit for data producers:
 - If a municipality joins the geospatial platform, it will automatically get its data delivered via OGC API – Features service
- Bonus: Feature-based change detection API will be provided

CO-OPERATION WITH MUNICIPALITIES

- Municipal forum
- Newsletter for municipalities
- A special website for municipalities
- Skype sessions for municipalities
- Webinars
"How to use"-videos and webinar sessions
- Municipal tour
- Otakantaa.fi-dialogue and participation online tool by ministry of Justice
- Fairs and other events

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EACH DATA THEME HAS DIFFERENT KEY PARTNERS

- **Buildings** – Municipalities
- **Hydrography** – Finnish Environment Institute
- **Topography** – Finnish Forest Centre
- **Transport Networks** – Finnish Transport Infrastructure Agency
- **Addresses** – Municipalities

OSOITTEEN TIEDOT

SULJE X

Keijukaistenpolku 9, Helsinki

SISÄÄNKÄYNNIT

+ LISÄÄ

PISTE	TUNNUS	TYYPPI
> S1	D	Pääsisäänkäynti porrashuoneeseen
> S2	C	Pääsisäänkäynti porrashuoneeseen
> S3	B	Pääsisäänkäynti porrashuoneeseen
> S4	A	Pääsisäänkäynti porrashuoneeseen

KULKUPISTEET

+ LISÄÄ

PISTE	TYYPPI
> K1	Liittymä tieverkosta

OPASTAULU

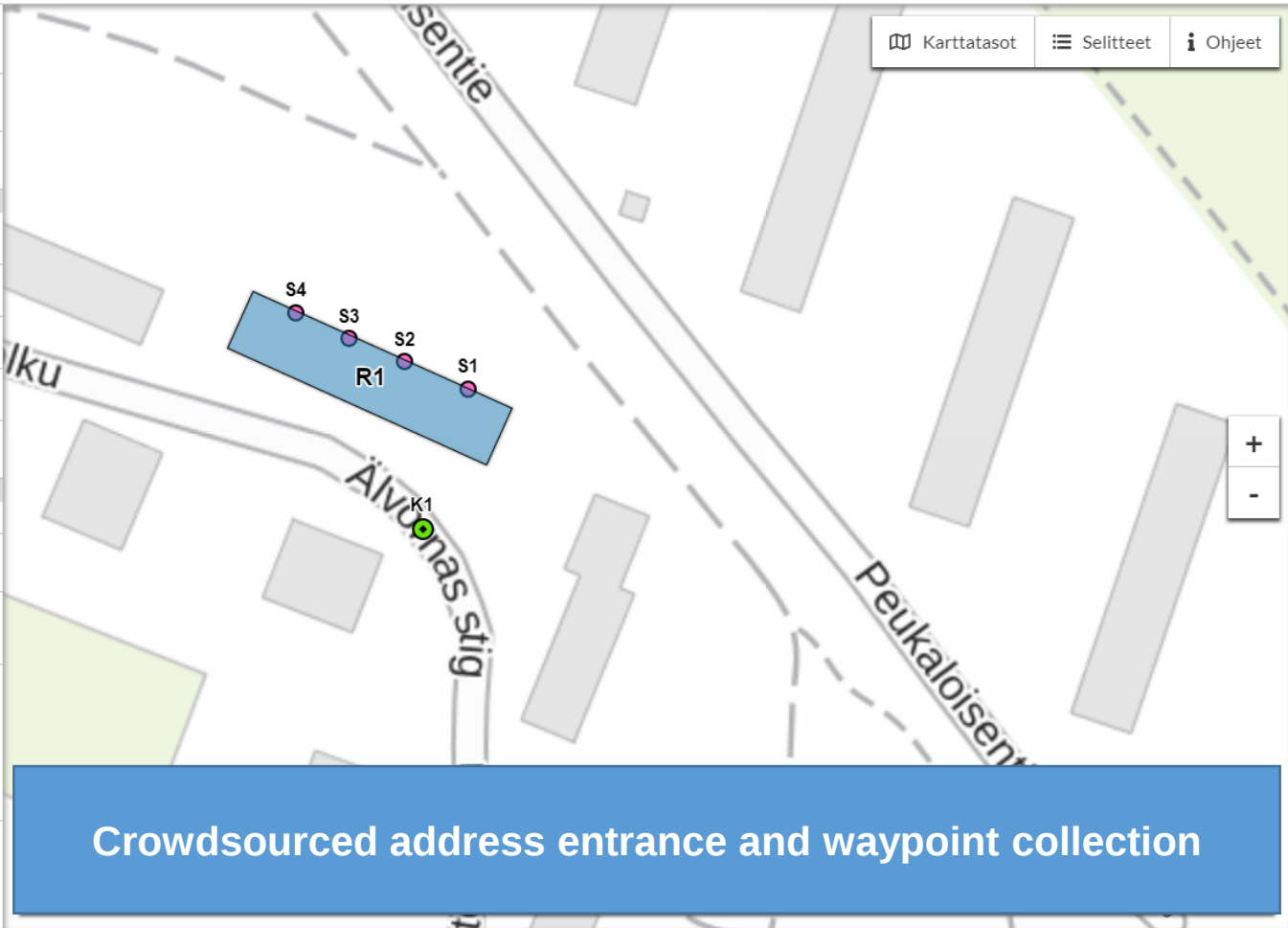
+ LISÄÄ



Ei lisättyä opastaulua

PERU KAIKKI

TALLENNAMUUTOKSET





- DEMO
- PAIKKATIEOTOIKKUNA
- HAKU
- KARTTATA SOT
- KARTTASELITTEET
- KARTTAJULKAISU
- TEEMAKARTAT
- ANALYYSI
- KAYTTOOHJE
- OMAT TIEDOT
- KOORDINAATTI-MUUNNOS
- [Kirjautu - Rekisteröidy](#)
- [På svenska - In English](#)
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Kohdetiedot	
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surface_relation_id	0
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Varjostus

3/5

1 2 3 4 5 6 7 8 9 10 11 12

Nykyhetki

3D visualisation in the national geoportal Paikkatietoikkuna

For more information:

beta.paikkatietoalusta.fi/

www.nls.fi

Twitter: @PTAlusta

YouTube:

www.youtube.com/c/paikkatietoalusta



World's best interoperable geospatial ecosystem –
Let's do it together!



ADVANCING TOGETHER

