



**The Assessment of Organisation's GIS Maturity
Gives a Push to the Use of Spatial Data**
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The Finnish Environment Institute as a Case Study

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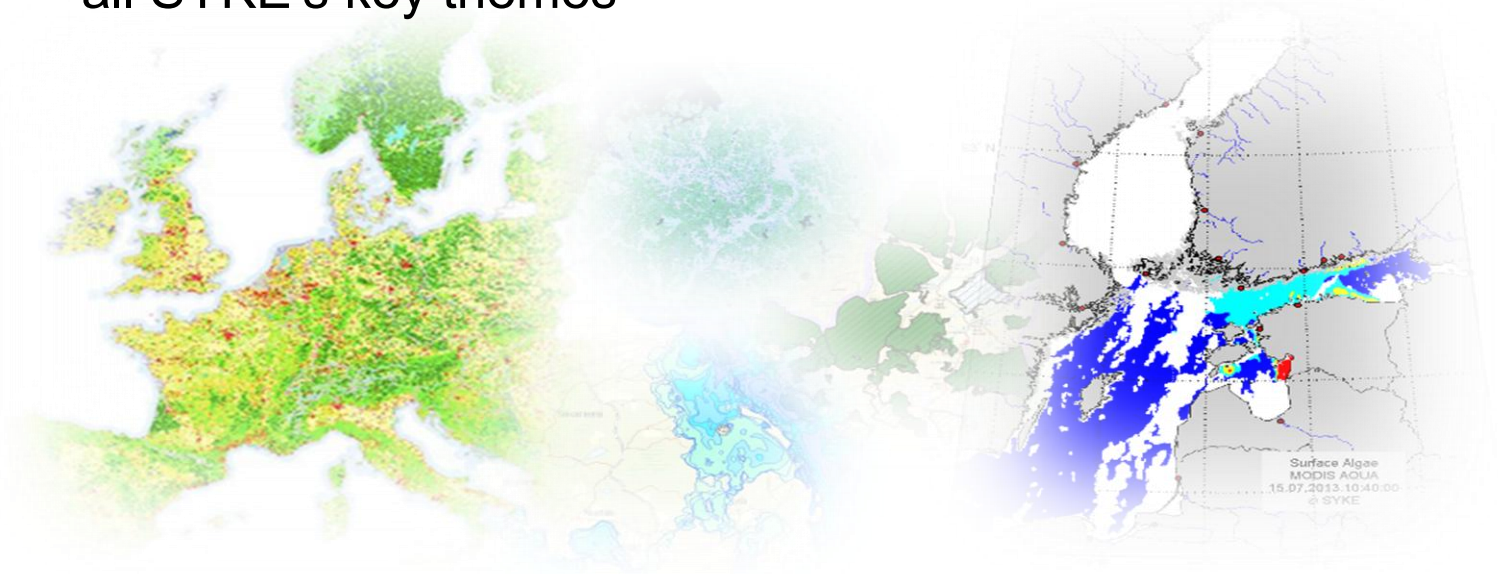
SYKE – Crucial information and innovative solutions for a sustainable society

- The Finnish Environment Institute (SYKE) is both a research institute, and a centre for environmental expertise.
- A part of Finnish environmental administration
- The focus is on six key themes:
 1. Climate change mitigation and adaptation
 2. Sustainable management of the Baltic Sea and freshwater resources
 3. Sustainability of consumption and production
 4. Maintaining ecosystem services and biodiversity
 5. Sustainability of land use and the built environment
 6. Production and utilization of environmental information



SYKE & spatial data

- One of the biggest INSPIRE data producers in Finland
- Also a significant spatial data user - GIS is valuable for all SYKE's key themes



GIS maturity indicates the capability to utilize spatial data

- SYKE's GIS maturity was assessed in 2014 to find out how well spatial data and GIS tools are adopted in organisation
- The GIS maturity indicates the organisation's capability and readiness to utilise spatial data to reach objectives of the organisation
- In a mature organisation spatial data and spatial data solutions have been integrated into the organisation's key processes
- Organizations benefit from comprehensive utilisation of spatial data: better quality of research, decision-making, productivity and customer services
- The GIS maturity model was created at Aalto University in co-operation with the Finnish Inspire Network*

*Mäkelä, Jaana (2013). *Customizing a maturity model for the evaluation of the development of shared situational awareness and the utilization of spatial data*. Doctoral Dissertation, Aalto University, School of Engineering.

The GIS maturity model was developed further to a product: Spatineo Roadmap



Use the relevant indicators of a GIS maturity assessment

Examine the visualised and analysed results

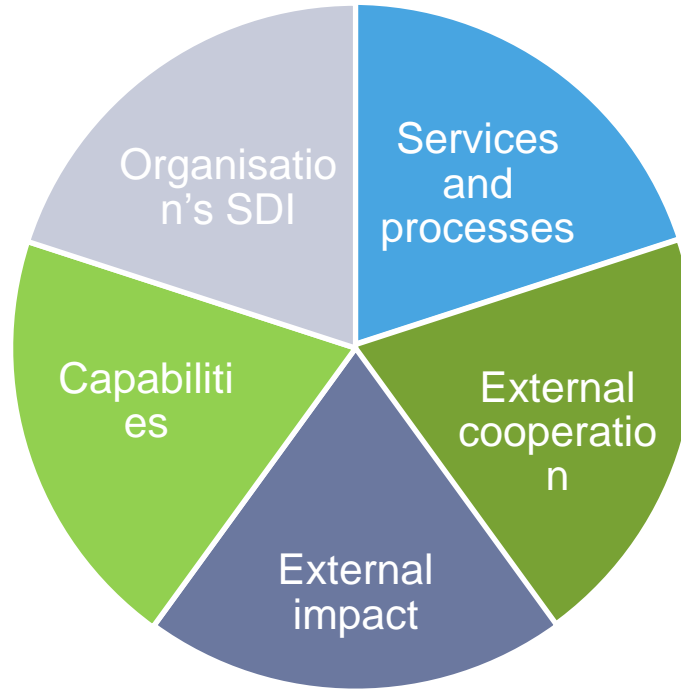
Recognise the strengths and areas that need development

Set the future goals for the development of the utilisation of spatial data

Spatineo Roadmap

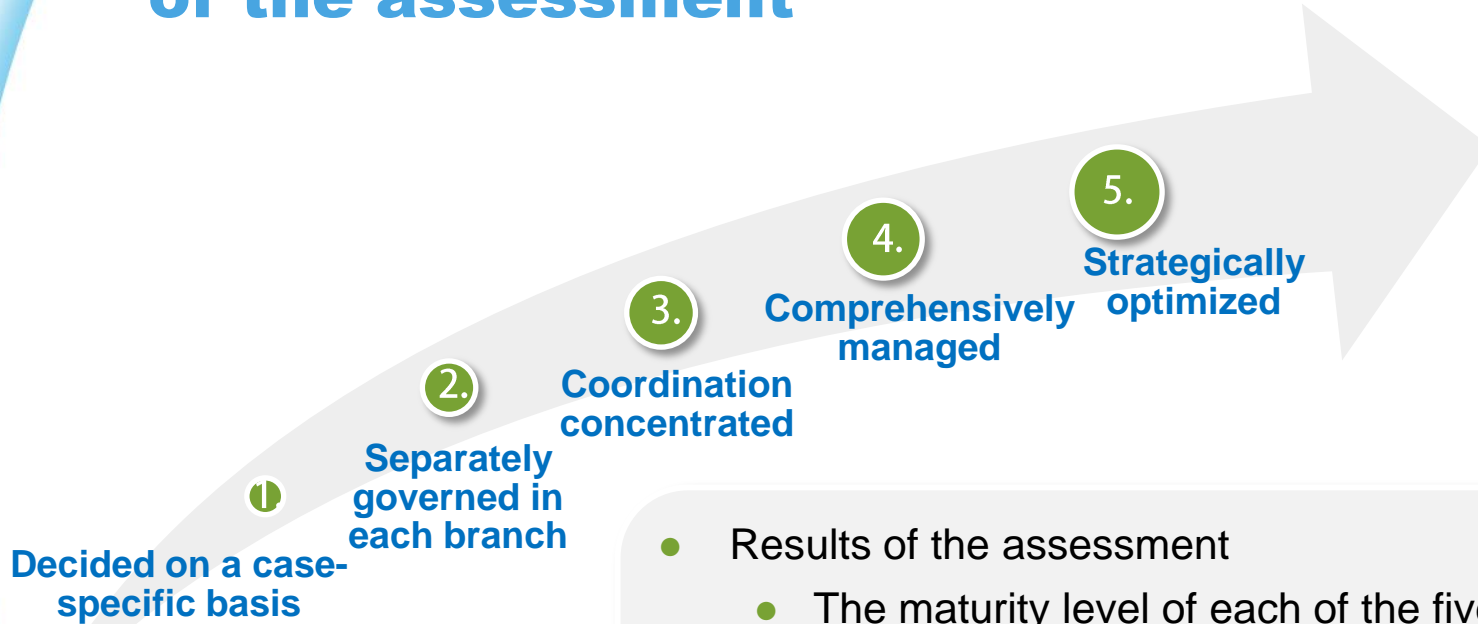
- A web-based tool to assess the current state of the utilisation of spatial data in your organisation
- Sets a roadmap for organisational improvement for enhancing the utilization of spatial data

Five key areas of the maturity assessment



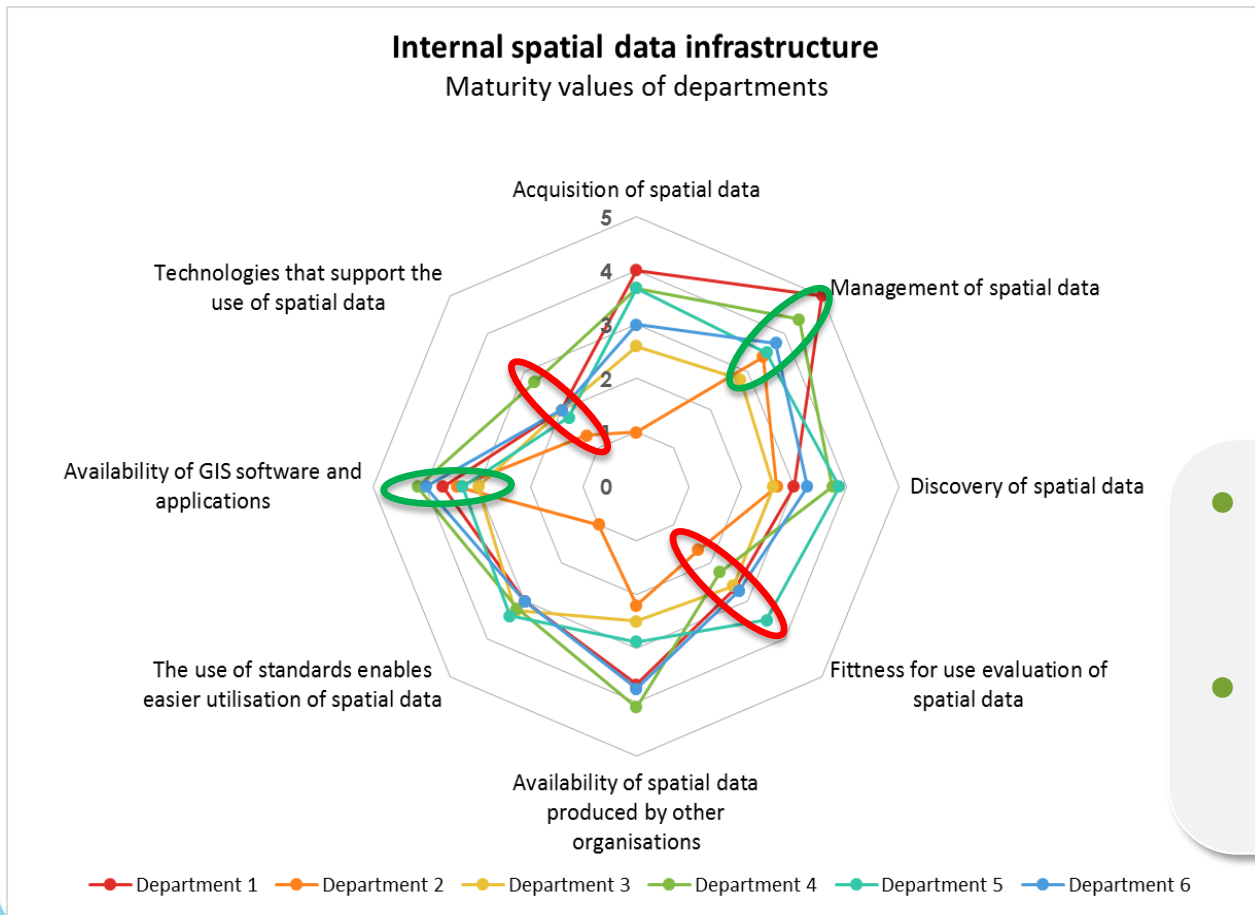
- Relevant indicators for each key areas are used for the maturity assessment

GIS maturity level summarizes the results of the assessment



- Results of the assessment
 - The maturity level of each of the five key areas
 - Visualisation of the results of the query
 - Analysis of the strengths and areas to be developed
- Organisation decides which level is a relevant goal

Some results: Maturity values of internal SDI



- Shows up those areas that have been invested in
- Helps to allocate resources to relevant areas

Analysis of the strenghts & areas to be developed

Internal SDI

Centralized coordination of spatial data, GIS software and applications

SYKE's input to national SDI (INSPIRE)

Personnel's technical GIS skills

Availability of SYKE's GIS services

Free data policy, network services

Knowledge about possibilities of GIS is inadequate among organisation's management level

Communication

Both internal and external

Visibility of SYKE's GIS services at organisation's web site

Co-operation between different departments

Actions based on the results of the assessment

For better co-operation and sharing information



Infos & discussions with management groups of SYKE's different departments

Regular infos for internal GIS users

To increase knowledge about possibilities offered by centralized SDI

Collecting illustrative examples of spatial data usage to demonstrate the possibilities of GIS

To develop external impact



Project initiative to improve the visibility and availability of SYKE's GIS services in co-operation with SYKE's communication unit

To have GIS integrated in all key processes and to set it as a strategic goal



Impact to SYKE's Data management strategy

Some considerations on the assessment

Things that
were known
intuitively were
made visible

Revealing
information about
GIS user's level of
knowledge (e.g.
network services)

Clear results to
be presented for
the management

Presents how
organisations will
benefit if spatial
data is utilised
effectively

High diversity of the
answers – both
positive and extremely
critical views

Not only results,
but the whole
process is useful

Additional Information:

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About Spatineo Roadmap and GIS maturity model:
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See also:

syke.maps.arcgis.com



Thank You!