Finland to have the most innovative and the safest geospatial ecosystem in the world

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A recent Finnish Report on spatial data policy aims to steer governmental activities so that Finland would have the best-functioning geospatial data infrastructure in the world. The quality of Finland’s spatial data functions is high on an international level. However, this does not mean that we can rest on our laurels. We have a lot of work ahead of us in order to fulfil the vision drawn in the heading of this article.

The starting point of the report is that data material, services and processes should be developed so that we could know how to use and understand why to use spatial data in Finland in the most innovative, effective and safest way in the world.

Making maps continue to be an important means of using spatial data. However, focus has shifted towards exploitation of the spatial data. Spatial data is mainly needed by parties who process it further. Users ask for processed spatial data analyses, services and products. It has been said that users do not need to know what data and analyses have been used to produce the analysis results they are using. It is sufficient that users can rely on the results or products being reliable and correctly made.

Then again, it is easy to make incorrect analyses using data, and possibly even easier using spatial data. Perhaps it would be better to know after all!

Key material from discussions with stakeholders

The vision and proposed actions of the Report on spatial data policy have been shaped as a result of discussions with a large group of stakeholders. These discussions were mainly carried out as face-to-face interviews, meetings, workshops and seminars primed by brief introductions. Four sub-reports were prepared for the report (http://mnm.fi/paikkataitoselonteko/osaselvitykset, available in Finnish only). Some 300 people participated in both interviews and workshops.

The sub-reports aimed to find answers from representatives of three target groups to the question of how the best possible system of spatial data functions can be built considering Finnish society. Another goal was to obtain an overview of roles and responsibilities in the public sector. Furthermore, the sub-reports aimed to identify any challenges and problems related to spatial data functions and to seek solutions, as well as proven practices and methods.

The target groups of the sub-reports were the business sector, the public sector, education and research. The fourth sub-report sought answers to the question of what are the effects of technological development on spatial data functions in Finland.

Exploitation of spatial data through development actions

The Report on spatial data policy provides the Government with information about how spatial data can be used to develop the functioning and safety of society and the operating conditions of companies.

Development actions are key parts of the report. They help to pave the way for new and innovative business based on the use of spatial data, to make citizens day-to-day activities easier and to improve the efficiency of the public sector.

The preparation of these development actions will start at the beginning...
In January 2017, the Ministry of Agriculture and Forestry established a project to prepare the Report on spatial data policy for setting guidelines for the development of spatial data functions in the public sector.

The Report on spatial data policy is available in English, Finnish and Swedish at mmm.fi/paikkatietoselonteko.

DEVELOPING THE SPATIAL DATA ECOSYSTEM

ENSURING HIGH-QUALITY ADDRESS DATA
National address data need to be corrected quickly in cooperation with different parties. The maintenance process for address data needs to be corrected in order to reduce the number of new errors. Any special needs of the security authorities need to be addressed.

ACCESS TO ACCURATE POSITIONING FOR ALL
The national FinRef positioning correction service that enhances satellite positioning must be offered to be openly available for future positioning and logistics services. This is vital considering the development of autonomous transport. The comprehensive security of society needs to be addressed when providing the open access service.

BUILDING A COMMON SPATIAL DATA PLATFORM FOR ALL SECURITY AUTHORITIES
The security authorities have a number of common special needs related to spatial data sets and products. We need to build a common spatial data platform to fulfil these needs. For example, common-to-all and up-to-date spatial data products are needed to build an overview for the security authorities.

DEVELOPING A COMMON SPATIAL DATA ECOSYSTEM
We need to accelerate cooperation between different parties, both in the private and the public sector, for networking spatial data functions into a shared data and service system. Cooperation between different sectors will increase as a result of digitalisation. This forms the basis of the ecosystem and supports the improved efficiency of functions, harmonised data and the development of services and business operations.

MORE EFFICIENT COOPERATION VIA A NEW COOPERATION BODY
The efficiency of extensive cooperation between different sectors needs to be improved by developing an existing organisation or by establishing a new organisation. Its purpose will be to promote the use of spatial data, to develop business activities and related opportunities, and to increase knowledge and awareness of the potential of spatial data.

ENHANCING KNOWLEDGE AND EXPERTISE ON SPATIAL DATA
The efficient use of spatial data is slowed down by the lack of expertise and awareness regarding its potential. To fix this situation, spreading of information and activities that highlight spatial data and the benefits of its use will be encouraged at all levels of education and in all types of organisations.

LEGISLATIVE REFORMS TO ENSURE DEVELOPMENT
The legislation needs to be amended, for example, by defining key spatial data resources considering society and by defining roles and responsibilities related to the spatial data functions of public organisations. Furthermore, we need to oblige all authorities to produce and distribute key spatial data in an interoperable format. Security aspects related to spatial data need to be specified, including information security, holistic security of society and the protection of personal data.