

# INNOVATING LAND ADMINISTRATION IN FINLAND

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*The National Land Survey of Finland is responsible for a great number of tasks, such as maintaining the cadastre, registering ownership rights, topographic surveying at the national level as well as scientific research in the spatial data field. The Ministry of Agriculture and Forestry leads Finnish land policy and the National Land Survey is one of the parties that implement the policy. The Land Information System maintained by the National Land Survey is a part of the Finnish system of basic registers, which includes several other parties. Through scientific research it is possible to evaluate the information needs of an increasingly digital society: for example, the Cadastre 2035 research project is investigating the changing expectations of customers.*

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## INTRODUCTION

This presentation is a description of the development of the Finnish real property system. It describes the role of the National Land Survey in the administration of Finland and political goals concerning the land administration system and the real property system as a part of the basic registers of society. The last section of this presentation explains the needs and views of the future to be considered when building a reliable and trustworthy real property system.

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## I. BACKGROUND OF FINNISH LAND ADMINISTRATION

The Finnish land administration system is based on legislation enacted by the King of Sweden in 1734, at a time when Finland was a part of the Kingdom of Sweden. In the 19th Century Finland was an autonomous Grand Duchy of Russia, although the Swedish legislation concerning the land administration system remained in force. Following Finnish independence one hundred years ago in 1917, the same legislative principles were and are still in force. A good land administration system must be based on trustworthy and reliable legislation, which can be used as a starting point for innovative and time-bound operation models and service solutions.

The current Finnish land administration system serves a population of approx. 5.5 million people and shows how an area of 335,000 square kilometers has been divided into different—both privately and publicly owned—ownership units. The Finnish Cadastre contains approx. 2.8 million property units. Changes in society have meant an increase in urbanization so that 67% of Finns live in towns and cities. The development in this direction continues.

## II. THE ROLE OF NATIONAL LAND SURVEY

The National Land Survey of Finland, which is a central agency under the Ministry of Agriculture and Forestry, is responsible for tasks related to the land administration system as defined in legislation. The National Land Survey has six main tasks: 1) to perform cadastral surveys; 2) to maintain the land information system; 3) to maintain the national topographic data system; 4) to perform registration tasks related to properties (registration of titles, mortgages and special rights); 5) to maintain and develop IT systems both for its own needs and for the needs of agencies within the same administrative sector; and 6) to research and develop within the spatial data sector. The financial and operational management of the National Land Survey is handled through multiannual strategic performance agreements with the Ministry of Agriculture and Forestry. In annual performance agreements with the Ministry, the parties agree on the goals for the National Land Survey's influence on society. One goal is the reliability of the land administration system as the basis for collateral security for loans. Financial management is also affected by customer satisfaction, because charges from customers are allocated to the National Land Survey via net budgeting. The charges from customers only cover the costs of operations, it is not possible to make a profit. For this reason, the list of customer charges is ratified by the Ministry of Agriculture and Forestry. This is one way the Ministry

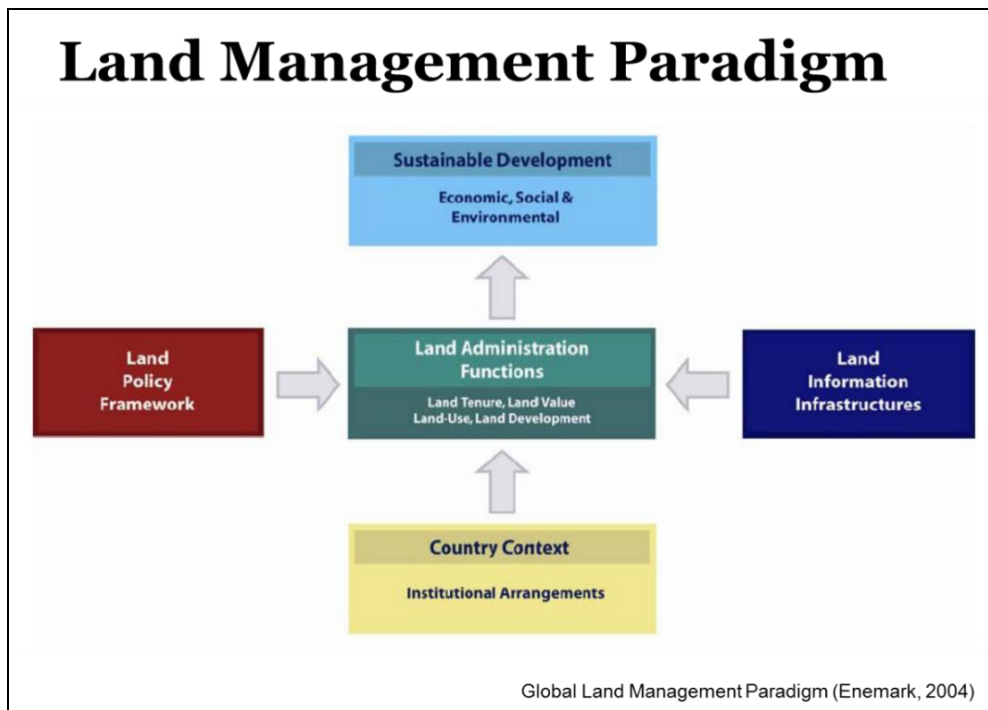
supervises the interests of landowners. The National Land Survey openly and transparently reports on its operations.

### III. THE STRATEGIC GOALS

The strategic goals of the Finnish land administration system are to observe the changing needs of society and to match them in a sustainable and reliable way to the existing system. This requires the analysis of changes and the comparison of different effects. Choices are based on careful and multidisciplinary preparations in cooperation with other authorities in the sector, various Ministries and representatives of landowners. Following definitions of policy, it has been found necessary to draft sector-specific strategies during the implementation phase. Examples are the project to rebuild the Cadastre 2020 or the land consolidation strategy 2025. Both involve changes in the operating environment that require changes in the operational processes or in the contents of the Cadastre. Even in this context, it is necessary to emphasize the changes in electronic operational processes.

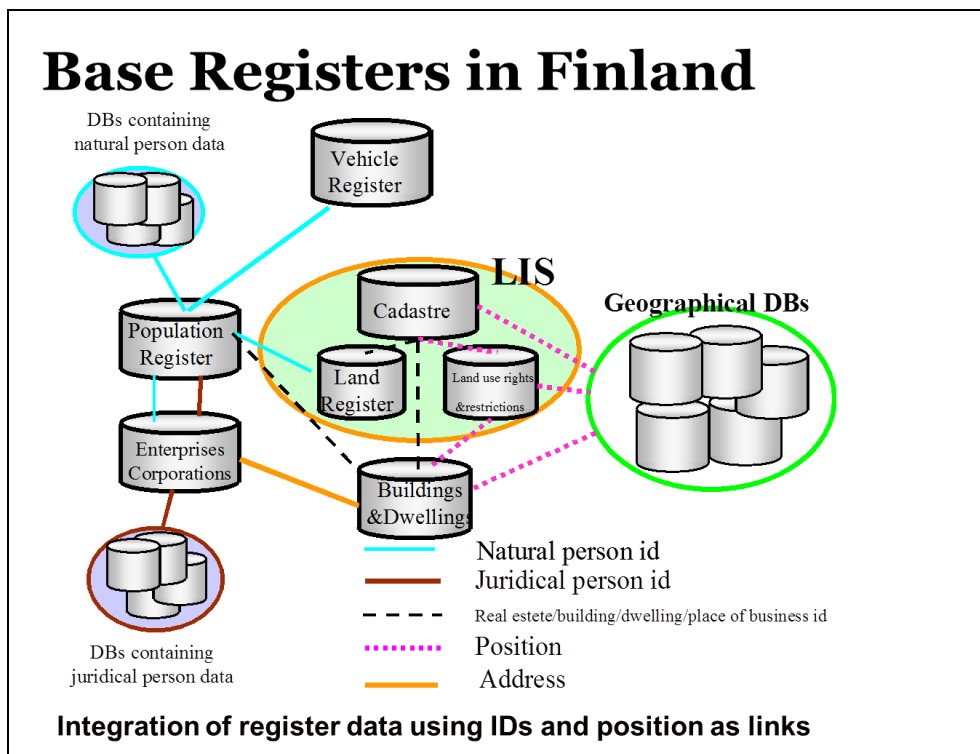
### IV. LAND GOVERNANCE

In 2004 Professor StigEnemark published the Global Land Management Paradigm showing how a properly functioning land administration system can create financially, socially, and environmentally sustainable development. Each characteristic of this paradigm can be found in the Finnish land administration system. However, the author's opinion is that the cultural, historic and judicial traditions of each country influence the emphases in each system.



### V. BASE REGISTERS

The premise for Finnish national information systems is the existence of certain basic registers, around which the logical information infrastructure needed by society can be constructed. It is a so-called basic register system, where real property units are one of the basic units of society. Other basic units include individual human beings, buildings and organizations. One thing all these have in common is identifiers. Information can be exchanged between registers using these identifiers. When map databases are included, the result is the core of the spatial data infrastructure needed by modern society. Thus a reliable land administration system is a part of the reliable information infrastructure of society.



## VI. THE LAND INFORMATION SYSTEM

In Finland, the Topographic database covers the entire country. Its contents have been agreed upon and they are uniform in extent and up-to-date. The Land Information System contains the information in the Cadastre and the title and mortgage register. The coverage of land use planning information (zoning) is not in a satisfactory condition.

Crucial actors in the Land Information System are the Ministry of Agriculture and Forestry as the authority responsible for pertinent legislation, the National Land Survey as the administrator and data producer of the system, the municipalities as data producers and private businesses as IT-managers and providers of information services.

The title and mortgage register contains information about property ownership (titles) and registered mortgages and special rights. The responsibility for maintaining the title and mortgage register was transferred from the District Courts to the National Land Survey in 2010. The reform was the result of long and careful planning and followed the same general trend as the rest of Northern Europe in the 2010s. In retrospect the decision has turned out to be a success from the customers' point of view, as all

matters related to real property are handled by the same authority.

The National Land Survey also maintains the Official purchase price register. Since 1982, all property purchases have been stored in the register, which is public and strengthens an open and transparent society. A public register serves not only the individual citizen but also the property market as a whole, by for example providing the data for price trend analyses.

## VII. LIS PLAYERS

Above the author has stated that there is also room for improvement in the Finnish land administration system. The lack of complete coverage of decisions concerning land use is one of the things that need improvement. The zoning monopoly, which is a part of the autonomy of Finnish municipalities, has meant that there is no national information service available. There is also room for improvement concerning the registration of nature conservation sites and privately owned nature reserves. The work continues.

## VIII. FUTURE PERSPECTIVES

When considering the needs of a future land administration system, the starting point should be customer needs. This applies whether the customer is the administration (international, for example the European Union, or national) or a private landowner. For this reason, the National Land Survey has initiated the project Cadastre 2035, which is intended to define future information needs. Recognized needs are, for example, 3D property formation, the integration of building and dwelling information to property information and the integration of land use decisions. It is, however, crucial to approach this matter scientifically and with a holistic view. What coordinate reference systems (plane and elevation coordinate systems and a gravity system) will be used in the future and what is the consequence for the land administration system? The introduction of bidirectional electronic services, where the customer can not only keep track of, but also directly influence the handling of his or her case using electronic channels, is completely new challenges facing the goals of the land administration system and its information service. When the goals are fixed and connected to the national framework, it will be possible to open new means for innovative alternative solutions. Technology and scientific research will be very helpful in achieving this. In Finland, we have started drafting a Policy Report on Spatial Data Infrastructure. The aim of this report is to create a framework for SDI at the parliamentary level or for its future development.

A good and reliable land administration system is a part of this. If we wish to improve operational productivity, a necessity for success in international competition, we must simultaneously develop legislation, operational processes and information systems.

#### CONCLUSION

The digitalisation of society changes established operating processes and creates new information system structures. It also demands clear goals for the legislation that steers our activities. Through scientific research it is possible to produce information that is needed as a base for good decision-making. Developing spatial data is the kind of work that requires cooperation between different administrative sectors.