Key words: SDI, cadastral mapping, GIS, surveying, land information, international transactions.

ABSTRACT

Spatial Data Infrastructure, SDI is emerging as the framework for a number of different spatial related information services. Land information is one basic pillar within this context covering all aspects of the property market, from creating single land parcels to land reform programs and the financing of investments in land and infrastructure. Managing land information is therefore of great importance regardless the stage of development in each particular jurisdiction.

Sweden has a very long history of mapping and cadastral activities, with Lantmäteriet’s history going back to 1628. This also means that we have a long experience in the field of using up-to-date technology and working methods.

In recent decades the IT-development has had an increasing influence on the business of land information on the cadaster evolution. The Internet boom has created a new and rapidly changing environment for the further development. This paper deals with two examples of how the new technique can help promoting services within our business in the future.

In order to increase efficiency in handling all kinds of spatial data Sweden’s Lantmäteriet is now developing ArcCadastre together with its partners ESRI and Leica. ArcCadastre is being developed to be a tool specially adapted for cadastral and mapping activities with different kinds of spatial management in different situations around the world. ArcCadastre is a unique solution that extends mapping functionality with survey and cadaster functionality.

Although land administration systems and records vary in format and content from country to country, they all have at least one requirement in common, namely, the need to satisfy the requirements of the land market. The demand for land registration services and associated data is increasing year by year together with a need for systems that can be used to efficiently manage the considerable volumes of data and also make it available to a wide range of users.

ArcCadastre is designed to support cadaster surveying activities, to handle geographical data and for map production. It is well suited for customer / country-specific extensions. The core product is the basic cadastral software and the tool for all mapping activities in the fields of large scale, small scale and utilities map production. The product contains all functionality needed for surveying and mapping purposes and for the greater part of the functionality that is common to cadastral workflow in different countries. ArcCadastre has been designed as a
multi-purpose tool for handling geographic data together with non-spatial data from other databases.

Functionality, which may vary between different user categories, or from country to country because of different local legal or other requirements, can be added by customisation. Hereby ArcCadastre can meet the needs of many user categories and for a wide range of applications such as municipal mapping, management of cadastral systems and the production of cadastral index maps.

To an increasing extent the European market is becoming more integrated. So far property transactions have remained quite national, and complaints have been made about the lack of a single mortgage market. In order to speed up the integration process Lantmäteriet has initiated a project for providing the market with a single entrance to land information across borders. This project, EULIS, is carried out together with a number of European countries.

Today there are major divergences between the national markets for mortgage credit, which result in difficulties in establishing more open and competitive markets. One of the reasons for this is lack of – or difficulties in finding – adequate land information as a basis for selling and buying real properties or handling mortgage loans in other countries.

The EULIS project aims at proposing how an electronic European Land Information Service can be designed in order to promote a more open and competitive European market for real properties and mortgage credits. A more developed single market in this area would function as a driving force for growth and new jobs, while maintaining a high level of consumer protection and lower costs for mortgage credit.

The EULIS project aims to develop a co-ordinated approach for this public sector information. The project will support cross-border use of land information, but will also give important input for the development of the national services. Benchmarking and exchange of experiences between the participating countries will contribute to the development of efficient services in the involved countries as well as other countries.

A cross border service for land information will widen the market for real property. It will be easier to sell and buy properties between members of different countries. It will be easier to discuss a loan based on a mortgage credit with a bank in another country. The competition between banks and credit institutions will be sharpened, which will have positive effects for the consumers.

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