From Static to Dynamic Land Information Systems

Dear Chairman, Dear Delegates,

It is my great pleasure to address all of you in the name of Latvia as the presiding state of the European Union. The three priorities of the Latvian Presidency are Competitive Europe, Digital Europe and Engaged Europe. The increase in competitive capacity and the development of digital environment are also important tasks in the context of sustainable land governance.

After regaining independence in 1990, Latvia faced the tasks of restitution of private property rights and implementation of land privatisation. Today we can consider that the land reform has been successfully completed and the privatisation process of the public housing fund has been implemented. At the same time, the Cadastre Information System has been developed which in a digital form accumulates textual and spatial information about both land parcels and buildings, and flat properties in apartment houses throughout the territory of Latvia. These processes served as a basis for defining a further sustainable land and housing policy, and forming a single and all-embracing land administration model.

Land information is a basis for the development of a land administration system. Cadastral data play a very important role in this system. Spatial cadastral data are a backbone of the geospatial infrastructure of the country and cannot be replaced by a different layer spatial information layer. The cadastre register is one of the most important public information systems. Cadastre data, similar to address data, are significant in the existence of many other public registers. Uniqueness of cadastre is relation of place and person. Only with the help of cadastre it is possible to connect any geographical location with a person.

The development of the cadastre in Latvia, the same as elsewhere in the world, has always been connected with changing needs of the society and public administration. The greatest challenge for the cadastre over the last decade has been not to obtain initial data but to ensure that the information is updated and the data structure is maintained and developed in order to support decision making process of currently vital issues and future planning requirements. The task of cadastre and land information is to support governments in making the right decisions when struggling with such challenges as rapid urbanisation, climate change, natural disasters and poverty reduction.

In Latvia, the cadastre is an excellent example how to develop an information system in a short period of time and accumulate the data which support decision making on sustainable land policy, regional development planning, including city planning. The cadastre accumulates detailed information about both land and buildings. More than 100 various data fields describe buildings as physical objects providing information about the type of its use, space, its utilities and constructive elements, its age, physical condition and value. Essential information for housing policy is also apartment property data.

Building information is widely used in the construction planning process, property rights registration, housing administration and development planning.

Recently, public demand for cadastre data has increased rapidly. More and more data are used both in the public and private sectors. It has made us think not only how to develop information services and to make data easy accessible but also to look for new solutions to improve data quality. Today users use data much faster than it is possible to obtain them. There is a wide variety of data sets stored in the cadastre. However, data have a tendency to become out-of-date. To serve the user requirements, we are actively looking for and implementing new solutions that would ensure a regular systematic data renewal and dynamic data updating process. Currently, we apply more actively automatic data exchange solutions with other state information systems, the data obtained via remote sensing technologies and use of big data. New information acquisition channels are developed, a data declaration system has been worked out which will involve more owners and the community at large in the provision of data updating.

A modern land information system is a dynamic information system. For its operation, it is essential to provide not only integration of information systems but also a high level of cooperation among organisations. For instance, cooperation between a cadastre institution and local governments, cooperation between data holders and users. When the land administration system is evaluated as important and the need for high quality land information is recognised by the government at a high political level, than imore and more new solutions could be provided.

Today I would like to share my experience with you about the plans Latvia has in the organisation of the population census. In 2012, the Cabinet of Ministers of the Republic of Latvia adopted a decision that the next population census in 2021 is to be conducted by obtaining all the necessary information from administrative registers and other data bases and by using the information obtained in the regular surveys made by the Central Statistical Bureau, declining to poll the population via internet or in their place of residence. It has been planned to obtain full information about dwellings (which is one of the two population census survey groups, that are included in the population census programme) from administrative data sources. The main data source is the cadastre information system. In order to get ready for such a population census, it is required to take measures for development of both the cadastre and other public information systems to ensure compatibility of the required data and to improve data quality. Thus, a triple reduction in the costs of the organisation of this process has been envisaged. In addition, improvement of the amount and quality of building data will be advanced, which according to prior estimation, will increase additional real estate tax revenues even up to 10%. However, the main benefit will be qualitative and comprehensive statistical information about households which will, in the future, be a basis for making qualitative decisions in the field of regional development and housing policy.