

Comparison and Evaluation of Mature Cadastral Systems

Karolina Itäinen, Pauliina Krigsholm and Kirsikka Riekkinen (Finland)

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SUMMARY

High-quality cadastral systems are widely recognized as an important component of land administration system capable of supporting society in many important tasks, such as securing tenure and promoting sustainability. To adapt to changing operational environments, cadastral systems need to be developed. Comparison of the features of cadastral systems is one means to support efficient development process. However, most of the previously develop methods have focused on either emerging systems, or cadastral systems in general. To address the need for tools more suitable to compare and evaluate mature cadastral systems, we have developed a framework capable of identifying differences between matures systems. The framework aims for a holistic approach to cadastral systems, and includes six themes: 3D Land administration, Temporal cadastre, Multipurpose cadastre, Quality and interoperability, Institutional environment, and Users and services.

In this paper, we demonstrate how the framework can be utilized to compare and evaluate mature systems by applying it to the cadastral systems of six countries: Finland, the Netherlands, Denmark, Sweden, Lithuania, and New Zealand. We apply the framework on data collected from interviews with cadastral experts from these countries and aim to make observations on the applicability of the framework, and holistic methods of comparison, on mature systems. We explore the similarities, differences, and other observations of interest, as well as their implications to the development of comparative methods. The results highlight the usefulness of a holistic approach in differentiating between mature systems. Additionally, we observe possible weaknesses and pitfalls of comparative approaches to mature cadastral systems that warrant attention when further developing comparative methodology.