

# Prominent Themes and Challenges in Comparing Cadastral Systems

Karolina Itäinen, Pauliina Krigsholm and Kirsikka Riekkinen (Finland)

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## SUMMARY

A functional cadastral system enables land administration to support economic, social, and ecological sustainability and welfare. For these benefits to remain, cadastral systems need to be adjusted and developed to fit modern requirements. Due to development of cadastral systems being expensive and time-consuming, learning from the practices and trajectories of other systems through comparison is a constant topic of interest. This paper discusses the notable themes in evaluating cadastral systems and the challenges faced in comparing the systems. First, a framework for enhanced comparison of modern, developed cadastral systems with long traditions in registering land related rights, restrictions, and responsibilities, i.e., mature cadastral systems, is developed through a literature review. To test the applicability of the framework, we interviewed cadastral experts of six countries. The interviews focused on information contents, operational environments, and development goals of the cadastral systems. Based on our experiences from these interviews, we aim to draw attention to both emerging themes of interest, and possible difficulties to consider when comparing cadastres.

While each system has its unique challenges and areas of focus, similarities that warrant attention when comparing systems emerged. Major common theme emerging from the interviews is quality of data, especially in relation to the perception of quality and how it differs from the actual quality. Additionally, digital services are widely seen as an important area of development. Three main groups of challenges were identified that should be considered when comparing cadastral systems: semantic differences, different administrative structures, and lack of centralized knowledge. Based on these results, either a shared terminology with clear definitions for comparison or improved understanding of semantic differences is needed to avoid misinterpretations. Additionally, to better evaluate the multipurpose role modern cadastral systems serve, it may be necessary to widen the scope of evaluation from cadastral authorities and services they provide to include external services

based on cadastral data.

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