## **Rethinking Infrastructure within Denmark's Real Property Data Reform**

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## SUMMARY

Denmark is reforming the registration of real property data, which makes up a business case for significant efficiency improvements of the work flows between registers. This pertains both to redesigning core business processes with a view to reduce the risk of human error and to facilitate the handover to new employees who are not necessarily experts in real property and legacy IT systems.

In 2012, the Danish Government launched the Real Property Data Program (RPDP) with dual objectives. First, RPDP intends to improve efficiency of real property data registration and administration at central and local government levels. Second, RPDP establishes a common data infrastructure that stimulates the re-use of real property data in the public and private sectors. Currently, RPDP is in the development stages and is expected fully implemented and ready for operation by mid-2017. The program is backed by an open data initiative that makes most public data, including real property and map data, freely available to users.

The RPDP responsible parties are the register authorities (Cadastre; Building and Dwelling; Real Property Ownership and Land Registry) and the major public beneficiaries (real property valuation and taxation authorities). A detailed business case documents the potential efficiency gain for the RPDP to gather.

Today, Denmark's real property data is registered at independent public authorities using different keys for identifying real property objects, which makes it difficult to compare and combine data across registers. Thus, resources are used on quality checking data and double data entry at users' databases. RPDP deals with these data inconsistences in two ways. The data models of the various registers have been harmonized, and a new common agreed real property identifier replaces the old

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FIG Working Week 2016 Recovery from Disaster Christchurch, New Zealand, May 2–6, 2016 register-specific identifiers. A comprehensive data cleansing has been performed to improve the data quality of property registers: errors are corrected, irrelevant information is removed, and missing data is supplied.

The Danish RPDP approach is significant because of its both holistic and business-oriented view on IT-infrastructure developments. The approach is holistic because several IT-infrastructure aspects at four different registers have to be considered simultaneously. These diverse focuses are essential because even the most efficient work procedure fails to function without sufficient IT support or high quality data.

RPDP is business-oriented because each work procedure has been leaned to meet specific business requirements; it will simplify administration, reduce errors, and eliminate the obstacle to public and private-sector use of the data.

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