

Achieving and Maintaining Interoperability of Spatial Data

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SUMMARY

In Great Britain extensive work has been done to develop a solid framework for joined-up geographic information, the Digital National Framework (DNF), which acts as an enabler for a Spatial Data Infrastructure (SDI) and, as such, may be transferable to other countries [Murray, Munday and Bush, 2005].

This paper examines the associativity of geographic data to their reference as a result of work being done to implement positional accuracy improvement throughout Great Britain, with the goal to bring traditionally surveyed topographic maps to meter-accuracy against GPS. A particular methodology to analyze and store relationships between features, the Associativity Model, is presented along with first test results.

In the context of DNF these methods can be utilized to migrate data into the data model suggested by DNF, to manage the synchronicity of datasets over time and verify the use of datasets in conjunction with each other. The latter may be used to ensure data interoperability in the light of web services and future scenarios of serving geodata from multiple servers, maintained by multiple organizations into one application.