

The Academic SDI—Towards understanding spatial data infrastructures for research and education

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ABSTRACT:

The demand for geospatial data across different disciplines and organisations has led to the development and implementation of spatial data infrastructures (SDI) and the theory and concepts behind them. An SDI is an evolving concept about facilitating and coordinating the exchange of geospatial data and services between stakeholders from different levels in the spatial data community. Universities and other research organisations typically have well-established libraries and digital catalogues for scientific literature, but catalogues for geospatial data are rare. Geospatial data is widely used in research, but geospatial data produced by researchers is seldom available, accessible and usable, e.g., for purposes of teaching or further research after completion of the project. This chapter describes the experiences of a number of SDI implementations at universities and research institutes. Based on this, the Academic SDI, an SDI for research and education, is defined and its stakeholders are described. The purpose, scope and stakeholders of the Academic SDI are described based on the formal model of an SDI developed by the International Cartographic Association (ICA) Commission on SDIs and Standards (formerly the Commission on Geoinformation Infrastructures and Standards). The results contribute to understanding the state-of-the-art in SDI implementations at universities and research institutes; how the Academic SDI differs from a 'regular' SDI; and which role players need to be involved in a successful SDI implementation for research and education.