

Geospatial Information Management, a Feasible Tool for Small Island Developing States?

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ABSTRACT

Starting from a use case in disaster management the presentation illustrates the need for and the benefits of an operational Spatial Data Infrastructure (SDI), the fundamental base of Geospatial Information Management. The basic components of an SDI will be discussed in the context of the current status of worldwide SDI implementation. Best practice studies originating from several continents will be presented. The second aim of the presentation is to identify lessons for SDI developments in developing countries by analysing the European initiative INSPIRE (Infrastructure for Spatial Information in Europe) more in detail. Potential benefits for SDI in developing countries emerging from development and use of many international technical standards will be emphasized. Special attention will be given to the work of the Open Geospatial Consortium (OGC) and the International Organization for Standardization (ISO). The basic steps of building an SDI are described in the INSPIRE directive. This work can be used as a comprehensive check list for SDI development and implementation in other regions. Results of extensive academic research, published pilot studies and on-line training materials, procedures of verification with defined test beds are available and can be used as a knowledge base for SDI development in developing countries. In that way INSPIRE is seen to have a high potential of technical relevance for the implementation of other national and regional SDI's. By co-ordinating 34 data themes for 28 sovereign member states with more than 500 million inhabitants, multiple languages and different legal systems, the European initiative INSPIRE addresses a highly complex area. Therefore, it is assumed that the political, legal and administrative conditions will be different for other SDI's. Consequently, the corresponding components of an SDI probably will have to be developed separately in other regions and countries. The key message of the presentation is the statement that a comprehensive toolbox of best practice SDI implementation cases all over the world is available and ready to be used as a knowledge base for the development of Geospatial Information Management in Small Island Developing States.

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