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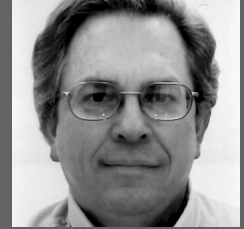
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# SDI SPANS MULTIPLE INFORMATION INFRASTRUCTURES

## OR WHY OUR MULTIPLE PERCEPTIONS OF 'SDI' MATTER IN REAL LIFE

Readers will notice that this issue is chock full of articles dealing with Spatial Data Infrastructure (SDI), which some may find strange for a magazine noted primarily for its focus on geomatics industry technology. Yet information infrastructures underpin most of modern society – public sector information (PSI), health information, transport information, homeland security information. All are examples of existing information infrastructures within which data is collected, processed, managed, disseminated, governed by rules and regulations, etc. SDI is no different, except that the sort of information we have dubbed 'spatial' (or 'geographic' or 'geospatial' or ...) tends to span all these other information infrastructures because "everything is somewhere and everything happens somewhere", hence the added value of the 'place' attribute for much information.

Introduction of the US National SDI by Presidential Executive Order in 1994 is seen by many as a key event driving SDI strategies and formations of the past 15 years. Yet I believe that the European INSPIRE Directive (Infrastructure for Spatial Information in the European Community) is more important today, because of its truly multinational and multidisciplinary coverage – 34 data themes applicable in all 27 sovereign states comprising the European Union – which must be implemented, by law, over the coming years. The issues being faced in developing INSPIRE are truly complex, covering standards (many of which are now agreed at international level, but require 'profiling' for Europe), specifications for harmonised data and multiple types of interoperable services (discover, view, download, transform), cost-benefit considerations, and SDI performance monitoring and reporting requirements. The thorny issues surrounding access, charging (cost recovery) and use of spatial data at a time of global economic meltdown – and the resulting holes in government budgets – are also complex and a 'one size fits all' approach does not suit all participants in this grand venture. There are many valuable lessons to be learned in watching INSPIRE develop.

Articles in this month's issue cover such wide ranging topics as geographic names,

geodemographics, SDIs in small islands and for the marine sector, developing geoscience information in Africa and the 'human side' of SDI. Yet these articles only hint at the complexity of SDI implementation, which spans myriad sectors of the economy and society, all producing, holding, needing or using 'place based' information. Add to this some recent comments as to whether SDI is a 'process' or a 'thing', and confusion grows! On this latter subject, it was recently pointed out to me that even if SDI is a 'process', it results in a number of 'things' which create the resulting information infrastructure. These 'things' can be observed, their implementation cost and use value computed or imputed, their performance measured against some stated goals.

Which leads me to another topic for an article that we could not print this month due to space limitations, but which will appear in the July/August summer issue, dealing with assessing cost-benefit of SDI implementations, especially in relation to local government participation. In my own experience in this arena, I am not convinced that it is possible to conduct a comprehensive cost-benefit study for something as complex as an information infrastructure, spatial or otherwise. The reasons are too many and too complicated to explore in an editorial piece like this, but practical experience and years of research into the subject lead me to this conclusion. However, I believe that it is possible to define identifiable elements or components of an SDI, at organisational, regional (sub-national), national, regional (trans-national) and even global levels, and conduct cost-benefit analyses on the individual components. By then 'adding up' the results, one can develop a view of just how cost-beneficial SDI implementation really is – or could be.

In the current economic climate, with every government under financial pressure to spend its limited resources more wisely than ever before, perhaps now is the time to take a closer look at the cost-benefit of SDI implementations around the world.