

Geospatial Solutions  
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Annual Market Map

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Most new technologies invariably descend from heady heights after their initial introduction and either land on the technology trash heap or disappear into the information technology world where they become important but also invisible. The capabilities these latter technologies offer often become commonplace: It took Daniel Boone weeks to cross the Commonwealth of Kentucky and now any grandmother can do it in a car in an easy day, including a long lunch.

One of the key mileposts along the technology adoption road is standardization. What would our electrical system look like if each state had its own voltage and frequency standards? How useful would our mobile phones be if they could not be used outside their home areas? How much more useful will geospatial technologies become as we reduce the impeding friction caused by inability to share and to interoperate?

The answer to that last question is: Much, much, much more useful. Everything we do happens somewhere and some-when - just think about daily movements of goods and materials. Many of our daily spatial considerations are so mundane that they do not require technology to measure or facilitate. Many activities, however, would benefit from more effective use of information technology but never get that help because the cost to get the answer exceeds the value of the answer. Creation and effective use of standards reduces those costs and increases the value. The inexorable march towards standardization will continue and the number of issues addressed will grow as the cost falls and more and more solutions become economically affordable.

Market forces will play their role in the standards march as more and more vendors and integrators figure out how to match their business models to capitalize on the value of standardization. Just like international telephony standards enable transparent global access to diverse national telephone systems, international geoprocessing standards enable transparent global access to diverse geospatial data and services. The U.S. Geological Survey's National Map initiative, by using consensus, industry standards from the OGC, will add its weight to this march toward the use of standards. For the last two years, the UK Ordnance Survey has been distributing its data using an application profile of the OGC Geography Markup Language (GML). The Canada Geospatial Data Infrastructure (CGDI) and National Forest Information System (NFIS) applications depend on standards from the OGC, OASIS, and W3C. I believe that the momentum has already become irresistible and in the year 2005 the move to standards as an integral part of the geospatial infrastructure will become undeniable.