

Transitions

In October 2011, it will be exactly forty years since I got my first job as a young geodesist. Having worked in academia ever since, I have been at the cutting edge of the developments in our domain. I was even able to actively contribute to these developments in some areas and to prepare young students and professionals for what was coming. Now, when I look back, I can see how much our field has changed - and there is more to come.

In fact we are in the middle of very fundamental changes. Of course everybody is aware of that, but it became particularly obvious to me when my colleagues and I were formulating a strategic view for ITC for the coming years. We had to formulate our vision on the future of Geoinformation to prepare the students of ITC for their tasks in helping their countries and home organisations to adjust to these rapid changes. We saw the following key transitions:

- New 'mobile' data access provides 'on-demand' geoinformation. Data processing and integration transforms raw geospatial data to contextualised geoinformation. The data supply will be able to satisfy the growing and increasingly diverse demand, and the integration and often interactive analysis of data and/or geoinformation will support the new 'information society'.
- Users are no longer merely interested in 'What is where' but rather in 'What is happening where and why'. The periodical registration of 'snapshots' (maps) of our environment no longer suffices. Users need information about the actual processes that are driving change in their environment in order to be able to make meaningful, informed decisions.
- The paradigm 'Collect once, use many times,' that was introduced just two decades ago is no longer generally applicable. Spatial data is now often collected on an ad-hoc basis at such a high frequency and volume, by both remote and human sensors, that data availability is no longer an issue.
- Geoinformatics activities are becoming an integrated part of mainstream information technology as they become increasingly embedded in application environments. They no longer belong exclusively to the domain of the geoexperts whose relative contributions are decreasing rapidly.
- Our societies will become more open and transparent - at least to those who master the methods of tracing the better information sources and of combining these sensibly into actionable information. In many cases, that information will be spatially explicit.

These transitions will lead to fundamental issues regarding organisational and personal privacy, data custodianship and proper management of semantics at several levels. Data credibility and quality and data coverage might not be as systematic or as good as the data snapshots traditionally collected by mapping agencies. In regions where geodata is in high demand and where the 'snapshot approach' lags behind, recent data is often preferred to accurate data (as defined by the traditional professionals). Many applications do not critically depend on positional accuracy. From this point of view, the traditional mapping agencies and survey professions are no longer the dominant players in the field. Instead, they are now in among other players comprising users and providers of geoinformatics product and services, both public and private.