

Somewhere Deep Inside

It is about thirty-five years since I left university with the Dutch equivalent of a MSc degree in Geodesy. Computers had just been introduced into our field and we were gaining some first experience in their use and an early understanding of what they would mean for our profession. We were exploring the possibilities of Doppler satellite measurements for positioning and navigation. But our education was still for a profession with a long tradition. The lifetime of surveying equipment was a multiple of the professional lifetime of a surveyor. Photogrammetric instruments required an investment of several annual incomes of a photogrammetrist, and these instruments were supposed to operate for at least 25 to thirty years. We were taught that a primary and secondary triangulation, even for a small country like the Netherlands, would take several years, and the maintenance of these networks would involve a ten-year programme. Revision of the topographic map of the Netherlands was on a cycle of seven to ten years.

Stable Profession

Mapping processes were indeed slow; investments had a time horizon of about 25 years. The lifetime of data was fifteen years or more; fifty was quite normal. The basic concepts and methods of geodesy and surveying had hardly changed for more than a century. And consequently mapping organisations had a long lifetime too; a hundred years was no exception. This all meant that geodesy and surveying was a stable profession with a stable professional community. I am talking about just thirty years ago.

Professions Change

And now The rapid development of ICT shifted the emphasis in our field from data capture to data management. The technical lifetime of equipment (especially ICT) is down to about three years and the cost per unit is a fraction of the annual income of a professional. Technical innovations force us to renew software every five to seven years and the underlying concepts every eight to twelve years. And this means technical disciplines or professions change radically every fifteen to twenty years. It is not very likely that a young graduate will remain working within their educational domain for the full length of their career; or, to put things a bit more bluntly, it is not very likely that a technical profession will exist this long.

The Old Mentality

Where once we had a well-established professional community, we now see a much more mobile and diverse one involved in the mapping business. This is exciting; professionals from different disciplinary backgrounds have become involved in the business and as a result our field is very dynamic and multi-faceted. But amidst all the excitement I sometimes sense deep inside me a little room in which a hidden cupboard contains some remnants of the old geodetic mentality. And this gets me worrying, which leads to the question, “who in this drifting community still understands the old geodetic concepts of data quality, precision and reliability?”