



## Geomatics always more accurate

Geomatics has always been a science of “truth and accuracy” containing a set of geographic techniques. But it has mainly evolved technically and strategically.

Before 1990, the priority was to improve the profession with automated mapping, data collection, and updated maps of the territory. Soon after, land management computerization and improved organizations functioning have become fundamental to stimulate the market to evolve towards exchange, distribution, and geographic knowledge sharing thanks to new software tools.

These tools created to improve the technical performance as data collection and edition didn't stop evolving. And with the arrival of the internet, the exchange of data after 2000 was imposed legal constraints. However, professionals were suddenly facing a problem related to the public understanding of technical data and were obliged to work together to develop a common territory mapping.

Cadastral operations, geological and mineral mapping, navigation and road traffic assistance are all areas in which professional use and consumer data cohabited. In fact, we can now find road maps everywhere, and even in a digital format on the Web.

Aerial photography has certainly helped to diversify the areas of use of geographic information, and in 20 years, the evolution of Geomatics has evolved from technical concerns towards collaborative problems centered on understanding and assimilation of the data.

Thus, the development of IT tools has played and still plays a large role in the evolution of the processes. Indeed, the tools available before the 90's allowed only to use certain data, such as plans and maps. However, the instability of the software and the lack of precision of GIS tools at the time allowed the emergence of new computerized devices dedicated to the observation of the territory.

Now, the focus is on sharing data and functional aspects such as interoperability tools, or data translators. But today, the challenges are not technical, but of a strategic nature related to understanding the players new technologies like LiDAR. The lack of training and support causes organizations to have to work as before, without the benefit of these new innovative tools.

Yet, geomatics are more oriented towards large environmental and societal issues that bring the profession to be updated from a technological point of view. Satellite, computers, GPS, digital photography, and more recently the 3D scanner and LiDAR, come to shake up the teams and how they work.

