

Geospatial Engineering in the 21st Century

Zhilin Li, Editor-in-Chief

The *Geomatics Journal of Hong Kong* is renamed as *Journal of Geospatial Engineering*.

This is a natural development. Since its launch nearly 3 years ago, this journal has attracted submissions and subscriptions from international community. On the other hand, the Hong Kong Institution of Engineering Surveyors also makes every effort to make this journal an international one. As a result, the phrase "of Hong Kong" is dropped from the title.

The use of "geospatial engineering" to replace "geomatics" is also deliberative. Geomatics is widely used by surveying disciplines. For example, most schools/departments of surveying of universities in Australia, Britain, Canada and US have been changed to schools /departments of geomatics (or geomatic engineering). However, other communities in geo-information seem to be reluctant to adopt this term and some other terms have also in use.

Recently, the word "geospatial" has become very popular, all over the world. It was perhaps first used by the USGS in a programme called "geospatial data infrastructure". The term "geospatial" is normally used to refer to spatial information (positions, size, shapes, orientations, relations, etc.) for phenomena at geographical scales. This is used in contrast to the other two terms -- "geographical" and "spatial". The former is used to refer to both geospatial and non-spatial attributes of geographical phenomena. The latter is used to refer to spatial information at any scale, from sub-molecular to intergalactic.

In some literature, "geospatial" is used together with "technology". People working in geospatial technology are sometimes called "geospatial engineers". In correspondence to the word "geospatial engineer", the term "geospatial engineering" has also been in use. e.g. in the Britain. The editor has also been told that the term "geospatial engineering" has been formally defined in some English dictionaries, although having not seen it personally. It refers to the science and technology used to acquire, store, manage, analyse, present and apply geospatial data in two or three dimensions, referenced to the earth by some type of real-world coordinate systems (e.g. national geodetic systems). Indeed, it encompasses cartography, GIS, geodesy, GPS, photogrammetry, remote sensing and surveying.

With these in mind, it has been decided to change the name of the Journal to "Journal of Geospatial Engineering". It is hoped that the term "geospatial engineering" represents the most recent development in geospatial information industry and this journal will become a flagship in the 21st century and beyond, by publishing interesting articles in this discipline.

In normal issues, this journal will publish a mix of papers in cartography, GIS, geodesy, GPS, photogrammetry, remote sensing and surveying, both original research papers and practical papers that are of interest to practitioners. It will also try to include reports, reviews and other useful information. This journal will also publish issues with special emphasis on particular topics. For example, a set of four papers on "deformation monitoring" has been selected for this issue.

The chief editor hopes that the papers in this journal are of interest to you and that you will also make contribution to this journal in the future. Indeed, this is my journal, your journal and thus our journal. Let's work together, to make this journal an influential one in geospatial engineering in the 21st century and beyond.