

Should We Replace the Word 'Geomatics'?



In response to the findings from a recent poll by the Geomatics Professional Group Board (GPGB) of RICS, Brian Coutts traces the evolution of the word 'geomatics' and argues that the time has come to consider a change.

That geomatics word has reared its (ugly) head again. The Geomatics Professional Group Board (GPGB) of RICS recently conducted a poll regarding the use of the

word "Geomatics" to describe what used to be its Land and Hydrographic Surveying Division (LHSD). Gordon Johnston, Chair of the GPGB, reported recently that "insufficient responses have been received to progress the issue". So it seems that, at least for some, there remains such a degree of antipathy towards the term that a further change might be considered. Geomatics was a term that was contentious at the time of its introduction in 1998, and has remained so.

Jon Maynard reported that in 1998 only 13% of the Land and Hydrographic Division voted on the proposal to change the name to the Geomatics Faculty, and of that 13%, 113 were in support and 93 were opposed. Extrapolating those numbers suggests that there were at that time about 1585 members of the LHSD. The figures given convert to 7.1% in favour and 5.9% against - a margin of 1.2% of the membership! Clearly not what one might call a decisive vote, nor a mandate for change, especially when considering that 87% expressed no opinion.

Where Did the Name Geomatics Originate?

It is frequently assumed that the term came from Canada and progressed to Australia and then to the United Kingdom. The debate in Britain that resulted from the proposed change of surveying university course names, and the division of the RICS, to embrace the new term was contentious at the time, and makes interesting reading in the annals of what was then *Surveying World*. Stephen Booth's call for "... more promotion of what geomatics means ..." appears to have gone unheeded in 2011.



Has the use of the word geomatics to replace surveying failed?

While there is anecdotal evidence of the geomatics word being used as early as 1960, it is generally accepted that it (*Geomatique* in the original French of which *geomatic* is the English translation) was first used in a scientific paper in 1975 by Bernard Dubuisson, a French geodesist and photogrammetrist (Gagnon and Coleman, 1990). It is recorded that the word had been accepted by the *Comité international de la langue française* by 1977 as a neologism. Hence, not only did it exist in 1975, but it had a meaning! While not defined explicitly by Dubuisson, its meaning is described in his book as being related to geographic location and computerisation.

At that time it did not catch on. It was not until Michel Paradis, a Quebec surveyor, picked up the term that it began to be used more extensively. Laval University brought the term into academic use in 1986 with the introduction of a bachelor's degree programme in Geomatics (Gagnon and Coleman, 1990). From Quebec it spread to the University of New Brunswick, and then to all of Canada. The bilingual nature of Canada was most likely an important factor in its adoption and spread in that country.

Why Change?

It comes, therefore, as somewhat of a surprise that senior members of the surveying profession, when the term "geomatics" was introduced to Great Britain, maintained that it could be adopted and given whatever definition those who adopted it chose to suit their own needs. The reasons given for the need to change were firstly to improve the image of surveying by sounding more modern, up-market and embracing of new and developing technologies. Secondly (and possibly, in reality, more importantly) to improve the attractiveness of the profession to prospective candidates of university surveying programmes.

Why Change Again?

In hindsight it would seem that this was an optimistic prognostication. Surveying university programmes have generally been absorbed into schools of engineering. Numbers of students have reputedly continued to drop, or at least have not improved, and the profession at large has not adopted the term to incorporate it into the titles of the practices nor been inclined to call themselves "geomaticians". Neither, it seems, do the public know what geomatics means. The use of geomatics to replace surveying, particularly land surveying, seems to have

failed on all counts. Furthermore, the evidence suggests that the GPGB of the RICS is no longer convinced that geomatics is a term that it wishes to continue to use in its title.

Research conducted by the author in 2014, and the very fact that the GPGB has seen fit to raise the issue, indicates that there remains at least a residual dissatisfaction with the use of geomatics as a descriptor for . . . something. It is not for the profession, as it seems still to be widely accepted as “surveying” or “land surveying”. This is not only so in the United Kingdom, but is also true in Australia, and even in Canada where the term’s life began. In Australia geomatics has generally fallen into disuse and has been replaced by “spatial science” which itself is losing ground to the more recent and progressively ubiquitous term - “geospatial science”.

In many of the Canadian provinces, geomatics has been attached to engineering, suggesting that surveying might be another branch of that discipline. This is particularly true at the University of New Brunswick where “geomatic engineering” stands alongside other branches of engineering, such as civil and mechanical.

What Could Replace Geomatics?

So if geomatics makes its practitioners unhappy, what might replace it? One of the common factors in its unacceptability is the loss of the reference to surveying. If one can have geomatics engineers could one have geomatics surveyors? Probably not, I would venture to suggest. That would likely lead to even greater confusion.

Given the ever-expanding need for and ability to accurately define the location or position of everything, both absolute and relative, then the word “spatial” comes to mind. That is, position or location in space. If that position in space is then relative to the framework of the planet, then geo-spatial becomes a natural choice. Given the knowledge of accuracies in relation to location that is core to being a (land) surveyor, the increasing ability of multiple tools of varying accuracy to supply positional data, and the continuing development of applications to which such knowledge can be applied, the profession grows in importance - the profession being that of the Geospatial Surveyor.

While “land surveying” has a long and proud history, the reference to land has probably outlived its usefulness and relevance. The skill-set of the modern surveyor now enables him or her to apply their tools, expertise and their understanding of the precision and relative accuracies of measurements from diverse sources, to the much expanded areas of application, well beyond the traditional “surveying and mapping” areas. This now needs to be recognised but while maintaining the association with the traditional profession. When a qualifying descriptor is required to distinguish the former land surveyor from the many other activities that use surveying in their titles, Geospatial Surveyor satisfies that need.

References

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