

The way forward for PLATO as a statutory body in the transitional period towards the new SA Geomatics Council

by Paul Marshall, PLATO

Abstract

Some background and PLATO's activities on behalf of the public and its members over the last couple of years, and an outline of the way forward for PLATO as a statutory body in the pending transitional period towards the new SA Geomatics Council.

History

Pre 1950

Prior to 1950 land surveyors were officially known as “government land surveyors” and carried out the surveys of land grants, mining titles and other land rights on behalf of the government and were responsible to the Surveyor General.

During the first half of the twentieth century, registration for surveyors dealing with cadastral boundaries was with the Office of the Surveyor General.

The successful completion of a very comprehensive “Trial Survey” which included astronomical position determinations and a law examination was a pre-requirement to this registration

Membership of a provincial Institute of Land Surveyors was obligatory to practice in a specific province

1950

1950 saw the enactment of The Land Surveyors’ Registration Act 1950 (Act 14 of 1950). The planning and discussion leading up to this legislation started in 1934. That was sixteen years prior to its enactment.

Registration by way of the Central Committee of land surveyors was applicable only to land surveyors practising in the Cadastral field.

The requirement of a “Trial Survey”, although less rigorous, under the auspices of the Surveyor General remained in place and a four-year honours degree in surveying was set as the minimum academic requirement for registration.

This Act, in terms of its rules, established an enforceable code of conduct. This code was strictly enforced and some land surveyors removed from the register for periods of ten-years or more for making false entries in a field book. The strict and by today’s standards restrictive rules pertaining to advertising, touting and supersession were also enforced.

1984

In March 1984 the Professional Land and Technical Surveyors Act was enacted replacing the Land Surveyors’ Registration Act No 14 of 1950.

Although enacted in March, the first sitting of the new council occurred on 10 September 1984, and consequently this date is identified as the commencement of the Professional Land and Technical Surveyors Act No. 40 of 1984.

This legislation was the culmination of well over ten years of discussion between the State, a provincially fragmented land surveying profession and the Institute of Topographical and Engineering Surveyors of South Africa (ITESSA).

The act became commonly known as the “PLATO ACT”. “PLATO” being an acronym for “Professional Land and Tegnise Opmeters” from a time when it was politically expedient to combine English and Afrikaans in the same word when naming of organisations such as Eskom and Technikons (spelt with a ‘K’ instead of a ‘C’).

The non-bilingual acronyms suggested prior to the enactment were “PLATSCO” (Professional Land and Technical Surveyors’ Council) and PLETOR (Professionele Land en Tegnise Opmeters Raad).

SASGI Proceedings 2013 – Stream 2

This Act introduced the first registration opportunity for survey technicians and technologist surveyors. The only professional category that was available at the inception in 1984 was that of professional land surveyors. The professionals in the other categories tended to already be registered as professional land surveyors.

For “non-academically qualified” applicants, 31 December 1984, was set as the cut-off date for meeting the minimum experience requirements to register in terms of the “Grandfather Clause”.

Requirements for registration with PLATO

PLATO registration implies a recognised degree of academic and practical competence relevant to a specific category and registration level.

The PLATO Act recognises three levels of competence, namely:

- Professional (Four year University Degree [or a recognised equivalent] plus an articles period of 270 to 300 days culminating in a PLATO law examination)
- Technologist (National Diploma [or a recognised equivalent] plus a minimum of three years of specified practical training under the supervision of a PLATO registered technologist or professional and a PLATO law examination)
- Technician (National Diploma [or a recognised equivalent] and an examination on the PLATO Act)

Those responsible for the drafting of the Act, which included many persons from the land surveying profession, The Institute of Topographical and Engineering Surveyors, The Hydrographic Society, the Association of Air Survey Companies and from government, saw fit, at the time to define the conditions under which certain registration categories would be permitted to operate.

Professionals and Technologists: once complying with the registration requirements are permitted to operate their own practices unsupervised and perform work for their own account.

Technicians: although academically qualified are considered to have insufficient experience for PLATO to recognise that they are competent to operate for their own account.

Name change of the Act to the Professional and Technical Surveyors Act of 1984

In 1993 the discipline of mine surveying was added to the disciplines already being registered by PLATO. In order to accommodate this additional discipline it was necessary to make certain amendments to the Act. The most significant being the name change.

The title of the Act was changed to the Professional and Technical Surveyors’ Act. The word “Land” dropped from the title and “Land Surveyor” replaced by “Surveyor” throughout the Act.

Albeit a bit pretentious – there being very little that could be considered to be philosophical about the role and functions of PLATO, the ‘PLATO’ acronym, remained in common usage. There is something seriously lacking in “PATO” as an acronym.

December 1993 was set down as the “cut-off” date for the experience requirements for registration in the mine surveying category in terms of the “grandfather clause”.

The registrations of professional mine surveyors led to the realisation that there was in reality no reason why there should not be a category of professional surveyor in all the other disciplines as well. This concept had simply not been considered in 1984, the only “Professional Surveyors” then being land surveyors.

1994 saw the first registration of professional surveyors in other categories.

2001 to Present

This is the period of my presidency of the Council and obviously the period of which I am most familiar. During this period there have been some positive and some less positive times. Apart for the ongoing day to day running of the council there have been, in my view, four main “milestones”.

These are:

- The recognition of the BTech qualification as the minimum academic requirement for registration as a professional surveyor in categories other than professional land surveyor
- The opening of a register at all levels of registration for geo-information science practitioners

SASGI Proceedings 2013 – Stream 2

- The accreditation of all academic institutions offering geomatics qualifications
- The introduction of a continuing professional development programme

2002

Saw the first hint towards a new registration Act. The Deputy Director General in the department attended the PLATO meeting in Stutterheim and advised that the existing PLATO Act was outdated and needed a rewrite.

This proposal had already been addressed in previous years for several reasons, not the least being the references to Institutes of Land Surveyors of “Transvaal”, “Orange Free State” and “Natal” (These institutes themselves had already undergone a renaming process and were now referred to as “Northern Provinces”, “Freestate and Northern Cape” and “KwaZulu-Natal” respectively.)

The consequence of this suggestion was to put any amendments to the Act or even the rules on hold and was to plague the council, the professional institutes and ITESSA for at least the next ten years.

2004

PLATO Recognition of the BTech Degree in Geomatics

The PLATO Council recognised the BTech qualification in surveying as the minimum academic requirement for registration as a professional surveyor.

This was to apply to all disciplines other than professional land surveyor. The significance of this was that there was now an academic opportunity for registration in the professional surveying categories other than through the BSc Honours degree in surveying, the latter continuing to be the minimum requirement for professional land surveyors.

This was a significant step and underwent some robust debate in the build up. The BTech had until this time been assessed as not meeting the minimum requirements in the areas of maths, science and professional practice.

The registration of GISc as a PLATO registerable discipline

Also in 2004 the council, in consultation with GISSA, resolved to open a new registration branch to be known as geo-information science.

Because of the impending legislation which was in early drafting phase in the department, no changes to the existing legislation were considered and representation by members of GISSA on the council was informal and by way of agreement only.

December 31, 2004 was benchmarked as the cut off date for prior experience for all three categories of GISc in terms of a grandfather clause.

There was, until recently, no formal qualification in GISc other than add-on diplomas and post graduate honours and masters qualifications. These qualifications were often added onto the full spectrum of undergraduate qualifications including Arts, Science, Forestry, Agriculture and several others. None of these were recognised as fitting the PLATO basic academic requirements for registration, many of which are woefully short in the fields of maths and science and generally have no professional practice or ethics courses in their curricula.

The PLATO view point has always been that at the Professional Level GISc Practitioners should be significantly more than GISc “users”. In other words a Professional GISc Practitioner should be a person who can consult and give advice on the setting up of data bases and other criteria to provide a GIS model that will cater for his or her client’s needs.

Because the lack of an established qualification in GISc to measure the applications for registration against, every application for registration had to be individually assessed. This was both time consuming and to a large extent subjective. Applicants could only be assessed on the information that they provided. This, in many cases, lead to dissatisfaction with the outcome for the applicants. Many felt that they were deserving of more or compared themselves with similarly qualified colleagues who had been assessed at a higher level.

Surveying Profession Bill of 2004

Eventually, the first “secret/leaked” version of the new draft registration Act appeared. This draft initially surfaced as the “Surveying Profession Bill of 2004”. A true “cut and paste” of the Planning Professions Act, “Planner” simply being replaced with “Surveyor”.

2005

October; the first official publication of the draft bill, in exactly the same format as the “secret” version. This bill was farcically “road showed” in November requiring comment by January 2006. This bill was specifically intended to exclude geo-information science as a PLATO discipline.

The steering committee responsible for the drafting of this bill comprised only employees of the department with absolutely no input from the then existing PLATO Council or any of the recognised institutes or any other stakeholders such as Transnet or Eskom. Both previous registration Acts had been a culmination of discussions between industry and state. While written input by stakeholders was allowed from time to time, the composition of the steering committee has remained exclusive to employees of the department.

A new PLATO Council should have been nominated in this year, 2005. This did not happen as it was felt that the new legislation was imminent and so the then existing council was appointed until the enactment of the new Bill. That was eight years ago!

2009

Accreditation of all institutions offering qualifications in surveying

During July 2009, the Education Advisory Committee of PLATO visited and accredited all seven institutions offering surveying qualifications. These institutions were the four Universities of Technology namely Durban, Tshwane, Cape Peninsular and Mangosuthu as well as the Universities of Cape Town, KwaZulu Natal and Johannesburg.

All of surveying qualifications offered by these institutions were accredited as meeting the minimum academic requirements for registration with the council. A common challenge for each was the difficulty in meeting the necessary numbers of suitably qualified academic staff and all were restricted by budgetary constraints to meet the high cost of the modern equipment required for training purposes.

Towards the end of this year, four years after its initial appearance as the “Surveying Profession Bill of 2004” a revised Bill reappeared. This draft contained some concessions but still had the same fundamental sticking points, specifically the minister’s control of the council and the limited size of the council. The major positive change being that it was renamed “The Geomatics Profession Bill” and as such was inclusive of geo-information science as a PLATO discipline.

2010

Academic models in geo-information science approved by the council

In November of 2010 the council approved academic models for standard entry recognition in all categories of geo-information science. This was a culmination of at least two years of discussion between the council and the various institutions that were potentially likely to offer courses leading to registration in the branch of geo-information science.

Immediately following the recognition of the GISc academic models the council revised and approved academic models for the branch of professional land surveying and all categories in the branches of engineering, mine and photogrammetric surveying.

2012

Accreditation of the academic courses in geo-information science

During July of 2012 PLATO accredited qualifications leading to registration in the Professional and Technologist categories of geo-information science at the Universities of Pretoria, Cape Town, Stellenbosch and Salzburg as well as the Cape Peninsular University of Technology.

The consequence of this is that all persons qualifying at these institutions are automatically eligible for registration with PLATO. Qualifications obtained at any other institution will in future still have to be assessed by the PLATO non-accredited qualification committee at significant cost in both rands and time to the applicant.

PLATO introduces a continuing professional development Programme (CPD)

In October 2012 the council finalised and published the Continuous Professional Development programme rules with the first cycle commencing 1 July 2012.

SASGI Proceedings 2013 – Stream 2

CPD was not simply a whim of the PLATO Council. PLATO as it turned had fallen behind most other South African statutory councils in the introduction of a CPD Programme. CPD in various forms under various guises is also an internationally recognised criterion for continued registration.

In South Africa the CPD requirement for continued registration has been compulsory in the medical professions for some considerable time and has seen a new impetus in other professions in recent years. The new Geomatics Profession Bill (Section 8(1)(d)(ix)) makes specific reference to a compulsory CPD programme.

In short the CPD requirements of PLATO registered persons are:

- Professional and technologists twenty credits in a five year cycle with a minimum requirement of three credits per year
- Technicians thirteen credits in a five year cycle with a minimum requirement of two and a half credits per year

In October 2012, the 2011 version of the Geomatics Profession Bill was submitted to the National Assembly

Where to from here?

The new Geomatics Profession Bill of 2009, (now published as Bill B4-2013) is currently in the later phases of the parliamentary process, with the very likelihood of being finalised before the end of this year. Considering the times between the start of discussion and the enactment of the two previous registration Acts (16 years for Act 14 of 1950) and (at least ten years for Act 40 of 1984) then the ten years to get to this point of the new Bill doesn't seem so bad.

Since it first appeared in 2005 as the Surveying Profession Bill, which as I pointed out earlier was nothing more than a "cut and paste" of the Planning Profession Act No. 32 of 2002, I have been a staunch and often outspoken opponent to this Bill.

The Planning Profession Act caters for a single discipline, planners. The Geomatic Profession embraces several disciplines across the very broad spectrum of "geomatics", including land surveyors, mine surveyors and geo-information science practitioners – all with very different academic backgrounds, legislative processes and constraints. Adapting the "One Act Fits All" to cater for the various and different disciplines within the geomatics industry will be a major challenges for the new council.

The final draft of the Bill as presented to the Parliamentary Committee on Rural Development and Land Reform is still essentially the same as the original draft, however more recently the department has taken cognisance of some of the input from the various stakeholders, specifically SAGI, IMSSA, GISSA and PLATO. At this point in time it is unclear quite what the final draft will look like but any changes at this late stage will most likely be minimal.

There is little point in continuing to debate the merits or not of this legislation, it is going to happen and the time for that event is getting closer.

Some of the significant differences between this new Act and the PLATO Act are

- The fundamental difference between the new Act and the current 1984 Act is the extent of the ministers involvement in the affairs of the council. The new council will be controlled by the minister while the current council is simply answerable to the minister.
- The industry is going to have much less input in the nomination of its members to the new council. This will be by way of a publically advertised process with the final choice being by the minister. In the 1984 Act members of council are nominated by the organisation they represent and are appointed by the minister. The minister may for a valid reason refuse to appoint a nominee but may not appoint a person not nominated.
- The minister will appoint the president and the vice presidents of the council. These will no longer be positions elected by the council members themselves as is currently the case.
- The council will be required to meet twice a year as opposed to the current once a year. Not necessarily a bad thing but certainly a costly change considering that the council is spread across the country.
- The council will be funded to a much larger extent by the department, which will, as a consequence, have greater financial control of the council. The current council is self funded and is largely independent of state funding.
- The terms of appointment of the council members will be extended from two to four years.
- The rules, under which the council will function, will need to be rewritten by the new council. No mean task; the planning profession, some 10 years down the line, are still in the process of trying to get approval by the minister for rules drafted in terms of the planning profession Act.
- The new Act provides for the publishing of a recommended tariff of fees. This is seen by many in the industry as a positive incentive for adopting the new legislation. How the council will draft a "One Tariff Fits All" for the

SASGI Proceedings 2013 – Stream 2

geomatics industry is also likely to be a major challenge. Because the publishing of a guideline tariff is not specified in the 1984 Act and because of concerns of the impact of the Competitions Board the current council has not published a tariff since 2003.

- The new Act specifies that the council must establish a CPD programme. Because this is a specified duty of the council it will allow it much more authority to enforce participation in the programme by its members. (Ironically the planning profession has yet to establish a compulsory CPD programme.)
- The Education Advisory Committee will no longer be an appointment by the minister but will be a sub-committee of the council and will be known as the Education and Training Committee. Considering the amount of work done by the PLATO Education Advisory Committee, one would imagine that the authors of this legislation have little concept of what is involved. The Education and Training committee will need to be more than a two or three person committee with permission to co-opt. This committee will need suitable and sufficient permanent members and will need the backing of the minister to properly carry out its functions, which could include the denying accreditation to institutions.

The transitional process:

- Once the Geomatics Profession Act is enacted it will be necessary to proceed with the advertising processes for the soliciting of potential candidates to serve on the new council.
- The minister then will need to apply his or her mind to the candidates, taking cognisance of the voluntary associations and paying specific attention to demographics and gender.
- Once the council members, the president and the vice-presidents have been appointed by the minister the date of the first council meeting will need to be announced. This date will then be the commencement date of the new geomatics Profession Act.
- The new council is required in terms of the new Act to, within 90 days and with consultation with relevant stakeholders, publish a “Code of Conduct” for its members. The fact that this requirement is set out in the Act and no provision is allowed for an extension of time means that the council will need to proceed with this task immediately subsequent to its first meeting in order to achieve this.
- The existing PLATO Rules will remain in place until new rules, drafted by the new council, are approved by the minister. Where a conflict between the new Act and the existing rules may occur, the Act will prevail. This will relieve the council of the immediate pressure of drafting the rules but could risk some degree of complacency and this matter may not be treated with the necessary urgency.
- The new council will be obliged to honour all existing commitments made by the PLATO Council.
- The Education Advisory committee will remain in place until a suitable Education and Training Committee can be established. Whatever the makeup of this committee, it will need to be suitably staffed to carry out the work for which it is intended. The most onerous task being the two yearly accreditation (as set out in the Act) of qualifications offered for PLATO registration at all institutions offering surveying, mine surveying and geo-information science. This will be neither a small nor a cheap task, even on a four or five year cycle.
- A minimum of five of the existing council members must form part of the first new council.

In short one can only hope the PLATO goals of enhancing the professionalism and credibility of its members by maintaining high academic standards of its registration criteria while simultaneously providing a degree of protection to the public by the fair and just sanctioning of its members who are in conflict with the established code of conduct continue to be applied.

Contact Paul Marshall, PLATO, Tel 011 436-2133, vdwant@iafrica.com