

The Surveying Profession Needs to Think Ahead

During a kick-off event in late January in Athens, Greece, Chryssy Potsiou took on the presidency of the International Federation of Surveyors (FIG) after having been elected at the four-yearly congress in Kuala Lumpur, Malaysia, last summer. Potsiou is the first woman to lead FIG. She has been active in FIG for many years and sees it as one of the main tasks of the federation to change the minds of governments in order to secure property rights for the millions of people currently lacking them.

Congratulations on the presidency! Can you tell our readers a little more about yourself?

Thank you! I studied surveying engineering at the School of Rural and Surveying Engineering at the National Technical University of Athens (NTUA). I graduated in 1982 and I finished my PhD in 1995. I started my research activity in photogrammetry and regularly participated in ISPRS conferences. Then gradually, over the years, I moved into

the fields of cadastre, land management, property valuation, urban planning and formalisation of informal settlements. After graduation I worked at NTUA in various positions and in the private sector, eventually becoming an associate professor at NTUA.

How did you become active in FIG?

I started participating in FIG conferences after graduation and regularly presented my

scientific work. Actually, I was one of the very few young surveyors within FIG at that time. Firstly, I was a correspondent member to Commission 7 of FIG. After several years of that I became a national delegate from the Technical Chamber of Greece (TCG) to FIG Commission 3 in 1999. Through my involvement in FIG my professional interests gradually changed from purely technical aspects to the management of land. I steadily gained more responsibilities in Commission 3 and went on to become chair of Commission 3 in 2007 and FIG vice-president in 2011, before becoming elected president just last summer.

Why do you think FIG is important for the profession?

FIG supports international cooperation among its members for the progress of surveying in all its fields and applications, rather than only in focused, specialised technical disciplines, and in various regions all over the world as well. In addition, FIG has a close cooperation with global organisations like the UN agencies and The World Bank. That cooperation means that members have a better understanding of the value of our profession in terms of its contribution to society, the environment and the economy. FIG members understand the current global trends and the



▲ FIG past president CheeHai Teo (2011-14) hands over the FIG chain of office to the new president Chryssy Potsiou.

world's needs in the context of improving their skills and methods in order to better serve the public and to maintain the sustainability of the profession.

You mentioned the cooperation with The World Bank and the United Nations. Do you have other partners in mind?

Improving cooperation at national level with our member associations, academic members, corporate members and affiliates such as the national mapping agencies and also with governments will help us to make a real difference in people's lives. Strengthening our relationships with our corporate members and the business sector, both outside and inside FIG, is also among our priorities, as well as improving our cooperation with sister organisations and regional associations.

What will be the main focus during your presidency of FIG?

Our main focus will be on providing an enhanced response to the changes we experience constantly in our lives, while ensuring a prosperous future for the profession in all regions.

You're the first woman to head up FIG. Is that important to you? And to others?

I was fortunate to be born in a country that provides free and equal access to education for both genders. This also applies to employment opportunities in Greece. Therefore, I do not consider my situation unique or unusual. I hope to see all people, all women, from all regions, have access to education and professional opportunities in general. We know there is still much to be done in this field and I will do my best to contribute to the global effort for the human rights of women, against discrimination and to equal access to housing, land and property rights. As far as other people are concerned, so far I can only say that this position is important to my Greek colleagues; at TCG and HARSE we have a common strategy to promote the current international trends and the best practices in the management of land in Greece for the benefit of the local society, the national economy and the environment, and in parallel to ensure the future of the profession here.

How do you view the 'new era for land administration'?

It looks very promising. The provision of reliable and current spatial information about land and property, and the rights to own and

use property, as well as the value of these rights has gained global recognition amongst governments and international organisations regarding people's prosperity and well-being. Therefore land administration has become a top issue on the global agenda.

Do you foresee complete cadastral systems for the developing world in the near future?

The global progress that has been achieved in the last five to ten years in geospatial information provision and management is greater than what was achieved in the whole history of cadastral development before then. This progress is increasing at an enormous rate. We have moved from e-services to mobile services which, when applied to land administration, will very soon facilitate the establishment of cadastral systems in the regions most in need. In my opinion what may slow the procedure down is a lack of government determination to recognise property rights quickly and affordably, and that process is vital to the success of the cadastre.

What would be the most compelling reasons for governments to speed up?

Governments need to understand that housing is directly linked to economic development. We know from Hernando de Soto and his research that housing, regulated ownership rights and a functioning market are a way to build wealth. We try to prove to politicians through metrics and real numbers that recognising citizens' property rights improves the national economy very quickly, and the more they delay in doing so, the greater annual GDP loss they create. That is a reason governments should acknowledge and act upon.



What are you doing to convince them?

We are promoting the impact of our work in the implementation of the global sustainable development agenda. That is why we are here, that is what FIG is devoted to! Our vision is not just to do our job well, not even to do what we do better and more efficiently, but actually to create a better world around us. It's a lifestyle. If you participate in FIG and if you are active for a long period, you actually contribute to change. Every active individual FIG member contributes to change. From my own limited experience, I can say that I've seen things changing gradually. That is very exciting and rewarding. I hope I can influence that even more in my position from now on, especially through my activity in the formalisation of informal settlements, security of tenure, registration of property rights and provision of affordable housing.

How can urbanisation be estimated and how should the associated problems be tackled?

There is a constant flow of people from rural areas into urban areas as people search for ▶

Chryssy Potsiou

Chryssy Potsiou is president of the International Federation of Surveyors (FIG). Before that she was vice president and member of the Council of FIG. She has held several other positions within FIG. Potsiou is an associate professor at the School of Rural & Surveying Engineering, National Technical University of Athens (NTUA). During her academic studies she received scholarships from NTUA and TCG, and awards from the private sector. She graduated in 1982. Since 1992, she has been employed at NTUA. In parallel, she has worked as a consultant on several research programmes and projects. She has more than 30 years' experience in education, training and international capacity building. She was a member of the board of directors of the Hellenic Mapping and Cadastre Organisation and of KTIMATOLOGIO SA, the agency responsible for the implementation and operation of the Hellenic Cadastre. She is an elected member of the board of the Hellenic Association of Rural and Surveying Engineers (HARSE). She has spent 12 years as an active bureau member of the UNECE Working Party on Land Administration. In her professional career, she has written several publications and more than 140 scientific papers.

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better jobs, better opportunities and better futures. This will not change; urbanisation is inevitable. What the world must do is manage urbanisation. It will require massive development of infrastructure supported by all disciplines of surveying, including data collection and measurement, positioning and navigation, land administration, valuation, planning, construction management, coastal zone management and marine cadastre and

I STRONGLY BELIEVE THAT YOUNG SURVEYORS ALL OVER THE WORLD HAVE A PROMISING FUTURE

so on, to support municipal governments in their growth. Geospatial information has changed the administrative concept. We are moving from a model of historic data to a platform of real-time information for the provision of services to facilitate mobility, energy saving, environmental protection and disaster management. Never in the past have natural disasters had such an impact as now because of the accumulation of populations in higher densities. As a result, most of our future professional activities will be in urban areas.

Do you feel there is enough interest in the problems in rural areas, with evictions and land grabbing, versus urbanisation?

Rural areas are also going through reform. However, in order to achieve better results in any reform, it is important to recognise existing tenure rights, access to land and sufficient compensation to enable displaced people to restart their lives and businesses somewhere else. Otherwise the continuing massive influx of poor and displaced people to the cities will be accompanied by a growth of peri-urban areas of informal development, creating even more social unrest and economic exclusion. Urbanisation is inevitable, but people living in slums does not have to be inevitable.

Which geomatics techniques do you regard as holding the most promise?

The rise of UAVs with cameras and laser scanners accompanied by advanced software to provide them with some autonomy and intelligence is one of the most promising developments we have seen. Their capacity to enable high-resolution orthophotos and 2D site map production at multiple zoom levels; beautiful 3D scenes and maps that can be

navigated online; 2D and 3D measurements as well as change detection over time and automatic feature extraction, can enable authoritative and accurate information to be used by any modern land administration system. Developments in point cloud processing are also moving fast; UAVs are used for a broad spectrum of applications both in rural and urban areas and soon even within the built environment. In general, the current trends in software modernisation, making 'app-like', all-in-one smart solutions to simplify the process from sensor to information, and the interconnectivity of total stations, GNSS and mobile devices are two of the most promising developments of our times.

And what about crowdsourcing?

Geospatial information has changed the perception of how governments seek growth; reliable cadastres have a direct impact on lending practices and national economies. Governments are seeking innovative ways to encourage universal parcel recording as quickly as possible. Citizens also understand that innovation facilitates good decision-making for all people in the public and private sectors alike. The question is, how much can governments afford to provide? There is a need for increased capacity building in assessing the value of data derived through

crowdsourcing. Authoritative data can be provided and assured by government agencies but also by crowdsourcing with the engagement of surveyors.

You attracted a lot of young people to today's kick-off event here in Athens. Is that important to you?

One of my objectives with organising this event in Greece, especially now that the country is in a difficult situation, is to offer some inspiration to young surveyors and to show them that they actually have a lot of opportunities and that they can change things. As an academic, I strongly believe that young surveyors all over the world have a promising future and a great role in facilitating change, providing innovative tools and reliable solutions, and implementing reforms in the management of land and the built environment. Young Greek surveyors in particular have a promising future in which they can contribute to Greece's economic and social recovery.

What would make you most proud at the end of your presidential term?

The successful implementation of any part of the new FIG Work Plan towards achieving the global sustainable development agenda goals, and enabling a real difference in people's lives, would make me proud.

What message would you like to convey to the readers of GIM International now, at the start of your presidency?

It is urgent that the surveying profession thinks ahead, predicts future changes, foresees the requirements of the next generation of citizens and provides structure for the way forward. It is our role to provide solution functionality, reliably and affordably for a complex and rapidly changing world that cannot wait. Management of natural disasters cannot wait, the need to support global sustainable development cannot wait, management of economic disasters cannot wait. We need to respond fast. ◀