

## Workshop 1

# Students Where Are You ?

Feedback from four working groups

28<sup>th</sup> February 2009

Rob MAHONEY, UK



## Workshop Facilitators

# Firstly a big thank you to:

- ❖ Tamas Jancso
- ❖ Carmen Grecea
- ❖ Henny Mills
- ❖ Gerhard Navratil



## Discussion Topics

1. Is the surveying profession itself too unattractive for today's young people?
2. Is the low number of surveying students the result of an insufficient and inadequate education?
3. Is the low number of surveying students the result of only a missing or none active marketing of the surveying study and/or the surveying profession?
4. How to enhance technical interest and interest especially for academic surveying education? Mustn't technical education and training begin at kindergarten/ elementary school?
5. How to encourage life long learning, project management and quality management?



## What did we find?

1. **Is the surveying profession itself too unattractive for today's young people?**
  - ✓ Surveying is not as attractive as other larger disciplines (e.g. law, medicine)
  - ✓ It is not clear what is involved - photogrammetry etc is not seen as part of surveying
  - ✓ There are huge global and regional variations:
    - UK and Egypt - Surveying compares well to other professions
    - Hungary - Surveying not unattractive but unpopular
    - Slovenia - For a minority in society it is neither attractive or unattractive.
    - Japan – There is a different situation compared to Europe. It can be unattractive because of its relationship to the construction industry that has a poor reputation. Also outdoor and low salary are problems.



What did we find?

1. Is the surveying profession itself too unattractive for today's young people?
  - Romania - Remuneration is good and prospects are excellent and Surveying is seen as an attractive career
  - Carribean – GIS is changing the attractiveness of the profession and in particular to female students



What did we find?

1. Is the surveying profession itself too unattractive for today's young people?
  - Image is a problem. Regional differences in focus and approach and the labour market all impact.
  - Peers have a shallow understanding of what surveyors study/work in.
  - Our name makes us unattractive and invisible
  - Many sons and daughters of surveyors become architects! The perception is that architects are managers!
  - Where remuneration is poor attractiveness and perception is poor
  - FIG Young Surveyors have a Blog: FIG should have an on line video library to promote the profession



The profession is attractive because:

- ❖ Theoretical background (mathematics, physics)
- ❖ Applied computer science
- ❖ Geography meets engineering science
- ❖ Outdoors meets indoors

And the Professional work is exciting:

- ❖ Interdisciplinary
- ❖ Communication
- ❖ Foreign countries
- ❖ Management



What did we find?

2. Is the low number of surveying students the result of an insufficient and inadequate education?
  - ✓ The general answer is that this is not a problem
  - ✓ If you had to choose your profession most in surveyors would make the same choice again – thats encouraging!
  - ✓ Would you choose surveying for your son or daughter?  
 Some colleagues would not... because its not seen as high tech; harsh environment, some are afraid of the maths aspects of the profession and field work
  - ✓ Image: people do not know about the profession, they do not know what jobs they can take up after their studies

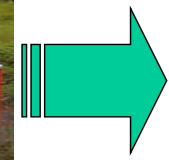


What did we find?

2. Is the low number of surveying students the result of an insufficient and inadequate education?
  - ✓ We do not promote the advantages of indoor and outdoor work as a surveyor
  - ✓ Surveying is not part of the school curriculum in all countries
  - ✓ Maths and physics are not very popular: Maths could be more interesting with real surveying examples
  - ✓ Maths teachers are not interested in making maths interestingly and bringing across the relevance, importance and applications of maths
  - ✓ School teachers need to be contacted because they have a big influence of on future of school children and their chosen direction of further study

Our public profile is poor: surveyors are the people standing on the highways looking through strange instruments

It needs to change .....





What did we find?

3. Is the low number of surveying students the result of only a missing or none active marketing of the surveying study and/or the surveying profession?
  - ✓ There are wide variations
    - Some marketing is aggressive because funding is tied to students – Word of mouth is important
    - One issue is prestige: surveying is not ranked highly by industrialists and this presents a ‘glass ceiling’
    - Students themselves are the best method of attracting new students
    - Direct approaches to schools are successful and in some cases with sponsorship from industry
    - Some countries sceptical on the three year vs. 5year degree

What did we find?

3. Is the low number of surveying students the result of only a missing or none active marketing of the surveying study and/or the surveying profession?
  - ✓ Visit schools: practical elements, show equipment – but its time and money
  - ✓ Naming of a degree programme: one name does fit all aspects of the profession
    - In Sweden name has been surveyed amongst school kids, concluding to Society Construction (2003) in the school of built environment now 3 times more applicants than places
    - Name is first contact to degree programme, therefore needs to be a catch phrase – for people who are undecided
    - But content also needs to be promoted, what do surveyor do? It needs to be promoted amongst other professions
  - ✓ How google earth is constructed?

What did we find?



3. Is the low number of surveying students the result of only a missing or none active marketing of the surveying study and/or the surveying profession?
- ✓ Marketing is time and financially expensive, requires man power
  - ✓ Societies to support local surveyors to visit schools
    - Generate exercises, examples for schools
    - In France OGE have one dedicated communication person, visiting schools
    - Generate material for teachers who are interested in mapping, surveying, e.g. maths or geography – exercises should be linked
    - Students like maths but don't know where to apply
    - FIG to take lead role to develop template for exercise which can be translated into national basis
    - Surveying should be part of school text books
    - French comics [www.geometre-expert.fr](http://www.geometre-expert.fr)
  - ✓ Surveyor only as outdoor surveying work, not aware of data processing, modelling etc.
-   Rob MAHONEY - WORKSHOP1 Feedback: Students Where Are You?

If we are failing to inform the public about what we do then ....



We need professional Marketing Support - FIG could put together a generic Marketing Package with Marketing Professionals

And ..... Why not **(we must)** use Electronic channels: Pod Casts, you tube, Web Communications, facebook, Blogs, Google earth?

What did we find?

4. How to enhance technical interest and interest especially for academic surveying education? Mustn't technical education and training begin at kindergarten/ elementary school?
- ✓ The current situation is that in many counties primary education embraces the topic some explicitly others not so explicitly.
  - ✓ Kindergarten is seen as too early to start – 20 years ago I would like to be a cleaner/policeman/train driver
  - ✓ Influencing secondary level knowledge is essential
  - ✓ There are examples of videos used some in surveying some in other professions
  - ✓ Educate them in what? Surveying is too dynamic to promote?
-   Rob MAHONEY - WORKSHOP1 Feedback: Students Where Are You?

What did we find?

4. How to enhance technical interest and interest especially for academic surveying education? Mustn't technical education and training begin at kindergarten/ elementary school?
- ✓ Children stories and comic books should contain surveying
  - ✓ Make children aware at an early age what surveying is all about
  - ✓ Colouring books – educational
  - ✓ Summer kids academy – academic staff should volunteer to give lectures
  - ✓ Dissertation prepare school materials
  - ✓ Use social frameworks for example 'Scouting'
    - sketch maps, map reading etc.
    - Showing the use of GPS (show technology)
-   Rob MAHONEY - WORKSHOP1 Feedback: Students Where Are You?

Action should start as fast as possible – small steps only!  
 We need an attractive image of the surveyor (compare to Navy Pilot)

We must inform the public about the global problems we work at – relevance for their daily life

What did we find?

- How to encourage life long learning, project management and quality management?
  - In some countries there is mandatory CPD where either a chamber of engineers or a professional body is involved
  - In countries with no requirement to join a chamber of engineers or a professional body there is a problem
  - This can be achieved through problem based learning. Access to a coach. Knowledge sharing of problem solving. E-learning enhances life long learning – independent of time, cheaper, easier access (not location based)

You will be out of business if you ignore CPD or LLL  
 What you learn now is how to learn your skills may be redundant in a few years time.

One way to encourage CPD is to expunge members from a chamber of engineers or a professional body if they fail to comply with CPD or LLL requirements – it requires monitoring  
 This is a stick and not a carrot, but it would be better to encourage surveyors into compliance in the first instance

