Commission 1 Work Plan 2011 - 14

• Working Group 1.1
  – to consider the current and future role of the surveyor
  – to review the definition of the surveyor
• Co-chairs
  – Winnie Shiu (Hong Kong)
  – Curtis Sumner (USA)
  – Brian Coutts (NZ)

Towards 2020 -
Critical Developments in Land Surveying in 60 years
Chickens and eggs – Question:

- Does the current role of the surveyor flow from the definition, or should a definition flow from the current role of the surveyor?
- Maybe the answer is . . . neither!
- Might the definition of the surveyor not flow from the foreseeable future role of the surveyor?

Implications of the answer:

- What practitioners see as their role in society
- How the current practitioners maintain their current and anticipated competencies
- What academia teaches the incoming generation of surveyors
- How the profession is marketed to society and to potential members
- The explanation of these implications is related to the perceived or claimed “crisis” in some quarters of the profession
Definition of the Surveyor

• The FIG definition of the surveyor was published in 1991
• It encompasses a broad variety of sub-disciplines and skills
• This definition includes what in some contexts (including Aust and NZ) are separate professional disciplines (eg Valuation, QS, Property Mgmt)
• Does the definition of “Surveyor” continue to withstand scrutiny 20 years later?
• This paper is intended only as an introduction to that question.
• Additionally, it focuses on the discipline of “Land Surveying”.

Other definitions that may be relevant

• Profession: An occupation in which a professional knowledge of some subject, field, or science is applied; a vocation or career, especially one that involves prolonged training and a formal qualification.”
  » (OED Online).
• Surveying: The determination and identification of the shape, contour, location and dimensions of land or water masses and their features, or planning and designing maps.”
  » (the gooduniversitiesguide.au.com)
Surveyors may come in 4 flavours:

- Professional general practitioners (owners or employees serving the public)
- Technician practitioners (also owners or employees serving the public)
- Surveying specialists
  - eg a hydrographic surveyor (professional/technical)
- Surveying scientists
  - eg a geodetic scientist

Advances in the past -

- Printing
- The maritime clock
- Logarithms and natural trigonometrical tables
- Mechanical calculators
- Telescopes
- The fine and accurate etching of protractors
- Measurement by (reducible) metal bands or staves
Critical developments since the 1950s

- Electronic distance measurement
- Miniaturisation
- Electronic calculators
- Aerial photography / photogrammetry
- Satellite positioning
- Computerised databases
- Other remote sensing (infra red, Lidar)

so where to now?

- Certain aspects of the traditional work of a land surveyor can apparently be easily achieved by a lay-person –
  - the location of a mobile phone super-imposed on a topographical map
  - a coordinated position for a land title boundary angle.
The BIG question -

- Do we need to redefine the “identity” of the professional land surveyor?