## Report to the 35<sup>th</sup> General Assembly FIG Working Week 2012 in Rome, Italy

## Task Force on Surveyors and the Climate Change

## **Report of Activities 2011-2012**

Since the Task Force was inaugurated at the 2011 Working Week in Morocco, it has finalized its membership, implementing a two-tier system comprised of full members and corresponding members. The complete list of full members is given below.

- John Hannah (New Zealand)
- Isaac Boateng (Ghana/UK)
- Paul van der Molen (Netherlands)
- Neil Pullar (FAO/New Zealand)
- Michael Sutherland (UK)
- David Mitchell (Australia)
- Stig Enemark (Denmark) Informal, Ex Officio member.

The list of corresponding members has largely been compiled from those who attended the TF meetings in Marrakesh and indicated a desire to be kept informed of progress.

The TF has made minor amendments to its initial Terms of Reference (ToR) so as to clarify direction and intent. Its primary goals are now as follows:

- 1. To identify those areas where surveyors can assist uniquely the international community to better understand the effects and impacts of climate change and can provide advice on how to mitigate and cope with the effects of climate change.
- 2. To assist FIG meet its MoU partnership commitments to the FAO, UN-Habitat, International Association of Geodesy, (IAG), and the World Bank with respect to climate change studies and initiatives.
- 3. To consider and comment, as appropriate to the skills of a surveyor, on the design and use of any global measuring, monitoring and management systems that might be used to identify and mitigate the effects of climate change.

It is anticipated that the TF will submit a final report at the FIG Congress in Kuala Lumpur in 2014. A draft structure for this report is shown below.

- 1. Technologies
  - a. For the Monitoring of Climate Change (Data collection)
    - i. Sea Level (e.g., tide gauges, GPS, satellite altimetry, etc.)
    - ii. Ice Mass Balance (e.g., GRACE, absolute gravity, etc)
    - iii. Land Cover (e.g., Remote sensing, photogrammetry)
    - iv. Land Forms (LIDAR terrestrial and airborne)
  - b. For the Analysis of Climate Change Impacts (Data integration and analysis)

- c. For the Mitigation of Climate Change
- 2. Impacts of Climate Change
  - a. On Land Management and Land Administration (including re-settlement issues)
  - b. On Cadastral Boundaries and Property Rights
  - c. On Infrastructure (e.g., dams, water supply, etc)
  - d. On Land Economy (e.g., carbon credits)

The intent is to develop these topics from a surveyor's perspective by identifying those areas where the surveyor can bring his/her unique knowledge and skills into play. To this end, tentative responsibilities for various aspects of the report have been allocated amongst the TF members.

A draft Work Plan is given below.

- 1. TF Meets at the 2012 FIG Working Week in Rome (6-11 May)
- 2. TF Meets at the 2013 FIG Working Week in Abuja, Nigeria (4-11 May)
- 3. TF Meets at 2014 FIG Congress in Kuala Lumpur (June) and present its final report.

## John Hannah

Task Force Chair

17 February, 2012