

Climate Change Task Force: Report to FIG Working Week, Abuja, May 2013

Membership

The members of the Task Force are:

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 Task Force also has a number of corresponding members who are contributing to its work.

Activity Over the Last 12 Months

The Task Force met in Rome where two dedicated Technical Sessions were held as part of the FIG Working Week. The following actions were taken.

1. Subject to minor changes, the Terms of Reference were endorsed.
2. Confirmed the goal of producing a final report for the FIG General Assembly in Kuala Lumpur in 2014.
3. It was agreed that because of commonality of interest the TF would combine its technical sessions with those of FIG WG 8.1 at future Working Weeks.
4. The TF would next meet formally at the FIG WW in Abuja in May 2013.

Since the Rome WW, Task Force members have completed a comprehensive outline of the final draft report. Responsibilities for writing individual sections of this report have been allocated both to TF members and to members of associated commissions where there is a commonality of interest.

The proposed final structure of the report is shown in the Appendix below.

John Hannah
Chair, Climate Change Task Force
19 February, 2013

Appendix

THE CONTRIBUTION OF THE SURVEYOR TO CLIMATE CHANGE STUDIES

1. **Introduction** (1200 words)
 - 1.1. What is meant with Climate Change
 - 1.2. Climate change - challenges and priorities
 - a. Increase in frequency and severity of natural disasters
 - b. Rising sea levels?
 - c. Impact on natural resources
 - d. Impact on human settlements
 - e. Impact on food security
 - f. Economic impact
 - g. Etc
 - 1.3. What do we mean by 'surveyor'
 - 1.4. Previous FIG studies related to climate change
 - 1.5. The purpose of this publication
 - 1.6. Target groups for this publication
2. **The contribution of spatial science to climate change studies** (4000 words)
 - 2.1. Monitoring (requirements data on Sea level, Ice Mass, Land Cover, Land Forms....)
 - 2.2. Data integration and analysis
 - 2.3. Understanding issues of geographical scale (global, continental, regional, national, local, different requirements?)
3. **Tools for spatial data collection and analysis** (3000 words)
 - 3.1. Data collection tools
 - 3.2. Analytical tools
4. **Spatial aspects of mitigation and adaption to climate change** (4200 words)
 - 4.1. Urban areas/human settlements (reducing carbon/e footprint existing cities, adaptation measures, generation and transportation of renewable energy [solar, wind, geothermal, energy, cropping), design of energy landscapes)
 - 4.2. Rural areas (reducing carbon/e footprint existing cities, adaptation measures, generation and transportation of renewable energy [solar, wind, geothermal, energy, cropping), design of energy landscapes)
 - 4.3. Peri urban areas: rapid urbanization (special feature)
 - 4.4. Specific climate change adaptation sectors
 - a. DRR and Coastal management
 - b. Biodiversity and Coastal Ecosystems Resilience
 - c. Forestry and agriculture (REDD, REDD+) (300 words)
 - d. Food Security
 - e. Water resources
 - f. The Kyoto protocol and the establishment of emission allowances or carbon credits (compliance markets, voluntary carbon/e markets) (300 words)
 - g. Physical infrastructure
 - h. Capacity building

5. **Spatial aspects of climate governance** (inclusion of CC aspects in governance) (1200 words)
 - 5.1. Need for relevant data and information at decision makers level
 - 5.2. Impact on Policy and Land Policy
 - 5.3. Need for multi level collaboration and governance

6. **The application of the professional skills of the surveyor**
 - 6.1 Clarification Property Rights (Rights and Restrictions, Responsibility, Unbundling, externalities)
 - 6.2 Land Administration (ownership, value and use of land, energy labelling)
 - 6.3 Land management (planning, development, land use control, including energy sources, energy sinks and energy cascades)
 - 6.4 Spatial Information Management
 - 6.5 Valuation and taxation
 - 6.6 Positioning and measurement
 - 6.7 Disaster risk management

7. **Practical examples** (source: other FIG papers such as Friesicke & Kötter, Vranken & Broekhof) (10 pages, mainly figures)

8. **The role of surveyors and capacity building** (role of surveyors, new roles, requirements education and training) (1200 words = 2 pages).