International Federation of Surveyors
Fédération Internationale des Géomètres
Internationale Vereinigung der Vermessungsingenieure

## FIG Working Week and (GSDI-8)

FIG Working Week 2005 and the 8th International Conference on Global Spatial Data Infrastructure will be held in Cairo from 16th to 21st April 2005. The Organising Committee consists of the Egyptian Committee for Surveying and Mapping and the Egyptian Survey Authority, who together with the FIG office and GSDI office are in charge of the arrangements for the ference.

In addition to technical sessions, there will be several pre-conference workshops on Saturday and Sunday prior to the conference. Attendance at these workshops is free to those delegates who register for the whole week (pre-registration is, however, compulsory). Roundtable discussions on various topics will also be held during the week.

## Standardisation in the Cadastral Domain

A workshop on 'Standardisation in the Cadastral Domain' took place at the University of P nberg, Germany, on 9th a d 10th December 2004.

The workshop was held in the context of the European COST Action G9 'Modelling Real Property Transactions' and jointly with FIG Commission 7 'Cadastre and Land Management'.

One of the main dilemmas in the cadastral domain involves the lack of a shared set of concepts and terminology. International standardisation of these concepts, that is, the development of a common ontology, could potentially resolve many problems. Motivations behind standardisation efforts include meaning- exchange of information between organisations and efficient component-based system development through the application of standardised models.

A cadastral system entails land registration, the 'administrative/legal component', and (geo referenced) cadastral mapping, the 'spatial component'. Together these components facilitate land administration, and a land-registry/cadastral system provides the environment within which the process takes place. Data is initially collected, maintained and - probably the most relevant issue in standardisation - used and updated within a distributed environment.

Standardisation of the cadastral domain is in an initial phase and many non-co-ordinated initiatives exist.

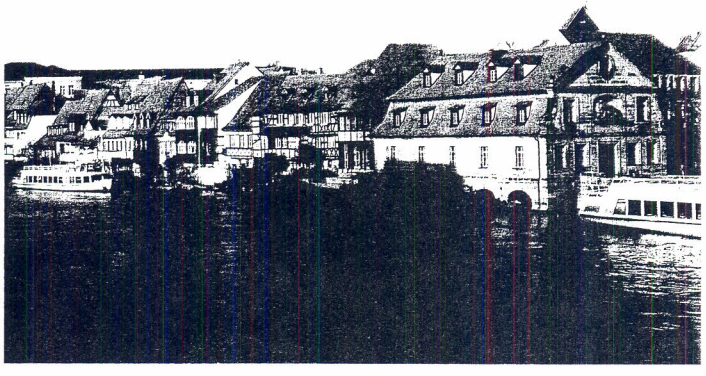
The specific goals of the workshop were as follows.

- To further develop administrative/legal aspects of the model: rights of persons to lands, customary and so-called 'informal rights', 3D aspects, legal and survey-based source documents.
- Further formalisation of the model (semantics ontology, knowledge engineering).
- To test the current model in different countries, i.e., evaluation.
- To involve the geo-ICT industry and standardisation institutes in support of implementations of the model.

Of great importance for the implementation of interoperable cadastral and land information data could be the Land Information Initiative of the Open Geospatial Consortium (OGC).

The workshop brought together 61 experts from nineteen countries, all representing various communities and disciplines involved in the cadastral domain and including legal specialists, surveyors and ICT-specialists. Twenty papers were presented, with keynotes from Prof. Andrew Frank, Austria, and Juerg Kaufmann, Switzerland.

Should there be one general legal model or many models? Common steps in workflows had to be identified, involving modelling of the legal situation in different countries. A single standard model might not be possible but a core model based on common concepts should be achievable; there should be a common set of concepts, allowing talking across boundaries. From the test in and between different countries it was concluded that no two systems are alike.



*Bamberg, Germany.*

The issues involved in a CCDM are now under scientific debate; further activities have to be identified in an international context, together with ICT industry, academia, COST, EULIS and professionals, and with a strong focus on and involvement of users. The CCDM might become the centre of a complex with interfaces, data exchange and interoperability. The market will drive the Geo-ICT industry; models will be developed as and when they are needed. Semantic aspects require further attention. From a European prospective, it can be expected that financial institutions such as banks, mortgages and security, and other users will drive development of a CCDM - but who takes the lead role? It was felt that an authority such as the FIG, with its well-established network, had to drive development of the CCDM. A co-ordinating group was needed able further to identify the driving force. 'Model boundaries' (what should and should not be included) required further investigation; rights, restrictions and responsibilities related to land should be included, as well as extension of fiscal rights and responsibilities. It was of the utmost importance to better communicate and disseminate the concept of the CCDM.

*Christiaan Lemmen, Commission 7*

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## Websites

www.oicrf.org
www.fig.net