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Item 9 of the provisional agenda*

Cadastral Workshop

(Submitted by Ian Williamson)

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15TH United Nations Regional Cartographic Conference for Asia and the Pacific, Kuala Lumpur, Malaysia, April 2000

Cadastral Workshop

2.00 - 5.30pm Thursday 13th April, 2000

WORKSHOP CONVENOR: Professor Ian Williamson, Department of Geomatics, The University of Melbourne, Director FIG-UN Liaison. Also representing Commission 7 (Cadastre and Land Management) i.williamson@eng.unimelb.edu.au http://www.geom.unimelb.edu.au/people/ipw.html

THE MISSION OF UN REGIONAL CARTOGRAPHIC CONFERENCES:

The mission of the United Nations regional cartographic conferences is to provide both a regional and interregional forum for member States, through their governmental institutions, professional and academic sectors, non-governmental organisations and the private sector, to discuss and share information on related institutional, legal, economic and technical issues and to advise national Governments, the United Nations and other regional and international organisations on policy development options related to cartography, surveying, mapping, charting, cadastre, GIS technology and spatial data infrastructures in support of sustained economic growth for sustainable development and environmental management. Resolution 1, UNRCC for Americas, New York, 2-6 June, 1997

OBJECTIVE OF CADASTRAL WORKSHOP: To establish a formal structure within the UNRCC for Asia and Pacific and the PCGIAP to ensure an ongoing cadastral or land administration focus and support for related activities

BACKGROUND

- 1. Overview the recent cadastral and land administration activities of the UNRCC for Asia and the Pacific (UNDESA) to date:
 - a) 13th UNRCC for Asia and the Pacific Beijing
 - b) 14th UNRCC for Asia and the Pacific Bangkok
 - c) UN-FIG Bogor Declaration on Cadastral Reform presentation
 - d) UN-FIG Bathurst Declaration on Land Administration for Sustainable Development - presentation
- 2. Overview of the activities of the Meeting of Land Administrators (MOLA) established under UNECE - presentation
- 3. Overview of the activities of Commission 7 (Cadastre and Land Management), International Federation of Surveyors
 - a) Statement on Cadastre presentation
 - b) Cadastre 2014 presentation
 - c) Workplan 1994-1998 presentation
 - d) Workplan 1998-2002 presentation
- 4. Discuss the cadastral and land administration activities of member States in the Asian-Pacific region:

a) Land titling or land administration projects

- b) Integration of cadastral and topographic data sets as part of a state or national
- c) Automation of cadastral systems
- d) Moves to develop national cadastral layers within NSDIs (including properties and addresses) - presentation on Australia's PSMA
- 5. Discuss the justification and needs of member States for a cadastral and land administration focus in the UNRCC for Asia and Pacific and the PCGIAP
 - a) Need to share experiences on cadastral reform
 - b) Need to justify cadastral and land administration infrastructures and reform in support of sustainable development
 - c) A focus to implement the Recommendations from the UN-FIG Bathurst Declaration on Land Administration for Sustainable Development.

THE WAY FORWARD

Following are the suggested steps that need to be undertaken to ensure UNRCC and PCGIAP adequately address cadastral and land administration issues and particularly the Recommendations arising out of the UN-FIG Bathurst Declaration.

- 1. Ensure a UN commitment to a cadastral working group possibly through a Resolution
- 2. Establish a Cadastral Working Group and identify a country or organisation which is committed to coordinating the Working Group under the UNRCC and PCGIAP
- 3. Appoint a Cadastral Working Group or Secretariat
- 4. Consider funding implications
- 5. Develop a Work Plan to address the relevant Recommendations arising out of the UN-FIG Bathurst Declaration:
 - a) Encourage nations, international organisations, NGOs, policy makers, administrators and other interested parties to adopt and promote the Bathurst Declaration in support of sustainable development.
 - b) Encourage all those involved in land administration to recognise the relationships and inter-dependence between different aspects of land and property. In particular there is need for functional cooperation and coordination between surveying and mapping, the cadastre, the valuation, the physical planning and the land registration institutions.
 - c) Encourage the flow of information relating to land and property between different government agencies and between these agencies and the public. Whilst access to data, its collection, custody and updating should be facilitated at local level, the overall land information infrastructure should be recognised as belonging to a national uniform service, to promote sharing within and between nations.
 - d) In order to increase knowledge of the global situation of land administration and land tenure, the United Nations undertake a study of global land administration issues such as the range of tenure issues, gender, urban agglomeration, land disputes, problems and indicators with a view to producing a global atlas and related documentation. Much of the needed data are already available in different UN databases.
 - e) Recognising the difficulties in interpretation of the many land administration related terms, develop a readily accessible thesaurus, translated into

appropriate languages, to facilitate a better understanding of the terminology used. Further, on the basis of selected criteria, use this to *prepare* examples of best practice in the field of land administration. This can be done using work already completed by FIG and FAO.

f) In view of the crucial importance of human resources in the management of land, ensure that there is sustained education and training in land administration. In particular, international agencies should seek to develop multi-disciplinary, multi-national training courses in land administration and make these available at the local level through the use of modern information technology.

g) International and national agencies, NGOs and other interested parties to arrange workshops and conduct studies with regard to such matters as the quality of access to land and information, gender issues, customary law and indigenous rights, land tenure systems, interaction between land and water rights, maritime cadastres, and the management of land administration systems.

h) In order to coordinate foreign assistance, countries seeking help should prepare a country profile analysis, describing the status of land administration and the need for improvements. Based on this the countries should prepare a master plan to which all land administration, initiatives and projects should adhere.

i) In order to ensure sustainable development of territorial oceans claimed under UNCLOS the United Nations *emphasise* the need for claimant countries to develop their capability to support effective marine resource administration through the national spatial data infrastructure.

j) Undertake analyses and develop performance indicators that can monitor the effectiveness of land administration and land tenure systems in relation to sustainable development and poverty alleviation.

APPENDIX 1

"Justification for including cadastral issues in the PCGIAP". Proposal from Professor Ian Williamson requested by Mr Drew Clarke, Secretary, PCGIAP, and transmitted to PCGIAP on 1 September, 1998

JUSTIFICATION FOR INCLUDING CADASTRAL ISSUES IN THE PCGIAP

Virtually all member nations of the PCGIAP are vitally interested in cadastral issues and especially the trend to integrate cadastral data bases at a national level with national topographic mapping etc, as well as the digital cadastral layer being the key layer or at least one of the key layers in any spatial data infrastructure.

Due to the interest in cadastral matters of all countries in the region, if the PCGIAP does not pick this matter up then I have no doubt another competing PC (like MOLA in Europe) could be established out of UNRCCs to accommodate cadastral and land administration issues in the region. That would be unfortunate since all these areas are intimately integrated. We should learn from the CERCO/MOLA development. Please be aware that the UN/FIG Bogor Declaration specifically recommended the establishment of a forum "...for officials and experts in cadastre and associated forms of land administration with annual meetings to promote cooperation in the exchange

of technical knowledge, expertise, education and training." When this was discussed at the PCGIAP in Bangkok and afterwards in the UNRCC it was accepted that this would be picked up by the PCGIAP as a Working Group. I believe that this was the right way to go to ensure competing PCs were not established.

As background I have listed the various UN resolutions that pertain to this area. But first the mission of UNRCCs. This is important to understand the role that the PCGIAP can and is making as the focus between UNRCCs. There is clearly a focus on exchanging information, experiences etc. This could arguably be the prime focus of the PCGIAP albeit it should focus on issues of common interest and issues that can be addressed by a working group over an extended period. I don't believe the mission of the PCGIAP is or should be just on "regional" issues in the true sense but on issues of regional significance. Therefore I would argue that since cadastral and land administration issues are clearly a part of UNRCCs and are clearly of regional significance, then they should have an important focus at the PCGIAP.

16TH UNITED NATIONS REGIONAL CARTOGRAPHIC CONFERENCE FOR THE AMERICAS, NEW YORK, U.S.A. (2-6 June 1997)

At this UNRCC the Mission of the conferences was re-affirmed. It clearly highlights the importance of cadastre and the need to discuss and share information.

"the mission of the United Nations regional cartographic conferences is to provide both a regional and interregional forum for member States, through their governmental institutions, professional and academic sectors, nongovernmental organisations and the private sector, to discuss and share information on related institutional, legal, economic and technical issues and to advise national Governments, the United Nations and other regional and international organisations on policy development options related to cartography, surveying, mapping, charting, cadastre, GIS technology and spatial data infrastructures in support of sustained economic growth for sustainable development and environmental management.

Bearing in mind that the conferences address the requirements of mapping organisations, spatial data providers and related land information managers, who focus on the needs of national, regional and local decision makers, stakeholders and other end-users."

THE BOGOR DECLARATION, UNITED NATIONS INTERREGIONAL MEETING OF EXPERTS ON THE CADASTRE, BOGOR, INDONESIA (18-22 March 1996)

The following recommendations from the Bogor Declaration suggest some TOR for the PCGIAP Cadastral Working Group.

Recommendations (part) to the United Nations:

1. To produce a set of guidelines for cadastre and associated forms of land administration along the lines of those recently produced by the United

Nations Economic Commission for Europe but based on a taxonomy of regional needs, for instance with special reference to the practices in South East Asia.

- 2. To support a workshop to develop a clearer definition of the form and range of land rights and the responsibilities and obligations which attach to land rights specifically within the Asian and Pacific region.
- To produce a set of guidelines to determine the costs, benefits, risks and value 3. for money of cadastral systems to assist national governments in evaluating support for cadastral projects.

The following Resolution from the Bangkok UNRCC also suggests an item for the TOR of the WG. In fact I believe that the PCGIAP could play an important role in getting this material together so that member states can report back on this matter to the next UNRCC for Asia and the Pacific.

14TH UNITED NATIONS REGIONAL CARTOGRAPHIC CONFERENCE FOR ASIA AND THE PACIFIC, BANGKOK, THAILAND (3-7 February 1997)

Institutional issues

Same of the state of

15. Linking cadastral mapping with topographic mapping within a wider spatial data infrastructure

The conference,

Bearing in mind the conclusions of the 1996 United Nations Interregional Meeting of Experts on Cadastre, jointly sponsored by the United Nations and the International Federation of surveyors, and the recommendations in the resulting Bogor Declaration, and the recommendations of the 1997 Third Meeting of the Permanent Committee on GIS Infrastructure for Asia and the Pacific,

Mindful of the outcomes of Agenda 21, which promoted the importance of efficient and accessible land markets based on cadastral systems and the establishment of appropriate land tenure systems, as key factors in support of sustainable development and environmental management,

Noting the benefit of integrating cadastral and land tenure information with topographic information in providing an appropriate basis for supporting sustainable development and environmental management.

Further noting the difficulties being faced by many member States in integrating cadastral and topographic spatial data, especially in digital form, and the second of the second o

Recommends that member States report to the next United Nations Regional Cartographic Conference on issues, problems and solutions concerned with integrating digital cadastral mapping with large-scale topographic mapping within the context of a wider national spatial data infrastructure.

The UNRCC for the Americas in New York also clearly shows the thrust of UNRCCs. It also suggests some roles for the PCGIAP.

4. The role of the cadastre in spatial data infrastructure

The Conference,

Bearing in mind the conclusions of the United Nations Interregional Meeting of Cadastral Experts, held at Bogor, Indonesia, 18-22 March 1996, jointly sponsored by the United Nations and the International Federation of Surveyors, and the recommendations in the Bogor Declaration on cadastral reform,

Recalling the deliberations of the Sixth United Nations Regional Cartographic Conference for the Americas on the need better to understand and appreciate the relationship between land tenure and the physical environment,

Mindful of the outcomes of Agenda 21 which promoted the importance of efficient and accessible land markets based on cadastral systems and appropriate land tenure systems as key factors in support of sustainable development and environmental management,

Recognising the importance of efficient and effective cadastral systems in supporting the development of land markets, in providing security of tenure and access to land, in facilitating the provision of credit to farmers and peasants, and more generally in promoting economic development, social cohesion and sustainable development,

Noting the benefit of integrating cadastral/land tenure information with topographic information in providing an appropriate basis for the support of sustainable development and environmental management,

Further noting the difficulties being faced by many member States in integrating cadastral and topographic spatial data, especially in digital form,

1. Recommends that member States and appropriate stakeholders convene, through the proposed Permanent Committee on GIS Infrastructure for the Americas, and under the guidance and with the assistance of the Secretary-General of the United Nations, a special working group to determine the role of the cadastre in spatial data infrastructures and, in particular, to discuss technical, institutional and legal issues, problems and solutions concerned with integrating digital

- cadastral mapping with large-scale topographic mapping, within the context of wider national spatial data infrastructures;
- 2. Also recommends that the deliberations and recommendations of the working group be reported to the Seventh United Nations Regional Cartographic Conference for the Americas;
- 3. Further recommends that the special working group review the Bogor Declaration on cadastral reform to assess its applicability to the Americas and, in particular, review the need for guidelines regarding:
 - (a) Cadastre and associated land administration along the lines of those guidelines recently produced for the Economic Commission for Europe;
 - (b) Costs, benefits, risks and value for money of cadastral systems in assisting member states in evaluation support for cadastral projects.

As a result of the above I would strongly urge the PCGIAP to maintain a high profile in cadastral and land administration issues through one of the key WGs. There is a great opportunity here for the PCGIAP to show leadership and to fully serve the interests of the member countries.

Ian P. Williamson

1 September 1998