Working Group 3
3rd Land Administration Forum

Overview of PCGIAP-WG3
and Spatially Enabled Government

Abbas Rajabifard
Vice Chair, PCGIAP-WG3
PCGIAP-WG3

- Established in **2000** based on a Resolution from the **15th UNRCC-AP** in Malaysia.
- With the expert assistance of relevant organisations such as FIG and IHO, undertake work into and facilitate discussion on:
  - development of the Asia-Pacific SDI;
  - development of regional marine cadastral infrastructure and marine administration;
  - realisation of economic, social and environmental benefits for the region; and
  - the implementation of the United Nations Conference on Environment and Development (UNCED) Agenda 21; and that:
  - explore the relationship between the operations of the cadastre or land administration system in each member country and the development of their spatial data infrastructures at local, state and national levels.
Major activities over past 8 years include:

- Successfully completed or contributed to four major projects (cadastral template, marine administration, data integration and spatial enablement projects),
- Successfully organised **five international workshops/seminar**,
- Established four dedicated websites for completed and current projects, and
- Successful and widely disseminated publication strategy.

Chair: Ian Williamson  
Vice-Chair: Ahmad Fauzi Bin Nordin  
Vice Chair: Abbas Rajabifard  
University of Melbourne  
Department of Survey and Mapping  
University of Melbourne  
AUSTRALIA  
MALAYSIA  
AUSTRALIA
Working Group 3

WG3 was originally the ‘Cadastre’ working group (until 2006 when re-named WG3 on Spatially Enabled Government).

WG3 was renamed again “Land Administration” in 2008 with a mandate to consider land administration issues, spatially enabling government and their joint role in supporting sustainable development.

This was the result of a resolution during the 14th PCGIAP meeting in Malaysia (due to the desire by WG3 members for WG3 to focus more broadly on land administration issues in the Asia and the Pacific region).
Working Group 3 Activities

• WG3 has undertaken many major activities over the last three years as part of its 2006-2009 workplan, and

• particularly in response to Resolution 4 (SDI to support spatially enabled Government) of the 17th UNRCC-AP, Bangkok, Thailand.
Key activities undertaken since 17th UNRCC-AP Conference 2006 in Bangkok, Thailand

Activity 1. Integration of Built and Natural environmental datasets within National SDIs


Activity 5. Sharing of land administration experiences in the Asia and Pacific Region


Activity 7. 3rd Land Administration Forum for Asia-Pacific Region, 24-26 May 2009 – Tehran, Iran

Activity 8. GSDI Association and Conferences

Activity 9. Cadastral Template Project
Activity 1. Integration of Built and Natural environmental datasets within National SDIs

The aim of the project was to better understand and describe the technical, jurisdictional, institutional, legal and land policy perspective surrounding the two foundation datasets (cadastral and topographic) in a National SDI.
Activity 1. Data Integration project-Activities and Outcomes

• Major Activities
  – International Case Studies
  – International Workshop on Data Integration as part of the 17th UNRCC-AP, 2006
  – Pilot study of Geo-web Service Integration
  – Development of a data integration framework
  – Development of a web-based system using the data integration framework to facilitate data interoperability test and data integration.
  – Publication Strategy

• Spatial data integration validation tool
• Spatial data integration tool
• Spatial data integration guideline
• Technical and policy reports
• Publications
  – 5 international papers
  – 2 Journal papers
  – 2 book chapters
  – Project website
PCGIAP Working Group 3
Research Project
Integration of Built and Natural Environmental Datasets
within National SDI Initiatives

Spatial Data Integration Validation Tool
Specification and User Guide

August 2008

Centre for Spatial Data Infrastructures and Land Administration
Department of Geomatics, University of Melbourne
UNRCC-AP & PCGIAP International Workshop on Data Integration

ARC Linkage Project - the Integration of Built and Natural Environmental Datasets in National Spatial Data Infrastructure Initiatives

This project is an Australian Research Council Linkage Project involving researchers from the Centre for Spatial Data Infrastructure and Land Administration at the University of Melbourne and three industry partners, as listed below. The project also involves collaboration with Working Group 3 (Cadastre) of the UN supported Permanent Committee for GIS Infrastructure for Asia Pacific (PCGIAP), which helps to involve seven different countries in the project.

Project Partners
Project Duration
Personnel
Project Overview
Project Background

Project Partners
Victoria: DSE, Victoria
Department of Lands: Department of Lands, NSW
Geoscience Australia: Geoscience Australia

WG3 re-named in 2006 “SpatiaLy enabled government” and focused on the development of spatially enabled government. A new vision and objectives for its future direction and its activities was undertaken, which focused on the concept of spatially enabling government. This includes work on:

– Concepts and principles of spatially enabled government
– Design requirements of spatially enabled government
– Issues associated in the development of spatially enabled government including: Institutional; Technical; Policy and Socio-economic
– Relationship between SDI and LA (Cadastre) to support spatially enabled government
– Capacity building for spatially enabled government.

• As part of the WG3 workplan for 2007-09, an international workshop was conducted on the 12 June 2007 on the ‘Spatial Enablement of Government’ in collaboration with the GSDI Association.

• 125 people from 13 countries and 2 international organisations attended the workshop.

• The workshop addressed the development of SDIs, including legal and economic issues at both a global and regional level.

• The workshop endorsed the concept of Spatially Enabled Government (SEG) as an important tool for governments to improve effectiveness, efficiency, better decision making, business processes, and policy implementation, nationally, regionally and globally.
Activity 4. Spatially Enabling Government Conference, Canberra, Australia

After the International workshop held in Korea, and due to the increased international and national importance being placed on Spatial Enablement, the Australian Government conducted a dedicated SEG conference in Canberra in August 2007.

This conference was chaired by Prof Williamson, and was supported by the Centre for SDIs and Land Administration, the University of Melbourne.
The conference discussed the issues and challenges in creating a **spatially enabled government** and society. Major challenges and issues identified included:

- Broader appeal.
- Information policy.
- Access issues.
- Seamless platform.
- Risk management.
- Institutional processes.
- Research and education.
- Standards.
- Licensing.
Spatially Enabling Government & Society – Research Activities

- Research in Australia
- Research and Activities Internationally
Activity 5. Sharing of land administration experiences in the Asia and Pacific Region

- Following the 13th PCGIAP meeting in Korea, and endorsed by the Roundtable in Mongolia, PCGIAP through its WG3 agreed to facilitate a two-day international seminar on “Land administration trends and issues in the Asia and Pacific Region” at the 14th PCGIAP meeting, 19-20 August 2008 in Malaysia.

- Options and implications arising from this seminar were considered by PCGIAP and suggested new arrangements could be presented for consideration to the next UNRCC-AP scheduled for 2009.

As part of the WG3 workplan, WG3 together with FAO, Malaysian Government, FIG, GSDI, Coordinates professional magazine (as media partner) and Centre for SDIs and Land Administration, University of Melbourne, has successfully hold a seminar from 19-20 August and discussed land administration issues and possibility of establishing an annual forum under the UN in the Asia and Pacific region.

150+ people from 30 countries and 5 international organisations participated.
Activity 7. 3rd Land Administration Forum “Re-Engineering the Cadastre to Support e-Government”,
24-26 May 2009 – Tehran, Iran

- As part of the WG3 workplan, WG3 together with Iranian Government, FIG, GSDI and the Centre for SDIs and Land Administration, University of Melbourne, are organising a **three day Forum in Tehran** to discuss land administration issues and the role of cadastre to support e-government.

**The objectives of the forum in Tehran are:**
- To discuss the role of cadastre to support e-Government
- To share land administration experiences in the Asia and Pacific with a focus on re-engineering cadastre to support e-government
- To continue discussion on the need for an ongoing land administration forum in the Asia and the Pacific that was commenced at the **Mongolian and Malaysian forums** with a view to preparing a proposal and resolution to be put before the UNRCC-AP in Bangkok 26-29 October, 2009.
Activity 8. **GSDI Association & Collaboration**

- President Elect
- Conferences
- AP-Newsletter
Activity 8.1 *President Elect of the GSDI Association*

- This is an important appointment for PCGIAP to develop stronger links with the international SDI community.
- Since the PCGIAP is the key regional forum engaged in SDI development, this also provides an opportunity for PCGIAP to become a full member of GSDI Association and a member of its Board in order to contribute more and stronger to the strategic direction of SDI development worldwide.
Activity 8.1 *President Elect of the GSDI Association*

- Another key opportunity of this appointment is the joint PCGIAP/GSDI-12 conference which will be held in Singapore in 2010.

- As a result of this and the full support received from the PCGIAP-Executive Board meeting in Canberra in April 2008, the 16th PCGIAP meeting will be conducted jointly with the **GSDI 12 Conference** in Asia-pacific region and Singapore will be host of this joint event.

- Based on this and as a result of the efforts and arrangements by the Singapore’s delegation to PCGIAP, the Singapore government approved to host this joint event in Oct. 2010 and the initial preparation of this joint event is well underway.
Activity 8.2  *SDI Asia-Pacific Newsletter*

- Following 10th GSDI conference, the Centre for SDIs and Land Administration at Melbourne University, through the WG3, has agreed to facilitate the production of *Asia-Pacific Newsletter* and to assist in establishing permanent arrangements for newsletter production.

- The re-launch of this important SDI publication offers a great opportunity to re-vitalise SDI information exchange in Asia-Pacific region and for key actors to showcase their efforts and share their experiences with other practitioners.

**Action:** PCGIAP members to note developments and to use and contribute to the Newsletter to promote their SDI activities in Asia and the Pacific region.
Activity 9. Cadastral Template Project

- As part of the WG3 workplan, WG3 has continued its effort to promote the project and responses to the Cadastral Template and has maintained and updated the Cadastral Template website until beginning of 2007 according to the WG3 workplan.

- However, due to the importance of this project and its value for all countries and international organisations such as FIG, PCGIAP and others, it is now maintained and run by FIG Commission 7 (through a request from FIG and in agreement with PCGIAP-WG3).
Activity 9. Cadastral Template Project

• Currently **42 country reports** on cadastral systems are placed to this website.

• The cadastral template project and its results through its website continuously being cited and visited by many countries and jurisdictions and its serves as a reference point for cadastral activities.
Cadastral Template
A Worldwide Comparison of Cadastral Systems

Cadastral country reports based on a jointly developed PCGIAP-FIG template.
Established under UN mandate by Resolution 4 of the 16th UNRCC-AP in Okinawa, Japan in July 2003.
UN endorsement for cooperation with UN-ECE WPLA, UN-ECA CODI, and PCIDEA.

Data per Country
(last update: 7 Jun. 2004, 35 countries)
as .htm[Select a Country]
as .pdf[Select a Country]

Field Definitions

I. Data per Data Fields
(last update: 1 Jan. 2005, 36 countries)
Select a Field

II. Principles and Statistics
(last update: 1 Jan. 2005, 36 countries)
1.1 Cadastral Principles
2.1 Population
2.2 Parcels
2.7 Professionals

Documents
• Questionnaires for Download (English, Español, Português)
• Publications
• Administrative Documents
• Web Statistics

Latest Updates
• Country report of Namibia as 30th country (7 Jun. 2004)
• Country report of Venezuela (in Spanish) as 31st country (28 May 2004)
• Country report of Mexico (also in English) (26 Apr. 2004)
• Country report of Mexico (in Spanish) as 32nd country (18 Apr. 2004)
• Publication in the Hong Kong Journal of Geospatial Engineering (3 Mar. 2004)
• Questionnaires available also in Spanish and Portuguese (6 Feb. 2004)

The "Cadastral Template" has been developed by a research group at the Department of Geomatics of the University of Melbourne. It consisted of Prof. Ian Williamson, Dr. Abbas Rajabifard, and Daniel Steudler, supported by Prof. Stig Enemark from Aalborg University, Denmark.

PCGIAP-Working Group 3 "Cadastre" cooperates with FIG-Commission 7 to place the country information jointly on this website and to maintain the information during its 2003-2005 Work Plan.

For providing or updating your country data, please contact:
- for PCGIAP members: Dr. Abbas Rajabifard, Abbas.R@unimelb.edu.au
Analysis of Results

Parcels per Population

Registered - Rural

% Parcels
International Workshop on

“Administering the Marine Environment – the Spatial Dimensions”

2004, KL, Malaysia
Marine Administration Country Template

A Comparison of Marine Administration Systems


Data per Country
(last update: 13Sept. 2004, 8 countries)

II. Principles and Statistics
(last update: 13Sept. 2004, 8 countries)
1.0 Policy Principles
2.0 Institutional Principles
3.0 Spatial Data Infrastructures
4.0 Spatial Data Principles
5.0 Marine Tenure Principles
6.0 Legal Principles

Latest Updates
• Marine Administration Country Reports presented at the Workshop on Administering the Marine Environment - the Spatial Dimensions now online.

• Publication in the Hong Kong Journal of Geospatial Engineering (3 Mar. 2004)

Field Definitions

I. Data per Data Fields
(last update: 13Sept. 2004, 8 countries)

Documents
• Marine Administration Country Template for Download (English).
• Publications
• Administrative Documents

Select a Country

Select a Country
Cadastral Template - Country Data

Select another Country

Fiji

I. Country Report

A. Country Context
B. Institutional Framework
C. Cadastral System
D. Cadastral Mapping
E. Reform Issues
References

II. Cadastral Principles and Statistics
1. Cadastral Principles
2. Cadastral Statistics

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Contact person for provided information:
Kemueli Masikerei
Department of Lands and Surveys
Ministry of Lands and Mineral Resources
Assistant Director Mapping and Land Information
Information provided on 2 Jul. 2003

Address:
Department of Lands and Surveys
PO Box 2222
Government BuildingsSuva
FIJI
Email: kmasikerei@lands.gov.fj
WG3 Future Direction and Workplan
## WG3-Workplan

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<th>Activities/Steps</th>
<th>Date</th>
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<td>1</td>
<td>Conduct of 3rd Land Administration Forum for the Asia and Pacific Region – “Re-Engineering the Cadastre to Support e-Government”– Tehran, Iran</td>
<td>24-26 May 2009</td>
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<td>2</td>
<td>Preparation of report and analysis of results from the 3rd Forum</td>
<td>June-Oct. 2009</td>
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<td>3</td>
<td>Presentation of the results and outcomes of the research and work on land administration forum and also Spatially Enabled Government</td>
<td>18th UNRCC-AP Conference and 15th PCGIAP Meeting</td>
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<td>4</td>
<td>Facilitate and coordination of Land Administration Forum meetings and Seminars in Asia-Pacific region</td>
<td>2009-2012</td>
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<td>5</td>
<td>Keep the joint PCGIAP-FIG Cadastral Template Project up to date and extend the number of countries contributing</td>
<td>2009-2012</td>
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<td>6</td>
<td>Report on outcomes of WG3 activities (including analysis of current projects, recommendations, future plan, etc.)</td>
<td>PCGIAP Meetings</td>
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Thank you