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E



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FIFTEENTH UNITED NATIONS REGIONAL
CARTOGRAPHIC CONFERENCE FOR ASIA
AND THE PACIFIC

Kuala Lumpur, 11-14 April 2000

Item 9 of the provisional agenda*

POWERPOINT PRESENTATION

* E/CONF.92/INF.1



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

Cadastral Workshop

**Bogor Declaration,
March 1996**



Cadastral Workshop, UNRCC-AP, Kuala Lumpur, April 2000

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THE BOGOR DECLARATION

The UN Cartographic Conference for Asia and the Pacific held in Beijing in 1994 resolved as follows:

The United Nations with the expert assistance of the International Federation of Surveyors (FIG) and other relevant organisations support the preparation of a regional and global compilation of optional components of a cadastre, including legal aspects, land policy, institutional arrangements, technology and economics.



Cadastral Workshop, UNRCC-AP, Kuala Lumpur, April 2000

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THE BOGOR DECLARATION

Bogor, Indonesia, 18-22 March, 1996

- inter-regional meeting
- meeting recognised that:
 - all countries have individual needs, but similarities in their requirements;
 - the key to a successful cadastral system is to ensure that the 3 main processes (adjudication, land transfer and subdivision) be undertaken efficiently, securely and at affordable cost and speed in support of an efficient and effective land market.



Cadastral Workshop, UNRCC-AP, Kuala Lumpur, April 2000

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THE BOGOR DECLARATION

Justification for cadastral reform

- support the development of an efficient land market
- improve protection of land rights
- support land management and economic development
- computerisation
- simplification of cadastral processes



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THE BOGOR DECLARATION

The Cadastral Vision

...to develop modern cadastral infrastructures that facilitate efficient land and property markets, protect the land rights of all, and support long term sustainable development and land management



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THE BOGOR DECLARATION

Components of the Vision

- simple and effective
- adapt to rates and patterns of population change
- access to land, security of tenure, trade land rights
- vast array of options
- cadastre includes all state and private lands
- part of spatial data infrastructure



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THE BOGOR DECLARATION Recommendations to the UN

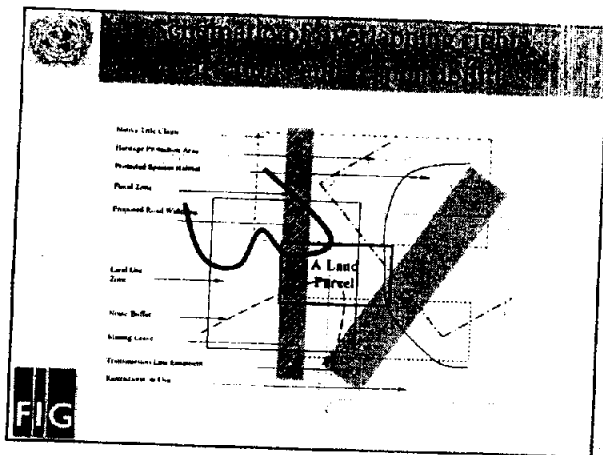
1. Establish inter-regional forums
2. Guidelines for cadastre/land administration
3. Workshop - clearer definition of land rights, responsibilities and obligations
4. Guidelines on costs/benefits for evaluating cadastral reform



THE BOGOR DECLARATION Recommendations to National Governments

1. Recognition of the role of land and property
2. Cadastre - basic infrastructure for land markets
3. Relationship between cadastral maps and NSDIs
4. Relationship between cadastral surveying/mapping and land registration
5. Government, private and academic sectors roles





FIG

Current land administration systems are based on 19th Century paradigms and as such are inadequate in addressing sustainable development objectives.

FIG

- Inappropriate property rights inhibiting proper use and management of land
- Land administration infrastructures not adapting to changing requirements

FIG

- Future humankind/land relationships;
- The role of land in sustainable development;
- Land tenure and land administration systems;
- Re-engineering land administration systems.

FIG

- Land, Water and Food
- Land Tenure, Markets, Planning and Valuation

FIG

Recognition that without effective access to property, economies are unable to progress and the goal of sustainable development cannot be realised.

FIG


United Nations
International Federation of Surveyors

Bathurst Declaration on Land Administration for Sustainable Development


October 1999

Professor Don Grant AM
Surveyor-General of New South Wales
Chairman, PSMA
Australian Delegate to FIG


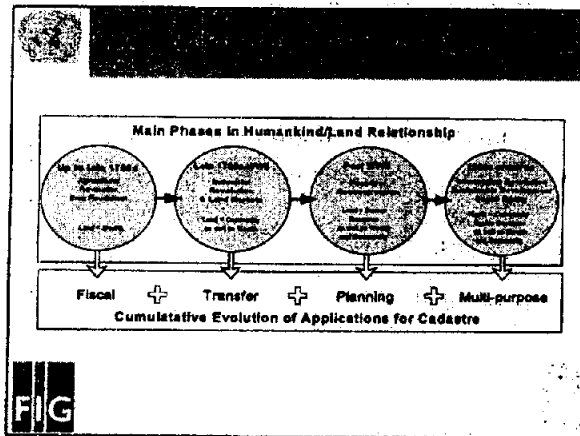
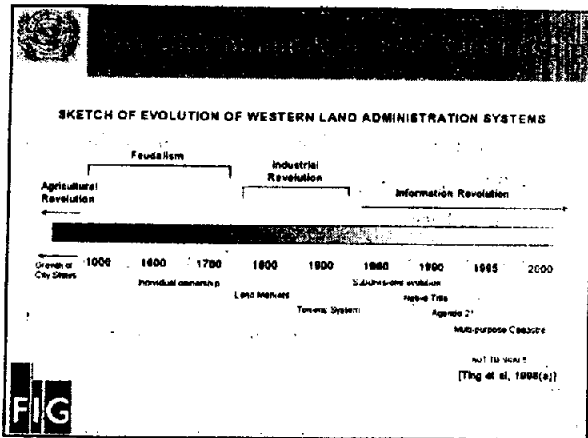
Professor Ian Williamson FTSE
University of Melbourne
Director, UN/FIG Liaison




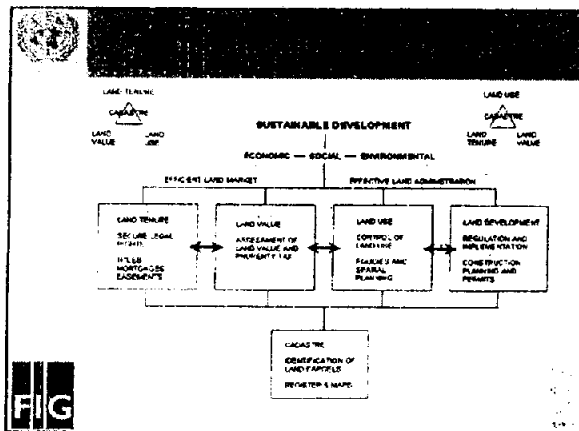
SUSTAINABLE DEVELOPMENT

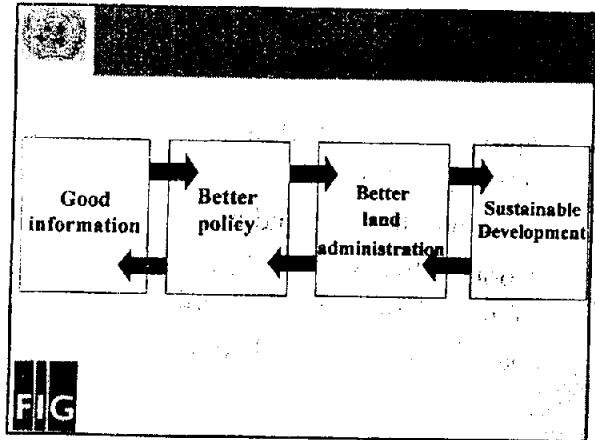
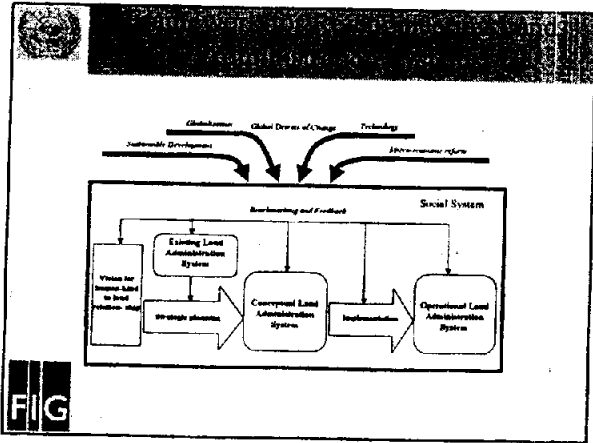
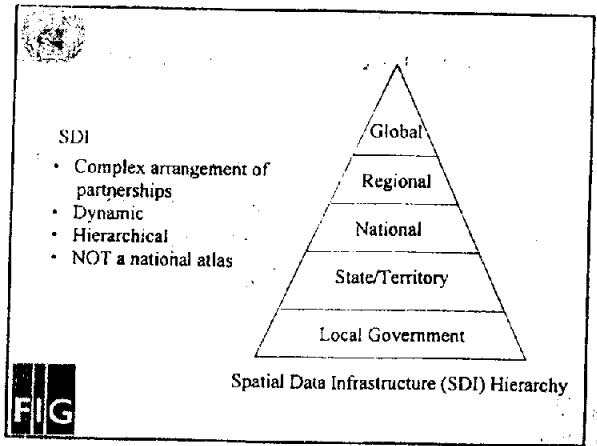
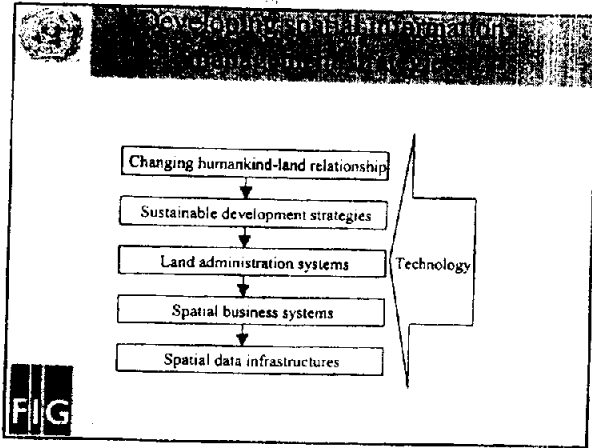


LAND ADMINISTRATION





Today, sustainable development is the key driver influencing the relationship of humankind to land




- Sustainable development is not possible without sound land administration
 - Sustainable development is intimately linked to good governance and participation at the local parcel/property level
- FIG




A global commitment to halving the number of people in the world who do not have secure access to property rights by the year 2010.


FIG

- 
- legal security of tenure and access to property;
 - institutional reforms
 - re-engineering land administration systems.


FIG

- 
- investing in land administration infrastructure
 - dissemination of land information;
 - cooperation between land administration professionals;
 - participation by local communities;


FIG

- 
- improved access to land and to land administration systems;
 - development of user-driven systems for sustainable development;

FIG

- 
- efficient operation of land markets;
 - flow of information between government agencies and the public;


FIG

- 
- coordinated education and research in land administration
 - country profile analyses of land administration systems
 - development of performance indicators

FIG

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

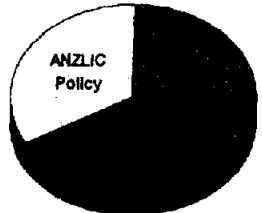
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PSMA


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FIG NATIONAL SPATIAL DATA INFRASTRUCTURE FOR AUSTRALIA



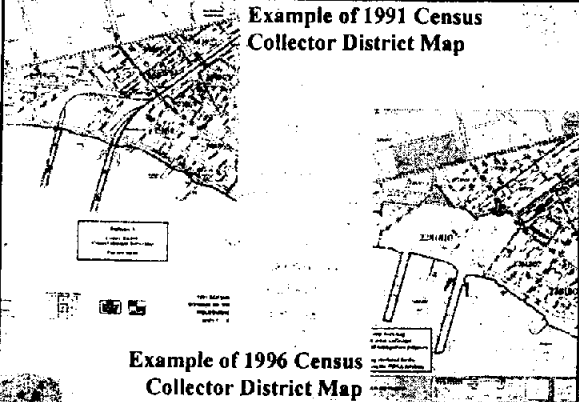
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FIG PUBLIC SECTOR MAPPING AGENCIES Australia



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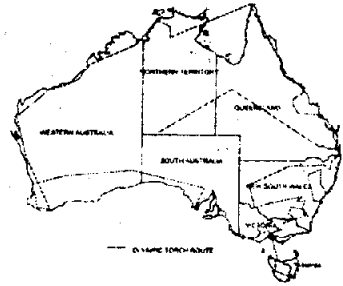
FIG Example of 1991 Census Collector District Map



Example of 1996 Census Collector District Map

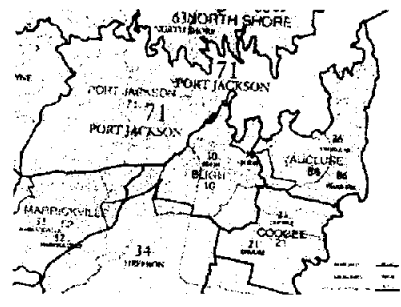
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FIG OLYMPIC TORCH ROUTE PLANNING DATA



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FIG EDAMS - ELECTORAL BOUNDARIES REDISTRIBUTION



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FIG Strategic Overview

- 1992
ANZLIC endorsed the formation of the PSMA to respond to the needs of the ABS for the national Census
- 1993
The PSMA consortium was formed with LIC as the lead agency
– PSMA commenced integration of a detailed, digital, multi-resolution, national topographic dataset
- 1995
Dataset completed (private sector assisting).
- 1996
The PSMA dataset contributed to cost savings in the national Census

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FIG Strategic Overview

1996
ANZLIC agreed that:

- PSMA should extend the scope of its activity to take advantage of further opportunities regarding the use of national datasets to meet the needs of clients beyond the ABS; and
- PSMA should act in the role of a non-exclusive broker for the data comprising the national datasets, including negotiating with individual jurisdictions as regards to conditions associated with their further involvement, eg pricing, maintenance and licensing

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FIG Strategic Overview

PSMA Success Factors 1993 - 1997

- Integrated national dataset
- Provides access to 9 Agencies' data
- Minimal bureaucracy - low overheads
- Enthusiastic executive, board, Jurisdictions, staff
- Strong communication - regular board meetings
- High quality spatial data
- Defined data access and pricing policy
- Innovation and responsiveness
- Directed to "get on with the job"
- Era of greater spatial awareness and GIS
- Strong technical support from the LIC

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FIG Strategic Overview

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ANZLIC endorsed the following PSMA vision:

- The return of economic benefits to the nation through the co-ordination, assembly and delivery of standards-compliant, client-specific national datasets from fundamental databases held by the member agencies

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FIG Strategic Overview

Proposed Structure for PSMA Australia

- Company limited by shares (government liability reduced)
- Subject to Corporations Law
- Owned by governments - equal voting
- ANZLIC may review annual program
- Board of directors and independent chairperson
- Constitution and Establishment Agreement
- Data licences with jurisdictions
- Scope for private sector data managers
- Revenue generated through data licensing

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FIG Strategic Overview

Proposed Structure for PSMA Australia

The diagram illustrates the proposed structure for PSMA Australia. At the top, ANZLIC is shown as the Policy Builder, with 'Other VAR' also indicated. Below ANZLIC, a list of State Governments is provided: NSW, VIC, QLD, NT, TAS, SA, WA, and ACT. These states are connected to PSMA OPERATIONS. The PSMA OPERATIONS box is divided into two main sections: 'PSMA Australia' (containing Director, Chairman, and 120 B Staff) and 'Data Manager' (containing Assembly, Distribution, and Local Add). A note at the bottom states: 'Data Manager may be performed by numerous assembly of integrated fundamental datasets'.

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Strategic Overview

Challenges Facing PSMA Australia

■ Core


- Fulfil ANZLIC's direction to incorporate
- Establish fully-functioning company
- Fulfil contractual obligations to the ABS
- Complete the MSD upgrade for 2001 Census
- Update ROSD (2001) and maintain service to VARs
- Remain solvent

■ Special

- Work with ANZLIC & ICSM on ASDI issues
- Create the G-NAF
- Investigate cadastral products
- Build VAR base
- Respond to other proposals

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

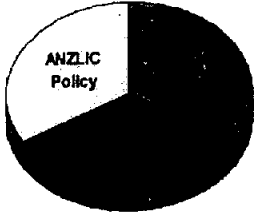
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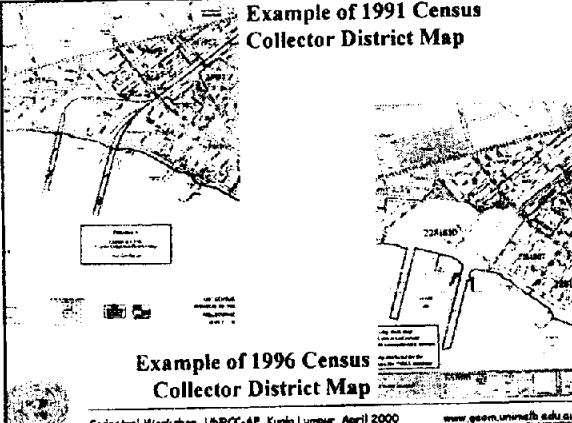
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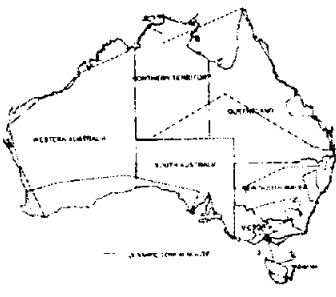
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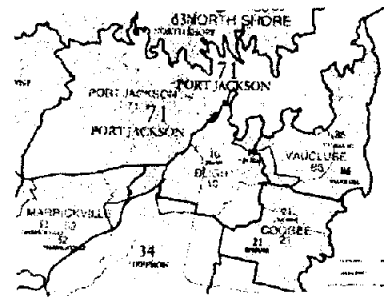
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FIG

Strategic Overview

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

Cadastral Workshop

FIG-Commission 7 Activities

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FIG **FIG-Commission 7 Activities**
Statement on the Cadastre - The Vision

- To develop modern cadastral infrastructures that facilitate efficient land and property markets, protect the land rights of all, and support long term sustainable development and land management.

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FIG **FIG-Commission 7 Activities**
Statement on the Cadastre - The Vision

- To facilitate the planning and development of national cadastral infrastructures so that they may fully service the escalating needs of greatly increased urban populations. These will result from the rapid expansion of cities that is already taking place and which is projected to continue into the 21st century.

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FIG **FIG-Commission 7 Activities**
Statement on the Cadastre - The Vision

- To facilitate access to land, support security of tenure and allow land rights to be traded, where appropriate, in an efficient and effective way and at affordable cost.

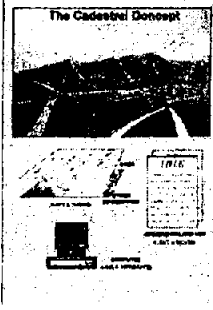
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FIG **FIG-Commission 7 Activities**
Statement on the Cadastre - Content

1. Land Management and Land Information
2. The Cadastre and Land Information
3. Different Cadastres
4. The Role of the Surveyor
5. The Cadastre and Land Tenure
6. Cadastral Issues
7. Conclusion

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FIG **FIG-Commission 7 Activities**
Statement on the Cadastre - The Concept



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FIG FIG-Commission 7 Activities
CADASTRE 2014

Detected trends:

- automation and linking of different systems
- multi-purpose cadastres (LIS)
- new legislations
- integration of different land administration organisations
- getting the private sector more involved

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FIG FIG-Commission 7 Activities
CADASTRE 2014

FIG-Commission 7 Working Group 7.1 "Cadastre 2014"

Statement 1 on Cadastre 2014

Cadastre 2014 will show the complete legal situation of land, including public rights and restrictions!

Fig. 7-1-1-10, David Mueller July 1998

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FIG FIG-Commission 7 Activities
CADASTRE 2014

FIG-Commission 7 Working Group 7.1 "Cadastre 2014"

Cadastre 2014 documenting "Private Law" and "Public Law"

Traditional Cadastres based on "Private Law" Legal Security 100-120%

Legal Security 100%

Legal Security based on "Public Law"

Fig. 7-1-1-11, David Mueller July 1998

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FIG FIG-Commission 7 Activities
CADASTRE 2014

FIG-Commission 7 Working Group 7.1 "Cadastre 2014"

Definition 1

Traditional Definition	Definition for Cadastre 2014
Parcel A parcel is a piece of land with defined boundaries, and in which a legal homogenous property right exists.	Land Object A land object is a piece of land with defined boundaries, and in which homogeneous conditions exist. Legal land objects are described with the content of the right or constraint, and by the boundaries in which they exist.

Fig. 7-1-1-12, David Mueller July 1998

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FIG FIG-Commission 7 Activities
CADASTRE 2014

FIG-Commission 7 Working Group 7.1 "Cadastre 2014"

The principle of legal independence

Legal Topics	Land Object Boundaries	Rightful Claims
Resource exploitation		Divided ownership
Collective land rights		Conservation
Water Protection		Spells
Traditional rights		Right of Way
Environment Protection		Search
Land Use Planning		Private Land Owners
Land Property		Search
Topography		Search
Natural Resources		Search
Natural Land Objects		Search

Fig. 7-1-1-13, David Mueller July 1998

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FIG FIG-Commission 7 Activities
CADASTRE 2014

FIG-Commission 7 Working Group 7.1 "Cadastre 2014"

Statement 2 on Cadastre 2014

The separation between 'maps' and 'registers' will be abolished!

Fig. 7-1-1-14, David Mueller July 1998

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FIG FIG-Commission 7 Activities
CADASTRE 2014

FIG-Commission 7 Working Group 7.1 "Cadastre 2014"

Statement 3 on Cadastre 2014

'Cadastral mapping' will be dead! Long live modelling!

FIG Conference, David Stottler -16- Brighton, July 1998

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FIG FIG-Commission 7 Activities
CADASTRE 2014

FIG-Commission 7 Working Group 7.1 "Cadastre 2014"

Statement 4 on Cadastre 2014

'Paper and pencil cadastre' will be gone!

FIG Conference, David Stottler -17- Brighton, July 1998

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FIG FIG-Commission 7 Activities
CADASTRE 2014

FIG-Commission 7 Working Group 7.1 "Cadastre 2014"

Statement 5 on Cadastre 2014

Cadastre 2014 will be highly privatized! Public and private sector are working closely together!

FIG Conference, David Stottler -18- Brighton, July 1998

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FIG FIG-Commission 7 Activities
CADASTRE 2014

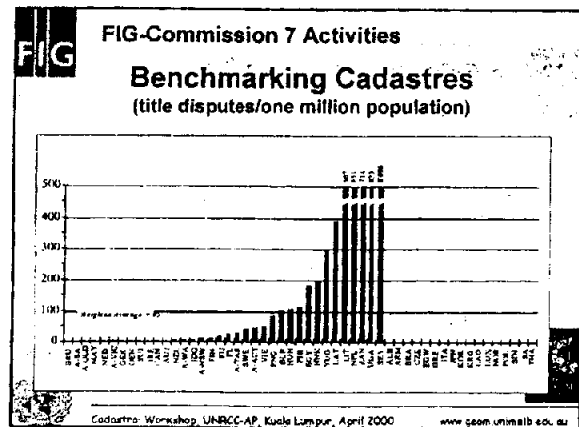
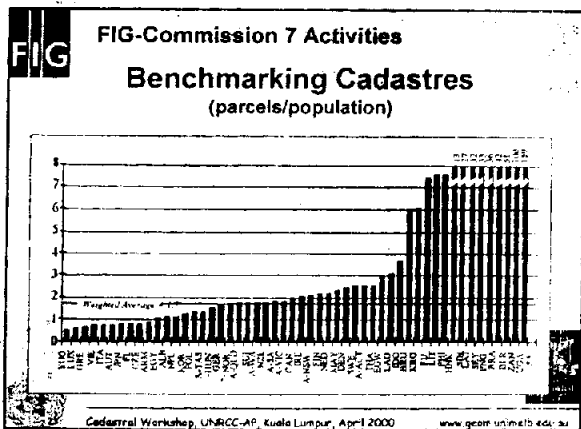
FIG-Commission 7 Working Group 7.1 "Cadastre 2014"

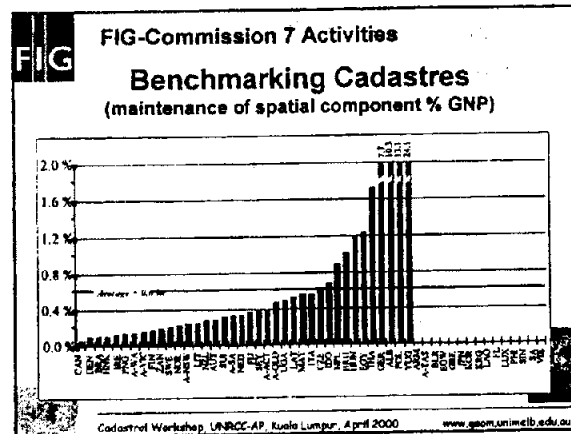
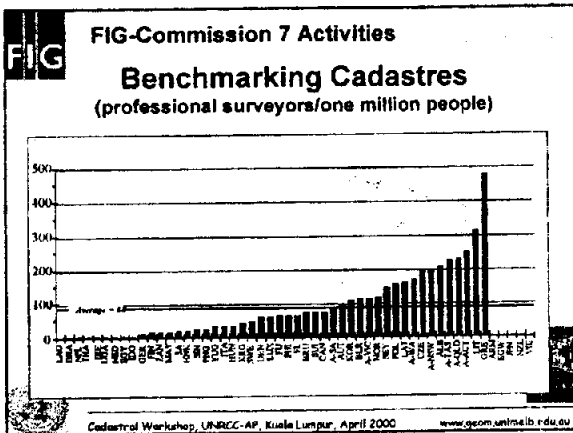
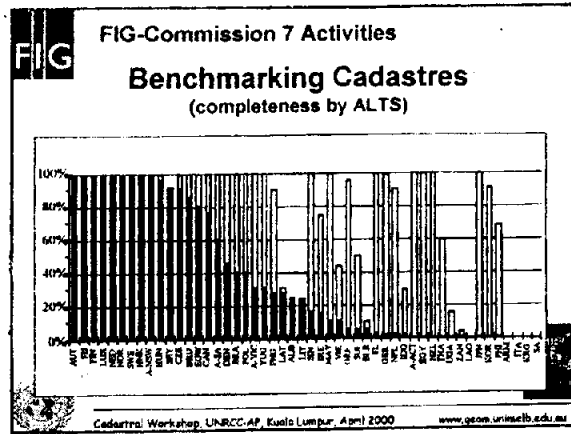
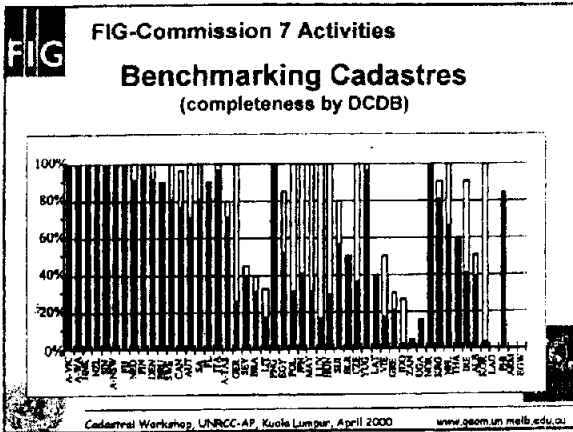
Statement 6 on Cadastre 2014

Cadastre 2014 will be cost recovering!

FIG Conference, David Stottler -19- Brighton, July 1998

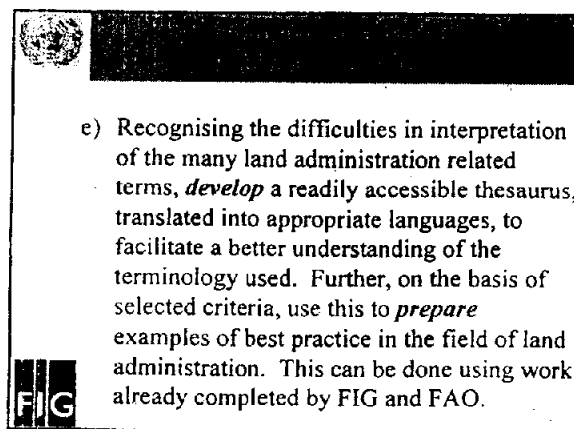
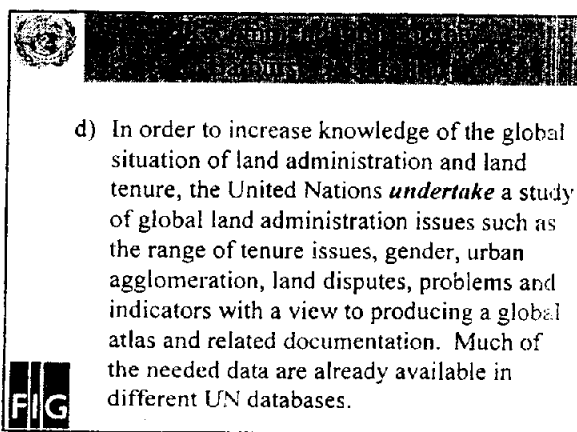
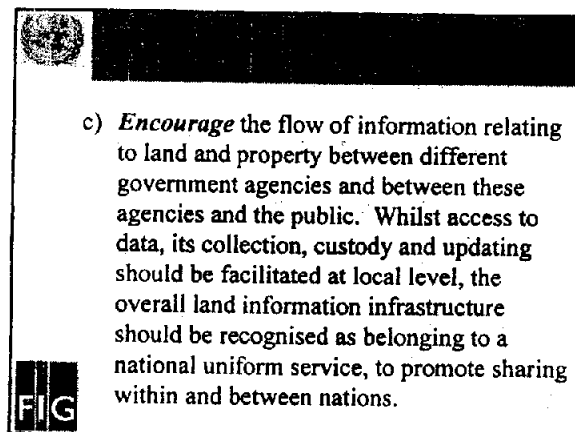
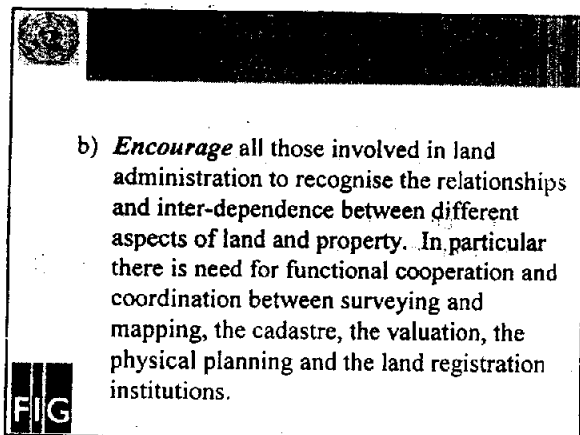
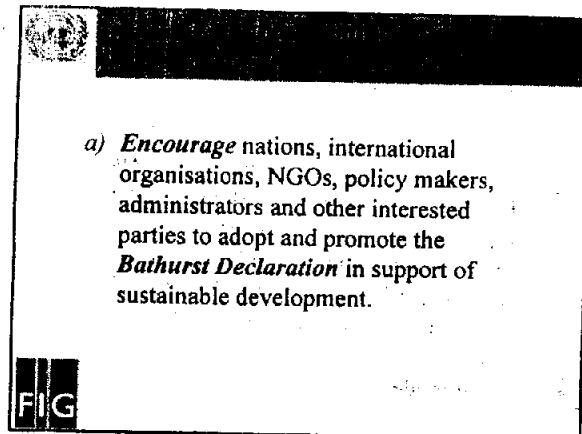
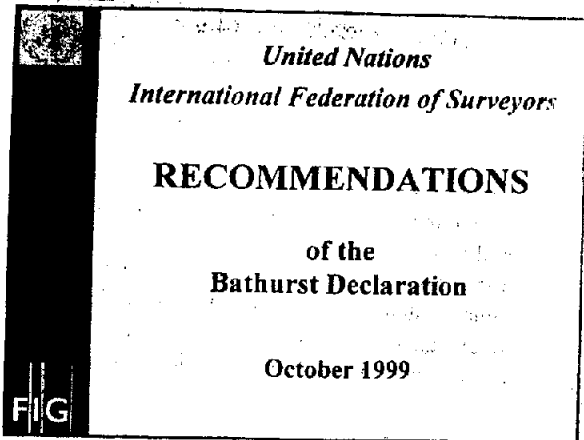
Cadastral Workshop, UNRCC-AP, Kuala Lumpur, April 2000 www.geom.unimelb.edu.au





- FIG** FIG-Commission 7 Activities
 Workplan 1994-1998
- Statement on the Cadastre 1994
 - 3 Working Groups:
 - Working Group 7.1: "Cadastral Reforms and Trends"
 - Working Group 7.2: "Cadastral Systems in Developing Countries"
 - Working Group 7.3: "Land Management"
 - 4 Annual Meetings with one-day-seminars:
 - "Modern Cadastres and Cadastral Innovation", Delft 1995
 - "Cadastral Systems in Developing Countries", Penang 1997
 - "Land Management in the Process of Transition", Budapest 1996
- <http://www.fig7.org.uk/>
- Cadastral Workshop, UNRCC-AP, Kuala Lumpur, April 2000 www.geom.unimelb.edu.au

- FIG** FIG-Commission 7 Activities
 Workplan 1998-2002
- 3 Working Groups
 - Working Group 7.1: "Reforming the Cadastre" incorporating a task force on "Cadastral Related Standards"
 - Working Group 7.2: "Land Ownership for the 21st Century - Access to Land" incorporating a task force on "Women's Access to Land"
 - Working Group 7.3: "Land Markets"
 - 3 Annual Meetings:
 - New Zealand, 1999
 - Germany, 2000
 - Sweden, 2001
- <http://www.fig7.org.uk/>
- Cadastral Workshop, UNRCC-AP, Kuala Lumpur, April 2000 www.geom.unimelb.edu.au





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.

FIG



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.

FIG



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.

FIG



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.

FIG



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.

FIG