

14th September 2003

The Chairman
Inquiry on First Home Ownership
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Sir

This is a submission to the Inquiry on First Home Ownership on behalf of Dr Ken Lyons, Mr Ed Cottrell and Mr Kevin Davies

Background:

Following commissions from Federal and State Authorities since 1996 the Authors have been researching the efficiency and effectiveness of land/property administration systems in Australia.

These systems underpin orderly settlement in Australia and are an input cost to the operation of land and property markets. These costs are derived from the operation of both public authorities (Registration Authorities, etc) and the market (Conveyancers, Surveyors etc), and are met by participants in the market which includes first home buyers.

Public comment over many years has reflected adversely on the efficiency and effectiveness of these systems.

Research:

A summary of our latest research findings is attached.

Earlier research and bibliography available upon request.

The outcomes of our research has led to the Australian and New Zealand Land Information Council (ANZLIC) adopting the theme of Land Administration Reform as an issue for its ongoing consideration (http://wwwanzlic.org.au/issues_landadmin.html), and several States are actively considering the issues we have raised.

Further research completed for the Queensland Government addressed the costs of the current system for that State and inquiries as to the availability of that data might be addressed in the first instances to Mr Steve Jacoby of the Department of Natural Resources and Mines in Queensland (PH: (07) 3405-6890).

Relevance:

Land/Property Administration in Australia is an enormously complex and large undertaking which fails many tests of efficiency, effectiveness and accountability. It is our contention that maintenance of the system costs about \$1000 per household per year (including First Home buyers) and that a long term program of coordinated reform would achieve considerable savings to consumers.

Submission:

The authors offer for the consideration of the Inquiry the results of their research as one area of housing costs where the potential for cost savings is high.

Further information or clarification of any issue will be supplied upon request, and a representative of the authors would be willing to attend any Brisbane Hearings of the Inquiry to assist the Commission

Kevin Davies, Qld
For the Authors



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THE CASE for REFOCUSING & RE-ENGINEERING LAND ADMINISTRATION to BETTER MEET CONTEMPORARY and FUTURE NEEDS in PROPERTY RIGHTS AND MARKETS

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ABSTRACT

Historically property rights have remained implicit and bundled within a land title, and an extensive regulatory regime has been established to provide security of that title and to allow trading. With the advent of various Federal and State Environmental Acts and COAG driven water reforms over the last 5 years, previously implicit property rights are being defined and unbundled (i.e. excluded) from the land title. There is increasing evidence that this is having an adverse social and financial impact on many landholders. There are calls for improvements to the definition and administration of property rights.¹ The authors have been engaged in 3 projects over the last two years examining the broad operation of land administration and information. This paper will report on that work, conclusions reached, and recommendation made. New conceptual and operational models are suggested, as well as major changes to the current concepts and administration of property rights.

KEYWORDS: Land Administration, Property Administration, Property Rights, Land Information, Capital Markets, Public Policy,

¹ (e.g. Deputy Prime Minister's press release of 7 March 2002 - http://www.dotars.gov.au/media/anders/archive/2002/mar_02/a26_2002.htm).

1. BACKGROUND

In July 2000 the Surveyors Board of Queensland was awarded an ASDI (Australian Spatial Data Infrastructure Program) partnership grant. Cottrell Cameron and & Steen Surveys Pty Ltd conducted the work on behalf of the Surveyors Board of Queensland and the work was undertaken by Mr Ed Cottrell, Mr Kevin Davies and Dr Ken Lyons.

This study produced four papers ranging from a high-level to overview of land administration in all Australian States and New Zealand to the business case for the digital lodgement of survey plans. Six key issues were identified as follows: --

1. The purpose of land administration needs adjustment and to be made much more explicit
2. Responsibilities lie with multiple jurisdictions and multiple procedures exist
3. Improvements are possible but there are no performance indicators
4. The desirability of separating regular tree and operational responsibilities when situated in the same government agencies
5. Consolidated information on all land rights and interest is not readily available
6. The most appropriate method of digital lodgement to use to ensure the maximum benefit to all stakeholders and other subsystems

The above is a short form of the issues and a longer form is shown at Annex A.

One of the produced papers *Issues Identified In An Overview Of Part Of Part Of The Land Administration Of Australia and New Zealand* (www.auslig.gov.au/asdi/survbdq.htm) was a discussion paper on the issues. This paper was considered by ANZLIC and the Lands Departments or their equivalents in the various jurisdictions. There was little disagreement with the thrust of the issues and that they needed attention. How to proceed was less clear. Queensland undertook to support some additional research, also undertaken by the authors, with a view to clarifying possible ways forward. This paper is largely a summary of the report *On the Efficiency of Property Rights Administration in Queensland, 12/04/02* prepared for Queensland Department of Natural Resources and Mines. Their permission to use the results in this paper is acknowledged. The views expressed are solely those of the authors.

2. METHODOLOGY

An extensive literature review had been done for the first study and this was broadened to land markets and property rights, obligations and restrictions (ROR's). The change drivers on land administration were identified, examined, and conclusions drawn. A list of Legislation affecting property ROR's in Queensland was compiled. A range of consultation was carried out, largely outside of the traditional "land administrators" and focusing more on users.

It was proposed that land administration needed to refocus to the management of property rights and markets. Objectives were proposed together with conceptual and operational models. Options were examined and a list of "why not" questions were posed for wide debate, together with a number of suggested next steps.

While the focus of this report was on Queensland it is considered that much is relevant to other jurisdictions in Australia.

3. MEANING OF SOME TERMS USED

The term "property rights" can have many different meanings to different groups. Some take the term "property" to only relate to "real property" or definitions of either in particular legislation. Some view property rights as a generic term encompassing, or synonymous with some or all of the following: access rights, use rights, entitlements rights and similar terms. Some consider the generic term also includes obligations, restrictions, controls and similar terms. Others view "rights" as being solely restricted to rights and not to include obligations, restrictions etc. Some consider the terms "access rights" and "use" rights to have specific meanings. Access and use rights can be considered as modifying restrictions to, or obligations on rights held by another.

In this paper “property rights” is used in its fullest generic sense of including all types of rights, restrictions, obligations, controls etc. It is used synonymously with “property ROR’s” where ROR’s is an abbreviation for rights, obligations and restrictions, with restrictions including controls.

CHANGE DRIVERS ACTING ON LAND ADMINISTRATION AND THEIR CONSEQUENCES

Three major change drivers are impacting on the future structure and operation of land administration in Queensland, with important consequences, see below. Consequences 2.1 and 2.2 are making a complex system, much more complex, less certain and more costly.

Change Driver		Consequences	
1	The evolutionary impacts on land administration.	1.1	The continued incremental improvement of land administration.
2	The need for and actions to improve land sustainability and environmental quality.	2.1	The implementation of more Federal, State and Local Government actions and the trend towards more Legislation and restrictions.
		2.2	The trend to unbundle property rights and create separate markets for them.
		2.3	The impact on and disempowerment of current and future landholders.
3	The pressure to reduce Government expenditure, improve services and accountability	3.1	The changing modes for the delivery of Government services.
		3.2	The demand for performance measuring of government services and major infrastructure.

There has been a serious reduction in land quality in many areas and remedial action is required together with long term sustainable land use practices. Productivity Commission reports note the importance of well defined property rights and the importance of markets. Their work on measuring effectiveness and efficiency of a range of government services in different States is also interesting as it can be argued that if it is possible to do this for complex government services such as health and education, then it should be possible to do similar for land administration. A House of Representatives Committee report clearly indicates that there are serious adverse economic impacts on some landholders from the imposition of public good conservation measures by Australian Governments. Property Council of Australia estimate an inefficiency cost of \$2bn per year in Property administration and planning systems in Australia. In the main report the section on change drivers covers 16 pages and 8 Appendices.

Public Demand for Reform

Whilst reform of the overall land administration system is not currently a public issue, some aspects of the system are currently attracting considerable controversy², and following consultation with a wide range of stakeholders there is a high recognition of the need for overall reform.

The following priorities emerged from discussions with a cross section of land and natural resource administrators, users, and interested parties:

Priority 1 –

- Obtaining consolidated information on ALL rights and obligations and restrictions pertaining to any parcel or area of land,
- Achieving certainty in the definition and application of ALL rights and obligations and restrictions pertaining to any parcel or area of land.
- Compensation to landholders where financial loss occurs as a result of the withdrawing of some property rights to meet a common good requirement.

² The Deputy Prime Minister is foreshadowing action at COAG on Property Rights and Information. See http://www.dotars.gov.au/media/anders/speeches/2002/as15_2002.htm
See also Press Releases from National Farmers Federation <http://www.nff.org.au/nr02/14.htm> and <http://www.nff.org.au/nr01/141.htm> , and from the Northern Territory University - http://savanna.ntu.edu.au/publications/savanna_links3/property.html

Priority 2 –

- Harmonising land administration regulatory regimes and systems across jurisdictions,
- Implementing performance measurement of land administration and its various components.

Comment

From the previous material a number of comments can be made, that could be considered as conclusions. Some would probably argue that even if the comments are valid, then this is not necessarily “bad” or a cause for change, as that is the nature of the area. The comments are:

1. The traditional administration of the freehold "ownership" rights and their market (the traditional land and property market) continues to evolve based on the IT driver with moves to E-conveyancing and digital lodgment. Similarly the administration of leasehold land has evolved, mainly in line with the requirements of the land's owner - the State. For leasehold land the major recent change has been driven by the need to improve land management.
2. There has been a serious reduction in land quality in many areas and remedial action is required together with long term sustainable land use practices.
3. Commonwealth Government legislation and programs have developed to such a stage where the Commonwealth Government is now a major "player" in land policy and land management, an area traditionally the sole responsibility of the States.
4. The relatively recent inclusion of the obligation of “a duty of care” on landholders is more likely to increase rather than decrease. This duty is likely to cause financial impact on landholders, and be likely to adversely affect the economic status of many landholders who have large holdings. Some landholders are unlikely to be able to financially meet their duty of care responsibility.
5. The unbundling of natural resource rights from "ownership" rights, and the establishment of separate controls and markets for individual natural resources represents a fundamental change to the management of land and its administration.
6. The separate markets for the natural resource rights are in an embryonic stage and some have yet to be established. Government support to these markets will probably be necessary if they are to be firmly established, operate effectively, and achieve their objectives of contributing to environmental quality of land and natural resource sustainability. This is not to say that all ROR's can be or should be traded but, that for many, markets could be established increasing the value of and securing sustainability of natural resources.
7. There have been calls, over many years, from several areas for a harmonising / establishment of uniform national laws relating to property, the Torrens system, the environment, and development assessment.
8. Inter-jurisdictional performance measurement for the delivery of complex government services such as health, education and justice is regularly carried out, and there would appear to be no reason why similar methodologies could not be applied to property rights management/ administration and markets.
9. Traditional land administration will need to be broadened significantly (both conceptually and operationally), and significant effort and cost expended, if it is to also include: the administration of the various unbundled property rights and to treat them holistically; and to foster the operation of separate specialised markets, so that they can operate as well as the highly developed current land and property market.

4. THE REGULATORY REGIME IMPACTING ON PROPERTY ROR's and MARKETS

In Queensland there are at least 188 separate pieces of legislation that define land related Property Rights or impact on their administration/management while Federal legislation (about another 19 Acts) can also have an important impact. There are 24 major pieces of legislation affecting Property Rights in Queensland. However it is in the detail in the other 164 pieces of legislation, the myriad of Regulations under the various Acts, and the range of "Directions" issued by "registering" Authorities and the like, that contain most of the fine details, exceptions etc. The current system is enormously complex, is increasing in complexity, and this trend is likely to continue. No one (not even the experts) understands the system(s) completely and can easily identify with any degree of certainty, the Property Rights affecting areas of land. Mr & Mrs. Average probably have little idea of the Property Rights that can and do "sit above" their land parcel, control its use, and affect value and resale. In the main report this aspect covers 15 pages and 4 Annexes. Some of the discussion in Change Drivers is also relevant, particularly that relating to environmental legislation and restriction, and the unbundling of land rights.

The cost of regulatory regime in Queensland

No previous work has been done to estimate the cost of the existing land administration system in Queensland let alone in Australia. A preliminary cost model has been undertaken and supplied to the Queensland Government. Land administration in Australia has often been claimed to be very efficient, effective and affordable, In summary, our preliminary costings raise serious questions on some of these claims.

Comments

From the previous material a number of comments can be made, they could be considered as conclusions. Some would probably argue that even if the comments are valid that is not necessarily "bad" or a cause for change, as that is the nature of the area.

1. The current Queensland regulatory system is enormously complex and is increasing in complexity, and this trend is likely to continue.
2. Property Rights are not treated in a holistic manner. Legislation tends to be focused on a singular Property Right. Legislation tends to be amended or enacted to deal with individual aspects as they arise.
3. Not all Property Rights are clearly defined and for some the land areas they affect can be uncertain.
4. No one (not even the experts) understands the system(s) completely and can easily identify with any degree of certainty, the Property Rights affecting areas of land. Mr. & Mrs. Average probably have little idea of the Property Rights that can and do "sit above" their land parcel, control its use, and effect value and resale. Even the intelligent layman would be loath to carry out routine dealings without expert professional assistance.
5. The supply side and the Regulator tend to be concerned with a single Property Right, the administration of a single Act etc, while the demand side (the customer's) prime concern is with the bundle of Property Rights that impact on use, investment, raising capital and trading/ transaction/dealings in specific parcels of land or a specific right.
6. The development approval process can be long, complex and costly.
7. The mining industry reports that the backlog in the resolution of native title claims is adversely impacting that market.
8. The integrity of the land and property market and some other markets (e.g. mining) is being affected by the uncertainty of Property Rights affecting specific titles or leases.
9. Benefits would seem to be available from much closer coordination between Federal and State Governments responsible for legislation that affect/creates Property Rights, and State Government Agencies that also affect/create Property Rights.

10. While this study is not examining in detail the effect of different State systems, it is reported by those operating across State boundaries that there is also considerable cost involved in other jurisdictions.

In 1858 Torrens introduced the system named after him³ to overcome the weakness of the English Property Law then operating in Australia. The weaknesses were: too complex, too costly, uncertain, too slow, created a low value of credit of value against the land. It is interesting to speculate how Torrens would rate the regulatory regime now existing nearly 150 years after his simplifications.

5. REFOCUSING FROM LAND ADMINISTRATION TO PROPERTY RIGHTS & MARKETS

Section 4 and 5 lead to major conclusions that:

- The traditional and well-established administration of "ownership and property" rights continues to evolve 'bottom up' mainly driven by technology, service improvement, and efficiency and cost considerations.
- The traditional bundled property rights are tending to be "unbundled" into separate property rights such as water, vegetation, native flora and fauna etc, which can be traded in separate markets.
- That relatively recently imposed obligations, such as a "duty of care" on landholders, are likely to increase.
- That the regulatory regime is excessively complex

Traditional land administration needs to be broadened significantly (both conceptually and operationally), and significant effort and cost expended, to include: the administration of the various unbundled property rights; and to foster the operation of separate specialised markets, so that they can operate contemporaneously with the highly developed current land and property market.

Much has been written about the importance of land and property rights to society and the adverse social and economic effects on countries when land and property rights are not effective, efficient, or in accordance with good governance. This is assumed proven and not in contention.

In Queensland the total unimproved capital value for rateable land is in the order of \$115,770 million. The improved capital value would be many times greater. About \$6,000 million of building is approved annually. In 1998-9 total lending in Queensland was \$37.8bn comprising Owner Housing Finance \$9bn, Personal Finance \$8.1bn, Commercial Finance \$18.5b, and Lease Finance \$2.2bn. Also in 1998-9 there were 140,000 transfers of Freehold & State Leasehold land with a consideration of \$28.7bn. The value of 1998-9 goods & services produced was \$87bn.⁴

Therefore a significant proportion of lending used land and property as collateral. This indicates the critical importance of land and property to the capital market in Queensland (and elsewhere).

It is reported⁵ that some areas in NSW have reduced in value by 20% due to environmental restrictions. A wide spread reduction in property value would reflect adversely on the pool of development capital available for economic development.

The Issue

The major difference between the emerging situation (unbundled rights and growing environment restrictions) and the traditional context (bundled freehold rights, few environmental restrictions, land either freehold or leasehold) raises an important question of what should constitute property rights administration in the future.

³ Torrens, Sir Robert Richard, 1814-1884. *The South Australian System of conveyancing by registration of title, with instructions for the guidance of parties dealing, illustrated by copies of the books and forms in use in the Land Titles Office, by Robert R. Torrens, to which is added the South Australian Real Property Act as amended in the sessions of 1858, with a copious index by Henry Gawler...* Adelaide, Printed at the Register and Observer printing Office, 1859.

⁴ PowerPoint presentation, QRR, 2000

⁵ The Deputy Prime Minister in addressing the 46th Annual Conference of the Australian Agricultural and Resource Economics & Society, Canberra, February 2002. See http://www.dotars.gov.au/media/anders/speeches/2002/as15_2002.htm

The major responsibilities for land are laid down in a range of Acts (mainly State), that are allocated to various Departments for administration. Departments tend to have groups responsible for the administration of a particular Act. Quite naturally the focus is then on administering a particular Act.

Those responsible for administering the traditional freehold and leasehold land rights tend to see themselves, and to be seen, as “land administrators”. Those responsible for administering “restrictions” flowing from environmental legislation probably see themselves, and are seen, more as “environmental quality guardians”, rather than administrators of a particular set of “property” restrictions or obligations or rights.

While there are various calls on the urgent need to manage land more holistically (for environmental and sustainability reasons), the administration of the rights, obligations and restrictions on land and its components, tends not to be carried out holistically.

While land is physical and immovable, the rights, obligations and restrictions pertaining to the land are abstract, but no less real, and can be traded provided a market exists and the rights are recognised, unambiguous, and enforceable. To enable rights to be held, be of value and able to be traded, a regulatory and administrative framework, that accords with the norms of good governance and has public confidence, is necessary. When this occurs, the value of the rights can be used as collateral to raise capital.

Land management has generally been considered to be how an “owner” uses and manages land for a productive economic purpose, and to apply to rural and large holdings, rather than small urban holdings. Traditionally land management was viewed as an owner’s business alone but this is no longer the case due to environmental and sustainability concerns. A range of recent Legislation has imposed restrictions and /or a duty of care on some landholders. Traditionally land administration and land management were seen to have little in common, but this is no longer the case.

The central issue

Should land administration be restrained to its traditional context or should it be seen as much more embracing (with a name change if necessary) and include all rights, obligations controls, restrictions, (property rights) relating to land, and for land to be treated more holistically? i.e. should land administration be refocused so as to take a more holistic view of property rights and their markets?

This paper takes the view that such a refocussing is necessary. The grounds are:-

- Holistic land management and improvements in sustainability are likely to be much more difficult to attain without holistic property rights and markets, management and information,
- A lack of holistic property rights management and administration is likely to adversely affect the security of rights, their value and tradability,
- Any non-holistic approach will very likely be less effective and efficient.

6. OBJECTIVES AND MODELS FOR THE MANAGEMENT AND ADMINISTRATION OF PROPERTY RIGHTS AND MARKETS

Objectives

The *Objectives* of property rights and markets, and the *qualities* that should be attained/ exhibited could be as shown below.

	<i>Objectives</i>	<i>Qualities to be attained</i>
1	To ensure all property rights are clearly defined, secure in law and in practice.	Property rights are clear, certain, unambiguous, exclusive, legally enforceable, tradable; the area/spatial extent to which each specific property right applies is clear, certain, and unambiguous.
2	To support the operation of markets in the various property rights.	Markets operate effectively, efficiently, and in accordance with good governance, international best practice, with the Australian Charter of regulatory principles for small business; no unnecessary inter-jurisdictional impediments (such as non-harmonised regulatory regimes)
3	To ensure that transactions and trading in property rights can be carried out.	Dealings are simple, transparent, certain in outcome, easily accessible, affordable, conducted expeditiously, with no disincentives.
4	To provide legally correct	Composite/consolidated/integrated information on all property

	composite/integrated information on all property rights that applies to, or affects any area of land.	rights applying to any land parcel (s) or selected area(s), is quickly and easily obtainable at low cost.
5	To enable property rights to be used as a source of capital/credit and economic development	In the world's "best" 10 for efficiency of capital-raising from property rights and their markets.
6	To support government revenue raising/ taxation based on land.	Property right valuations (assumed as a basis of taxation) are current, fair, transparent, information readily available.
7	To contribute to social stability.	The community has confidence in and respect for the land administration. Independent dispute resolution/ decision challenge is available quickly, is accessible and affordable, matters are resolved expeditiously. Dispute rates are amongst the lowest 10 in the world; public confidence and the application of good governance is amongst the world's top 10.
8	To contribute to natural resource and environmental sustainability.	Efficient and effective management of property rights to further sustainability objectives.
9	To operate effectively and efficiently, with a service philosophy, with public confidence and stringent accountability.	In the world's top 10 for efficient and effective administration, service, public confidence, and accountability.

One of the six originally identified major issues was the lack of performance indicators, data and national and international comparisons. Section 2 noted how the Productivity Commission compared the performance of a range of Government major services. The objectives listed above can be a step towards the development of effectiveness indicators, leading to interstate and international comparison.

It is common to define all terms used. In section 3 it was noted that the term "property right" was used in this paper in its fullest generic sense of including all types of rights, restrictions, obligations, controls etc. It is used synonymously with "property ROR's" where ROR is an abbreviation for rights, obligations and restrictions, with restrictions including controls. A definition of property rights, markets, administration and management might be:

the framework (legislative, institutional, stakeholders, systems and process) that creates, allocates, records, transacts, manages, and administers (includes providing information and appeal mechanisms) all types of ROR's relating to property and natural resources.

Some probably hold the view that a holistic view is not appropriate and the above definitions are not appropriate. Some view land administration as dealing solely with the recording of possession rights, interests and obligations as recorded on a title and that it has little to do with the creation and allocation of ROR's, and that each type of right should be treated independently. Improvements would be obtained by regulatory reform.

Other would argue, and this report does, that the above has been the traditional way and that it is in need of change for the cogent reasons outlined in section 2 and elsewhere in this paper.

Much debate can occur over definitions. Where a subject is complex the definitions become complex and long debates can occur between practitioners. What is more important than the definition is setting the objectives and then defining the scope, while the qualities of the objectives sets the standards. It could be argued that this area is similar in complexity to other major government services such as health, education and justice. While experts might debate detail, customers and users are generally very clear what outcomes they want. An appropriate consideration for any improvements is for all stakeholders to be involved and to achieve outcomes that are stakeholder and demand side focused.

Debate will occur on what the objectives should be; it is unlikely that the need to have explicit objectives would be debated. These objectives, with the qualities provide a start point for the debate.

A conceptual model

Dale and Baldwin (1999), when doing work on the emerging land markets in former socialist East European countries, considered the land market to be composed of the following elements:- the legal basis; the regulating institutions; the participants; the goods and services; the financial institutions. They developed a diagrammatic representation.

The model of Dale and Baldwin can be expanded to show unbundled rights, the separate markets, and which parts support social stability, capital formation and natural resource sustainability. Figure 1 below. Each of these pillars/components can be considered as having three integral parts: a policy and regulator part; an administering institutions part; and a services, process and data part. Each of these parts can be examined in terms of its structural completeness and its operational efficiency, (Lyons unpublished).

While much has been written on land and property markets there appears to have been little work done on what constitutes an effective and efficient land market and how to measure that. Dale and Baldwin (1999), when examining the emerging land markets in the former socialist countries of Eastern Europe, provided a list of characteristics and elements of efficient and effective land markets, which were indicators of market activity. LARI (Land and Real Estate Initiative) is a multi-sectored association of partners convened by the World Bank to help realize the full benefits of land and real estate to the economy and to specifically extend those benefits to the poor. It aims to build consensus on the policy questions, methodologies, and indicators to be used for diagnosis. It has developed a diagnostic tool for assessing land and real estate markets. [World Bank (2001), unpublished].

One of the stated objectives is to support markets in property rights. To measure this objective it is necessary to assess the effectiveness and efficiency of the respective markets, to determine if the performance is contributing adversely, and where and how, and then determine how to improve. All of this requires measures of performance. The indicators above are for land and real estate, with a focus on non-fully developed economies. The need for performance measurement for land administration was noted previously.

Objective methods are required which can be used to compare and assess if best practice is being achieved. Even if not included in an expanded land administration, the requirement for assessing and comparing with best practice will be necessary as a measure of public accountability.

This conceptual model shows (Figure 1) all the various aspects and indicates where property rights and their administration fit in to the markets and the other aspects that support the markets.

None of the above necessarily advocates having a market for each and every property right. However there is a clear indication that markets can be very useful and can be established in more areas than currently exist. Clear objective criteria are required to evaluate the merit of establishing markets. The establishment of a market does not necessarily imply that it is for a public or private good.

An Operational Model

The major functions that deal with property rights are:

- A policy and legal basis;
- The determination of property rights, legal declaration, guidelines;
- Application processing for dealings, permits/licenses etc;
- The provision of information;
- compliance checking;
- appeal processes; and
- a viable and orderly market for trading.

These aspects apply to each of the unbundled rights. A diagrammatic representation of these aspects, the various rights, and Queensland Departments that are responsible for them is shown in Figure 2. This indicates that, at a high level, there is little difference (from a system or macro function point of view) between the administrations of the various types of property rights. Each requires the macro functions of policy and legal formation, determination and declaration, handling of transactions/dealings, information, compliance, and appeals⁶. In the original report some sub system diagrams are shown.

⁶ A useful model for providing a single Appeal process for different processes can be seen at the UK Independent Complaints Reviewer <http://www.icrev.demon.co.uk/icrbook.htm>

FIGURE 1 – The Property Rights Market Model

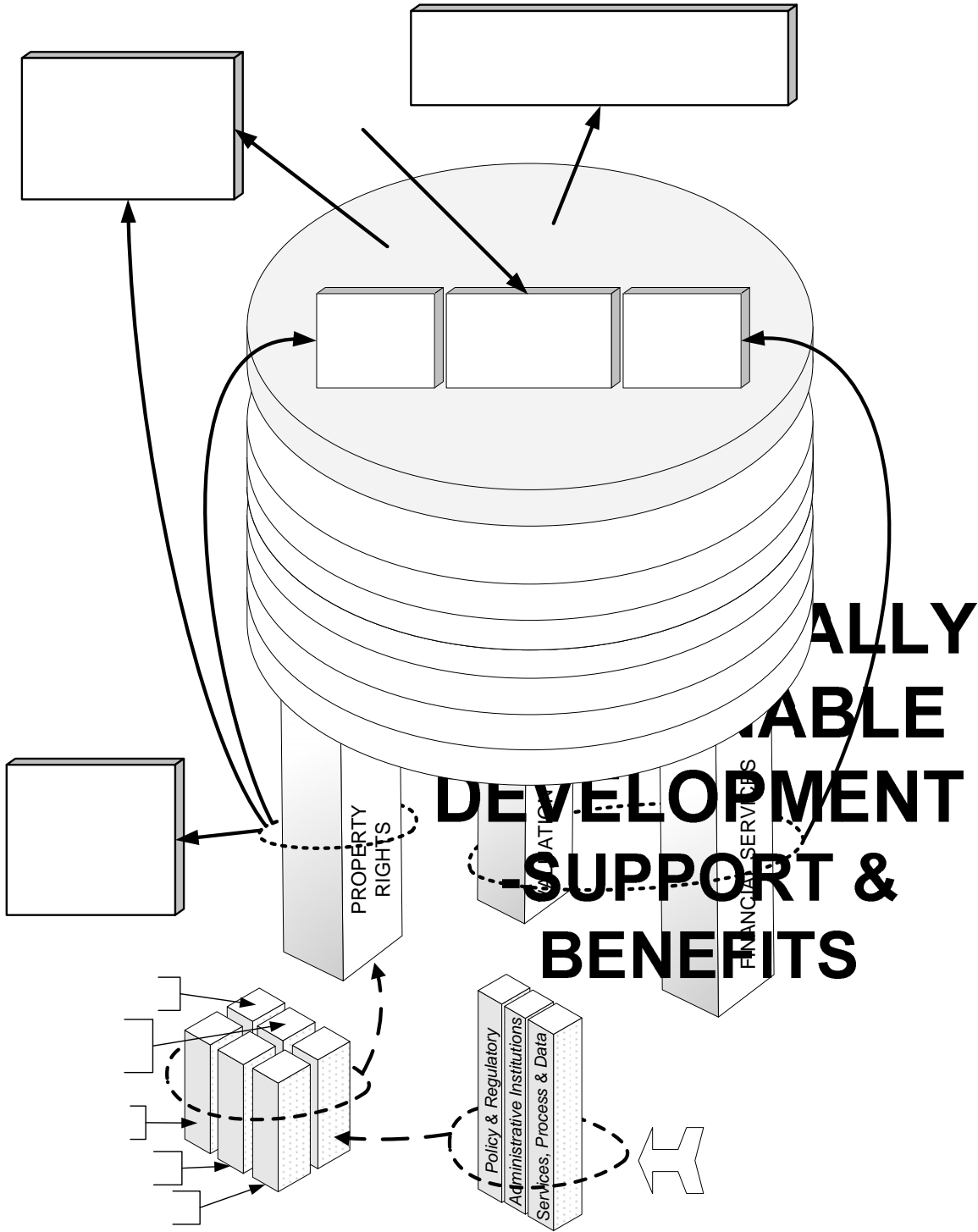
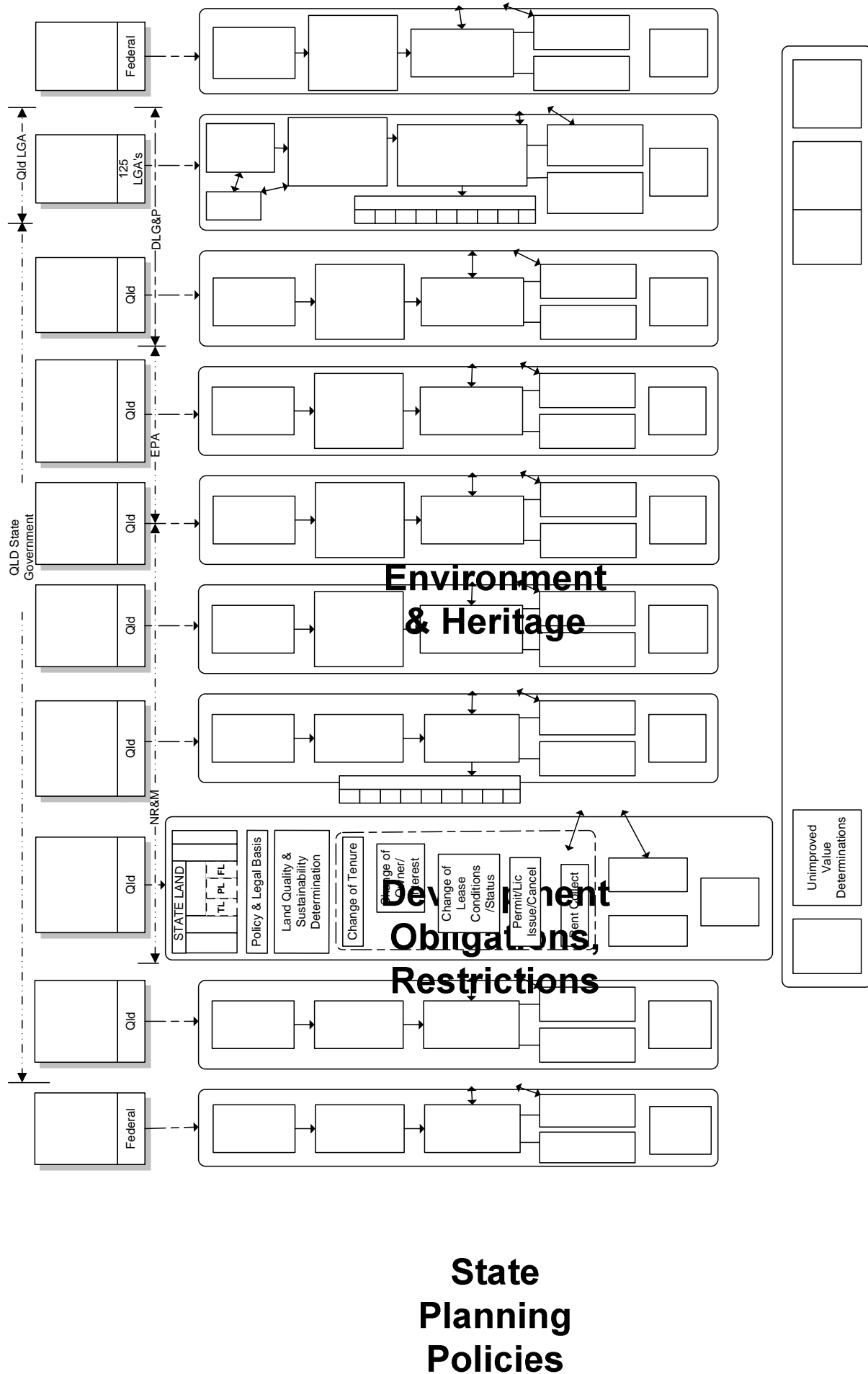


Figure 2 – The Major Administrative Functions for Land & Property Rights, Obligations & Restrictions



Comments/Questions

From a consideration of the above the following questions could be posed:-

1. Why not consider adopting a set of objectives with quality criteria for property rights management and administration?
2. Why not consider arranging the administration and management of property rights holistically by function rather than by type of right [Ref Fig 2; current arrangements tend to be by row(s); could it done better by column (function)?].
3. Why not consider physically, legally and transparently separating policy, from regulator, from supplier?
4. Why not have a single point of Ministerial responsibility for all aspects of property rights with a high level consultative committee comprising all stakeholder groups
5. Why not consider opening more areas up to competitive supply? [eg provision of permits/ licenses, processing applications, compliance checking, technical science base used in determination, etc]
6. Why not measure the performance (effectiveness and efficiency) of property rights management/ administration, and their markets?
7. Why not provide composite information on all ROR's related to a specific parcel(s) or a designated land area, quickly and at low cost?
8. Why not devote more effort to defining all property rights, establishing markets and foster the underdeveloped markets?
9. Why not devote effectiveness & efficiency savings to outreach education & incentives for individual landholders that will compliment broad initiatives such as NHT & NAP (National Heritage Trust Funding and related National Action Plan)⁷?

The form and number of the questions can be refined. The important point is the direction of the questions. The aim is to ensure that property rights management and administration meets its objectives, effectively and efficiently.

7. PRINCIPLES ON WHICH IMPROVED PROPERTY RIGHTS AND MARKETS COULD BE BASED

Background

The Federal Government has international obligations to the reduction of greenhouse emissions. In moving to meet these obligations Public Agencies with responsibility to deliver an environmentally sustainable Australia are lawfully developing and imposing constraints on land use, effectively through the unbundling of the property rights attached to land.

The impact of this falls unduly on rural landholders who generally receive no compensation for the subsequent diminution in value of their landholding. Whilst an environmentally sustainable Australia is a desirable objective which will benefit all Australians, this should be achieved equitably and not through any undue contribution from any particular sector of the community.

The Federal Government is committed to addressing the issue of property water rights at COAG. There are also related questions as to the precision and justification of the declared land use constraints. A lot of the clearing and development of land was brought about by mandatory Government lease requirements. Many agricultural practices that are now considered unsustainable were advocated or fostered by Government Agencies like Queensland's Department of Primary Industry (DPI.)

Discussion

Historically, and in the common law, which originally applied to land ownership in Australia, landholders had a reasonable expectation that their property rights equated to an almost exclusive social and economic use of their landholding based on its tenure. Notwithstanding this expectation property rights have been incrementally reduced statutorily over time e.g. for town planning, but the pace of this reduction has increased markedly since Australia's international obligations to global warming and emissions reduction have been applied.

Generally it is the inability of Governments to address questions of compensation that has fed the current high levels of dissatisfaction by landholders. It is taken as a given that this inability is because Governments have no

⁷ <http://www.nht.gov.au>

capacity to provide compensation. In this event the only option open to the Nation (and the Government) is to foster the establishment and operation of markets in property rights, in addition to the well developed markets in title rights.

The market mechanism allows market forces to continually move property rights to the highest value uses, and in so doing provides financial adjustment to those landholders advantaged or disadvantaged through the unbundling of property rights.⁸

The US has several examples of emissions trading (of non-GHG emissions). These programs include the Acid Rain Program⁹ (Title IV of the U.S. Clean Air Act of 1990), Ozone Transport Commission NOx Program¹⁰ (13 Northeast states and Washington D.C.), the South Coast Air Quality District's Regional Clean Air Incentives Market (California), and Discrete Emission Reductions Credits¹¹. Since 1994 evidence has indicated that these programs have generally resulted in reduced compliance costs (often half of original predictions), lower emissions, and reductions in advance of regulatory emissions caps.

National governments are at various stages in establishing of national GHG (Greenhouse Gas) trading schemes. The Danish Government has implemented a mandatory emissions trading scheme that applies to the electricity generators¹². The United Kingdom is in the process of establishing a voluntary emissions trading scheme that offers corporations significant financial incentives to take on emissions reductions¹³. There are plans in the European Commission to implement a regional emissions trading scheme by 2005¹⁴. Other nations, including Norway¹⁵, The Netherlands¹⁶ and Australia¹⁷ are examining the feasibility of establishing schemes. The manner in which these various schemes will interact is still to be determined.

To establish the framework for this to occur it will be necessary to establish a set of principles which would need to exist for property rights markets to be effective.

Existing landholder principles:

All landholders are entitled to:-

- Information, certainty and justification as to the rights attached to their landholding
- Accuracy as to their spatial extent
- Rights of appeal to independent authority
- Compensation where rights are reduced and value is reduced

Where it is proposed that the property rights of any landholder are to be unbundled and reduced in the interests of a sustainable Australia the landholder is entitled to:-

- Information, certainty and justification of the proposed reduction
- Accuracy as to their spatial extent
- Rights of appeal to independent authority
- Compensation where rights are reduced and value is reduced

To establish new markets:

Whereas it may be necessary for Governments to create markets in unbundled property rights in order to meet requirements of equity among landholders, then these rights should also be:-

- Clearly defined,
- Completely and exclusively allocated (that is, holders of property rights should be guaranteed exclusive use)
- Secure
- Legally enforceable

⁸ For a discussion on markets see emissions trading on <http://www.ieta.org>

⁹ <http://www.epa.gov/airmarkets/arp/>

¹⁰ <http://www.epa.gov/airmarkt/progsregs/noxview.html>

¹¹ <http://www.des.state.nh.us/ard/dertp.htm>

¹² http://www.ens.dk/uk/energy_reform/emissions_trading/index.htm

¹³ <http://www.uketg.com>

¹⁴ http://www.ieta.org/About_ET/Documents_Linked_To/EC_ET_Directive.doc

¹⁵ <http://odin.dep.no/md/engelsk/publ/rapporter/022021-020006/index-dok000-b-n-a.html>

¹⁶ <http://www.senter.nl/asp/page.asp?alias=erupt>

¹⁷ <http://www.greenhouse.gov.au/emissionstrading>

- Tradable

Application:

Whilst this framework is predicated nationally, it is also likely to be independently valid in the States who have the constitutional responsibility for land administration.

Standards:

Markets in property rights should be nationally consistent to facilitate efficiency, and internationally consistent where property rights are to be traded globally. E.g. carbon credits.

Implementation and planning:

States and the Federal Government should create an appropriate resource to work with and through the land administration infrastructure of all States, sustainability Agencies, and with landholders, to implement this framework.

Measurement:

Best Practice criteria should be established nationally for property right systems to provide an efficiency driver for State systems, etc.

What these principles are not:

The above principles are not a recipe for wholesale and massive reform. Rather they represent a vision towards which practical reforms of subsystems in any jurisdiction can migrate over time.

For example, it is possible that a business case may not exist to harmonise State titling systems, however a case may exist to further develop nationally consistent property rights data, as has been initiated by the PSMA (Public Sector Mapping Agency) with its Cadastral Lite product¹⁸. The European Commission is moving in this direction with its Member States who have much larger traditional and cultural differences than the Australian States.¹⁹

8. OPTIONS

There are two broad options arising from the above:

1. Do nothing, or
2. Undertake a program to improve.

The findings of the report raised a variety of complex issues, many of which will not be solved quickly or easily. If much is considered "too hard" then the "do nothing" option is attractive. Some comments on working drafts indicated that some had the view that the complexity was such that nothing should be done and by and large it was all working.

Without some commitment to reform the overall system in the long term, will become more and more complex, less certain, more time-consuming to deal with, and with associated increased costs to all. It will only be a matter of time before users and consumers express more public concern. (The topic of property rights is increasingly on the agenda and receiving political attention). This would be likely to adversely reflect in the markets for the various Property Rights, affect the achievements of the nine proposed objectives for land administration with their attendant quality criteria, and, in the long-term, could affect the three major benefit areas of economic development and wealth creation, land and environmental sustainability, and social stability. Pressure will mount for risks to be insured (as occurs in the USA), further increasing consumer costs.

The successful implementation of changes to development assessment in Queensland, e.g. the introduction of the IPA legislation and the introduction of IDAS, shows that improvements in an equally complex area can be successfully achieved.

¹⁸ <http://www.pdma.com.au>

¹⁹ <http://www.eulis.org>

The challenge then becomes *what* to do, and *how* to progress, in a way that addresses issues of substance; is likely to achieve something worthwhile, while at the same time addressing them in a way that has some chance of success. It is possible to identify a number of areas that can be addressed, undertaken within a reasonable timeframe, and pave the way towards further activities. They could be conducted in such a way that they have the support of the major impacted parties and stakeholders.

The authors believe Option 2 is appropriate.

9. POSSIBLE NEXT STEPS

Activities

The activities that the authors consider that could now be undertaken are to: --

1. Prototype consolidated information and definition on all property rights relating to any parcel of land or any selected area of land.
2. Determine performance indicators and values for the various property markets and property rights administration, particularly from the demand side; examine how well the regulatory regime compares to the criteria laid down in the charter for small businesses and COAG.
3. Use material in the final report to compile a discussion paper for public and stakeholder comment.
4. Establish a high level Queensland consultative committee to Government for property rights and markets policy, management and administration.
5. Examine the less well established property rights markets and determine what is needed to foster their establishment so that they become effective and efficient.
6. Determine the desirability and feasibility of establishing a single independent appeals mechanism for all matters relating to property rights, their markets, their administration etc.
7. Raise the matter at a National level.
8. Assist to establish and foster a property rights and markets research/ think-tank group.
9. Establish an authoritative data set on tenure types in Queensland.
10. Undertake a review of the Regulatory Impact on Property Rights.

The results from these activities would provide a good lead in to the more difficult issues relating to legislation and organisational arrangements. Support from relevant Departments and possibly Cabinet, as well as major stakeholder groups, would be needed.

Questions for Further Discussion and Debate

Throughout the paper a number of comments are made, they could be considered as conclusions. Some would probably argue that even if the comments are valid that is not necessarily “bad” or a cause for change, as that is the nature of the area. However it is possible to raise a series of questions to advance further discussion and debate. These questions have been posed as “why not” and brief “pros” and “cons” have been given to foster further discussion.

The form and number of the questions can be refined. The important point is the direction of the questions. The aim is to ensure that property rights management and administration meets its objectives, effectively and efficiently. None of the questions posed advocate privatising or weakening land related Property Rights or public confidence; rather it is intended to strengthen them and overcome current weaknesses, and to be able to objectively substantiate claims for effectiveness, efficiency, and consumer satisfaction and to be able to compare between jurisdictions.

Q	Question	Pros	Cons
1	Why not consider adopting a set of objectives with quality criteria for property rights management and administration?	<p>There is clear knowledge on what the objectives are and the standards being sought. [The ten objectives in the paper are a starting point].</p> <p>Provides a basis to measure effectiveness.</p> <p>The role of government would become more explicit.</p>	
2.	Why not consider arranging the administration and management of property rights holistically by function rather than by type of right [Ref Fig 3.5; current arrangements tend to be by row(s); could it done better by column (function)].	Should lead to a more holistic approach as each function would be handled across all rights.	Would involve major changes in government administrative arrangements.
3.	Why not consider physically, legally and transparently separating policy, from regulator, from supplier?	In line with current trends and good governance.	May be considered already done.
4	Why not have single point of Ministerial responsibilities for all aspects of property rights with a high level consultative committee comprising all stakeholder groups?	<p>More likely to be effective with single accountability rather than multiple.</p> <p>All stakeholders groups being represented at a high level should ensure issues are raised earlier rather than later.</p>	Changes the status quo.
5	Why not consider opening more areas up to competitive supply? [e.g. provision of permits/ licenses, processing applications, compliance checking, technical science base used in determination, etc]	<p>As above.</p> <p>Private solicitors and surveyors are integral to the current system so precedence exists.</p> <p>Introduces competition without necessarily comprising quality.</p>	<p>As above.</p> <p>Major change to public sector operations</p>
6	Why not measure the performance (effectiveness and efficiency) of property rights management/ administration, and their markets?	<p>Would provide fact to replace assertion; if done comparatively provides a measure with like.</p> <p>Has been done successfully in complex areas such as Health, Education etc.</p>	<p>Has not been done before in this area.</p> <p>Some would argue that the area is so complex that measuring performance cannot be done and current performance is OK.</p>
7	Why not provide composite information on all Property Rights related to a specific parcel(s) or a designated land area, quickly and at low cost?	<p>Provides information users, customers, stakeholder's etc. want and need.</p> <p>Should remove some uncertainty.</p> <p>Should allow imprecise (in definition and spatial extent) Property Rights to be identified and hence made more precise.</p>	Would require cooperation across a large number of Queensland State Agencies, and between the State and all LGA's in Queensland, and between the State and a number of Federal Government agencies. May adversely affect the income of some Agencies derived from the sale of information.

Q	Question	Pros	Cons
8	Why not devote more effort to defining all property rights, establishing markets and foster the underdeveloped markets?	Some property rights are ill defined and this causes uncertainty. Markets do not operate in all rights; some assert that an effective market will assist to protect biodiversity and contribute to sustainable land use.	May not be seen as part of a refocused land administration. Many conservationists would probably not agree that a market could contribute to the protection of biodiversity etc.
9	Why not devote effectiveness & efficiency savings to outreach education & incentives for individual landholders that will compliment broad initiatives such as NHT & NAP?	Incentives and education will probably have a longer term impact than restrictions alone. That is not to say that restrictions are not necessary.	Is long term and needs to be directed at individual landholders to be effective.
10	Why not greatly reduce the number of pieces of legislation that define /impact on property rights and treat property rights much more holistically in a few pieces of legislation that clearly define all property ROR's and establish their markets?	Sustainable land management requires a holistic approach. Clear property rights and effective markets have been identified as necessary	Would be quite complex and lengthy to achieve.
11	Why not carry out a Regulatory Impact Assessment using a recognised methodology and against recognised principles?	Would report on the efficacy of the current regulatory regime.	
12	Why not provide composite information on all ROR's related to a specific parcel(s) or a designated land area, quickly and at low cost?	Provides information that users, customers, stakeholders etc. want and need. Should remove some uncertainty. Should allow imprecise (in definition and spatial extent) ROR's to be identified and hence made more precise.	Would require cooperation across a large number of Queensland State Agencies, and between the State and all LGA's in Queensland, and between the State and a number of Federal Government agencies. May adversely affect the income of some Agencies derived from the provision of information.
13	Why not have a single appeals pathway for all matters re property rights? [This is not to necessarily advocate only one way or level]	Would reduce the current complexity.	If amount of current legislation remains unchanged it would involve minor changes to numerous pieces of legislation.
14	Why not have better/ earlier coordination between policy groups before separate legislation/ regulation is enacted re property rights?	Should result in more holistic policy and legislation, which in turn should reduce complexity and uncertainty for customers/ stakeholders, and contribute to more sustainable land management.	Would require cooperation across a large number of Queensland State Agencies, and between the State and all LGA's in Queensland, and between the State and a number of Federal Government agencies.

Q	Question	Pros	Cons
15	Why not work towards an Australia wide harmonising of property rights?	As above. Other reports call for and indicate substantial benefits?	As above. Would take considerable time. Outcome not certain.

10. CONCLUSIONS

This paper has identified an important area of public administration that would benefit from reform. Objectives and criteria have been identified and reforms should only be undertaken within the framework of those objectives and criteria.

The experience gained and lessons learnt, from the reform of development planning and assessment during the past decade, is considered relevant and shows that reform can be achieved.

A range of activities and questions for debate have been identified as next steps to commence the reform process of property rights and land administration.

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REFERENCES

- Alexandra, Jason. *The Rural Property Market - Facing the Environmental Challenge*. Rural Environment, February 2001
- Arnold C. *The Queensland Local Government (Planning and Environment) Act 1990 and the Solicitor - Practice Problems*. Symposium '92. Qld Law Society and the Bar Association of Queensland. 1992.
- Australian Electrical and Electronic Manufacturers' Association Limited (AEEMA). *Pilot E-Business initiative offers a secure electronic conveyancing system*. Media Release #24/01, 9 August 2001.
http://www.aeema.asn.au/docs/9_August_Electronic_conveyancing_project.pdf
- Australian Council of Building Design Professionals & ors, *Unfinished Business - Prospects for an Intergovernmental Agreement on Development Assessment*, Joint Industry Submission to Planning, Housing and Local Government Ministers, Feb 1998.
- Australian State of the Environment Committee, 2001. *Australia State of the Environment 2001*, Independent Report to the Commonwealth Minister for the Environment and Heritage, CSIRO Publishing on behalf of the Department of the Environment and Heritage, Canberra.
- Barnes G., *International Comparative Review of Land Administration Initiatives*, Land Administration Project – Part C, National Development Planning Agency and National Land Agency, Government of the Republic of Indonesia. 1997.
- Birrell S. Barry J. Hall D. Parker J. *Is the Torrens System suitable for the 21st Century ?* 2010 A Vision – NZ Australian Cadastral Conference. New Zealand June 1995.
- Boge C. *State Leasehold in Queensland*. The Federation Press. 2000.
- Bogor Declaration on the Cadastre 1996. UN.
<http://sunspot.sli.unimelb.edu.au/fig7/Bogor/BogorDeclaration.html>
- Bradsen J., Fowler R., *Land Degradation: legal issues and institutional constraints*, in *Land degradation Problems and Policies* (ed: Chisholm A., Dumsday R.), Cambridge University Press, 1987.
- Brandão A., Feder G., *Regulatory policies and reform: the case of land markets* Chapter 10 of Regulatory Policies and Reform: A Comparative Perspective, Claudio Frischtak (ed.), World Bank, December 1995. pp. 191-209
<http://wbln0018.worldbank.org/networks/essd/icdb.nsf/d4856f112e805df4852566c9007c27a6/48a37371db09aed2852567dd005c5ed8>
- Bromley D.W., *Environment and Economy – Property Rights and Public Policy*, Blackwell, 1991.
- Butt P.(Ed), *A new era in Torrens title in Queensland - the Land Title Act 1994*, The Australian Law Journal Sept.1994.
- Cook J.S., *The Influence of Human Rights on Land Rights and Spatial Information*. Proceedings of the 42nd National Congress of the Institution of Surveyors, Australia. Brisbane, Queensland. September 2001.
- Council of Australian Governments, *Principles and Guidelines for National Standard Setting and Regulatory Action by Ministerial Councils and Standard-Setting Bodies*, Department of Prime Minister & Cabinet, November 1997. <http://www.dpmmc.gov.au/pdfs/coagpg.pdf>
- Dale, P.F. *Cadastral Reform '92 – Let the Users Speak*. International Conference on Cadastral Reform. Melbourne. June 1992.
- Dale, P.F. *International Trends in Cadastral Reform – or Registration of Title, is it time for a change ?* Cadastral

Reform Conference. Melbourne. July 1990.

Dale, P.F. *Strategies for Cadastral Reform*. Cadastral Reform Conference. Melbourne. July 1990.

Dale, Peter, *Is technology a blessing or a curse in land administration?* UN-FIG Conference on Land Tenure and Cadastral Infrastructure for Sustainable Development, Melbourne, Australia, 25-27 October 1999.
http://www.oicrf.org/cgi-bin/show_document.pl?docid=984047660

Dale P. *The importance of land administration in the development of land markets: a global perspective*. 2000.
http://www.oicrf.org/cgi-bin/get_pdf.pl/985865568.pdf?agree=on&docid=985865568&legal_notice=on&method=download&email=&document=Get+document

Dale P. & Baldwin R.,(1999), *Development of Land Markets in Central and Eastern Europe, Final Report*, Project P2128R of the European Union Action for Cooperation in the Field of Economics Program.

Davies P.F. *Cadastral Strategies – Reform or Transition*. Cadastral Reform Conference. Melbourne. July 1990.

Office of Local Government, *Local Government Regulation of Land and Building Development*, Department of Immigration, Local Government and Ethnic Affairs, AGPS Canberra, 1990.

Department of Lands. *Crown Land Management Reform in Queensland - A White Paper which outlines principles for Crown land legislation*. Qld Government. Dec 1992

Department of Lands. *The New Queensland Land Act*. Booklet. Dec 1995.

Department of Natural Resources. *Co-ordinating Resource Planning Within DNR*. Handbook of Resource Planning Guidelines Chapter J1. Qld Govt. November 2000.

Department of Natural Resources. *Allocation, Regulation and Management - Mechanisms to Achieve Land Sustainability*. Handbook of Land Planning Guidelines Appendix 5. Qld Govt December 2000.

Department of Natural Resources and Mines. *Broad State Interests in Natural Resource Management*. Handbook of Resource Planning Guidelines Chapter A2. Qld Govt July 2001.

Department of Natural Resources and Mines, *Corporate plan 2001 – 2006*, Qld Govt, 2001
http://www.nrm.qld.gov.au/resourcenet/aboutus/corp_plan2001_2006.pdf

Duncan W. *State Indemnified Title in Queensland - Success or Failure*. University of Queensland Law Journal Vol.10, No.1. ?

Eaton A. *Summary Version of the Report of a Review of Land Policy and Administration in Queensland*. Sept 1990.

Ekner B. *Restrictions in Land Use - Information and Control*. Seoul 2001.
<http://www.ddl.org/figtree/pub/proceedings/korea/full-papers/session13/ekner.htm>

Else-Mitchell Rae. *Legacies of the 19th Century Land Reformers from Melville to George*. The John Murtagh Macrossan Lecture 1974.

Else-Mitchell, Rae. *Legacies of the nineteenth century land reformers from Melville to George*. U.of Q. Press. 1975.

Else-Mitchell Rae, *Commission of Inquiry into Land Tenures - First Report*, Government Printer, 1973.

Else-Mitchell Rae, *Commission of Inquiry into Land Tenures - Final Report*, Australian Government Publishing Service,1976.

EEU., *The Development of Land Markets in Central and Eastern Europe*, Action for Cooperation in the Field of

Economics, Nov 1999.

Environmental Protection Agency. *State of the Environment Queensland*. EPA.1999.

Feder, Gershon, *Land administration reform: economic rationale and social considerations*. UN-FIG Conference on Land Tenure and Cadastral Infrastructure for Sustainable Development, Melbourne, Australia, 25-27 October 1999
http://www.oicrf.org/cgi-bin/show_document.pl?docid=984047655

FIG Commission 7 Home Page <http://www.fig7.org.uk>

FIG. *Cadastré 2014 – A vision for a future Cadastral System*. 1998. <http://www.swisstopo.ch/fig-wg71/cad2014/cad2014/index.htm>

FIG Statement on the cadastre
http://sunspot.sli.unimelb.edu.au/fig7/cadastre/statement_on_cadastre_summary.html

FIG *Agenda 21 : agenda for implementing the concept of sustainable development in the activities of the International Federation of Surveyors and its member associations* http://www.oicrf.org/cgi-bin/get_pdf.pl?docid=995975116

Gorrie G., Wonder B., *Managing Natural Resources in Rural Australia for a Sustainable Future*, Standing Committee of Agriculture and Resource Management, National Natural Resource Management Task Force, Canberra, 1999.

Hanna S and Munasinghe M., *Property Rights and the Environment – Social and Ecological Issues*. Beijer International Institute of Ecological Economics and The World Bank. 1995.

Hawerk W., *Standards in Cadastre - Sense or Nonsense ?* International Symposium on Reforming and Benchmarking the Cadastre. Gavle, Sweden. June 2001.

Henssen, J.L.G. and Williamson, I.P. *Land Registration, Cadastre and its Interaction - A World Perspective*. 1990
http://sunspot.sli.unimelb.edu.au/research/cad_anthology/article/artic5.htm

Henssen J. *Basic Principles of the Main Cadastral Systems in the World*. from Proceedings of the One Day Seminar held during the Annual Meeting of Commission 7, Cadastre and Rural Land Management, of the International Federation of Surveyors (FIG), May 16, 1995, Delft, The Netherlands.
http://www.swisstopo.ch/fig-wg71/doc/delft_seminar/paper2.html

Hogg J.E., *The Australian Torrens System: Being a Treatise on the System of Land Transfer and Registration of Title now in Operation in the Six States of The Commonwealth of Australia, The Colony of New Zealand, and Fiji, and British New Guinea. Including The text of the Torrens Statutes and Ordinances in the Nine Territories, and References to Other Statutes Relating to Land, And An Historical Account Of The Growth Of The System*. William Clowes And Sons, Limited, London. 1905

Holmes J. *Land Tenure as a Contemporary Policy Instrument*. University of Qld. February 1996.

Holmes J. *The Policy Relevance of the State's Proprietary Power: Lease Tenures in Queensland*. Australian Journal of Environmental Management - Volume 3. December 1996.

Industry Commission. *A Full Repairing Lease - Inquiry into Ecologically Sustainable Land Management*. Report No.60. Jan 1998.

Jacoby, S., Smith, S., Ting, L., and Williamson, I. P. *Developing a Common Spatial Data Infrastructure between state and Local Government - An Australian case study*. 2001.

http://www.geom.unimelb.edu.au/research/publications/IPW/4_01JacobySmith.pdf

Joint Land Titles Committee, *Renovating the Foundation: Proposals for a Model Land Recording and Registration Act for the Provinces and Territories of Canada*, Alberta Law Reform Institute, 1990.

Kaufmann, Jürg, *Future cadastres: implications for future land administration systems: bringing the world together?* UN-FIG Conference on Land Tenure and Cadastral Infrastructure for Sustainable Development, Melbourne, Australia, 25-27 October 1999

http://www.oicrf.org/cgi-bin/show_document.pl?docid=984047650

Kaufmann, J. *Future Cadastres: The Bookkeeping Systems for Land Administration supporting Sustainable Development*. 1st International Seminar on Cadastral System, Land Administration and Sustainable Development in Bogota, Colombia, 3-5 May 2000. <http://www.swisstopo.ch/fig-wg71/doc/bogota00/bogota.htm>

Kaufmann, J. *Benchmarking Cadastral Systems - Results of the Working Group 7.1*. International Symposium on Reforming and Benchmarking the Cadastre. Gavle, Sweden. June 2001.

Kerr D., *The Principles of the Australian Lands Titles (Torrens) System*. The Law Book Company of Australasia Ltd, 1927.

Kerr E., *Property Law – Uniformity of Laws: Towards a National Property Practice*. Australian Property Law Journal, Nov. 1993.

Lauri, Bo, *User interface and internet approach : important components in the Swedish cadastral system*.

International Conference FIG Working Week 2001, Seoul, Korea. 2001. http://www.oicrf.org/cgi-bin/show_document.pl?docid=991207986

Lyons K., Cottrell E., Davies K., *The Impact of the Regulatory Regime on Cadastral Surveying in Queensland – Queensland Spatial Data Standards Project paper No 3, 2000*.

Lyons K., Cottrell E., Davies K., *Land Administration In Australia And New Zealand; Purpose, Trends & Possible Improvements -- A Discussion Paper*, 2001, www.auslig.gov.au/asdi/survbdq.htm .

Lyons K., Cottrell E., Davies K., *The Digital Lodgment Of Survey Plans -- A Discussion Paper*, 2001, www.auslig.gov.au/asdi/survbdq.htm .

Lyons K., Cottrell E., Davies K., *A Business Case For The Digital Lodgment Of Survey Information To Register Land And Strata Parcels*, 2001, www.auslig.gov.au/asdi/survbdq.htm .

Lyons K., Cottrell E., Davies K., *Issues Identified In An Overview Of Part Of The Land Administration Of Australia And New Zealand -- A Discussion Paper*, 2001, www.auslig.gov.au/asdi/survbdq.htm .

Mant J. *Public And Government Land - Post Colonial Land Systems*. Australian Journal of Public Administration Vol.XLVI, No.3, September 1987.

McGrath, Chris. *Major pieces of the Queensland Environmental Legal System*. Environmental Law Publishing, 2001.

McLaughlin J. *Land Administration within a Social Market Context*. International Conference on Cadastral Reform. Melbourne. June 1992. http://sunspot.sli.unimelb.edu.au/research/cad_anthology/article/artic10.htm

McLaughlin, John. *Land administration and globalization*. UN-FIG Conference on Land Tenure and Cadastral Infrastructure for Sustainable Development, Melbourne, Australia, 25-27 October 1999. http://www.oicrf.org/cgi-bin/show_document.pl?docid=984047647

Molen P. Van Der, Osterberg T. *Land Tenure and Land Administration For Social And Economic Development In (Western) Europe*. UN-FIG Conference on Land Tenure and Cadastral Infrastructure for Sustainable Development, Melbourne, Australia, 25-27 October 1999. http://www.oicrf.org/cgi-bin/get_pdf.pl?docid=984047644

Molen P. Van Der *Datacommunication: A lifeline between Land Administration Organisations and Society*. Seoul 2001. <http://www.ddl.org/figtree/pub/proceedings/korea/full-papers/session13/vandermolen.htm>

Molen P. Van Der *Cadastrals Revisited: The Promised Land of Land Administration*. Enschede, Netherlands. 2001. http://www.oicrf.org/cgi-bin/get_pdf.pl/991140211.pdf?agree=on&docid=991140211&legal_notice=on&method=download&email=&document=Get+document

Molen P. Van Der, *Cost Recovery for Land Administration*, International Symposium on Reforming and Benchmarking the Cadastre. Gavle, Sweden. June 2001.

Mortson, Jason *An object oriented approach to parcel history tracking*. Urban and Regional Information Systems Association (URISA) Annual Conference, Orlando, Florida, August 19-23, 2000. http://www.oicrf.org/cgi-bin/show_document.pl?docid=984047802

Munro-Faure Paul, *Infrastructure reforms: the role of the markets and land valuation systems: agenda for change?* UN-FIG Conference on Land Tenure and Cadastral Infrastructure for Sustainable Development, Melbourne, Australia, 25-27 October 1999. http://www.oicrf.org/cgi-bin/show_document.pl?docid=984047648

"World Bank estimates suggest that the capital value of real estate constitutes half to three quarters of a nation's wealth: the less domestic capital and the less developed the economy, the higher this proportion. Whilst is true for a nation, is also typically true for the family and individual, and may be true for the Corporation.

Real estate is therefore likely to be by far the largest class of asset in most economies. Its efficient use and management must be one of the keys to successful economic development."

Munro-Faure P., *Infrastructure reforms: the Role of Markets and Land Valuation Systems - Agenda for Change*, UN-FIG Conference on Land Tenure and Cadastral Infrastructure for Sustainable Development, Melbourne, Australia, 25-27 October 1999. http://www.oicrf.org/cgi-bin/show_document.pl?docid=984047648

National Office of Local Government, *Principles of Leading Practice in Development Assessment Processes*, Development Assessment Forum, Dept of Transport and Regional Services, Sept 1999

National Office of Local Government, *Charter*, Development Assessment Forum, Dept of Transport and Regional Services, Sept 1999

Neate G. *Mapping Landscapes of the mind: A cadastral conundrum in the Native Title era*. UN-FIG Conference on Land Tenure and Cadastral Infrastructure for Sustainable Development, Melbourne, Australia, 25-27 October 1999.

Neave M. *Towards a Uniform Torrens System: Principles and Pragmatism*, Australian Property Law Journal. Nov 1993.

New South Wales Department of Land Water Conservation, *Offsets, Salinity and Native Vegetation - A Discussion Paper*, Sydney, July 2001

North D. *Institutions Matter*. Working Paper dated 28/3/1994. <http://econwpa.wustl.edu:8089/eps/eh/papers/9411/9411004.pdf>

OECD. *Urban Land Markets - Policies for the 1990's*. Organisation for Economic Co-operation and Development. 1992.

Ordnance Survey UK. *Putting customers first in land administration : discussion paper* author unknown (year unknown)

http://www.oicrf.org/cgi-bin/show_document.pl?docid=984047283

Ordnance Survey UK., *The Economic Contribution of Ordnance Survey GB.*, OXERA, 1999.

O'Sullivan J., *Delivering Property Registration Services in the e-Government era - Developments in Ireland*, Conference on Delivering Property Registration Services in the e-Government era, Dublin Castle, 18/19 October 2001. http://www.irlgov.ie/landreg/irish_presentation.htm

Proceedings. *International Conference on Land Tenure and Cadastral Infrastructures for Sustainable Development*. Melbourne October 1999. <http://www.sli.unimelb.edu.au/UNConf99/proceedings.htm>

Productivity Commission , *Microeconomic Reform and the Environment*, Workshop Proceedings, Sep 2000, Melbourne. <http://www.pc.gov.au/research/confproc/mecrefenv/index.html>

Productivity Commission, *Constraints on Private Conservation of Biodiversity*, Commission research paper, 2001 Canberra. <http://www.pc.gov.au/research/commres/copcob/copcob.pdf>

Productivity Commission, *Creating Markets for Biodiversity: A Case Study of Earth Sanctuaries Ltd*, Staff Research Paper, Canberra, Sept 2001. <http://www.pc.gov.au/research/staffres/cmbiod/cmbiod.pdf>

Productivity Commission, *Harnessing Private Sector Conservation of Biodiversity*, Commission Research Paper, Canberra. 2001 <http://www.pc.gov.au/research/commres/hpscb/hpscb.pdf>

Property Council of Australia (and another 7 organisations), *Unfinished Business Prospects for an Intergovernmental Agreement on Development Assessment*, . Joint Industry Submission to Planning, Housing and Local Government Ministers, February 1998.

Property Council of Australia, Media Statements, 12th, 15th & 16th May 2000. http://www.propertyoz.com.au/data/media_lounge/fs_lounge.htm

Property Council of Australia, *One set of Rules*, Dec 2000

Queensland Competition Authority. *Criteria for the declaration of Government Monopoly Business Activities*. 1997.

Exec. Summary - <http://www.qca.org.au/getfile.cfm?fid=2&lib=1&LibraryID=1&PageID=8>

Full Report - <http://www.qca.org.au/getfile.cfm?fid=1&lib=1&LibraryID=1&PageID=8>

Queensland Farmers Federation. *The Environmental Code of Practice for Agriculture*. 1995.

Queensland Government. *Planning Guidelines - Separating Agriculture and Residential Land Uses*. Qld Govt Printer. 1997.

Reeve I., *Tiptoeing round the Slumbering Dragon: Property Rights and Environmental Discourse in Rural Australia*, The Rural Development Centre, University of New England, 1999

<http://www.ruralfutures.une.edu.au/publications/downloads/irffilesfordl/dragon.pdf>

Registers of Scotland, *Delivering Property Registration Services in the e-Government era - Automated Registration of Title to Land*, Land Registration Conference, Dublin, Ireland, October 2001.

http://www.irlgov.ie/landreg/scottish_presentation.htm

Registration Conference, Dublin Castle, Dublin, Ireland , October 2001.

http://www.irlgov.ie/landreg/irish_presentation.htm

Riddell, J. & Palmer, D. *The importance of co-ordinated land administration in the next millenium*. UN-FIG Conference on Land Tenure and Cadastral Infrastructure for Sustainable Development, Melbourne, Australia, 25-27 October 1999. http://www.oicrf.org/cgi-bin/show_document.pl?docid=984047642

Roberge D. *Protecting Land Rights, A Key Factor in Sustainable Development - The Quebec Example*. 1st International Seminar on Cadastral System, Land Administration and Sustainable Development in Bogota, Colombia, 3-5 May 2000. http://www.swisstopo.ch/fig-wg71/doc/bogota00/roberge_bogota.htm

Ruoff T.B. *An Englishman Looks at the Torrens System*. Law Book Co. of Australasia. 1957.

SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) 2001, *Report on Government Services 2001*, AusInfo, Canberra.

Sherko R. & Stanfield D., *Adapting Information Technology (IT) for Land Market Institutional Development: With Special Reference to Albania*. The Association of American Geographers, 96th Annual Meeting, 4-8 April 2000, Pittsburgh, Pennsylvania.

Stuedler, D., Williamson, I.P., Kaufmann, J. and Grant D.M. *Benchmarking Cadastral Systems*. 1997. <http://www.geom.unimelb.edu.au/research/publications/IPW/bnchmrk.html>

Stuedler D, Williamson I., *A Framework for Benchmarking Land Administration Systems*. FIG Commission 7 Annual Meeting, Sweden, June 2001. <http://www.swisstopo.ch/fig-wg71/>

Stoter, Jantien & Zevenbergen, J. *Changes in the definition of property: a consideration for a 3D cadastral registration system*. Seoul 2001. http://www.oicrf.org/cgi-bin/get_pdf.pl?docid=991827835

The Parliament of The Commonwealth of Australia. *Commission Of Enquiry Into Land Tenures - First Report*. Government Printer. 1975.

The Parliament of The Commonwealth of Australia. *Commission Of Enquiry Into Land Tenures - Final Report*. Australian Government Publishing Service. 1976.

The Parliament of The Commonwealth of Australia. House of Representatives Standing Committee on Environment and Heritage. *Public Good Conservation: Our challenge for the 21st Century*. Sep 2001, Canberra.

Tang C., *An assessment of the Hong Kong cadastral survey system*. International Symposium on Reforming and Benchmarking the Cadastre. Gavle, Sweden. June 2001.

Ting, L. and Williamson, I.P. *Spatial Data Infrastructures and Good Governance: Frameworks for Land Administration Reform to support Sustainable Development*. 2000. http://www.geom.unimelb.edu.au/research/publications/IPW/ipw_paper40.pdf

Ting, L. and Williamson, I.P. *Land Administration and Cadastral Trends: The Impact of the Changing Humankind-Land Relationship and Major Global Drivers*. 2001. http://www.geom.unimelb.edu.au/research/publications/IPW/2_01_Ting_LandAdmin_CT.pdf

Torrens, Sir Robert Richard, 1814-1884. *The South Australian System of conveyancing by registration of title, with instructions for the guidance of parties dealing, illustrated by copies of the books and forms in use in the Land Titles Office, by Robert R. Torrens, to which is added the South Australian Real Property Act as amended in the sessions of 1858, with a copious index by Henry Gawler...* Adelaide, Printed at the Register and Observer printing Office, 1859.

Trickett J.(President). *The Land Court Act 2000 and the Land Court Rules 2000*. Unpublished.

UNECE Environment and Human Settlements Division. *On Managing And Developing Effective Land Registration And Cadastral Services*. Proceedings of a Workshop in London (23 to 24 September 1999) <http://www.unece.org/env/hs/wpla/p7-99-5e.pdf>

UNECE Environment and Human Settlements Division. *On Public/ Private Sector Relationships In The Establishment Of Land Registration Systems*. Proceedings of a Workshop in Albania (30 March to 1 April 2000) <http://www.unece.org/env/hs/chs/2000-5e.pdf>

UNECE Environment and Human Settlements Division. *Social and Economic Benefits of Good Land*

- Administration. Updated to Nov 2000. <http://www.unece.org/env/hs/wpla/docs/benefits/contents.html>
- UNECE Environment and Human Settlements Division. *Land Administration Guidelines*. Updated to Oct 2000. <http://www.unece.org/env/hs/wpla/docs/guidelines/lag.html>
- UN/FIG. *Bogor Declaration on Cadastral Reform*. Bogor, Indonesia. 1996. <http://www.geom.unimelb.edu.au/fig7/Bogor/BogorDeclaration.html>
- Wallace J. *A methodology to Review Torrens Systems and Their Relevance to Changing Societies from a Legal Perspective*. UN-FIG Conference on Land Tenure and Cadastral Infrastructure for Sustainable Development, Melbourne, Australia, 25-27 October 1999 http://www.oicrf.org/cgi-bin/show_document.pl?docid=984047639
- Wallace J. *Barriers to Cadastral Reform*. Cadastral Reform Conference. Melbourne. July 1990. http://sunspot.sli.unimelb.edu.au/research/cad_anthology/article/artic8.htm
- Weir M. *Land Title Act 1994 (Qld) - Statute for a New Millenium ?* Flinders Journal of Law Reform. Volume 4 Issue 2. July 2000.
- Whalan D, *The Torrens System in Australia*, The Law Book Company (of Australia) Limited. 1882 - "Is it too much to hope that the States & Territories could cooperate to produce a uniform Torrens statute"
- Williamson, I.P. *A Land Information Vision for Victoria* 1996. <http://www.geom.unimelb.edu.au/research/publications/IPW/landvision.html>
- Williamson, I.P. *Strategic Management of Cadastral Reform*. 1997. <http://www.geom.unimelb.edu.au/research/publications/IPW/StratManagementNY.htm>
- Williamson, I.P. Fourie, C. *Using the Case Study Methodology for Cadastral Reform*. 1998. <http://www.sli.unimelb.edu.au/research/publications/IPW/clarissa1.html>
- Williamson, I.P., Ting L., *Land Administration and Cadastral Trends - A Framework for Re-Engineering*. Melbourne 1999. <http://www.sli.unimelb.edu.au/UNConf99/sessions/session4/williamson.pdf>
- Williamson, I.P. *Future Directions for Spatial Information Management in Australia - A Land Administration Perspective*. 1999. <http://www.geom.unimelb.edu.au/research/publications/IPW/AURISA%2099%20Keynote1.pdf>
- Williamson, I.P. [The Evolution of Modern Cadastres. Proceedings of New Technology for a New Century Conference. FWW2001](http://www.geom.unimelb.edu.au/research/publications/IPW/AURISA%2099%20Keynote1.pdf), Seoul, South Korea, 6-11 May 2001.
- Williamson, I.P. *Land Administration "Best Practice" providing the infrastructure for land policy implementation*. 2001. http://www.geom.unimelb.edu.au/research/publications/IPW/2_01Williamson_LUP.pdf
- Williamson, I.P. *Re-engineering land administration systems for sustainable development - from rhetoric to reality*. 2001. http://www.geom.unimelb.edu.au/research/publications/IPW/2_01Williamson_Re-eng.pdf
- Wills M. (Parliamentary Secretary), *Land Registration Act receives Royal Assent*, Press Release, London, Feb 2002. <http://www.landreg.gov.uk/pressoffice/default.asp?fl=1&pnum=lcdpn75/02>
- Wypych S., *Integrated Planning Law- The Queensland Approach - Lessons from Queensland is Integrated Planning Act 1997* - Paper to the National NZPI/RAPI Planning Congress, Wellington, New Zealand, April 2002.
- Young M., *Land Tenure: plaything of governments or an effective instrument ?* in *Land degradation Problems and Policies* (ed: Chisholm A., Dumsday R.), Cambridge University Press, 1987.
- Young M., *First or Second Best Solutions ? Looking back on Australian Agri-Environmental Policy from 2020*, Australian Agricultural and Resource Economics Society, Annual Conference 2000, Sydney.

Zevenbergen, J. *What makes land registration 'go round' ?*, PhD Paper, 1995.
http://www.oicrf.org/cgi-bin/show_document.pl?docid=984046291

Zevenbergen J. *Are cadastres really serving the landowner?* Venice 1999. http://www.oicrf.org/cgi-bin/get_pdf.pl/984047471.pdf?agree=on&docid=984047471&legal_notice=on&method=download&email=&document=Get+document

Zevenbergen J. *Land Registration, Transaction Costs and the Land Market*. 2000. http://www.oicrf.org/cgi-bin/get_pdf.pl/985872655.pdf?agree=on&docid=985872655&legal_notice=on&method=download&email=&document=Get+document

ANNEX A

The Issues - In A Long Form

1. Land administration tends to be viewed as land allocation, tenure management and transaction recording. This tends to be historic and an operational view. The more appropriate purpose for modern times and the future would be support of the land and property market and assisting in capital formation. This purpose should be made explicit.
2. The efficiency of commerce and of capital creation in Australia is inhibited through the application of different rules and procedures applicable to the Land Administration System in each jurisdiction.
3. The present land administration system and subsystems can be significantly improved but there are no best practice/performance indicators to create the efficiency drivers need to compensate for the largely monopolistic nature of the Land Administration System.
4. Where government responsibility to the land administration systems for regulations/quality/security are not at arm's length from governments operational activities in the same agency, a potential conflict of interest exists, and the application of market/best practice testing is inhibited.
5. The inability of the Land Administration System to quickly, cheaply and easily identify ALL the growing range of rights, interests, obligations, restrictions in land and property (as a precondition to trading) is a growing threat to public confidence in the market, and barrier to participation.
6. If designed appropriately the digital lodgement of land and strata information can provide benefits to all process stakeholders as well as downstream data uses and other land administration subsystems.