

# **Environmental Assessment in Federations: Current Dynamics and Emerging Issues**

**Australia, an academic perspective**

**Associate Professor Garry Middle, Head Department of Urban and Regional Planning, Curtin University, Western Australia**

## **Overview**

This paper supports the presentation of the same name given at the above conference. There are two parts to the paper: an overview of the federal EA process; and, a discussion of the emerging issues in EA in Australia. The EA process in WA is given greater emphasis than other States, given my familiarity with that process.

## **The federal and constituent unit (states) EA processes**

### **History**

In Australia, many of the functions of Government were given to the States at Federation (1901), including environmental protection. It remained the sole responsibility of the States until the mid 1970s, although the Commonwealth showed little interest in EA until the 1990s. The Commonwealth interest in environmental protection was initially based on the requirement to address international treaties it had signed. The first Commonwealth environmental legislation was passed in 1974, but it was the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) that allowed the Commonwealth to carry out serious EA. However, in recognition of the States' leading role in EA, the EPBC Act limited EA to matters of National Significance (see below).

### **The States**

EA at the State level is generally comprehensive covering all proposals deemed likely to have a significant effect on the environment, with all environmental issues considered. Each state has developed its own thresholds of significance both for screening (whether an EA is required or not) and for significance of impacts. This leads to difference across States.

There is also difference in where the jurisdiction for EA lies. For example, in Queensland EA is carried out under 3 different pieces of legislation involving three different departments and Ministers:

- State Development and Public Works Organisation Act 1971 (amended in 1999) requires government agencies to carry out an EIA for its projects considered significant;
- The Integrated Planning Act 1997 allows for EA for either prescribed development proposals or community infrastructure - the Minister for Planning is the final decision maker; and
- Environmental Protection Act 1994 allows for EAs for certain mining and other proposals – the Environmental Protection Agency (Department) carries the EAs.

In Victoria, EAs are carried out under the Environment Effects Act 1978. It is not an approval process, but an EA provides advice to the responsible decision making authority - Ministers, local government and statutory authorities - to enable them to make informed decisions about whether a project with potentially significant environmental effects should proceed. The Minister for Planning has the key role in EA including deciding as to whether an EA is required. The Minister also provides an assessment of the proposal and gives that advice to the relevant decision-makers. The Department of Planning and Community Development coordinates the process.

In WA, all EAs are carried out under the Environmental Protection Act 1986, with the assessments being carried out by the EPA (a independent statutory authority) and the Minister for the Environment the final decision maker.

## **The Commonwealth**

EA under the EPBC Act is required if an 'action' is likely to have a significant impact on matters of national significance: notably:

- World heritage Sites;
- National Heritage Places;
- Wetlands of International importance;
- National threatened species and ecological communities;
- Migratory Species;
- Commonwealth marine waters; and
- Nuclear actions.

## **The operations of the two types of EAs**

The Commonwealth EAs acts like a 'horizontal' cut through the State EA process where certain matters are taken out for special consideration by the Commonwealth. Whilst the EPBC Act allows for Bilateral Agreements between individual States and the Commonwealth so as to minimise duplication of assessments, significant duplication still occurs even where a Bilateral agreement has been drawn up. There are two reasons for this. Firstly, there is not agreement between the States and the Commonwealth as to what is deemed significant, which means the Commonwealth often has to do a supplementary assessment after the State has finished its assessment. Second, EAs at the State level are of proposals and plans, whereas the Commonwealth considers actions. Actions maybe specific parts of a proposal, or the very end of the land use planning process (subdivision or development). This often means that the Commonwealth EA occurs very late in the decision making process after key project or planning decisions have been made. The Commonwealth is attempting to address this by focusing more on strategic assessments (see below). Notwithstanding this recent change of emphasis, many involved in the development industry at the State level express continued frustration about the continued late involvement of the Commonwealth in the decision making process, and it emphasis on individual species rather than habitats and ecosystems.

## **Emerging issues**

### **Overview**

Prior to this conference I drew up an email list of EA practitioners who are members of the International Association of Impact Assessment (IAIA). They were asked to identify what they thought were the key emerging issues in EA in Australia. 96 individuals were emailed with only 16 responses received (16.7% response rate). These responses were tabulated and four key issues emerged. I supplemented these with two of my own (author's prerogative, but based on my own experience, especially in WA). These issues are:

- Need for strategic assessments and examination of alternatives;
- Timeliness and cost pressures;
- Increased number of Commonwealth EAs, and that these EAs come late in the decision making process
- Independence of EIA being challenged – politicisation of EA;
- Better integration of environmental planning and EA into land use planning; and
- Increasing uncertainty in predicting impacts.

These are discussed in detail below. As well as describing the issue I will make some observations.

## **Need for strategic assessments and examination of alternatives**

EA in Australia is dominated by project EIA, with only minimal, although growing, interest in SEA. Most legislations give little attention to assessment of plans, programmes and policies, although in some States (NSW) EA is integrated into the land use planning process and assessment of plans is not a separate process (integrative SEA). The Commonwealth EPBC Act allows for strategic assessments, but the focus has been on single agency management plans and planning scheme amendments covering relatively small areas. The Commonwealth has yet to carry out an assessment of a regional land uses strategy, although it has shown recent interest in being involved in the current round of regional land use planning being carried out in the north of WA.

In WA, that Act allows for formal SEA, but examples of this have been limited to-date. This has not stopped the EPA carrying out 'informal' SEAs. Since the 1990s, the EPA has provided public advice on the environmental issues associated with strategic land use plans to the lead land use planning agency, the Western Australian Planning Commission. It has developed a tiered approach to assessment, where public advice is given at the regional strategic level, and generally formal assessment of schemes or proposal is only required when the initial EPA advice has been ignored.

### *Observations*

SEA is clearly underdeveloped in Australia, which is partly explained by the work loads of assessing agencies in dealing with the many major resources and infrastructure projects being considered: these agencies have been unable to dedicate resources to SEA. The need to focus on project EA will continue as all Governments push to fast track approvals for major resource proposals: these proposals are seen as a way of significantly addressing the downturn in the Australian economy due to global financial crisis. As well, the Commonwealth and some States have embarked on ambitious infrastructure building programs to provide an additional boost to local economic activity, and pressure will continue to fast track EAs for these proposals. Making space for SEA is becoming more difficult.

## **Timeliness and cost pressures**

There is growing pressure on the EA process to deliver outcomes more quickly and to reduce the cost to proponents. As noted above, the global financial crisis has only added to this pressure. The community are beginning to react to this, as they see that more timely EAs mean fewer opportunities for community involvement. This is particularly the case for major resource proposals. A spin off to this has been increasing calls in States like WA to better integrate all of the approvals processes (including indigenous planning approvals).

### *Observations*

The problem for EA practitioners is that this debate is based as much on perception as reality. There is very little data available on EA timelines, which makes it easy for critics of the EA process to claim that EA is both long and costly. There is an urgent need for better research in the area, including the costs and time delays of rushed and poor EAs. I present here the initial results of some research that I have been doing on the issue of timeliness. I examined the published timelines of the project that have undergone EA since 2000 in WA.

There are two types of EAs in WA:

- Quick EAs, where the assessment process is shortened by combining the early phases of EA into one step; and
- Full EAs, where all the key steps of EA are carried out sequentially.

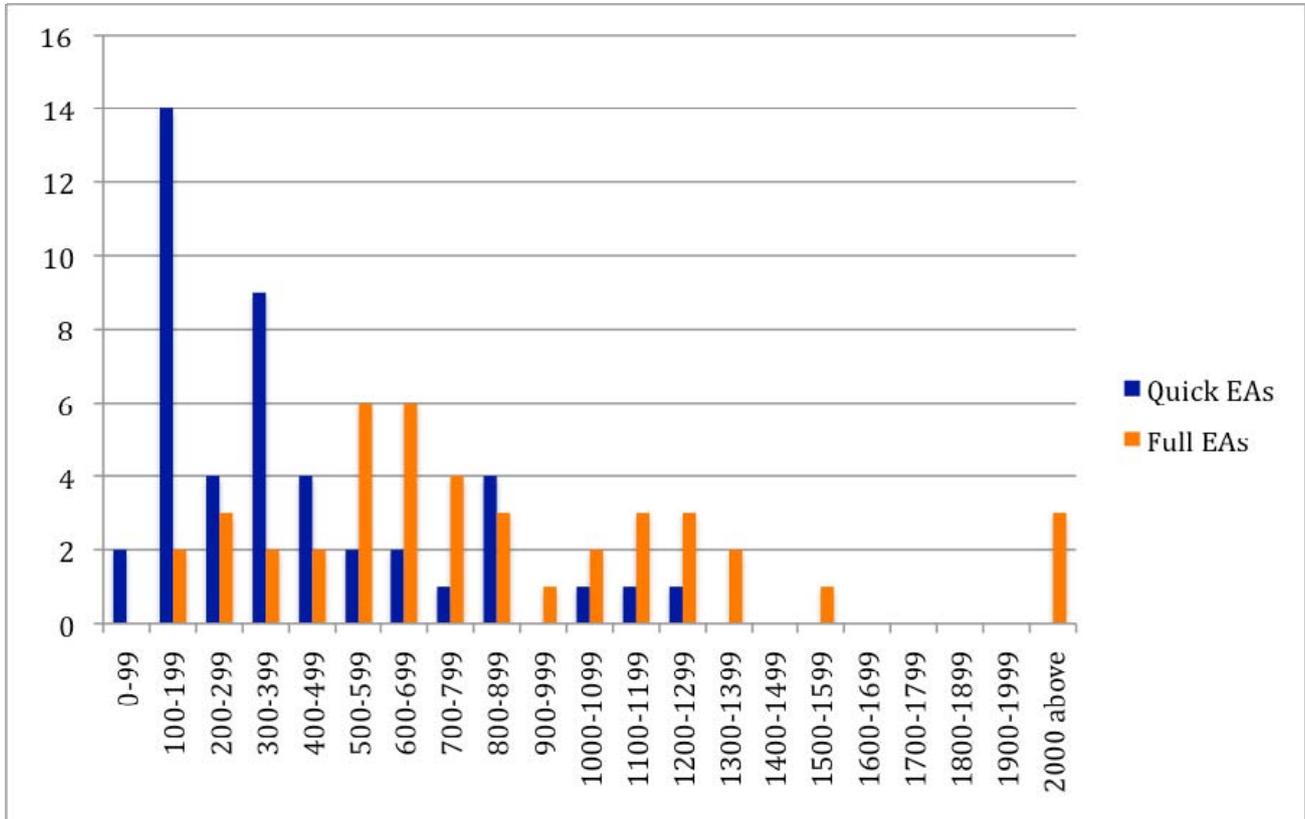
Quick EAs are generally used for proposals that have few environmental issues and limited public interest. A total of 45 quick EAs and 43 full EAs were included in this research. The first part of this research was to determine the total time taken for each, which was:

- For quick EAs, the time from initial referral to the EPA to when the conditions were finally published; and

- For full EAs, the time from when the EPA formally decided to carry out an assessment to when the conditions were finally published.

Figure 1 shows the results of this analysis, using 100-day groupings. The times for quick and full EAs have been separated.

**Figure 1: Time taken to complete EAs.**



The average time for each EA type are as follows:

- Quick EAs – 410 days; and
- Full EAs – 890 days.

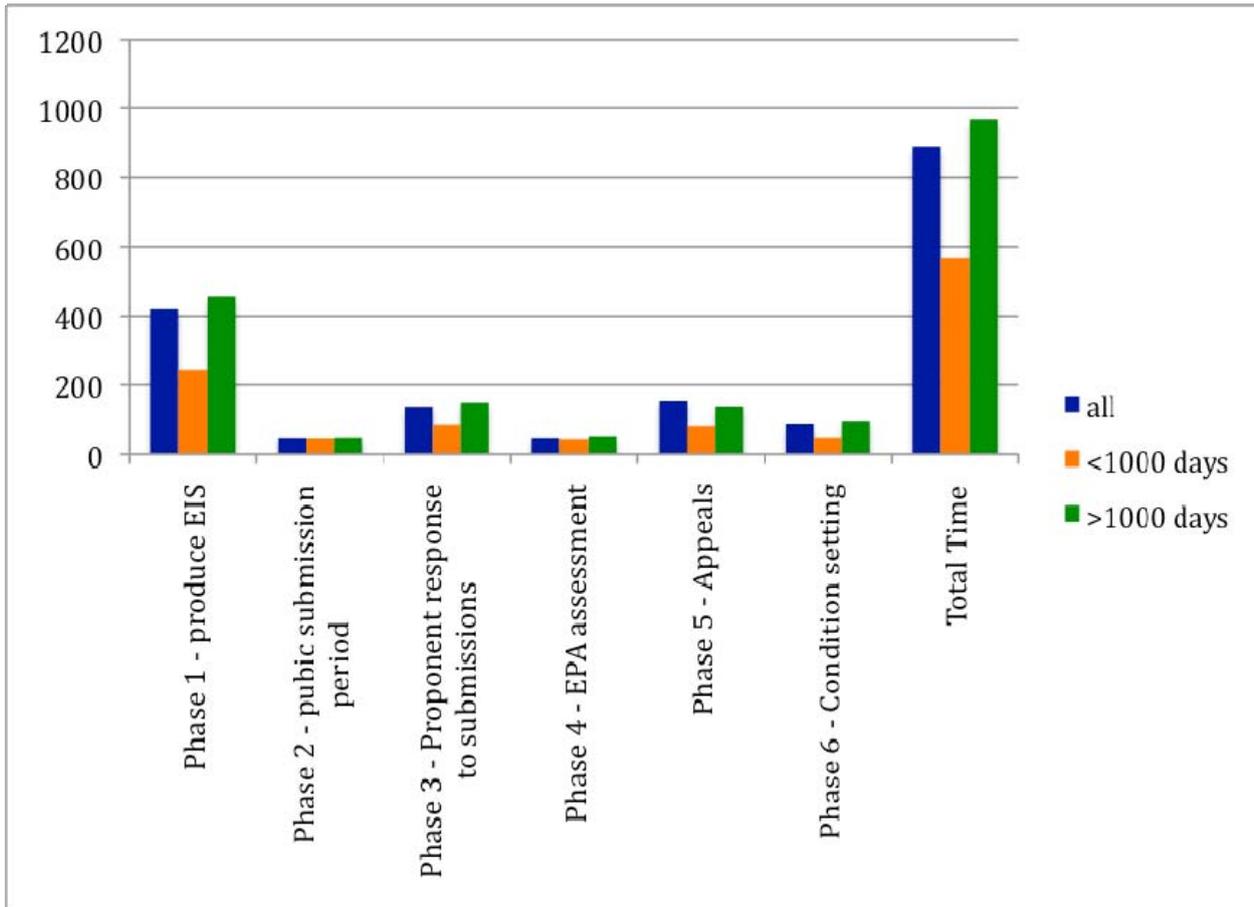
A quick and superficial glance at these figures suggests that timelines for EAs, especially full EAs, are long. A closer look at these figures tells a different and more meaningful story.

To further analysis these figures, five key phases or steps in the EA process in WA were identified:

- Phase 1 – Time taken for the proponent to produce its EIS;
- Phase 2 – the public submission period;
- Phase 3 - Time taken for the proponent to respond to public submissions;
- Phase 4 – Time taken for the EPA to complete its assessment once the proponent’s to respond to public submissions have been received;
- Phase 5 – Time taken to determine any appeals on the EPA’s assessment (it should be noted that not all EPA assessments were appealed); and
- Phase 6 – Time taken to set the Condition following the determination of any appeals.

Figure 2 shows the average time taken for each phase. To provide some further differentiation, EAs greater than 1000 days were considered separately from those of less than 1000 days. Figure 1 also shows the data for all EAs.

Figure 2: Average times for each phase of EAs



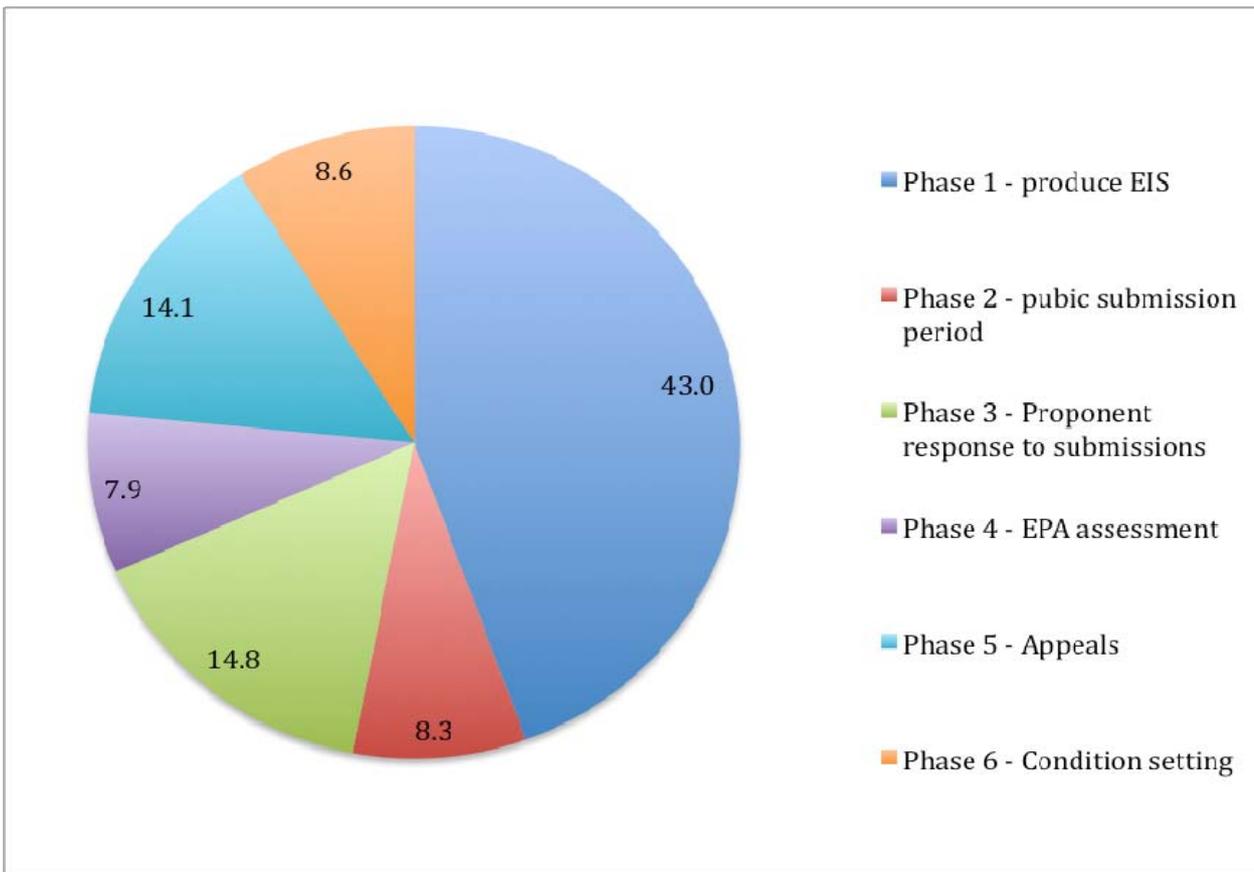
A number of observations are worth making:

- The phase that takes up the most time is the preparation of the EIS, which is largely the responsibility of the proponent;
- The public submission period is generally the shortest, phase – this period is set at the start of the assessment based on the level of assessment, and is rarely varied;
- The actual time taken by the EPA for its assessment is both relatively short and remarkably consistent irrespective of the overall length the of assessment; and
- Appeals take up a significant portion of the time.

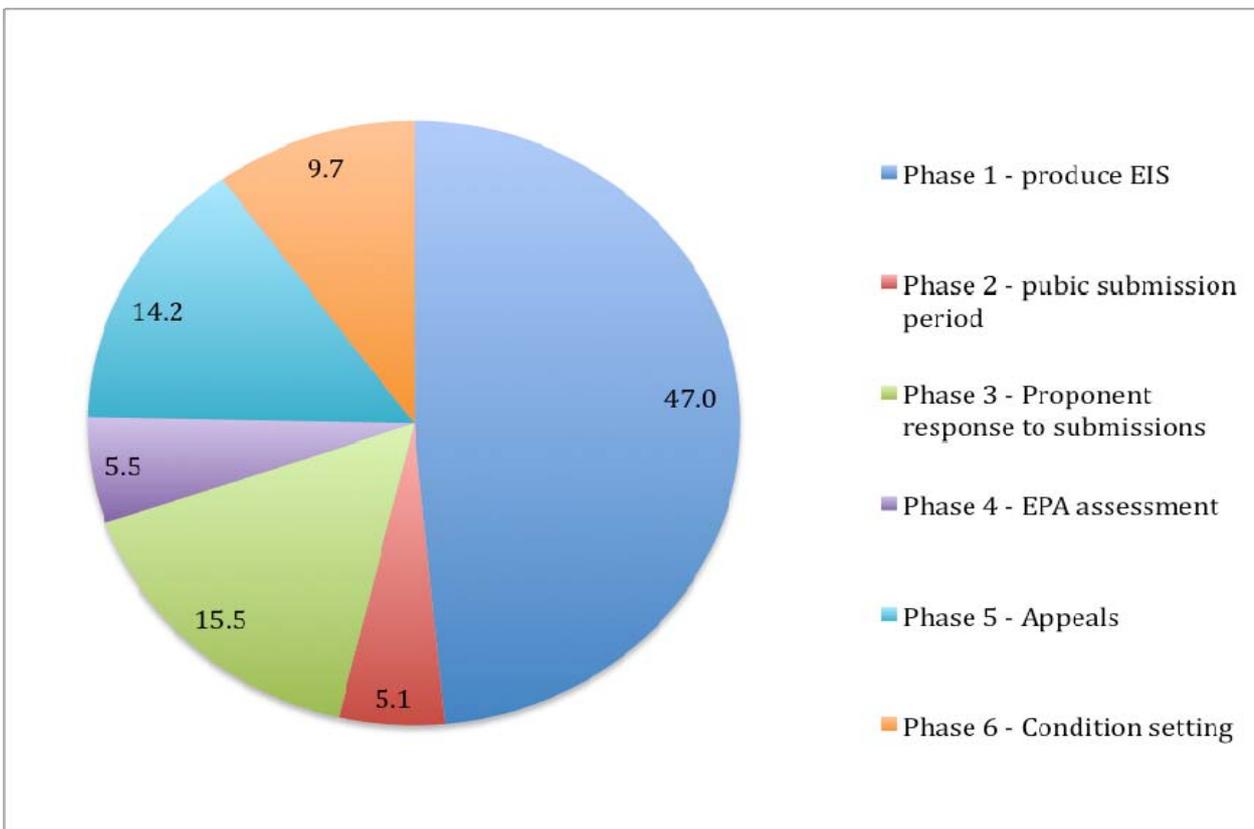
These observations are confirmed in Figures 3 and 4 which shows the average % of total time taken up by each phase for full EAs.

These data and other similar research needs to be reported to decision makers so that a proper debate about timeliness can occur. Critical to this debate is the question of effectiveness of EAs, which seems to have been lost in the calls for more efficient EAs.

**Figure 3: Percentage of total time taken for each phase – EAs with assessment times less than 1000 days**



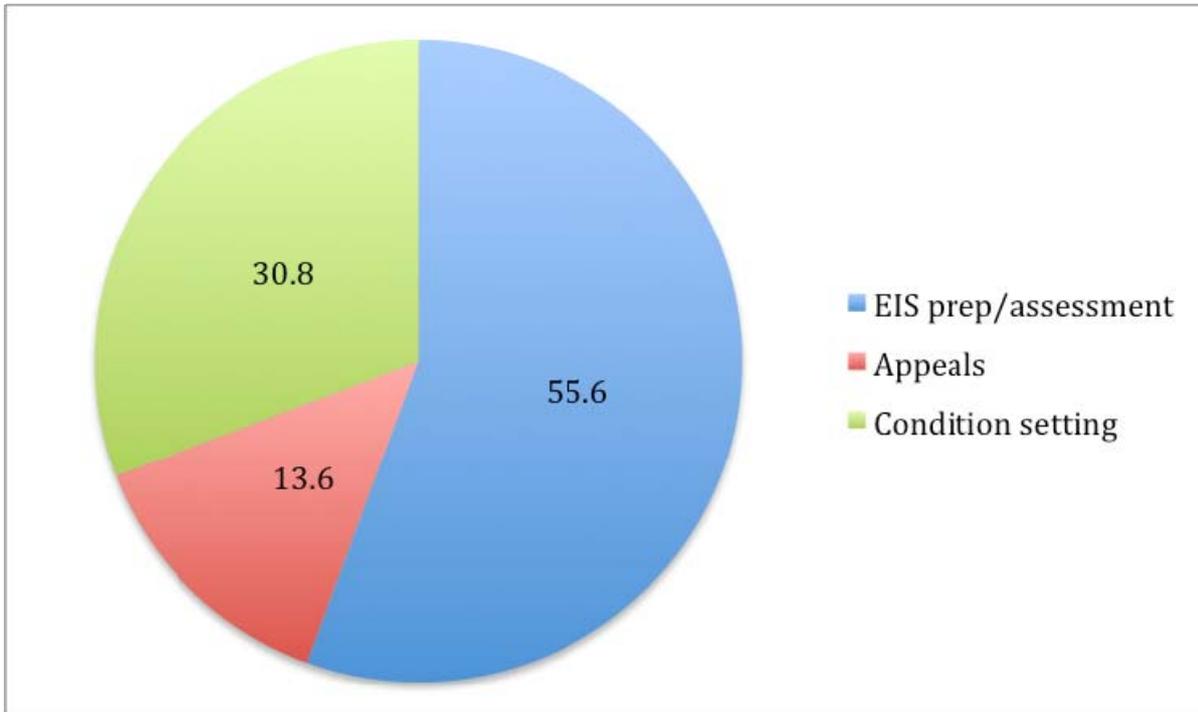
**Figure 4: Percentage of total time taken for each phase – EAs with assessment times greater than 1,000 days**



Given how significant the time taken to produce the EIS is to the overall assessment time, further work is needed to examine the reason for this: for example, is it the complexity of the work required as set through scoping, or is it that proponents are electing to delay assessments?

The picture for quick EAs is less clear given that the first four phases of the EA process are combined into one, with the proponent required to develop its EIS and consult with the community prior to referral to the EPA, and the EPA prepares its assessment report at the same time it announces that a formal assessment is required. Figure 5 shows these limited data.

Figure 5: Average % of time taken with each phase for quick EAs



The only notable observation worth making here is the increase proportion of time taken in the condition setting process in these quick EAs. This may simply reflect the fact that condition setting has a relatively consistent timeframe irrespective of the complexity of the assessment (i.e. the overall average times of assessments for quick EAs is much shorter than full EAs).

Increased number of Commonwealth EAs, and that these EAs come late in the decision making process

There is growing concern in most States about the increasing involvement of the Commonwealth in EAs, where, as discussed above, these EAs come in late in the overall approvals process and introduces issues and concerns not considered in the State assessment processes: protection of individual species is of particular concern.

### *Observation*

Primarily, there is a fatal flaw of the EPBC Act, which is that the Commonwealth can only assess 'actions'. SEA provides a mechanism for the Commonwealth to avoid late assessments, but two problems remain. First, issues of rare and endangered species and ecological communities will remain of concern in highly urbanised areas where most of the land is 'up' zoned and hasn't been subject to Commonwealth assessment. The Commonwealth could choose to 'write-off' these areas and focus its efforts on SEA of new non-urban land, but the record to-date suggest that the Commonwealth will continue to assess actions on these up-zoned areas and conflict between the States and developers and the Commonwealth will remain. Second, the Commonwealth has yet to seriously embrace SEA of strategic land use planning, and until it does, it will continue to carry out assessments late in the decision making process.

## **Independence of EIA being challenged – politicisation**

With the pressure to deliver more timely and cost effective EAs, concern is emerging that the EA process is becoming less independent and becoming more political. As noted above, the independence of the EA processes in each State varies, but even in WA, which arguably has the most independent EA process, concern about increased politicisation of the process is growing, especially at the end of process.

### *Observation*

My observation is that governments are trying to redress what they perceive as a lack of balance where the EA process has had significant primacy over other factors and approvals processes (the socio-economic). It is becoming more common for governments to announce their support for a proposal well ahead of the EA process being complete. There are many who see this change as well overdue (land use planners for example), and EA faces a difficult time ahead to remain independent and central to decision making where environmental impacts could be significant.

## **Better integration of environmental planning into land use planning**

Both at the Commonwealth level and in those States where EAs are independent of the land use planning process, there are increasing calls for better integration of EA with land use decision-making. There are two schools of thought here: as discussed in the last section, there are those who want to bring the EA process back on par with other considerations and approvals processes, and there are the EA practitioners who are calling for better SEA rather than integrating EAs as part of land use planning. This latter view is clear recognition of the central role that land use planning plays in long-term decision making (e.g. provision of infrastructure and zoning of land for special purposes).

### *Observation*

Whilst I support greater SEA of land use planning instruments, the key constraint that I see to this happening is a lack expertise in, and understanding of, the land use planning process within the assessing agencies, in particular, the Commonwealth. EA agencies need to broaden their skills base beyond environmental management specialisation and recruit land use planners with an environmental leaning so that they are better equipped to carry out SEA. SEA is a much less technical exercise and requires instead a strategic approach to assessment that parallels the strategic land use planning system it is assessing.

## **Increasing uncertainty in predicting impacts**

This is emerging as a significant issue for major resource proposals in Australia, especially in very remote areas where the level of environmental information available is limited, and studies carried out in support of an EA often adds significantly to the amount of information available. Australia, like most nations with large areas of land that are sparsely populated, carries out the majority of environmental studies on the environments that are nearest to the major population centres. This is in part because these areas are under most threat from human impacts, but also because these areas are the most valued and contested areas, and naturally become the focus of most scientific studies. Figures 6 and 7 below illustrate this point very well. They show the population distribution of Australia (Figure 6) and the location of the major natural gas fields in Australia.

A complementary issue that comes with increasing uncertainty is the importance, but also difficulty, of predicting cumulative impacts. Many of these resource proposals are in the same region and have a range of cumulative impacts, for example on migratory species.

Figure 6: Australia's population distribution (Source: <http://www.environment.gov.au/soe/2001/publications/theme-reports/settlements/index.html>)

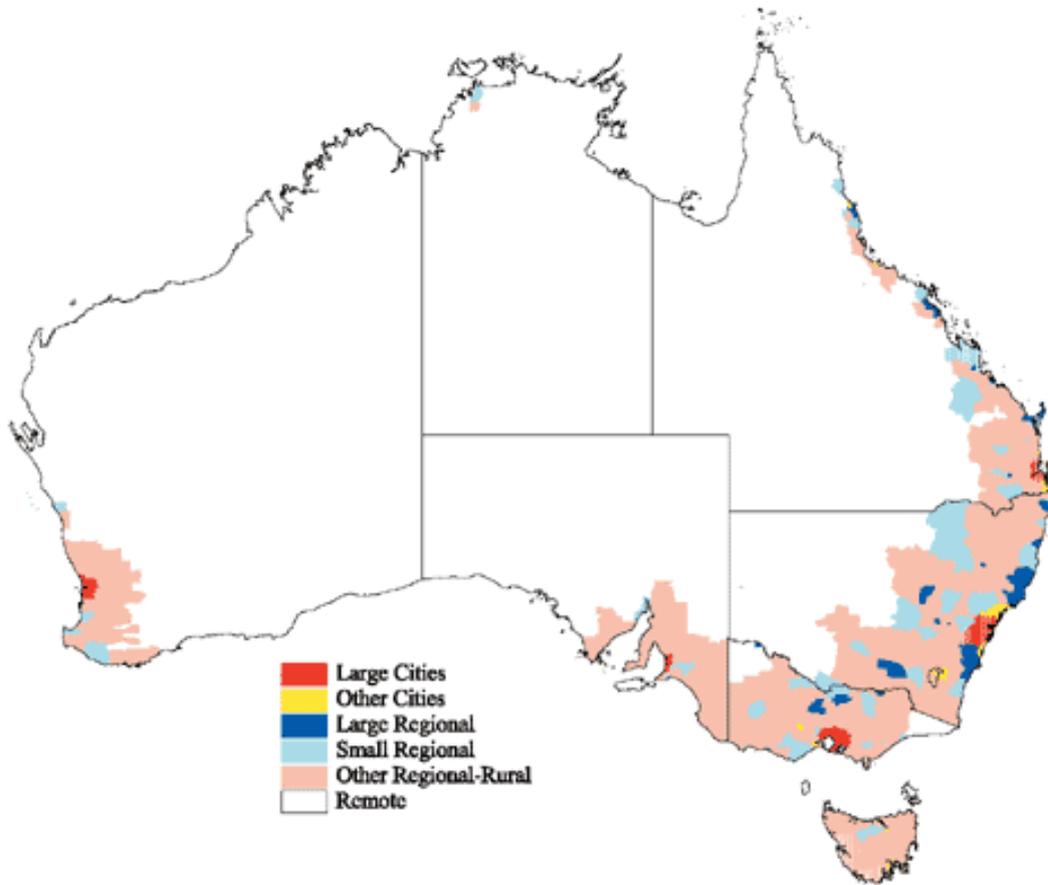
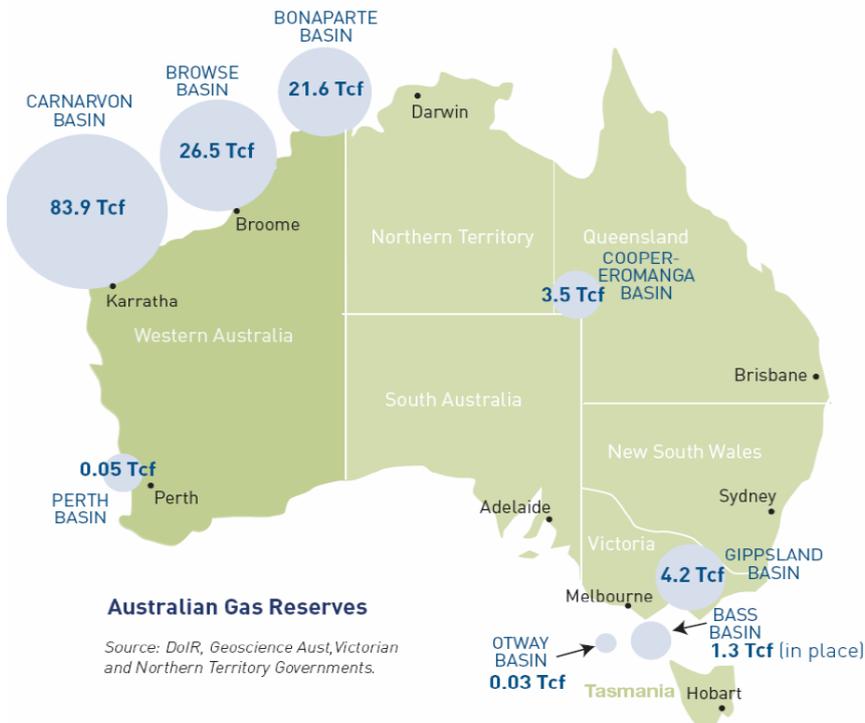


Figure 7: Location of the main natural gas fields in Australia.



## *Observation*

This lack of base-line data often leads to high levels of uncertainty in predicting impacts during EAs and reliance on modelling to predict impacts. As a result, decisions on acceptability are risk based and the precautionary principle gets expressed in terms of adaptability of management responses rather than waiting until sufficient information has become available to complete the EA. The key challenges for EA practitioners in this political environment are to both engage in the risk assessment debate to argue from time to time that the uncertainty and risk are too high and to be able to craft conditions of approval that are adaptable so that as new information becomes available management responses can be adjusted. The key problem is that project EA is not necessarily well suited to an adaptable and flexible approach. Further, it makes the auditing process more important than in EAs not subject to the same levels of uncertainty.

The monitoring of impacts also ties into determining cumulative impacts. There are many natural gas (LNG) proposals off the Pilbara coast in WA, all likely to have a range of marine impacts. Each of these proposals will need to collect a large amount of data, both during the EA phase but also post-approval. At this time there is no single agency that will collect and review all of this data. This is a missed opportunity, as not only would analysis of all this data yield important information on cumulative impacts, it would also help to inform both decision-makers and newer proponents on likely impacts of these newer proposals: a learning opportunity is being missed.

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