ENVIRONMENTAL IMPACT ASSESSMENT UNDER THE PROTOCOL ON ENVIRONMENT PROTECTION TO THE ANTARCTIC TREATY AND AUSTRALIAN LEGISLATION

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I INTRODUCTION

The Antarctic Treaty System (ATS) consists of a number of separate international instruments and their associated measures including: the *Antarctic Treaty* (1961); the *Agreed Measures for the Conservation of Antarctic Fauna and Flora* (1964); the *Convention on the Conservation of Antarctic Seals* (1972); the *Convention for the Conservation of Antarctic Marine Living Resources* (1981); the *Protocol on Environmental Protection to the Antarctic Treaty* (1991) (the *Madrid Protocol*); and recommendations of Antarctic Treaty Consultative Meetings (ATCMs) and several Special Meetings in the form of decisions, measures and resolutions.[1]

The most significant environmental instrument, with origins in the 1988 *Convention for the Regulation of Antarctic Mineral Resource Activities* (CRAMRA),[2] has been the *Madrid Protocol*.[3] The Protocol codified and made legally binding a number of environmental protection measures through 27 Articles and five Annexes (Annex I – Environmental Impact Assessment, Annex II – Conservation of Antarctic Fauna and Flora, Annex III – Waste Disposal and Waste Management, Annex IV – Prevention of Marine Pollution, Annex V – Area Protection and Management). At the Twenty Eighth Antarctic Treaty Consultative Meeting in Stockholm, Sweden in June 2005, Annex VI – Liability Arising from Environmental Emergencies was

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1 Antarctic Law Interest Group, 'Antarctic Treaty Papers' (2005) <http://www.polarlaw.org/Treaty.htm>; L K Kriwoken and P L Keage, 'Introduction: the Antarctic Treaty System' in J Handmer (ed), *Antarctica: Policies and Policy Development* (1989), Centre for Resource and Environmental Studies, Australian National University, Canberra, Australia, 1-6.

2 C C Joyner, 'The Antarctic Minerals Negotiating Process' (1987) 27(4) *Am J Int Law* 441.

3 D J Rothwell 'Polar Environmental Protection and International Law: the 1991 Antarctic Protocol' (2000) 11(3) *Eur J Int Law* 591.

supported by Antarctic Treaty Consultative Parties (ATCPs), although it needs to be ratified and its contribution to ensuring Antarctic environmental protection has yet to be tested. Together these measures provide a comprehensive multilateral agreement on the management of the Antarctic environment.[4] All 27 ATCPs have ratified the Protocol and it formally entered into force on 14 January 1998.[5] Whilst all ATCPs have ratified the Protocol, not all have detailed regulations in place to guide human activities in Antarctica.

The *Madrid Protocol* marked an important accomplishment in international environmental law as it bans mining in Antarctica for a minimum of 50 years and designates the whole of the continent and its dependent marine ecosystems as a 'natural reserve, devoted to peace and science' (Article 2). Article 3(2)(a) establishes environmental principles and states that 'activities in the Antarctic Treaty Area shall be planned and conducted so as to limit adverse impacts on the Antarctic environment and dependent and associated ecosystems'. Article 3(2)(b) states that activities must avoid adverse effects on climate and weather, air and water, atmospheric and terrestrial environments, glacial and marine environments, fauna and flora, and wilderness and aesthetic values. A framework is provided in Article 3(2)(c) that establishes criteria by which to assess the impact of planned activities and conduct monitoring of current activities for the Area where:

> … activities in the Antarctic Treaty Area shall be planned and conducted on the basis of information sufficient to allow prior assessment of, and informed judgements about, their possible impacts on the Antarctic environment and dependent and associated ecosystems and on the value of Antarctica for the conduct of scientific research.[6]

Article 8 makes reference to environmental impact assessment (EIA) and states that proposed activities shall be subject to the EIA process as outlined in Annex I, which details a three-tiered process.[7] Activities also need to be subject to the 'procedures set out in Annex I for prior assessment of the impacts of those activities on the Antarctic environment'.[8] All national governments and private operators are therefore required to conduct an EIA of their activities.

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4 D R Rothwell, 'The Antarctic Treaty System and the Southern Ocean' in S Bateman and D R Rothwell (eds), *Southern Ocean Fishing: Policy Challenges for Australia* (1998) 5-40; S K Blay, 'New Trends in the Protection of the Antarctic Environment: The 1991 Madrid Protocol' (1992) 86 *Am J Int Law* 377.

5 The *Protocol on Environmental Protection to the Antarctic Treaty* [Hereafter the *Madrid Protocol*] <http://www.cep.aq/default.asp?casid=5074>; [Annexes I-IV] signed on 4 October 1991 (Madrid) (entered into force 14 January 1998); [Annex V] signed on 17 October 1991, (Bonn) (entered into force 24 May 2002) adopted as Recommendation XVI-10, Final Report of the Sixteenth Antarctic Treaty Consultative Meeting, Bonn, Germany 7-18 October 1991, 116-125 <http://www.greenyearbook.org/agree/nat-con/antarc.htm>.

6 *Madrid Protocol*, above n 5.

7 Rothwell, above n 4.

8 *Madrid Protocol*, above n 5, art 8(1).

The objective of this paper is to assess how the requirements for EIA have been put in place by the Australian Commonwealth government (hereafter referred to as the Commonwealth government) under national legislation. This paper draws on research conducted in 2002 and 2003. Qualitative data in the form of semi-structured key informant interviews were conducted with senior Australian Antarctic administrators to elicit their views on the introduction of new Australian environmental legislation and its impact, and key similarities and differences, on existing Australian Antarctic legislation and associated regulations.[9] The paper begins with an examination of the three tiers of EIA as outlined in the *Madrid Protocol* and the relevant Australian legislation. The paper then provides an analysis of the EIA process in the following eight themes: planning provisions; resources of concern; environmental documentation; categorical exclusions; thresholds; cumulative impacts; public involvement; and dispute resolution, compliance and enforcement. Tentative conclusions are made with respect to the roles and responsibilities of both the *Antarctic Treaty (Environment Protection) Act 1980* (Cth) (AT(EP) Act)[10] and the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)[11] in enhancing Australia's capacity to protect the Antarctic environment. Discussion is limited to the Antarctic Treaty Area and therefore does not include the Australian sub-Antarctic islands.

II ENVIRONMENTAL IMPACT ASSESSMENT

A *Environmental Impact Assessment under the Madrid Protocol*

EIA attempts to identify and predict the potential impact of a given activity on the environment from a proposed development (or other action) and determines mitigation procedures.[12] It is a process that informs decisions before they are taken.[13] Environmental impact 'is the effect of one thing upon another',[14] and in this context, EIA is an environmental management technique by which information about the environmental effects of an activity are collected objectively and systematically, and the significance of those effects are determined. In the Antarctic

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9 The authors point out that ongoing consideration of the issues presented in this paper by Australian Antarctic administrators will continue to reduce friction or overlap between the relevant Australian Antarctic focused legislation. The paper reflects events at the time of writing.

10 *Antarctic Treaty (Environment Protection) Act 1980* (Cth), <http://www.austlii.edu.au/au/legis/cth/consol_act/atpa1980447/> [Hereafter the AT(EP) Act].

11 *Environment Protection and Biodiversity Conservation Act 1999* (Cth), <http://www.deh.gov.au/epbc/> [Hereafter the EPBC Act].

12 C Wood, *Environmental Impact Assessment: A Comparative Review* (1995).

13 Antarctic and Southern Ocean Coalition (ASOC) 'Applying Environmental Impact Assessment to Lake Vostok' (2002) <http://www.asoc.org/Lake%20Vostok/EIA_Lake%20Vostok.htm>.

14 A Gilpin, *Environmental Impact Assessment (EIA): Cutting Edge for the Twenty-first Century* (1995).

context, EIA has been defined as 'the evaluation of the potential impact on the Antarctic environment of a given activity'.[15]

EIA assists decision-making authorities to make informed decisions about whether a project should be allowed to proceed and under what conditions.[16]. EIA ensures that projects are undertaken in ways that take into account, and mitigate as far as practicable, any potential environmental impacts.

The *Madrid Protocol* provides a tiered EIA process depending on the severity of potential impacts. This process applies to scientific programs, logistical support activities, tourism operators and all other activities undertaken in the Antarctic Treaty Area. The *Council of Managers of National Antarctic Programs (COMNAP) Guidelines* on practical EIA procedures were first prepared in June 1991, and updated in 1999, in response to ATCM recommendation XIV-2.[17] These Guidelines provide a single format for the preparation of assessments, specify the degree of detail required for each, and provide a structure promoting comparability and consistency to the EIA process between national government operators.

Each level of EIA varies according to form, circulation and evaluation. The first level is the Preliminary Assessment (PA) and, 'if an activity is determined as having less than a minor or transitory impact, the activity may proceed' (Annex I Article 1). It is implied, although no guidance is given, that the PA is an 'in-house' activity.[18] There is no triggering mechanism that automatically pushes an activity to the next assessment level and the decision about whether to progress to a higher EIA level is usually made by the national authority responsible for Antarctic environmental affairs.[19] Rothwell[20] points out that in 1997, at the Twenty First Antarctic Treaty Consultative Meeting in Christchurch, New Zealand, ATCPs noted that the determination of the status (or EIA level) of Antarctic activities was also context dependant, based on value judgements and information at the time.

The second level of assessment is the Initial Environmental Evaluation (IEE), which is required for proposed activities that may have a 'minor or transitory

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15 W S Benninghoff and W N Bonner, *Man's Impact on the Antarctic Environment: a Procedure for Evaluating Impacts from Scientific and Logistic Activities* (1985) 21.

16 G Bates, *Environmental Law in Australia* (4th ed, 1995); J Glasson, R Therivel and A Chadwick, *Introduction to Environmental Impact Assessment: Principles and Procedures, Process, Practice, and Prospects* (1994).

17 Committee of Managers of National Antarctic Programs, 'Guidelines for Environmental Impact Assessment' (Council of Managers of National Antarctic Programs [COMNAP], 1991) former: <http://www.comnap.aq/comnap/comnap.nsf/P/Pages/Environment/>; The new COMNAP Guidelines were endorsed by the Committee for Environmental Protection (CEP) II and ATCM XXIII which were held in Lima, Peru during May 1999 <http://www.comnap.aq/comnap/comnap.nsf/P/Pages/About.Publications/?Open#1>.

18 L K Kriwoken and D Rootes, 'Tourism on Ice: Environmental Impact Assessment of Antarctic Tourism' (2000) 18(2) *Impact Assess Proj Appraisal* 138-149.

19 D Lyons, 'Environmental Impact Assessment in Antarctica under the Protocol on Environmental Protection' (1993) 29(169) *Polar Rec* 111, 115.

20 Rothwell, above n 3, 601.

impact on the Antarctic environment' (Annex I Article 2). Indicative lists and schedules of activities that require an IEE, often found in national environmental legislation, do not exist in the *Madrid Protocol*. Most countries do not maintain such lists and the judgement about the level of assessment usually rests with the policy and/or environment representatives in the responsible national authority.

The third level of assessment, the Comprehensive Environmental Evaluation (CEE), must be prepared for any activity likely to have 'more than a minor or transitory impact'. The *Madrid Protocol* states '[i]f an IEE indicates or if it is otherwise determined that a proposed activity is likely to have more than a minor or transitory impact, a CEE shall be prepared' (Annex I Article 3). The CEE must be publicly available and circulated to interested ATCPs, the ATCM and the more recently formed Committee for Environmental Protection (CEP). The CEP held its first meeting in 1998, and it was formed as a specialist body to provide ATCPs and other parties with advice on Antarctic environmental matters.[21]

B *Reform of Australian Environmental Impact Assessment Legislation*

Since the United States first incorporated provisions for EIA into the *National Environmental Policy Act 1969* (NEPA), the concept of the environmental impact has spread globally.[22] NEPA provided an impetus for the Commonwealth government to seek ways of improving its procedures for protecting the environment.[23] In 1974, the Commonwealth government introduced the *Environment Protection (Impact of Proposals) Act 1974* (Cth) (EP(IP) Act).[24] This Act, which governed EIA at the national level until July 2000, marked a major advance in environment protection in Australia.[25]

The Commonwealth government agency, Department of Environment (then Environment Australia and now Department of Environment and Heritage [hereafter DEH]), was responsible for administering the EP(IP) Act. The Act applied to all government proposals at the Commonwealth level and projects directly funded by the Commonwealth government or those requiring a Commonwealth decision and deemed to affect the environment to a significant extent.[26] The decision about whether an action was environmentally 'significant'

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21 Rothwell, above n 3, 598.

22 R Padgett and L K Kriwoken 'The Australian *Environment Protection and Biodiversity Conservation Act 1999*: What Role for the Commonwealth in Environmental Impact Assessment?' (2001) 8(1) *Aust J Env Mgmt* 25.

23 I Thomas, *Environmental Impact Assessment in Australia: Theory and Practice* (2nd ed, 1998).

24 *Environment Protection (Impact of Proposals) Act 1974* No 164 (Cth) <http://www.austlii.edu.au/au/legis/cth/num_act/epopa1974n1641974508/>.

25 S Münchenberg, 'Review of the Commonwealth Environmental Impact Assessment Process: Initial Response of the Commonwealth Government' (Paper presented to Environmental Defender's Office [EDO] Conference – Commonwealth Environmental Impact Assessment, Sydney, 19-20 October 1995).

26 Thomas, above n 23.

was assisted by the Australian and New Zealand Environment and Conservation Council's (ANZECC's) *Guidelines and Criteria for Determining the Need for and Level of Environmental Impact Assessment in Australia.*[27]

In response to the May 1985 report to the House of Representatives Standing Committee on Environment and Conservation, the development of a Memorandum of Understanding (MOU) was recommended between the Department of Environment and the Australian Antarctic Division (AAD) as the action agency, given that the AAD coordinates Australian Antarctic Program. The MOU determined how the EP(IP) Act applied to the functions and responsibilities of the AAD and all activities considered under the AT(EP) Act. It also established procedures for determining which EIAs should be referred to the Department of Environment.

Although all activities conducted in Antarctica have the potential to affect the environment to some degree, the extent to which the environment was affected may or may not have been 'significant' under the AT(EP) Act. As a result, and in accordance with the MOU, it was agreed that in the majority of cases PAs, IEEs, and CEEs could be prepared in accordance with the AT(EP) Act providing that sufficient information was available to determine environmental significance in terms of the EP(IP) Act.[28] An agreement was made whereby all draft IEEs and CEEs would be provided to Commonwealth government Assessing Officers responsible for administering the EP(IP) Act. If a determination was considered to be potentially environmentally 'significant', the EP(IP) Act applied. Conversely, for proposed activities deemed as not affecting the environment to a significant extent, the Minister's Delegate at the AAD could approve the activity.

The EP(IP) Act was criticised due to its failure to reflect best practice EIA standards in Australia.[29] Critics identified a number of limitations in which the

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27 Environmental Defender's Office NSW, *Analysis of the Environment Protection and Biodiversity Conservation Act 1999* (1999) Environmental Defender's Office [EDO] <http://www.edo.org.au/edonsw/site/default.asp>.

28 Australian station activities that are considered as 'ongoing' activities prior to the signing of the *Madrid Protocol* (4 October 1991) are not considered likely to affect the environment to a significant extent unless identified as being environmentally sensitive or contentious. These activities are regulated by relevant AAD polices such as the *AAD Environmental Policy*, *Code of Conduct*, *Waste Management Policy*, and guidelines such as the *Operations Manual*, *Environmental Code of Conduct for Australian Field Activities in Antarctica*, or *Environmental Guidelines for Antarctic Helicopter Operations*. Ongoing station activities might include routine sea transport and sea and land-based cargo handling; works within station boundaries, provided they are in compliance with station and environmental management plans including road works and quarrying activities, construction and maintenance of logistic facilities; conduct of low impact field and laboratory investigations; and recreational activities using existing facilities. Information on Australian Antarctic policy and guidelines can be found at <http://www.aad.gov.au/>.

29 Padget and Kriwoken, above n 22, 25; J Prest and S Downing, 'Shades of Green'? Proposals to Change Commonwealth Environmental Laws' (Research Paper 16, Department of the Parliamentary Library, 1998) <www.aph.gov.au/library/pubs/rp/1997-98/98rp16.htm>; Sen R

Commonwealth government's jurisdiction in EIA under the EP(IP) Act operated.[30] One of the most noteworthy limitations was that the EP(IP) Act did not enable the Commonwealth government to assess all projects that raised environmentally significant issues of national or international importance. It could only be invoked for projects that raised environmentally significant issues of national or international importance if those projects were being undertaken by a Commonwealth government agency or were subject to some other Commonwealth approval.[31] Padgett and Kriwoken[32] state that this situation compromised the Commonwealth government's 'ability to implement its national and international environmental commitments as not all activities affecting such commitments were necessarily subject to EIA'.[33] Consequently, a number of reviews of the EP(IP) Act were undertaken in order to address its deficiencies.[34] The outcomes of these reviews and intergovernmental agreements were not translated into significant legislative reform until the passing of the EPBC Act in June 2000.[35]

The EPBC Act has been described as the most important attempt to reform Commonwealth environmental law in Australia since the introduction of the EP(IP) Act. The EPBC Act supports the principles of ecologically sustainable development[36] and repeals five pieces of legislation, namely, the: EP(IP) Act, *National Parks and Wildlife Conservation Act 1975* (Cth), *Whale Protection Act 1980* (Cth), *World Heritage (Properties Conservation) Act 1983* (Cth) and

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Hill, 'Reform of Commonwealth Environment Legislation' (Consultation Paper, 1998) <http://www.deh.gov.au/minister/env/98/mr25feb298.html>.

30 Commonwealth Environment Protection Agency, 'Review of Commonwealth Environmental Impact Assessment: Main Discussion Paper' (1994) [hereafter CEPA, 1994]; Münchenberg, above n 25.

31 Additional criticisms were directed toward the EP(IP) Act regarding deficient and ad hoc triggers, uncertainty on what types of proposals required assessment, and inappropriate timing where the Act was often triggered at a later stage of the project; Padgett and Kriwoken, above n 22, 26; CEPA, 1994.

32 Padgett and Kriwoken, above n 22.

33 Ibid 26.

34 Intergovernmental agreements on EIA or related matters were signed in the 1990s including: ANZECC's Basis for a National Agreement on Environmental Impact Assessment (1997) the Intergovernmental Agreement on the Environment (IGAE) in (1992) and the Council of Australian Government's (COAG) Agreement on Commonwealth/State Roles and Responsibilities for the Environment (1997); Padgett and Kriwoken, above n 22; Thomas, above n 23; Münchenberg, above n 25.

35 Münchenberg, above n 25.

36 Chapter 1, Pt 1 3(A) of the EPBC Act, n 9, specifies the following principles of ecologically sustainable development: (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations; (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation; (c) the principle of inter-generational equity − that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations; (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making; and (e) improved valuation, pricing and incentive mechanisms should be promoted.

Endangered Species Protection Act 1992 (Cth).[37] It also establishes the Australian Whale Sanctuary, which includes waters of the 200 nautical mile exclusive economic zone adjacent to the Australian Antarctic Territory (AAT).[38]

The EPBC Act applies a 'significance test' and emphasises the protection of those aspects of the environment that are matters of national environmental significance.[39] The original six matters of national environmental significance that invoke the EPBC Act are: World Heritage properties; Ramsar listed wetlands; listed threatened species and ecological communities; listed migratory species; protection of the environment from nuclear actions; and the Commonwealth marine environment.[40] In June 2002, the Commonwealth government reintroduced a *heritage legislation package* which incorporates heritage provisions into the EPBC Act.[41] The package of Bills was passed by the Australian Parliament in September 2003 with the aim of establishing a national scheme for conserving, assessing and protecting Australia's heritage assets and places.[42] From 1 January 2004, a seventh matter of environmental significance was enacted in relation to National Heritage places.[43]

The EPBC Act established a Commonwealth EIA process for assessment of proposed actions that are likely to have a 'significant' impact on matters of national environmental significance, and for Commonwealth activities and activities on Crown land. Environment is defined under s 528 of the EPBC Act to provide a framework for EIA to consider the 'whole of the environment' including land-use issues and natural and cultural resources.[44] In addition, the Act introduced important

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37 See Environment Australia, *An Overview of the Environment Protection and Biodiversity Conservation Act* (1999) Department of the Environment and Heritage <http://www.deh.gov.au/epbc/publications/overview.html>.

38 Regulations under the EPBC Act specify approach distances and appropriate behaviour for aircraft and vessels in the vicinity of cetaceans: See Australian Antarctic Division, *The Law on Ice* (2002) <http://www-old.aad.gov.au/environment/laws&treaties/default.asp> 3 July 2002.

39 K Guest, F Michaelis and B McCormick, 'Environment Protection and Biodiversity Conservation Bill 1998' (1999) Bill Digest No 135; Environmental Defender's Office Network, 'Submission to the Senate Environment, Recreation, Communications and the Arts Legislation Committee on the Environment Protection and Biodiversity Conservation Bill 1998' (1998) EDO < http://www.aph.gov.au/library/pubs/bd/1998-99/99bd135.htm>.

40 EPBC Act, ch 2.

41 Environment Australia, *Proposed Amendments to the EPBC Act and Regulations* (2003) Department of the Environment and Heritage, <http://www.deh.gov.au/epbc/about/amendments> 2 December 2003.

42 Ibid, the package of Bills incorporating heritage provisions into the EPBC Act included the *Environment and Heritage Legislation Amendment Bill (No 1) 2002* (Cth); *Australian Heritage Council Bill 2002* (Cth) and *Australian Heritage Council (Consequential and Transitional Provisions) Bill 2002* (Cth).

43 The *Environment Protection and Biodiversity Conservation Amendment Regulations 2003 (No 1) (Statutory Rule No. 2003/354)* (Cth) were made on 23 December 2003 and commenced on 1 January 2004 with the purpose of providing additional detail to the heritage provisions in the EPBC Act <http://scaleplus.law.gov.au/html/numrul/20/10002/top.htm>.

44 Environment is defined under s 528 of the EPBC Act as: (a) ecosystems and their constituent parts, including people and communities; (b) natural and physical resources; (c) the qualities and characteristics of locations, places and areas; and (d) the social, economic and cultural aspects of a thing mentioned in paragraph (a), (b) or (c).

changes to the role of the Commonwealth government in EIA such as introducing environmentally-related triggers for Commonwealth government involvement in EIA, vesting decision-making power directly in the Environment Minister rather than through the Minister's Delegate and establishing a framework for the accreditation of EIA and approval processes.

Actions undertaken by Australian nationals on foreign soil are generally not subject to the EPBC Act. However, all activities proposed to be conducted in the AAT are subject to the EPBC Act if they are likely to have a 'significant' impact on matters of national environmental significance on Commonwealth land.[45] Commonwealth activities likely to have a 'significant' impact on the environment anywhere in Antarctica are subject to the EPBC Act. The Environment Minister triggers the process by deciding whether or not approval is necessary and by selecting the method of assessment. There are five levels of assessment: assessment without the preparation of a Public Environmental Report (PER) or Environmental Impact Statement (EIS), a PER, an EIS, a public inquiry, and a one-off accreditation of a State or Commonwealth process.[46] The Environment Minister is responsible for making the final decision regarding project approvals.

For proposed activities that are likely to have a 'significant' impact on matters of national environmental significance, proponents need to comply with an 'electing in' or referral process under the EPBC Act. Once a referral is made, the action is illegal until an approval has been granted. If an activity is referred to DEH as a controlled action, proponents can put forward a referral and indicate that approval should be required (in which case, the referral undergoes a ten-day process that does not include a public comment period).[47] The proponent also nominates which provisions may apply. According to Jinman (pers comm 2002),[48] if approval is most likely to be required, it becomes a controlled action and DEH recommends to the Environment Minister or Minister's Delegate the controlling provisions. DEH may agree with the controlling provisions nominated by the proponent, or deem it appropriate to add other relevant controlling provisions. These provisions set the scope for any subsequent EIA and approval.

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45 However, there remains a question of recognition with regard to the AT(EP) Act as Australian law for the AAT is only recognised by ATCPs who recognise Australia's claim. Therefore, the EPBC Act would not necessarily apply to foreigners operating in the AAT outside the support provided by the AAD.

46 A PER has a twenty day assessment report period and the EIS has a thirty day assessment report period. It is the scope of these two processes, not the level of investigation, which determines the level of assessment. If the action is not complicated and there are only a few issues DEH conducts a PER. If the activity is complicated and has many issues an EIS is completed. See <http://www.deh.gov.au/epbc/assessmentsapprovals/assessments/index.html>.

47 Under the EPBC Act, an action that a person proposes to take is a 'controlled action' if the taking of the action by the person without approval under Part 9 for the purposes of a provision of Part 3 would be prohibited by the controlling provision (EPBC Act s 67). There is no public comment period in the 'controlled action' ten day referral process because the referral is proceeding through to the environmental assessment process which includes a public comment period.

48 F Jinman, Assistant Director (Referrals Section, Approvals and Legislation Division, DEH).

Alternatively, proponents may state that a referred action does not require approval. This could be because the proponent is unsure about potential impacts or they have a reasonable understanding of what the impacts may be and a reasonable certainty that any impacts can be mitigated to an acceptable extent. This twenty-day process incorporates a ten-day public comment period.[49] DEH receives the referral and circulates it internally to relevant Commonwealth Ministers to determine their views on the relevant provisions.[50] Any advice is then collated and DEH briefs the Environment Minister or Minister's Delegate on whether approval should be required. DEH may determine that:

- approval is not required;
- approval is not required but the activity must be undertaken in a specified way; or
- approval is required, in which case controlling provisions are set and the referral proceeds through the EIA process.

Once a decision is made under the EPBC Act, it provides proponents with a 'very high level of certainty' and they may progress with an activity 'knowing the Environment Minister has said it is not significant' (Garrett pers comm 2002).[51] If the activity is conducted as described in the referral, there is no possibility of DEH returning to the proponent and stating that additional approval is required. In effect, DEH and the Commonwealth government are locked into the decision.

C *Australian Antarctic Environmental Impact Assessment Legislation*

In Australia, the AT(EP) Act implements obligations at the national level arising from the *Madrid Protocol* and the 1964 Agreed Measures for the Conservation of Antarctic Flora and Fauna. As the Australian Antarctic Program is coordinated through the AAD, this Australian Commonwealth government agency is the action agency and responsible for administering the AT(EP) Act and implementing the Australian EIA process in Antarctica. The Director of the AAD is the official Delegate of the Environment Minister.

The object of the AT(EP) Act is the conservation of Antarctic flora and fauna and the protection of the Antarctic environment. This is achieved through a permit system, a regime of protected areas and the EIA process. The following Regulations have been made under the AT(EP) Act:

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49 Under s 75 of the EPBC Act, the Environment Minister must consider public comment: (1A) In making a decision under subsection (1) about the action, the Minister must consider the comments (if any) received: (a) in response to the invitation (if any) under subsection 74(3) for anyone to give the Minister comments on whether the action is a controlled action; and (b) within the period specified in the invitation.

50 Relevant provisions could be Commonwealth land, Commonwealth action, potentially Commonwealth marine, listed threatened or listed migratory species.

51 P Garrett, Director (Referrals Section, Approvals and Legislation Division, DEH).

1. Antarctic Seals Conservation Regulations – implements the Convention for the Conservation of Antarctic Seals, Agreed Measures for the Conservation of Antarctic Flora and Fauna, and *Madrid Protocol*.

2. Antarctic Treaty (Environment Protection) (Waste Management) Regulations – implements Annex III to the *Madrid Protocol*. These Regulations relate to waste disposal and waste management, and are primarily concerned with managing waste generated on a day-to-day basis at Antarctic stations including recycling, compulsory removal of certain wastes, disposal of sewage and domestic liquid waste, and clean-up activities.

3. Antarctic Treaty Environmental Protection (Environmental Impact Assessment) Regulations: Part 3 of the AT(EP) Act – implements the EIA requirements of the *Madrid Protocol* and provides the Environment Minister with powers in relation to the EIA process. Proposed activities are subject to prior assessment of the likely impacts on the Antarctic environment and its dependent and associated ecosystems.

To implement the obligations under Annex I of the *Madrid Protocol*, the Commonwealth government amended the AT(EP) Act and associated Environmental Impact Assessment Regulations (the EIA Regulations) in 1992. The AT(EP) Act and EIA Regulations must be adhered to for all activities in the AAT, and any activity proposed by Australian nationals in Antarctica. The EIA process is a staged procedure that is guided by the *Australian Guidelines for Initial and Comprehensive Environmental Evaluations*.[52] These EIA Guidelines closely mirror the COMNAP Guidelines, but also include Australian legislative and processing requirements.

Under the AT(EP) Act, all activities occurring after 4 October 1991 require consideration of the environmental impacts, unless they were 'ongoing' actions at the time the *Madrid Protocol* was signed. Thus, if the Environment Minister or Minister's Delegate determines that an activity has 'less than a minor or transitory impact' on the environment – it may proceed forthwith. Where PAs are required, the proponent prepares a document that highlights key features of the proposed activity. Although an activity may be determined as having 'less than a minor or transitory impact on the environment', approval to proceed may be given subject to

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52 The Australian Antarctic EIA guidelines state that in order to comply with the requirements of the AT(EP) Act and EIA Regulations in a logical and structured manner, the Australian EIA format based on COMNAP's 'Practical Guidelines' is to be implemented for IEEs and CEEs, see Australian Antarctic Division, *Australian Guidelines for Preparation of Initial and Comprehensive Environmental Evaluations* (2002/04) Department of the Environment and Heritage <http://www-old.antdiv.gov.au/environment/eia/guidelinestoc.asp> 12 April 2005.

certain conditions aimed at minimising potential impacts. The Australian approach for the preparation of PAs is that activities can be determined as either engineering and logistical activities, or scientific activities submitted as part of a formal scientific proposal. On average, Australia assesses 80 to 90 activities at the PA level each year. Approximately 60 per cent of these are scientific research activities, with the balance being logistics related. Of the total, only about five per cent involve non-government activities.[53]

In some cases, an assessment will indicate that a higher level of evaluation is necessary, in which case, an IEE or CEE is prepared. The same type of information is required for both assessments, as summarised below, although a CEE is required to include more detail than an IEE.

a) non-technical summary;
b) description of the proposed activity;
c) description of the existing environment;
d) description of methods and data used to predict impacts;
e) analysis of expected impacts;
f) alternatives;
g) mitigation measures;
h) monitoring of impacts;
i) response action in case of accident;
j) audit arrangements;
k) conclusion;
l) contact name and address; and
m) external consultation and proponent response.[54]

If the proposed activity is likely to have 'no more than a minor or transitory impact' on the environment, an IEE is prepared to identify possible alternatives and measures for assessing and verifying the activity's impacts. From 1989 to 2002, Australia completed 29 IEEs for activities such as the construction of additional buildings at stations, antennae, meteorological structures, wind generators and major scientific apparatus within the disturbed area of an existing station and the establishment of temporary field bases for projects with permanent but minor impacts, or those considered to be minor and transitory.[55] More recently, Australia has completed IEEs for the removal of buildings at Old Davis Station in Antarctica,

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53 Australian Antarctic Division, *Impact Assessments of Australian Activities in Antarctica – 1989 to Present* (2002) DEH <http://www.aad.gov.au/environment/eia/aust_iees.asp> 3 July 2002; Australian Antarctic Division, *Annual list of any Initial Environmental Evaluations prepared, and procedures put in place in accordance with Articles 2(2) and 5, in fulfilment of Article 6 of Annex I to the Protocol on Environmental Protection to the Antarctic Treaty*, (2004) < http://www.aad.gov.au/default.asp?casid=15353> 8 April 2005.

54 Council of Managers of National Antarctic Programs, *Guidelines for Environmental Impact Assessment in Antarctica* (COMNAP) 1999 <http://www.comnap.aq/comnap/comnap.nsf/P/Pages/About.Publications/>.

55 Examples of IEEs completed by Australia can be accessed at <http://www-old.aad.gov.au/environment/eia/aust_iees.asp>.

and the development and operation of an ongoing air transport system including intercontinental flights between the Australian and Antarctic continents and intra-continental flights between Antarctic stations – the Australian Airlink Project.[56]

If an activity is deemed as having 'more than a minor or transitory impact' on the environment a CEE is prepared to provide a detailed examination of the proposal, its potential impacts and the possible alternatives and measures to minimise, mitigate, verify and assess impacts. Although Australia has yet to conduct a CEE, this assessment could be prepared for major construction projects such as a new permanent station or a rock runway, a major new wharf facility, or other projects with large potential impacts such as the extension of a station or scientific rock drilling, including projects with transitory but major impacts, or those of a permanent and major nature.[57]

Many activities in the AAT, because of their routine nature and negligible impact, do not require formal EIA. Assessment of these activities is often undertaken on-the-spot (mental assessment) by appropriately trained Station Environment Officers, Station Leaders and expeditioners. On-the-spot assessments that do not require formal documentation include ongoing activities as from 4 October 1991; ongoing activities undertaken at current levels; or activities that are within existing building areas, established station or field camps, or those not requiring additional infrastructure (eg, facilities or logistics).[58]

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56 Australian Antarctic Division, 'Protecting the Environment: IEE Davis Building Removal – IEE Air Transport' (2003) <http://www.antdiv.gov.au/default.asp?casid=12597> 2 December 2003; Currently see Australian Antarctic Division, 'Air Transport Project' (2005) <http://www.aad.gov.au/default.asp?casid=2189>.

57 A number of other ATCPs have completed CEEs including the drilling activity at Dome C, Antarctica – the Concordia Project (France and Italy), and the construction of a station, SANAE IV facility at Vesleskarvet, Queen Maud Land, Antarctica (South Africa). For details see Committee for Environmental Protection (CEP II), 'A Summary of Environmental Impact Assessments' (Information Paper presented to ATCM XXIII, Lima, 22-23 May 1999) <www.vias.studies.aq/antdocs/EIA_Archive.pdf>; CEP IV, 'Annual Report Pursuant to the Protocol on Environmental Protection to the Antarctic Treaty' (Information Paper presented to ATCM XXV, Warsaw, 10-20 September 2002) <http://www.cep.aq/MediaLibrary/asset/MediaItems/ml_376384686574074_IP064e.pdf>; Media Library, 'A summary of Comprehensive Environmental Evaluations (CEEs)' (2004) <www.cep.aq/MediaLibrary/asset/MediaItems/ml_382524900694444_CEE_List_Sept_2004.pdf>.

58 Above n 28; other activities not requiring EIA include: activities that involve only minor variations or modifications to established operational practices or facilities and are necessary for maintenance activities and annual supply of stations; field trips that do not involve establishment of new supplies or equipment or the entry into protected or other sensitive areas; disposal of urine and greywater into the field providing the activity is in accordance with the Antarctic Treaty (Environment Protection)(Waste Management) Regulations; non-government expeditions or tourist vessel visits to the Antarctic Treaty Area not involving landings, and harvesting of marine organisms as these activities fall under the jurisdiction of the *Convention for the Conservation of Antarctic Marine Living Resources* (CCAMLR) Area. Most notably, on 6 September 2002, ongoing Australian Antarctic operations were certified as conforming to the Environmental Management System (EMS) International Standard ISO 14001. See Australian Antarctic Division, 'Environmental Excellence' (2004) <http://www.aad.gov.au/default.asp?casid=3261>.

The AT(EP) Act implements the obligations arising from the *Madrid Protocol* at the national level. The EPBC Act applies to Australia and provides for Commonwealth involvement in EIA to be focused on seven matters of national environmental significance. The two Acts are used for different purposes. The AT(EP) Act is the basic assessment and approval mechanism used for day-to-day management of the AAT (95 per cent of activities). The EPBC Act is a more robust and public assessment process that picks up matters at a broader level. However, the AT(EP) Act and EPBC Act share several similarities. Both are intended to influence decision-making for planned activities, require EIA before taking actions that significantly affect the environment, require assessment of cumulative and indirect impacts, and require specific review periods for draft documents. In addition, both prescribe thresholds for determining the 'significance' of environmental effects. However, there are also substantial differences between these Acts including; the level of public input required in the planning process, consideration of alternatives, approach to the assessment of cumulative impacts, implementation of thresholds and the application of enforcement mechanisms. A comparison of the EIA requirements of the Protocol, AT(EP) Act and EPBC Act is presented in Table 1.

Table 1: Comparison of EIA requirements under the EPBC Act, AT(EP) Act and *Madrid Protocol*.

EIA topic	Madrid Protocol	AT(EP) Act	EBPC Act
Legal standing	Applies to all ATCPs	Applies to all activities conducted by Australian or foreign nationals (if attached to the AAD) in the AAT, and activities conducted by Australian nationals anywhere in Antarctica Does not apply to Heard Island (HIMI), although the same EIA process is currently followed for activities conducted in the HIMI	Applies to any Commonwealth government action in Antarctica or activities conducted by Australian nationals in the AAT that has, or is likely to have, a 'significant' environmental impact
Planning	EIA is intended to be integrated into the planning process (Article 3) – ongoing activities do not require EIA (from 4 October 1991)	EIA is intended to be integrated into the planning process) – activities after 4 October 1991 require EIA – ongoing activities do not require EIA (from 4 October 1991)	EIA is intended to be integrated into the planning process – some actions (i.e. those assessed under the EP(IP) Act) are covered by transitional provisions and may not be regulated by the EPBC Act
Resources	Contains very	Contains very specific	Protects 'the whole of the

of concern	specific provisions for protecting Antarctica's natural and cultural resources – calls for the protection of intrinsic, wilderness and scientific values, and bans mining (Article 7)	provisions for protecting Antarctica's environment – categories include atmospheric, aquatic, terrestrial, marine, social and historical resources – specially managed areas and areas of special scientific interest are also identified	environment' and matters of national environmental significance through environmental triggers (EPBC Act Chapter 2) – generally, the requirements are less specific than the AT(EP) Act
Environ-mental document-ation	Any planned activity or logistic facility to support such an activity should be scrutinised in accordance with national procedures to determine if it is likely to have a 'significant' impact (Annex 1)	The self-administered PA process calls for mandatory information, IEEs are prepared in accordance to Australia's Antarctic EIA Regulations and Guidelines and the Australian version of the COMNAP Guidelines, and higher level assessment is conducted through preparation of an internationally scrutinised CEE	There are different assessment approaches that are appropriate in different circumstances including preliminary documentation, PER, EIS, public inquiry, and an accredited assessment process
Categorical exclusions	Does not specifically address categories of actions that do not require review or documentatio n	Opportunity is provided for categorical exclusion of activities from assessment as stated in s12 (B) of the *Antarctic (Environment Protection) Legislation Amendment Act 1992* (Cth) where 'the Minister can determine any activities that can be excluded from assessment'	Activities do not require approval if they were approved under, and taken in accordance with, a Commonwealth government accredited management plan, the action has been authorised by an Commonwealth government decision, or was authorised prior to commencement of the EPBC Act (in July 2000)
Thresholds	'Minor or transitory' is not defined and includes notable uncertainties in application an IEE is the first evalua-tion expected to have a 'significant' impact	'Minor or transitory' is not defined and includes notable uncertainties in application – the treatment of alternatives is unclear although IEEs must assess alternatives including the 'no action' option – EIA is not intended to stop activities from proceeding, but to ensure they progress in a manner that protects the Antarctic environment	Proponents need to take into account the nature and magnitude of potential impacts if the action has, will have, or is likely to have a 'significant' impact on matters of national environmental significance – significance is not defined and a broad definition is applied

Cumulative impacts	Not defined, but the context of use, '[i] in light of existing and known planned activities', suggests a more restrictive meaning – i.e. no specific mention of past activities or obligations to identify actions to others	Not defined as proponents may find cumulative impacts difficult to assess due to their lack of knowledge, about their interaction to one another or the environment, or the EIA process – a clear understanding of the meaning of cumulative impacts is required	Cumulative impact of independent actions, all of which are below the 'significant' impact threshold, are primarily to be addressed through Australian State or Territory planning and land management legislation, and recovery plans
Public involvement	There is no requirement to undertake public consultation in scoping – draft CEEs are to be made available for comment to the ATCPs and the CEP	The PA checklist process is not an open process and does not prescribe public consultation – IEEs require some formal notification to other agencies or interested parties (Annex I Article 6 – an annual list of IEEs must be made available to the ATCM – draft CEEs are made publicly available and referred to DEH, ATCPs, ATCMs and the CEP	An opportunity is provided for all individuals, agencies or interested parties and agencies affected to be involved in defining the scope, review and analysis of draft preliminary documentation, a PER or EIS – after receiving a proposal, the Environment Minister must publish the document and seek public comment (s74(3))
Dispute resolution, compliance and enforcement	Disputes are established on protocol and international law – they may be carried to a special Arbitral Tribunal or to the International Court of Justice – international political and cultural considerations may affect interpretation and implementa-tion	Legally binding conditions and recommended notes may be applied to the approval to ensure that environmental impacts are avoided – PAs are a closed process, IEEs have an appeal process and CEEs have a limited appeal process The AT(EP) Act has no criminal enforcement provisions, a lower penalty point enforcement system than the EPBC Act and no prescriptive review mechanisms – in emergencies, the Environment Minister (or an authorised person) must be given notice of the contravention within 30 days of starting the activity and a written report within a	Disagreements, if not resolved prior to the Commonwealth government decision and exhaustion of any available administrative appeals under Chapter 6 Division 16, may be addressed in the Australian Courts – proponents can seek a Statement of Reasons, however, the Environment Minister has limited power to vary or substitute decisions – those found in breach can be held legally and financially liable Decision-making power is transferred from the Action Minister or Minister's Delegate to the Environment Minister

		further 30 days	

Antarctic Treaty Consultative Meeting (ATCM); Antarctic Treaty Consultative Party (ATCP); Australian Antarctic Division (AAD); Australian Antarctic Territory (AAT); Committee for Environmental Protection (CEP); Council of Managers of National Antarctic Programs (COMNAP); Heard and Macdonald Islands Territory ((HIMI); Environmental Impact Assessment (EIA); Environmental Impact Statement (EIS); Comprehensive Environmental Evaluation (CEE); Initial Environmental Evaluation (IEE); Preliminary Assessment (PA); Public Environmental Report (PER)

The AT(EP) Act and associated EIA Regulations must be complied with for all activities proposed to be conducted in the AAT, and any activity proposed by an Australian agency or national anywhere in Antarctica. The EPBC Act only regulates a subset of Antarctica and applies to all Australian actions in the AAT likely to have a 'significant' impact on matters of national environmental significance and Commonwealth government agency activities throughout Antarctica. Therefore, if the EPBC Act applies, the AT(EP) Act automatically applies. However, the EPBC Act also applies to the marine environment, including Antarctic and international waters, under the Commonwealth marine environment trigger and consequently, some marine activities escaping the AT(EP) Act may be controlled under the EPBC Act. As neither Act applies to foreigners, sovereignty problems arise and foreigners are only required to complete EIAs voluntarily.

When dealing with matters of national environmental significance, the EPBC Act maximises reliance on accredited State and Territory EIA procedures that meet 'appropriate standards'.[59] The Act sets up a framework for accreditation by providing for bilateral agreements between the Commonwealth and individual State and Territory governments in Australia. A bilateral agreement is defined in s 45(2) of the Act as a written agreement between the Commonwealth and a State or Territory that provides for one or more of the following: protecting the environment; promoting the conservation and ecologically sustainable use of natural resources; ensuring an efficient, timely and effective process for environmental assessment and approval of actions; and minimising duplication in the environmental assessment and approval process through Commonwealth accreditation of State and Territory processes (or vice versa).[60]

Actions covered by bilateral agreements are not subject to the EPBC Act's EIA and approval process. Instead, the bilateral agreement outlines the EIA process that a proposal will need to fulfil. The Act provides for two types of bilateral agreements: assessment bilateral agreements that accredit State and Territory assessment processes alone, and approval bilateral agreements that accredit State and Territory assessment and approval processes.[61]

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59 D K Anton, *Environmental Laws for the 21st Century: What role for the Commonwealth?* (1998) 50, 1-4; Hill, above n 29.

60 Padgett and Kriwoken, above n 22, 30-31.

61 Environment Australia, *Regulations and Guidelines under the Environment Protection and Biodiversity Conservation Act 1999: A Consultation Paper* (1999) Department of the

However, there are limitations on a Minister's ability to enter into a bilateral agreement.[62] For example, the Minister has to be satisfied that the agreement will promote the management of a property or wetland in accordance with the Australian World Heritage or Ramsar wetland management principles (EPBC Act ss 51 and 52). The Act also sets out a number of specific standards and requirements for assessment and approval bilateral agreements. An example of a requirement for assessment bilateral agreements is that the EIA process to be accredited must address all impacts on matters of national environmental significance (EPBC Act s 47(2)).[63] In addition, approval bilateral agreements have been more contentious than the assessment bilateral agreements[64] and the Commonwealth government will only consider delegating responsibility for making approval decisions in limited circumstances.[65]

Technically, the Environment Minister can accredit the AT(EP) Act EIA process under the EPBC Act if assessments are conducted at the same time and fundamental standards are met. However, Garrett (pers comm 2002) points out that the AT(EP) Act would not qualify as an accredited EIA process particularly with regard to lack of public consultation and differing requirements regarding the preparation of EIA reports. Garrett (pers comm 2002) also stated out that 'even if there was the capacity to accredit the AT(EP) process, it would not be worth it as there are so few assessments coming through the EPBC Act from the AAD'.[66] In addition, for large projects triggering the EPBC Act, DEH may wish to maintain separation of powers from the proponent, which in most cases would be the AAD. In these cases, referral of 'significant' activities to DEH provides a degree of protection against criticisms that could be directed toward the AAD with regard to the organisation being the

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Environment and Heritage. A hardcopy of this publication can be requested from the Community Consultation Unit, DEH, Canberra, Australia.

62 According to Padgett and Kriwoken, above n 22, 33; 'the form, content and potential benchmarks for approval bilateral agreements are not currently known'. The Commonwealth government states that such detail will not be published until substantial progress has been made toward developing assessment bilateral agreements (Environment Australia, above n 55).

63 Padgett and Kriwoken, above n 22, 31.

64 K Wells, 'Environmental Impact Assessment: An Environmental Defender's Office Critique' (Paper presented to the National Environmental Defender's Office [EDO] Network Conference – *A New Green Agenda*, Sydney, 14 October 1999); P Garrett, 'Commonwealth Environment Powers: An environment movement perspective' (Paper presented to the National Environmental Defender's Office [EDO] Network Conference – *A New Green Agenda*, Sydney, 14 October 1999); Environmental Defender's Office Network, *Submission on the Consultation Paper Issued by Environment Australia: Regulations and Guidelines under the EPBC Act 1999* (Environmental Defender's Office [EDO], Sydney, 1999). See Community Biodiversity Network, 'New Commonwealth Environmental Laws: EDO Network 'New Green Agenda' Conference' (1999) <http://www.nccnsw.org.au/member/cbn/news/media/19991203_53np_edo.html>.

65 R Hill, 'Opening Address: Reform of Commonwealth Environmental Law' in P Leadbeter, N Gunningham and B Boer (eds), *Environmental Outlook No 3: Law and Policy* (1999).

66 Garrett (pers comm 2002) estimates there may be three or four referrals made to DEH per year, with one or two of these referrals possibly requiring approval.

proponent, assessor and approver of an activity. Here, the EPBC Act provides additional transparency to the Antarctic EIA process.

Rather than enacting a formal bilateral process between the EPBC and AT(EP) Acts, there are a number of other strategic provisions that could be enacted including:

1. Bilateral agreements similar to those proposed and signed between the Commonwealth and State or Territory governments (EPBC Act s 29). However, this option may not be appropriate for the AAD due to the low number of actions likely to require referral and/or later EIA under the EPBC Act.

2. Strategic assessments where an assessment be made of the impacts of actions under a policy, plan or program on a matter protected by a provision of Part 3 of the EPBC Act (EPBC Act s 146). However, this option may not be appropriate to the AAD as it only establishes thresholds and does not provide certainty on decisions.[67]

3. Ministerial declarations where the AAD would be exempt from the provisions of Chapters 3 or 4 of the EPBC Act (EPBC Act ss 32 and 33). This approach is unlikely to be pursued or granted as it needs to be passed by both houses of the Australian Parliament and a management plan is required.[68]

4. Accreditation on a project-by-project basis if a proposal is determined as requiring assessment (EPBC Act s 87(4)). This approach provides the capacity for DEH to accredit the AT(EP) Act process for a proposal in whatever form is appropriate. This may be the most practical and preferred approach with regard to Antarctic EIA and the low number of actions that are likely to be referred to DEH, or for referrals that are determined as not requiring approval under the EPBC Act.[69]

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67 Strategic assessment is an approach used to ensure that environmental considerations are integrated into government policy-making; J D Court, C J Wright and A C Guthrie, 'Environmental Assessment and Sustainability: are we Ready for the Challenge?' (1996) 3 *Aust J Environ Manage* 42-57. As part of a strategic assessment, it may be possible to accredit a management plan under the EPBC Act that may cover either a whole station operation or even the AAT.

68 An action does not require approval from the Environment Minister under the EPBC Act if it is consistent with an approval from another Commonwealth government agency decision-maker under a management plan accredited by the Environment Minister for the purposes of a Ministerial Declaration (EPBC Act s 33); or it has been authorised by a government decision on which the Environment Minister's advice has been sought (EPBC Act s 160).

69 The accreditation procedures only relate to referrals where it is determined that approval should be required. Nationally, the majority of proposals (approximately 65 to 70 per cent) do not require approval (Jinman pers comm 2002; Garrett pers comm 2002). This is not to say that most referrals should be submitted, as the referral process considers the proposal and likely environmental impacts. The outcome is a legal decision where approval is not required

III PLANNING FOR AUSTRALIAN ANTARCTIC ENVIRONMENTAL IMPACT ASSESSMENT

Both the EPBC Act and *Madrid Protocol* aim to protect the Antarctic environment and EIA requirements are intended to be integrated into the planning process at the earliest stages.[70] In particular, the Protocol is focused on planning, stating in Annex I Article 1 that 'the environmental impacts of proposed activities … shall, before their commencement, be considered in accordance with appropriate national procedures'. Further, Annex I Article 4 states that 'any decision on whether a proposed activity, to which Article 3 applies, should proceed, and, if so, whether in its original or in a modified form, shall be based on the CEE as well as other relevant considerations'.

Planning is a principal tool for protecting the Antarctic environment under the AT(EP) Act and EPBC Act. Resources necessary for the preparation of an EIA need to be accepted as a valid part of that project and should be allocated within the activity's planning requirements. The assessment should focus on salient features of proposals and associated environmental considerations and the document should be self-contained with sufficient information provided to enable examination of the basis of decisions.[71] In particular, all possible alternatives should be explored and discussed in detail, especially when the decision is not clear-cut. More specifically, to meet the requirements of the AT(EP) Act, the purpose, need and benefits of the activity should be included in IEEs and CEEs to explain the characteristics and features of the activity that might cause environmental impact.

Antarctic EIA under the EPBC Act depends on the level of 'significance' of the activity on the environment. Activities most likely to be referred to DEH are logistical support and infrastructure proposals, or programs such as waste clean-up and contamination containment or heritage (Garrett pers comm 2002; Jinman pers comm 2002).[72] Land-based (ice-based) tourism and any tourism that has the potential to interfere with cetaceans in international and Antarctic waters would

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as 'significant' impacts are either not likely, or likely but able to be mitigated. This decision provides 'certainty' to the proponent. However, this trend may not flow through to proposals in the AAT as this is a pristine environment, and therefore the threshold of likely impact may be lower than for similar proposals in more degraded Australian mainland environments.

70 The Australian Antarctic EIA Guidelines states that the 'environmental assessment process should be initiated at the earliest planning stage of an activity to enable adequate information gathering and baseline evaluations (including necessary field studies)', Australian Antarctic Division, *Australian guidelines for preparation of IEEs and CEEs*, see '(2) General Considerations' <http://www.aad.gov.au/default.asp?casid=3587>.

71 A non-technical summary is included in IEEs or CEEs to give all readers a quick, non-technical understanding of the proposal and its environmental impact. It is important that objectives, relationship to existing or proposed activities, alternatives, issues identified and conclusions reached in the assessment are included.

72 Most scientific projects would not be significant under the EPBC Act (although not all) and they are regulated by the permit system under the EPBC Act.

automatically need to be referred to DEH (Garrett pers comm. 2002).[73] In these cases, DEH would conduct an EIA of the whole activity. Considering that the AT(EP) Act does not have the jurisdiction to apply conditions to tourism operations in international waters, DEH cannot legally accredit the AT(EP) Act EIA process for these activities. In these cases, it would be the operator who would have the responsibilities under the legislation rather than the AAD.

IV RESOURCES OF CONCERN

Categories of environmental resources addressed in the EPBC Act differ from those specified in the *Madrid Protocol*. The EPBC Act emphasises the protection of those aspects of the environment that are matters of national environmental significance. Under the Protocol, activities in the Antarctic Treaty Area should be planned and conducted to limit adverse impacts on the 'Antarctic environment and dependent and associated ecosystems'.[74]

As Ensminger, McCold and Webb[75] point out, '[b]ecause of the unique and relatively unspoiled character of Antarctica, the intrinsic and scientific values of the Antarctic environment become key factors during the EIA process'. Consequently, these values establish a level of protection that may be beyond the disclosure of environmental effects required under the EPBC Act. In particular, the EPBC Act does not specifically address aesthetic impacts nor has it a comparable requirement for the protection of intrinsic and wilderness values. It also makes little direct reference to social or heritage values, although the Act is based upon the principles of ecologically sustainable development that specifies that 'decision making processes should effectively integrate … social and equitable considerations' (EPBC Act, ch 1, pt 1, s 3A). Despite these impediments, Jinman (pers comm 2002) argues that although heritage values appear absent in the EPBC Act, heritage is protected in Antarctica under the Act because activities cover 'the whole of the environment'. However, to ensure that heritage values are protected, the Commonwealth government has considered a direct heritage trigger under the Act and reintroduced a *heritage legislation package* which incorporates heritage provisions into the Act in June 2002, which was passed by the Australian Parliament in September 2003. A seventh matter of environmental significance in relation to National Heritage places was also enacted in early 2004.[76]

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73 Tourism is not explicitly mentioned in the Australian Constitution (C M Hall, *Introduction to Tourism in Australia: Impacts, Planning and Development* (2nd ed, 1995)). In addition, there is no overarching legislation for the tourism industry in Australia at either the Commonwealth, State or Territory levels and the legal responsibility for tourism has developed under those areas that infringe on the tourism industry. As tourism is not directly mentioned in the EBPC Act because it is not a Commonwealth activity, some tourist activities may escape EIA under this Act.

74 *Madrid Protocol*, above n 5, art 2.

75 T J Ensminger, L N McCold and J W Webb, 'Environmental Impact Assessment Under the National Environmental Policy Act and the Protocol on Environmental Protection to the Antarctic Treaty' (1999) 24(1) *Environ Manage* 13, 18.

76 See above n 42, 43.

To protect Antarctica, it may be possible to provide for a World Heritage serial listing of the whole (or parts) of the continent where ATCPs are asked to manage and report on Antarctica jointly under a MOU agreement (Preece pers comm 2002).[77] In this case, actions planned for, or conducted in, the AAT may be subject to the EPBC Act as a matter of national environmental significance. A management plan in accordance with the Australian World Heritage principles would be required under the EPBC Act (ss 316 and 321-323). However, difficulties may arise with regard to all, or part of, Antarctica becoming a World Heritage Area, particularly with regard to sovereignty and jurisdictional issues. In addition, differences in the regimes for land managed by the Commonwealth government or others will need to be clarified.[78] Considering that governments that are not parties to the ATS may not support the listing, Australia is unlikely to nominate the AAT for World Heritage Listing.

V ENVIRONMENTAL DOCUMENTATION AND PUBLIC INVOLVEMENT

Under the EPBC Act and *Madrid Protocol*, time is required for comment on draft EIAs by interested or affected parties prior to the publication of final documents and decision. However, the extent of public involvement specified as necessary under the Protocol and AT(EP) and EPBC Acts varies considerably. Under the Protocol, there is little emphasis on public comment generally and no mention of public input early in the EIA process, nor for activities with 'less than a minor or transitory impact'.[79] The AT(EP) Act specifies neither consultation times nor the pubic audience, whereas the EPBC Act clearly identifies consultation periods and requires that interested and affected persons and agencies be informed of the availability of environmental documents.

The Protocol requires that procedures used for PAs,[80] and an annual list of IEEs prepared and decisions subsequently taken, be made publicly available.[81] Under the AT(EP) Act, the PA checklist process is not described by law to be an open process. It is peer reviewed, assessed 'in house', approved by the Environment Minister's Delegate and does not prescribe a public consultation process beyond specific experts as required. The Assessing Officer at the AAD bases advice to the Environment Minister on appropriate expert input. As such, if members of the

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77 M Preece, Assistant Director (Intergovernmental Section, Australian and World Heritage Group, DEH).

78 Differences are exemplified by the Tasmanian Wilderness World Heritage Area (TWWHA). This Area is managed under a bilaterally accredited agreement between the Commonwealth and Tasmanian governments (EPBC Act s 45). The Tasmanian government manages the TWWHA in accordance with a management plan that was finalised in 1999 (Tasmanian Parks and Wildlife Service 1999). However, for the TWWHA, the Commonwealth Environment Minister has the final say over actions that may impact matters of national environmental significance (Preece pers comm 2002).

79 Ensminger, McCold and Webb, above n 75.

80 *Madrid Protocol*, above n 5, Annex 1, art 6(1)(a).

81 Ibid art 6(1)(b).

public sought information concerning PAs they would need to access the information through freedom of information processes. Maggs (pers comm 2002) warned that public access to PA information may also result in commercial-in-confidence issues for some operators, particularly for tourism activities or operations that have developed specialised procedures.[82]

The AT(EP) Act replicates the *Madrid Protocol's* requirements for the preparation of IEEs and CEEs. Proponents prepare these EIAs in accordance with the EIA Regulations associated with the AT(EP) Act, and the Australian version of the COMNAP Guidelines. Under the AT(EP) Act, proponents must provide alternatives including the 'no action' option as part of the IEE.[83] Once the Environment Minister's Delegate is satisfied that the document is complete, the draft IEE is released for public comment. It is circulated within the AAD and to any other national program affected by the activity. The AAD also forwards the draft IEE to selected organisations (depending upon the activity) including non-government organisations (NGOs), DEH, the Australian Heritage Commission (now Council), other heritage professionals and technical specialists who have particular expertise and the Executive Secretary of COMNAP.[84] The AAD does not consult internationally for IEEs unless the activity has international links. A limitation of this process is that NGOs and the public will not necessarily be aware that an IEE has been prepared unless they learn of it through the public consultation phase or are specifically asked to comment. The Minister's Delegate may then grant approval after a public consultation period of four weeks on the advice of the AAD's Assessing Officer once all comments received have been adequately

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82 Issues surrounding commercial-in-confidence concerns and intellectual property rights are exemplified when the New Zealand Antarctic Program sought information in the Australian Qantas Overflights PA (Maggs pers comm 2002). Given that this PA was detailed, thorough and expensive to produce (in excess of $AUD130,000), Qantas was concerned that its EIA information, which it provided at some expense, would find its way to the rival operators, Air New Zealand and Ansett. To address Qantas's concerns, the AAD did not provide specific parts of the information contained in the Qantas Overflights PA. T Maggs, Manager (Environmental Policy and Protection, Environmental Policy and Protection Section, Policy Coordination Branch, Australian Antarctic Division).

83 Instead of proponents being specific in the title of their activities, the AAD prefers that for an activity, a broad description is provided as this approach allows for a greater range of alternatives to be considered. As part of an Antarctic Environment Officers Network (AEON) project that was established in 1996 to undertake specific tasks on behalf of COMNAP, the AAD has reviewed the IEEs it has completed and found that these assessments are generally deficient when detailing alternative locations, methodologies and timing (Ingram pers comm 2002). Very few proponents consider alternative timing because they hope to complete the project during the coming shipping season. S Ingram, Environmental Policy Officer (Environmental Policy and Protection Section, Policy Coordination Branch, Australian Antarctic Division). For more information on COMNAP and the reports and proceedings, see <http://www.comnap.aq/comnap/comnap.nsf/P/Pages/About.Publications/#1>.

84 NGOs may include the Antarctic and Southern Ocean Coalition (ASOC), World Wide Fund for Nature (WWF), Greenpeace, and Australian Conservation Foundation (ACF).

addressed in the revised EIA document.[85] Once the IEE is complete, a notice is placed in the *Commonwealth of Australia Gazette* and the AAD provides ATS exchange information.[86]

A CEE is similar to an IEE although it provides greater detail and is investigated more thoroughly. Once the draft CEE is released for public comment, the AAD must publish a notice in the *Commonwealth of Australia Gazette* to ensure the public has 'at least' 28 days to comment after publication of the notice.[87] The draft CEE is also sent to all signatories of the *Madrid Protocol* for comment, the CEP and made publicly available to all ATCPs at least 120 days before the next biannual ATCM.[88] Foreign parties must respond within 90 days from being sent the draft CEE.[89] The final CEE should address and include a summary of comments received on the draft document. Notice of any decisions relating thereto and any evaluation of 'significant' impacts in relation to the advantages of the proposed activity should be made publicly available at least 60 days before commencement of the activity.[90] In cases of emergency, Annex I does not apply and notice of the emergency should be circulated to the ATCPs immediately with a full explanation being provided within 90 days.[91]

EIA requirements under the AT(EP) Act continue to be implemented by the AAD although, with the introduction of the EPBC Act, these procedures are altering in order to 'mesh' the two EIA processes in an effort to reduce duplication and public confusion. Reporting requirements under s 170A of the EPBC Act are extensive. The EPBC Act has specific provisions for public comment at each assessment stage and there is a minimum ten-day public consultation period at the referral stage if the activity is not a controlled action (Ingram pers comm 2002). If an activity is a controlled action, the normal assessment process applies as the controlling provisions set the scope for the later assessment, public comment and approval. Conversely, if an activity is assessed at either the PER or EIS level, DEH can increase the public consultation period up to 90 days.[92] However, although this Act

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85 This situation can create a paradox under the AT(EP) Act where assessments at the PA level can provide greater protection to proponents with respect to ensuring that information remains confidential than do IEEs or CEEs.

86 The *Madrid Protocol* calls for the publication of an annual summary list of IEEs to be submitted at each CEP meeting. See CEP IV 'Report from the Intersessional Contact Group Reviewing Information Exchange Requirements' (Working Paper WP-7, Australia, 2001) <www.cep.aq/MediaLibrary/asset/ MediaItems/ml_376375193402778_wp007e.pdf>.

87 Publishing a CEE notice in the *Commonwealth of Australia Gazette* is a weakness in the EIA process in terms of public participation as the public may not know of the notice or have the opportunity to read it.

88 The CEP has taken the consultation and consideration process further at CEP III with guidelines for the consideration of draft CEEs (Maggs pers comm 2002).

89 *Madrid Protocol*, above n 5, Annex 1, art 3(3).

90 Ibid art 3(6).

91 Ibid art 7.

92 Under s 97 and s 102 of the EPBC Act, the Environment Minister must prepare guidelines for draft PERs and EISs within 20 business days of the decision that the relevant impacts of the action must be assessed by a PER under this Division; or if the Minister invites a person to

asks for comment from State or Territory Ministers, relevant interest groups are not specifically targeted to comment (Bourke pers comm 2002).[93] Once public comment has been sought and the assessment approved, a notice is placed on the Internet to inform the public and documentation is made available in the DEH library.

With the introduction of the EPBC Act, any referred or assessed activity may not necessarily require that two assessment reports be released for public comment. Given that DEH intends to 'mesh' the two reports and release a single document under both the EPBC Act and AT(EP) Act to avoid duplication, the AAD intends 'tailoring' its public comment requirements to meet the requirements specified by the EPBC Act. Therefore, where the IEE process calls for a four-week consultation period and the EPBC Act may only provide for a ten-day consultation period, the ADD may ask DEH to increase its consultation period if required (Maggs pers comm 2002). However, two separate EIA processes would be undertaken under the EPBC Act and AT(EP) Act for the purposes of the two assessment processes. To help reduce duplication, there is the possibility of an 'exchange of letters' (Jinman pers comm 2002) setting out the internal understandings and arrangements in relation to, for example, EPBC procedures being drafted. These letters are less formal than bilateral agreements and would not confer any delegation. They would also provide certainty to the AAD and DEH on what was required and expected in relation to the EPBC documentation and public consultation processes.[94]

VI CATEGORICAL EXCLUSIONS

The *Madrid Protocol* and EPBC Act do not specifically address categories of actions that do not require review or documentation. In terms of the Protocol, prescriptive lists for environmental impacts tend to be put forward by governments from European nations that already have designated development lists. These governments argue that this approach is preferred because it provides certainty. However, the Protocol and EPBC Act are designed so that not all activities of a particular size necessarily have equal environmental significance, particularly in fragile environments such as Antarctica.[95] For this reason, Garrett (pers comm 2002) does not envisage any categorical exclusions or designated lists in the EPBC Act as they may be counterproductive when protecting the Antarctic environment.

However, the EPBC Act states that a person proposing to take a controlled action, or the designated proponent of an action, may apply to the Environment Minister

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comment on a draft of the guidelines within a period specified by the Minister – within 20 business days after the end of that period (or the latest of those periods if there is more than one).

93 D Bourke, Assessment Officer (Government and Infrastructure Section, Environment Assessment and Approvals Branch, DEH).

94 Note that the responsibilities of each government agency in relation to its respective legislation would remain, although administrative arrangements would be defined.

95 Under the EPBC Act, actions that clearly do not impact matters of national environmental significance need not be analysed. However, for Antarctica it would be difficult to demonstrate that an action would not have 'significant' impacts without conducting an EIA.

for an exemption from a specified provision of Part 3 (EPBC Act s 158). The Minister may grant an exception only if he/she is satisfied that it is in the national interest in terms of Australia's defence or security, or a national emergency. In addition, there is an opportunity for categorical exclusion of activities from assessment as stated in s 12(B) of the *Antarctic (Environment Protection) Legislation Amendment Act 1992* (Cth) where 'the Minister can determine any activities that can be excluded from assessment'.[96]

VII THRESHOLDS

Both the *Madrid Protocol* and EPBC Act contain triggering language referring to a point or threshold at which a detailed EIA is to be completed. Article 8(2) of the Protocol states that Parties:

> … shall ensure that the assessment procedures set out in Annex 1 are applied in the planning processes leading to decisions about any activities undertaken in the Antarctic Treaty Area pursuant to scientific research programmes, tourism and all other governmental and non-governmental activities in the Antarctic Treaty Area for which advance notice is required under Article VII(5) of the Antarctic Treaty, including associated logistical activities.[97]

According to Scully,[98] the threshold of 'activities in the Antarctic Treaty Area for which advance notice is required under Article VII(5) of the Antarctic Treaty' was reportedly added to avoid 'EIA requirements extending to the level of the activities of individuals', such as individual tourists or expeditioners. However, Lyons[99] points out, that there is a wide disparity in the level of EIA detail provided by national governments and operators to the ATCM on Antarctic activities. Given that the activities notified are at the discretion of national governments and operators, the information provided depends on what they understand by terms such as 'tourists', 'expeditioners' and 'threshold tests'.

Activities are subject to a PA in accordance with appropriate national procedures and an activity may proceed forthwith if it is determined as having 'less than a minor or transitory impact'.[100] However, in the *Madrid Protocol*, what constitutes 'minor or transitory' is not defined to permit flexibility because it is difficult to be

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96 *Antarctic (Environment Protection) Legislation Amendment Act 1992* (Cth), Act No 103 of 1980, <http://www-old.aad.gov.au/environment/laws&treaties/default.asp>.

97 *Madrid Protocol*, above n 5.

98 R T Scully, 'The Eleventh Antarctic Treaty Special Consultative Meeting' (1991) 11(1) *Int Challenges* 84.

99 Lyons, above n 19.

100 According to Lyons (1993, 115), the decision of whether to 'proceed forthwith' or require an IEE or CEE is left in the hands of the national government or operator. Given the limited resources and tradition of 'proceeding forthwith', governments and/or operators may be tempted to proceed with an activity with insufficient regard to the potential environmental impacts; Lyons, above n 19.

precise in terms of what is 'significant'.[101] By October 1987, the final report of the Fourteenth Antarctic Treaty Consultative Meeting in Rio de Janeiro, Brazil, ATCPs noted that much attention was directed toward the difficulties surrounding the use of the word 'significant' in respect of environmental impact, and that the word was common to virtually to all national and international EIA systems. However, ATCPs recognised that 'significant' had not been defined and, in attempting to provide guidance, decided that an IEE was the first evaluation to determine whether an activity might reasonably be expected to have a 'significant' impact. By 1990, the term 'minor and transitory' was well entrenched and the term 'significant' is now widely accepted by most national Antarctic EIA processes.

Under the EPBC Act, the 'significance test' is similar to that prescribed by the EP(IP) Act however, the old regime had few consequences. Conversely, the EPBC Act directs a duty of care. Under the EP(IP) Act, if a proponent 'got it wrong' the Australian Courts could do little more than point out the error. However, under the EPBC Act those breaching the Act could be imprisoned. Consequently, it is not appropriate to take the same stance with regard to the 'significance test' between the two Acts, or the same type of practical rule of thumb approach to the EPBC Act as may have been taken in the past.

Garrett (pers comm 2002) argues that 'asking how you assess the scale of an activity is to ask one of the great imponderables – what is significant?' There is a judgement involved, and to a large extent the decision is based on precedent and comparison. As a result, DEH refers to existing standards. However, the Commonwealth government applies a low threshold of significance in Antarctica because it is a pristine environment and standard guidelines may not be appropriate. Consequently, the significance of a marginal change must be considered, as environmental changes will be detectable and long-term. Generally, Jinman (pers comm 2002) and Garrett (pers comm 2002) consider that a broad definition of significance is desirable because it allows decision-makers to take into account specific circumstances associated with each EIA.

In addition, whereas an activity may not require an EIA under the AT(EP) Act because it is an ongoing activity prior to 4 October 1991, for the purposes of the EPBC Act the activity would not be considered as an activity that had been approved. Consequently, if an action was likely to have, or have had, a 'significant' impact on matters of national environmental significance it could be brought in under the EPBC Act. For example, if the AAD were to increase the frequency of helicopter operations in terms of fuel caches, the initial environmental impacts may

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101 Rothwell, above n 3. The genesis of the phrase 'minor and transitory impact' occurred in the 1970s when ATCPs recognised the need to take a consistent approach in preparing EIAs and improve understanding regarding the terms. Indicative lists have been discussed as a solution to this problem. However, as impacts depend on a combination of activity, location and timing, it is not possible to conclude that an activity will result in a certain level of impact. Individual circumstances must be taken into account. For example, a new station located on an inland icesheet will result in different and potentially less impact than if situated on coastal rock.

have increased to a point where the activity needed to be referred to DEH. Alternatively, there are incremental activities where approvals of small activities reach a point where significant thresholds may be crossed.[102] If the entirety of that activity had been approved under the EPBC Act, the transition including the incremental activities would be covered. However, if an activity becomes incrementally larger and an EIA is referred yearly to increase the program, the activity may reach a point of non-compliance (Garrett pers comm 2002). This is because it is not possible to obtain approval for activities that have already occurred as the EPBC Act cannot be retrospective. In this situation, if proponents find themselves in breach of the EPBC Act there is little they can do to protect themselves. The issue becomes one of enforcement; it moves away from the referral, assessment and approval area and into the Australian Courts.[103]

For example, Maggs (pers comm 2002) highlighted the Bechevaise Island Penguin Program near Mawson Station, Antarctica. This science project may never have triggered an IEE on a year-to-year basis, but it grew from a series of PAs over ten years. The AT(EP) Act provides no guidance for ongoing threshold levels and the AAD assessment process provides no mechanisms to recognize the growth of this activity. Consequently, the AAD has attempted to establish a threshold for this project and advised the proponent that, as the activity had grown beyond its original scope, it required either a review or audit and possibly the completion of an IEE.

VIII TRIGGERING ENVIRONMENTAL IMPACT ASSESSMENT

There are two ways to trigger EIAs in Australia:

- a designated developments list which describes the types of developments that require EIA; and

- considering the nature of the impact on the environment. The EPBC Act's primary interest is on the impact to the environment rather than the nature of the action and DEH makes a determination on the significance of those impacts.[104]

Activities planned for the Antarctic need to be completed on a case-by-case basis where all projects are referred to DEH if there is reasonable doubt about whether they trigger the EPBC Act. This is because the AAD and DEH are currently developing an understanding through experience and precedent. Until recently,

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102 Incremental approvals relate to activities under AT(EP) Act. However, incremental approvals could equally apply to the EPBC Act in the future, dependent on how proposals (such as base expansions) are referred (Garrett pers comm 2002).

103 If a proponent recognises that an activity may be in breach of the EPBC Act before non-compliance occurs, the proponent can minimise the risk and refer the 'whole' activity. This situation can be common, particularly with waste management (Garrett pers comm 2002).

104 The nature of the action or its size is of no concern to DEH, it is its environmental significance that is important (Garret pers comm 2002; Jinman pers comm 2002).

activities would be referred to the Environment Minister under the EPBC Act if they were assessed under the AT(EP) Act as having 'more than minor and transitory impact' (ie, required a CEE) (Maggs pers comm 2002). However, the point at which an activity is referred is now a 'greyer' process. Maggs (pers comm 2002) points out that where the AAD considered that an activity would proceed to the IEE level and it was a controlled action under the EPBC Act, 'a draft IEE would be completed and referred to DEH for public comment'. Garrett (pers comm 2002) stated that DEH would support the AAD referring all IEEs as this is an appropriate risk management strategy that promotes transparency.

Jinman (pers comm 2002) pointed out that 'the scope of what the AAD looks at in terms of environmental impacts, particularly heritage, social and economic values could be quite different' than the scope used by DEH. The AT(EP) Act does not consider the implications of social and economic issues to the same degree as the EPBC Act and activities involving heritage values may not necessarily trigger the AT(EP) Act. For example, Garrett (pers comm 2002) described the case of the AAD proposing to construct a wind generator within sight of Mawson's Hut at Commonwealth Bay, Antarctica. Although the activity may not have triggered the IEE process under the AT(EP) Act, it may attract considerable criticism from the Australian Heritage Council and trigger the EPBC Act. If the AAD did not refer this activity under the EPBC Act, the action would be open to third party injunction, inconvenience and cost to the AAD, and criticism from the public if it were perceived that the AAD was not operating within Australian law. Jinman (pers comm 2002) stated that these issues are fundamental to the discussions DEH has conducted with the AAD as 'matters protected under the EPBC Act … can differ from AAD operational requirements'.

Conversely, to refer all actions proposed for the Antarctic to DEH would be excessive as not all activities will trigger the EPBC Act. For example, it may be possible for a non-government proponent, operating in Antarctica outside the AAT, to conduct a CEE and escape the requirements of the EPBC Act if the activity did not affect a matter of national environmental significance.[105] As a result, mechanisms have been developed by DEH to assist the AAD in determining the level of EIA in Antarctica. With the assistance of experience, precedents, peer review and advice, DEH and the AAD consider that in time, Assessing Officers will gain the skills necessary to assess and refer activities under the EPBC and AT(EP) Acts. Once an understanding through experience is developed, the Australian Antartic EIA guidelines will be rewritten to reflect the new processes.

A positive feature of the EPBC Act is that it contains direct triggers that are based on environmental criteria.[106] According to Padgett and Kriwoken, these EIA are far

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105 For example, a proponent planning to build a tourism resort in the unclaimed sector of Antarctica.

106 L K Kriwoken, L D Fallon and D R Rothwell, 'Australia and the Precautionary Principle: Moving from International Principles to Domestic and Local Implementation' (forthcoming) in D Rothwell and D VanderZwaag (eds), *Towards Principled Oceans Governance: Australian*

superior to the triggers in the EP(IP) Act, which were ad hoc and generally unrelated to environmental criteria.[107] Another positive aspect of the EPBC Act is that it allows the Commonwealth government to add to the list of triggers by consulting with relevant parties. As a result, Maggs (pers comm 2002) considers that the EPBC Act has the capacity to enhance Antarctic environmental protection as it provides clear directions as to the issues of importance, whereas specific issues and matters of environmental significance are not specified in the *Madrid Protocol*. For example, the EPBC Act includes listed threatened species and communities (ie, migratory protected other marine species) and provides a framework for land-use issues as it includes the 'whole of the environment'.

IX CUMULATIVE IMPACTS

Both the *Madrid Protocol* and the EPBC Act have some capacity to assess cumulative impacts. However, although cumulative impact assessment is required under the Protocol, it is not defined and the context in which the phrase is used is ambiguous because proponents need to assess an activity 'in light of existing and known planned activities' (Annex I, arts 2(1)(b) and 3(2)(f)). Importantly, because proponents may not be aware about all other past activities or known planned activities, it may be difficult for them to assess their own activity in light of all cumulative impacts. Despite this, these paragraphs could be interpreted to suggest that impacts of past actions need not be considered.[108] This issue has direct application to Antarctic activities where more emphasis tends to be given to environmental management of cumulative impacts on a regional basis.[109] Regional planning activities are supported in Annex V of the Protocol that provides for Antarctic Specially Managed Areas (ASMAs). In the Antarctic context, ASMAs are areas 'where activities are being conducted or may in the future be conducted … to assist in the planning and coordination of activities, avoid possible conflicts, improve cooperation between Parties or minimize environmental impacts' (Annex 5, art 4(1)).[110] Under the EPBC Act, cumulative impact is not mentioned directly and actions by different persons, all of which may be below the 'significant' impact threshold, are primarily to be addressed through Australian State or Territory planning and land management legislation or recovery plans rather than directly through the Act. Despite this limitation, strategic assessment of a policy, program or plan is mentioned in the EPBC Act and it allows for the early assessment of the cumulative impacts of relevant individual actions (EPBC Act, ch 4, Pt 10).

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and Canadian Approaches and Challenges' Environmental Defender's Office NSW, above n 27; Garrett, above n 64.

107 Padgett and Kriwoken, above n 22, 31.

108 Ensminger, McCold and Webb above n 75.

109 L K Kriwoken, 'Antarctic Environmental Planning and Management: Conclusions from Casey, Australian Antarctic Territory' (1991) 27(160) *Polar Rec* 1.

110 ASMAs may include: areas where activities pose risks of mutual interference or cumulative impacts, and sites or monuments of recognized historic value (Annex 5 [a]rt 4(2)(a)(b)).

Court, Wright and Guthrie[111] have argued that there is general agreement on the need to have regard for cumulative, regional and long-term impacts and to evaluate development proposals within the carrying capacity of regional environments. However, Garrett (pers comm. 2002) considers that EIA is an inappropriate mechanism to assess cumulative impacts, particularly as each assessment is project based and a separate entity. In addition, it is often difficult for proponents to assess cumulative impacts as they may not be familiar with all known activities, their interaction to one another and the environment, the EIA process or the necessity for such an analysis. Despite this, cumulative EIA may be more successful in Antarctica because the AAD is generally the proponent and its activities can be assessed as a whole. For example, cumulative impacts of station works programs could be assessed over a five-year period. In addition, the EPBC Act provides DEH with discretion to assess cumlative impact.[112] Generally, the assessment of cumulative impacts requires a clear understanding of the process, an indication of who might bear the administrative costs, how to evaluate impacts, and the development of comprehensive monitoring and reporting mechanisms.[113]

Under the EPBC Act, activities and monitoring requirements are the responsibility of the proponent, although they can be carried over to the new Assessing Officer or owner of the activity. Jinman (pers comm 2002) considered that the EPBC Act offers a positive scoping mechanism to monitor activities in Antarctica because these activities can be conducted 'in-house by the AAD and/or become scientific programs in themselves that make leading edge outcomes'.[114] However, Maggs (pers comm 2002) suggested that monitoring remains a problem for the AAD – generally, it is not specified in the AT(EP) Act and is only conducted when written into the legal conditions set for an EIA. Consequently, the AAD has not hitherto followed up on monitoring, particularly for PAs. This situation is slowly changing and Assessing Officers are writing specific compliance monitoring or auditing requirements into the environmental briefs for Antarctic Station Leaders.[115] Post Activity Reports are also being sought at the end of the construction or project phases, after remediation, and five years after the project has been completed (Ingram pers comm 2002).

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111 J D Court, C J Wright and A C Guthrie, 'Environmental Assessment and Sustainability: are we Ready for the Challenge?' (1996) 3 *Aust J Environ Manage* 42.

112 Where multiple AAD actions result in cumulative impact, the EPBC Act could technically be enacted, however, it can only operate after the event or through voluntary foresight (Jinman pers comm. 2002).

113 R J Hofman and J Jatko (eds),

114 In a national context, if monitoring conditions are specified, DEH is compelling the proponent to undertake monitoring activities at their own cost.

115 Antarctic Station Leaders can be asked to complete an audit of a selected number of PAs – for example, five per cent or the square root of all PAs conducted on station for any particular year (Ingram pers comm. 2002).

X DISPUTE RESOLUTION, COMPLIANCE AND ENFORCEMENT

Article 18 (Dispute Settlement) and Article 19 (Choice of Dispute Settlement Procedure) of the *Madrid Protocol* make provisions for the settlement of disputes between Parties concerning EIA as well as other matters relating to the Protocol.[116] Disputes are established on protocol and international law, and they may be carried either to the International Court of Justice or to a special Arbitral Tribunal established by the Protocol.[117] Disagreements that develop among government agencies and/or the public concerning EPBC Act issues, if not resolved prior to the Federal decision and exhaustion of any available administrative appeals under Chapter 6, Division 16 (Review of Administrative Decisions), may be addressed in the Australian Courts.[118]

Under the EPBC Act there are options for proponents to seek a statement of reasons (EPBC Act s 77). This Statement can be requested at various points in the assessment process, not only for the whole action, but also for non-controlled actions and EIAs. Proponents can also seek a reconsideration of decision immediately after a project has been referred if they do not consider it is a controlled action or if substantial new information comes to hand (EPBC Act s 79). However, the Environment Minister has limited power to vary or substitute decisions.[119] In addition, third parties can take out an injunction to prevent an act that may be in breach of the Act (EPBC Act s 475).[120]

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116 Ensminger, McCold and Webb above n 75.

117 There has not been a dispute under the AT(EP) Act since the mid-1990s when it was challenged at the Administrative Appeals Tribunal by expeditioners at Casey Station, Antarctica who questioned if the modification of a concrete ramp associated with the main store was necessary (Maggs pers comm 2002).

118 Section 487 of the EPBC Act (Extended Standing for Judicial Review) extends (and does not limit) the meaning of the term 'person aggrieved' (or organisation or association) in the *Administrative Decisions (Judicial Review) Act 1977* (Cth) for the purposes of the application of that Act in relation to: (a) a decision made under the EBPC Act or the regulations; or (b) a failure to make a decision under the EBPC Act or the regulations; or (c) conduct engaged in for the purpose of making a decision under the EBPC Act or the regulations. *Administrative Decisions (Judicial Review) Act 1977* (Cth) Act No. 59, 1977 <http://www.austlii.edu.au/au/legis/cth/num_act/adra1977n591977423/>.

119 Under s 78 of the EPBC Act (Reconsideration of Decision) the Environment Minister may revoke a decision (the first decision) … and substitute a new decision ... but only if the Minister is satisfied that: (a) substantial new information is available; (b) there is a substantial change in circumstances that was not foreseen; (c) the action is not being, or will not be, taken in the manner identified; or (d) if the first decision was that the action was not a controlled action because of a provision of a bilateral agreement, a declaration under s33, a management plan that is a bilaterally accredited management plan or an accredited management plan: (i) the agreement or declaration no longer operates in relation to the action; or (ii) the management plan is no longer in force under law.

120 The third party injunction provision has already been exercised under the EPBC Act in 'the Flying Fox Case' of *Booth v Bosworth* [2001] FCA 1453. In this case, conservationists applied to restrain the mass culling of spectacled flying foxes (*Pteropus conspicillatus*) by a large aerial electric grid in north Queensland, adjacent to the Wet Tropics World Heritage Area. Justice Branson of the Federal Court decided to grant an injunction restraining an action found to be causing a significant impact on the world heritage values of the Wet Tropics World

The final decision on proposed PA and IEE activities in the AAT is a national one, although it should take into account the views expressed by ATCPs, ATCM, the CEP, and other NGOs. While economic and operational factors need to be considered, national governments must ensure that activities are consistent with the environmental principles set out in Article 3 Annex I of the *Madrid Protocol* to ensure that effects are limited and the diverse natural and cultural values of Antarctica are preserved. The final decision should weigh up the acceptability of any negative impacts against the benefits of the activity for both science and logistical support activities. Under Article 3(4)(b) of the Protocol, activities are required to 'be modified, suspended or cancelled if they result in, or threaten to result in impacts upon the Antarctic environment or dependent or associated ecosystems inconsistent with those principles (of the Protocol)'. However, as Lyons[121] points out, the problem with the Protocol is 'that with no enforcement mechanism, it is questionable whether an activity would ever be voluntarily cancelled, or even suspended', particularly by commercial operators after they have invested substantial resources to an activity.

Generally, PAs are a closed process, IEEs have an appeals process and CEEs have a limited appeals process. Legally binding conditions and recommended notes may be applied under the AT(EP) Act to the approval (authorisation) to ensure that 'significant' adverse environmental effects are avoided.[122] The notice of determination for a PA is signed by the Minister's Delegate under paragraph 12E(a) of the AT(EP) Act.[123] If the Environment Minister considers the activity will result in a 'negligible impact on the environment' then authorisation is given under 12F of the AT(EP) Act.[124] The notice of determination for IEEs is given under section 12H and authorisation under section 12J of the AT(EP) Act. The notice of determination for CEEs is given under section 12L and authorisation under section 12M of the AT(EP) Act.

Heritage Area. Justice Branson found that a 'significant impact' was an 'impact that was important, notable or of consequence having regard to its context or intensity', and analysed the meaning of 'world heritage values'; see C McGrath, *Legal landmarks of the Flying Fox Case* (2001) The Brisbane Institute <http://www.brisinst.org.au/resources/brisinst_brown_mcgrath_fox.html> 10 December 2003.

121 Lyons, above n 19, 118.

122 If environmental impact occurred in Antarctica, presence or absence of the proponent would not reduce their liability under the EPBC Act. However, it is possible to transfer conditions. If an approval designated the AAD as the proponent and the action was subsequently transferred to an Australian company, the responsibilities and conditions could be transferred to the company. Conversely, if the AAD, as the designated proponent, sub-contracted an activity to an Australian company the responsibilities and conditions would remain with the AAD.

123 Paragraph 12E of the AT(EP) Act states that after considering the PA, the Environment Minister must: (a) determine whether the activity is likely to have: (i) more than a minor or transitory impact; or (ii) a minor or transitory impact; or (iii) no more than a negligible impact on the environment; and (b) inform the proponent of the activity in writing of his or her decision.

124 Paragraph 12F of the AT(EP) Act states that if the Environment Minister determines that the activity is likely to have 'no more than a negligible impact on the environment, the Minister must, by notice in writing, authorise the proponent of the activity to carry on the activity'.

However, the AT(EP) Act has no criminal enforcement provisions, a lower penalty point enforcement system than the EPBC Act and no review mechanisms. Although there are penalties for false EIA declarations under the AT(EP) Act, there are no penalties for conducting activities in a manner other than was documented in the EIA. The EPBC Act applies greater penalties and those found in breach of the Act can be held legally and financially liable. Consequently, the EPBC Act provides assistance and additional power to the AAD with respect to gamekeeper/poacher issues in Antarctica.

Jinman (pers comm 2002) considers that compliance and enforcement provisions under the EPBC Act 'are a big improvement because we are not dealing exclusively with the AAD in Antarctica'. The combined application of the AT(EP) and EPBC Acts makes provision for other operators and there are disparate levels of compliance in the way these proponents can proceed with their activities. Jinman (pers comm 2002) argues that having an approval Act (the EPBC Act) with provisions relating to enforcement, compliance and breaches provides a compliance mechanism and certainty. That is, if environmental impacts occur outside the scope of a referred action or in the absence of a referral, it becomes an enforcement issue.[125] Where an activity was carried out in accordance with the referral, Garrett (pers comm 2002) identified that despite these mechanisms, there is limited capacity for DEH to return to the proponent and control the action because the proponent is not legally liable for any unanticipated impacts. Consequently, enforcement issues are dependant on the content of the referral and assessment, and enforcement provisions are possible only when proponents have not disclosed information or provided false information about the process.

In addition, Padgett and Kriwoken suggest that it is 'widely acknowledged that a positive aspect of the EPBC Act is that it transfers decision-making power from the Action Minister under the EP(IP) Act to the Minister for the Environment'.[126] This transfer of decision-making power to the Environment Minister is an improvement because, under the EP(IP) Act, the Action Minister was the decision-making authority and the Environment Minister only had an advisory role. The Action Minister was usually a resource or industry minister and may have been influenced by development concerns. According to Padgett and Kriwoken,[127] the Environment Minister is more likely to have the appropriate expertise to make informed decisions under the EPBC Act and to be more sensitive to environmental needs given his/her specific environmental expertise.

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125 An approval Act has provisions relating to enforcement and compliance, whereas an advisory Act is only levied on Commonwealth government agencies.

126 Padgett and Kriwoken, above n 22, 31-32.

127 Ibid.

XI CONCLUSIONS

The EIA process generally is not straightforward and decisions are often subjective. EIA conducted in Australia also remains an area for discussion and value-laden judgement is required when completing assessments. In particular, Australian Antarctic administrators are continuing to evaluate Australian Antarctic EIA processes in an effort to reduce friction or overlap between the relevant Antarctic provisions. Ultimately, Lyons[128] argues that there are difficulties in determining the appropriate level of assessment and the language of the EIA provisions under the *Madrid Protocol* is open to interpretation. For Rothwell,[129] the interpretation of key EIA terms continues to be a major challenge and successful assessment outcomes ultimately depend on the quality of national laws and policies, and effective review mechanisms.[130] Ensminger, McCold and Webb[131] agree, and identify three areas where the EIA provisions of the Protocol could be strengthened to improve its effectiveness:

- thresholds need to be clarified;
- cumulative impact, although called for, needs to be defined; and
- the public needs to be provided with greater opportunities 'to comment on or influence the preparation of initial or comprehensive environmental evaluations' given that 'public input to environmental documents has a considerable influence on agency decision-making and the quality of EIA that agencies perform'.[132]

With respect to the Australian legislation that implements the *Madrid Protocol* at the national level, EIA has been undertaken under the AT(EP) Act for over 20 years. The EPBC Act may prove more useful in the future with regard to Antarctica, however, it has yet to establish a substantive jurisprudence to provide refinement and clarification. Given that the EPBC Act is multifaceted, those administering it are working through its complexities and developing an Antarctic focused interpretation of the legislation and instruments to achieve appropriate environmentally sensitive outcomes. It is difficult to identify strengths and weaknesses in the interrelated operation of these two Acts as the EPBC Act is a new piece of legislation and there are limited specific Antarctic examples available to date. Consequently, the EPBC Act is undergoing development, particularly in relation to developing Antarctic EIA processes and setting precedent. In addition, education of stakeholders and the general public with this new process is required to ensure that all those involved with Antarctic EIA processes understand the EPBC Act and their responsibilities toward meeting its legal requirements.

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128 Lyons, above n 19.
129 Rothwell, above n 3.
130 Ibid 603, 609.
131 Ensminger, McCold and Webb, above n 75, 13.
132 Ibid.

It is not possible to closely match the EIA processes under the AT(EP) and EPBC Acts, nor is not possible to link proponents' responsibilities under the EPBC Act with a decision to conduct an IEE under the AT(EP) Act. This is because an activity may not require an IEE but may require referral to DEH, as it is a matter of environmental significance under the EPBC Act. In addition, although cultural, social and heritage issues in Antarctica could be assessed 'in-house' at the PA level under the AT(EP) Act, they may trigger the EPBC Act. Conversely, not all IEEs will trigger the EPBC Act and referring all these activities to DEH may not be a valid test. Therefore, each EIA needs to be completed on a case-by-case basis and include public comment. However, including public comment may be difficult in these EIA processes because, while Antarctic EIAs do not prevent the vast majority of activities from proceeding, the expectations of the community can influence EIA procedures, resources and timing of activities, or may be opposed to an activity altogether. Such public influence could be considered as counter-productive in some situations where an activity might need to be conducted for vital strategic or scientific reasons, or in a specific way or within a narrow timeframe to capitalise on the *windows of opportunity* that hostile Antarctic conditions allow. Despite this, proponents need to consider the views of the general public, because without wider community political and financial support, governments and agencies might be pressured to withdraw their support to contentious Antarctic projects regardless of their merits.

One option to ensure that proponents meet their EIA responsibilities under the two Acts involves re-writing the AAD's PA form. The revised document would ensure that proponents consider if their activities are likely to cause a 'negligible' or 'minor' or 'transitory' impact to the Antarctic environment under the AT(EP) Act, or impact a matter of national environmental significance under the EPBC Act. In time, AAD staff will develop their expertise with the EPBC Act based on experience, and be able to make judgements on whether an action needs to be referred to DEH. While Assessing Officers at the AAD have experience in administering EIA under the AT(EP) Act and EP(IP) Act, they have only referred a limited number of assessments to DEH under the EPBC Act.[133] Therefore, it is unlikely they have worked through, in a practical sense, all the associated issues such as significance criteria and protected matters.

The key benefits of the EPBC Act in enhancing the capabilities of the AT(EP) Act to protect the Antarctic environment include improved planning, transparency of process, increased public comment, stronger enforcement provisions and flexibility of process. The application of these two Acts potentially provides an inclusive

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133 See above n 46, 53, 55. For example, notices published in the *Commonwealth of Australia Gazette* have called for public comment regarding the IEEs detailing the removal of the Old Davis Station buildings at Davis Station, Antarctica and the development and operation of an ongoing air transport system including intercontinental flights between the Australia and Antarctic continents and intra-continental flights between Antarctic stations under the EPBC Act and the AT(EP) Act (as of 5 December 2003).

process that meets the obligations imposed by the *Madrid Protocol*, international treaties, stakeholders and national agencies. However, as these two Acts target different requirements and are under different regimes and administered separately, proponents may become over-regulated – in the sense that the benefits derived from these two EIA processes may not be incommensurable to costs. Although over-regulation might result in an extension of work, it can also lead to a more inclusive, thorough and stringent process. This impediment is acceptable given the environmental sensitivity of Antarctica, particularly if the level of resources allocated to EIA is commensurate with what the impacts might be if an activity resulted in 'significant' impacts.

Given that the EPBC Act is still under development, any operational or logistic impediments can be accommodated to ensure that scoping within the legislation takes into account Antarctic activities. Consequently, there needs to be a 'levering up' of EIA procedures and public consultation between the two Acts to ensure that acceptable thresholds for both processes are determined. However, cumulative impacts, the consideration of alternatives and monitoring remain weaknesses in the EPBC Act and AT(EP) Act. There is little guidance in the EPBC Act with respect to cumulative assessment and as the proponent chooses what to refer, if a proposal is extremely prescriptive alternatives cannot be considered. Under the *Madrid Protocol*, cumulative impacts are mentioned but not defined, alternatives tend to be limited within the scope of the activity proposed and little guidance is provided on monitoring activities.

Ultimately, if issues of over-regulation are taken into account, greater environmental protection of the Antarctic environment will result from the application of the EPBC Act and AT(EP) Act. Understanding with regard to the application of these two Acts needs to be developed through experience and precedent. Activities conducted by the AAD over the next five years will test the EPBC Act and its combined application with the AT(EP) Act.