Submission to the Joint Standing Committee on Treaties
Inquiry into Nuclear Non-proliferation and Disarmament

Richard Tanter[1]

I welcome the invitation of the Committee chair to make this submission.[2] A number of treaties to which Australia is a party are relevant to the Inquiry, beyond those nominally related to Nuclear Non-proliferation and Disarmament. This is because other agreements have the effect of associating Australia in various ways with either nuclear weapons or aspects of the civilian nuclear fuel cycle that may become salient to nuclear weapons, and accordingly, to the issue of disarmament if not non-proliferation. These include the following treaties and agreements:

- Treaty on the Non-Proliferation of Nuclear Weapons (1973)
- Associated nuclear safety and security agreements, including the Regional Co-Operative Agreement for Research, Development and Training Related to Nuclear Science and Technology
- Security Treaty between Australia, New Zealand and the United States of America [ANZUS]
- Australia-Indonesia Agreement on the Framework for Security Cooperation (2006)
- Japan-Australia Joint Declaration on Security Cooperation (2007)
- Agreement between the Australian Government and the United States Government relating to the Establishment of a Joint Defence Space Research Facility (1966), and subsequent agreements to extend in 1977, 1988, 2000
- United Nations Security Council Resolution 1540 (2004) under Chapter VII of the United Nations Charter, obliging States, inter alia, to refrain from supporting by any means non-State actors from developing, acquiring, manufacturing, possessing, transporting, transferring or using nuclear, chemical or biological weapons and their delivery systems.

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[2] The views I express are my own, and not necessarily those of the Nautilus Institute or RMIT University.

I would just say at the outset that this wide range of treaties are not a matter of a scatter-gun approach to the Inquiry's concern so much a reflection of the fact that the complex manner in which Australia is connected both to nuclear weapons and to nuclear disarmament and non-proliferation activities and policies. These are genuinely complex problems on a global scale, whose drivers and solutions are inter-related in ways often not well understood. Accordingly, actions for effective nuclear disarmament and non-proliferation need to be understood as being necessarily manifold, inter-related and difficult. Nuclear security is clearly a paradigm global problem to be solved. Just what constitutes a solution varies from restraining proliferation of weapons to new state or non-state actors through to complete abolition. Preventing nuclear next use - creating the conditions that deny the possibility of another use of nuclear weapons in war - can stand for the core problem to be solved. [3]

A. Preliminary remarks on core disarmament and non-proliferation treaties

In this submission I will largely omit discussion of the Non-Proliferation Treaty and immediately related treaties, simply because it is likely other submissions will address them in detail. I would only make three comments in this regard.

Nuclear Weapons State ratification of the Comprehensive Test Ban Treaty

The first is that it is very much in Australia's national interest to urge Nuclear Weapons States which have not yet ratified the Comprehensive Test Ban Treaty to do so – especially those Nuclear Weapons States with which Australia has close strategic or political relations: United States, the People's Republic of China, India, Pakistan, and Israel.

Fissile Materials Cut-off Treaty (FMCT)

The second is that a high priority for Australian disarmament and non-proliferation policy should be to encourage concerted international movement towards a universal and verifiable **Fissile Materials Cut-off Treaty (FMCT)** within the Conference on Disarmament and in other forums. Though the issues to be negotiated with both Nuclear Weapons States and non-Nuclear Weapons States are considerable and complex, there is reason to be believe that a politically feasible pathway can be found.[4] In the case of Australia's ally, the United States, this will involve addressing. amongst other matters,

[3] See the approach of *Global Problems, Global Problem Solving*, Nautilus Institute. <http://www.globalcollab.org/gps>
For a short introduction see Peter Hayes and Richard Tanter, "What are Global Problems*?*", Global Problem Solving Project, Nautilus Institute, May 2008. **<**http://www.globalcollab.org/gps/intro/whatareGPS**>**

[4] See the detailed review of the positions of eleven key countries by the International Panel on Fissile Materials: *Banning the Production of Fissile Materials for Nuclear Weapons: Country Perspectives on the Challenges to a Fissile Material (Cut-off) Treaty*, International Panel on Fissile Materials, 2008.

concerns of China and other countries concerning missile defence programmes and the weaponization of space (in which Australia is directly involved, not least through the expanding Defense Support Program downlink facilities at the Pine Gap Joint Defence Facility).

Beyond preserving the NPT

The third is to note that concentration on the Non-Proliferation Treaty and the associated international regime is understandable, given the well-known strains of that regime, but dangerously limited, both politically and conceptually. It is historically clear that both the two key Nuclear Weapon State proponents of the draft NPT (the United States and the former Soviet Union), as well as the Eighteen Nation Committee on Disarmament which provided the effective global forum for response, viewed the NPT as but one part of an expected response to the nuclear arms race of the 1950s and 1960s. Despite some bilateral successes, and some improvements in IAEA-related agreements (e.g. the Additional Protocol), remarkably little progress has been made on the substantive goal of comprehensive nuclear disarmament.

What is clear is that effective action on disarmament and non-proliferation beyond the repair – or even simple maintenance – of the NPT regime will involve action on a wide range of policy fronts addressing a complex set of inter-related problems. This is brought out by three key documents addressing the question of a comprehensive approach:

- the IPPNW/ICAN draft Nuclear Weapons Convention[5]
- the Carnegie Endowment for International Peace study of multiple approaches to comprehensive and effective disarmament and non-proliferation policy *Universal Compliance: A Strategy for Nuclear Security*[6]; and
- *Who Will Stop Nuclear Next-Use*: *Global Insecurity and Nuclear Next-Use: A Briefing Paper* by Peter Hayes.[7]

All three documents exemplify the inter-connectedness of the contemporary drivers of nuclear weapons strategy and proliferation, and the consequent need for a multifaceted strategy going well beyond maintenance of the NPT regime.

B. Comment on other treaties and issues of concern

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[5] *Securing Our Survival: The Case for a Nuclear Weapons Convention*, IPPNW and ICAN, 2008.

[6] *Universal Compliance: A Strategy for Nuclear Security*, George Perkovich, Jessica T. Mathews, Joseph Cirincione, Rose Gottemoeller, Jon B. Wolfsthal, Carnegie Endowment for International Peace. March 2005.

[7] *Global Insecurity and Nuclear Next-Use: A Briefing Paper*, Peter Hayes, Scenarios Workshop "Who Will Stop Nuclear Next Use?", Nautilus Institute, 2004. <http://www.nautilus.org/gps/scenarios/paper.html>

Let me comment briefly on a different set of issues that bear on the Inquiry's objectives, and in certain respects on the last six Treaties mentioned above.

1. Extended nuclear deterrence

The operation of the ANZUS Treaty brings Australia into direct relationship with nuclear weapons through the incorporation of the assurance of extended nuclear deterrence offered to Australia by the United States. This is currently formalised in the most recent Defence White Paper: Defence 2000, as follows:

> A healthy alliance should not be a relationship of dependency, but of mutual help. In the long run, dependency would weaken the alliance, both in the eyes of Australians and in the eyes of Americans. For that reason, self-reliance will remain an inherent part of our alliance policy.
>
> There is one important exception to this principle of self-reliance. Australia relies on the extended deterrence provided by US nuclear forces to deter the remote possibility of any nuclear attack on Australia.[8]

It may well be that few are aware of this commitment, and that others may, at a fundamental level, question the reliability and credibility of such an assurance, or is its invocation in particular contingencies, foreseeable at a certain point or otherwise.[9] Be that as it may, the acceptance of the assurance and its incorporation into formal defence doctrine by successive Australian governments constitute the commitment by those governments to the potential use of nuclear weapons in the defence of this country. Since there is no conceivable use of nuclear weapons in war that does not bring with it large numbers of civilian casualties, it must be understood that such acceptance of nuclear weapons in the defence of Australia constitutes a commitment to genocide in the broad sense of the term.

I do not believe that this is understood by the Australian population, nor do I believe that it would not be regarded without deep moral revulsion if it were. Though the matter has not been closely argued at an official level for many years, I am prepared to argue that there are no current or presently foreseeable strategic circumstances which would warrant such a commitment to the acceptance of genocide in the defence of Australia. At a minimum this formal incorporation of extended nuclear deterrence into Australian security policy and doctrine undermines the implicit commitment to substantive movement to nuclear disarmament inherent in Australian disarmament policies, and symbolically, the impulse behind the establishment of the International Commission on Nuclear Non-Proliferation & Disarmament (ICNND).

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[8] *White Paper: Defence 2000 - Our Future Defence Force*, Department of Defence, 2000, p.36.

[9] I will comment below on one particular interpretation of alleged diminishing US commitment to extended nuclear deterrence on behalf of Australia.

Accordingly, the Inquiry should consider steps towards the removal of a reliance on extended nuclear deterrence from Australian security policy and doctrine. This could involve three stages:

- firstly, the Australian government should use its good offices with the United States to encourage that country to commit to a policy of No First Use of Nuclear Weapons;

- secondly, Australia should declare the territory and waters of Australia a Nuclear Weapons Free Zone, and seek the recognition of such a zone by the United States and other Nuclear Weapons States; and

- thirdly Australia could move to characterize the alliance with the United States in non-nuclear terms by informing that country that Australia no longer requires the US assurance of extended nuclear deterrence.

2. The re-emergence of advocacy of Australian nuclear weapons

It is critical to bear in mind that until 1972 and the application of American diplomatic *force majeure*, Australia was attempting as a matter of government policy to either acquire or develop nuclear weapons. This history has now been well documented in academic and military research studies in Australia and elsewhere.[10] Most importantly, this history has not been forgotten in security policy circles in the country which was the putative target of this nuclear ambition: Indonesia, a country with which Australia has a vital but volatile and fragile relationship. In this context, coupled with that of the Rudd government's public commitment to a renewal of disarmament activism, the recent emergence of a minority line of Australian nuclear weapons advocacy in Australian security policy circles is both alarming and surprising.[11] Three non-trivial assertions of a requirement to reconsider the desirability of Australia either developing a nuclear weapons capacity, or at least not further foreclosing the option, emerged from publications by mainstream Australian foreign policy and security bodies in 2007 and 2008: the Lowy Institute, the Centre for Independent Studies, and the Kokoda Foundation.

A contribution to a Lowy Institute voters' guide for the 2007 election asserted that

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[10] For a comprehensive bibliography see *Australia nuclear proliferation history - resource list*, Reframing Australia-Indonesia Security, Nautilus Institute Australia. http://www.globalcollab.org/Nautilus/australia/reframing/aust-ind-nuclear/aust-prolif/aust-prolif-hist-list/

[11] For a bibliography that is updated see *Australian nuclear proliferation – contemporary*, Reframing Australia-Indonesia Security, Nautilus Institute Australia. http://www.globalcollab.org/Nautilus/australia/reframing/aust-ind-nuclear/aust-prolif/aust-prolif-now/

> an incoming Australian government will need to assess the changed global nuclear environment and develop strategic policy options to protect and project our interests. Some of these options may be controversial and unpopular.

After a review of important but uncontroversial disarmament and non-proliferation policy proposals, the author concluded:

> a thorough nuclear policy review should also consider which strategic circumstances might lead to Australia's revisiting the nuclear weapons option. As extreme as this may sound, failure to sustain and strengthen our current non-proliferation regime may force us to consider such an option. In the current strategic circumstances, no government could leave such an eventuality entirely out of mind.[12]

In the same year, former ONA analyst Professor Robyn Lim argued in a more sophisticated and wide-ranging strategic analysis that incipient nuclear weapons proliferation in Northeast Asia and potentially dangerous civil nuclear energy development in Indonesia warranted Australia

> resisting aspects of President Bush's Global Nuclear Energy Partnership (GNEP) that would have seen Australia required permanently to give up the option to enrich uranium.[13]

And early in 2008, ANU strategic analyst Raoul Heinrichs argued in a Kokoda Foundation publication that because of an alleged weakening of the capacity of the United States to honour its commitment of extended nuclear deterrence to Australia, a functional substitute should be developed. Heinrichs concluded that

> an outright offensive deterrent is not the only mechanism which might eventually reduce Australia's reliance on the US nuclear umbrella. An Australian Ballistic Missile Defence (BMD) shield, by shifting to a strategy of nuclear denial, may in time reduce the burden on the United States to maintain a credible offensive threat against Australian adversaries.[14]

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[12] *Australian Voters' Guide to International Policy: Non-proliferation and Arms Control*, Martine Letts, Lowy Institute, 15 October 2007. See also Richard Tanter, "The Re-emergence of an Australian nuclear weapons option?" *Austral Policy Forum* 07-20A, 29 October 2007 < http://www.globalcollab.org/Nautilus/australia/apsnet/policy-forum/2007/the-re-emergence-of-an-australian-nuclear-weapons-option>; and Martine Letts, "A reply to Richard Tanter", 12 November 2007, *Austral Policy Forum* 07-20B. < http://www.globalcollab.org/Nautilus/australia/apsnet/policy-forum/2007/a-reply-to-richard-tanter/>

[13] "Australia and the Future of Nuclear Deterrence", Robyn Lim, *Issue Analysis* No. 82, Centre for Independent Studies, 1 March 2007.

[14] "Australia's Nuclear Dilemma: Dependence, Deterrence or Denial?", Raoul E. Heinrichs, *Security Challenges*, Volume 4, Number 1, 2008, pp. 55-67.

While the arguments presented for either a missile defence shield or an indigenous nuclear weapons capacity were not particularly strong, the political significance of this movement in a debate thought to be long dead was not lost on neighbouring states.[15]

3. Australia-Indonesia security misperceptions and expansion of the nuclear fuel cycle

In fact, in the contexts of both the ease with which relations between Indonesia and Australia can be knocked off kilter, and the expansion and refurbishing of military capacities in both countries (albeit at a much higher rate in Australia)[16], Australia and Indonesia could very well be moving towards a downward spiral of security misperceptions about their nuclear intentions and capacities.[17] While not yet a matter of dominant perceptions on either side, there are elements in security policy circles in both Indonesia and Australia voicing concerns about the proliferation propensity of the other – whatever the evidence to the contrary may be. In other words, the foundations for a classic vicious circle of security misperceptions is in place, requiring clear action by government and civil society.

One common element to the expansion of different aspects of the nuclear fuel cycle (e.g. uranium mining export in Australia; and nuclear power proposals in Indonesia, Thailand, Malaysia, Vietnam and the Philippines) is justification by expected contributions to national and global greenhouse gas emission reduction targets, as much as for energy security concerns. In this respect such nuclear fuel cycle expansion as climate change adaptation may turn out to have mal-adaptive security and proliferation consequences that need to be considered by government, along with more fundamental questions about the actual contribution nuclear power can in fact make to climate change concerns proper.

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[15] "Indonesia 'concerned' about uranium enrichment talk in Aust", ABC News Online, 3 September 2006. <http://www.abc.net.au/news/newsitems/200609/s1731694.htm>; and *Australia and the nuclear renaissance*, Producer: Tom Morton, Background Briefing, Radio National, ABC, 3 September 2006. <http://www.abc.net.au/rn/backgroundbriefing/stories/2006/1726921.htm>

[16] Desmond Ball, *Security trends in the Asia-Pacific region: an emerging complex arms race*, Strategic and Defence Studies Centre Working Paper 380, Australian National University, 2003. On Australia see Desmond Ball, "Rushing Headlong to Infirmity: Australian Defence Policy and Force Structure Development", *Security Challenges*, Volume 3, Number 4 (November 2007), pp. 11-27.

[17] *Suspects with Form: Security implications of Australian and Indonesia nuclear developments for state and civil society*, Richard Tanter, International Expert Workshop on Uranium: Energy, Security, Environment, Flinders International Asia Pacific Institute, Adelaide, 7-8 June 2007. <http://www.globalcollab.org/Nautilus/australia/reframing/notes-etc/Flinders%20-%20final.ppt>

A key concern of the Australian government at present should be to take all possible steps to counteract and dampen such a cycle of misperceptions. One key step would be to dismiss the uncertainty left by the previous government in its response to the Switowski Report (UMPNER) on the question of uranium enrichment. In the 2007 election campaign, the Australian Labor Party stated its opposition to uranium enrichment. More than a year after the election, there has not been a clear government statement on the matter, thus unintentionally contributing to ongoing concerns about Australia's intentions. The government would make a simple but effective contribution to dampening regional proliferation concerns and misperceptions with a clear statement from the highest level of government that Australia has no intention of developing uranium enrichment facilities.

As already mentioned one key element on the Australian side of this gathering cycle of misperceptions is the assumption that Indonesia will definitely go ahead with its proposed 4 x 1,000 MW Muria peninsula nuclear power project, and that this will almost inevitably give rise to a significant danger of Indonesian nuclear weapons development, thus warranting reaction by Australia. It is certainly true to say that the Indonesian government is likely to make a decision on whether or not to proceed with the Muria peninsula nuclear power plan following the 2009 presidential elections. It is also correct that there are grave risks – volcanic and seismic, regulatory, and financial – which are of concern to many in Indonesia and in neighbouring countries, and which ought to be of concern to the Australian government.[18]

Given that the Australia-Indonesia Agreement on the Framework for Security Cooperation signed by the previous government in 2006 includes provisions for cooperation over nuclear energy development it is clear that both governments understand the connection between civil nuclear power developments and security relations between the two countries. In the first instance it is appropriate that the Australian government seek clarification with the Indonesian government about the status of the widely reported volcanic and seismic, financial and regulatory risks already mentioned, since these in themselves could easily have destabilising consequences for the

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[18] For a review of this current situation on the Muria project, see Richard Tanter and Arabella Imhoff, "The Muria peninsula nuclear power proposal: state of play", *Austral Policy Forum* 09-1A, 19 January 2009.
<http://www.globalcollab.org/Nautilus/australia/apsnet/policy-forum/2009/muria-nuclear-power>
For documentation on the Muria peninsula proposal see *Indonesian nuclear power proposals*, Nautilus Institute RMIT.
<http://www.globalcollab.org/Nautilus/australia/reframing/aust-ind-nuclear/ind-np/contemporary>
For a detailed review of public available studies of seismic and volcanic hazards, see Richard Tanter, *Volcanic and seismic hazards*, Indonesian nuclear power proposals, Nautilus Institute RMIT, [updated as necessary].
<http://www.globalcollab.org/Nautilus/australia/reframing/aust-ind-nuclear/ind-np/muria/vulcanology>

security relationship. One possible way for such discussions between neighbours could be to support calls from Singaporean and other public policy bodies that have called for ASEAN-wide safety and regulatory standards for the development of nuclear power in the region – before such developments take concrete form.

4. Strengthening the UNSC 1540 regime

Furthermore, the Australian government should take proactive steps on possible proliferation developments. Indonesia in fact is at a high level of compliance with international and especially IAEA-related nuclear regulation given its current level of nuclear development. Moreover, it is no secret that United States agencies concerned with proliferation issues have been paying close attention to Indonesia, and have not expressed concern to date. Given that there is as yet no such thing as a "proliferation proof" commercial nuclear power facility, public concern is inevitable. To assuage undue anxieties it may be appropriate for Australia to consult with Indonesia about what can be done to raise the level of regional public confidence.

However, even if concern about nuclear weapons proliferation by the Indonesian state is not presently warranted to the degree assumed by some Australian analysts, the possibility of linkages between Indonesian civil nuclear power development and an A.Q.Khan-type black market of international nuclear weapons components and expertise is another matter, and one not often considered in Australia. In this regard, the Australian government should consider a review of the adequacy of regional responses to the United Nations Security Council 1540 regime to criminalize and prevent non-state nuclear weapons activities domestically and transnationally.[19] Studies of the level of compliance with UNSC 1540 have shown in general a low level of compliance, and great variation in capacity to comply with the complex requirements of the 1540 Committee's agenda.[20] A comparison of the Australian and Indonesian government reports to the 1540 Committee since 2004 makes clear that Indonesia has a long way to go before legislative and regulatory doors to an A.Q.Khan-type of network are reliably closed.[21] This is an urgent matter for the Australian and Indonesian governments to assuage anxieties about the consequences of Indonesian nuclear power development, and dampen an emerging vicious cycle of security misperceptions.

5. Pine Gap Joint Defence Facility

The question of the roles of the Joint US-Australian Defence Facility Pine Gap in nuclear war planning, arms control, missile defence and space weaponization, and contemporary

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[19] Resolution 1540 (2004), Security Council, 28 April 2004.
[20] See "Implementing UN Security Council Resolution 1540: A Risk-Based Approach", Peter Crail, *Nonproliferation Review*, Vol. 13, No 2, July 2006; and *Enhancing Implementation of U.N. Security Council Resolution 1540*, Allen S. Weiner, Chaim Braun, Michael May & Roger Speed, Center for International Security and Cooperation, Stanford University, September 2007.
[21] See *Implementing UNSC 1540*, Nautilus Institute [updated].

US and coalition military operations in Iraq and Afghanistan is a large one with which Committee members are most likely familiar from other Inquiries, and which will only be outlined here.[22] However each of these aspects of Pine Gap's operations bears on the Inquiry and questions of Australia's contribution to nuclear disarmament and non-proliferation. Let me make the following assertions that I would be pleased to develop at greater length if the Committee so wished:

- Pine Gap has an important role in the still-unfolding United States ballistic missile defence system, primarily through its hosting of downlink facilities for US Defence Support Program (DSP) satellites and the Space-Based Infra-Red Satellites programs (SBIRS). The arguments of both research analysts and those countries that believe themselves affected (notably China and Russia) that the US missile defence system, integrated with those of allied countries such as Japan, itself accelerates nuclear weapons development and modernization in target countries, must be taken seriously prima facie. Accordingly, the role of this aspect of Pine Gap's activities in potentially enhancing possibilities of nuclear weapons next-use must be closely examined.

- Australian governments have acknowledged the role of the Pine Gap's electronic intelligence gathering and processing capacities in implementing arms control agreements.[23] For some distinguished analysts, this has provided substantial reason to mitigate longstanding and well-founded objections to the hosting of the facility due to its role in United States nuclear war-fighting strategies.[24] Two issues relevant to the Inquiry arise.

    - The first is the extent and manner in which both roles (nuclear war-fighting and contribution to arms control agreements) have developed in the past two decades, and particularly in the context of substantive proliferation and space development in regions of strategic concern to Australia – East Asia, South Asia and the Middle East.

[22] In particular, see *Report of the Joint Standing Committee on Treaties, Parliament of the Commonwealth of Australia, October 1999 on An Agreement to extend the period of operation of the Joint Defence Facility at Pine Gap*. For a comprehensive survey of materials on the Pine Gap facility see *Joint Defence Facility, Pine Gap*, Australian Defence Facilities, Nautilus Institute [updated]. <http://www.globalcollab.org/Nautilus/australia/australian-defence-facilities/pine-gap/pine-gap-intro>

[23] Joint Defence Facilities, R.J.L.Hawke, Prime Minister, Ministerial Statement, House of Representatives, 22 November 1988.

[24] Testimony of Professor Desmond Ball to the Joint Standing Committee On Treaties, Reference: Pine Gap, Official Committee Hansard, Parliament of the Commonwealth of Australia, Parliament of the Commonwealth of Australia, 9 August 1999, pp 1-16. Note the concurrence with Ball's key assertions in his testimony about the facility in Testimony of Professor Paul Dibb to the Joint Standing Committee On Treaties, Reference: Pine Gap, Official Committee Hansard, 9 August 1999, pp 17-28.

- The second is the possibility, discussed in different forms over a number of years, of whether the time has come when some form of International Verification Agency under United Nations auspices is both technically and politically worthy of consideration.[25] Under such circumstances, the question should be asked of whether or not it is in Australia's interest, and part of its wider moral responsibility to the task of avoiding nuclear next-use, to seek the transfer of those portions of Pine Gap's capacities that are genuinely necessary for arms control verification purposes to such an International Verification Agency – and to abjure those parts related to nuclear war-fighting. The technical and political difficulties are immediately obvious, but that does not mean that they are either insuperable or not worthy a new consideration of a balance of costs and benefits.

- It is now clear that Pine Gap has had and continues to have an important role in relation United States military operations in Iraq and Afghanistan.[26] Pine Gap is a part of the US system of space-based intelligence, surveillance and reconnaissance [IS&R], and is increasingly an integral, inseparable and substantial part of the total US signals intelligence interception capability. In brief, this is largely a function of the development of United States signals intelligence integration in three ways, each of which heightens the likelihood that the Pine Gap facility has had and continues to make a substantial contribution to US operations in Afghanistan and Iraq:

  - Major downlink and processing facilities such as Pine Gap are no longer "stove-piped", and accordingly functions and roles may shift;

  - Signals intelligence and other technically-derived forms of intelligence are now integrated to generate complex "mosaics" of intelligence;

  - Space-based intelligence is not only downlinked in the Afghanistan and Iraq theatre commands, but is available to at least middle-level combat commands.

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[25] For example, Sverre Lodgaard, "Summary and Conclusions", in Pericles Gasparini Alves and Kerstin Hoffman (eds.), The Transfer of Sensitive Technologies and Future Control Regimes, UNIDIR, 1997.

[26] See materials listed at *Iraq, Afghanistan and Pine Gap*, Bibliography - Joint Defence Facility, Pine Gap, Australian Defence Facilities, Nautilus Institute. <http://www.globalcollab.org/Nautilus/australia/australian-defence-facilities/pine-gap/bibliography/#iraq-afghanistan-and-pine>; and Richard Tanter, *Pine Gap and the coalition wars in Afghanistan and Iraq*, Alice Springs, 14 June 2007. <http://www.globalcollab.org/Nautilus/australia/australian-defence-facilities/pine-gap/Alice%20meeting.ppt>

- Apart from the specifics of involvement in these wars which are beyond the scope of the Inquiry, there is a new set of issue concerning the consequences of these changes in intelligence gathering and intelligence product distribution in an increasingly integrated and somewhat “seamless” system, as they articulate with earlier questions about nuclear war-fighting. This in turn requires a close scrutiny of the current status of United States deterrence and war-fighting doctrines and policies concerning nuclear weapons, and their relation to conventional operations.