What do Deterrence, Prevention and Pre-emption mean for Australia? How should they feature in our strategic framework?

It is important to see deterrence and pre-emption as part of a broader policy approach of prevention. It is difficult to seriously argue that we should prevent attacks on Australia so far as is possible. The challenge arises when one considers two important questions:

- How to prevent such attacks? and
- To what extent should military force be used?

In fact, the following diagrammatic representation of the relationship between these concepts is a useful starting point for thinking about an integrated approach to DPP.

<table>
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<th>Prevention</th>
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<td>Deterrence</td>
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Definitions
Deterrence is conventionally understood to imply using the threat of military force or other retaliation or punishment to deter an actor from attacking or otherwise harming the interests of another actor. It reached its peak during the Cold War through the particular concept of nuclear deterrence and mutually assured destruction or MAD.

The success or failure of deterrence is a function of several factors, all of which are crucial: the credibility of the deterrent; the determination and strength of will of the opponent; and the design of the deterrent (a strong, credible response option that won’t actually hurt the opponents is far less useful than a weaker option that could decisively affect their interests). In this sense, it effectively comes down to a cost-benefit analysis, where the likely benefits of the attack are greater than the likely costs, an attack is more likely than where the equation is reversed. The state seeking to deter an opponent needs to try and increase their likely costs to the extent that the equation no longer appears favourable.

Need for proportionality of any retaliatory or pre-emptive attack – critical for legitimacy

Conversely, pre-emption is generally defined as attacking an opponent before they can develop a particular capability or exploit an opportunity which will give them a decisive advantage in the event of conflict.

---

1 Decreasing the benefits would also work, but is likely to involve damage to the national economy in a variety of ways. As such, this paper suggests that increasing the costs to an opponent aligns more closely with the national interest.
Prevention is similar, but is held to be an attack at a later stage. To employ a simple analogy, both prevention and pre-emption need to be based on accurate and timely intelligence. The role of intelligence in the build up to the second Iraq War is well documented and highlights the critical importance of accurate and timely intelligence. Without such information, preventive or pre-emptive attacks are unlikely to succeed. Similar, such attacks need to be perceived as legitimate by the broader international community – such legitimacy is vital to winning the political battle and garnering international support for one’s actions.

More simply though, prevention is precisely that: the act of preventing an attack against you. And yet there is a curious inability within the strategic policy community to draw both deterrence and pre-emption together under the rubric of prevention. Rather than as distinct and separate policy tools, the two should be seen as interrelated tools both designed to forestall or avoid an attack. Seen in this context, prevention in the overarching goal, with deterrence and pre-emption two approaches which can be employed in trying to achieve this goal.

Applying the DPP Framework to Australian Strategic Policy
To determine the role that DPP should play in Australian strategic policy, we need to consider the threats from which we need to defend Australia and then consider how DPP can assist in the defence against each type of threat. In considering this role, the source of the threat is important, especially when considering whether (and how) such a threat could be deterred.

Australia faces several type of military/national security threats against which it needs to defend:

1. conventional military attack across the air-sea gap
   - generally from a peer or greater-than-peer adversary

2. harassing attacks in our northern waters and on the northern coastline designed to influence policy development
   - from a peer or slightly-less-than-peer adversary

3. long-range ballistic missile/pace attack (with or without WMD warheads)
   - most likely from a state actor

In this sense, a distinction is drawn between the deployment of the ADF purely to defend Australian territory in the narrowest sense and possible deployments elsewhere in the region in the event that a revisionist power seeks to attack say Indonesia or Malaysia before turning their attention to Australia. In the latter case, we can anticipate the deployment of the AD beyond Australia shores – the ultimate goal in this case would be to defeat the power before it could launch a direct assault on Australia.
4. cyber/electronic/information warfare, possibly designed to weaken defences to facilitate conventional or BM attack
   - again probably from a state actor, although non-state actors may engage in limited cyber warfare for terrorist purposes

5. terrorist attack on Australian soil or against Australian interests
   - most likely from a non-state actor

The next step is to consider whether each type of threat can be prevented and if so, whether deterrence, pre-emption, neither or both are the best approach to take.

1. A conventional military attack on Australia is likely to come from a peer or stronger adversary.

In this scenario, we assume that a peer adversary will be more easily deterred than a stronger opponent. The factors affecting the success of the deterrent are discussed briefly above.

This sketch suggests that if an opponent believes it can defeat Australia militarily and at an acceptable cost, ____________________________________________________________

This leads us to a pre-emptive attack. The costs and benefits of this approach have been discussed at length in other works and are thus not addressed in detail here. Suffice it to say that such an attack would only appeal under certain circumstances:

Nonetheless, ____________________________________________________________

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In this scenario, a deterrent approach is far more likely to succeed should Australia have a strong and willing ally.

2. Deterring small scale attacks on Australia's northern coastline and in our northern waters is a much more feasible proposition and one that does not rely on strong alliance partners. To begin with, the sources of such attacks are more likely to be peer adversaries or weaker opponents, adopting what are effectively asymmetric tactics. Secondly, Australia maintains strong maritime domain awareness of our northern waters and this awareness is likely to improve in coming years, which should enable us to monitor activities in these waters closely.

Again, understanding the motivation behind the attacks will provide an indication of both the opponent’s will and how they can best be deterred. As the attacks are relatively small-scale, Australia is likely to have the capacity to make the costs to our opponent disproportionate to their perceived benefits.

Should deterrence for some reason fail,
Relying on the US Nuclear Deterrent

2 types of scenario: where Australia is the lead, and where we want to assure best possible outcome for Australia
Ballistic missile defence (BMD) capabilities are used to detect, track and destroy ballistic missiles during flight. It is common to distinguish between theatre BMD (capabilities for the protection of deployed military forces against short and medium range ballistic missiles) and national BMD (capabilities for protecting national territory against missiles, particularly longer range strategic missiles). BMD capabilities, of varying type, scale and sophistication, are possessed by the US, Japan, NATO, Russia and Israel.

BMD has been controversial since the initial development of anti-ballistic missiles in the 1960s. In the Cold War, there were concerns that BMD for national defence could undermine the certainty and stability of mutual nuclear deterrence between the US and USSR. Mutual deterrence depended on the assurance that either superpower, if attacked with strategic nuclear weapons, could inflict unacceptable damage on the other in retaliation, even if a significant proportion of its deterrent capability was destroyed by the first strike. Anti-missile defences made it less certain that such retaliatory strikes would be effective and created potential incentives for the superpowers to increase their offensive capabilities in order to overwhelm such defences, thereby exacerbating the nuclear arms race.

These concerns led to the US-Soviet 1972 Anti-Ballistic Missile (ABM) Treaty, which set limits on each superpower’s ABM and BMD radar capabilities. Theatre BMD capabilities were permitted by the ABM Treaty, as they did not threaten strategic deterrence. The US withdrew from the ABM Treaty in 2002.

In 1983, the US Reagan Administration announced the Strategic Defense Initiative (SDI; popularly known as ‘Star Wars’), a plan for a comprehensive BMD system including advanced technology space-based interceptors with the ultimate goal of ‘eliminating the threat posed by strategic nuclear missiles’. In 1991, following improvements in US-Soviet relations and Saddam Hussein’s use of SCUD short-range ballistic missiles during the first Gulf War, the SDI program was reshaped and renamed as ‘Global Protection against Limited Strikes’ (GPALS). GPALS was designed to respond to limited ballistic missile threats in a post-Cold War environment rather than large-scale Soviet strategic missile attack.

The Clinton Administration did not continue GPALS and focused US efforts on theatre BMD during the mid 1990s. However, growing concern about the potential for rogue states – particularly North Korea and Iran – to develop long range ballistic missiles (such as the North Korean Taepo Dong) capable of striking the US homeland created both strategic and domestic political impetus for a national BMD capability. This resulted in the US Missile Defense Act of 1999, which stipulated that:

'It is the policy of the United States to deploy as soon as is technologically possible an effective National Missile Defense system capable of defending the territory of the United States against limited ballistic missile attack (whether accidental, unauthorised, or deliberate)'.

The current US Administration directed the deployment of a limited but multilayered BMD System (BMDS) in 2002, which began in 2004. The BMDS is now considered
capable of achieving the initial capability goal of being able to defend the US homeland against limited long range ballistic missile attacks from North Korea. It also has a substantial (but not yet completed) capability to defend US allies and deployed forces from short and medium range ballistic missiles in one operational theatre or region. The next goals for the US BMDS are achieving the capability to:

- defend the US homeland against limited long range ballistic missile attacks from Iran;
- defend European allies against long range ballistic missile attacks from Iran (with sensors and interceptors based in Europe that will also expand protection for the US homeland); and
- defend allies and deployed forces from short and medium range ballistic missiles in two operational theatres or regions.

US commitment to BMD in some form will almost certainly continue, although increased investment is not certain given cost pressures and possible changes in strategic priorities under the next US Administration.

The technical feasibility of the BMDS achieving even its current modest goals has been questioned, but missile defence-related technology has advanced significantly in recent years and continues to improve. It remains more difficult to successfully intercept and destroy long range ballistic missiles than short and medium range ballistic missiles, particularly in scenarios involving multiple targets. This is due to the greater speed of long range missiles and the reduced time available to react and intercept them.
A decision to develop a BMD capability may be perceived as contradictory to Australia’s position on arms control and nuclear disarmament. This perception posits a zero-sum choice between BMD and arms control, but this assumption is too simplistic. Australia’s approach to BMD can complement its long-standing commitment to arms control and nuclear disarmament, and Australia’s ongoing efforts to manage WMD and missile-related security challenges through cooperation and diplomatic means.

A key strategic benefit of limited BMD capability is that it denies (or at least constrains) the ability of rogue states to use ballistic missile capabilities for coercion, and thereby reduces the attractiveness of ballistic missile proliferation, but does not undermine strategic deterrence between great powers. Such an approach is consistent with Australia’s long-standing policy of cooperation with the US to maintain global stability through deterrence, while promoting arms control and disarmament.

The previous Australian Government announced on 4 December 2003 that Australia would participate in the US BMD program. Australia signed a 25-year framework Memorandum of Understanding (MOU) in July 2004 that allows for development of collaboration in mutually agreed areas over time. Current areas of collaboration with the US on BMD include research and development, simulation, modeling and policy dialogue. Australia also participates in bilateral and multilateral missile defense exercises designed to explore policy and capability issues, and to develop enhance understanding of BMD technologies and policies.

Australia’s current policy approach on BMD is cautious and based on:

- an appreciation of BMD’s value for protecting deployed forces;
- maintaining a good understanding of missile defence;
- not closing beneficial options prematurely;
- examining capability options appropriate to Australia’s circumstances.

Australia has a four decade history of cooperating with the US in the related field of ballistic missile early warning. Our cooperation in ballistic missile early warning is based on our interest in preserving strategic deterrence and supporting our US ally’s capacity to provide extended deterrence, although early warning capabilities also have a role in any BMD system.

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33(a)(i) & 33(a)(iii)

Sensor capability
A sensor-only BMD capability for the new Air Warfare Destroyers would allow limited but important Australian contributions to protecting coalition operations and the US BMDS. The availability of sensors and their global distribution is essential to the effectiveness of the US BMDS.

33(a)(i) & 33(a)(iii)

However, a timely expansion of BMD capability in response to future threats would depend on adequate warning time and preparation for rapid adaptation.

33(a)(iii)

it would deliver some benefits in interoperability and information sharing.

33(a)(iii)

Japan plays a key role in BMD in the Asia-Pacific. Japan’s Self-Defence Force (SDF) has developed a significant missile defence capability.

33(a)(iii)

Japanese defence policy limits cooperation with countries other than the US, which is Japan’s only formal ally.
Currently, the Japanese Government interprets constitutional restrictions as precluding any assistance in defending other countries involving the use of ‘armed strength’ by its forces.

Given Japanese BMD capabilities and Japan’s important geographical position with respect to missile launches from Northeast Asia,

Dialogue would also allow Australia to raise concerns with China regarding the scale and intent of its ballistic missile and space capability development.

Australia could emphasise the benefits of international cooperation (with China playing an active role) in the areas of confidence building and arms control and limitation.

Australia could also encourage additional Sino-US dialogue on BMD and related issues, possibly as part of a broader regional arms control and confidence building framework.
BMD capabilities will not destabilise the region;
Australia is sensitive to China’s position on BMD and engages in active
dialogue on the matter; and
increased cooperation with the US does not detract from our long-standing
commitment to regional cooperation in Southeast Asia.
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### JOINT DFAT/DEFENCE SUBMISSION TO US NUCLEAR POSTURE REVIEW

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<th>FOR: Senator Faulkner</th>
<th>Schedule No:</th>
<th>Ministerial action required by:</th>
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Copies: Secretary, CDF, VCDF, CJOPS, CN, CA, CAF, FASMS, FASIP

### Recommendation
That you:
(a) **Note** the joint DFAT/Defence submission to the US Nuclear Posture Review
(b) **Approve** the proposed text for the submission.

### Key Issues
1. The US has invited Australia to make a submission to its 2009 Nuclear Posture Review (NPR). This review will establish US nuclear deterrence policy and posture for the next five to ten years. The Nuclear Posture Review will be submitted to Congress in December 2009. The 2009 NPR terms of reference are enclosed (Attachment A).
2. The Nuclear Posture Review will also guide US policy in regards to the proposed Strategic Arms Reduction Treaty (START) Follow-On agreement between the United States and the Russian Federation.
3. The invitation represents a timely opportunity to shape and influence the development of US Strategic Nuclear Posture, including Extended Deterrence. As stated in the 2009 Defence White Paper, Australian defence policy under successive governments has acknowledged the value to Australia of the protection afforded by extended nuclear deterrence under the US alliance.
4. Accordingly, the joint DFAT/Defence submission (Attachment B) reinforces the importance of US Extended Deterrence for Australia.
5. Australia also has obligations under Article VI of the 1968 Nuclear Non-Proliferation Treaty (NPT) towards contributing to nuclear disarmament. In this sense, the work of the International Commission on Nuclear Non-proliferation and Disarmament (ICNND) is important, and our desire to support its goals must be balanced against our strategic interest in ensuring stability through ensuring a credible US Extended Deterrence.

---

### Comments:

**Peter Jennings**  
A/Deputy Secretary Strategy,  
Coordination & Governance  
Tel: W: 02 6265 2652  
M:  
DD/MM / 2009

**JOHN FAULKNER**  
/ / 2009

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**Point of Contact: Ben Coleman**  
W: 02 6265 2846  
Mob: **[redacted]**

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Sensitivity
8. The issues included in this submission count attract controversy if publicly discussed or released, either through US statements thanking Australia for our submission, or in Congressional / Senate hearings.

Resources
9. Nil

Consultation
10. PM&C, [REDACTED] Division were consulted in the development of this submission.

Attachments
A. Nuclear Posture Review Terms of Reference
BACKGROUND INFORMATION – THE US NUCLEAR POSTURE REVIEW (NPR) – AUSTRALIA’S PERSPECTIVE

1. Ensure appropriate background information is attached and tabs are used so the Minister is able to quickly find information.

2. Background should be Times New Roman 12 point.
MINISTERIAL SUBMISSION

To: Senator Faulkner
Timing: Routine
Required by: 21 August 2009

Copies to: Secretary, CDF, VCDF, CN, CA, CAF, CIOPS, FASMSPA, FASSP, FASIP

Submission to the United States Nuclear Posture Review 2009

Recommendation:
That you:

i. agree the proposed text of the attached submission to the US Nuclear Posture Review.
   AGREED / NOT AGREED

ii. note that Minister Smith’s and the Prime Minister’s approval is being sought concurrently.
   NOTED / PLEASE DISCUSS

Key Points:

1. The US has invited Australia to make a submission to its 2009 Nuclear Posture Review (NPR) (Attachment A). The NPR will establish US nuclear deterrence policy and posture for the next five to ten years and will be submitted to Congress in December 2009. The 2009 NPR terms of reference are enclosed (Attachment B). The invitation follows Ambassador Richardson’s submission to the US Congressional Commission on US Strategic Posture earlier this year (Attachment C).

2. DFAT and Defence have prepared a joint submission. The submission reiterates Defence White Paper 2009 policy positions, including (1) Australia’s reliance on US extended deterrence to deter nuclear attacks on Australia while nuclear weapons exist, and (2) Australia’s opposition to the development of national missile defence systems which would undermine mutual nuclear deterrence as the basis of stability. The submission also draws attention to Australia’s longstanding efforts in the sphere of nuclear disarmament, and notes areas of nuclear policy that the US could consider as it seeks to meet President Obama’s stated long-term goal of a nuclear weapons-free world while, in the current circumstances, countering proliferation and maintaining nuclear deterrence for the US and its allies.

3. Embassy reporting indicates that a key area of nuclear policy that the US NPR will consider is declaratory policy on the circumstances in which it would consider using nuclear weapons.
The 2009 White Paper used the language set out in paragraph 2 (above) which has, in effect, made our endorsement of extended deterrence, more limited to scenarios including the use of nuclear weapons. In turn this is reflected in the submission provided at Attachments A. This reflects a subtle shift of an Australian policy position and will be of note to our US colleagues.

5. It is possible the independent International Commission on Nuclear Non-proliferation and Disarmament (ICNND), which Australia recently established with Japan and which is co-chaired by former Foreign Minister Gareth Evans, could recommend a sole purpose declaration when it reports in early 2010.

6. Should you and Mr Smith approve the submission to the US NPR, it will be passed to the US State Department.

Sensitivity:

7. Medium. It is possible that the US could publicly mention that allies including Australia were consulted during the course of the NPR and the matter could attract media interest. Contingency talking points are at Attachment D.

Resources:

8. N/A.

Consultation:

9. and DFAT were consulted in the preparation of the NPR submission.

Attachments:

A. Submission to the US NPR 2009.

B. Terms of Reference to the US NPR 2009.

C. Ministerial Submission 23 February 2009 ‘Proposed submission to the Congressional Commission on US Strategic Posture’.

D. Talking points.
DRAFT (v.5)

Australian position on the Obama Administration’s Nuclear Posture Review

In broad terms, Australia would welcome the formulation of a Nuclear Posture Review (NPR) that contributes to international stability and security and to the national security of the United States, Australia and other US allies. Australia would also encourage an NPR that enhances US leadership on nuclear non-proliferation and disarmament, including reaffirmation of US commitment to the ultimate goal of a world free of nuclear weapons, while recognising the important role US extended nuclear deterrence plays in Australian and global security so long as nuclear weapons exist.

Australia’s commitment to the Alliance with the United States of America

Our formal Alliance relationship began in 1951 with the ANZUS Treaty, but an informal strategic relationship can be traced back to the early part of the last century.

The evolution of this strategic relationship has been no accident of history. It reflects enduring common interests supported by common values and underscored by shared sacrifices.

Australia pursues a policy of defence self-reliance in the direct defence of Australia and in relation to our unique strategic interests, while maintaining a capacity to do more when required, consistent with those strategic interests that we might share with others, and within the limits of our resources.

As highlighted in our 2009 Defence White Paper, one of the most important ways Australia seeks to promote its strategic interests is through our network of alliances and defence relationships. Of these, our alliance with the US is our most important.

Our alliance with the US is an integral element of our strategic posture. Under Australia’s policy of defence self-reliance, Australia would only expect the US to come to our aid in circumstances where we were under threat from a major power whose military capabilities were simply beyond our capacity to resist.

But there remains one area of Australian security for which we remain entirely dependent on the US – that of extended nuclear deterrence. For so long as nuclear weapons exist, Australia is likely to rely on the nuclear forces of the US to deter nuclear attack on Australia. Australian defence policy under successive governments has acknowledged the value to Australia of the protection afforded by extended nuclear deterrence under the US alliance. That protection provides a stable and reliable sense of assurance and has over the years removed the need for Australia to consider more significant and expensive defence options.

Preventing Nuclear Conflict – Deterrence and Disarmament

Australia and the US have closely aligned interests in deterring nuclear conflict between states and achieving the ultimate goal of a world free of nuclear weapons. The human cost of a nuclear exchange would be staggering. This would remain true even if the conflict was contained.
Consistent with a long tradition of arms control advocacy and multilateral cooperation, Australia is strongly committed to active engagement in nuclear non-proliferation and disarmament efforts. Our establishment with Japan of the Independent International Commission on Nuclear Non-proliferation and Disarmament is a demonstration of that commitment.

In working towards the goal of disarmament, Australia recognises the importance of deterrence as the foundation of nuclear stability between nuclear-weapon states, and the need for the United States to maintain appropriately structured nuclear forces.

The projected timeframe for achieving a stable “zero-state” for nuclear arsenals is not clear. The process of disarmament is likely to be complex and prolonged and must be pursued carefully while retaining a stable balance of nuclear postures that is sensitive to geopolitical realities.

**Extended Deterrence**

Extended deterrence is a key element of Australia’s national security. Confidence that a nuclear attack on US allies would be met with a response-in-kind has assured very close US allies, like Australia, that they do not need to develop their own nuclear weapons, thus contributing to counter-proliferation efforts. At the governmental level, there has been strong bipartisan support in Australia for extended nuclear deterrence during past decades and we expect that will remain the case for so long as nuclear arsenals exist.

While the threat of nuclear catastrophe arising from all-out conflict between the major nuclear weapon states is remote, the threat of a lower-scale nuclear attack remains of concern through proliferation to belligerent and unstable states or non-state actors for whom traditional deterrence appears less applicable.

While Australia does not seek to provide detailed advice to the United States on the size and composition of its nuclear capabilities or the doctrine, planning and command and control arrangements it should employ, we would seek a nuclear posture that promotes the following key objectives:

- deters adversaries of the United States and its allies from developing or using nuclear weapons;
- contributes to a stable international security environment by providing a demonstrably credible deterrent, while not engendering excessive security fears in competitors or states of concern that would encourage proliferation of nuclear weapons;
- seeks to reduce the role of nuclear forces in national security strategy, including by:
  - minimising the size and prominence of nuclear forces, while remaining consistent with the objectives above; and
  - leveraging conventional forces, diplomatic and economic means to shape and influence the behaviour of potential nuclear adversaries.
Assurance and Deterrence in North Asia

The US-Russia nuclear balance and the mechanisms in place for managing nuclear capabilities and crises are relatively stable and mature. We welcome the July 2009 commitment from the United States and Russia to replace START I and to reduce current war-head limitations beyond those of the lower end of the range stipulated in SORT and to move quickly to further reductions, including in non-strategic weapons.

We recognise that the US strategic posture in North Asia must be structured to assuage sufficiently allied security concerns, deter and deny North Korean aggression and, Regular high-level strategic communications between the United States and China on nuclear issues will be important in ensuring there is a degree of mutual understanding of each other’s respective nuclear policies and avoiding miscalculation.

Nuclear declaratory policy/doctrine

As noted above, for so long as nuclear weapons exist, Australia relies on US nuclear forces to deter nuclear attack on Australia.

For some time, US declaratory policy has not ruled out the use of nuclear weapons in response to the use of other weapons of mass destruction (chemical or biological) or conventional forces on the United States itself or its allies.
the role of US conventional forces as a deterrent and in response to the use by
other states of chemical and biological weapons or conventional forces; and
the utility of nuclear weapons as a deterrent or response to the threat or use of
biological or chemical weapons by terrorists.

If, in the context of international movement towards nuclear disarmament, the United
States was disposed to make a 'sole purpose' declaration, the Australian Government
would be supportive in principle, but would want to be closely consulted on the
specific details.

Related to consideration of a possible 'sole purpose' declaration, the United States
and other nuclear-weapon states might also consider options for strengthening
negative security assurances (NSAs), which many countries consider a high priority.
The NPR might consider whether all the current US caveats on the application of
NSAs need to be maintained.

Nuclear Arsenal

Australia appreciates that, of all the states with nuclear weapons, the United States
implements the highest level of transparency, consistent with security requirements.
Australia encourages the United States to continue to be as transparent as possible on
issues such as the number of nuclear weapons in its arsenal, including deployed
weapons, non-deployed weapons and those awaiting destruction, so as to dissuade
other nuclear-armed states from compensating for uncertainty.
Australia strongly supports US negotiations with Russia on a successor agreement to START. Australia encourages the United States to institute with Russia (and eventually all other nuclear-armed states) a continuing process of arsenal reductions that are substantial, verifiable, legally-binding, irreversible and applicable to all kinds of nuclear weapons, including non-strategic nuclear weapons.

Australia acknowledges that the operational status of US nuclear weapons systems is subject to the most rigorous command and control systems to mitigate the risks of miscalculation or accidental or unintentional use, and to provide the President with the maximum time possible to respond. Australia also acknowledges that only the United States is in a position to decide the state of operational readiness necessary for its own security. Australia would encourage the United States to consider whether steps could be taken to reduce further the operational readiness of its nuclear weapons, both to increase and prolong the escalation path to nuclear options and to address the concerns of some countries about miscalculation and an accidental or unauthorised nuclear launch.

Australia appreciates that the long-term reliability of the US nuclear stockpile and the intellectual and technical capacity of its nuclear weapon complex are critical issues for the United States. We appreciate that the United States is the only nuclear-weapon state under the NPT that is not modernising its nuclear forces.

The effectiveness of extended deterrence over the longer term and the reliability of the stockpile are intertwined. Australia has an abiding interest in a safe, secure and reliable United States nuclear stockpile. Additionally, Australia recognises that reliability of the stockpile will be a significant factor in the consideration of US ratification of the Comprehensive Nuclear-Test-Ban Treaty (CTBT). Australia sees entry into force of the CTBT as an immediate disarmament and non-proliferation priority and we welcome the strong commitment by the Obama Administration to obtaining US Senate approval of the CTBT. Australia also welcomes the Administration’s commitment to begin negotiation on a verifiable Fissile Material Cut-off Treaty (FMCT) in the Conference on Disarmament (CD). The CD negotiations will need to decide how the issue of existing stocks of fissile material are to be treated.

Australia encourages the United States to continue to utilise the Life-cycle Extension Program (LEP) and Stockpile Stewardship Program (SSP) to ensure the reliability of the nuclear stockpile, and to ensure that these programs are properly funded and resourced. We encourage the United States to conduct a thorough examination of the long-term prospects of both programs, taking into account issues such as the status of nuclear and non-nuclear components, and the expertise of its personnel.
Counter-Proliferation

Australia believes it is important to counter nuclear proliferation by whatever means are available and appropriate. The nuclear programs of Iran and North Korea represent a serious threat to the nuclear non-proliferation regime and international stability. It is essential that we maintain the effectiveness of UN sanctions against Iran. Australia and the United States are finalising modalities for cooperation in ensuring toughened UN sanctions are enforced against North Korea to the maximum extent. Pressure should also be kept on Syria to cooperate fully with the IAEA, including by allowing the access sought by the IAEA.

Australia values the leadership of the United States in efforts to counter nuclear non-proliferation through such means as the Proliferation Security Initiative (PSI), the Global Initiative to Combat Nuclear Terrorism, the universal adoption of the Additional Protocol which would strengthen the nuclear safeguards system of the IAEA, and the development of practical criteria for the transfer of sensitive nuclear technology. In the case of the PSI, we welcome practical US initiatives to enhance the commitment and capabilities of PSI-endorsing regional states. Australia also welcomes President Obama's proposal to secure sensitive nuclear materials globally within four years and to hold a National Security Summit before the NPT Review Conference to initiate this process.

Australia will continue close cooperation with the United States in strengthening the effectiveness of the Missile Technology Control Regime (MTCR) to combat the spread of sophisticated unmanned delivery systems and associated technologies.

We encourage enhanced cooperation in preventing proliferation through combined efforts on export controls, particularly to prevent the illicit transfer of nuclear materials and sensitive nuclear technology.

Missile Defence

The 2009 Defence White Paper recognises that threats posed by ballistic missiles and their proliferation, particularly by states of concern such as North Korea, constitute a potential strategic challenge for Australia. Such threats include potential direct threats
to Australia, threats to deployed Australian forces (particularly in East Asia and the Middle East), and other threats to regional security and stability.

As noted in the White Paper, Australia does not support the development of a unilateral national missile defence system by any nation because such a system would be at odds with the maintenance of global nuclear deterrence. We would be especially concerned at developments that might undercut the deterrent value of the strategic nuclear forces of the major nuclear powers, and especially the viability of their second strike capabilities.

Australia notes that the US missile defence program focuses on the threat from rogue states and protecting deployed US and allied forces from theatre-based missile threats. Consequently, Australia does not consider the current US missile defence program undermines deterrence. We look forward to the results of the current US missile defence review, including in relation to possible options for cooperation with other countries.
The 2009 Nuclear Posture Review (NPR) will establish U.S. nuclear defense policy, strategy, and force posture for the next 5 to 10 years and will provide a basis for the negotiation of a follow-on agreement to the Strategic Arms Reduction Treaty. The Nuclear Posture Review will also satisfy the requirements of the National Defense Authorization Act of Fiscal Year 2008, Sec. 1070 (Public Law 110-181). DoD is preparing now to conduct this review, which will be submitted to Congress in December 2009.

- The NPR will assess:
  - The role of nuclear forces in the United States military strategy, planning, and programming
  - The policy requirements and objectives for the United States to maintain a safe, reliable, and credible nuclear deterrence posture
  - The relationship among United States nuclear deterrence policy, targeting strategy, and arms control objectives
  - The role that missile defense capabilities and conventional strike forces play in determining the role and size of nuclear forces
  - The levels and composition of the nuclear delivery systems that will be required for implementing the United States national and military strategy, including any plans for replacing or modifying existing systems
  - The nuclear weapons complex that will be required for implementing the United States national and military strategy, including any plans to modernize or modify the complex
  - The active and inactive nuclear weapons stockpile that will be required for implementing the United States national and military strategy, including any plans for replacing or modifying warheads

- The NPR process embraces a “whole of government” approach. As such, DoD will consult with other U.S. Government departments and agencies and appropriate Congressional committees.

  - The NPR will be led by the Office of the Secretary of Defense and Joint Staff, in direct consultation with the Secretary of Energy and Secretary of State. OSD and Joint Staff leadership will work closely with representatives from the Military Departments and Combatant Commands and across OSD components.
  - The NPR will be conducted concurrently with the Quadrennial Defense Review (QDR), the Ballistic Missile Defense Review (BMD), the Space Policy Review, various other interagency reviews, the START-follow on negotiations, and the Nuclear Non-proliferation Treaty 2010 Review Conference preparations.
  - Primary DoD responsibility will reside with the Under Secretary of Defense for Policy and Vice Chairman, Joint Chiefs of Staff.
  - The Assistant Secretary of Defense, Global Strategic Affairs will provide overall supervision of day-to-day operations, reporting to the Under Secretary and Principal Deputy Under Secretary for Policy.
• Day-to-day operation of the review will be directed by the Co-Directors: Deputy Assistant Secretary of Defense for Nuclear and Ballistic Missile Defense Policy and the J-5 Deputy Director for Strategy and Policy.
• Four working groups will be developed and tasked to address the primary issues to be resolved by the NPR:
  • Policy and Strategy Working Group
  • Capabilities, Force Structure and Programs Working Group
  • Nuclear Weapon Stockpile and Infrastructure Working Group
  • International Dimensions Working Group
• The NPR will be submitted to Congress in December 2009 and done so in coordination with the 2010 QDR.
• The NPR will produce an unclassified report as one of its final products.
• Previous NPRs were conducted in 1994 and 2002.
DECLASSIFIED
CONFIDENTIAL AUS/USA

PROPOSED AUSTRALIAN PRESENTATION TO US CONGRESSIONAL COMMISSION ON STRATEGIC POSTURE

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<tr>
<th>FOR:</th>
<th>Mr Fitzgibbon</th>
<th>Category: Defence initiated</th>
<th>Ministerial action required by:</th>
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<tr>
<td>GROUP: Strategy Coordination &amp; Governance</td>
<td>5FG</td>
<td>18 February 2009</td>
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Copies: Secretary, CDF, VCDF, GOPS, CN, CA, CAF, CCDQ, DEPSEC WP, DEPSEC O&M, Defence Head of the House, Jelk Fundation WP, FASCMPA, FASIP.

Recommendations

That you:

(a) approve the proposed text for presentation by Australia's Ambassador Richardson to the Bipartisan Congressional Commission on US Strategic Posture on 24 February 2009. and
(b) note DFAT is seeking Minister Smith's approval concurrently.

Key Issues

1. The Australian Embassy in Washington has advised that it received an invitation to address, in private, the bipartisan Congressional Commission on US Strategic Posture (see cable at Attachment A). The presentation is currently scheduled for 24 February 2009.

2. The Commission is developing advice on the future US strategic posture, including the US approach to nuclear weapons use and tests to counter nuclear threats to the US such as military capabilities, deterrence, arms control, non-proliferation strategies and missile defense issues. The work of the Commission is seen as a precursor to the completion of a new Nuclear Force Posture Review in late 2009. Around a dozen key allies and friends have been asked to present, including the UK, Japan, Germany, France, Israel and Turkey.

3. The invitation represents a timely opportunity to influence the emerging debate about how the new US administration should seek to shape and influence the world through the US strategic posture.

4. DFAT and Defence have prepared a joint presentation (Attachment B) for the Commission. The presentation covers Australia's position on the broader US strategic posture in the region, US extended nuclear deterrence, counter proliferation efforts and nuclear non-proliferation and disarmament measures.

5. DFAT is also writing concurrently to the Minister for Foreign Affairs seeking his approval.

6. Should you and Minister Smith approve the draft, Ambassador Richardson will deliver the presentation to the Commission.

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DECLASSIFIED
Presentation to the Congressional Commission on the Strategic Posture of the United States

Introduction

As an ally of the United States, we welcome the opportunity to talk with the Commission.

The Commission's work is an example of the United States' transparency in relation to its nuclear weapon strategy, doctrine and stockpile.

We appreciate that the United States often receives more criticism than other nuclear weapon states because it is the most transparent, but we encourage the United States to continue to be as open as possible to build confidence and to encourage other nuclear weapon states to follow its lead.

The Alliance

Our formal Alliance relationship began in 1951 with the ANZUS Treaty, but our informal strategic relationship dates back to the early part of the last century.

The evolution of this strategic relationship has been no accident of history. It reflects enduring common interests supported by common values and underscored by shared sacrifices.

US Strategic Posture in the Pacific

We continue to share an interest in maintaining a stable regional and global strategic environment, in minimising instability, and deterring aggressive impulses or defeating adversaries where competition or conflict is inevitable.

The US' conventional force posture and forward presence in the Asia-Pacific region makes a major contribution to this interest. Forward deployed forces also enhance Australian defence capability and interoperability through major exercise opportunities.

US military capabilities create an environment in which aggressive acts by any regional country are unlikely to succeed. This deterrent effect is a stabilising factor which underpins the peaceful and strong regional economic growth over the past half-century.

Australia strongly supports continued engagement by the US in the Asia-Pacific region through its network of alliances and close strategic relationships. The US strategic presence complements our approach to regional security.

While the US has a formidable capacity to project military power from its own territory, US forces forward deployed remain important in providing reassurance to allies. Forward deployed forces make an unambiguous statement about US commitment and priorities, and complicate the planning of any prospective belligerent in the region.

It is important that the US continues to engage closely with the regional countries, especially allies, whenever it adjusts its posture. This Commission is a good example.
It is also important for the US to maintain continuing dialogue with strategic competitors, particularly China. As China’s military capabilities grow, it is important that both sides understand each other, and find ways to cooperate.

Preventing Nuclear War

Australia and the US have closely shared interests in deterring nuclear conflict between states. The human cost of a nuclear exchange in the first decades of the 21st century would be staggering. This would remain true even if such a conflict were contained.

Dialogue with other nuclear states will remain important to reduce the risks of miscalculations, particularly when the lines of communication between strategic competitors are not well established.

Australia’s most enduring contribution to the US nuclear force posture has been through our partnerships in the Joint Defence Facility Nurrungar and the Joint Defence Facility Pine Gap. This contribution includes vital support to ballistic missile early warning information as part of the US Defense Support Program.

Australia also supports the US strategic posture through the collection of intelligence that, among other things, helps monitor compliance with arms control and non-proliferation agreements.

Australia recognises the importance of mutual deterrence as the foundation of nuclear stability between nuclear weapon states. In this context, Australia watches very carefully any development in missile defence capabilities that could destabilise the nuclear balance.

In relation to ballistic missile defence, Australia’s policy objectives are to gain an understanding of the technology involved, the development of international cooperation and the applicability of missile defence to Australia’s strategic circumstances. We continue to explore appropriate options for collaborating with the US and other allies in this field.

Extended Deterrence

Extended deterrence is a key element of Australia’s national security. Confidence that a nuclear attack on US allies would be met with a response-in-kind has assured very close US allies, like Australia, that they do not need to develop their own nuclear weapons, thus contributing to non-proliferation efforts. There has been strong bipartisan support in Australia for extended nuclear deterrence during past decades and we expect that will remain the case for so long as substantial nuclear arsenals exist.

It is worth noting that even non-US allies benefit from US extended deterrence because it inhibits further nuclear proliferation. One has only to speculate about how regional countries would react if Japan, for example, were to acquire nuclear weapons, to see the tangible benefits of the US’ extended deterrence posture.

In order to maintain confidence in extended deterrence, the US will also need to make clear that it would respond in kind to nations that employ nuclear weapons against friends and allies of the US, even where there is no existential threat to the US itself.
Deterrence and dissuasion strategies will, nonetheless, need to evolve to account for a multipolar world in which smaller regional states, or potentially non-state actors, may gain access to nuclear weapons and may not respond to traditional deterrence strategies in the same way as major powers.

Non-Proliferation and Disarmament

Australia shares with the United States a strong commitment to nuclear non-proliferation.

Current trends in the proliferation of nuclear materials and dual use technologies suggest the number of states capable of reaching the nuclear threshold will continue to increase.

Both countries' strategic/national interests are served by an effective NPT regime, including strengthened IAEA nuclear safeguards and agreed measures in response to non-compliance.

The current review cycle of the NPT, with the next Review Conference being held in April-May 2010, offers an opportunity to strengthen the authority and effectiveness of the Treaty, including through reaching agreement on measures in response to states that withdraw from the NPT.

US leadership and commitment will be vital to a successful 2010 Review Conference outcome.

It will be important in establishing a productive atmosphere at the 2010 NPT Review Conference for the US and the other nuclear-weapon states to reaffirm their commitment to the total elimination of their nuclear arsenals.

The international community also needs to address more effectively challenges to the non-proliferation regime such as those posed by the proliferation of ballistic missile and nuclear technology, particularly to states of concern such as Iran and North Korea, or to terrorists.

We need to continue to keep up the pressure on Iran in the IAEA, the Security Council and other fora, and through application of rigorous sanctions, to persuade Iran to take steps to remove the doubts about its nuclear program.

Australia also supports the continuation of engagement with Iran by the permanent members of the Security Council and Germany.

We note with interest the Administration's comments about the importance of direct diplomacy, as well as maintaining pressure on Iran, should it fail to abandon its illicit nuclear program.

In regard to the DPRK, Australia strongly supports the Six-Party Talks process, and encourages the United States to maintain the pressure on the DPRK to agree to a verification protocol under which there could be international confidence that North Korea is implementing its denuclearisation commitments.
The US-India nuclear deal, for example, will bring a significant part of India’s nuclear facilities under IAEA safeguards, and strengthen India’s export controls.

Australia works with the United States to strengthen the export control regimes. We recognise they need to be supported by effective and practical measures – both overt and covert – to prevent and interdict illicit trafficking in WMD, their delivery systems and related materials.

We welcome the strong leadership role the US takes in promoting Proliferation Security Initiative (PSI) and ensure it retains a practical focus. Australia looks to continue work with the US to build the number of supporters for PSI in South East Asia.

Efforts to strengthen nuclear non-proliferation are being held back by those non-nuclear-weapon states that either have genuine concerns about the pace and extent of nuclear disarmament – or that use such concerns as a pretext for blocking progress on ways to strengthen nuclear non-proliferation.

We think movement on disarmament should not be a pre-condition to progress on non-proliferation – preventing the spread of nuclear weapons is in every state’s interests.

But further reductions in nuclear arsenals – coupled with decisive action on banning nuclear testing, containing weapons-related fissile material production and other initiatives – will help overcome both the real concerns of some and the pretext used by others that have constrained the strengthening of non-proliferation regime.

This is one of the reasons why Australia is strongly committed to progress on nuclear disarmament and the goal of eventual elimination of nuclear weapons.

To that end, Australia and Japan have established the International Commission on Nuclear Non-proliferation and Disarmament to reinvigorate international efforts on nuclear non-proliferation and disarmament.

One of the International Commissioners is, of course, this Commission’s Chairman, former US Secretary of Defense, William Perry.

The International Commission’s second meeting was held in Washington on 13-15 February.

We do not underestimate the magnitude of the challenges facing the International Commission – there have been many well-written reports on these issues by well-meaning individuals and groups.

As an independent body with a highly credible membership of former leaders and ministers, the International Commission will pitch its messages at the political level,
with the aim of convincing key decision-makers of its recommendations and providing a program of practical action.

It will shape its arguments with regard to states’ strategic interests and geopolitical stability.

It is intended that the International Commission help pave the way for a successful outcome from the 2010 NPT Review Conference.

Australia is also working hard to encourage the entry into force of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) as a priority for nuclear non-proliferation and disarmament.

The CTBT’s binding and verified prohibition on testing explosions will present a significant new barrier to horizontal or vertical proliferation.

United States ratification of the CTBT would give the entry into force process a significant new impetus. We welcome the commitment from the US Administration to achieve this outcome.

Movement toward entry into force will put pressure to ratify on others, including states such as Iran and the DPRK.

The negotiation of a Fissile Material Cut-Off Treaty - a non-discriminatory, legally binding and verifiable treaty on limiting the production of fissile material for nuclear weapons - is another non-proliferation and disarmament priority for Australia.

It would advance nuclear disarmament by capping the amount of fissile material for nuclear weapons and reinforce the principle of irreversible disarmament.

And it would strengthen non-proliferation by tightening further the controls over fissile material, thereby reducing the risk of it being diverted to proliferators or terrorists.

We welcome the US Administration’s commitment to work for the negotiation of such a treaty.

We also welcome the commitment to achieve further reductions in the number of nuclear weapons.

We acknowledge the extensive cuts already made by the US. We appreciate that, in considering further cuts, the US will be guided by the need to maintain effective deterrence, commitments to its allies and by the overall strategic environment, including non-proliferation challenges.

Australia welcomes the indications that the United States and Russia will take early action to reach a successor agreement to START.
A successor agreement should contain irreversible reductions on all types of nuclear weapons, contain a strong verification regime and clearly set out a future process on disarmament.

Australia would also like the United States' Nuclear Posture Review to reinforce and accelerate the trend over the last decade and more to reduce the role of nuclear weapons in US security policy. It will also be important that other nuclear weapon states follow the US lead on this issue. A clearer delineation of the purpose of nuclear weapons would be helpful in this respect.

Lowering the operational readiness of nuclear weapons systems, in ways that promote international stability and security, would be a significant confidence-building measure. We hope consideration of this will be an element of the Nuclear Posture review.
MINISTERIAL TALKING POINTS

If asked whether Australia contributed to the US Nuclear Posture Review...

- As close allies, Australia and the US frequently consult on security matters of mutual concern.
- Australian defence policy under successive Governments has acknowledged the value to Australia of the protection afforded by extended nuclear deterrence under the US alliance. This was reaffirmed in the recent Defence White Paper.
- It is the Government's judgement that stable nuclear deterrence will continue to be a feature of the international system for the foreseeable future, and in this context extended deterrence will continue to be viable.
- Australia's advice to the US was consistent with this policy approach.

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<tr>
<th>Name</th>
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<tr>
<td>Ben Coleman</td>
<td>ASSP</td>
<td>4 August 09</td>
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<td>John Sullivan</td>
<td>AS Arms Control and Proliferation</td>
<td>4 August 09</td>
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<tr>
<td>Rod Dudfield</td>
<td>DDGFA</td>
<td>5 August 09</td>
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</tbody>
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For Clearance | For Information | No Action |
To: Senator Faulkner  
Timing: Urgent
Required by: 7 April
Reason: To advise you on the draft response to the US NPR prepared by DFAT.

Copies to: Secretary, CDF, VCDF, CN, CA, CAF, FASSP, FASPI, FASMSPA.

The United States’ Nuclear Posture Review and the Australian Government response

Recommendation:
That you:

1. **note** the key features of the United States’ Nuclear Posture Review and strategic implications for Australia.
   
   NOTED / PLEASE DISCUSS

2. **agree** the draft text of the Joint Statement on the United States’ Nuclear Posture Review prepared for you and Minister Smith by the Department of Foreign Affairs and Trade, in consultation with Defence.
   
   AGREED / NOT AGREED

Key Points:

1. On 6 April, the United States released its Nuclear Posture Review (NPR) (Attachment A). The NPR sets out US nuclear deterrence policy, strategy and force posture for the next five to ten years, and provides a roadmap for implementing President Obama’s agenda for reducing nuclear risks to the US, its allies and partners and the international community.

2. The 2010 NPR places the prevention of nuclear terrorism and proliferation at the top of the US nuclear policy agenda. It describes how the US will reduce the role and numbers of nuclear weapons while maintaining strategic deterrence and stability, reassuring US allies and partners and sustaining a safe, secure and effective US nuclear arsenal. As such, it represents a key statement on US national security strategy, with implications beyond nuclear non-proliferation and arms control policy.

3. The NPR marks a shift in US declaratory policy regarding the use of nuclear weapons, strengthening long-standing ‘negative security assurances’ by declaring that the US will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the Nuclear Non-Proliferation Treaty (NPT) and in compliance with their nuclear non-proliferation obligations. Previously, the US declaratory position left greater scope for using
nuclear weapons against non-nuclear states that were armed with chemical and biological weapons, or allied to hostile nuclear powers.

4. The NPR states that the US is not prepared at the present time to adopt a universal policy that deterring nuclear attack is the sole purpose of nuclear weapons, but the US will work to establish conditions under which such a policy could be safely adopted (page viii, NPR Executive Summary).

5. DFAT has drafted a joint statement in response to the NPR’s release for you and Minister Smith (Attachment B). Key points of the draft joint statement include:

(a) The Australian Government welcomes the NPR as a clear signal of President Obama’s Administration to work towards the goal of a nuclear weapons free world.

(b) The Australian Government acknowledges that nuclear disarmament is a long-term process, reliant for its success on firm and verifiable commitments (consistent with the assessments in the NPR).

(c) Australian defence policy acknowledges the value to Australia of the protection afforded by extended nuclear deterrence under the US alliance.

(d) The Australian Government welcomes the change in US declaratory policy as a significant reduction of the role of nuclear weapons in US national security strategy, and would be comfortable if the US were to make deterrence of nuclear attack the sole purpose of its nuclear weapons.

6. Defence is mostly supportive of the draft statement’s text, [redacted].

nuclear doctrine in the future. The NPR commits to work towards establishing conditions under which such a policy could be safely adopted, which would be complex and demanding.

7. While Defence is comfortable with the draft joint statement, the NPR has a number of significant long-term strategic implications that need further assessment, such as those relating to the US-China strategic relationship and future US capabilities and force posture for conventional deterrence in the Asia-Pacific. Defence will provide you with further advice on these implications once this analysis has been completed, and we have received more detailed briefings from US officials.

Sensitivity:

8. High. Australia’s reaction to the Obama Administration’s nuclear policy is likely to attract media interest and it has significant implications for the US alliance.

Resources:

9. N/A.

Consultation:

10. Defence has consulted with DFAT on the attached draft statement, and has consulted regularly with DFAT and PM&C on Australian Government policy regarding nuclear non-proliferation, disarmament and deterrence since mid-2009.

Attachments:

A. 2010 Nuclear Posture Review.

B. Draft joint statement on the Australian Government response prepared by DFAT, with amendment proposed by Defence regarding ‘sole purpose’ nuclear policy.
Nuclear Posture Review
Report

April 2010
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April 6, 2010

This Nuclear Posture Review provides a roadmap for implementing President Obama's agenda for reducing nuclear risks to the United States, our allies and partners, and the international community. As the President said in Prague last year, a world without nuclear weapons will not be achieved quickly, but we must begin to take concrete steps today.

This NPR places the prevention of nuclear terrorism and proliferation at the top of the U.S. policy agenda, and describes how the United States will reduce the role and numbers of nuclear weapons. Efforts like the New Strategic Arms Reduction Treaty with Russia, the Nuclear Security Summit, our work to strengthen the nuclear nonproliferation regime, and a broader approach to deterrence are central elements of this strategy.

At the same time, as long as nuclear weapons exist, the United States must sustain a safe, secure, and effective nuclear arsenal - to maintain strategic stability with other major nuclear powers, deter potential adversaries, and reassure our allies and partners of our security commitments to them.

The NPR calls for making much-needed investments to rebuild America's aging nuclear infrastructure. To this end, I asked for nearly $5 billion to be transferred from the Department of Defense to the Department of Energy over the next several years. These investments, and the NPR's strategy for warhead life extension, represent a credible modernization plan necessary to sustain the nuclear infrastructure and support our nation's deterrent. They will also enable further arms reductions by allowing us to hedge against future threats without the need for a large non-deployed stockpile.

From beginning to end, this review was an interagency effort, and as such reflects the strength of what can be accomplished when our government's departments work in concert. The steps outlined in this report will take years, and, in some cases, decades to complete. Implementing them will be the work of multiple administrations and Congresses, and will require sustained bipartisan consensus.

In closing, I would like to thank those men and women at the Departments of Defense and Energy, including the national labs, who are critical to sustaining our nuclear arsenal. Their important work underwrites the security of the United States as well as our partners and allies.
EXECUTIVE SUMMARY

In his April 2009 speech in Prague, President Obama highlighted 21st century nuclear dangers, declaring that to overcome these grave and growing threats, the United States will “seek the peace and security of a world without nuclear weapons.” He recognized that such an ambitious goal could not be reached quickly—perhaps, he said, not in his lifetime. But the President expressed his determination to take concrete steps toward that goal, including by reducing the number of nuclear weapons and their role in U.S. national security strategy. At the same time, he pledged that as long as nuclear weapons exist, the United States will maintain a safe, secure, and effective arsenal, both to deter potential adversaries and to assure U.S. allies and other security partners that they can count on America’s security commitments.

The 2010 Nuclear Posture Review (NPR) outlines the Administration’s approach to promoting the President’s agenda for reducing nuclear dangers and pursuing the goal of a world without nuclear weapons, while simultaneously advancing broader U.S. security interests. The NPR reflects the President’s national security priorities and the supporting defense strategy objectives identified in the 2010 Quadrennial Defense Review.

After describing fundamental changes in the international security environment, the NPR report focuses on five key objectives of our nuclear weapons policies and posture:

1. Preventing nuclear proliferation and nuclear terrorism;
2. Reducing the role of U.S. nuclear weapons in U.S. national security strategy;
3. Maintaining strategic deterrence and stability at reduced nuclear force levels;
4. Strengthening regional deterrence and reassuring U.S. allies and partners; and
5. Sustaining a safe, secure, and effective nuclear arsenal.
While the NPR focused principally on steps to be taken in the next five to ten years, it also considered the path ahead for U.S. nuclear strategy and posture over the longer term. Making sustained progress to reduce nuclear dangers, while ensuring security for ourselves and our allies and partners, will require a concerted effort by a long succession of U.S. Administrations and Congresses. Forging a sustainable consensus on the way ahead is critical.


The international security environment has changed dramatically since the end of the Cold War. The threat of global nuclear war has become remote, but the risk of nuclear attack has increased.

As President Obama has made clear, today’s most immediate and extreme danger is nuclear terrorism. Al Qaeda and their extremist allies are seeking nuclear weapons. We must assume they would use such weapons if they managed to obtain them. The vulnerability to theft or seizure of vast stocks of such nuclear materials around the world, and the availability of sensitive equipment and technologies in the nuclear black market, create a serious risk that terrorists may acquire what they need to build a nuclear weapon.

Today’s other pressing threat is nuclear proliferation. Additional countries – especially those at odds with the United States, its allies and partners, and the broader international community – may acquire nuclear weapons. In pursuit of their nuclear ambitions, North Korea and Iran have violated non-proliferation obligations, defied directives of the United Nations Security Council, pursued missile delivery capabilities, and resisted international efforts to resolve through diplomatic means the crises they have created. Their provocative behavior has increased instability in their regions and could generate pressures in neighboring countries for considering nuclear deterrent options of their own. Continued non-compliance with non-proliferation norms by these and other countries would seriously weaken the Nuclear Non-Proliferation Treaty (NPT), with adverse security implications for the United States and the international community.

While facing the increasingly urgent threats of nuclear terrorism and nuclear proliferation, the United States must continue to address the more familiar challenge of ensuring strategic stability with existing nuclear powers – most notably Russia and China. Russia remains America’s only peer in the area of nuclear weapons capabilities. But the nature of the U.S.-Russia relationship has changed fundamentally since the days of the Cold War. While policy differences continue to arise between the two countries and Russia continues to modernize its still-formidable nuclear forces, Russia and the United States are no longer adversaries, and prospects for military confrontation have declined dramatically. The two have increased their cooperation in areas of shared interest, including preventing nuclear terrorism and nuclear proliferation.
The United States and China are increasingly interdependent and their shared responsibilities for addressing global security threats, such as weapons of mass destruction (WMD) proliferation and terrorism, are growing. At the same time, the United States and China’s Asian neighbors remain concerned about China’s current military modernization efforts, including its qualitative and quantitative modernization of its nuclear arsenal. China’s nuclear arsenal remains much smaller than the arsenals of Russia and the United States. But the lack of transparency surrounding its nuclear programs – their pace and scope, as well as the strategy and doctrine that guides them – raises questions about China’s future strategic intentions.

These changes in the nuclear threat environment have altered the hierarchy of our nuclear concerns and strategic objectives. In coming years, we must give top priority to discouraging additional countries from acquiring nuclear weapons capabilities and stopping terrorist groups from acquiring nuclear bombs or the materials to build them. At the same time, we must continue to maintain stable strategic relationships with Russia and China and counter threats posed by any emerging nuclear-armed states, thereby protecting the United States and our allies and partners against nuclear threats or intimidation, and reducing any incentives they might have to seek their own nuclear deterrents.

Implications for U.S. Nuclear Weapons Policies and Force Posture

The massive nuclear arsenal we inherited from the Cold War era of bipolar military confrontation is poorly suited to address the challenges posed by suicidal terrorists and unfriendly regimes seeking nuclear weapons. Therefore, it is essential that we better align our nuclear policies and posture to our most urgent priorities – preventing nuclear terrorism and nuclear proliferation.

This does not mean that our nuclear deterrent has become irrelevant. Indeed, as long as nuclear weapons exist, the United States will sustain safe, secure, and effective nuclear forces. These nuclear forces will continue to play an essential role in deterring potential adversaries and reassuring allies and partners around the world.

But fundamental changes in the international security environment in recent years – including the growth of unrivaled U.S. conventional military capabilities, major improvements in missile defenses, and the easing of Cold War rivalries – enable us to fulfill those objectives at significantly lower nuclear force levels and with reduced reliance on nuclear weapons. Therefore, without jeopardizing our traditional deterrent and reassurance goals, we are now able to shape our nuclear weapons policies and force structure in ways that will better enable us to meet our most pressing security challenges.

- By reducing the role and numbers of U.S. nuclear weapons – meeting our NPT Article VI obligation to make progress toward nuclear disarmament – we can put ourselves in a
much stronger position to persuade our NPT partners to join with us in adopting the measures needed to reinvigorate the non-proliferation regime and secure nuclear materials worldwide.

- By maintaining a credible nuclear deterrent and reinforcing regional security architectures with missile defenses and other conventional military capabilities, we can reassure our non-nuclear allies and partners worldwide of our security commitments to them and confirm that they do not need nuclear weapons capabilities of their own.

- By pursuing a sound Stockpile Management Program for extending the life of U.S. nuclear weapons, we can ensure a safe, secure, and effective deterrent without the development of new nuclear warheads or further nuclear testing.

- By modernizing our aging nuclear facilities and investing in human capital, we can substantially reduce the number of nuclear weapons we retain as a hedge against technical or geopolitical surprise, accelerate dismantlement of retired warheads, and improve our understanding of foreign nuclear weapons activities.

- By promoting strategic stability with Russia and China and improving transparency and mutual confidence, we can help create the conditions for moving toward a world without nuclear weapons and build a stronger basis for addressing nuclear proliferation and nuclear terrorism.

- By working to reduce the salience of nuclear weapons in international affairs and moving step-by-step toward eliminating them, we can reverse the growing expectation that we are destined to live in a world with more nuclear-armed states, and decrease incentives for additional countries to hedge against an uncertain future by pursuing nuclear options of their own.

Preventing Nuclear Proliferation and Nuclear Terrorism

As a critical element of our effort to move toward a world free of nuclear weapons, the United States will lead expanded international efforts to rebuild and strengthen the global nuclear non-proliferation regime — and for the first time, the 2010 NPR places this priority atop the U.S. nuclear agenda. Concerns have grown in recent years that we are approaching a nuclear tipping point — that unless today’s dangerous trends are arrested and reversed, before very long we will be living in a world with a steadily growing number of nuclear-armed states and an increasing likelihood of terrorists getting their hands on nuclear weapons.

The U.S. approach to preventing nuclear proliferation and nuclear terrorism includes three key elements. First, we seek to bolster the nuclear non-proliferation regime and its centerpiece, the NPT, by reversing the nuclear ambitions of North Korea and Iran, strengthening international
Atomic Energy Agency safeguards and enforcing compliance with them, impeding illicit nuclear trade, and promoting the peaceful uses of nuclear energy without increasing proliferation risks. Second, we are accelerating efforts to implement President Obama’s initiative to secure all vulnerable nuclear materials worldwide in four years.

And third, we are pursuing arms control efforts – including the New Strategic Arms Reduction Treaty (New START), ratification and entry into force of the Comprehensive Nuclear Test Ban Treaty, and negotiation of a verifiable Fissile Material Cutoff Treaty – as a means of strengthening our ability to mobilize broad international support for the measures needed to reinforce the non-proliferation regime and secure nuclear materials worldwide.

Among key Administration initiatives are:

- Pursuing aggressively the President’s Prague initiative to secure all vulnerable nuclear materials worldwide, including accelerating the Global Threat Reduction Initiative and the International Nuclear Material Protection and Cooperation Program. This includes increasing funding in fiscal year (FY) 2011 for Department of Energy nuclear non-proliferation programs to $2.7 billion, more than 25 percent.

- Enhancing national and international capabilities to disrupt illicit proliferation networks and interdict smuggled nuclear materials, and continuing to expand our nuclear forensics efforts to improve the ability to identify the source of nuclear material used or intended for use in a terrorist nuclear explosive device.

- Initiating a comprehensive national research and development program to support continued progress toward a world free of nuclear weapons, including expanded work on verification technologies and the development of transparency measures.

- Renewing the U.S. commitment to hold fully accountable any state, terrorist group, or other non-state actor that supports or enables terrorist efforts to obtain or use weapons of mass destruction, whether by facilitating, financing, or providing expertise or safe haven for such efforts.

Reducing the Role of U.S. Nuclear Weapons

The role of nuclear weapons in U.S. national security and U.S. military strategy has been reduced significantly in recent decades, but further steps can and should be taken at this time.

The fundamental role of U.S. nuclear weapons, which will continue as long as nuclear weapons exist, is to deter nuclear attack on the United States, our allies, and partners.

During the Cold War, the United States reserved the right to use nuclear weapons in response to a massive conventional attack by the Soviet Union and its Warsaw Pact allies. Moreover, after the
United States gave up its own chemical and biological weapons (CBW) pursuant to international treaties (while some states continue to possess or pursue them), it reserved the right to employ nuclear weapons to deter CBW attack on the United States and its allies and partners.

Since the end of the Cold War, the strategic situation has changed in fundamental ways. With the advent of U.S. conventional military preeminence and continued improvements in U.S. missile defenses and capabilities to counter and mitigate the effects of CBW, the role of U.S. nuclear weapons in deterring non-nuclear attacks—conventional, biological, or chemical—has declined significantly. The United States will continue to reduce the role of nuclear weapons in deterring non-nuclear attacks.

To that end, the United States is now prepared to strengthen its long-standing “negative security assurance” by declaring that the United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations.

This revised assurance is intended to underscore the security benefits of adhering to and fully complying with the NPT and persuade non-nuclear weapon states party to the Treaty to work with the United States and other interested parties to adopt effective measures to strengthen the non-proliferation regime.

In making this strengthened assurance, the United States affirms that any state eligible for the assurance that uses chemical or biological weapons against the United States or its allies and partners would face the prospect of a devastating conventional military response—and that any individual responsible for the attack, whether national leaders or military commanders, would be held fully accountable. Given the catastrophic potential of biological weapons and the rapid pace of bio-technology development, the United States reserves the right to make any adjustment in the assurance that may be warranted by the evolution and proliferation of the biological weapons threat and U.S. capacities to counter that threat.

In the case of countries not covered by this assurance—states that possess nuclear weapons and states not in compliance with their nuclear non-proliferation obligations—there remains a narrow range of contingencies in which U.S. nuclear weapons may still play a role in deterring a conventional or CBW attack against the United States or its allies and partners. The United States is therefore not prepared at the present time to adopt a universal policy that deterring nuclear attack is the sole purpose of nuclear weapons, but will work to establish conditions under which such a policy could be safely adopted.

Yet that does not mean that our willingness to use nuclear weapons against countries not covered by the new assurance has in any way decreased. Indeed, the United States wishes to stress that it would only consider the use of nuclear weapons in extreme circumstances to defend the vital
interests of the United States or its allies and partners. It is in the U.S. interest and that of all other nations that the nearly 65-year record of nuclear non-use be extended forever.

Accordingly, among the key conclusions of the NPR:

- The United States will continue to strengthen conventional capabilities and reduce the role of nuclear weapons in deterring non-nuclear attacks, with the objective of making deterrence of nuclear attack on the United States or our allies and partners the sole purpose of U.S. nuclear weapons.

- The United States would only consider the use of nuclear weapons in extreme circumstances to defend the vital interests of the United States or its allies and partners.

- The United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations.

Maintaining Strategic Deterrence and Stability at Reduced Nuclear Force Levels

Since the end of the Cold War, the United States and Russia have reduced operationally deployed strategic nuclear weapons by about 75 percent, but both still retain many more nuclear weapons than they need for deterrence. The Administration is committed to working with Russia to preserve stability at significantly reduced force levels.

New START: The next step in this process is to replace the now-expired 1991 START I Treaty with another verifiable agreement, New START. An early task for the NPR was to develop U.S. positions for the New START negotiations and to consider how U.S. forces could be structured in light of the reductions required by the new agreement. The NPR reached the following conclusions:

- Stable deterrence can be maintained while reducing U.S. strategic delivery vehicles — intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs), and nuclear-capable heavy bombers — by approximately 50 percent from the START I level, and reducing accountable strategic warheads by approximately 30 percent from the Moscow Treaty level.

- Building on NPR analysis, the United States agreed with Russia to New START limits of 1,550 accountable strategic warheads, 700 deployed strategic delivery vehicles, and a combined limit of 800 deployed and non-deployed strategic launchers.

- The U.S. nuclear Triad of ICBMs, SLBMs, and nuclear-capable heavy bombers will be maintained under New START.

- All U.S. ICBMs will be “de-MIRVed” to a single warhead each to increase stability.
• Contributions by non-nuclear systems to U.S. regional deterrence and reassurance goals will be preserved by avoiding limitations on missile defenses and preserving options for using heavy bombers and long-range missile systems in conventional roles.

Maximizing Presidential decision time. The NPR concluded that the current alert posture of U.S. strategic forces – with heavy bombers on full-time alert, nearly all ICBMs on alert, and a significant number of SSBNs at sea at any given time – should be maintained for the present. It also concluded that efforts should continue to diminish further the possibility of nuclear launches resulting from accidents, unauthorized actions, or misperceptions and to maximize the time available to the President to consider whether to authorize the use of nuclear weapons. Key steps include:

• Continuing the practice of “open-ocean targeting” of all ICBMs and SLBMs so that, in the highly unlikely event of an unauthorized or accidental launch, the missile would land in the open ocean, and asking Russia to re-confirm its commitment to this practice.

• Further strengthening the U.S. command and control system to maximize Presidential decision time in a nuclear crisis.

• Exploring new modes of ICBM basing that enhance survivability and further reduce any incentives for prompt launch.

Reinforcing strategic stability. Given that Russia and China are currently modernizing their nuclear capabilities – and that both are claiming U.S. missile defense and conventionally-armed missile programs are destabilizing – maintaining strategic stability with the two countries will be an important challenge in the years ahead.

• The United States will pursue high-level, bilateral dialogues on strategic stability with both Russia and China which are aimed at fostering more stable, resilient, and transparent strategic relationships.

A strategic dialogue with Russia will allow the United States to explain that our missile defenses and any future U.S. conventionally-armed long-range ballistic missile systems are designed to address newly emerging regional threats, and are not intended to affect the strategic balance with Russia. For its part, Russia could explain its modernization programs, clarify its current military doctrine (especially the extent to which it places importance on nuclear weapons), and discuss steps it could take to allay concerns in the West about its non-strategic nuclear arsenal, such as further consolidating its non-strategic systems in a small number of secure facilities deep within Russia.

With China, the purpose of a dialogue on strategic stability is to provide a venue and mechanism for each side to communicate its views about the other’s strategies, policies, and programs on
nuclear weapons and other strategic capabilities. The goal of such a dialogue is to enhance confidence, improve transparency, and reduce mistrust. As stated in the 2010 Ballistic Missile Defense Review Report, “maintaining strategic stability in the U.S.-China relationship is as important to this Administration as maintaining strategic stability with other major powers.”

**Future nuclear reductions.** The President has directed a review of post-New START arms control objectives, to consider future reductions in nuclear weapons. Several factors will influence the magnitude and pace of future reductions in U.S. nuclear forces below New START levels.

First, any future nuclear reductions must continue to strengthen deterrence of potential regional adversaries, strategic stability vis-à-vis Russia and China, and assurance of our allies and partners. This will require an updated assessment of deterrence requirements; further improvements in U.S., allied, and partner non-nuclear capabilities; focused reductions in strategic and non-strategic weapons; and close consultations with allies and partners. The United States will continue to ensure that, in the calculations of any potential opponent, the perceived gains of attacking the United States or its allies and partners would be far outweighed by the unacceptable costs of the response.

Second, implementation of the Stockpile Stewardship Program and the nuclear infrastructure investments recommended in the NPR will allow the United States to shift away from retaining large numbers of non-deployed warheads as a hedge against technical or geopolitical surprise, allowing major reductions in the nuclear stockpile. These investments are essential to facilitating reductions while sustaining deterrence under New START and beyond.

Third, Russia’s nuclear force will remain a significant factor in determining how much and how fast we are prepared to reduce U.S. forces. Because of our improved relations, the need for strict numerical parity between the two countries is no longer as compelling as it was during the Cold War. But large disparities in nuclear capabilities could raise concerns on both sides and among U.S. allies and partners, and may not be conducive to maintaining a stable, long-term strategic relationship, especially as nuclear forces are significantly reduced. Therefore, we will place importance on Russia joining us as we move to lower levels.

**Key NPR recommendations include:**

- Conduct follow-on analysis to set goals for future nuclear reductions below the levels expected in New START, while strengthening deterrence of potential regional adversaries, strategic stability vis-à-vis Russia and China, and assurance of our allies and partners.

- Address non-strategic nuclear weapons, together with the non-deployed nuclear weapons of both sides, in any post-New START negotiations with Russia.
• Implement U.S. nuclear force reductions in ways that maintain the reliability and effectiveness of security assurances to our allies and partners. The United States will consult with allies and partners in developing its approach to post-New START negotiations.

Strengthening Regional Deterrence and Reassuring U.S. Allies and Partners

The United States is fully committed to strengthening bilateral and regional security ties and working with allies and partners to adapt these relationships to 21st century challenges. Such security relationships are critical in deterring potential threats, and can also serve our non-proliferation goals – by demonstrating to neighboring states that their pursuit of nuclear weapons will only undermine their goal of achieving military or political advantages, and by reassuring our non-nuclear U.S. allies and partners that their security interests can be protected without their own nuclear deterrent capabilities.

U.S. nuclear weapons have played an essential role in extending deterrence to U.S. allies and partners against nuclear attacks or nuclear-backed coercion by states in their region that possess or are seeking nuclear weapons. A credible U.S. “nuclear umbrella” has been provided by a combination of means – the strategic forces of the U.S. Triad, non-strategic nuclear weapons deployed forward in key regions, and U.S.-based nuclear weapons that could be deployed forward quickly to meet regional contingencies. The mix of deterrence means has varied over time and from region to region.

In Europe, forward-deployed U.S. nuclear weapons have been reduced dramatically since the end of the Cold War, but a small number of U.S. nuclear weapons remain. Although the risk of nuclear attack against NATO members is at an historic low, the presence of U.S. nuclear weapons – combined with NATO’s unique nuclear sharing arrangements under which non-nuclear members participate in nuclear planning and possess specially configured aircraft capable of delivering nuclear weapons – contribute to Alliance cohesion and provide reassurance to allies and partners who feel exposed to regional threats. The role of nuclear weapons in defending Alliance members will be discussed this year in
connection with NATO’s revision of its Strategic Concept. Any changes in NATO’s nuclear posture should only be taken after a thorough review within – and decision by – the Alliance.

In Asia and the Middle East – where there are no multilateral alliance structures analogous to NATO – the United States has maintained extended deterrence through bilateral alliances and security relationships and through its forward military presence and security guarantees. When the Cold War ended, the United States withdrew its forward deployed nuclear weapons from the Pacific region, including removing nuclear weapons from naval surface vessels and general purpose submarines. Since then, it has relied on its central strategic forces and the capacity to redeploy nuclear systems in East Asia in times of crisis.

Although nuclear weapons have proved to be a key component of U.S. assurances to allies and partners, the United States has relied increasingly on non-nuclear elements to strengthen regional security architectures, including a forward U.S. conventional presence and effective theater ballistic missile defenses. As the role of nuclear weapons is reduced in U.S. national security strategy, these non-nuclear elements will take on a greater share of the deterrence burden. Moreover, an indispensable ingredient of effective regional deterrence is not only non-nuclear but also non-military – strong, trusting political relationships between the United States and its allies and partners.

Non-strategic nuclear weapons. The United States has reduced non-strategic (or “tactical”) nuclear weapons dramatically since the end of the Cold War. Today, it keeps only a limited number of forward deployed nuclear weapons in Europe, plus a small number of nuclear weapons stored in the United States for possible overseas deployment in support of extended deterrence to allies and partners worldwide. Russia maintains a much larger force of non-strategic nuclear weapons, a significant number of which are deployed near the territories of several North Atlantic Treaty Organization (NATO) countries.

The NPR concluded that the United States will:

- Retain the capability to forward-deploy U.S. nuclear weapons on tactical fighter-bombers and heavy bombers, and proceed with full scope life extension for the B-61 bomb including enhancing safety, security, and use control.
- Retire the nuclear-equipped sea-launched cruise missile (TLAM-N).
- Continue to maintain and develop long-range strike capabilities that supplement U.S. forward military presence and strengthen regional deterrence.
- Continue and, where appropriate, expand consultations with allies and partners to address how to ensure the credibility and effectiveness of the U.S. extended deterrent. No changes
in U.S. extended deterrence capabilities will be made without close consultations with our allies and partners.

Sustaining a Safe, Secure, and Effective Nuclear Arsenal

The United States is committed to ensuring that its nuclear weapons remain safe, secure, and effective. Since the end of U.S. nuclear testing in 1992, our nuclear warheads have been maintained and certified as safe and reliable through a Stockpile Stewardship Program that has extended the lives of warheads by refurbishing them to nearly original specifications. Looking ahead three decades, the NPR considered how best to extend the lives of existing nuclear warheads consistent with the congressionally mandated Stockpile Management Program and U.S. non-proliferation goals, and reached the following conclusions:

- The United States will not conduct nuclear testing and will pursue ratification and entry into force of the Comprehensive Nuclear Test Ban Treaty.

- The United States will not develop new nuclear warheads. Life Extension Programs (LEPs) will use only nuclear components based on previously tested designs, and will not support new military missions or provide for new military capabilities.

- The United States will study options for ensuring the safety, security, and reliability of nuclear warheads on a case-by-case basis, consistent with the congressionally mandated Stockpile Management Program. The full range of LEP approaches will be considered: refurbishment of existing warheads, reuse of nuclear components from different warheads, and replacement of nuclear components.

- In any decision to proceed to engineering development for warhead LEPs, the United States will give strong preference to options for refurbishment or reuse. Replacement of nuclear components would be undertaken only if critical Stockpile Management Program goals could not otherwise be met, and if specifically authorized by the President and approved by Congress.

Consistent with these conclusions, the NPR recommended:

- Funding fully the ongoing LEP for the W-76 submarine-based warhead and the LEP study and follow-on activities for the B-61 bomb; and

- Initiating a study of LEP options for the W-78 ICBM warhead, including the possibility of using the resulting warhead also on SLBMs to reduce the number of warhead types.

In order to remain safe, secure, and effective, the U.S. nuclear stockpile must be supported by a modern physical infrastructure—comprised of the national security laboratories and a complex of supporting facilities—and a highly capable workforce with the specialized skills needed to sustain
the nuclear deterrent. As the United States reduces the numbers of nuclear weapons, the reliability of the remaining weapons in the stockpile — and the quality of the facilities needed to sustain it — become more important.

Human capital is also a concern. The national security laboratories have found it increasingly difficult to attract and retain the most promising scientists and engineers of the next generation. The Administration’s commitment to a clear, long-term plan for managing the stockpile, as well as to preventing proliferation and nuclear terrorism will enhance recruitment and retention of the scientists and engineers of tomorrow, by providing the opportunity to engage in challenging and meaningful research and development activities.

The NPR concluded:

- The science, technology and engineering base, vital for stockpile stewardship as well as providing insights for non-proliferation, must be strengthened.

- Increased investments in the nuclear weapons complex of facilities and personnel are required to ensure the long-term safety, security, and effectiveness of our nuclear arsenal. New facilities will be sized to support the requirements of the stockpile stewardship and management plan being developed by the National Nuclear Security Administration.

- Increased funding is needed for the Chemistry and Metallurgy Research Replacement Project at Los Alamos National Laboratory to replace the existing 30-year old facility, and to develop a new Uranium Processing Facility at the Y-12 Plant in Oak Ridge, Tennessee.

Looking Ahead: Toward a World without Nuclear Weapons

Pursuing the recommendations of the 2010 Nuclear Posture Review will strengthen the security of the United States and its allies and partners and bring us significant steps closer to the President’s vision of a world without nuclear weapons.

The conditions that would ultimately permit the United States and others to give up their nuclear weapons without risking greater international instability and insecurity are very demanding. Among those conditions are success in halting the proliferation of nuclear weapons, much greater transparency into the programs and capabilities of key countries of concern, verification methods and technologies capable of detecting violations of disarmament obligations, enforcement measures strong and credible enough to deter such violations, and ultimately the resolution of regional disputes that can motivate rival states to acquire and maintain nuclear weapons. Clearly, such conditions do not exist today.

But we can — and must — work actively to create those conditions. We can take the practical steps identified in the 2010 NPR that will not only move us toward the ultimate goal of eliminating all nuclear weapons worldwide but will, in their own right, reinvigorate the global nuclear non-
proliferation regime, erect higher barriers to the acquisition of nuclear weapons and nuclear materials by terrorist groups, and strengthen U.S. and international security.
A year ago in Prague, President Obama offered a new direction for coping with 21st century nuclear dangers, declaring that to overcome grave and growing threats of nuclear terrorism and nuclear proliferation, the United States will "seek the peace and security of a world without nuclear weapons." He recognized that such an ambitious goal could not be reached quickly — perhaps, he said, not in his lifetime. But the President expressed his determination to take concrete steps toward that goal, including by reducing U.S. nuclear weapons and their role in U.S. national security strategy. At the same time, he pledged that as long as nuclear weapons exist, the United States will maintain a safe, secure, and effective arsenal, both to deter potential adversaries and to assure U.S. allies and other security partners that they can count on America's security commitments.

This Nuclear Posture Review (NPR) report outlines the Administration's approach to promoting the President's agenda for reducing nuclear dangers and pursuing the goal of a world without nuclear weapons — while simultaneously advancing broader U.S. security interests, consistent with the President's national security priorities and the supporting defense strategy objectives identified in the 2010 Quadrennial Defense Review. The 2010 NPR represents the third comprehensive assessment of U.S. nuclear policy and strategy conducted by the United States since the end of the Cold War. Previous reviews were completed in 1994 and 2001.

As mandated by Congress, the 2010 NPR was conducted by the Secretary of Defense in consultation with the Secretaries of State and Energy. Within the Department of Defense, the review was led jointly by the Office of the Secretary of Defense and the Joint Staff. The Military Departments and Combatant Commands also contributed to the analytical work; there was especially close collaboration with U.S. Strategic Command. Because of the breadth of issues addressed, the review involved a number of additional departments and agencies, including the Departments of Homeland Security and Treasury, and the Office of the Director of National Intelligence. The review also benefited from extensive consultations with Congress, U.S. allies, and other interested stakeholders. The National Security Council and its supporting interagency bodies met throughout the review to consider key issues of strategy and policy.

In Presidential guidance initiating the NPR, the President called for a thorough review of U.S. nuclear weapons policies and force posture. He directed that the review bring forward options for discussion aimed at multiple objectives: reducing the role and numbers of U.S. nuclear weapons; strengthening deterrence of adversaries; reassuring allies and partners, who depend on the U.S. commitment to extended deterrence; enhancing strategic stability; and moving demonstrably toward the ultimate goal of the elimination of nuclear weapons.
A key premise of the 2010 NPR was that any successful strategy for achieving these objectives must be balanced, with movement in one area enabling and reinforcing progress in other areas. For example, increased infrastructure investment and a sound Stockpile Stewardship Program will facilitate reductions in both deployed and non-deployed nuclear weapons. The elements of such a strategy must also be integrated, both nationally – across federal agencies and between the executive and legislative branches – and internationally among a wide range of partner governments. And an effective strategy must be sustained over time, with support from a long succession of U.S. Administrations and Congresses. A balanced, integrated, and sustained strategy will require a strong bipartisan consensus. Forging such a consensus is a central purpose of this NPR.

After describing fundamental changes in the international security environment and U.S. adjustments to date, the NPR report focuses on five key objectives of our nuclear weapons policies and posture:

1. Preventing nuclear proliferation and nuclear terrorism;
2. Reducing the role of U.S. nuclear weapons in U.S. national security strategy;
3. Maintaining strategic deterrence and stability at lower nuclear force levels;
4. Strengthening regional deterrence and reassuring U.S. allies and partners; and
5. Sustaining a safe, secure, and effective nuclear arsenal.

A final section of the NPR considers the path ahead for U.S. nuclear strategy and posture over the coming years and decades.
THE CHANGED – AND CHANGING –
NUCLEAR SECURITY ENVIRONMENT

The international security environment has changed dramatically since the end of the Cold War. The threat of global nuclear war has become remote, but the risk of nuclear attack has increased.

The Threat of Nuclear Proliferation and Nuclear Terrorism

The most immediate and extreme threat today is nuclear terrorism. Al Qaeda and their extremist allies are seeking nuclear weapons. We must assume they would use such weapons if they managed to obtain them. Although terrorist groups are currently believed to lack the resources to produce weapons-useable nuclear material themselves, the vulnerability to theft or seizure of vast stocks of such nuclear materials around the world, and the availability of sensitive equipment and technologies in the nuclear black market, create a serious risk that terrorists may acquire what they need to build a nuclear weapon.

To date, the international community has made progress toward achieving a global “lock down” of nuclear weapons, materials, and associated technology, but much more work needs to be done. In addition, the United States and the international community have improving but currently insufficient capabilities to detect, interdict, and defeat efforts to covertly deliver nuclear materials or weapons—and if an attack occurs, to respond to minimize casualties and economic impact as well as to attribute the source of the attack and take strong action.

Today’s other pressing threat is nuclear proliferation. Additional countries – especially those at odds with the United States, its allies and partners, and the broader international community – may acquire nuclear weapons. In pursuit of their nuclear ambitions, North Korea and Iran have violated non-proliferation obligations, defied directives of the United Nations Security Council, pursued missile delivery capabilities, and resisted international efforts to resolve through diplomatic means the crises.
they have created. Their illicit supply of arms and sensitive material and technologies has heightened global proliferation risks and regional tensions. Their provocative behavior has increased instability in their regions. Continued non-compliance with non-proliferation norms by these and other countries would seriously weaken the Nuclear Non-Proliferation Treaty (NPT), with adverse security implications for the United States and the international community at large.

The potential for regional aggression by these states raises challenges not only of deterrence, but also of reassuring U.S. allies and partners. In the Cold War, our allies sought assurance that they would remain safe in the face of Soviet threats because the United States was demonstrably committed to their security. Today's environment is quite different. Some U.S. allies are increasingly anxious about changes in the security environment, including nuclear and missile proliferation, and desire reassurance that the United States will remain committed to their security. A failure of reassurance could lead to a decision by one or more non-nuclear states to seek nuclear deterrents of their own, an outcome which could contribute to an unraveling of the NPT regime and to a greater likelihood of nuclear weapon use.

Despite these challenges, the NPT remains a cornerstone of the non-proliferation regime and has served the international community well over the past four decades. Its fundamental bargain is still sound: all parties have a right to peaceful nuclear power; states without nuclear weapons forswear them; and those with nuclear weapons work towards disarmament. However, with clear evidence of non-compliance with the NPT, the non-proliferation regime urgently requires strengthening.

Further, the International Atomic Energy Agency (IAEA), the international body charged with applying safeguards to ensure that nuclear facilities and materials are used only for peaceful purposes, currently lacks sufficient resources and authorities necessary to carry out its mission effectively.

**Strategic Stability with Russia and China**

While facing the urgent threats of nuclear terrorism and nuclear proliferation, the United States must continue to address the more familiar challenge of ensuring strategic stability with existing nuclear powers – most notably Russia and China. Russia remains America's only peer in the area of nuclear weapons capabilities. But the nature of the U.S.-Russia strategic and political relationship has changed fundamentally since the days of the Cold War. Policy differences continue to arise between the two countries, and Russia continues to modernize its still-formidable nuclear forces. But Russia and the United States have increased their cooperation in areas of shared interest, including preventing nuclear proliferation and nuclear terrorism. And the prospects for military confrontation have declined dramatically in recent decades.
While the United States and Russia have reduced deployed nuclear weapons by about 75 percent since the end of the Cold War, each still retains more nuclear weapons than necessary for stable deterrence. As the United States and Russia reduce their deployed strategic nuclear weapons and delivery vehicles under the New Strategic Arms Reduction Treaty (New START) and a follow-on agreement to it, maintaining a stable bilateral balance and avoiding dangerous nuclear competition will be key objectives.

The United States and China are increasingly interdependent and their shared responsibilities for addressing global security threats, such as WMD proliferation and terrorism, are growing. The United States welcomes a strong, prosperous, and successful China that plays a greater global role in supporting international rules, norms, and institutions.

At the same time, the United States and China's Asian neighbors remain concerned about the pace and scope of China's current military modernization efforts, including its quantitative and qualitative modernization of its nuclear capabilities. China's nuclear arsenal remains much smaller than the arsenals of Russia and the United States. But the lack of transparency surrounding its programs — their pace and scope as well as the strategy and doctrine guiding them — raises questions about China's future strategic intentions.

Adapting to a Changed Security Environment

These changes in the nuclear threat environment — especially the heightened concern about nuclear terrorism and nuclear proliferation and the less dangerous strategic interaction between the United States and Russia — have not emerged overnight. They have developed over the last twenty years, and Administrations of both parties have responded with modifications of U.S. nuclear weapons policies and force posture. But those modifications have not gone far or fast enough. As the President has said, we have to "put an end to Cold War thinking."

- The United States has begun to shift our focus to the dangers of nuclear proliferation and nuclear terrorism, but we need to intensify our efforts to build broad international support for the rigorous measures needed to prevent these dangers.
- The United States has sought to prevent the emergence of new regional nuclear-armed states, but we need to do more to enhance regional security architectures to reassure our allies and partners that our commitment to their defense will remain strong and reliable.
- The United States and Russia have deeply reduced their nuclear forces from Cold War levels, but both still retain many more nuclear weapons than needed.
- The United States has reduced our reliance on nuclear weapons as Cold War nuclear rivalries have eased and as our conventional military forces and missile defense capabilities
have strengthened, but we have sent mixed signals about the importance we place on nuclear weapons in our national security strategy.

- The United States has maintained a safe, secure, and effective nuclear stockpile without nuclear testing since 1992, but significant investments are needed in both physical and human capital to ensure that the stockpile can be maintained without ever needing to test again.

The growing dangers of nuclear proliferation and nuclear terrorism have altered the hierarchy of our nuclear concerns and strategic objectives. In coming years, we must give top priority to discouraging additional countries from acquiring nuclear weapons capabilities and stopping terrorist groups from acquiring the materials to build nuclear bombs. At the same time, we must continue to maintain stable strategic relationships with Russia and China and counter threats posed by any emerging nuclear-armed states, thereby protecting the United States and our allies and partners against nuclear threats or intimidation, and reducing any incentives our non-nuclear allies and partners might have to seek their own nuclear deterrents.

**Implications for U.S. Nuclear Weapons Policies and Force Structure**

The massive nuclear arsenal we inherited from the Cold War era of bipolar military confrontation is poorly suited to address the challenges posed by suicidal terrorists and unfriendly regimes seeking nuclear weapons. Therefore, it is essential that we better align our nuclear policies and posture to our most urgent priorities—preventing nuclear terrorism and nuclear proliferation.

This does not mean that our nuclear deterrent has become irrelevant. Indeed, as long as nuclear weapons exist, the United States will maintain safe, secure, and effective nuclear forces, including deployed and stockpiled nuclear weapons, highly capable nuclear delivery systems and command and control capabilities, and the physical infrastructure and the expert personnel needed to sustain them. These nuclear forces will continue to play an essential role in deterring potential adversaries, reassuring allies and partners around the world, and promoting stability globally and in key regions.

But fundamental changes in the international security environment in recent years—including the growth of unrivaled U.S. conventional military capabilities, major improvements in missile defenses, and the easing of Cold War rivalries—enable us to fulfill those objectives at significantly lower nuclear force levels and with reduced reliance on nuclear weapons. Therefore, without jeopardizing our traditional deterrence and reassurance goals, we are now able to shape our nuclear weapons policies and force structure in ways that will better enable us to meet today's most pressing security challenges.
• By reducing the role and numbers of U.S. nuclear weapons—and thereby demonstrating that we are meeting our NPT Article VI obligation to make progress toward nuclear disarmament—we can put ourselves in a much stronger position to persuade our NPT partners to join with us in adopting the measures needed to reinvigorate the non-proliferation regime and secure nuclear materials worldwide against theft or seizure by terrorist groups.

• By maintaining a credible nuclear deterrent and reinforcing regional security architectures with missile defenses and other conventional military capabilities, we can reassure our non-nuclear allies and partners worldwide of our security commitments to them and confirm that they do not need nuclear weapons capabilities of their own.

• By pursuing a sound Stockpile Management Program for extending the life of U.S. nuclear weapons, we can ensure a safe, secure, and effective deterrent without the development of new nuclear warheads or further nuclear testing.

• By modernizing our aging nuclear weapons-supporting facilities and investing in human capital, we can substantially reduce the number of stockpiled nuclear weapons we retain as a hedge against technical or geopolitical surprise, accelerate the dismantlement of nuclear weapons no longer required for our deterrent, and improve our understanding of foreign nuclear weapons activities.

• By promoting strategic stability with Russia and China and improving transparency and mutual confidence, we can help create the conditions for moving toward a world without nuclear weapons and build a stronger basis for addressing the threats of nuclear proliferation and nuclear terrorism.

• By working to reduce the salience of nuclear weapons in international affairs and moving step-by-step toward
eliminating them, we can reverse the growing expectation that we are destined to live in a world with many nuclear-armed states, and decrease incentives for additional countries to hedge against an uncertain and dangerous future by pursuing nuclear options of their own. Creating these conditions will reduce the likelihood of nuclear weapon use.

In sum, the security environment has changed in fundamental ways since the end of the Cold War. The landscape of threats and challenges has evolved. But a changing landscape has also brought with it some valuable new opportunities. Accordingly, U.S. policy priorities must shift. The U.S. policy agenda must reflect a clear and current understanding of how U.S. nuclear strategy and posture shape these international dynamics.
PREVENTING NUCLEAR PROLIFERATION AND NUCLEAR TERRORISM

As part of our effort to move toward a world free of nuclear weapons, the United States will lead expanded international efforts to rebuild and strengthen the global nuclear non-proliferation regime and to accelerate efforts to prevent nuclear terrorism. Concerns have grown in recent years that unless today’s dangerous trends are arrested and reversed, before long we will be living in a world with a steadily growing number of nuclear-armed states and an increasing likelihood of terrorists getting their hands on nuclear weapons. Therefore, for the first time, the 2010 NPR places this priority atop the U.S. nuclear agenda.

The United States is committed to renewing and strengthening the Nuclear Non-Proliferation Treaty (NPT) and the global nuclear non-proliferation regime it anchors to cope with the challenges of non-compliance and of the growth of nuclear power. We support expanding access to the benefits of peaceful nuclear technology, but this must be done in a way that does not promote proliferation of nuclear weapons capabilities. To strengthen the regime, the United States seeks to champion and reaffirm through its own actions the grand bargain that underpins the treaty: states without nuclear weapons will not acquire them, states with nuclear weapons will move toward disarmament, and all Parties can have access to peaceful nuclear energy under effective verification.

As part of this effort, the United States seeks to bolster the nuclear non-proliferation regime by:

- Reversing the nuclear ambitions of North Korea and Iran. We have demonstrated that we are prepared to engage multilaterally and bilaterally with these states to arrive at negotiated solutions that provide for their political and economic integration with the international community, while verifiably confirming they are not pursuing nuclear weapons capabilities. However, their continued defiance of international norms and agreements will lead only to their further isolation and increasing international pressure.

- Strengthening International Atomic Energy Agency (IAEA) safeguards. NPT Members, particularly non-nuclear weapons states, rely for security on assurances that countries will not divert nuclear material to illicit nuclear weapons programs. IAEA safeguards are essential in maintaining that assurance. To deter and detect safeguards violations, the IAEA must be given additional financial resources and verification authorities, and all countries should adhere to the IAEA Additional Protocol. The United States is committed to expanding financial support for the regular IAEA budget and will continue to push for stronger institutional support from other states, while we continue to increase our own extra-budgetary contributions. The U.S. Next Generation Safeguards Initiative will assist...
the IAEA to confront new challenges far into the future by helping develop the tools, authorities, capabilities, technologies, expertise, and resources needed to meet current and future safeguard challenges.

- Creating consequences for non-compliance. It is not enough to detect non-compliance; violators must know that they will face consequences when they are caught. Moreover, states that violate their obligations must not be able to escape the consequences of their non-compliance by withdrawing from the NPT.

- Impeding sensitive nuclear trade. National and multilateral export and border controls must be strengthened, financial and other tools must be used to disrupt illicit proliferation networks, and tighter restrictions must be placed on the transfer of dual-use enrichment and reprocessing technologies. The United States has increased its funding to help countries improve strategic trade controls and improve targeting and inspection at border crossings. We also support development of a United Nations Security Council Resolution 1540 “trust fund” to assist countries in meeting their obligations under the resolution, including developing and enforcing national export controls to prevent non-state actors from obtaining weapons of mass destruction (WMD)-related materials and technology. We are implementing President Obama’s pledge to make the Proliferation Security Initiative into a durable international institution, under which over 90 countries coordinate, share intelligence, and build capacity to interdict WMD-related transfers. And the United States is working to detect and disrupt the financing of nuclear proliferation and terrorism by identifying and prosecuting its networks and establishing international standards and best practices.

- Promoting the peaceful uses of nuclear energy without increasing proliferation risks. President Obama has called for the development of a new framework for international nuclear energy cooperation, which the United States is pursuing with the international community through the Global Nuclear Energy Partnership, which includes 25 partner and 31 observer nations. To reduce incentives for countries to pursue indigenous fuel cycle facilities, this new framework should include international fuel banks, such as the Russian Angarsk fuel bank approved by the IAEA in February 2010, multilateral fuel-supply assurances, agreements by suppliers to take back spent fuel, and spent fuel repositories. Cradle-to-grave nuclear fuel management could be one important element of this new framework. The United States will also continue to assist other countries in benefitting from the other peaceful applications of nuclear materials, including for medical and agricultural uses and pure research.

The United States is committed to improving nuclear security worldwide in order to prevent nuclear terrorism. This cannot be accomplished by the United States alone. All states have a
fundamental responsibility to ensure the security and control of nuclear materials and weapons in their possession. Further, this ambitious agenda requires the active engagement of a broad coalition of nations acting in concert. The United States has given high priority to strengthening and accelerating international efforts to prevent nuclear terrorism by:

- Pursuing aggressively the President’s Prague initiative, endorsed in United Nations Security Council Resolution 1887, to secure all vulnerable nuclear materials worldwide. The United States will be doing so by expanding our cooperation with other countries and strengthening nuclear security standards, practices, and international safeguards.

- Hosting the April 2010 Nuclear Security Summit, where leaders of over 40 countries will commit to fight nuclear smuggling and terrorism and put in place effective nuclear security measures.

- Increasing funding in fiscal year (FY) 2011 for the National Nuclear Security Administration’s nuclear non-proliferation programs to $2.7 billion, an increase of more than 25 percent.

- Accelerating the Global Threat Reduction Initiative to remove and secure high-priority vulnerable nuclear material around the world, convert additional research reactors to operate on fuel that cannot be used in nuclear weapons, and complete the repatriation of U.S.- and Russian-origin highly enriched uranium from research reactors worldwide.

- Accelerating the International Nuclear Material Protection and Cooperation Program to install nuclear security upgrades at Russian weapons complex sites and to expand cooperation to new priority countries beyond Russia and the former Soviet Union.

- Securing and eliminating weapons of mass destruction and their means of delivery through cooperative threat reduction programs at the Departments of Defense, State, and Energy, including the flagship Nunn-Lugar program. And assisting other countries to strengthen their national capacities for nuclear materials protection, control, and...
accounting through these programs, United Nations Security Council Resolution 1540, and multilateral cooperative threat reduction programs.

- Enhancing national and international capabilities to detect and interdict smuggled nuclear materials. We are expanding the Container Security Initiative to screen U.S.-bound cargo and the Second Line of Defense and Megaports programs to install radiation detectors at key borders, airports, and seaports. We also are making the 77-country Global Initiative to Combat Nuclear Terrorism a durable international institution. The Initiative coordinates expertise, shares information, and integrates capabilities to deter, detect, interdict, mitigate, and respond to acts of nuclear terrorism.

- Continue to strengthen our nuclear forensics efforts to improve the ability to identify the source of nuclear material used or intended for use in a terrorist nuclear explosive device.

- Renewing the U.S. commitment to hold fully accountable any state, terrorist group, or other non-state actor that supports or enables terrorist efforts to obtain or use weapons of mass destruction, whether by facilitating, financing, or providing expertise or safe haven for such efforts.

U.S. arms control and disarmament efforts, as well as other means of reducing the role of nuclear weapons and moving toward a world without them, can make a major contribution to our goal of preventing nuclear proliferation and nuclear terrorism. By demonstrating that we take seriously our NPT obligation to pursue nuclear disarmament, we strengthen our ability to mobilize broad international support for the measures needed to reinforce the non-proliferation regime and secure nuclear materials worldwide. We are doing so by:

- Concluding a verifiable New Strategic Arms Reduction Treaty (New START) that limits U.S. and Russian nuclear forces to levels well below those provided for in the 1991 START Treaty and the 2002 Moscow Treaty. U.S. ratification and subsequent implementation of the new Treaty will be a concrete step on the path to nuclear disarmament. The verification and transparency measures included in the Treaty will help ensure stability and predictability in the U.S.-Russia strategic relationship. Implementation of the treaty also will set the stage for deeper, verifiable nuclear reductions. As the United States and Russia reduce their deployed weapons through New START, the United States will pursue negotiations for deeper reductions and greater transparency in partnership with Russia. Over time, we will also engage with other nuclear weapon states, including China, on ways to expand the nuclear reduction process in the future. This process should include efforts to improve transparency of states' nuclear policies, strategies, and programs.
• Pursuing ratification and early entry into force of the Comprehensive Nuclear Test Ban Treaty (CTBT). Ratification of the CTBT is central to leading other nuclear weapons states toward a world of diminished reliance on nuclear weapons, reduced nuclear competition, and eventual nuclear disarmament. U.S. ratification could also encourage ratification by other states, including China, and provide incentives for the remaining states to work toward entry into force of the treaty. Further, U.S. ratification of the CTBT would enable us to encourage non-NPT Parties to follow the lead of the NPT-recognized Nuclear Weapon States in formalizing a heretofore voluntary testing moratorium, and thus strengthen strategic stability by reducing the salience of nuclear weapons in those states’ national defense strategies.

• Seeking commencement of negotiations on a verifiable Fissile Material Cutoff Treaty (FMCT) to halt the production of fissile material for use in nuclear weapons. Given that some states continue to produce fissile materials for nuclear weapons, a multilateral, binding FMCT is needed to provide a quantitative cap on the potential growth of existing nuclear weapons stockpiles. As a result, the United States is committed to prompt negotiation of an FMCT with appropriate monitoring and verification provisions. The United States recognizes that such negotiations will be complex and will take time; however, a carefully crafted and verifiable FMCT will enhance our national security and contribute to nuclear stability worldwide.

• Working with the Russian Federation to jointly eliminate 68 tons of weapons-grade plutonium no longer needed for defense purposes.

• Initiating a comprehensive national research and development program to support continued progress toward a world free of nuclear weapons, including expanded work on verification technologies and the development of transparency measures. Such technologies will help us manage risk as we continue down this path by ensuring that we are able to detect potential clandestine weapons programs, foreign nuclear materials, and weapons production facilities and processes.
REducing the Role of U.S. Nuclear Weapons

The role of nuclear weapons in U.S. national security and U.S. military strategy has been reduced significantly in recent decades, but further steps can and should be taken at this time.

The fundamental role of U.S. nuclear weapons, which will continue as long as nuclear weapons exist, is to deter nuclear attack on the United States, our allies, and partners.

During the Cold War, the United States also reserved the right to use nuclear weapons in response to a massive conventional attack by the Soviet Union and its Warsaw Pact allies. Moreover, after the United States gave up its own chemical and biological weapons (CBW) pursuant to international treaties (while some states continued to possess or pursue them) the United States reserved the right to employ nuclear weapons to deter CBW attack on the United States and its allies and partners.

Since the end of the Cold War, the strategic situation has changed in fundamental ways.

First, and foremost, the Soviet Union and the Warsaw Pact are gone. Russia is not an enemy, and is increasingly a partner in confronting proliferation and other emerging threats. And all of the non-Soviet former members of the Warsaw Pact are now members of the North Atlantic Treaty Organization (NATO).

Second, U.S., allied, and partner conventional military capabilities now provide a wide range of effective conventional response options to deter and, if necessary, defeat conventional threats from regional actors. Major improvements in missile defenses and counter-weapons of mass destruction (WMD) capabilities have strengthened deterrence and defense against CBW attack.

Given these developments, the role of U.S. nuclear weapons to deter and respond to non-nuclear attacks—conventional, biological, or chemical—has declined significantly. The United States will continue to reduce the role of nuclear weapons in deterring non-nuclear attack.

To that end, the United States is now prepared to strengthen its long-standing "negative security assurance" by declaring that the United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the Nuclear Non-Proliferation Treaty (NPT) and in compliance with their nuclear non-proliferation obligations.

This revised assurance is intended to underscore the security benefits of adhering to and fully complying with the NPT and persuade non-nuclear weapon states party to the Treaty to work with the United States and other interested parties to adopt effective measures to strengthen the non-proliferation regime.
In making this strengthened assurance, the United States affirm that any state eligible for the assurance that uses CBW against the United States or its allies and partners would face the prospect of a devastating conventional military response—and that any individuals responsible for the attack, whether national leaders or military commanders, would be held fully accountable. Given the catastrophic potential of biological weapons and the rapid pace of bio-technology development, the United States reserves the right to make any adjustment in the assurance that may be warranted by the evolution and proliferation of the biological weapons threat and U.S. capacities to counter that threat.

In the case of countries not covered by this assurance—states that possess nuclear weapons and states not in compliance with their nuclear non-proliferation obligations—there remains a narrow range of contingencies in which U.S. nuclear weapons may still play a role in deterring a conventional or CBW attack against the United States or its allies and partners. The United States is therefore not prepared at the present time to adopt a universal policy that the “sole purpose” of U.S. nuclear weapons is to deter nuclear attack on the United States and our allies and partners, but will work to establish conditions under which such a policy could be safely adopted.

Yet, this does not mean that our willingness to use nuclear weapons against countries not covered by the new assurance has in any way increased. Indeed, the United States wishes to stress that it would only consider the use of nuclear weapons in extreme circumstances to defend the vital interests of the United States or its allies and partners.

It is in the U.S. interest and that of all other nations that the nearly 65-year record of nuclear non-use be extended forever. As President Ronald Reagan declared, “A nuclear war cannot be won and must never be fought.”

In summary, the following principles will guide U.S. nuclear policies:

- The United States will meet its commitment under Article VI of the NPT to pursue nuclear disarmament and will make demonstrable progress over the next five to ten years.
We will work to reduce the role and numbers of U.S. nuclear weapons while enhancing security for ourselves, and our allies and partners.

- The United States will continue to strengthen conventional capabilities and reduce the role of nuclear weapons in deterring non-nuclear attacks, with the objective of making deterrence of nuclear attack on the United States or our allies and partners the sole purpose of U.S. nuclear weapons.

- The United States would only consider the use of nuclear weapons in extreme circumstances to defend the vital interests of the United States or its allies and partners.

- The United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations.
MAINTAINING STRATEGIC DETERRENCE AND STABILITY AT REDUCED NUCLEAR FORCE LEVELS

Since the end of the Cold War, the United States and Russia have reduced operationally deployed strategic nuclear weapons by approximately 75 percent, but both still retain many more nuclear weapons than needed for deterrence. As an initial step, the Administration is committed to working with Russia to preserve stability at significantly reduced nuclear force levels, through the New Strategic Arms Reduction Treaty (New START).

Beyond New START's bilateral reductions in operationally deployed strategic forces, the NPR examined ways to minimize potential nuclear instability by maximizing the decision time provided to the President. Analysis also focused on our limited non-strategic nuclear weapons posture. Moreover, in our commitment to the long-term goal of a world without nuclear weapons, the NPR examined the full range of factors that will allow deeper reductions in U.S. nuclear force levels.

It is also clear that maintaining strategic stability at reduced force levels will be an enduring and evolving challenge for the United States in the years ahead. Ongoing nuclear and other military modernization efforts by Russia and China compound this challenge, making the need for strategic stability dialogues all the more critical.

**Toward New START**

U.S. strategic forces—comprised of submarine-launched ballistic missiles (SLBMs), inter-continental ballistic missiles (ICBMs), and nuclear-capable heavy bombers—continue to underwrite deterrence of nuclear attack against the United States, our allies, and partners.

In the two decades since the end of the Cold War, the United States has reduced deployed warheads on
strategic delivery systems by approximately 75 percent. The next step in this process is to replace the expired 1991 START I Treaty with another verifiable agreement, New START. U.S. and Russian negotiators have recently completed this agreement.

An early task of the NPR was to develop U.S. positions for the New START negotiations. In so doing, the review explored how a range of force structures might affect strategic stability at lower numbers. Further the NPR considered whether the nuclear Triad of SLBMs, ICBMs, and heavy bombers should be retained, and, if so, the necessary investments to sustain each Triad leg.

Determining New START Positions

Detailed NPR analysis of potential reductions in strategic weapons, conducted in spring 2009, concluded that the United States could sustain stable deterrence with significantly fewer deployed strategic nuclear warheads, assuming parallel Russian reductions. The NPR analysis considered several specific levels of nuclear weapons, all below current levels of approximately 2,200 deployed strategic warheads. Its conclusions, approved by the President, the Secretary of Defense, the Joint Chiefs of Staff, and Commander, U.S. Strategic Command, formed the basis for U.S. negotiations with Russia on New START. Because New START is intended to be only an initial step in a continuing process of bilateral nuclear reductions, this initial analysis used conservative assumptions to determine acceptable reductions in deployed strategic nuclear weapons.

New START will result in significant mutual limits in deployed strategic nuclear warheads, well below the 2,200 allowed under the Strategic Offensive Reductions Treaty (SORT), also known as the Moscow Treaty, which expires in 2012.

The NPR conducted detailed analysis to determine an appropriate limit on nuclear warheads and strategic delivery vehicles (SDVs). After determining that the United States should retain a nuclear Triad under New START, the NPR went on to assess the appropriate force structure for each Triad leg, namely the required numbers of strategic nuclear submarines (SSBNs) and SLBMs, ICBMs, and nuclear-capable heavy bombers. Analysis focused on meeting four requirements:

- Supporting strategic stability through an assured second-strike capability;
- Retaining sufficient force structure in each leg to allow the ability to hedge effectively by shifting weight from one Triad leg to another if necessary due to unexpected technological problems or operational vulnerabilities;
- Retaining a margin above the minimum required nuclear force structure for the possible addition of non-nuclear prompt global strike capabilities (conventionally-armed ICBMs or SLBMs) that would be accountable under the Treaty; and
• Maintaining the needed capabilities over the next several decades or more, including retaining a sufficient cadre of trained military and civilian personnel and adequate infrastructure.

The 1991 START I, which expired in December 2009, limited the United States and Russia to 1600 SDVs each. While the United States has approximately 1,200 SDVs still accountable under the now-expired Treaty's counting rules, fewer than 900 are associated with deployed strategic nuclear weapons. The remainder are essentially "phantoms:\" either conventional-only delivery systems, particularly B-1B bombers and SSGN submarines (converted from SSBNs to carry conventional sea-launched cruise missiles), or ICBM silos and heavy bombers that are no longer in use but which have not yet been eliminated.

The Secretary of Defense, the Joint Chiefs of Staff, and the Commander of U.S. Strategic Command supported reductions in limits on deployed as well as non-deployed U.S. SDVs. This recommendation was conditional on the exclusion of conventional B-1B bombers and U.S. SSGN submarines from accountability under the Treaty and the acceptance of the potential conversion of a subset of the B-52 fleet to a conventional-only capability.

Building on NPR analysis, the United States and Russia have agreed to mutual limits under the New START:

• A limit of 1,550 accountable strategic warheads;

• A separate limit of 700 deployed ICBMs, deployed SLBMs, and deployed nuclear-capable heavy bombers; and

• A combined limit of 800 deployed and non-deployed ICBM launchers, SLBM launchers, and nuclear-capable heavy bombers.

Under the New START, dual-capable bombers will count as both one strategic delivery vehicle, and as one warhead. This counting rule was adopted in recognition of the facts that heavy bombers do not pose a first-strike threat to either side, and that on a day-to-day basis few or no bombers are loaded with nuclear weapons.

The Future of the Triad

After considering a wide range of possible options for the U.S. strategic nuclear posture, including some that involved eliminating a leg of the Triad, the NPR concluded that for planned reductions under New START, the United States should retain a smaller Triad of SLBMs, ICBMs, and heavy bombers. Retaining all three Triad legs will best maintain strategic stability at reasonable cost, while hedging against potential technical problems or vulnerabilities.
Each leg of the Triad has advantages that warrant retaining all three legs at this stage of reductions. Strategic nuclear submarines (SSBNs) and the SLBMs they carry represent the most survivable leg of the U.S. nuclear Triad. Today, there appears to be no viable near or mid-term threats to the survivability of U.S. SSBNs, but such threats—or other technical problems—cannot be ruled out over the long term. Single-warhead ICBMs contribute to stability, and like SLBMs are not vulnerable to air defenses. Unlike ICBMs and SLBMs, bombers can be visibly deployed forward, as a signal in crisis to strengthen deterrence of potential adversaries and assurance of allies and partners.

While significantly reducing the size of the technical hedge overall, the United States will retain the ability to "upload" some nuclear warheads as a technical hedge against any future problems with U.S. delivery systems or warheads, or as a result of a fundamental deterioration of the security environment. For example, if there were a problem with a specific ICBM warhead type, it could be taken out of service and replaced with warheads from another ICBM warhead type, and/or nuclear warheads could be uploaded on SLBMs and/or bombers.

Sustaining Strategic Submarines (SSBNs)

The NPR concluded that ensuring a survivable U.S. response force requires continuous at-sea deployments of SSBNs in both the Atlantic and Pacific oceans, as well as the ability to surge additional submarines in crisis. To support this requirement, the United States currently has fourteen nuclear-capable Ohio-class SSBNs. By 2020, Ohio-class submarines will have been in service longer than any previous submarines. Therefore as a prudent hedge, the Navy will retain all 14 SSBNs for the near-term. Depending on future force structure assessments, and on how remaining SSBNs age in the coming years, the United States will consider reducing from 14 to 12 Ohio-class submarines in the second half of this decade. This decision will not affect the number of deployed nuclear warheads on SSBNs.
To maintain an at-sea presence for the long-term, the United States must continue development of a follow-on to the Ohio-class submarine. The first Ohio-class submarine retirement is planned for 2027. Since the lead times associated with designing, building, testing, and deploying new submarines are particularly long, the Secretary of Defense has directed the Navy to begin technology development of an SSBN replacement.

Today, there appears to be no credible near or mid-term threats to the survivability of U.S. SSBNs. However, given the stakes involved, the Department of Defense will continue a robust SSBN Security Program that aims to anticipate potential threats and develop appropriate countermeasures to protect current and future SSBNs.

A "DeMIRVed" ICBM Force

Today, the United States has 450 deployed silo-based Minuteman III ICBMs, each with one to three warheads. The NPR considered the type and number of ICBMs needed for stable deterrence, and to serve as a hedge against any future vulnerability of U.S. SSBNs.

The United States will "deMIRV" all deployed ICBMs, so that each Minuteman III ICBM has only one nuclear warhead. (A "MIRVed" ballistic missile carries Multiple Independently-targetable Reentry Vehicles (MIRVs). "DeMIRVing" would reduce each missile to a single warhead.) This step will enhance the stability of the nuclear balance by reducing the incentives for either side to strike first.

ICBMs provide significant advantages to the U.S. nuclear force posture, including extremely secure command and control, high readiness rates, and relatively low operating costs. The Department of Defense will continue the Minuteman III Life Extension Program with the aim of keeping the fleet in service to 2030, as mandated by Congress. Although a decision on any follow-on ICBM is not needed for several years, studies to inform that decision are needed now. Accordingly, the Department of Defense will begin initial study of alternatives in fiscal years (FY) 2011 and 2012. This study will consider a range of possible deployment options, with the objective of defining a cost-effective approach that supports continued reductions in U.S. nuclear weapons while promoting stable deterrence.
A Smaller and Highly Capable Nuclear Bomber Force

The United States currently has 76 B-52H bombers and 18 B-2 bombers that can be equipped with nuclear weapons. The NPR determined that the Air Force will retain nuclear-capable bombers, while converting some B-52Hs to a conventional-only role.

There are two principal reasons to retain nuclear-capable – or more accurately dual-capable – bombers. First, this capability provides a rapid and effective hedge against technical challenges with another leg of the Triad, as well as geopolitical uncertainties. Second, nuclear-capable bombers are important to extended deterrence of potential attacks on U.S. allies and partners. Unlike ICBMs and SLBMs, heavy bombers can be visibly forward deployed, thereby signaling U.S. resolve and commitment in crisis.

U.S. dual-capable heavy bombers will not be placed on full-time nuclear alert, and so will provide additional conventional firepower. The value of heavy bombers has been demonstrated multiple times since World War II, including in Desert Storm, Kosovo, Operation Iraqi Freedom, and Operation Enduring Freedom. The Department of Defense (DoD) will invest more than $1 billion over the next five years to support upgrades to the B-2 stealth bomber. These enhancements will help sustain survivability and improve mission effectiveness.

DoD is also studying the appropriate mix of long-range strike capabilities, including heavy bombers as well as non-nuclear prompt global strike, in follow-on analysis to the 2010 Quadrennial Defense Review and the NPR. This analysis will affect the Department’s FY 2012 budget proposal. In addition, the Air Force will conduct an assessment of alternatives to inform decisions in FY 2012 about whether and (if so) how to replace the current air-launched cruise missile (ALCM), which will reach the end of its service life later in the next decade.

DoD is also studying emerging challenges in the defense industrial base. As commitments are made to life extend or replace current weapons, challenges are likely to emerge that could impede needed progress. Steps can be taken now to mitigate some of these risks. An example is in the production of solid rocket motors. Across the U.S. Government, there are three users of the solid rocket motor industry: the National Aeronautics and Space Administration (NASA) for shuttle boosters; the Air Force for Minuteman III, and the Navy for Trident II D-5. None of them has immediate plans for a new large solid rocket motor design. With current plans to sustain the
Minuteman III and Trident II strategic missiles for at least another two decades, the nation will need technically skilled personnel to address the unknown future challenges associated with the aging of these systems. In order to revive the health of this industry, a research and development program is being initiated that focuses on commonality between the Military Departments and joint scalable flight test demonstrations.

In sum, the NPR concluded:

- Stable deterrence can be maintained while reducing accountable U.S. strategic delivery vehicles by approximately 50 percent from the START level and reducing accountable strategic warheads by approximately 30 percent from the 2002 Moscow Treaty level.
- During the ten-year duration of New START, the nuclear Triad of ICBMs, SLBMs, and heavy bombers will be maintained.
- All U.S. ICBMs will be “de-MIRVed” to a single warhead each to increase stability.
- Some ability to “upload” non-deployed nuclear weapons on existing delivery vehicles should be retained as a hedge against technical or geopolitical surprise. Preference will be given to upload capacity for bombers and strategic submarines.
- Contributions by non-nuclear systems to U.S. regional deterrence and reassurance goals will be preserved by avoiding limitations on missile defenses in New START and ensuring that New START will not preclude options for using heavy bombers or long-range missile systems in conventional roles.

The NPR conducted extensive analysis of alternative force structures under a New START Treaty, and the Department of Defense will define its planned force structure under the Treaty after taking account of this work. The United States will retain the ability to adjust this posture under New START as needed to account for unexpected technological developments or operational vulnerabilities, or geo-political surprise.

**Maximizing Presidential Decision Time**

Maximizing decision time for the President can further strengthen strategic stability at lower force levels. Thus, the NPR considered changes to existing nuclear policies and postures that directly affect potential crisis stability, including alert postures and the Nuclear Command, Control, and Communication (NC3) system.

The NPR examined possible adjustments to the current alert posture of U.S. strategic forces. Today, U.S. nuclear-capable heavy bombers are off full-time alert, nearly all ICBMs remain on alert, and a significant number of SSBNs are at sea at any given time. The NPR concluded that this posture should be maintained.
The NPR reaffirmed the current practice of "open-ocean targeting" of all ICBMs and SLBMs so that, in the highly unlikely event of an accidental launch, the missile would land in the open ocean. The United States will ask Russia to reaffirm its commitment to continue this practice, which was mutually agreed in 1994.

The NPR considered the possibility of reducing alert rates for ICBMs and at-sea rates of SSBNs, and concluded that such steps could reduce crisis stability by giving an adversary the incentive to attack before "re-alerting" was complete. At the same time, the NPR concluded that returning heavy bombers to full-time nuclear alert was not necessary, assuming the other two Triad legs retained a significant alert rate.

Looking to the longer term, the NPR initiated studies that may lead to future reductions in alert posture. For example, in an initial study of possible follow-on systems to the Minuteman III ICBM force, the Department of Defense will explore whether new modes of being may ensure the survivability of this leg of the Triad while eliminating or reducing incentives for prompt launch.

Additionally, the NPR examined the effectiveness of our command and control of U.S. nuclear forces as an essential element in ensuring crisis stability, deterrence, and the safety, security and effectiveness of our nuclear stockpile. The DoD NC3 system enables informed and timely decisions by the President, the sole authority for nuclear employment, and execution of Presidential nuclear response options.

The Secretary of Defense has directed a number of initiatives to further improve the resiliency of the NC3 system and the capabilities for the fully deliberative control of the force in time of crisis. The Department of Defense has taken steps to strengthen NC3 in the FY 2011 budget request, including modernizing "legacy" single-purpose NC3 capabilities to meet current and projected challenges, and continuing to invest in secure voice conferences for NC3. An interagency study is being initiated to determine the investment needed and the organizational structure best suited to further strengthen the NC3 capabilities. This study, led by DoD, will begin in 2010 and provide a long-term strategy that will inform our-year budget submission to Congress.

The NPR concluded that the United States will:
• Maintain the current alert posture of U.S. strategic forces: U.S. nuclear-capable heavy bombers off full-time alert, nearly all ICBMs on alert, and a significant number of SSBNs at sea at any given time.

• Continue the practice of “open-ocean targeting” of all ICBMs and SLEMs so that, in the highly unlikely event of an unauthorized or accidental launch, the missile would land in the open ocean. The United States will ask Russia to re-confirm its commitment to this practice.

• Make new investments in the U.S. command and control system to maximize Presidential decision time in a nuclear crisis.

• Explore new modes of ICBM basing that could enhance survivability and further reduce any incentives for prompt launch. Such an assessment will be part of the Department of Defense’s study of possible replacements for the current ICBM force.

Non-Strategic Nuclear Weapons:
The United States has reduced its non-strategic (or "tactical") nuclear weapons dramatically since the end of the Cold War. Today, it keeps only a limited number of forward deployed nuclear weapons in Europe, plus a small number of nuclear weapons stored in the United States, available for global deployment in support of extended deterrence to allies and partners. Russia maintains a much larger force of non-strategic nuclear weapons, a significant number of which are deployed near the territories of several North Atlantic Treaty Organization (NATO) countries and are therefore a concern to NATO.

Non-strategic nuclear weapons, together with the non-deployed nuclear weapons of both sides, should be included in any future reduction arrangements between the United States and Russia. The United States will consult with our allies regarding the future basing of nuclear weapons in Europe, and is committed to making consensus decisions through NATO processes. In cooperation with allies and partners, the NPR has determined that the following steps will be taken.

• The Air Force will retain a dual-capable fighter (the capability to deliver both conventional and nuclear weapons) as it replaces F-16s with the F-35 Joint Strike Fighter. As described in more detail below, the United States will also conduct a full scope B-61 (nuclear bomb) Life Extension Program to ensure its functionality with the F-35 and to include making sure—safety, security, and use control—enhancements to maintain confidence in the B-61. These decisions ensure that the United States will retain the capability to forward-deploy non-strategic nuclear weapons in support of its Alliance commitments. These decisions do not presume the results of future decisions within
NATO about the requirements of nuclear deterrence and nuclear sharing, but keep open all options.

- The United States will retire the nuclear-equipped sea-launched cruise missile (TLAM-N). This system serves a redundant purpose in the U.S. nuclear stockpile. It has been one of a number of means to forward-deploy nuclear weapons in time of crisis. Other means include forward-deployment of bombers with either bombs or cruise missiles, as well as forward-deployment of dual-capable fighters. In addition, U.S. ICBMs and SLBMs are capable of striking any potential adversary. The deterrence and assurance roles of TLAM-N can be adequately substituted by these other means, and the United States remains committed to providing a credible extended deterrent posture and capabilities.

As these NPR decisions are implemented and as we work with our allies and partners to strengthen security while reducing the role and numbers of nuclear weapons, we will continue close consultations with allies and partners. No changes to U.S. extended deterrence capabilities will be made without continued close consultation with allies and partners.

These decisions are embedded in a broader approach to the emerging challenges of extended deterrence that is reflected in not just the NPR but also the 2010 Ballistic Missile Defense Review (BMDR) and 2010 Quadrennial Defense Review (QDR). The United States seeks to significantly strengthen regional security architectures in a comprehensive way. It seeks improved peacetime approaches that fully integrate “whole of government” approaches as well as the “hard” and “soft power” tools of the United States and its allies and partners, including an overall balance of conventional military power that serves the purposes of security and peace. U.S. nuclear weapons will play a role in the deterrence of regional states so long as those states have nuclear weapons, but the decisions taken in the NPR, BMDR, and QDR reflect the U.S. desire to increase reliance on non-nuclear means to accomplish our objectives of deterring such states and reassuring our allies and partners.

Reinforcing Strategic Stability

Given that Russia and China are currently modernizing their nuclear capabilities — and that both are claiming U.S. missile defense and conventionally-armed missile programs are destabilizing — maintaining strategic stability with the two countries will be an important challenge in the years ahead.

- The United States will therefore pursue high-level, bilateral dialogues with Russia and China aimed at promoting more stable, resilient, and transparent strategic relationships.

A strategic dialogue with Russia will allow the United States to explain that our missile defenses and any future U.S. conventionally-armed long-range ballistic missile systems are designed to address newly emerging regional threats, and are not intended to affect the strategic balance with
Russia. For its part, Russia could explain its modernization programs, clarify its current military doctrine (especially the extent to which it places importance on nuclear weapons), and discuss steps it could take to allay concerns in the West about its non-strategic nuclear arsenal, such as further consolidating its non-strategic systems in a small number of secure facilities deep within Russia.

A bilateral dialogue would also provide an opportunity for the two sides to consider wide-ranging missile defense cooperation, building on a joint statement signed by President Obama and President Medvedev in July 2009, and addressing such areas as integrating U.S. and Russian sensors, developing joint missile defense architectures, and conducting joint testing, research and development, modeling and simulations, and exercises.

With China, the purpose of a dialogue on strategic stability is to provide a venue and mechanism for each side to communicate its views about the other’s strategies, policies, and programs on nuclear weapons and other strategic capabilities. The goal of such a dialogue is to enhance confidence, improve transparency, and reduce mistrust. As stated in the 2010 Ballistic Missile Defense Review Report, “maintaining strategic stability in the U.S.-China relationship is as important to this Administration as maintaining strategic stability with other major powers.”

Building more stable strategic relationships with Russia and China could contribute to greater restraint in those countries’ nuclear programs and postures, which could have a reassuring and stabilizing effect in their regions. It could also facilitate closer cooperation by those two countries with the United States on measures to prevent nuclear proliferation and nuclear terrorism.

**Future Nuclear Reductions**

The United States is committed to the long-term goal of a world free of nuclear weapons. The President has directed a review of potential future reductions in U.S. nuclear weapons below New START levels. Several factors will influence the magnitude and pace of such reductions.

First, any future nuclear reductions must continue to strengthen deterrence of potential regional adversaries, strategic stability vis-à-vis Russia and China, and assurance of our allies and partners.
This will require an updated assessment of deterrence requirements; further improvements in U.S., allied, and partner non-nuclear capabilities; focused reductions in strategic and non-strategic weapons; and close consultations with allies and partners. The United States will continue to ensure that, in the calculations of any potential opponent, the perceived gains of attacking the United States or its allies and partners would be far outweighed by the unacceptable costs of the response.

Second, implementation of the Stockpile Stewardship Program and the nuclear infrastructure investments recommended in the NPR will allow the United States to shift away from retaining large numbers of non-deployed warheads as a hedge against technical or geopolitical surprise, allowing major reductions in the nuclear stockpile. These investments are essential to facilitating reductions while sustaining deterrence under New START and beyond.

Third, Russia’s nuclear force will remain a significant factor in determining how much and how fast we are prepared to reduce U.S. forces. Following ratification and entry into force of New START, the Administration will pursue a follow-on agreement with Russia that binds both countries to further reductions in all nuclear weapons. Because of our improved relations, the need for strict numerical parity between the two countries is no longer as compelling as it was during the Cold War. But large disparities in nuclear capabilities could raise concerns on both sides and among U.S. allies and partners, and may not be conducive to maintaining a stable, long-term strategic relationship, especially as nuclear forces are significantly reduced. Therefore, we will place importance on Russia joining us as we move to lower levels.

The President has directed follow-on analysis to the NPR that considers the above three factors, and others as appropriate, to set goals for future U.S.-Russia reductions in nuclear weapons below New START levels. The size and pace of U.S. nuclear force reductions will be implemented in ways that maintain the reliability and effectiveness of our security assurances to our allies and partners.

Following ratification and entry into force of New START, the Administration will pursue discussions with Russia on further reductions and transparency, which could be pursued through formal agreements and/or parallel voluntary measures. These follow-on reductions should be broader in scope than previous bilateral agreements, addressing all the nuclear weapons of the two countries, not just deployed strategic nuclear weapons.
STRENGTHENING REGIONAL DETERRENCE
AND REASSURING U.S. ALLIES AND PARTNERS

U.S. allies and partners are on the front lines of a changing global security environment. Some are enjoying unprecedented security and accordingly seek an acceleration of efforts to reduce reliance on nuclear deterrence. Others face new challenges to their security and look to the United States for continued partnership in safeguarding their interests. Among their neighbors are nuclear proliferators, potential smugglers of weapons of mass destruction (WMD), and weak and failing states. Some also feel the pressures of neighboring major powers asserting stronger regional roles, in some cases by nuclear means.

Accordingly, the United States is fully committed to strengthening bilateral and regional security ties and working closely with its allies and partners to adapt these relationships to emerging 21st century requirements. We will continue to assure our allies and partners of our commitment to their security and to demonstrate this commitment not only through words, but also through deeds. This includes the continued forward deployment of U.S. forces in key regions, strengthening of U.S. and allied non-nuclear capabilities, and the continued provision of extended deterrence. Such security relationships are critical not only in deterring potential threats, but can also serve our non-proliferation goals – by demonstrating to neighboring states that their pursuit of nuclear weapons will only undermine their goal of achieving military or political advantages, and by reassuring non-nuclear U.S. allies and partners that their security interests can be protected without their own nuclear deterrent capabilities. Further, the United States will work with allies and partners to strengthen the global non-proliferation regime, especially the implementation of existing commitments within their regions.

Security architectures in key regions will retain a nuclear dimension as long as nuclear threats to U.S. allies and partners remain. U.S. nuclear weapons have played an essential role in extending deterrence to U.S. allies and partners against nuclear attacks or nuclear-backed coercion by states in their region that possess or are seeking nuclear weapons. A credible U.S. “nuclear umbrella” has been provided by a combination of means – the strategic forces of the U.S. Triad, non-
strategic nuclear weapons deployed forward in key regions, and U.S.-based nuclear weapons that could be deployed forward quickly to meet regional contingencies.

The mix of deterrence means has varied over time and from region to region. During the Cold War, the United States forward-deployed nuclear weapons in both Europe and Asia, and retained the capability to increase those deployments if needed. At the end of the Cold War, a series of steps were taken to dramatically reduce the forward presence of U.S. nuclear weapons. Today, there are separate choices to be made in partnership with allies in Europe and Asia about what posture best serves our shared interests in deterrence and assurance and in moving toward a world of reduced nuclear dangers.

In Europe, forward-deployed U.S. nuclear weapons have been reduced dramatically since the end of the Cold War, but a small number of U.S. nuclear weapons remain. Although the risk of nuclear attack against North Atlantic Treaty Organization (NATO) members is at an historic low, the presence of U.S. nuclear weapons – combined with NATO’s unique nuclear sharing arrangements under which non-nuclear members participate in nuclear planning and possess specially configured aircraft capable of delivering nuclear weapons – contribute to Alliance cohesion and provide reassurance to allies and partners who feel exposed to regional threats. The role of nuclear weapons in defending Alliance members will be discussed this year in connection with NATO’s revision of its Strategic Concept. Any changes in NATO’s nuclear posture should only be taken after a thorough review within – and decision by – the Alliance.

In Asia and the Middle East – where there are no multilateral alliance structures analogous to NATO – the United States has mainly extended deterrence through bilateral alliances and security relationships and through its forward military presence and security guarantees. When the Cold War ended, the United States withdrew its forward-deployed nuclear weapons from the Pacific region, including removing nuclear weapons from naval surface vessels and general purpose submarines. Since then, it has relied on its central strategic forces and the capacity to redeploy non-strategic nuclear systems in East Asia, if needed, in times of crisis.

The Administration is pursuing strategic dialogues with its allies and partners in East Asia and the Middle East to determine how best to cooperatively strengthen regional security architectures to enhance peace and security, and reassure them that U.S. extended deterrence is credible and effective.

**Regional Security Architectures**

Enhancing regional security architectures is a key part of the U.S. strategy for strengthening regional deterrence while reducing the role and numbers of nuclear weapons. These regional security architectures include effective missile defense, counter-WMD capabilities, conventional power-projection capabilities, and integrated command and control – all underwritten by strong
political commitments. The goal is to ensure that if states attempt to attack U.S. forces or our allies and partners, their attacks will be blunted and their aims denied by an enhanced set of capabilities — and that these states understand this reality and so are deterred from threatening or undertaking such an attack.

Strengthening the non-nuclear elements of regional security architectures is vital to moving toward a world free of nuclear weapons. The United States is positioned with capabilities across all domains to deter a wide range of attacks or forms of coercion against itself, its allies, and partners. Credible deterrence depends on land, air, and naval forces capable of fighting limited and large-scale conflicts in anti-access environments, as well as forces prepared to respond to the full range of challenges posed by state and non-state groups. These forces are enabled by U.S. capabilities to protect its assets in cyberspace and outer space and enhanced by U.S. capabilities to deny adversaries' objectives through resilient infrastructure (including command and control systems), global basing and posture, and ballistic missile defense and counter-WMD capabilities.

Effective missile defenses are an essential element of the U.S. commitment to strengthen regional deterrence against states of concern. Thus, while the United States will maintain a nuclear deterrent to cope with such states, we are also bolstering the other critical elements of U.S. deterrence, including conventional and ballistic missile defense capabilities.

The U.S. nuclear posture has a vital role to play in regional security architectures. Proliferating states must understand that any attack on the United States, or our allies and partners, will be defeated, and any use of nuclear weapons will be met with a response that would be effective and overwhelming. The President, as Commander-in-Chief, will determine the precise nature of any U.S. response. But by pursuing nuclear weapons, such states must understand that they have significantly raised the stakes of any conflict.

**Key Initiatives**

Enduring alliances and broad-based political relationships are the foundation of strategic stability and security. The United States will work closely with allies and partners across the globe to ensure strong political and military ties, based on a common understanding of the challenges and opportunities of the emerging security environment, and strengthen regional deterrence. The United States will:

- Continue to work extensively with allies and partners to build enhanced regional security architectures, including non-nuclear capabilities for deterrence, helping to build partner capacity, conducting combined exercises and training, and sustaining a forward presence in key regions — as described in the 2010 Quadrennial Defense Review (QDR) and the 2010 Ballistic Missile Defense Review (BMDR).
• Continue and, where appropriate, expand ongoing bilateral and multilateral discussions with allies and partners, including in Europe, Northeast Asia, Southwest Asia, and the Middle East, on the most effective ways to enhance regional stability in the near-term and long-term.

• Work with allies and partners to respond to regional threats by deploying effective missile defenses, including in Europe, Northeast Asia, the Middle East, and Southwest Asia. This includes pursuing a Phased Adaptive Approach in these regions – as described in detail in the 2010 BMDR.

• Strengthen counter-WMD capabilities, including improved U.S. and allied ability to defeat chemical or biological attack. The Department of Defense is significantly bolstering defenses against next-generation chemical weapons and advanced biological weapons – these initiatives are described in more detail in the 2010 QDR.

• Develop non-nuclear prompt global strike capabilities. These capabilities may be particularly valuable for the defeat of time-urgent regional threats. The Administration is currently examining the appropriate mix of such capabilities needed to improve our ability to address such regional threats, while not negatively affecting the stability of our nuclear relationships with Russia or China. Specific recommendations will be made in the fiscal year (FY) 2012 Department of Defense budget.

• Develop and deploy, over the next decade, more effective capabilities for real-time intelligence, surveillance, and reconnaissance capabilities, as well as intelligence analysis to enable rapid processing of data.

• Expand and deepen consultations with allies and partners on policies and combined postures to prevent proliferation and credibly deter aggression.

• Retain the capability to forward-deploy U.S. nuclear weapons on tactical fighter-bombers (in the future, the F-35 Joint Strike Fighter) and heavy bombers (the B-2 and B-52H), and will proceed with full scope life extension, including surety – safety, security, and use...
control – enhancements, for the B-61 nuclear bomb, which will be able to be carried by the F-35 and B-2. These decisions do not presume what NATO will decide about future deterrence requirements, but are intended to keep the Alliance's options open and provide capabilities to support other U.S. commitments.
SUSTAINING A SAFE, SECURE, AND EFFECTIVE NUCLEAR ARSENAL

The United States is committed to ensuring that the nuclear weapons stockpile remains safe, secure, and effective. The NPR has made a significant number of decisions to meet this long-term obligation.

Today’s nuclear weapons have aged well beyond their originally planned lifetime. Until 1992, the U.S. nuclear stockpile was sustained through continual warhead-type replacement that proceeded from design to test, deployment, and then retirement and replacement by a successor design. Since then, the United States has stopped testing nuclear weapons, maintaining and certifying our warheads as safe and reliable through a Stockpile Stewardship Program that has extended the lives of some warheads by refurbishing them to nearly original specifications.

To sustain a safe, secure, and effective stockpile today, with the ultimate goal of a world free of nuclear weapons in the future, we must prudently manage our nuclear stockpile and related Life Extension Programs (LEPs), while cultivating the nuclear infrastructure, expert workforce, and leadership required to sustain it.

Managing the U.S. Nuclear Stockpile

The U.S. nuclear stockpile includes both deployed and non-deployed warheads. The United States has additional warheads awaiting dismantlement.

Deployed warheads include both strategic (planned to be delivered at intercontinental range and deployed on strategic submarines (SSBNs), intercontinental ballistic missiles (ICBMs), and heavy bombers) and non-strategic weapons assigned a nuclear mission, such as the B-61 bombs deployed in Europe. In the near- to mid-term, the U.S. strategic deployed force
will be reduced through arms control agreements with Russia, initially by the New Strategic Arms Reduction Treaty (New START).

**Non-deployed warheads** provide logistics spares, support the surveillance program, and hedge against technical or geopolitical surprise. Logistics spares enable the United States to maintain desired quantities of deployed weapons during maintenance and surveillance where some warhead components are destroyed and the warheads are not rebuilt for return to the stockpile. Non-deployed warheads also provide a hedge against technological surprise, such as discovery of a technical problem in a warhead that renders it (and all of its type) non-operational. They also serve as a hedge against geopolitical surprise, such as an erosion of the security environment that requires additional weapons to be uploaded on delivery systems. The non-deployed stockpile currently includes more warheads than required for the above purposes, due to the limited capacity of the National Nuclear Security Administration (NNSA) complex to conduct LEPs for deployed weapons in a timely manner. Progress in restoring NNSA’s production infrastructure will allow these excess warheads to be retired along with other stockpile reductions planned over the next decade.

**Warheads awaiting dismantlement** are those in the queue for disassembly. Today, there are several thousand nuclear warheads awaiting dismantlement, and this number will increase as weapons are removed from the stockpile under New START. We anticipate it will take more than a decade to eliminate the dismantlement backlog. Investments to modernize the nuclear infrastructure, outlined below, will ensure that the United States can continue to decrease this backlog in a responsible manner.

Looking ahead three decades, the NPR considered how best to extend the lives of existing nuclear warheads consistent with the congressionally mandated Stockpile Management Program and U.S. non-proliferation goals. Over that period, every nuclear warhead now in the stockpile will require some level of technical attention. Thus, the Stockpile Management Program will outline ways to ensure the safety and security of warheads over time. While the general parameters of this plan are discussed here, some key information about the specific numbers and types of warheads in different elements of the stockpile are classified, as are specific plans for their future disposition, and will be briefed separately to Congress.

After consideration of how to best manage our current stockpile, the NPR reached the following conclusions to guide future U.S. stockpile management decisions:

- The United States will not conduct nuclear testing, and will pursue ratification and entry into force of the Comprehensive Nuclear Test Ban Treaty.
• The United States will not develop new nuclear warheads. Life Extension Programs will use only nuclear components based on previously tested designs, and will not support new military missions or provide for new military capabilities.

• The United States will study options for ensuring the safety, security, and reliability of nuclear warheads on a case-by-case basis, consistent with the congressionally mandated Stockpile Management Program. The full range of LEP approaches will be considered: refurbishment of existing warheads, reuse of nuclear components from different warheads, and replacement of nuclear components.

• In any decision to proceed to engineering development for warhead LEPs, the United States will give strong preference to options for refurbishment or reuse. Replacement of nuclear components would be undertaken only if critical Stockpile Management Program goals could not otherwise be met, and if specifically authorized by the President and approved by Congress.

• The United States will retain the smallest possible nuclear stockpile consistent with our need to deter adversaries, reassure our allies, and hedge against technical or geopolitical surprise.

Using these guidelines, the United States will extend the life of nuclear warheads required for the smaller force structure identified under New START. Consistent with this approach, the NPR recommended that:

• The Administration will fully fund the ongoing LEP for the W-76 submarine-based warhead for a fiscal year (FY) 2017 completion, and the full scope LEP study and follow-on activities for the B-61 bomb to ensure first production begins in FY 2017.

• The Nuclear Weapons Council will initiate a study in 2010 of LEP options for the W-78 ICBM warhead to be conducted jointly by the National Nuclear Security Administration and the Department of Defense. This study will consider, as all future LEP studies will, the possibility of using the resulting warhead also on multiple platforms in order to reduce the number of warhead types.
• The United States will consider reductions in non-deployed nuclear warheads, as well as acceleration of the pace of nuclear warhead dismantlement, as it implements a new stockpile stewardship and management plan consistent with New START.

The National Nuclear Security Administration (NNSA), in close coordination with DoD, will provide a new stockpile stewardship and management plan to Congress within 90 days, consistent with the increased in infrastructure investment requested in the President's FY 2011 budget. As critical infrastructure is restored and modernized, it will allow the United States to begin to shift away from retaining large numbers of non-deployed warheads as a technical hedge, allowing additional reductions in the U.S. stockpile of non-deployed nuclear weapons over time.

The approach described here will ensure high confidence in the technical performance of warheads retained in the stockpile. It will guarantee that their safety and security are aligned with 21st century requirements (and technical capabilities). At the same time, it will not develop new nuclear warheads, and it will be structured so as not to require nuclear testing. Life Extension Programs will use only nuclear components based on previously tested designs, and will not support new military missions or provide for new military capabilities. This approach sets a high standard for the safety and security of U.S. nuclear weapons and, in support of nonproliferation goals, positions the United States to encourage other nations to maintain the highest levels of surety for their nuclear stockpiles.

**Critical Infrastructure and Human Capital**

In order to sustain a safe, secure, and effective U.S. nuclear stockpile as long as nuclear weapons exist, the United States must possess a modern physical infrastructure – comprised of the national security laboratories and a complex of supporting facilities – and a highly capable workforce with the specialized skills needed to sustain the nuclear deterrent and support the President's nuclear security agenda.

Today's nuclear complex, however, has fallen into neglect. Although substantial science, technology, and engineering investments were made over the last decade under the auspices of the Stockpile Stewardship Program, the complex still includes many oversized and costly-to-maintain facilities built during the 1940s and 1950s. Some facilities needed for working with plutonium and uranium date back to the Manhattan Project. Safety, security, and environmental issues associated with these aging facilities are mounting, as are the costs of addressing them.

Responsible stockpile management and dismantlement require not only infrastructure, but skilled scientists and engineers to manage these efforts. Like our infrastructure, over the last decade our human capital base has been underfunded and underdeveloped. Our national security laboratories have found it increasingly difficult to attract and retain the best and brightest scientists and engineers of today. Morale has declined with the lack of broad, national consensus
on the approach to sustaining warheads and nuclear technical capabilities. The cumulative loss of focus, expertise, and excellence on nuclear matters in the United States remains a significant challenge. A strong national commitment to these important nuclear security objectives is essential to countering this trend.

Increased investments in the nuclear infrastructure and a highly skilled workforce are needed to ensure the long-term safety, security, and effectiveness of our nuclear arsenal and to support the full range of nuclear security work to include non-proliferation, nuclear forensics, nuclear, counter-terrorism, emergency management, intelligence analysis and treaty verification.

Such investments, over time, can reduce our reliance on large inventories of non-deployed warheads to deal with technical surprise, thereby allowing additional reductions in the U.S. nuclear stockpile and supporting our long-term path to zero. A revitalized infrastructure will also serve to reduce the number of warheads retained as a geopolitical hedge, by helping to dissuade potential competitors from believing they can permanently secure an advantage by deploying new nuclear capabilities.

Efforts to strengthen the science, technology, and engineering base and address the problems in the physical infrastructure will help with the human capital problem. A renewal of the sense of national purpose and direction in nuclear strategy will also be helpful. The President has clearly outlined the importance of nuclear issues for our national security, and the importance of keeping the U.S. nuclear deterrent safe, secure, and effective at the minimum numbers required.

Further, the Administration’s commitment to a clear and long-term plan for managing the stockpile ensures the scientists and engineers of tomorrow will have the opportunity to engage in challenging research and development activities which is essential to their recruitment and retention.

A modern nuclear infrastructure and highly skilled workforce is not only consistent with our arms control and non-proliferation objectives; it is essential to them. By certifying the reliability of each weapon type we retain, the United States can credibly assure non-nuclear allies and partners they need not build their own, while...
seeking greater stockpile reductions than otherwise possible. Further, a corps of highly skilled personnel will continue to expand our ability to understand the technical challenges associated with verifying ever deeper arms control reductions.

Through science and engineering programs that improve the analysis of the reliability of our warheads, we also enhance our ability to assess and render safe potential terrorist nuclear devices and support other national security initiatives, such as nuclear forensics and attribution. Expert nuclear scientists and engineers help improve our understanding of foreign nuclear weapons activities, which is critical for managing risks on the path to zero. And, in a world with complete nuclear disarmament, a robust intellectual and physical capability would provide the ultimate insurance against nuclear break-out by an aggressor.

Additionally, the industrial base activities that support the nuclear enterprise also remain critical to the nation's deterrence posture. Increased surveillance of critical commercial sector human skills, manufacturing capabilities, and sustainment capabilities is required to ensure this infrastructure remains viable to support the enterprise.

The NPR concluded that the following key investments were required to sustain a safe, secure, and effective nuclear arsenal:

- Strengthening the science, technology, and engineering (ST&EE) base needed for conducting weapon system LEPs, maturing advanced technologies to increase weapons safety, qualification of weapon components, and certifying weapons without nuclear testing, and providing annual stockpile assessments through weapons surveillance. This includes developing and sustaining high quality scientific staff and supporting computational and experimental capabilities. The NNSA will develop a long-term strategy that will describe the ST&EE base required to meet the Stockpile Stewardship Program. The report will be delivered to the Nuclear Weapons Council in 2011.

- Funding the Chemistry and Metallurgy Research Replacement Project at Los Alamos National Laboratory to replace the existing 50-year-old Chemistry and Metallurgy Research facility in 2021.

- Developing a new Uranium Processing Facility at the Y-12 Plant in Oak Ridge, Tennessee to come online for production operations in 2021. Without an ability to produce uranium components, any plan to sustain the stockpile, as well as support for our Navy nuclear propulsion, will come to a halt. This would have a significant impact, not just on the weapons program, but in dealing with nuclear dangers of many kinds.

More broadly, the Administration supports the needed recapitalization of the nuclear infrastructure through fully funding the NNSA. New production facilities will be sized to support the requirements of the Stockpile Stewardship Program mandated by Congress and to
meet the multiple requirements of dismantling warheads and eliminating material no longer needed for defense purposes, conducting technical surveillance, implementing life extension plans, and supporting naval requirements. Some modest capacity will be put in place to surge production in the event of significant geopolitical "surprise."

Defense Department Leadership of the Nuclear Deterrence Mission

Sustaining a safe, secure, and effective nuclear arsenal requires sustained and effective leadership. In recent years, it has been necessary for the Department of Defense to renew its commitment to that leadership, following the cumulative loss of focus and expertise on nuclear matters within DoD. The Department has taken a number of steps over the last two years to address these problems, and this NPR reflects a continued high-level commitment to their implementation.

The Task Force on DoD Nuclear Weapons Management generated a large set of recommendations to the Secretary of Defense and the Military Departments. The Secretary of Defense strongly endorsed the recommendations and took steps in 2008 to ensure their timely implementation. U.S. Strategic Command initiated several efforts to address these findings and to ensure a renewed and sustained dedication to and focus on, the strategic deterrence mission. The U.S. Navy has been focused on continuous improvement of the nuclear enterprise for more than twenty years; most recently evidenced by the establishment of the Nuclear Weapons Senior Leadership Council and OPNAV Nuclear Weapons Council. The U.S. Air Force roadmap titled "Reinvigorating the Nuclear Enterprise" describes ongoing efforts, including the standing-up of the new Air Force Global Strike Command for nuclear-capable bombers and ICBMs, the consolidation of nuclear sustainment efforts in Air Force Materiel Command and the establishment of the Headquarters, U.S. Air Force Assistant Chief of Staff, Strategic Deterrence and Nuclear Integration (HAF/A10).

Maintaining leadership focus, expertise, and excellence on nuclear capabilities is a fundamental obligation of the Department of Defense. As the United States reduces the role and numbers of nuclear weapons, sustaining a cadre of talented and expert leaders will become more, not less, important.
LOOKING AHEAD: TOWARD A WORLD WITHOUT NUCLEAR WEAPONS

The U.S. nuclear posture is pivotal to international and national security. While the risk of all-out nuclear war is much diminished relative to the Cold War, nuclear dangers persist and some are increasing. Even as we seek a future world free of nuclear weapons, we are realistic about the world around us, recognizing that this goal will be a long-term effort, not the work of one Administration.

During the Cold War, our nuclear weapons policies and forces were designed to meet two core goals: to deter a massive nuclear or large-scale conventional, biological, or chemical attack by the Soviet Union and its allies; and to reassure our allies and partners that they could count on us to carry out that mission effectively. At the peak of the Cold War, the United States had over 30,000 nuclear weapons, including thousands deployed in overseas locations on short-range delivery systems. The U.S. nuclear weapons production complex constantly developed new types of weapons.

Today, the reassurance mission remains, but the deterrence challenge is fundamentally different. While we must maintain stable deterrence with major nuclear powers, the likelihood of major nuclear war has declined significantly, thus far fewer nuclear weapons are needed to meet our traditional deterrence and reassurance goals. Further, the United States today has the strongest conventional military forces in the world. Our close allies and partners field much of the rest of the world’s military power. Moreover, our most pressing security challenge at present is preventing nuclear proliferation and nuclear terrorism, for which a nuclear force of thousands of weapons has little relevance.

As a result of these changes, nuclear weapons play a much more circumscribed role in U.S. national security strategy, a change reflected in the U.S. nuclear posture today. Since the end of the Cold War two decades ago, the United States has cut deployed strategic weapons by approximately 75 percent and has also substantially reduced the overall nuclear stockpile of deployed and non-deployed weapons. As this NPR report makes clear, more can and must be done.

A key focus of the 2010 NPR was therefore to bring our nuclear weapons policies and force posture into better alignment with today’s national security priorities. To that end, the NPR decided on a number of steps, many of which have already been initiated or will be pursued in the near term:
- Pursue rigorous measures to reinvigorate the Nuclear Non-Proliferation Treaty (NPT) and the broader non-proliferation regime, and secure vulnerable nuclear materials worldwide against theft or seizure by terrorists;

- Seek ratification and entry into force of the Comprehensive Nuclear Test Ban Treaty and prompt commencement of negotiations on a verifiable Fissile Material Cut-off Treaty;

- Increase efforts to improve nuclear forensics to attribute the source of any covert nuclear attack, so that the United States can hold accountable any state, terrorist group, or other non-state actor that supports or enables terrorist efforts to obtain or use nuclear weapons;

- Adopt a strengthened “negative security assurance” declaring that the United States will not use or threaten to use nuclear weapons against non-nuclear weapon states that are party to the NPT, and in compliance with their nuclear non-proliferation obligations;

- Seek ratification and implementation of the New Strategic Arms Reduction Treaty (New START) requiring substantial reductions in deployed U.S. and Russian nuclear forces;

- Structure the reduced U.S. force in a way that promotes stability, including “de-MIRVing” U.S. ICBMs;

- Eliminate the Tomahawk, nuclear-equipped, sea-launched cruise missile (TLAM-N);

- Strengthen regional security architectures and reinforce security commitments to allies and partners by maintaining an effective nuclear umbrella while placing increased reliance on non-nuclear deterrence capabilities (e.g., missile defenses and conventional long-range missiles);

- Work with NATO Allies on a new Strategic Concept that supports Alliance cohesion and sustains effective extended deterrence, while reflecting the role of nuclear weapons in supporting Alliance strategy in the 21st century;

- Pursue high-level dialogues with Russia and China to promote more stable, transparent, and non-threatening strategic relationships between those countries and the United States;

- Continue to posture U.S. forces and enhance command and control arrangements to reduce further the possibility of nuclear weapons launches resulting from accidents, unauthorized actions, or misperceptions and to maximize the time available to the President to consider whether to authorize the use of nuclear weapons;

- Implement well-funded stockpile management and infrastructure investment plans that can sustain a safe, secure, and effective nuclear arsenal at significantly reduced stockpile levels without nuclear testing or the development of new nuclear warheads;
• Complete the Presidentially-directed review of post-New START arms control objectives, to establish goals for future reductions in nuclear weapons, as well as evaluating additional options to increase warning and decision time, and to further reduce the risks of false warnings or misjudgments relating to nuclear use; and

• Initiate a comprehensive national research and development program to support continued progress toward a world free of nuclear weapons, including expanded work on verification technologies.

This agenda encompasses a comprehensive set of concrete steps to reduce nuclear dangers to the United States and our allies and partners, to reduce the role and numbers of U.S. nuclear weapons, and at the same time to ensure that nuclear deterrence remains effective for the problems for which it is relevant in today’s world.

While the 2010 NPR focused principally on the near term, it also identified a number of longer-term steps to limit nuclear dangers, reduce the role and numbers of U.S. nuclear weapons, and strengthen deterrence of potential adversaries and assurance of U.S. allies and partners. As such, the NPR identified several important objectives toward which the United States should direct future efforts:

• Engage Russia, after ratification and entry into force of New START, in negotiations aimed at achieving substantial further nuclear force reductions and transparency that would cover all nuclear weapons – deployed and non-deployed, strategic and non-strategic;

• Adopt expanded measures to broaden cooperation and transparency, and strengthen strategic stability with Russia and China;

• Continue efforts to strengthen regional security architectures and eliminate chemical and biological weapons, so that over time all states possessing nuclear weapons can be secure in making deterrence of nuclear attack the sole purpose of nuclear weapons;

• Continue to ensure that the United States sustains a safe, secure, and effective nuclear arsenal as long as nuclear weapons exist;

• Following substantial further nuclear force reductions with Russia, engage other states possessing nuclear weapons, over time, in a multilateral effort to limit, reduce, and eventually eliminate all nuclear weapons worldwide;
• Improve nuclear physical infrastructure and human capital to position the United States to safely reduce nuclear weapons, and if international conditions allow, eliminate them altogether. In a world where nuclear weapons had been eliminated but nuclear knowledge remains, having a strong infrastructure and base of human capital would be essential to deterring cheating or breakout, or, if deterrence failed, responding in a timely fashion; and

• Set a course for the verified elimination of all nuclear weapons and minimize risk of cheating and breakout, through increasing transparency and investments in verification technologies focused on nuclear warheads, rather than delivery vehicles.

Toward a World Free of Nuclear Weapons

The long-term goal of U.S. policy is the complete elimination of nuclear weapons. At this point, it is not clear when this goal can be achieved. Pursuing these NPR recommendations will strengthen the security of the United States and its allies and partners and bring us significant steps closer to the President's vision of a world without nuclear weapons.

While security arrangements including NATO will retain a nuclear dimension so long as nuclear threats to the United States and our allies and partners remain, we will continue to seek to reduce the role and numbers of nuclear weapons in the future. In the coming years, as U.S. and allied non-nuclear and counter-WMD capabilities continue to improve and regional security architectures are strengthened, and as we assess progress in restraining other threats, including in particular biological weapons, the United States will consult with allies and partners regarding the conditions under which it would be prudent to shift to a policy under which deterring nuclear attack is the sole purpose of U.S. nuclear weapons.

The conditions that would ultimately permit the United States and others to give up their nuclear weapons without risking greater international instability and insecurity are very demanding. Among those are the resolution of regional disputes that can motivate rival states to acquire and maintain nuclear weapons, success in halting the proliferation of nuclear weapons,
much greater transparency into the programs and capabilities of key countries of concern, verification methods and technologies capable of detecting violations of disarmament obligations, and enforcement measures strong and credible enough to deter such violations. Clearly, such conditions do not exist today. But we can — and must — work actively to create those conditions.

The Administration is committed to establishing a sustainable bipartisan consensus on an agenda for American leadership to reduce nuclear risks to ourselves, our allies and partners, and the international community. Together, we can take practical steps immediately and in the near term — starting with those identified in the 2010 NPR — that not only move us toward the ultimate goal of eliminating all nuclear weapons worldwide but can, in their own right, reinvigorate the global nuclear non-proliferation regime, erect higher barriers to the acquisition of nuclear weapons and nuclear materials by terrorist groups, and strengthen U.S. and international security.
Release of the United States' Nuclear Posture Review

Draft Joint Statement by the Minister For Foreign Affairs, Stephen Smith, and the Minister for Defence, John Faulkner.

The Australian Government welcomes the release overnight of the United States’ Nuclear Posture Review (NPR).

The NPR is a clear signal of the strong commitment of President Obama’s Administration to work towards the goal of a nuclear weapons free world.

This is a commitment that Australia shares with the United States, as an ally and friend, and as a fellow party to the Nuclear Non-Proliferation Treaty (NPT).

The NPR comes a year after President Obama’s landmark speech in Prague on 5 April 2009, when he outlined an ambitious agenda of concrete steps towards a world without nuclear weapons.

The President undertook to reduce the role of nuclear weapons in US national security strategy, and to reduce the number of its nuclear weapons, while maintaining a safe, secure and effective arsenal as a deterrent for both the United States and its allies.

One of the concrete steps foreshadowed by President Obama was the negotiation of a new Strategic Arms Reduction Treaty (START) with Russia. The new START agreement will be signed by Presidents Obama and Medvedev in Prague tomorrow (8 April).

The Australian Government warmly welcomes the signature of this new agreement, which provides for substantial reductions in the numbers of nuclear weapons and ballistic missile launchers deployed by the United States and Russia.

Another concrete step announced by President Obama was a new international effort to secure vulnerable nuclear material around the world within four years.

Next week in Washington, President Obama will convene the Nuclear Security Summit, where the focus will be on addressing the challenge of securing vulnerable nuclear materials, in particular from terrorist threats.

Australia has played a constructive role in preparations for the Summit and looks forward to taking an active part in the Summit next week.

Australia’s own strong commitment to nuclear non-proliferation and nuclear disarmament is clear.

We strongly support a reduced role for nuclear forces in national security strategies.

We want to see deep and irreversible reductions in the numbers of nuclear weapons held by all nuclear-armed states.
We encourage strengthened security assurances from nuclear-weapon to non-nuclear weapon states, with fewer caveats than the current negative security assurances.

We are working hard to achieve the entry into force of the Comprehensive Nuclear Test Ban Treaty.

We are also working for the negotiation of an effectively verifiable Fissile Material Cut-off Treaty and, pending that, a moratorium on the production of fissile material for weapons purposes.

We are active in efforts to implement strengthened non-proliferation measures, such as support for the IAEA’s Additional Protocol and effective export controls.

We are working with others in the international community to reinforce the vital importance of full compliance with the NPT’s non-proliferation obligations, in particular by Iran.

We are an active participant in the Proliferation Security Initiative, which seeks to prevent illicit trafficking in weapons of mass destruction, their delivery systems and related materials.

With Japan, we established the International Commission on Nuclear Non-proliferation and Disarmament. The Commission’s independent report, launched in Tokyo last December, represents a major contribution to global disarmament and non-proliferation efforts.

While the Commission was not set up, or its report written, to reflect Australian Government policy, much of its analysis, action agenda and recommendations are in step with the Government’s nuclear non-proliferation and disarmament policies and priorities.

Also with Japan, we have submitted a joint Package of Practical Nuclear Disarmament and Non-Proliferation Measures for the NPT Review Conference, which will be held in New York in May.

While strongly committed to a world without nuclear weapons, we acknowledge that nuclear disarmament is a long-term process.

It relies for its success on a balance of firm and verifiable commitments among the nuclear armed states, and on the firm and unequivocal commitment of all states to the NPT’s nuclear non-proliferation objectives.

For the time being, we accept that nuclear weapons are part of the strategic environment.

Australian defence policy acknowledges the value to Australia of the protection afforded by extended nuclear deterrence under the US alliance.

As long as nuclear weapons exist, we can rely on US nuclear forces to deter nuclear attack on Australia.
In this context, Australia welcomes the NPR as taking another very substantial step by President Obama’s Administration towards a world without nuclear weapons, while maintaining an effective deterrent both for the United States, and for its allies such as Australia.

The NPR is a comprehensive, ambitious and pragmatic approach to nuclear non-proliferation and disarmament, tailored to meet the challenges and threats of the 21st century.

The NPR puts nuclear terrorism by violent extremists and nuclear proliferation at the top of the US nuclear agenda.

It emphasises the central importance of the Nuclear Non-Proliferation Treaty. Australia shares the conviction that the NPT – founded on the three pillars of non-proliferation, disarmament and peaceful uses of nuclear energy – is a critical instrument for international peace and security.

The NPR marks a historical shift in US declaratory policy.

It declares that the United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations.

Furthermore, the United States will only consider the use of nuclear weapons in extreme circumstances to defend the vital interests of the United States or its allies and partners.

The United States will continue to reduce the role of nuclear weapons in deterring non-nuclear attacks, with the objective of making deterrence of nuclear attack on the United States or its allies and partners the sole purpose of U.S. nuclear weapons.

The Australian Government welcomes this change in declaratory policy as a significant reduction of the role of nuclear weapons in US national security strategy. The United States knows that Australia, as an ally, would be comfortable if the United States were to reach its objective of making deterrence of nuclear attack the sole purpose of its nuclear weapons, noting that significant work is required to establish the conditions to do so safely.

Australia also supports the commitment in the NPR to pursue post-New START arms control with Russia that addresses not only strategic weapons, but also non-strategic and non-deployed nuclear weapons aimed at achieving substantial further nuclear force reductions.

We endorse the commitment to engage over time other nuclear weapons states, in a multilateral effort to reduce and eventually eliminate all nuclear weapons.

Australia is also pleased that the NPR rejects the development of new nuclear weapons or the pursuit of new military missions or new capabilities for nuclear weapons, while taking measures to sustain a safe, secure and effective arsenal.
We welcome the NPR’s reaffirmation of President Obama’s pledge in Prague that the United States will not conduct nuclear testing and will seek ratification and entry into force of the Comprehensive Test Ban Treaty.

In the lead up to the NPT Review Conference in May, the NPR reaffirms the revitalised leadership role of the United States in pursuing a more secure world through strengthened nuclear non-proliferation and disarmament.

Australia encourages a positive response by the other nuclear weapons states and non-nuclear weapon states to the far-reaching agenda outlined in the NPR.

We are committed to working with the United States and all other NPT parties to ensure a successful Review Conference, which strongly reaffirms the NPT’s core principles and achieves balanced outcomes under the three treaty pillars.

Australia’s strong non-proliferation and disarmament credentials will allow us to play a constructive and influential role in the Review Conference.
To: Senator Faulkner

Timing: Required by: 24 June 2010
Reason: For consideration

Copies to: Secretary, CDF, VCDF, CN, CA, CAF, FASSP, FASIP, FASMSA.

United States (US) Nuclear Posture Review (NPR) 2010 – Strategic Implications

Recommendation:
That you note that the strategic implications for Australia of the US NPR 2010 include:

33(a)(iii)

33(a)(iii)

c. more opportunities for bilateral cooperation on counter-proliferation.

NOTED / PLEASE DISCUSS

Key Points:
1. On 7 April, we provided you with an initial summary of the United States’ Nuclear Posture Review (NPR), and the draft text of an Australian Joint Statement in response (Attachment A), and undertook to provide you with additional advice on the implications of the NPR.

33(a)(i).

China
3. The NPR reaffirms the 2010 Ballistic Missile Defense Review Report (Attachment B refers) in stating that ‘maintaining strategic stability in the US-China relationship is as important to this Administration as maintaining strategic stability with other major powers,’ but identifies Russia as America’s only peer in nuclear capabilities. However, for the first time, this NPR
recognises the need for a high-level strategic nuclear stability dialogue with both countries, stating that stable and transparent strategic relationships could contribute to greater restraint in Russian and Chinese nuclear programs and postures.

4. The increased recognition of, and a need for greater dialogue with China on nuclear issues is a welcome recognition of the present and future reality. While welcoming a ‘strong and prosperous’ China, the NPR states that there is a lack of transparency around the pace and scope of China’s nuclear modernisation programs, and the strategy and doctrine that guide them.

**De-emphasising nuclear weapons**

5. The NPR aims to reduce the salience of nuclear weapons in US strategy, placing a greater emphasis on conventional forces and effective theatre ballistic missile defences to deter non-nuclear threats to the US and its allies. It also seeks to strengthen regional security architectures, including maintaining a forward US conventional presence.

**Regional posture**

6. The US will look to its allies to help enhance regional security architectures and facilitate a sustained forward presence in key regions. The 2010 Quadrennial Defense Review (Attachment C refers) provides more detail on this, referencing the need for access to a network of bases and supporting infrastructures, including using combinations of hardened, redundant, and dispersed facilities, combined with long-range platforms for ISR and strike operations.

**Ballistic Missile Defence (BMD)**

8. Effective theatre missile defences are identified as a compensator for greater reductions in nuclear arms. It is conceivable that any potential future Australian BMD capability could be integrated into an allied regional BMD architecture, and so support these efforts. The NPR also notes that China and Russia view US BMD as destabilising, but the US maintains that it would have limited effectiveness against arsenals of their size. We will continue to brief you on the implications of these trends for the Government’s BMD policy, including through Defence’s annual BMD report to Government, as outlined in the White Paper.

**Conventional Strike**

9. The US is studying the appropriate mix of long-range strike capabilities, including heavy bombers and non-nuclear prompt global strike. The US Conventional Prompt Global Strike
(CPGS) program is exploring technologies to provide the capability to launch a conventional strike anywhere in the world within one to two hours. CPGS is aimed providing a fast-response conventional strike, to bolster US conventional deterrence and provide options for striking time-sensitive targets. The US is investigating technologies such as conventionally armed ICBMs, and hypersonic flight systems to meet CPGS requirements.

Counter-proliferation and non-proliferation efforts

11. The NPR places increased priority on counter-proliferation, and announces measures to strengthen the NPT and IAEA safeguards, and impede sensitive nuclear trade. It also reaffirms the commitment made by President Obama in April this year to make the Proliferation Security Initiative (PSI) a durable international institution. This aligns with Australia's strategic interests (White Paper para 5.20 refers).

33(a)(iii)

33(a)(i)

Sensitivity:

12. High. Australia's reaction to the Obama Administration's nuclear policy has attracted media interest, and it has significant implications for the US alliance.

Resources:

13. N/A.

Consultation:

14. International Policy Division were consulted in the preparation of this submission.

Attachments:


B. FASSP(S)/OUT/2010/eB4046 – Implications of the United States’ Ballistic Missile Defense Review for Australia.

C. FASSP(S)/OUT/2010/3 – United States Quadrennial Defense Review (QDR) 2010 – key outcomes and themes relevant to Australia.

To: Senator Faulkner  
CC:  

Timing:  
Required by: 7 April  
Reason: To advise you on the draft response to the US NPR prepared by DFAT.

Copies to: Secretary, CDF, VCDF, CN, CA, CAF, FASSP, FASIP, FASPSPA.

The United States' Nuclear Posture Review and the Australian Government response

Recommendation:
That you:

i. note the key features of the United States' Nuclear Posture Review and strategic implications for Australia.

   NOTED / PLEASE DISCUSS

ii. agree the draft text of the Joint Statement on the United States' Nuclear Posture Review prepared for you and Minister Smith by the Department of Foreign Affairs and Trade, in consultation with Defence.

   AGREED / NOT AGREED

Key Points:

1. On 6 April, the United States released its Nuclear Posture Review (NPR) (Attachment A). The NPR sets out US nuclear deterrence policy, strategy and force posture for the next five to ten years, and provides a roadmap for implementing President Obama’s agenda for reducing nuclear risks to the US, its allies and partners and the international community.

2. The 2010 NPR places the prevention of nuclear terrorism and proliferation at the top of the US nuclear policy agenda. It describes how the US will reduce the role and numbers of nuclear weapons while maintaining strategic deterrence and stability, reassuring US allies and partners and sustaining a safe, secure and effective US nuclear arsenal. As such, it represents a key statement on US national security strategy, with implications beyond nuclear non-proliferation and arms control policy.

3. The NPR marks a shift in US declaratory policy regarding the use of nuclear weapons, strengthening long-standing ‘negative security assurances’ by declaring that the US will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the Nuclear Non-Proliferation Treaty (NPT) and in compliance with their nuclear non-proliferation obligations. Previously, the US declaratory position left greater scope for using...
nuclear weapons against non-nuclear states that were armed with chemical and biological weapons, or allied to hostile nuclear powers.

4. The NPR states that the US is not prepared at the present time to adopt a universal policy that deterring nuclear attack is the sole purpose of nuclear weapons, but the US will work to establish conditions under which such a policy could be safely adopted (page viii, NPR Executive Summary).

5. DFAT has drafted a joint statement in response to the NPR’s release for you and Minister Smith (Attachment B). Key points of the draft joint statement include:

(a) The Australian Government welcomes the NPR as a clear signal of President Obama’s Administration to work towards the goal of a nuclear weapons free world.

(b) The Australian Government acknowledges that nuclear disarmament is a long-term process, reliant for its success on firm and verifiable commitments (consistent with the assessments in the NPR).

(c) Australian defence policy acknowledges the value to Australia of the protection afforded by extended nuclear deterrence under the US alliance.

(d) The Australian Government welcomes the change in US declaratory policy as a significant reduction of the role of nuclear weapons in US national security strategy, and would be comfortable if the US were to make deterrence of nuclear attack the sole purpose of its nuclear weapons.

6. Defence is mostly supportive of the draft statement’s text, under which such a policy could be safely adopted, which would be complex and demanding.

7. While Defence is comfortable with the draft joint statement, the NPR has a number of significant long-term strategic implications that need further assessment, such as those relating to the US-China strategic relationship and future US capabilities and force posture for conventional deterrence in the Asia-Pacific. Defence will provide you with further advice on these implications once this analysis has been completed, and we have received more detailed briefings from US officials.

Sensitivity:

8. High. Australia’s reaction to the Obama Administration’s nuclear policy is likely to attract media interest and it has significant implications for the US alliance.

Resources:

9. N/A.

Consultation:

10. Defence has consulted with DFAT on the attached draft statement, and has consulted regularly with DFAT and PM&C on Australian Government policy regarding nuclear non-proliferation, disarmament and deterrence since mid-2009.

Attachments:

A. 2010 Nuclear Posture Review.

B. Draft joint statement on the Australian Government response prepared by DFAT, with amendment proposed by Defence regarding ‘sole purpose’ nuclear policy.
Ref: DEPSECS(S)/OUT/2010/

Approved By: Peter Jennings
Deputy Secretary Strategy
Office of the Secretary and CDF
Strategic Policy Division
7 April 2010

Contact Officer: Michael Lankowski
Phone: 6265 3134

JOHN FAULKNER

Page 1
CONFIDENTIAL
DECLASSIFIED
Release of the United States' Nuclear Posture Review


The Australian Government welcomes the release overnight of the United States' Nuclear Posture Review (NPR).

The NPR is a clear signal of the strong commitment of President Obama's Administration to work towards the goal of a nuclear weapons-free world.

This is a commitment that Australia shares with the United States, as an ally and friend, and as a fellow party to the Nuclear Non-Proliferation Treaty (NPT).

The NPR comes a year after President Obama's landmark speech in Prague on 5 April 2009, when he outlined an ambitious agenda of concrete steps towards a world without nuclear weapons.

The President undertook to reduce the role of nuclear weapons in US national security strategy, and to reduce the number of its nuclear weapons, while maintaining a safe, secure and effective arsenal as a deterrent for both the United States and its allies.

One of the concrete steps foreshadowed by President Obama was the negotiation of a new Strategic Arms Reduction Treaty (START) with Russia. The new START agreement will be signed by Presidents Obama and Medvedev in Prague tomorrow (8 April).

The Australian Government warmly welcomes the signature of this new agreement, which provides for substantial reductions in the numbers of nuclear weapons and ballistic missile launchers deployed by the United States and Russia.

Another concrete step announced by President Obama was a new international effort to secure vulnerable nuclear material around the world within four years.

Next week in Washington, President Obama will convene the Nuclear Security Summit, where the focus will be on addressing the challenge of securing vulnerable nuclear materials, in particular from terrorist threats.

Australia has played a constructive role in preparations for the Summit and looks forward to taking an active part in the Summit next week.

Australia's own strong commitment to nuclear non-proliferation and nuclear disarmament is clear.

We strongly support a reduced role for nuclear forces in national security strategies.

We want to see deep and irreversible reductions in the numbers of nuclear weapons held by all nuclear-armed states.
We encourage strengthened security assurances from nuclear-weapon to non-nuclear weapon states, with fewer caveats than the current negative security assurances.

We are working hard to achieve the entry into force of the Comprehensive Nuclear Test Ban Treaty.

We are also working for the negotiation of an effectively verifiable Fissile Material Cut-off Treaty and, pending that, a moratorium on the production of fissile material for weapons purposes.

We are active in efforts to implement strengthened non-proliferation measures, such as support for the IAEA’s Additional Protocol and effective export controls.

We are working with others in the international community to reinforce the vital importance of full compliance with the NPT’s non-proliferation obligations, in particular by Iran.

We are an active participant in the Proliferation Security Initiative, which seeks to prevent illicit trafficking in weapons of mass destruction, their delivery systems and related materials.

With Japan, we established the International Commission on Nuclear Non-proliferation and Disarmament. The Commission’s independent report, launched in Tokyo last December, represents a major contribution to global disarmament and non-proliferation efforts.

While the Commission was not set up, or its report written, to reflect Australian Government policy, much of its analysis, action agenda and recommendations are in step with the Government’s nuclear non-proliferation and disarmament policies and priorities.

Also with Japan, we have submitted a joint Package of Practical Nuclear Disarmament and Non-Proliferation Measures for the NPT Review Conference, which will be held in New York in May.

While strongly committed to a world without nuclear weapons, we acknowledge that nuclear disarmament is a long-term process.

It relies for its success on a balance of firm and verifiable commitments among the nuclear armed states, and on the firm and unequivocal commitment of all states to the NPT’s nuclear non-proliferation objectives.

For the time being, we accept that nuclear weapons are part of the strategic environment.

Australian defence policy acknowledges the value to Australia of the protection afforded by extended nuclear deterrence under the US alliance.

As long as nuclear weapons exist, we can rely on US nuclear forces to deter nuclear attack on Australia.
In this context, Australia welcomes the NPR as taking another very substantial step by President Obama's Administration towards a world without nuclear weapons, while maintaining an effective deterrent both for the United States, and for its allies such as Australia.

The NPR is a comprehensive, ambitious and pragmatic approach to nuclear non-proliferation and disarmament, tailored to meet the challenges and threats of the 21st century.

The NPR puts nuclear terrorism by violent extremists and nuclear proliferation at the top of the US nuclear agenda.

It emphasises the central importance of the Nuclear Non-Proliferation Treaty. Australia shares the conviction that the NPT – founded on the three pillars of non-proliferation, disarmament and peaceful uses of nuclear energy - is a critical instrument for international peace and security.

The NPR marks a historical shift in US declaratory policy.

It declares that the United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations.

Furthermore, the United States will only consider the use of nuclear weapons in extreme circumstances to defend the vital interests of the United States or its allies and partners.

The United States will continue to reduce the role of nuclear weapons in deterring non-nuclear attacks, with the objective of making deterrence of nuclear attack on the United States or its allies and partners the sole purpose of U.S. nuclear weapons.

The Australian Government welcomes this change in declaratory policy as a significant reduction of the role of nuclear weapons in US national security strategy. The United States knows that Australia, as an ally, would be comfortable if the United States were to reach its objective of making deterrence of nuclear attack the sole purpose of its nuclear weapons, noting that significant work is required to establish the conditions to do so safely.

Australia also supports the commitment in the NPR to pursue post-New START arms control with Russia that addresses not only strategic weapons, but also non-strategic and non-deployed nuclear weapons aimed at achieving substantial further nuclear force reductions.

We endorse the commitment to engage over time other nuclear weapons states, in a multilateral effort to reduce and eventually eliminate all nuclear weapons.

Australia is also pleased that the NPR rejects the development of new nuclear weapons or the pursuit of new military missions or new capabilities for nuclear weapons, while taking measures to sustain a safe, secure and effective arsenal.
We welcome the NPR’s reaffirmation of President Obama’s pledge in Prague that the United States will not conduct nuclear testing and will seek ratification and entry into force of the Comprehensive Test Ban Treaty.

In the lead up to the NPT Review Conference in May, the NPR reaffirms the revitalised leadership role of the United States in pursuing a more secure world through strengthened nuclear non-proliferation and disarmament.

Australia encourages a positive response by the other nuclear weapons states and non-nuclear weapon states to the far-reaching agenda outlined in the NPR.

We are committed to working with the United States and all other NPT parties to ensure a successful Review Conference, which strongly reaffirms the NPT’s core principles and achieves balanced outcomes under the three treaty pillars.

Australia’s strong non-proliferation and disarmament credentials will allow us to play a constructive and influential role in the Review Conference.
MINISTERIAL SUBMISSION

To: Senator Faulkner  
CC: Mr Cornet

Timing: ROUTINE 24/FEB/2010
Required by: In order to inform you of the key outcomes and themes in the newly released US BMD review.
Reason:

Copies to: Secretary, CDF, VCDF, CN, CA, CAF, DEPSEC S, DEPSEC Q&S, CCOG, CEO/DMO, FASIF, FASMS/PA.

Implications of the US Ballistic Missile Defense Review for Australia

Recommendation:

That you:

i. note the United States has released the outcomes of its Ballistic Missile Defense Review (BMD Review);

ii. note the Review raises no concerns for Australia’s BMD policy settings with the Review’s references to Australia limited to on-going dialogue and information sharing; and

iii. note the draft talking points regarding the release of the Review, which are attached for your consideration.

Key Points:

1. On 1 February 2010, the Obama Administration released its Review into its ballistic missile defence (BMD) program. Australia was consulted during the preparation of the Review on a confidential basis. This Review was developed in conjunction with the Quadrennial Defense Review (QDR) and the Defense FY2011 budget. The Review assesses a qualitative and quantitative increase in the ballistic missile threat, notably from North Korea, Iran and Syria. China’s missile capabilities are also highlighted and the Review reinforces the importance of engaging China on BMD.

2. The Review emphasizes that US BMD is not intended to affect the US strategic balance with China and Russia and accords with Australia’s stated policy in the 2009 Defence White Paper in which we note Australia does not support missile defence systems that unilaterally upset stable deterrence between the major nuclear powers (WP09 9.103). Draft talking points regarding the Review and its implications for Australia are at Attachment A for your consideration.
3. Upon taking office last year, President Obama directed a comprehensive review of the US ballistic missile defence policies, strategies, plans and programs. Congress also mandated the Department of Defense to conduct a review of BMD strategy and policy as part of the broader package of Reviews including the Nuclear Posture Review and the Space Policy Review (yet to be released). BMD policy in its current form was first developed following the findings of the 1998 Rumsfeld Commission, which was set up following North Korea’s long-range missile tests that overflow Japan. The Rumsfeld Commission findings form the basis for the current US BMD system, which is aimed at limited missile strikes from states of concern (such as North Korea or Iran).

4. In September 2009, the Obama Administration announced a new US approach to BMD in Europe which sought to replace plans for the fixed European BMD sites (in the Czech Republic and Poland) with an alternative system involving the phased deployment of improved technologies in both land and sea-based interceptor missiles.

5. A key focus for the revised strategy is a shift away from a global BMD architecture to a regional focus aimed at regional and emerging state actors such as North Korea, Iran and Syria which have short, medium and intermediate range ballistic missiles. The Review reflects President Obama’s direction that BMD must be “affordable, proven, and responsive” to the threat. The Review notes six key principles which form the basis for the revised US BMD Review. These are outlined below and include a brief analysis against each one.

The United States will continue to defend the homeland against the threat of limited intercontinental ballistic missile (ICBM) attack.

- The US already has the capacity to defend the homeland against limited ICBM attack, based on past investments in ground-based mid-course defences (GMD). The US will also invest in early intercept technologies, application of the SM-3 interceptor missiles and more forward sensors.

The United States will defend against regional missile threats to US forces while protecting allies and partners and enabling them to defend themselves.

- The US will increase its investment in the ‘Aegis Ashore’ system (a re-locatable land-based asset modelled on the Aegis air warfare radar system) due to be deployed by 2015 and also in early-warning infrared sensors on airborne assets such as Unmanned Aerial Vehicles.

Before new Missile Defense capabilities are deployed they must undergo testing that enables assessment against real operational conditions.

- The BMD Review will now shift the focus of future BMD developments to be more strategic rather than technology driven. More rigorous testing regimes against more realistic operational conditions will be used to assess BMD system performance prior to deployment.

The Commitment to new capabilities must be fiscally sustainable over the long term.

- The BMD Review will be supported in the FY11 Budget request. The Review notes the commitment to a fiscally sustainable program in the FY10 budget with decisions to terminate several programs such as the ‘multiple kill vehicle’ and the ‘kinetic energy interceptor’. Other technologies such as the ‘Airborne Laser’ were relegated to a technology demonstrator program.
The US will develop flexible capabilities to adapt as threats change.

- The BMD Review notes that global demand for missile defences both for US forces and allies and partners, will exceed supply. As such the future investment program will focus on mobile, relocatable systems that can be positioned according to threats.

The US will seek to lead expanded international efforts for missile defence.

- The US missile defence program supports a number of strategic goals, including supporting US security commitments to allies and partners, providing reassurance and maintaining US freedom of manoeuvre. The Review highlights US cooperation through bilateral alliances with key partners in East Asia, especially Japan. The Review makes specific reference to the ongoing dialogue between Australia and the US on missile defence, including information-sharing "that would help Australia with decisions regarding BMD should the need for it be seen in the future".

- The Review makes the point that this would include cooperation and engagement with Russia and China on missile defence matters. The Review underlines the importance of further dialogue with China on BMD and strategic issues but notes the growing imbalance of power in China's favour across the Taiwan Strait; the threat posed by China's advanced missiles to its neighbours; its anti-ship ballistic missiles, China's recent missile interception test; and the prospect of Chinese missiles reaching US and allied military installations in the region.

Sensitivity:
6. The subject of BMD remains sensitive within the public and political arenas.

Resources:
7. Not applicable.

Consultation:
8. Director-General Capability and Plans, Director Americas Section and A/Director Public Affairs (Strategy).

Attachments:
A. Draft talking points.

Approved by:
Rebecca Skinner
First Assistant Secretary Strategic Policy

7 February 2010
Contact Officer: Ben Coleman (ASSP)
Phone: 02 62652846

[Signature]
John Faulkner
17/2/2010

SECRET
DECLASSIFIED
BMD Review

MINISTERIAL TALKING POINTS

- We welcome the release of the US Ballistic Missile Defence Review.
  - I note the Review concentrates on the increased threat from short to medium range ballistic missiles and will focus on deploying improved technologies quickly.

- The Review’s emphasis on defending against threats from states of concern aligns with Australia’s own policy as outlined in the Government’s 2009 Defence White Paper.

If asked: Will the US BMD Review change Australia’s relationship with the US in relation to BMD?

- There is nothing in the Review that would affect the exceptionally close relationship Australia has with the US.

- Australia’s policy position does not support any ballistic missile defence system that would upset the strategic balance of the major nuclear powers and in particular any developments that might undercut mutual deterrence.

- The Review is totally consistent with Australia’s policy on BMD in this regard.
• As outlined in the Defence White Paper, the Government will continue to monitor regional threats posed by ballistic missiles.

• Australia has no current plans to acquire ballistic missile defence weapons systems.

  – The Aegis system on the Air Warfare Destroyers provide a possible path for developing a sea-based BMD system should any future government decide this is required.

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<td>ASSP</td>
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<td>DGCP</td>
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MINISTERIAL SUBMISSION

To: Senator Faulkner
CC: Mr Combet

Timing: 
URGENT
Required by: To inform you of key outcomes and themes relevant to Australia in the newly released US Quadrennial Defense Review (QDR).
Reason:

Copies to: Secretary, CDF, VCDF, CN, CA, CAP, CCGQ, CQF, Acting DEPSEC, [REDACTED], MADIS(W).

United States Quadrennial Defense Review (QDR) 2010 – key outcomes and themes relevant to Australia

Recommendation:
That you:

i. note the key outcomes and themes relevant to Australia in the US QDR.

   NOTED / PLEASE DISCUSS

33(a)(iii)

ii. 

   [Redacted]

   NOTED / PLEASE DISCUSS

Key Points:
QDR Review Process

1. The new US Quadrennial Defense Review (QDR) Report was released on 1 February (Washington DC time). It outlines the Obama Administration’s defense strategy and reflects the strategic priorities of Defense Secretary Robert Gates, with a strong emphasis on rebalancing the US military to meet the challenges of today’s wars in Afghanistan in Iraq and other emerging threats (such as cyber attacks) and reforming US Department of Defense institutions and processes. A concise summary of QDR 2010 prepared by Defense staff in Washington DC is provided at Attachment A.

33(a)(iii)

2. A separate Ballistic Missile Defense (BMD) Review Report was released alongside the QDR, outlining US BMD policies and programs. US policies and strategies for nuclear deterrence and space capabilities will be outlined in the upcoming Nuclear Posture Review and Space Posture Review.

33(a)(iii)
This engagement has been valuable and meant that most outcomes of the QDR were anticipated by Defence.

**Strategic priorities**

4. The QDR sets out the following four 'priority objectives': (a) prevail in today’s wars, including potential operations against Al Qaeda beyond Afghanistan; (b) prevent and deter conflicts; (c) prepare to succeed in a wide range of contingencies; and (d) preserve and enhance the all-volunteer force. The emphasis on capabilities for irregular warfare is balanced by the need to counter potential threats from states acquiring capabilities that challenge traditional US strengths in areas such as maritime power projection, information superiority and cyber security, and space systems.

5. Australia’s 2009 Defence White Paper prioritised capabilities for the defence of Australia against state-based threats and stabilisation operations in East Timor and the South Pacific over global commitments to counter-insurgency and counter-terrorism campaigns. However, this does not indicate either incompatibility between Australian and US defence policy, or that Australia must change its defence strategy. Both Australia and the US have sought to find the right balance between these priorities over the last decade.

6. The QDR recognises the importance of China’s growing power and influence, particularly its military’s new capabilities and missions in support of Chinese regional and global interests. It calls for engagement and confidence building to address US concerns about ‘lack of transparency and the nature of China’s military development and decision-making processes’. By comparison, the QDR assesses that India ‘will contribute to Asia as a net provider of security in the Indian Ocean and beyond’ as its military power grows.

7. The QDR also identifies the requirement for the Pentagon to develop policies and plans to manage the effects of climate change on its operating environment, missions and infrastructure.

**Force structure**

8. Key force structure decisions in the QDR include increased investment in Special Forces, intelligence, surveillance and reconnaissance, strategic communications and information networks. Defence will assess major implications of these decisions for Australia’s force structure and capability development plans through the Defence Planning Guidance process. These assessments should be completed by April 2010.

9. Public commentators and critics are likely to draw attention to the positive and negative consequences of rebalancing US military capabilities towards irregular warfare. It should be noted that ‘high-end asymmetric threats’ from major powers and rogue states were also a primary determinant of QDR force structure outcomes, and that US conventional and nuclear capabilities will remain very substantial (for example, no reduction in aircraft carriers, long-range strike or heavy armoured and mechanised brigades).

**Alliances**

10. The QDR acknowledges that the US must increasingly rely on cooperation with key allies and partners to sustain international security, due to the shifting balance of global power. In
particular, the QDR states that the US needs a strategic posture in the Asia Pacific that "better leverages the capabilities of our regional allies and partners."

11. Australia is mentioned in the QDR (on page 59): "we are deepening our relationship with Australia, an alliance that stretches beyond Asia to provide essential cooperation on a wide range of global security challenges." Australia is listed among contributors to the International Security Assistance Force in Afghanistan on page 58, and there is also a picture on page 35 illustrating a Proliferation Security Initiative exercise in the South China Sea involving a joint US Navy-Royal Australian Navy boarding team.

12. The QDR recognises the need to reform the US export control system, which "impedes cooperation, technology sharing, and interoperability with allies."

13. US strategy towards Australia and the Asia-Pacific may become clearer following the publication of the US Global Posture Review later this year, which will provide further details on the future shape of the US force posture in the Asia-Pacific and other regions relevant to Australian interests.

14. [Redacted]

Sensitivity:

15. Medium. QDR themes including the war in Afghanistan and the threat posed by Al Qaeda, the rise of China and future trends in military capability development are likely to attract attention from academics and specialist commentators, who may seek to highlight perceived divergences between the QDR's emphasis on irregular warfare and the war in Afghanistan and Iraq, compared to the Australian 2009 Defence White Paper's emphasis on conventional capabilities and our immediate region.

Resources:

16. N/A.

Consultation:

17. International Policy Division.

Attachments:

A. Summary of QDR 2010.

Approved By:
Ms Rebecca Skinner
First Assistant Secretary Strategic Policy
Strategy Executive
5 February 2010

Contact Officer: Dr Michael Lankowski
Phone: (02) 6265 3134

John Faulkner

Page 1

RESTITUTION
DECLASSIFIED
US Quadrennial Defense Review (QDR) 2010 - Summary

1. The 2010 Quadrennial Defense Review (QDR) is a concise statement of US defence strategy, introduced by Defense Secretary Gates as a "truly wartime QDR" that places current conflicts at the top of Defense budget, policy and program priorities, and as an "important step to fully institutionalize ongoing reform and reshaping of the US military." Gates notes the QDR covers current conflicts as well as security challenges on the horizon and concludes that US needs a broad portfolio of military capabilities to provide maximum versatility against the widest spectrum of conflict. The time horizon of the QDR is 2011-2015.

QDR Objectives

2. The QDR sets two clear objectives: Rebalance and Reform. To rebalance the capabilities of US forces to prevail in today's wars and to reform Department of Defense institutions and processes to better support the urgent need of the warfighter and to buy useable, affordable, needed weapons and ensure dollars are spent wisely.

Defence Strategy

3. The QDR outlines the challenges of a complex and uncertain security landscape and accelerating pace of change noting that America's global role is inextricably linked to the resilience of the international system. It says that the distribution of global, political, economic and military power is shifting with the rise of China, the world's most populous country and the rise of India, the world's largest democracy. The QDR contends that the United States will remain the most powerful global actor, but must increasingly rely on key allies and partners if it is to sustain peace and stability. The role of strong regional allies and partners is recognized as fundamental, and the QDR recognizes treaty commitments as an important element of US defence priorities. "US interests and role in the world require armed forces with unmatched capabilities and a willingness on the part of the nation to employ them in defence of interests and common good."

4. US Defense strategy seeks to balance resources and risks against four priority areas:

   - Prevail in today's wars: The key US defense priority is to ensure success in the field in Afghanistan and Iraq, and in missions around the world. With partners and allies, the US will continue renewed efforts in Afghanistan and Pakistan to disrupt, defeat and dismantle Al Qaeda and eliminate safe havens, and in Iraq to continue the responsible drawdown of US forces and develop a new role in assisting the Iraqi government. Missions in Afghanistan and Iraq will substantially determine the size and shape of the major elements of the US military for several years. The QDR also anticipates that operations in Afghanistan and elsewhere in pursuit for Al Qaeda will be enduring tasks.
• Prevent and deter conflict: The QDR recognizes US "stewardship" of the international system and the need to work closely with allies and partners to prevent the rise of threats. The US will leverage existing alliances and create conditions to advance common interests. The US will seek to enhance deterrence through land, air and naval forces against capable adversaries (state or non-state) with the capacity to fight limited or large-scale conflicts in contested environments, including anti-access environments. US forces will be enabled by cyber space, missile defence and counter WMD capabilities. The US will consult closely with allies on new, tailored, regional deterrence architecture, to combine forward presence with conventional capability, missile defence and commitments to extended deterrence.

• Prepare for a wide range of contingencies: The US must prepare to respond in support of US national interests, and the Department of Defense must be prepared to provide the President with options across a wide range of categories: to support a response to an attack on the homeland; a natural disaster at home; defeating aggression by an adversary; supporting the stabilization of fragile states; preventing human suffering or responding to mass atrocities or a large-scale natural disaster abroad. US forces must be prepared for responses in multiple theatres in overlapping timeframes, and maintain the ability to prevail against two capable nation-state aggressors. This priority takes seriously the need to plan for the broadest possible range of operations from homeland defence and support to the civil authority, deterrence and preparedness in multiple unpredictable combinations. This QDR moves beyond constructs like the two major theatre-war scenario, and notes that adversaries will adopt a wide range of strategies and capabilities against the US, its allies and its interests. As such it no longer makes sense to refer to major regional conflicts as the sole or primary template, but to assume multiple stressing combinations including but not limited to major stability operations, deterring or defeating highly capable regional aggressors.

• Preserve and enhance the all-volunteer force: The QDR recognizes the stresses of war on the force and on families. The QDR includes a full chapter on these issues, to underline its critical importance as a core component of policy, planning and programming. The QDR seeks to transition to sustainable rotation rates as soon as possible to protect the force in the longer term, but it also requires that US forces plan that in times of crisis, they be prepared to expect higher deployment rates and brief but high-intensity operations, and mobilize the reserve. The QDR also includes a commitment to expand the civilian workforce to support military forces. Specific QDR investments in taking care of people will include: more wounded warrior care, managed deployment tempo, increased support to families, and recruitment and retention.

5. The QDR also defines six key milestones for US armed forces with associated investment priorities which will be reflected in the FY2011 budget (to be released 1 Feb) and the five year defense plan (FYDP):

(1) Defense of the United States and support the civil authority at home. The QDR directs enhancements to:
- improved responsiveness and flexibility of consequence management and response forces;
- enhanced capabilities for domain awareness;
- accelerated development of stand-off radiological and nuclear detection capabilities and...
- enhanced domestic capability of counter improvised explosive devices.

(2) Success in counter insurgency, stabilisation operations and counter terrorism. With QDR directed initiatives to include:
- increased availability of rotary wing assets;
- expanded manned and unmanned aerial systems for intelligence surveillance and reconnaissance (ISR);
- increased key enabling assets for special forces;
- increased counterinsurgencies, stabilisation and counter terrorism competency in the general forces;
- increased Afghanistan/Pakistan regional expertise; and
- strengthen key enabling assets for strategic communications.

(3) Build security capacity of partner nations. The QDR places a significant focus on building partner capability and on reforming the US mechanisms for foreign military aid to assist in this goal. The QDR aims to:
- strengthen and increase the general purpose force capability for security force assistance;
- enhance language, regional and cultural expertise; and
- expand training of partner aviation forces.

(4) Deter and defeat aggression including in anti-access environments. The QDR recognises that this will be a fundamental capability and that without dominant US power projection, the integrity of US alliances and security partnerships could be called into question reducing the value of US security assurances. The QDR directs:
- expand future long range strike capability exploit advantage in sub-surface operations;
- increased resilience in US for posture and base infrastructure;
- assured access to space and use of space assets;
- enhanced robustness of key ISR capabilities;
- defeat enemy engagements; and
- enhance presence and responsiveness of US forces abroad.

(5) Prevent proliferation and counter weapons of mass destruction.
- Joint Task Force Elimination of WMD Headquarters will be established; and
- increased verification technology to detect CBRN will be introduced.

(6) Operational effectiveness in cyber space.
The QDR directs US forces to grow capability to operate effectively in cyberspace and in partnership with key allies.
Rebalancing the Force

6. Based on the above priorities and key missions, the QDR outlines specific guidance for the evolution of US forces, designed to significantly enhance US force capability to include a wholly new concept of operations to confront sophisticated anti-access challenges and threats posed by nuclear armed regional adversaries. US forces will need to focus on ISR, fighters, long range strike, joint forcible entry and information network and communications. The force for 2015 will be characterised by the need for US ground forces capable of full spectrum operation including counterinsurgency, stabilisation and counter terrorism operations; US naval forces with robust forward presence and power projection operations; sea and land based ballistic missile defences; US air forces with fifth generation fighters, greater range and flexibility to deter more potent anti-access operations; and more special operations forces.

7. The QDR notes that the significant program cancellations contained in the FY10 Defense budget were critical down payments for new capability investments. And the FY11 budget will contain a number of additional major project cancellations to redirect funding to higher priority areas. This will include the shut down of C-17 production line, delay of the Command ship placement (LCC) and extending the life of existing command ships; cancellations of the CG(X) Cruiser, termination of the AEGIS enabled command and control programs. The proposed force structure is listed below:


Department of the Army
4 Corps Headquarters
18 Division Headquarters
73 Brigade Combat Teams (45 active / 28 Reserve)
  40 Infantry BCT
  8 Stryker BCT
  25 Heavy BCT
31 Combat Aviation Brigades
15 Patriot Battalions; 7 THAAD Battalions

Department of the Navy
10-11 Aircraft Carrier and 10 Carrier Air wings
84-88 Large Surface combatants
  21-32 BMD capable + Aegis Ashore
14-28 Small surface combatants
25-31 amphibious warfare ships
53-55 Attack submarines and 4 Guided missile submarines
126-171 Land based ISR and EW Aircraft
3 Maritime pre-positioning squad
30-33 Combat logistics ships
17-2 Command and support ships
51 Roll-on Roll-off sealift vessels

3 Marine Expeditionary Forces
   4 Marine Divisions (3 Active 1 regular)
      11 infantry regiments
   4 Artillery regiments
   4 Marine Aircraft wings
   4 Marine logistics
   7 Marine Expeditionary Unit commands

Department of the Air Force
8 ISR wing equivalents (up to 380 primary mission aircraft)
30-32 Airlift / Aerial Refuelling wings
   (equiv 33 aircraft per wing)
10-11 theatre strike wings
   (equiv 72 aircraft per wing)
5 long range strike (bomber) wings
   (with up to 96 primary mission aircraft)
6 Air superiority wing
   (equiv 72 aircraft per wing)
3 Command and control wings
5 operational air and space operations wings
10 Space and Cyber wings

Special Operations Forces
60 Special Operations teams
3 Ranger Battalions
165 Yill senior fixed wing mobility and fire support aircraft.

Strengthening Relations

8. The QDR states repeatedly that the strength and influence of the US is deeply intertwined in the fate of the broader international system, and recognising alliance and multilateral institutions. The QDR notes that the US will work to strengthen their relationships with other US agencies and with allies and that it will seek to build a "vibrant network of defence alliances and new partnerships" while continuing to emphasise tailored approaches that build on common interests.

9. The QDR recognises transatlantic partnerships, underpinned by bilateral relationships, noting the special partnership with the United Kingdom, NATO partners, Eurofed and Russia, and including progress on the new START treaty, and that the US seeks to work with Russia on new issues including Missile Defence and Arctic cooperation.

10. In Asia, the foundation of US presence in Asia is based on historical treaty alliances with Japan and the Republic of Korea, and the QDR notes that they "will work to develop agreed on plans" and shared visions for security.
11. In the "Pacific Rim" the QDR starts by noting that "we are deepening our relationship with Australia, an alliance that stretches beyond Asia to provide essential cooperation on a wide range of global security challenges".

12. The QDR notes China's growing presence and influence in regional and global security affairs is one of the consequential aspects of the evolving security landscape in the Asia Pacific and globally. Chinese military is developing new roles and capabilities. The US welcomes a strong progressive and successful China that plays a greater global role but the lack of transparency in the nature of Chinese military modernisation and decision making raises legitimate questions about future intentions. The relationship with China is described as multidimensional and underpinned by a process of enhancing confidence and reducing mistrust.

Global Posture

13. The QDR only goes so far as to outline a set of principles as to how global security posture will be determined. We understand a full global posture review will be undertaken throughout 2010, drawing on these principles.

14. The US intends to adapt its overseas posture into new cooperative and regionally tailored approaches that balance forward stations and rotations forces, and the need to reassure allies of US commitment to mutual security.

15. The QDR reaffirms the security commitment to Europe and NATO, including theatre BMD. In the Asia Pacific the US will work with allies and key partners to ensure peace and security, and will look to augment and adopt forward presence which reassures allies, while encouraging allies to enhance their roles in security and in improving multilateral security cooperation.

16. The QDR also notes that the US will seek to develop additional opportunities for joint and combined training in the Western Pacific to respond to need for constant readiness of US forces for regional contingencies including humanitarian and disaster relief.

Refining how we do Business

17. The QDR places significant emphasis on refining Department of Defense practices in many areas, and will focus on:
   - reform of security assistance as discussed above;
   - acquisition reform, designed to balance cost and schedule with performance strengthening the industrial base, improve rapid acquisition, and rapid logistics;
   - significant reform of the export control system;
   - reforming and lowering the cost of the military health system (which costs an estimate $50bn annually); and
   - reducing the contractor workforce over the next five years to pre-2001 levels of 26% (currently at 39%).
Climate Change

18. The QDR includes a short section on Climate Change noting two key issues, the capacity for climate change to shape the future operating environment and hence the roles and missions of the US military. The report notes that while climate change may not cause conflict directly, it can act as an accelerant of instability. Defense also recognizes its increasing role in environment stewardship for facilities, installations and defense platforms.

Risk Management Framework

Experimenetal testing of hypersonic vehicles – HIFIRE 1

Recommendations:

That you:

i. note that a hypersonic air vehicle experiment will be conducted at the Woomera Test Range (WTR) during 9-28 March 2010 as part of the Hypersonic International Flight Research and Experimentation (HIFIRE) program.

[Signature: NOTED / PLEASE DISCUSS]

ii. agree to issue the attached Media Releases, as required.

[Signature: AGREED / NOT AGREED]

Key Points:

1. A series of scramjet propulsion technology experiments is being progressed by DSTO and the USAF Research Laboratory (AFRL) under the HIFIRE hypersonics research program. The program is collecting aerodynamic and aerothermodynamic data and developing scramjet engine technology that has potential military and civilian applications.

2. The previous MINSUB on this issue is at Attachment A.

3. The first of 10 flights, HIFIRE 0 launch, was successfully conducted at the Woomera Test Range from 4-16 May 2009.

4. The second of the HIFIRE launches, HIFIRE 1, is scheduled between 9 – 28 March 2010 and will also involve a "space launch".

5. On 15 February the Launch Approval Review for HIFIRE 1 was signed off by Commander Air Operational Support Group (AOSG).

6. The HIFIRE program has already achieved several significant milestones including the design, integration, assembly and pre-flight testing of the hypersonic vehicles; the design of complex avionics and flight systems; and computer modelling of the external aerodynamics.
Ref: CDS/OUT/2010/25

7. Hypersonics is a critical aerospace technology that may provide future revolutionary capabilities, including low-cost access to space. The project includes modelling, simulation, and ground and flight testing.

8. As this is an experimental trial, with the high risk involved in such efforts, media are not invited to the launch. A media release and talking points have been prepared for you to make the appropriate announcement after the successful conclusion of the launch (Attachment B). A separate media release and talking points are provided should the trials not proceed as planned, to be released as necessary (Attachment C).

Sensitivity:

9. Medium. The international program has also evolved from University of Queensland research and experimentation into scramjets which generate strong media interest. Recent media speculation has sought to link Australia’s current hypersonics research with weaponisation. Answers to anticipated media questions on this aspect of the trials are at Attachment D.

Resources:

33(a)(ii)

33(a)(iii)

Consultation:


Attachments:

A. CDS/OUT/2009/44 of 20 May 2009 – HIFiRE 0 LAUNCH
B. Background information.
C. Media Release and Talking points – Successful launch.
D. Media Release and Talking points – Unsuccessful launch.
E. Media Questions and Answers.
Report of the International Commission on Nuclear Non-Proliferation and Disarmament and the Australian Government response

Recommendation:

That you note Defence is involved in the development of a Government response to the report of the International Commission on Nuclear Non-Proliferation and Disarmament.

NOTED / PLEASE DISCUSS

Key Points:

1. The International Commission on Nuclear Non-Proliferation and Disarmament (ICNND), established by Australia and Japan in September 2008 and co-chaired by Gareth Evans and former foreign minister Yoriko Kawaguchi, has agreed a final draft of its report on 'Eliminating Nuclear Threats'. The ICNND was established to reinvigorate international efforts on nuclear non-proliferation and disarmament in the lead-up to the 2010 Nuclear Non-Proliferation Treaty Review Conference, and beyond.

2. The report makes 76 recommendations (Attachment A) as part of an ambitious agenda for achieving nuclear disarmament in a two-phase process, with 'minimisation' to be achieved no later than 2025 and 'elimination' as soon as possible thereafter. In particular, the report recommends cutting global numbers of nuclear warheads to no more than 2000 by 2025, less than ten per cent of current estimated warhead numbers. The report also includes recommendations for stronger safeguards, compliance and enforcement measures for nuclear non-proliferation. The report proposes the adoption of short term (to 2012), medium term (to 2025) and longer term (beyond 2025) action agendas in order to achieve these objectives.
Ref: FASSP(S)/OUT/2009/2

34 4. Defence largely supports the

(a) The ICNND report recommends that every nuclear-armed state make an unequivocal NFU declaration, committing itself to not using nuclear weapons either preventively or pre-emptively against any possible nuclear adversary or, if this proves unattainable, accept the principle that the ‘sole purpose’ of possessing nuclear weapons is to deter others from using nuclear weapons against that state or its allies.

(b) The ICNND report recommends that the PSI be reconstituted within the UN system as a neutral organisation.

33(a)(iii) While Defence White Papers since 1994 have only referred to nuclear threats when discussing our reliance on extended deterrence.

33(a)(iii) We understand PM&C will brief the Prime Minister’s Office on the ICNND report in the next few days. It is possible that the Prime Minister may wish to discuss the report’s recommendations and their implications for Defence before the public release of the report, which may occur as early as 1 December.

Sensitivity:

8. Medium. Although the ICNND is an independent commission, it is closely associated with the Government’s disarmament agenda. There is likely to be significant domestic and international interest in its recommendations on nuclear disarmament, non-proliferation and nuclear energy. Recommendations affecting nuclear deterrence have implications for the US alliance, particularly as the US administration is conducting its Nuclear Posture Review.

Resources:

9. N/A.
Consultation:

10. Defence has consulted with DFAT and PM&C on the Government response to the ICNND report.

Attachments:

A. ICNND Report recommendations.

B. 

Approved By:

Rebeeca Skinner
First Assistant Secretary Strategic Policy
Office of the Secretary and CDF
Strategic Policy Division
17 November 2009

Contact Officer: Michael Lankowski
Phone: 6265 3134

JOHN FAULKNER
Annex A: Commission Recommendations

On Overall Disarmament Strategy

1. Nuclear disarmament should be pursued as a two-phase process: with "minimization” to be achieved no later than 2025, and “elimination” as soon as possible thereafter. Short term (to 2012), medium term (to 2025) and longer term (beyond 2025) action agendas should reflect those objectives [7.1-5; see also Sections 17-19]

2. Short and medium term efforts should focus on achieving the general delegitimization of nuclear weapons, and on reaching as soon as possible, and no later than 2025, a minimization point” characterised by:
   (a) low numbers: a world with no more than 2,000 warheads (less than 10 per cent of present arsenals)
   (b) agreed doctrine: every nuclear-armed state committed to no first use of nuclear weapons; and
   (c) credible force postures: verifiable deployments and alert status reflecting that doctrine. [7.6-15; see also Sections 6 (on delegitimization) and 17-18 (on minimization point elements)]

3. Analysis and debate should commence now on the conditions necessary to move from the minimization point to elimination, even if a target date for getting to zero cannot now be credibly specified. [7.15-16; see also Section 19]

On Overall Non-Proliferation Strategy

4. Nuclear non-proliferation efforts should focus both on the demand side – persuading states that nuclear weapons will not advance their national security or other interests – and the supply side, through maintaining and strengthening a comprehensive array of measures (addressed in following recommendations) designed to make it as difficult as possible for states to buy or build such weapons. [8.9-16; see also Sections 9-15]

On NPT Safeguards and Verification

5. All states should accept the application of the Additional Protocol. To encourage universal take-up, acceptance of it should be a condition of all nuclear exports.[9.9]

6. The Additional Protocol and its annexes should be updated and strengthened to make clear the IAEA’s right to investigate possible weaponisation activity, including by adding specific reference to dual-use items, reporting on export denials, shorter notice periods and the right to interview specific individuals. [9.9-10]
7. With safeguards needing to move from a mechanistic to an information-driven system, there should be much more information sharing, in both directions, on the part of both states and the IAEA, with the agency re-evaluating its culture of confidentiality and non-transparency. [9.10-12]

On NPT Compliance and Enforcement

8. In determining compliance, the IAEA should confine itself essentially to technical criteria, applying them with consistency and credibility, and leaving the political consequences for the Security Council to determine. [9.15]

9. The UN Security Council should severely discourage withdrawal from the NPT by making it clear that this will be regarded as prima facie a threat to international peace and security, with all the punitive consequences that may follow from that under Chapter VII of the UN Charter. [9.20]

10. A state withdrawing from the NPT should not be free to use for non-peaceful purposes nuclear materials, equipment and technology acquired while party to the NPT. Any such material provided before withdrawal should so far as possible be returned, with this being enforced by the Security Council. [9.21-22]

11. All states should make it a condition of nuclear exports that the recipient state agree that, in the event it should withdraw, safeguards shall continue with respect to any nuclear material and equipment provided previously, as well as any material produced by using it [9.23]

On Strengthening the IAEA

12. The IAEA should make full use of the authority already available to it, including special inspections, and states should be prepared to strengthen its authority as deficiencies are identified. [9.24]

13. If the IAEA is to fully and effectively perform its assigned functions, it should be given, as recommended in 2008 by the Zedillo Commission:
   e) a one-off injection of funds to refurbish the Safeguards Analytical Laboratory
   f) a significant increase in its regular budget support, without a "zero real growth" constraint, and so as to reduce reliance on extra-budgetary funding for key functions;
   g) sufficient security of future funding to enable medium to long-term planning; and
   h) support from both states and industry in making staff secondments and offering training opportunities. [9.25-27]
14. Consideration should be given to an external review, by the Zedillo Commission or a successor panel, of the IAEA's organizational culture, in particular on questions of transparency and information sharing. [9.28]

On Non-NPT Treaties and Mechanisms

15. The Nuclear Suppliers Group (NSG) should develop a criteria-based approach to cooperation agreements with states outside the NPT, taking into account factors such as ratification of the CTBT, willingness to end unsafeguarded fissile material production, and their record in securing nuclear facilities and materials and controlling nuclear-related exports [10.3-9]

16. The Proliferation Security Initiative (PSI) should be reconstituted within the UN system as a neutral organization to assess intelligence, coordinate and fund activities, and make both generic and specific recommendations or decisions concerning the interdiction of suspected materials being carried to or from countries of proliferation concern. [10.10-12]

On Extending Obligations to Non-NPT States

17. Recognising the reality that the three nuclear-armed states now outside the NPT—India, Pakistan and Israel—are not likely to become members any time soon, every effort should be made to achieve their participation in parallel instruments and arrangements which apply equivalent non-proliferation and disarmament obligations. [10.13-16]

18. Provided they satisfy strong objective criteria demonstrating commitment to disarmament and non-proliferation, and sign up to specific future commitments in this respect, these states should have access to nuclear materials and technology on the same basis as an NPT member. [10.17]

19. These states should participate in multilateral disarmament negotiations on the same basis as the nuclear-weapon state members of the NPT, and not be expected to accept different treatment because of their non-membership of that treaty. [10.18]

On Banning Testing

20. All states that have not already done so should sign and ratify the CTBT unconditionally and without delay. Pending entry into force, all states should continue to refrain from nuclear testing. [11.1-8]

21. All signatories should provide the necessary financial, technical and political support for the continued development and operation of the CTBTO, including completing the global coverage of its monitoring systems, facilitating on-site inspection when warranted, and establishing effective national data centres and information gathering systems. [11.9-12]

On Limiting the Availability of Fissile Material

221
22. All states should negotiate to an early conclusion in the Conference on Disarmament a non-discriminatory, multilateral, internationally and effectively verifiable and irreversible Fissile Material Cut-Off Treaty, banning the production of fissile material for nuclear weapons or other nuclear explosive devices.[12.14]

23. All nuclear-armed states should declare or maintain a moratorium on the production of fissile material for weapon purposes pending the entry into force of such a treaty.[12.15]

24. On the question of pre-existing stocks, a phased approach should be adopted, with the first priority a cap on production; then an effort to ensure that all fissile material other than in weapons becomes subject to irreversible, verified non-explosive use commitments; and with fissile material released through dismantlement being brought under these commitments as weapon reductions are agreed. [12.18]

25. As an interim step, all nuclear-armed states should voluntarily declare their fissile material stocks and the amount they regard as excess to their weapons needs, place such excess material under IAEA safeguards as soon as practicable, and convert it as soon as possible to forms that cannot be used for nuclear weapons. [12.19]

26. The use of any fissile materials in civil research programs should be ended as soon as possible, and their availability and use in energy programs phased out as viable alternatives are established.[12.20-27]

On Nuclear Security

27. All states should agree to take further measures to strengthen the security of nuclear materials and facilities, including early adoption of the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material and the most recent international standards, accelerated implementation of the Cooperative Threat Reduction and associated programs worldwide, and greater commitment to international capacity building and information sharing. [13.1-16, 22-23]

28. At the Global Summit on Nuclear Security in April 2010, and in subsequent follow-up activity, priority attention should be given to the implementation-focused issues identified in Box 13.1. [13.4]

29. On the control of material usable for “dirty bombs”, further efforts need to be made to cooperatively implement the Code of Conduct on the Safety and Security of Radioactive Sources, with assistance to states in updating legislation and licensing practice, promoting awareness among users, and generally achieving a safety and security culture.[13.17-21]

30. Efforts should continue to be made to establish an intelligence clearing house which would provide a mechanism by which countries might be willing not only
to share their intelligence, but also provide the know-how for other countries to interpret and deal with it. [13.22]

31. Strong support should be given to the emerging science of nuclear forensics, designed to identify the sources of materials used in nuclear explosions, including through providing additional resources to the Nuclear Smuggling International Technical Working Group [13.24-25]

**On Nuclear Energy Management**

32. The use of nuclear energy for peaceful purposes should continue to be strongly supported as one of the three fundamental pillars of the NPT, along with disarmament and non-proliferation. Increased resources should be provided, including through the IAEA’s Technical Cooperation Programme, to assist developing states in taking full advantage of peaceful nuclear energy for human development. [14.1-3]

33. Support should be given to the initiative launched at the 2008 Hokkaido Toyako G8 Summit for international cooperation on nuclear energy infrastructure, designed to raising awareness worldwide of the importance of the three S’s — safeguards, security and safety — and assist countries concerned in developing the relevant measures. [14.4-6]

34. Proliferation resistance should be endorsed by governments and industry as an essential objective in the design and operation of nuclear facilities, and promoted through both institutional and technical measures — neither is sufficient without the other. [14.7-8]

35. The increasing use of plutonium recycle, and the prospective introduction of fast neutron reactors, must be pursued in ways which enhance non-proliferation objectives and avoid adding to proliferation and terrorism risks. In particular, fast neutron reactors should be designed and operated so that plutonium is produced in the core rather than a breeding blanket. [14.9-15]

36. International measures such as spent fuel take-back arrangements by fuel suppliers, are desirable to avoid increasing spent fuel accumulations in a large number of states. Particular attention should be paid in this respect to take-back of fuel from initial core loads. [14.13]

37. New technologies for spent fuel treatment should be developed avoiding current forms of reprocessing altogether, and as they are established, use of MOX fuel in thermal reactors, and conventional reprocessing plants, should be phased out. [12.26]

38. Nuclear industry, and government-industry collaboration, will need to play a greater role in mitigating the proliferation risks associated with a growing civilian nuclear sector worldwide. Industry should become a more active partner with
governments in the drafting of regulations and treaties that affect its activities, to ensure that they make operational sense and to encourage compliance.[14.16-24]

On Multilateralising the Nuclear Fuel Cycle

39. Multilateralisation of the nuclear fuel cycle — in particular through fuel banks and multilaterally management of enrichment, reprocessing and spent fuel storage facilities — should be strongly supported. Such arrangements would play an invaluable role in building global confidence in the peaceful uses of nuclear energy, and provide an important foundation for a world free of nuclear weapons, for which a necessary requirement will be multilateral verification and control of all sensitive fuel cycle activities.[15.48]

40. Pending the acceptance of more far-reaching proposals, support should be given to voluntary arrangements whereby, in return for assurances of supply, recipient states would renounce the national construction and operation of sensitive fuel cycle facilities for the duration of the agreement [15.46]

On Priorities for the 2010 NPT Review Conference

41. That the following be the major priority issues on which agreement should be sought at the 2010 NPT Review Conference:

(a) Action for Disarmament. Agree on a twenty-point statement, “A New International Consensus for Action on Nuclear Disarmament” (see Box 16-1), updating and extending the “Thirteen Practical Steps” agreed in 2000.

(b) Strengthening Safeguards and Enforcement. Agree:
   o that all states should accept the application of the Additional Protocol and that, to encourage its universal take-up, acceptance should be made a condition of all states’ nuclear exports
   o to declare that a state withdrawing from the NPT is not free to use for non-peaceful purposes nuclear materials, equipment and technology acquired while party to the NPT;
   o to recommend that the Security Council make it clear that any withdrawal will be regarded prima facie as a threat to international peace and security; and
   o to recommend to states that they make it a condition of nuclear exports that safeguards agreements continue to apply after any such withdrawal.

(c) Strengthening the IAEA. Agree that the IAEA’s budget be significantly increased — without any “zero real growth constraint”, and so as to reduce reliance on extra-budgetary support for key functions — as recommended in 2008 by the Zedillo Commission.
(d) Middle East Weapons of Mass Destruction Free Zone. Agree that the Secretary-General of the UN should convene an early conference of all relevant states to address creative and fresh ways to implement the 1995 resolution, including the identification of confidence building measures that all key states in the region can embrace, and to commence early consultations to facilitate that.

(e) Nuclear security. Agree that states should take further measures to strengthen the security of nuclear materials and facilities, including early adoption of the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material and the most recent international standards, accelerated implementation of the cooperative threat reduction and associated programs worldwide, and greater commitment to international capacity building and information sharing.

(f) Peaceful uses. Agree that the inalienable right to use of nuclear energy for peaceful purposes remains one of the fundamental objectives of the NPT and dedicate increased resources, including through the IAEA’s Technical Cooperation Programme, to assist developing states in taking full advantage of peaceful nuclear energy for human development.

On Reducing Weapon Numbers: Bilateral and Multilateral Processes

42. The “minimization point” objective should be to achieve no later than 2025 a global total of no more than 2,000 nuclear warheads, with the U.S. and Russia reducing to a total of 500 nuclear weapons each, and with at least no increases (and hopefully some reductions) in the arsenals of the other nuclear-armed states. The objective must be to cut not only strategic but all classes of weapons, and not only deployed weapons but those in storage and those awaiting destruction (but still capable of reconstitution and deployment) as well. [7.7; 18.1-3]

43. To bring the bilateral target within achievable range, the U.S. and Russia should accelerate implementation of the START follow-on treaty now being negotiated, bringing forward the envisaged reductions under this to no later than 2015. [17.13]

44. Once this treaty is ratified, the U.S. and Russia should resume intensive negotiations with a view to reaching a further START agreement no later than 2015, which would bring the total number of warheads down to no more than 1000 for each, and hopefully much less, by the year 2020. [17.12-13]
45. To achieve the minimization point objective of a global maximum of no more than 2,000 warheads, with the nuclear-armed states other than the U.S. and Russia having no more than 1,000 between them, the highest priority need is for all nuclear-armed states to explicitly commit not to increase the number of their nuclear weapons, and such declarations should be sought from them as soon as possible. [17.15-16]

46. To prepare the ground for multilateral disarmament negotiations, strategic dialogues should be initiated by all the nuclear-armed states with each other, and systematic and substantial national studies conducted of all the issues — including missile defence, conventional imbalances and disarmament verification — that will arise at all stages of the process. [17.17-19, 22-24]

47. Consideration should be given to the Conference on Disarmament in Geneva as an appropriate forum for initial consultations, on a formal or informal basis, between all the nuclear-armed states, given the need, if the multilateral disarmament process is to advance, for there to be early agreement on an appropriate negotiating process. [7.9; 17.20-21]

48. To facilitate future verification processes, in the credibility of which all nuclear-armed states will have a mutual interest, “nuclear archaeology” steps should be taken now by them to ensure that all relevant records are identified, secured and preserved; and relevant measurements and samples are taken. [17.25-26]

On Nuclear Doctrine: No First Use, Extended Deterrence, and Negative Security Assurances

49. Pending the ultimate elimination of nuclear weapons, every nuclear-armed state should make an unequivocal “no first use” declaration, committing itself to not using nuclear weapons either preventively or pre-emptively against any possible nuclear adversary, keeping them available only for use, or threat of use, by way of retaliation following a nuclear strike against itself or its allies. [17.28]

50. If not prepared at this stage to make such a declaration, every nuclear-armed state should at least accept the principle that the sole purpose of possessing nuclear weapons — until such time as they can be eliminated completely — is to deter others from using such weapons against that state or its allies. [7.10; 17.28-32]

51. The allies in question should be given firm assurances that they will not be exposed to unacceptable risk from other sources, including especially biological and chemical weapons. [17.29]

52. It is particularly important that at least a “sole purpose” statement be made in the U.S. Nuclear Posture Review due for publication early in 2010, placing pressure as this would on other nuclear armed states to be more forthcoming, and undermining “double standards” arguments at the 2010 NPT Review Conference.[17.32]
53. New and unequivocal negative security assurances (NSAs) should be given by all the nuclear-armed states, supported by binding Security Council resolution that they will not use nuclear weapons against non-nuclear weapon states. The only qualification should be that the assurance would not extend to a state determined by the Security Council to be in non-compliance with the NPT to so material an extent as to justify the non-application of any NSA. [17.33-39]

54. All NPT nuclear-weapon state members should sign and ratify the protocols for all the Nuclear Weapons Free Zones, and the other nuclear-armed states (so long as they remain outside the NPT) should issue stand-alone negative security assurances for each of them.[16.16]

On Nuclear Force Posture: Launch Alert Status and Transparency

55. The basic objective is to achieve changes to deployment as soon as possible which ensure that, while remaining demonstrably survivable to a disarming first strike, nuclear forces are not instantly useable. Stability should be maximized by deployments and launch alert status being transparent.[7.12-15; 17.40-50]

56. It is crucial that ways be found to lengthen the decision-making fuse for the launch of any nuclear weapons, and in particular – while recognising the difficulty and complexity of the negotiating process involved between the U.S. and Russia – that weapons be taken off launch-on-warning alert as soon as possible. [17.43]

57. In order to achieve strategic dialogues capable of making real progress on disarmament, maximum possible transparency in both nuclear doctrine and force postures should be offered by all nuclear-armed states.[17.44]

58. A relaxation of Israel’s policy of complete opacity would be helpful in this respect, but continued unwillingness to do so should not inhibit its engagement in multilateral disarmament negotiations (given that nuclear disarmament can be defined as a process of taking unsafeguarded fissile materials and putting them under international safeguards). [17.45-50]

On Parallel Security Issues: Missiles, Space, Biological and Conventional Weapons

59. The issue of anti-ballistic missile (ABM) systems should be revisited, with a view to allowing the further development of theatre ballistic missile defence systems, including potential joint operations in areas of mutual concern, but setting severe limits on strategic ballistic missile defences. It should be recognized that while, in a world without nuclear weapons, strategic missile defences could play an important stabilizing role as an insurance policy against potential cheaters, they now constitute a serious impediment to both bilateral and multilateral nuclear disarmament negotiations. [18.28-30; see also 2.30-34, 17.18]
60. International efforts to curb missile proliferation should continue, but continued failure to multilateralise the INF should not be used as an excuse for either present party to withdraw from it. [2.35-37]

61. Ongoing attempts to prevent an arms race in outer space (PAROS) at the Geneva Conference on Disarmament, and work at the Vienna-based UN Committee on the Peaceful Uses of Outer Space, should be strongly supported. [18.31]

62. Continuing strong efforts should be made to promote universal adherence to the Biological and Toxin Weapons Convention and the Chemical Weapons Convention, and to develop more effective ways of defending against potential biological attacks, including -- for all its difficulties -- building a workable Convention verification regime.[17.29; 18.32-33]

63. The issue of conventional arms imbalances, both quantitative and qualitative, between the nuclear-armed states, and in particular the relative scale of U.S. capability, needs to be seriously addressed if it is not to become a significant impediment to future bilateral and multilateral nuclear disarmament negotiations, including by revisiting matters covered in the Treaty on Conventional Armed Forces in Europe (CFE). The development of more cooperative approaches to conflict prevention and resolution may well prove more productive in this context than focusing entirely on arms limitation measures. [18.34-36]

On Action Agendas: Short, Medium and Longer Term

64. The Short Term Action Agenda, for the period between now and 2012 – and including the 2010 NPT Review Conference – should focus on the issues we identify in Box 17-1.

65. Consideration should be given to the possibility of the United Nations General Assembly holding a Special Session on Disarmament late in 2012, as a way of benchmarking the achievements of the short term and defining the way forward. Any decision should be deferred until mid-2010, to allow for reflection on the outcome of the 2010 Review Conference, and whether enough momentum is building to justify the resources and effort involved. [17.2-3]

66. The Medium Term Action Agenda, for the period between 2012 and 2025, should focus on the issues we identify in Box 18-1.

67. The Longer Term Action Agenda, for the period beyond 2025, should focus on establishing the conditions we identify in Box 19-1.

68. Given that questions of cost-burden sharing are likely to arise as disarmament momentum builds over the longer term, it may be helpful for interested states to commission a detailed study on the calculation of disarmament and non-proliferation costs and possible ways of funding them [18.26-27]

On Mobilizing and Sustaining Political Will
69. Sustained campaigning is needed, through both the traditional and new media and direct advocacy, to better inform policy-makers and those who influence them about nuclear disarmament and non-proliferation issues. Capable non-governmental organizations should be appropriately supported by governments and philosophical foundations to the extent necessary to enable them to perform this role effectively. [20.7-10]

70. There should be a major renewed emphasis on formal education and training about nuclear disarmament and related issues in schools and universities, focusing on the history of nuclear weapons, the risks and threats involved in their continued deployment and proliferation, and possible ways forward. An associated need is for more specialized courses on nuclear-related issues — from the scientific and technical to the strategic policy and legal — in universities and diplomatic-training and related institutions. [20.11-12]

71. Work should commence now on further refining and developing the concepts in the model Nuclear Weapons Convention now in circulation, making its provisions as workable and realistic as possible, and building support for them, with the object of having a fully-worked through draft available to inform and guide multilateral disarmament negotiations as they gain momentum. Interested governments should support with appropriate resources the further development of the NWC.[20.38-44]

72. To help sustain political will over time, a regular “report card” should be published in which a distinguished international panel, with appropriately professional and broad-based research support, would evaluate the performance of both nuclear-armed and non-nuclear-armed states against the action agendas identified in this report. [20.49-50]

73. Consideration should be given to the establishment of a new “Global Centre on Nuclear Non-Proliferation and Disarmament” to act as a focal point and clearing house for the work being done on nuclear non-proliferation and disarmament issues by many different institutions and organizations in many different countries, provide research and advocacy support for both like-minded governments on the one hand, and civil society organizations on the other, and to prepare the “report card” described above. [20.53]

74. Such a centre might be constructed to perform functions at two levels:
(a) a base of full time research and advocacy professionals, drawing directly on the resources of a wide international network of well-established associated research centres; and
(b) a superstructure, in the form of a governing or advisory board drawn from distinguished global figures of wide-ranging experience, giving their imprimatur as appropriate to the centre’s published reports, policy initiatives and campaigns. [20.51-54]
CHAPTER 4

WEAPONS

Executive summary

- Certain weapons are totally prohibited. The blanket prohibitions are based on concerns that the weapons in question are either indiscriminate in their effect or cause unnecessary suffering.
- Legal weapons are limited in the way in which they may be used. They cannot be used indiscriminately, against protected persons or places, or in a manner calculated to cause unnecessary suffering.

INTRODUCTION

4.1 Weapons, projectiles, materials and means of warfare which cause unnecessary injury or suffering are not permissible, that is, when the practical effect is to cause injury or suffering which is out of proportion to the military effectiveness of the weapon, projectile, material or means. Limitations on the use of weapons fall into two broad categories, namely:

- prohibited weapons, and
- the illegal use of lawful weapons.

4.2 Defence Instructions (General) OPS 44–1—Legal Review of New Weapons requires legal review of all proposed new weapon acquisitions to determine whether their intended use is consistent with the Australian Government’s obligations under international law. While Australian Defence Force (ADF) members can be confident that their issued weapons do not violate the law of armed conflict (LOAC), care must be taken to ensure that they are used and employed in a manner that complies with the LOAC. Weapon use will be unlawful under the LOAC when it breaches the principle of proportionality by causing unnecessary injury or suffering.

4.3 In a major or extended conflict, ADF members could be called upon to utilise captured enemy weapons. While the LOAC recognises that such weapons may be used (after enemy markings are removed and provided they do not cause unnecessary injury or suffering), prior command approval should normally be obtained if the captured weapon is not currently in the ADF inventory.
PROHIBITED WEAPONS

General

4.4 Some weapons and weapons systems are totally prohibited. These blanket prohibitions, which may be traced to treaty or customary international law, are justified on the grounds that the weapons in question are either indiscriminate in their affect or cause unnecessary suffering.

HISTORICAL EXAMPLE—PROGRESSIVE WEAPONS RESTRICTION

Although the Hague Conventions of 1899 and 1907 proscribed the use of poisonous gases, when Germany initiated chemical warfare in April 1915, free-for-all use resulted in 1.3 million casualties. Similarly, the use of flame warfare became a standard option. In 1922, the major powers signatory to the Washington Treaty joined in prohibiting chemical weapons, underpinned in part by the 1925 Geneva Protocol, which prohibited first use of chemical and bacteriological weapons, but not their development or production. Although there has been relatively restricted usage of such weapons—Italy in Ethiopia 1935–1936, Egypt in North Yemen 1963–1967 and Iran-Iraq 1983–1988, there was no use in World War II other than by Japan in China 1937–1945. The 1993 Chemical Weapons Convention (CWC) now totally prohibits their use.

Figure 4–1: Disposal of chemical and biological weapons following the Gulf War 1991
HISTORICAL EXAMPLE—(cont)

Parallel strong pressure to limit all ‘weapons of mass destruction’ has resulted in bilateral moves to reduce arsenals of nuclear weapons by Russia and the United States of America, South African destruction of its nuclear weapons, and pressure on countries attempting to join the nuclear club to desist. This has not been effective with India-Pakistan, and other countries of dubious responsibility have also continued their attempts—Iraq, now forestalled, Iran and North Korea remain serious aspirants and threats. Biological weapons, prohibited under a 1972 convention, also remain an achievable goal for many third world countries, which either do not subscribe to the Protocol or are prepared to flout it. As with chemical weapons, these are in reach of countries with a modest industrial base. Other techniques which were standard up to the Vietnam War, such as incendiary, flame and fragmentary weapons, and blinding lasers, have been restricted by the 1980 Convention on Prohibitions or Restrictions on the use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects (CCW).

Anti-personnel mines were targeted for proscription in the 1990s. With over 100 million mines already laid, and an annual rate exceeding the recovery rate by a factor of more than 100, the need for action was clear. Now 147 countries, including Australia, subscribe to the 1997 Ottawa Convention. This Treaty proscribes the use of anti-personnel landmines as a method of warfare. The nations party to the Convention have also committed to an aggressive campaign to destroy existing minefields throughout the world. (source: various)

Indiscriminate weapons

4.5 It is prohibited to employ weapons which cannot be directed at a specific military objective or the effects of which cannot be limited as required by Additional Protocol I (G.P.I) and are therefore of a nature that they may strike military objectives and civilians or civilian objects without distinction or which may be expected to cause incidental loss to civilians or civilian objects which would be excessive in relation to the military advantage anticipated.
4.6 G. P. I operates as an effective prohibition on the use of weapons that are so inaccurate that they cannot be directed at a military target. The Scud rockets used during the Gulf conflict of 1990–1991 are examples of weapons likely to be caught by this provision. Further clarification of what constitutes indiscriminate use or effect is covered in chapter 5—"Targeting".

Weapons calculated or modified to cause unnecessary suffering

4.7 Weapons such as irregularly shaped bullets, projectiles filled with broken glass, bullets which have been scored, have had their ends filed, have been altered or which have been smeared with any substance likely to exacerbate a trauma injury are prohibited. "Dum dum" bullets (those with a hard envelope that does not entirely cover the core or which have been pierced with incisions or which have had their points filed off) come within this category of weapon.

Poison

4.8 Poison or poisoned weapons are illegal because of their potential to be indiscriminate. So, for example, the poisoning or contamination of any source of drinking water is prohibited and the illegality is not cured by posting a notice that the water has been so contaminated or poisoned.

Non-detectable fragments

4.9 Weapons which cause injury by the use of fragments that are undetectable by X-ray in the human body are prohibited.

Exploding small arms projectiles

4.10 Bullets or other projectiles weighing less than 400 grams which are either explosive or contain fulminating or inflammable substances (exploding small arms projectiles) are prohibited. It should be noted however, that tracer and incendiary ammunition are not prohibited.

Environment altering weapons

4.11 Environmental modification techniques having widespread, long lasting or severe effects are prohibited. An example of this is defoliant chemicals used by militaries to deprive the enemy of ground cover or kill food crops. The United States used Agent Orange during the Vietnam War for this purpose. These chemicals are not discriminating and are difficult to contain, often resulting in effects to water supplies and creation of toxins dangerous to humans. Further details are contained in chapter 5.
Laser weapons

4.12 Under the 1995 Protocol IV of the CCW (CCW P IV), laser weapons are prohibited from use where they are specifically designed to cause permanent blindness. While CCW P IV does not prohibit use of lasers for other purposes, precautions must be taken when using laser systems for other purposes in order to avoid causing permanent blindness.

Gas

4.13 Asphyxiating, poisonous or other gases are prohibited. Smoke grenades, smoke ammunition from indirect fire weapons and tank smoke ammunition, all primarily used to conceal position or movement or mask a target are not prohibited.

Bacteriological warfare

4.14 Bacteriological methods of warfare are prohibited.

Chemical weapons

4.15 Under the CWC, States Parties, including Australia, undertake:

- never under any circumstances:
  - to develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone;
  - to use chemical weapons;
  - to engage in any military preparations to use chemical weapons; and
  - to assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party under the convention.

Article 1 of the Chemical Weapons Convention
4.16 The Convention contains a definition of chemical weapons as follows:

'chemical weapons' means the following, together or separately:

- toxic chemicals and their precursors, except where intended for purposes not prohibited under this Convention, as long as the types and quantities are consistent with such purposes;
- munitions and devices, specifically designed to cause death or other harm through the toxic properties of those toxic chemicals specified in sub-paragraph (a), which would be released as a result of the employment of such munitions and devices; and
- any equipment specifically designed for use directly in connection with the employment of munitions and devices specified in sub-paragraph (b).

Article 2 Chemical Weapons Convention

4.17 Permitted uses of chemicals include industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes; purposes directly related to protection against toxic chemicals and chemical weapons; military purposes not connected with the use of chemical weapons and not dependent on the use of the toxic properties of chemicals as a method of warfare; and law enforcement, including domestic riot control purposes.

4.18 The CWC also requires States Parties to destroy existing chemical weapons and chemical weapons production facilities. It establishes an Organisation for the Prohibition of Chemical Weapons and contains very detailed provisions for verification, including short notice challenge inspections.

4.19 The use of riot control agents, including tear gas and other gases which have debilitating but non-permanent effects as a means of warfare is prohibited under the CWC. This does not mean riot control agents cannot be used in times of conflict to maintain order, for example, in a prisoner of war camp, or to contain a riot by the civilian population. Legal advice should be sought on the occasions when their use is considered.

Biological weapons

4.20 Nations are prohibited from manufacturing, storing and using biological weapons. Both chemical and biological weapons are prohibited because they cause unnecessary suffering and may affect the civilian population in an indiscriminate fashion. Australia is a party to the international convention prohibiting the development, production and stockpiling of bacteriological (biological) and toxin weapons. As a party, Australia has
undertaken not to develop, produce, stockpile or otherwise acquire or retain biological agents or toxins that have no justification for prophylactic, protective or other peaceful purpose. Further, Australia has undertaken not to develop, produce, stockpile or otherwise acquire or retain weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.

EXPLOSIVE REMNANTS OF WAR

4.21 In 2003 States Parties to the CCW negotiated a new protocol to deal with explosive remnants of war (ERW). After two years of discussions and negotiations by a group of governmental experts, the States Parties to the CCW, including Australia, adopted Protocol V (CCW P. V) on ERW in November 2003. It will enter into force once 20 States Parties have consented to be bound by the protocol.

Obligations imposed on States

4.22 The Protocol requires each party to an armed conflict to remove and to provide assistance for the removal of these weapons and to take other measures to reduce the threat to civilians. This is the first international agreement to require the parties to an armed conflict to clear all unexploded munitions that threaten civilians, peacekeepers and humanitarian workers once the fighting is over. What characterises CCW P. V is that it provides for both post-conflict remedial measures and preventative measures that aim, in so far as possible, to minimise future risks. Remedial measures mainly include the making of ERW-affected areas as well as the clearance, removal or destruction of ERW. Although CCW P. V primarily applies to future cases, it also calls upon States Parties to cooperate in the clearance, removal or destruction of existing ERW.

Remedial and preventative measures

4.23 The Protocol addresses the post-conflict humanitarian problems caused by ERW, by proposing remedial measures of a generic nature, as well as generic preventive measures. It also addresses issues such as: clearance, removal and destruction of ERW, recording, retaining and transmission of information on the (potential) location of ERW, protection of civilians and humanitarian missions, and cooperation and assistance. Its technical annex also includes preventive measures aimed at minimising the occurrence of ERW. States Parties are encouraged to apply these measures when manufacturing, storing, and transferring munitions. As a preventive measure, States Parties have agreed to improve the reliability of munitions in order to minimise the occurrence of ERW.
LANDMINES

Anti-personnel landmines

4.24 Parties to the Ottawa Convention 1997, including Australia, accept a prohibition on the possession or use of anti-personnel landmines as well as assistance, encouragement or inducement to any other person to possess or use these mines. Members of the ADF will not, however, be guilty of an offence merely by reason of taking part in joint operations with forces of an ally not bound by the Ottawa Convention which deploy landmines.

Anti-vehicle landmines

4.25 The use of anti-vehicle landmines is permitted so long as:

• they are not designed to be detonated by mine detectors;
• any anti-handling device is deactivated when the mine deactivates;
• they are either cleared, removed, destroyed, or appropriately maintained after cessation of active hostilities.
HISTORICAL EXAMPLE—ANTI-PERSONNEL MINEFIELDS

Figure 4–2: Clearing the anti-personnel minefield, Nui Dat 1969

In 1967, a barrier minefield of jumping anti-personnel mines, fitted with anti-lift devices, was laid south of the 1 Australian Task Force base, and expected to be protected by the Army Republic of Vietnam troops. This protection did not eventuate, so the minefield became both a lying-up haven at night for passing enemy, and as well a magazine from which to take mines which were used with great success in ambushing Australian forces. Several attempts to clear the minefield safely failed until a system of rollers towed by armoured personnel carriers, fast enough to out-run the balls of ball bearings which had defeated tank mine-clearers, enabled safe and rapid destruction of the mines. Australia now subscribes to the international ban on anti-personnel mines. (source: Australian War Memorial BEL/69/0575VN)]

4.26 Restrictions on use. The following rules apply to anti-vehicle mines:

* they may only be deployed against or to protect military objectives,
* they may not be directed against civilians,
* indiscriminate use is prohibited.
• feasible precautions must be taken to protect civilians from their effects,
• effective advance warning must be given of any deployment of mines that might affect the civilian population unless circumstances do not permit, and
• mines must not be of a nature to cause superfluous injury or unnecessary suffering.

4.27 **Civilian protection factors.** In considering the protection of the civilian population, regard should be had to the following factors, though these are not exclusive:
• the short and long-term effect of mines on the local civilian population;
• possible measures to protect civilians (for example fencing, signs, warning and monitoring);
• the availability and feasibility of using alternatives to mines; and
• the short and long-term military requirements for a minefield.

4.28 **Self-deactivation.** It is prohibited to use remotely delivered anti-vehicle mines unless, to the extent feasible, they are equipped with an effective self-destruction or self-neutralisation mechanism and have a back-up self-deactivation feature, which is designed so that the mine will no longer function as a mine when the mine no longer serves the military purpose for which it was placed in position.\(^1\)

4.29 **Recording.** The recording of information about minefields, mined areas and mines (as well as booby traps and other devices) is mandatory.

**LIMITATIONS ON LAWFUL WEAPONS**

**General**

4.30 All legal weapons are limited in the way in which they may be used. Specifically, no weapons may be used indiscriminately or in such a way as to cause unnecessary injury or suffering. Similarly, non-combatants and those who have not been or are no longer in the fight (sick and wounded, shipwrecked, medical personnel, chaplains and most civilians) must not be targeted.

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1 Article 6 of the CCW Protocol II as Amended.
Incendiary weapons

4.31 Incendiary weapons include any weapon or munition which is designed to set fire to objects or to cause burn injury to humans through the action of flame, heat or a combination of the two caused by a chemical reaction of a substance delivered on a target. They include flame throwers, shells, rockets, grenades, mines, bombs and other containers of incendiary materials.

4.32 Incendiary weapons do not include munitions which have incidental incendiary effects such as illuminants, tracers, smoke or signalling devices; nor do they include munitions designed to combine penetration, blast or fragmentation effects with an additional incendiary effect, such as armour piercing projectiles, fragmentation shells, explosive bombs and similar combined effects ammunition in which the incendiary effect is not specifically designed to cause burn injury to humans, but to be used against military objectives such as armoured vehicles, aircraft and installations and facilities.

4.33 Specific rules prohibit the use of incendiary weapons:

- in all circumstances to attack the civilian population, individual citizens or civilian objects with incendiary weapons;

- in all circumstances to make any military objective located within a concentration of civilians the object of attack by air-delivered incendiary weapons;

- to make any military objective located within a concentration of civilians the object of an attack by other than air delivered incendiary weapons, except where the military objective is clearly separated from the civilians and all feasible precautions are taken to minimise incidental loss of civilian life and damage to civilian objects (separation in this context can mean a barrier (such as an air raid shelter or a hill) or distance); and

- on forests or plant cover except when the forests or plant cover are either being used to cover, conceal or camouflage military objectives or are military objectives themselves (if it is necessary to use incendiaries on a forest to clear a field of fire or facilitate an advance or attack against an enemy, the forest has become a military objective and may legitimately be attacked).
Sea mines

4.34 There are very few restrictions on the use of sea mines. Sea mines must be able to self neutralise if control over them is lost. Their location must be recorded. They must not be laid in neutral waters and when first laid in the territorial waters of the nation laying them, there must be provision for free exit of neutral shipping located in ports of the nation laying the mines. More detailed discussion concerning sea mines is contained in chapter 6—Maritime operations and the law of armed conflict.

Torpedoes

4.35 International law prohibits the use of torpedoes that do not sink or otherwise become harmless when they have completed their run.

Landmines, booby traps and other devices

4.36 In addition to the specific prohibition on the use of anti-personnel mines, all feasible precautions must be taken to protect civilians from the effects of mines, booby traps and similar devices. They must not be directed at civilians nor may they be used indiscriminately. It is indiscriminate to place them so that they are not on or not directed at a military objective, to use a means of delivery which cannot be directed at a military target, or to place them so that they may be expected to cause excessive collateral damage, that is injury, loss or damage to civilians which is excessive in relation to the concrete and direct military advantage anticipated.

4.37 Booby traps and similar devices must not be used in areas containing civilian concentrations if combat between ground forces is neither imminent nor actually taking place unless they are placed on, or in the vicinity, of an enemy military objective or there are protective measures for civilians such as warning signs, sentries, fences or other warnings to civilians.

4.38 The location of all pre-planned minefields and areas in which there has been large scale and pre-planned use of booby traps must be recorded. A record should also be kept of all other minefields, mines and booby traps so that they may be disarmed when they are no longer required.

Landmines

4.39 Landmines other than anti-personnel mines, are defined as any munition on, under or near the ground or other surface area and designed to be detonated by the presence, proximity or contact of a vehicle and includes remotely delivered mines, that is, mines delivered by artillery, rocket, mortar or aircraft. Time delayed weapons are not landmines.
4.40 Remotely delivered landmines can only be used within the area of a military objective if their location can be accurately recorded and they can be neutralised when they no longer serve the military purpose for which they were placed in position. Either each mine must have an effective self neutralising or destroying mechanism or a remotely controlled mechanism designed to render the mine harmless or destroy it. If circumstances permit, effective advance warning should be given where remotely delivered mines are likely to affect civilians.

Booby traps

4.41 Booby traps are objects that are designed to injure or kill and which explode when a person approaches or disturbs an apparently harmless object or performs an apparently safe act.

4.42 Booby traps that appear to be apparently harmless portable objects which are specifically designed and constructed to contain explosive material are prohibited. In particular they should not be attached to or associated with:

- internationally recognised protective emblems;
- corpses, casualties or the sick;
- burial, cremation sites or graves;
- medical facilities, equipment, supplies or transportation;
- children’s toys or objects designed for feeding, health, hygiene, clothing or education of children;
- food or drink;
- kitchen utensils or appliances (except those in military establishments, locations or supply depots);
- objects of a religious nature;
- historic monuments, works of art or places of worship which constitute the cultural or spiritual heritage of peoples; or
- animals or their carcasses.

4.43 Where booby traps are not prohibited, those that are used must not be designed to cause unnecessary injury or suffering.
Other devices

4.44 ‘Other devices’ are manually emplaced munitions and devices designed to kill, injure or damage and which are activated either remotely or by time delay. Restrictions on the use of these other devices are as for landmines and booby traps.

Nuclear weapons

4.45 The United Nations General Assembly has condemned nuclear weapons as illegal, although the international community itself is divided on this question. In 1996 the International Court of Justice handed down an advisory opinion on the legality of the threat or use of nuclear weapons determining that ‘...the threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law’. The Court could not however, conclude definitely whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of a state would be at stake.

4.46 The commentary to G. P. I states that 'there is no doubt that during the four sessions of the Conference agreement was reached not to discuss nuclear weapons'. Nevertheless, general humanitarian law principles aimed at limiting unnecessary suffering and protecting the civilian population, as further clarified by G. P. I, must be considered in the employment of all weapons of war, including nuclear weapons. The International Court of Justice took the view that only in cases of extreme necessity, where the very survival of the nation is at stake, would the use of a nuclear weapon possibly be appropriate.

4.47 In 1985 Australia ratified the Treaty of Rarotonga, which brought into effect the South Pacific Nuclear Free Zone. Pursuant to the terms of this Treaty, Australia has undertaken to prevent the stationing of any nuclear explosive device on Australian territory. The treaty preserves Australia’s right to decide whether to allow visits by foreign aircraft or ships which might be either nuclear-powered or nuclear-armed.

Rockets, missiles and bombardment

4.48 The LOAC restrictions of proportionality and unnecessary suffering apply to all facets of aerial warfare. With the advent of modern technology many defence forces are now able to deliver weapons with much greater precision. However, nations are not obliged to use only precision munitions; attack by conventional, free-fall weapons or ‘dumb’ weapons is lawful provided that the overriding the LOAC principles of proportionality and unnecessary suffering and other applicable rules are not violated.