

Submission by Friends of the Earth, Australia on the Agreement between Australia and Russia on Cooperation in the Use of Nuclear Energy for Peaceful Purposes

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ACRONYMS

- AONM** - Australian-Obligated Nuclear Materials - e.g. Australian-origin uranium and its by-products such as depleted uranium and plutonium
- ASNO** - Australian Safeguards and Non-Proliferation Office
- DFAT** - Department of Foreign Affairs and Trade
- DOE** - (US) Department of Energy
- IAEA** - International Atomic Energy Agency
- JSCT** - Joint Standing Committee on Treaties
- MUF** - Material Unaccounted For
- NPT** - Nuclear Non-Proliferation Treaty

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1. INTRODUCTION

Friends of the Earth welcomes the opportunity to make a submission to the Joint Standing Committee on Treaties (JSCT) and requests the opportunity to appear before a hearing of the Committee on the issue of the proposed Australia-Russia Nuclear Cooperation Agreement (hereafter the Australia-Russia Agreement or the Agreement).

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2. RECOMMENDATIONS

1. The JSCT should recommend that uranium sales to all nuclear weapons states including Russia be disallowed until they disarm.
2. The JSCT should recommend that the Australia-Russia Agreement be rejected because of inadequate nuclear security in Russia and the risk of theft, smuggling or other misadventures involving Australian-Obligated Nuclear Materials (AONM).

3. If the Joint Standing Committee does not reject the Agreement outright, it should make its support conditional on Russian adoption of amendments to the Convention on the Physical Protection of Nuclear Material.
4. The JSCT should insist not only that all facilities handling AONM are safeguards-eligible but are also actually subjected to rigorous safeguards - regular inspections, 24/7 video surveillance, environmental sampling where appropriate, etc.
5. The JSCT should recommend that the Agreement not proceed given that Russia has not ratified an Additional Protocol.
6. The JSCT should require that no Australian-origin uranium (or AONM) is processed in unsafeguarded facilities, without exception.
7. The JSCT should:
 - i) Take a stand against plutonium separation and stockpiling by recommending that uranium sales to countries involved in reprocessing (domestically or abroad) be prohibited.
 - ii) Recommend the rejection of the Australia-Russia Agreement because of the open-ended consent it provides for plutonium separation and stockpiling.
 - iii) At the very least, the JSCT should insist on the reintroduction of the previous Australian policy of requiring permission to reprocess on a case-by-case basis to allow for greater and more frequent scrutiny of Russia's reprocessing operations and the fate of Australian-obligated plutonium.
8. The JSCT should insist on full, prompt, public reporting of information concerning Material Unaccounted For.
9. The Administrative Arrangements should be made public as should any variations such as proposals to process AONM in unsafeguarded conversion or enrichment facilities.
10. The JSCT (or at least the government members on the JSCT) should revise the Agreement such that it is consistent with the binding Labor policy platform. This will require a great deal of revision of the Agreement.
11. The JSCT should recommend that the Agreement be rejected because of Russia's lack of democracy; inadequate protections for protesters, trade unions and whistle-blowers; media censorship; and inadequate regulation of the nuclear industry. Failing that, the Committee should insist on the inclusion of a 'human rights and democracy' clause in the Agreement.
12. The JSCT should recommend one of the following courses of action:
 - i) Abolition of ASNO and its replacement with a more effective safeguards organisation.
 - ii) Establishment of an independent public inquiry to investigate ASNO.
 - iii) Establishment of an inquiry into ASNO by the Australian National Audit Office (similar to the Audit Office's inquiry into the Australian Radiation Protection and Nuclear Safety Agency).

13. ASNO should be delisted as the 'competent' authority under Article IV of the Agreement, and replaced by DFAT or another suitable agency.

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3. QUESTIONS FOR ASNO/DFAT

Friends of the Earth requests that the JSCT require ASNO/DFAT to provide written answers to the following questions.

Can ASNO/DFAT advise what percentage of Russia's nuclear material has been adequately secured as at 2008?

Can ASNO/DFAT confirm that Russia has not adopted recent, important amendments to the Convention on the Physical Protection of Nuclear Material. If so, why is this not revealed in the National Interest Analysis or other relevant documents?

Can ASNO/DFAT advise as to the number of safeguards-eligible facilities in Russia and the number which have actually been inspected in recent years.

Which enrichment plant does Russia propose to enrich Australian-origin tails at - Novouralsk?

Material Unaccounted For (MUF):

- * Does ASNO propose that MUF information relating to the Australia-Russia Agreement will be kept confidential?
- * Does ASNO propose to include a MUF secrecy clause in the Administrative Arrangements (which is also to be kept secret) or elsewhere?
- * How can this secrecy possibly be justified in relation to commercial confidentiality since it has no relevance whatsoever to commercial transactions?

Exports:

- * Can ASNO/DFAT provide a suitably detailed account of Russia's past and present track record of nuclear exports.
- * Can ASNO/DFAT confirm that Russia supplies India with nuclear facilities and materials despite India's status as a non-NPT state? How has the Nuclear Suppliers Group dealt with this issue, if at all?
- * Can ASNO/DFAT confirm that Russia supplies Iran with nuclear facilities and materials despite the fact that Iran has been found to have breached its IAEA safeguards agreement?
- * Can ASNO/DFAT advise as to actual or proposed nuclear exports from Russia to the Burmese regime?
- * Is it not possible that Australian uranium could be sent to Iran via Russia as a result of substitution arrangements at unsafeguarded conversion or enrichment plants?

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4. RUSSIA'S NUCLEAR WEAPONS PROGRAM

"Russia maintains the most formidable nuclear forces, aside from the United States ..."
US Nuclear Posture Review, 2001.

"The nuclear non-proliferation treaty continues to fracture. And there has been little if any progress on nuclear arms reduction – let alone nuclear disarmament."
Kevin Rudd, Lowy Institute speech, July 2007.

"We will develop missile technology including completely new strategic [nuclear] complexes, completely new. Work is continuing and continuing successfully. We have plans that are not only big, but grandiose, they are fully realistic. Our armed forces will be more compact but more effective and better ensure Russia's defence."

Vladimir Putin
October, 2007

4.1 OVERVIEW

Russia has a huge arsenal of nuclear weapons, has no intention of disarming, and in recent years there have been a steady stream of reports of Russia developing new delivery capabilities, new types of nuclear weapons, increased importance given to the importance of nuclear weapons in its security posture, an increase in force exercises, resumption of long-range patrols near NATO airspace, an increase in missile test launches, as well as a steady stream of threatening comments from Russian politicians and military leaders regarding Russia's nuclear arsenal and their willingness to use and upgrade that arsenal.

None of the above is at all incompatible with the gradual reduction in the number of nuclear warheads held by Russia.

Russia cannot be said to be honouring its NPT disarmament obligations and this alone ought to preclude Russia as a destination for uranium exports from Australia. Given that disallowing civil nuclear trade with non-NPT-compliant states is both a fundamental principle of the NPT and a long-standing feature of Australian nuclear export policy, civil nuclear trade with Russia should be prohibited until such time as Russia disarms. A responsible Australian government would not permit civil nuclear trade with any nuclear weapons state.

Recommendation: The JSCT should recommend that uranium sales to all nuclear weapons states including Russia be disallowed until they disarm.

Jacqueline Cabasso from the US Western States' Legal Foundation presented this summary of Russia's weapons program to the 2007 NPT Preparatory Committee meeting in Vienna:

In March 2006, President Putin said "Russia view[s] its nuclear deterrent as a fundamental element guaranteeing its security." He also said that "maintaining the minimum level of nuclear armaments required for nuclear deterrence remains one of the top priorities of Russian Federation policy."

Russia still has approximately 5,670 operational nuclear warheads in its active arsenal, with an additional 9,300 warheads believed to be in reserve or awaiting dismantlement. At the same time, Russia is developing new land- and sea-based forces, and is likely to deploy a new multiple-warhead Bulava submarine-launched ballistic missile (SLBM) as well as a land-based ICBM. Revenues from oil sales have provided Russia with the capital needed to increase the modernization and size of its strategic nuclear forces. Obsolescence of existing weapon systems (primarily in the older SS-18 and SS-19 ICBMs) will, during the next 15 years, probably result in a 48 percent decrease in Russia's overall operational warhead level.

However, if START is not extended or replaced with a new treaty in 2009, Russia is likely to MIRV both its Topol-M forces and its submarine-launched ballistic missile forces, reducing the projected overall decrease to something more like 25 percent. (Russia has already withdrawn from the provisions of START II so that it could retain MIRVed ICBMs.)

Despite insistence from both Russia and the United States that the Cold War is over, concerns regarding the growing asymmetry between US and Russian strategic nuclear forces (due to a relentless US modernization program), the eastward expansion of NATO (whose conventional forces now outnumber Russian conventional forces by 3 to 1), and the planned deployment of US radars and missile interceptors in Poland and the Czech Republic are prompting Russia to rely more heavily upon its nuclear forces in its strategic planning.

In May 2006, President Putin told Russia's Federal Assembly that nuclear deterrence and the balance of strategic forces are still central to Russian nuclear policy. In November 2006, he clarified that this means having the capability to destroy "any potential aggressor, no matter what matter what modern weapons system this aggressor possesses," and not necessarily numeric parity. Russia is developing a maneuverable SS-27s in order to penetrate US missile defense systems.

(Jacqueline Cabasso, (US) Western States' Legal Foundation, Presentation to NPT Preparatory Committee, Vienna, May 2, 2007, <www.reachingcriticalwill.org/legal/npt/prepcom07/NGOpres.html>)

The Bulletin of the Atomic Scientists recently estimated Russia's nuclear arsenal at 5,200 weapons plus 8,800 in reserve or awaiting dismantlement - a total of 14,000. The article notes that:

Other nuclear-related developments in Russia include a resurgence of the importance of nuclear weapons in its security posture, an increase in force exercises and missile test-launches, and an upgrade to Moscow's air defenses.

Russian officials continued and deepened what appears to be a revival of the prominence of nuclear weapons in Russian national security. Gen. Yury Baluyevsky, chief of the general staff of the armed forces and first deputy minister of defense, said in January that Russia's "partners should clearly understand" that Russia would use

force to protect its territory and allies, "including on a preventative basis, including the use of nuclear weapons," a declaratory policy that resembles that of the Bush administration. In December 2007, First Deputy Prime Minister Sergei Ivanov, who at the time was considered a possible successor to President Vladimir Putin, declared an aggressive position on nuclear parity. "Military potential, to say nothing of nuclear potential, must be at the proper level if we want . . . to just stay independent," Ivanov said. "The weak are not loved and not heard, they are insulted, and when we have parity they will talk to us in a different way."

Bulletin of the Atomic Scientists, May/June 2008

Vol. 64, No. 2, p. 54-57, 62

<http://thebulletin.metapress.com/content/t2j78437407v3qv1/fulltext.pdf>

The Bulletin of the Atomic Scientists article provides still more evidence to prove what we already know – that Russia pays no more than lip service to its NPT disarmament obligations.

The combined explosive yield of Russia's arsenal is roughly 2,800 megatons - almost 200,000 times greater than the 15 kiloton Hiroshima bomb which killed approximately 100,000 people. In other words, Russia retains an arsenal not only capable of destroying any conceivable enemy many times over but also of destroying the world's entire population several times over.

Then Russian President Vladimir Putin said on national television in October 2007 that Russia was developing new types of nuclear weapons and expanding its delivery capabilities via missiles, submarines and strategic bombers. Mr Putin did not specify what kind of "completely new strategic weapons" Russia was developing but he stressed that apart from its land-based ballistic missiles, Russia would also develop other segments of its "nuclear triad" – submarines and strategic bombers. Putin said: "We will develop missile technology including completely new strategic [nuclear] complexes, completely new. Work is continuing and continuing successfully. We have plans that are not only big, but grandiose, they are fully realistic. Our armed forces will be more compact but more effective and better ensure Russia's defence."

(Putin talks of 'grandiose' nukes plan, October 19, 2007,

www.theaustralian.news.com.au/story/0,25197,22612181-26040,00.html>)

Earlier this year, Putin said that Russia could retarget strategic missiles at a missile shield the US plans to deploy in Central Europe. Putin said: "Our experts believe the system threatens our national security. ... If it appears, we will be forced to respond appropriately – we will have to retarget part of our systems against those missiles. ... We will be compelled to aim our missiles at facilities that we consider a threat to our national security, and I am putting this plainly now so that the blame for this is not shifted later."

(Russia Could Target U.S. Defenses, Putin Says, Feb 15 2008,

www.nti.org/d_newswire/issues/2008_2_15.html#3A235213>).

In May and again in December 2007, Russia's military successfully test-fired a new intercontinental ballistic missile capable (RS-24) of carrying multiple nuclear warheads – a weapon intended to replace aging Soviet-era missiles.

http://news.yahoo.com/s/ap/20071225/ap_on_re_eu/russia_new_missile>)

Russia is building new submarines capable of firing nuclear missiles, due to be launched in 2009 and 2011.

(*Putin says 'new arms race' has begun*, David Blair, Feb 10, 2008, <www.theage.com.au/news/world/putin-says-new-arms-race-has-begun/2008/02/09/1202234227114.html>)

Russia's military chief of staff General Yuri Baluyevsky said in January 2008: "We have no plans to attack anyone, but we consider it necessary for all our partners in the world community to clearly understand... that to defend the sovereignty and territorial integrity of Russia and its allies, military forces will be used, including preventively, including the use of nuclear weapons."

(<http://news.scotsman.com/latestnews/Russia-threatens-nuclear-strikes.3691550.jp>>)

Leaked 2003 correspondence from the US government to the Russian government stated: "Both the United States and the Russian Federation now possess and, as before, will possess under the terms of any possible future arms agreements, large, diversified, viable arsenals of strategic offensive weapons consisting of various types of ICBM's, submarine-launched ballistic missiles, and heavy bombers."

("Proposal on ABM: 'Ready to Work with Russia,'" *The New York Times*, April 28, 2000, p. A10. (WSLF Information Bulletin, Fall 2003, <www.wslfweb.org/docs/missiles03.pdf>)

The Bulletin of the Atomic Scientists noted in 2004 that the renewed interest in nuclear weapons by Putin and the Russian military was due to: the abandonment of the START II treaty; the impending deployment of the first stage of a U.S. ballistic missile defense system; NATO's enlargement eastward; and "Russia's apparent need to maintain modern nuclear forces approximately equivalent to those of the United States as a symbol of great power status, a relic of Cold War thinking that remains alive in Washington as well as in Moscow." The Bulletin quoted Putin saying: "Russia has been and will remain one of the biggest nuclear missile powers in the world."

(*Bulletin of the Atomic Scientists*, 'Russian nuclear forces, 2004', July/August 2004, Vol. 60, No. 4, pp. 72-74.)

4.2 RUSSIA IS IN VIOLATION OF ITS NPT COMMITMENTS

Russia is obliged under Article VI of the NPT to undertake "to pursue negotiations in good faith on effective measures relating to the cessation of the nuclear arms race at an early date and to nuclear disarmament and on a treaty on general and complete disarmament under strict and effective international control."

Russia clearly has no intention of disarming and it cannot be said to be pursuing good-faith disarmament negotiations.

Apologists for the nuclear weapons states argue that they are NPT-compliant on the basis of weak or specious arguments:

- * The reduction in the number of nuclear weapons held by Russia is of course welcome but a vast arsenal remains and Russia shows no intention of disarming.
- * Apologists for the nuclear weapons states also argue that the nuclear weapons states are NPT-compliant because they have not been formally held to be in breach of their obligations. But that is a circular argument - the Australian government, and others,

ought to be pursuing the issue of non-NPT-compliant weapons states through the UN and other relevant international fora. In Australia's case, the reluctance to hold the weapons states accountable reflects factors such as the commercial interests of the uranium industry, and Australia's status as an 'umbrella' state of the US.

* And of course, there is scope for endless semantic argument based on the NPT text. But the NPT bargain is clear: weapons states undertake to disarm, and non-weapons states undertake not to develop nuclear arsenals.

Russia is also in violation of a number of the 13 steps it committed to at the 2000 NPT Review Conference. To give just one example, Russia is in clear violation of the commitment to establish "a diminishing role for nuclear weapons in security policies to minimize the risk that these weapons ever be used and to facilitate the process of their total elimination".

4.3 HORIZONTAL PROLIFERATION

The nuclear arsenals of the weapons states are problems in and of themselves and they pose the additional problem of encouraging horizontal proliferation. This connection is obvious and rarely disputed, with one rare exception being John Carlson from ASNO. Carlson stated in a 2006 parliamentary submission that it is "not plausible" that a non nuclear weapons state would seek nuclear weapons because the weapons states are not meeting their NPT commitments. However, according to IAEA Director General Dr. Mohamed El Baradei: "As long as some countries place strategic reliance on nuclear weapons as a deterrent, other countries will emulate them. We cannot delude ourselves into thinking otherwise."

Dr El Baradei said in a 2007 speech:

This brings me to the urgent need to revive disarmament efforts. We must find a way for disarmament to be taken seriously. Article VI of the NPT requires parties to the Treaty to pursue disarmament negotiations in good faith, as well as negotiations "on effective measures relating to cessation of the nuclear arms race at an early date". Thirty-seven years after the Treaty entered into force, we are well past the date when States party should be developing new nuclear weapons.

Yet that is precisely what is happening.

Virtually all nuclear-weapon States are extending and modernizing their nuclear weapon arsenals well into the 21st Century, with some making statements about the possible use of nuclear weapons, or the development of more "usable" nuclear weapons. Some have even started to question their legal obligation to disarm under the Nuclear Non-Proliferation Treaty - despite the agreed interpretation by all NPT Parties, including the nuclear-weapon States, at the 2000 NPT Review Conference, of the "unequivocal undertaking by the nuclear-weapon States to accomplish the total elimination of their nuclear arsenals".

It should be no surprise that many States have started to question the credibility of the commitment of the weapon States to disarm.

And consider some of the justifications that have been recently put forward by some of the nuclear-weapon States.

'No major power is getting rid of their nuclear weapons, so why should we?... Despite the current lack of a nuclear threat, we cannot be sure that one will not re-emerge over the next 50 years... Our country (or region) must be protected by a nuclear deterrence capability... We can be trusted to use restraint with our nuclear weapons.'

The flaws in these arguments are painfully obvious. The very same logic could be used by every country to justify developing its own nuclear deterrent. Why, some ask, should the nuclear-weapon States be trusted, but not others - and who is qualified to make that judgment? Why, others ask, is it okay for some to live under a nuclear threat, but not others, who continue to be protected by a "nuclear umbrella"?

What the weapon States consistently fail to take into account is the impact of their actions. Whether they choose to continue their reliance on nuclear weapons, as the centerpiece of their security strategy, or to abandon that reliance, their choice will undoubtedly influence the actions of others.

(Mohamed El Baradei, May 24, 2007, 'Preventing Nuclear Catastrophe: Where Do We Go From Here?', <http://www.wagingpeace.org/articles/2007/05/24_ElBaradei_Preventing_Nuclear_Catastrophe.htm>)

Likewise, the Canberra Commission on the Elimination of Nuclear Weapons noted in its 1996 report:

Nuclear weapons are held by a handful of states which insist that these weapons provide unique security benefits, and yet reserve uniquely to themselves the right to own them. This situation is highly discriminatory and thus unstable; it cannot be sustained. The possession of nuclear weapons by any state is a constant stimulus to other states to acquire them.

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5. INADEQUATE NUCLEAR SECURITY

5.1 SUMMARY

ASNO's 'National Interest Analysis' states that the Australia-Russia Agreement contains an assurance, in Article XIII, that "adequate and effective physical protection measures which satisfy accepted international standards are applied to all AONM during use, storage and transport".

ASNO's 'National Interest Analysis' also states: "Article XIII would oblige the Parties to ensure that adequate physical protection measures, consistent with the current international standards, cover nuclear material, material, equipment, components and technology subject to the Agreement within their jurisdiction, and while in transport until responsibility is properly transferred to another state."

However there is abundant evidence that physical protection (security) standards are inadequate in Russia. Russia (and the former Soviet Union) have for many years been central to the global problem of nuclear theft and smuggling. Efforts have been made to improve nuclear security in Russia but the problem is far from solved. It would be irresponsible to permit uranium sales to Russia until this problem of is resolved.

Recommendation: The JSCT should recommend that the Australia-Russia Agreement be rejected because of inadequate nuclear security in Russia and the risk of theft, smuggling or other misadventures involving AONM.

5.2 BACKGROUND

Matthew and George Bunn told an IAEA conference in 2001:

Today, the problem [of nuclear theft] is most acute in the former Soviet Union, where the collapse of the Soviet state left a security system designed for a closed society with closed borders, well-paid nuclear workers, and everyone under close surveillance by the KGB facing a new world it was never designed to address. Nuclear weapons, which are large and readily accountable objects, remain under high levels of security - though even there, scarce resources for maintaining security systems and paying nuclear guards raise grounds for concern. For nuclear material, the problem is more urgent. Many nuclear facilities in Russia have no detector at the door that would set off an alarm if some one were carrying plutonium out in a briefcase, and no security cameras where the plutonium is stored. Nuclear workers and guards protecting material worth millions of dollars are paid \$200 a month. As a result, there have been a number of confirmed cases of theft of kilogram quantities of weapons-usable material in the former Soviet Union. Russian officials have confirmed that as recently as 1998, there was an insider conspiracy at one of Russia's largest nuclear weapons facilities to steal 18.5 kilograms of HEU - one that was stopped before the material actually left the gates. These are the conditions that led a distinguished U.S. bipartisan panel to warn, earlier this year, that "the most urgent unmet national security threat to the United States today is the danger that weapons of mass destruction or weapons-usable material in Russia could be stolen and sold to terrorists or hostile nation states."

Reducing the Threat of Nuclear Theft and Sabotage

Bunn, Matthew, and George Bunn. "Reducing the Threat of Nuclear Theft and Sabotage."

Presented at the International Atomic Energy Agency Safeguards Symposium, Vienna, Austria. October 30, 2001.

IAEA-SM-367/4/08

<http://ksgnotes1.harvard.edu/BCSIA/Library.nsf/pubs/nucleartheft>

5.3 NUMBER OF INCIDENTS

The IAEA Illicit Trafficking Database now contains more than 1000 confirmed reports on incidents involving smuggling, theft, loss and illegal disposal, illegal possession and transfer, and attempted illegal sales of nuclear material. Additionally, around 800 additional incidents are as yet unconfirmed.

The IAEA's database does not provide country-specific information. However the Stanford Database on Nuclear Smuggling, Theft and Orphan Radiation Sources has recorded at least 370 incidents involving former Soviet countries (56% of the total):

"Until now the issue of illicit trafficking has been primarily associated with Russia and other former Soviet republics. Indeed, with the collapse of the former Soviet Union (FSU) in 1991, hundreds of tons of weapons-usable nuclear material and thousands of radiation sources were left without adequate control and protection, thus posing a risk for sabotage, theft and diversion. Out of 660 illicit trafficking incidents recorded in the Stanford Database on Nuclear Smuggling, Theft and Orphan Radiation Sources (DSTO), at least 370 either took place in the former Soviet Union or involved material that had reportedly originated from the FSU. Although the former Soviet Union remains the major potential source of nuclear and other radioactive material, it is not the only one."

International Dimension of Illicit Trafficking in Nuclear and Other Radioactive Material
Lyudmila Zaitseva and Friedrich Steinhausler
Center for International Security and Cooperation (CISAC),
Institute of International Studies, Stanford University
<www.numat.at/list%20of%20papers/zaitseva.pdf>

A Bulletin of Atomic Scientists article states that 183 cases of nuclear trafficking were recorded in the former Soviet Union from 2001-06.

Nuclear terrorism's fatal assumptions
By Sonia Ben Ouagrham-Gormley
22 October 2007
<www.thebulletin.org/web-edition/features/nuclear-terrorism-fatal-assumptions>

Recorded incidents may be the tip of the iceberg:

According to a new database compiled by researchers at the Institute for International Studies (IIS), about 40 kilograms of weapons-usable uranium and plutonium have been stolen from poorly protected nuclear facilities in the former Soviet Union during the last decade. While most of that material has been retrieved, 2 kilos of highly enriched uranium filched from a research reactor in Georgia is still missing.

And that's just for starters.

"I think this is the tip of the iceberg," said Lyudmila Zaitseva, a researcher at IIS who has been sifting through databases, technical journals and newspapers since 1999 to compile what may be the most complete picture of illicit trafficking of nuclear material worldwide.

Zaitseva estimates that the real amount of missing weapons-grade material could be 10

times higher than is officially known.

For example, law enforcement officials in the United States seize only 10 to 40 percent of illegal drugs smuggled into the country every year, Zaitseva said. And Russia stops only 2 to 10 percent of illegally imported goods and immigrants entering illegally from neighboring Kazakhstan. Based on such statistics, Zaitseva's estimate of missing nuclear material is not far-fetched. "We don't know what's missing," she said. "That's the most frightening thing."

Database exposes threat from 'lost' nuclear material

Lisa Trei

Stanford Report, March 6, 2002

Questions have been raised about i) possible under-reporting of nuclear trafficking incidents by Russian authorities and ii) the accuracy of the IAEA's database:

[T]he number of incidents confirmed to the IAEA by the Russian Federation between 1993 and 2005 is less than a third of some 300 cases, which were reported in open sources in the same period.

According to the information revealed by Georgian authorities to a U.S. expert on organized crime, the latest seizure of HEU, reportedly stolen from a Russian nuclear facility, took place in Georgia in February 2006. As of yet, the IAEA List of Significant Incidents still does not list any other of these alleged HEU seizures in Georgia.

Organized Crime, Terrorism and Nuclear Trafficking

Lyudmila Zaitseva

Strategic Insights, Volume VI, Issue 5 (August 2007)

Center for Contemporary Conflict, Naval Postgraduate School, Monterey, California.

www.ccc.nps.navy.mil/si/2007/Aug/zaitsevaAug07.asp#references

Fourteen percent of Russia's 603 tonnes of weapons-grade material had been fully secured by 2001.

Russia is the epicentre of the nuclear smuggling problem, and the US has committed \$2.2 billion to a programme aimed at ensuring that nuclear material held there is secure. But a report from the US General Accounting Office in February showed that after seven years only 14 per cent of Russia's 603 tonnes of weapons-grade material has been fully secured.

Norwegian scientists also criticise the programme for failing to cover 120,000 spent fuel assemblies from Russian submarines and icebreakers. Spent fuel is usually regarded as "self-protecting" because it is too radioactive to handle safely. But a new investigation by the Norwegian Radiation Protection Authority concludes that after 30 years or less the radiation will have decayed sufficiently for terrorists to be able to extract enriched uranium and plutonium. Despite the risks, the Bush administration has said that it intends to scale back the programme.

Plutonium for sale
Rob Edwards
New Scientist magazine
Vol 170, issue 2292
May 26, 2001, page 10

Question: Can ASNO/DFAT advise what percentage of Russia's nuclear material has been adequately secured as at 2008?

5.4 THE PROBLEM IS A LONG WAY FROM BEING SOLVED.

Rensselaer Lee from the Foreign Policy Research Institute noted in 2001 that a Russian scientist interviewed by former White House Counsel Lloyd Cutler estimated that it would take as long as 60 years to secure all nuclear-sensitive sites in his country.

Nuclear Smuggling from the Former Soviet Union: Threats and Responses
April 27, 2001

<http://www.fpri.org/enotes/russia.20010427.lee.nuclearsmuggling.html>

The New York Times reported in 2007 that Russia has been unhelpful in the pursuit of investigations into theft/smuggling of weapon-grade nuclear material:

Last January, a Russian man with sunken cheeks and a wispy moustache entered Georgia and travelled to Tbilisi by car. In two plastic bags in his leather jacket, Georgian officials say, he carried 100 grams of uranium so refined that it could fuel an atomic bomb.

Oleg Khinsagov had come to meet a buyer who he believed would pay him \$US1 million. The buyer would then deliver the material to a Muslim man from "a serious organisation", officials say.

The uranium was a sample, and the deal a test. If all went smoothly, the Russian had boasted, he would sell a far larger cache stored in his flat back home in Vladikavkaz, in neighbouring southern Russia: two or three kilograms, which in expert hands is enough to make a small bomb.

The buyer, it turned out, was a Georgian agent. ... The case has alarmed Georgian officials who thought they had suppressed the nuclear blackmarket that developed in the 1990s, after the Soviet Union collapsed. Until now, the details of the case have remained secret. But an examination of the episode, and a similar one in 2003, suggests the region's political instability and rampant corruption continue to provide a fertile breeding ground for illicit commerce in atomic materials.

... The uranium seized in 2003 and 2006 had been enriched to nearly 90 per cent U-235. Too small an amount to make a bomb, but the ideal purity level for doing so.

In both cases the individuals arrested testified they had obtained the uranium through a web of Russian contacts and middlemen of various nationalities. This appears to be corroborated by a US Government laboratory analysis of the 2006 material. ...

Georgia's chief nuclear investigator, Archil Pavlenishvili, recalled how the Russian Government had co-operated in the early stages of the 2003 investigation. However, in

2006 it had hardly helped at all. He said the Georgians informed the Russian embassy of Khinsagov's detention, and offered to let diplomats speak to him. But the Russians never responded.

Nuclear blackmarket stirring back into life

Lawrence Sheets in Tbilisi and William Broad in New York

January 27, 2007

The New York Times

Reprint at:

<http://www.smh.com.au/news/world/nuclear-blackmarket-stirring-back-into-life/2007/01/26/1169788693460.html?page=fullpage#contentSwap1>

New Scientist summarised a 2007 SKI/ Atombesopastnos report which found gaping holes in nuclear security in Russia:

According to the report by [Swedish Nuclear Power Inspectorate] SKI and Atombesopastnost – a subsidiary of Russia's Federal Atomic Energy Agency, Rosatom – a large number of nuclear facilities have "insufficient" security measures. Measures for preventing thefts are "small" and cooperation among authorities is "inadequate". "The illicit trafficking problem is for real," the report concludes.

The IAEA conference also heard evidence of a "possible resurgence" of nuclear smuggling in former Soviet republics. Since 1999, there have been seven seizures of weapons-grade material in former Soviet republics, four of them in Georgia. For example, in 2003 Garik Dadayan was caught carrying 170 grams of highly enriched uranium and notes about substances that could be used in nuclear weapons.

Although the amounts seized in former Soviet republics have been small, the worry is that they could be samples from larger stockpiles. Recent analysis led by Stephane Baude at the French Atomic Energy Commission (CEA) suggests that two separate seizures of highly enriched uranium, in Paris in 2001 and Bulgaria in 1999, were from batches of fuel reprocessed at the same plant.

Study of nuclear security in Russia reveals lapses, New Scientist, 1/12/07,

<www.robedwards.com/2007/11/study-of-nuclea.html>

SBS television provided evidence of lax security at Russian nuclear facilities in February 2008, including lax security at the Novouralsk enrichment plant. Is this enrichment plant likely to process AONM, and has it processed AONM in the past?

<http://news.sbs.com.au/dateline//exporting_trouble_540362>

The Age reported in 2005 on initiatives to improve security at Russian nuclear facilities:

US president George Bush and Russian President Vladimir Putin plan to announce measures to counter the threat of nuclear terrorism - a threat highlighted in a US intelligence report warning that Russian nuclear material could still fall into terrorist hands.

Under the deal, US and Russian officials would accelerate long-delayed security upgrades at Russia's many poorly protected nuclear facilities, jointly develop responses to a nuclear or radiological terrorist attack and take steps to replace highly enriched uranium in the world's research reactors to prevent it being used for weapons. ...

The National Intelligence Council, comprising representatives of the CIA, the Pentagon, the Energy Department and other intelligence agencies, noted in its report that "undetected smuggling" of nuclear material had occurred over the past 13 years and the risk remained that terrorists could seize arms or materials. Under questioning in Washington last week, CIA Director Porter Goss said he could not rule out the possibility that Russian nuclear material was in terrorist hands.

Pact on nuclear terror threat, February 25, 2005, <www.theage.com.au/news/War-on-Terror/Pact-on-nuclear-terror-threat/2005/02/24/1109180037908.html>

Nuclear analysts from Harvard University reported in 2004:

Unfortunately, the recent claim by Russian Defense Minister Sergei Ivanov that inadequately secured nuclear stockpiles in Russia are only a "myth" is far from the truth. There has been a decade of improvements in Russia, but the work remains dangerously incomplete and the threat to nuclear facilities is terrifyingly high. While many of the best-known thefts of nuclear material occurred a decade ago, it was only last year that the chief of Russia's nuclear agency testified that nuclear security was underfunded by hundreds of millions of dollars. At nearly every site U.S. experts visit, they reach quick agreement with Russian experts on the need for substantial security upgrades. Russia's decision to send additional troops to guard nuclear facilities in the wake of the most recent terrorist attacks belies the notion that these facilities were adequately secured before. Moreover, that heightened troop presence is not likely to last and will do little to reduce the danger of theft by insiders.

Meanwhile, terrorists are zeroing in on these nuclear stockpiles. Top Russian officials have confirmed at least two cases in 2001 of terrorists carrying out reconnaissance at Russian nuclear warhead storage sites. The 41 heavily armed, suicidal terrorists who seized hundreds of hostages at a Moscow theater in 2002 reportedly considered seizing the Kurchatov Institute instead - a site with enough highly enriched uranium (HEU) for dozens of nuclear weapons. In 2003 proceedings in a Russian criminal case revealed that a Russian businessman had been offering \$750,000 for stolen weapon-grade plutonium for sale to a foreign client. Al Qaeda has been actively seeking nuclear material for a bomb and has strong connections to Chechen terrorist groups.

Matthew Bunn and Anthony Wier, Preventing a Nuclear 9/11, September 12, 2004, Washington Post, <www.washingtonpost.com/ac2/wp-dyn/A13014-2004Sep10?language=printer>.

5.5 ORGANISED CRIME AND NUCLEAR SMUGGLING

A study of the links between nuclear trafficking incidents with the suspected involvement of organised crime in the period 2001 to 2005 found that the number of incidents in Russia (7 incidents, 38 people) was second only to the Ukraine:

Looking at the number of both seizures and actors involved, the former Soviet Union still stands out as a major staging area for criminals trading in radioactive substance, with Ukraine, Russia, Georgia and Belarus taking the lead. Given the crime scene and the abundance of still poorly protected nuclear material and radioactive substances in these countries and their neighboring states, this is hardly surprising.

Organized Crime, Terrorism and Nuclear Trafficking

Lyudmila Zaitseva

Strategic Insights, Volume VI, Issue 5 (August 2007)

Center for Contemporary Conflict at the Naval Postgraduate School in Monterey, California.

<www.ccc.navy.mil/si/2007/Aug/zaitsevaAug07.asp#references>

Rensselaer Lee from the Foreign Policy Research Institute noted in 2001:

Furthermore, a few high-profile episodes point to a spreading ethos of corruption in the Russian nuclear establishment that could presage major covert exports of fissile material, weapons components and even intact nuclear weapons. For instance, in two recorded cases in the 1990s, Russian managers of top secret defense plants offered plutonium for sale to visiting foreign scientists. Elsewhere, military officers stole HEU fuel from a submarine base in Murmansk. In a bizarre episode suggesting a wider conspiracy, agents of the Russian Foreign Intelligence Service reportedly masterminded the delivery of almost a pound of plutonium oxide from Moscow to Munich in August 1994. In a 1998 incident, the Russian Federal Security Service reportedly foiled an attempt by "staff members" of a major nuclear weapons plant in Chelyabinsk to steal some 18.5 kilograms of unspecified weapons-usable material -- possibly enough to fashion a single nuclear weapon. ...

Contextual factors such as endemic official corruption and pervasive influence of organized crime contribute to the general atmosphere of uncertainty. More powerful Russian crime formations may well possess the capability to penetrate the defense-nuclear complex, to bribe or intimidate key personnel and to make off with stocks of weapons-grade materials. Also, Moscow's central control over the provinces and, by implication, over Russia's far-flung nuclear weapons cache, has deteriorated significantly over the past ten years (although President Vladimir Putin recently introduced administrative incentives to reverse this trend). Weakness at the center amidst Russia's current financial difficulties increases the prospect of regionally inspired nuclear deals -- involving collaboration between regional bosses and criminally motivated managers to peddle nuclear materials and components abroad.

The [US] Department of Energy (DOE) funds an initiative, underway since 1993, to improve "material protection, control and accountability" (MPC&A) at former Soviet nuclear enterprises. ... DOE's hard technical fixes may do little to deter theft even in facilities where they have been introduced. The safeguards can defeat isolated theft

attempts by lone employees, but they offer little defense against organized conspiracies of well-placed insiders able to circumvent alarm systems, bribe guards and fudge relevant paperwork. A consensual "company" decision of top managers to sell off fissile material stocks likewise would probably go undetected. Yet in the unstable and turbulent environment of Russia' nuclear weapons complex, such scenarios seem eminently plausible. ...

Nuclear Smuggling from the Former Soviet Union: Threats and Responses

Rensselaer Lee

Foreign Policy Research Institute

April 27, 2001

<http://www.fpri.org/enotes/russia.20010427.lee.nuclearsmuggling.html>

5.6 CONVENTION ON THE PHYSICAL PROTECTION OF NUCLEAR MATERIAL

Russia is a party to the Convention on the Physical Protection of Nuclear Material but Friends of the Earth understands that Russia has not adopted recent, important amendments to the Convention.

Question: Can ASNO/DFAT confirm that Russia has not adopted recent, important amendments to the Convention on the Physical Protection of Nuclear Material. If so, why is this not revealed in the National Interest Analysis or other relevant documents?

According to the IAEA:

The obligations contained in the Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM) require States Parties to make the intentional commission of an act which constitutes the carrying, sending or moving of nuclear material into or out of a State without the lawful authority, a punishable offence under its national law. The CPPNM also obliges States Parties to ensure that peaceful nuclear transports, domestic or international, are adequately secured. Another important obligation is the need for expanded cooperation between States Parties and the IAEA regarding rapid measures to locate and recover stolen or smuggled nuclear material and for guidance on how to implement certain obligations of the CPPNM.

International Conference on Illicit Nuclear Trafficking

19-22 November 2007

Organized by the International Atomic Energy Agency (IAEA)

<http://www-pub.iaea.org/MTCD/Meetings/Announcements.asp?ConfID=154>

Recommendation: If the Joint Standing Committee does not reject the Agreement outright, it should make its support conditional on Russian adoption of amendments to the Convention on the Physical Protection of Nuclear Material.

Article XIII of the Agreement appears to indicate that if Russia chooses not adopt amendments to the IAEA document INFCIRC/225/Rev.4 (corrected) entitled "The Physical Protection of Nuclear Material and Nuclear Facilities", this will have no effect on uranium exports:

Article XIII

2. In addition to its obligations under the Convention on the Physical Protection of Nuclear Material done at Vienna and New York on 3 March 1980, including any amendments that are in force for each Party, each Party shall apply measures of physical protection in accordance with its national legislation which meet levels not less than the recommendations of IAEA document INFCIRC/225/Rev.4 (corrected) entitled "The Physical Protection of Nuclear Material and Nuclear Facilities", as amended from time to time. Any amendment to or replacement of IAEA document INFCIRC/225/Rev.4 (corrected) shall have effect under this Agreement only when the Parties have informed each other in writing through diplomatic channels that they accept such amendment or replacement.

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6. NUCLEAR SAFEGUARDS

"Australia should establish a national diplomatic initiative aimed at restoring the integrity of the nuclear non-proliferation regime ... the current non-proliferation regime is fundamentally fracturing. The consequences of the collapse of this regime for Australia are acute, including the outbreak of regional nuclear arms races ... The impact on Australia's long-term national security interests is immense."

Kevin Rudd, Sydney Institute speech, Sept 2006

"Should Australian uranium end up in the wrong hands - and it's not too far-fetched to suggest that Russia under Putin is already in the wrong hands - Australia will not be able to act innocent or to claim ignorance. You can only be confident that the Kremlin will look out for itself, that they have zero obedience to the rule of law ..."

Garry Kasparov

The Bulletin, August 21, 2007

<http://bulletin.ninemsn.com.au/article.aspx?id=288522>

6.1 INTRODUCTION

Australia is entirely reliant on the International Atomic Energy Agency's safeguards system. There is no provision in the Australia-Russia agreement for Australian inspectors to monitor uranium exports.

Yet the IAEA's inspection system is limited, flawed and underfunded. Indeed the IAEA Director General, Dr. Mohamed El Baradei, has noted that the IAEA's basic rights of inspection are "fairly limited", that the safeguards system suffers from "vulnerabilities" and it "clearly needs reinforcement", that efforts to improve the system have been "half-hearted", and that the safeguards system operates on a "shoestring budget ... comparable to that of a local police department".

(Statements from Dr. El Baradei posted at: <www.iaea.org/NewsCenter/Statements/index.html>.)

The problems with the safeguards system are too numerous to discuss here. Suffice it to note a central problem: IAEA inspections are partial and periodic, all the more so in nuclear weapons states. The Joint Standing committee ought to insist that all facilities using AONM are not only *subject* to IAEA's safeguards inspection but are actually inspected. This would involve regular inspections and materials accountancy and it ought to include maximum use of the full suite of safeguard programs and technologies, including 24/7 video surveillance, environmental sampling and so on. This would require an arrangement with the IAEA such that the full suite of safeguards is applied to each Russian nuclear facility using AONM. Alternatively, an Australian inspection system could be established to supplement IAEA safeguards (the Agreement envisages the possibility of a non-IAEA safeguards system *replacing* IAEA safeguards and it should not be problematic to establish a safeguards system to *supplement* IAEA safeguards). The only alternative is to accept a situation whereby some and probably most of the facilities using AONM are not actually safeguarded; and that is an indefensible situation.

It emerged during the debate over uranium sales to China that only a small fraction of China's safeguards-eligible facilities had actually been inspected by the IAEA in recent years. ASNO/DFAT should be asked to provide information on the number of safeguards-eligible facilities in Russia and the number which have actually been inspected in recent years.

Question: Can ASNO/DFAT advise as to the number of safeguards-eligible facilities in Russia and the number which have actually been inspected in recent years.

Recommendation: The JSCT should insist not only that all facilities handling AONM are safeguards-eligible but are also actually subjected to rigorous safeguards - regular inspections, 24/7 video surveillance, environmental sampling where appropriate, etc.

More information on the flawed 'safeguards' system:

* *Nuclear Safeguards and Australia's Uranium Exports* <www.foe.org.au/campaigns/anti-nuclear/issues/mining/UraniumSafeguards.doc/view>

* *Medical Association for Prevention of War & ACF, "An Illusion of Protection: The Unavoidable Limitations of Safeguards"*, <www.acfonline.org.au/articles/news.asp?news_id=1012&c=10130>

* *Professor Richard Broinowski, "Fact or Fission? The Truth About Australia's Nuclear Ambitions"*, Melbourne: Scribe, 2003.

* *Non-Proliferation Policy Education Centre, Feb 2008, "Falling Behind: International Scrutiny of the Peaceful Atom"*, <www.npec-web.org>.

* *Nuclear Power Joint Fact Finding Dialogue, June 2007, "Final Report, Nuclear Power Joint Fact-Finding"*, <www.keystone.org/spp/energy07_nuclear.html>

6.2 ADDITIONAL PROTOCOL

"Without the expanded authority of this [Additional Protocol], the IAEA's rights of inspection are fairly limited."

IAEA Director Mohamed El Baradei

"Curbing the Nuclear Threat", February 2, 2005

<www.iaea.org/NewsCenter/Statements/2005/ebsp2005n001.html>).

It is unacceptable that Australia is negotiating a nuclear cooperation agreement with Russia given that Russia has not ratified an Additional Protocol.

In ASNO's 'Frequently Asked Questions' paper, ASNO asserts that: "The principal purpose of the Additional Protocol is to strengthen the IAEA's capabilities to detect undeclared nuclear material and activities." ASNO then goes on to say that "For nuclear-weapon states, the purpose of the Additional Protocol is different, namely to provide the IAEA with information on nuclear supply to, and cooperation with, non-nuclear-weapon states. Such information assists the IAEA in its objective of detecting any undeclared activities in non-nuclear-weapon states."

That amounts to disingenuous obfuscation by ASNO.

There would of course be greater confidence in IAEA safeguards if an Additional Protocol was in place and conversely, there will be less confidence in the safeguarding of AONM in the absence of an Additional Protocol. ASNO appears to be dodging this fundamental point.

ASNO's defense of the indefensible appears to assume that protection of AONM is of little or no concern except insofar as it may be exported to a non-weapons state. That lack of concern is unacceptable.

ASNO ascribes different reasons for the adoption of Additional Protocols in weapons states and non-weapons states. On what basis does ASNO ascribe these different reasons - are they spelt out by the IAEA or is ASNO making it up as it goes along?

Even if we take ASNO's obfuscation at face value, it raises an obvious problem: the issue of Russia's "nuclear supply to, and cooperation with, non-nuclear-weapon states" is of great concern, not least with respect to Iran. Yet Russia's failure to ratify an Additional Protocol weakens the capacity to monitor Russia's exports to and cooperation with Iran and other countries.

There is no legitimate justification whatsoever for refusing uranium exports to non-weapons states without an Additional Protocol but allowing exports to a weapons state without an Additional Protocol. The author of this submission has twice asked DFAT officials to justify that policy in face-to-face meetings; in both cases the silence was deafening. There is no legitimate justification for the policy.

As things stand, IAEA safeguards as applied to Russia are grossly inadequate. Moreover, the proposal for nuclear cooperation in the absence of a Russian Additional Protocol sets a bad precedent and could be used by other nations to justify their own positions. (For example, Brazil has pointed to loopholes in the United States' Additional Protocol to justify Brazil's disinclination to allow intrusive inspections of its enrichment program.)

ALP policy states that: "Labor will work towards ... universalising of the IAEA additional protocol making it mandatory for all states and members of the Nuclear Suppliers Group to make adherence to the additional protocol a condition of supply to all their transfers." NSG

members would regard that as being profoundly hypocritical given the current proposal for Australia to sell uranium to Russia in the absence of a ratified Additional Protocol.

It should further be noted that even if an Additional Protocol was in place, IAEA inspections as applied to Russia would still be partial and limited and fall far short of justifying the routine ASNO/DFAT/industry fiction that safeguards "ensure" that diversion will not occur.

Additional Protocols vary considerably in their scope so the JSCT may wish to consider refusing to endorse the proposed Agreement until such time as Russia has ratified an Additional Protocol and the Committee has had an opportunity to review the scope of the Additional Protocol.

ASNO has itself acknowledged the limitations of Additional Protocols.

(John Carlson, Russell Leslie, Annette Berriman, July 2006, "Detection of Undeclared Nuclear Activities: Does the IAEA have the necessary capabilities?",
<www.asno.dfat.gov.au/publications/inmm2006_detection_of_undeclared.pdf>.)

Recommendation: The JSCT should recommend that the Agreement not proceed given that Russia has not ratified an Additional Protocol.

6.3 SUBSTITUTION

The Agreement allows transfer of AONM to unsafeguarded conversion and enrichment plants.

The JSCT inquiry into uranium sales to China states that: "The Committee recommends that the Australian government lobbies the IAEA and the five declared nuclear weapon states under the NPT to make the safeguarding of all conversion facilities mandatory."

Recommendation: The JSCT should require that no Australian-origin uranium (or AONM) is processed in unsafeguarded facilities, without exception.

If that requires Russia to come to an arrangement with the IAEA to apply safeguards to currently unsafeguarded facilities, so be it. If that is unusual given the historical convention of not applying safeguards to conversion facilities, so be it. One would imagine that the IAEA would welcome the opportunity to extend safeguards to conversion facilities, notwithstanding the additional problems it would pose with respect to the underfunding of IAEA safeguards.

ASNO says that Russia wants to enrich tails at an unsafeguarded plant because the plant at Angarsk (which will be placed under IAEA safeguards) is unsuitable for processing this material. Russia could however allow the application of safeguards to the other plant and no explanation is given as to why this option has been rejected.

Question: Which enrichment plant does Russia propose to enrich Australian-origin tails at – Novouralsk?

6.4 REPROCESSING / PLUTONIUM

"Growing stocks of civilian separated plutonium (250 tons and growing at a rate of 10 tons/yr) pose a significant proliferation risk and require extraordinary protection and international attention. Diversion or theft of these stocks represents a risk of weapons development by sub-national terrorist organizations. Levels of physical protection and risk vary widely from country to country."
Nuclear Power Joint Fact Finding Dialogue, June 2007, "Final Report, Nuclear Power Joint Fact-Finding", <www.keystone.org/spp/energy07_nuclear.html>

The Australia-Russia Agreement gives open-ended ('programmatic') permission to reprocess, i.e. to separate spent fuel into three streams - plutonium, uranium, and a waste stream.

Russia's stockpile of separated civil plutonium is approximately 41 tonnes. Russia has precious little need for that stockpile let alone additional separated plutonium.

Recommendation: The JSCT should:

- i) Take a stand against plutonium separation and stockpiling by recommending that uranium sales to countries involved in reprocessing (domestically or abroad) be prohibited.
- ii) Recommend the rejection of the Australia-Russia Agreement because of the open-ended consent it provides for plutonium separation and stockpiling.
- iii) At the very least, the JSCT should insist on the reintroduction of the previous Australian policy of requiring permission to reprocess on a case-by-case basis to allow for greater and more frequent scrutiny of Russia's reprocessing operations and the fate of Australian-obligated plutonium.

The ALP National Platform states: "Labor will work towards: ... limiting the processing of weapons usable material (separation of plutonium and high enriched uranium in civil programs)". The Australia-Russia Agreement is inconsistent with the binding Labor Platform.

6.5 MATERIAL UNACCOUNTED FOR - SECRECY

ASNO falsely claims that "All Australian-obligated nuclear material [AONM], including plutonium, is fully accounted for."

(John Carlson, November 15, 2002, Australian Financial Review, <www.geocities.com/jimgreen3/uraniumbombs.html>.)

That is false. There are routine accounting discrepancies - called 'Material Unaccounted For' (MUF). MUF refers to discrepancies between the 'book stock' (the expected measured amount) and the 'physical stock' (the actual measured amount) of nuclear materials at a location under safeguards. Such discrepancies are frequent due to the difficulty of precisely measuring amounts of nuclear material.

What Carlson means when he says that all AONM is "fully accounted for" is that ASNO has accepted all the various reasons given for MUF over the years, however fanciful those explanations may or may not be.

In other words, when ASNO says all AONM is fully accounted for, it means all AONM is **not** fully accounted for.

ASNO refuses to provide specific data on MUF discrepancies or even aggregate, non-country-specific information. Nor has ASNO adequately justified this secrecy except to say that it relates to commercial confidentiality.

Questions:

- * Does ASNO propose that MUF information relating to the Australia-Russia Agreement will be kept confidential?
- * Does ASNO propose to include a MUF secrecy clause in the Administrative Arrangements (which is also to be kept secret) or elsewhere?
- * How can this secrecy possibly be justified in relation to commercial confidentiality since it has no relevance whatsoever to commercial transactions?

Recommendation:

- * The JSCT should insist on full, prompt, public reporting of information concerning Material Unaccounted For.

6.6 ADMINISTRATIVE ARRANGEMENTS - MORE SECRECY

The Administrative Arrangements (a.k.a. Memorandum of Understanding) will, according to ASNO, set out procedures for accounting for and reporting on AONM.

Yet this vital information is to be kept secret if ASNO has its way. The rationale is that some of Australia's customer countries prefer the Administrative Arrangements to be kept secret.

This is an unacceptable level of secrecy and should not be endorsed by the JSCT.

The Australia-Russia Agreement states that in the event that it is "necessary" to process AONM in facilities not on the Eligible Facilities List (and most likely not subject to any IAEA safeguards whatsoever), these arrangements will be detailed in the Administrative Arrangements.

In other words, ASNO proposes that if Russia wants to process AONM in unsafeguarded facilities, it can do so (subject to ASNO's agreement) and all the details of such arrangements will be kept secret.

This situation is clearly unacceptable and should be rejected by the JSCT.

Recommendation: The Administrative Arrangements should be made public as should any variations such as proposals to process AONM in unsafeguarded conversion or enrichment facilities.

6.7 THE AGREEMENT IS INCONSISTENT WITH ALP POLICY COMMITMENTS

The Australia-Russia Agreement should either be rejected or radically reformed such that it is consistent with the binding ALP policy platform adopted at the April 2007 ALP national conference (see chapter 5 of the policy platform).

ALP policy states that: "Labor will allow the export of uranium only to those countries which observe the Nuclear Non-Proliferation Treaty (NPT)". But Russia is not honouring its NPT disarmament obligations.

ALP policy states that: "Labor will allow the export of uranium only to those countries which ... are committed to non-proliferation". Russia's own weapons program, and its support for Iran's nuclear program, indicate that Russia is not committed to non-proliferation.

ALP policy states that: "Labor will allow the export of uranium only to those countries which ... maintain strict safeguards and security controls over their nuclear power industries." But nuclear security controls are inadequate in Russia.

ALP policy states that: "Labor will work towards strengthening ... the rights and authority of the International Atomic Energy Agency (IAEA)." But that is inconsistent with the proposal to allow uranium sales to a country which has not ratified an Additional Protocol.

ALP policy states that: "Labor will work towards ... universalising of the IAEA additional protocol making it mandatory for all states and members of the Nuclear Suppliers Group to make adherence to the additional protocol a condition of supply to all their transfers." NSG members would regard that as being profoundly hypocritical given the current proposal for Australia to sell uranium to Russia in the absence of a ratified Additional Protocol.

ALP policy states that: "Labor will work towards ... limiting the processing of weapon usable material (separation of plutonium and high enriched uranium in civilian programs)." That is inconsistent with the open-ended consent to reprocessing contained in the Australia-Russia Agreement.

ALP policy states that: "Labor will work towards ... revising the NPT to prevent countries from withdrawing from the NPT and passing a new resolution in the UN Security Council addressing the penalties for withdrawal from the NPT." Would it not therefore be wise to address this issue of NPT withdrawal BEFORE entering into new (or expanded) nuclear supply agreements?

ALP policy states that: "Labor will work towards ... reserving the right to withhold supplies of uranium permanently, indefinitely or for a specified period from any country which ... adopts nuclear practices or policies inimical to further advance in the cause of nuclear non-proliferation." Is not Russia's supply of nuclear facilities and materials to Iran and India inimical to the cause of non-proliferation?

ALP policy states that: "Labor will work towards ... seeking adequate international resourcing of the IAEA to ensure its effectiveness in undertaking its charter." Would it not

be wise to address the underfunding of IAEA safeguards BEFORE entering into new nuclear supply agreements?

Recommendation: The JSCT (or at least the government members on the JSCT) should revise the Agreement such that it is consistent with the binding Labor policy platform. This will require a great deal of revision of the Agreement.

6.8 CIVIL SOCIETY SAFEGUARDS

It was dubbed Vladimir Putin's Potemkin election - and it lived up to its name. ... Eleven parties registered to contest control of the State Duma, the lower house of Russia's parliament. ... But the resemblance to genuine democracy ends there. Russia has taken another regrettable step along the road to authoritarianism with a sham poll ... There is no independent judiciary and no rule of law.

*Corruption is rampant ...
Editorial - The Australian
December 04, 2007*

<http://www.theaustralian.news.com.au/story/0,25197,22864032-16382,00.html>

"All Australians should be concerned about advanced talks to sell uranium to Russia. Simply put, the Kremlin cannot be trusted."

*Robert Amsterdam - human rights lawyer
Herald Sun, August, 2007*

www.robertamsterdam.com/2007/08/ra_fallout_over_nuclear_deals.htm

"The fact that Russia has a whole new generation of political prisoners should be of concern to Australians, not just Russians."

*Robert Amsterdam - human rights lawyer
The Bulletin, August 21, 2007*

<http://bulletin.ninemsn.com.au/article.aspx?id=288522>

Given that the safeguards arrangements applying to the Australia-Russia Agreement are inadequate, civil society safeguards are all the more important.

The term civil society safeguards refers to:

- * a democratic political system;
- * adequate protections for protesters;
- * adequate protections for trade unions;
- * adequate protections for whistle-blowers;
- * media freedom and protections; and
- * rigorous, independent regulation of the nuclear industry

Russia does not meet any of these criteria.

The issue of civil society safeguards was raised in the context of the JSCT inquiry into uranium sales to China. ASNO's John Carlson could hardly have been more dismissive and, unfortunately, the Committee did not press Carlson on the issue.

Recommendation: The JSCT should recommend that the Australia-Russia Agreement be rejected because of Russia's lack of democracy; inadequate protections for protesters, trade unions and whistle-blowers; media censorship; and inadequate regulation of the nuclear industry. Failing that, the Committee should insist on the inclusion of a 'human rights and democracy' clause in the Agreement.

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7. NUCLEAR EXPORTS

As with other crucial issues - such as Russia's nuclear weapons program and its status as a major source of nuclear theft and smuggling - ASNO has little to say about Russia's track record of nuclear exports.

Questions:

- * Can ASNO/DFAT provide a suitably detailed account of Russia's past and present track record of nuclear exports.
- * Can ASNO/DFAT confirm that Russia supplies India with nuclear facilities and materials despite India's status as a non-NPT state? How has the Nuclear Suppliers Group dealt with this issue, if at all?
- * Can ASNO/DFAT confirm that Russia supplies Iran with nuclear facilities and materials despite the fact that Iran has been found to have breached its IAEA safeguards agreement?
- * Can ASNO/DFAT advise as to actual or proposed nuclear exports from Russia to the Burmese regime?

ASNO's Frequently Asked Questions asks:

'Could Russia transfer Australian uranium to Iran?'

And answers the question with an unequivocal 'No'.

But is it not possible that Australian uranium could be sent to Iran via Russia as a result of substitution arrangements at unsafeguarded conversion or enrichment plants?

Question: Is it not possible that Australian uranium could be sent to Iran via Russia as a result of substitution arrangements at unsafeguarded conversion or enrichment plants?

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8. THE AUSTRALIAN SAFEGUARDS AND NON-PROLIFERATION OFFICE

8.1 MORE FALSE STATEMENTS BY ASNO

Elsewhere in this submission, several false statements by ASNO are challenged. A few more false statements are listed below. A separate submission to this JSCT inquiry (by Broinowski, Roberts and Green) details numerous false statements by ASNO and exposes unprofessional behaviour by ASNO, e.g. during the JSCT inquiry into uranium sales to China.

ASNO's 'Regulation Impact Statement' states: "These agreements establish strict safeguards and control measures to ensure that exported uranium, nuclear equipment, or technology, are used solely for peaceful, non-military purposes." Likewise, ASNO's 'National Interest Analysis' states: "Australia's bilateral safeguards agreements provide assurance that AONM is used solely for peaceful purposes and is not diverted to nuclear weapons or other military uses."

Such statements imply that there is zero risk of diversion of AONM for weapons production, yet clearly there is a risk (however large or small).

ASNO's 'National Interest Analysis' states: "By virtue of our extensive network of agreements, Australia's strict conditions apply to a significant proportion of uranium in peaceful use worldwide, hence contributing to raising overall standards."

In fact, Australia relies on the inspection system of the limited, flawed and underfunded inspection system of the IAEA. No credit can be claimed for the provisions in bilateral agreements since key provisions - such as a right to refuse permission to separate plutonium from spent fuel - have never once been invoked.

Australia contributes to the weakening of safeguards standards through indefensible policies such as providing open-ended ('programmatic') permission to separate plutonium.

ASNO's 'Frequently Asked Questions' asks

'Will Australian uranium be covered by IAEA safeguards?'

And answers as follows:

'Yes. Under the terms of the Agreement AONM (Australian obligated nuclear material - Australian uranium and nuclear material derived from its use) can only be stored, processed, or used in facilities covered by Russia's safeguards agreement with the IAEA.'

Similarly, ASNO's 'Frequently Asked Questions' asks:

'What conditions will apply to Australian uranium?'

And answers as follows:

A key condition is that AONM be used, processed or stored only within facilities which will be subject to Russia's safeguards agreement with the IAEA. While Russia has the right to choose which facilities are eligible for IAEA inspections, under the terms of the Agreement Australia and Russia must jointly determine which facilities will be eligible to use AONM.

Those statements are at best misleading in that they fail to note the potential for substitution and thus for Australian uranium to be processed in non-safeguards-eligible facilities.

ASNO's 'Regulation Impact Statement' states: "Furthermore, there is a positive environmental impact in assisting Russia to reduce greenhouse gas emissions through use of nuclear power."

That assumes that nuclear power displaces more greenhouse-intensive energy sources, an entirely arbitrary assumption which is not even spelt out let alone justified. Perhaps ASNO

would justify the claim with reference to specious arguments about baseload energy sources (see Briefing Paper #16 at <www.energyscience.org.au>). Nuclear power is three times more greenhouse-intensive than wind power according to the Switkowski report. It is more greenhouse intensive than hydro. It is far more greenhouse intensive than energy efficiency and conservation measures.

8.2 WHAT IS TO BE DONE WITH ASNO?

Recommendation: The JSCT should recommend one of the following courses of action:

- i) Abolition of ASNO and its replacement with a more effective safeguards organisation.
- ii) Establishment of an independent public inquiry to investigate ASNO.
- iii) Establishment of an inquiry into ASNO by the Australian National Audit Office (similar to the Audit Office's inquiry into the Australian Radiation Protection and Nuclear Safety Agency).

Any inquiry into ASNO should of course be carried out independently of ASNO. It should also be carried out independently of the Department of Foreign Affairs and Trade (DFAT), given that the current relationship between ASNO and DFAT is arguably one of the areas in need of review.

An inquiry should address the competence and performance of ASNO; its scientific and technical expertise; whether its current management, organisation, structure and relationships best serve its mandate; any conflicts of interest; the implications of ASNO's structural connection to DFAT (whether it has sufficient independence or operates as a 'captured bureaucracy'); and options for reform including consideration of organisational models in other countries.

An inquiry should also consider the level of scientific literacy/illiteracy within ASNO. For example, ASNO's views on the potential to use reactor-grade plutonium in nuclear weapons have very little scientific support.

Under Article IV of the Australia-Russia Agreement, ASNO is listed as the 'competent' Australian authority. The situation could be improved, and in any case could not be worsened, by making DFAT the competent authority rather than ASNO. The appointment of alternative competent authorities is envisaged in the Agreement.

In theory, a statutory authority should be better placed to act as the competent authority rather than a government department, but special circumstances apply in the case of ASNO.

Recommendation: ASNO should be delisted as the 'competent' authority under Article IV of the Agreement, and replaced by DFAT or another suitable agency.

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