



Challenges and Opportunities for Extending NPT-Related Commitments to the Non-NPT States

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Summary

Today only four states – India, Israel, North Korea and Pakistan – remain outside the NPT. Putting aside the case of North Korea (which was a non-nuclear weapon state NPT party: hopefully the conditions can be established for it to rejoin as such), it is time to move from isolation to engagement with respect to the non-parties. Engagement however must be on a reciprocal basis – cooperation should be based on these states being prepared to participate constructively in regime-equivalent commitments. Although they might not appreciate it, the non-parties all benefit from the more stable world the NPT regime has been able to provide. Without the NPT, the security environment for all states would be far more challenging. The non-NPT states have gained this benefit without contributing to the regime. Now it is essential to find ways of extending key NPT-equivalent disciplines to the non-NPT states – achieving deep nuclear cuts and eventual disarmament will require universality. The non-NPT states cannot join the NPT as nuclear weapon states. It is not realistic to expect the non-NPT states to disarm and join the treaty as non-nuclear weapon states in the near term. However, there are key NPT provisions on non-proliferation and disarmament that the non-parties could adopt today, if there were an appropriate mechanism for them to do this. This could be done through a special treaty or a protocol to the NPT, or through other bilateral and multilateral treaties and arrangements.

Introduction¹

1. Since its conclusion in 1968, the Nuclear Non-Proliferation Treaty (NPT) has become almost universal, now having 190 parties. Only four states of any significance remain outside the treaty – India, Israel and Pakistan, which never joined, and North Korea, which joined in 1985 but withdrew in 2003. A total of nine states are known or believed to possess nuclear weapons. From an NPT point of view, they fall into three categories. The NPT recognizes as *nuclear weapon states* (NWS) those states that had exploded a nuclear device before 1 January 1967. There are five such states – the United States (US), Russia, United Kingdom (UK), France and China (these happen to be the five permanent members of the UN Security Council – the P5).

2. Second, India and Pakistan have nuclear weapons, and Israel is believed to have nuclear weapons (it neither confirms nor denies this). These three are thus de facto non-NPT *nuclear-armed states*.

3. Third, it is not known if North Korea has operational nuclear weapons, but it has conducted nuclear tests. It used to be an NPT state party as a non-nuclear weapon state but announced its withdrawal before proceeding to conduct a total of three nuclear weapon tests to date. Thus North Korea is the third category of an NPT *breakout state*. This makes North Korea a uniquely special case and it should be an objective to persuade it, as part of a resolution of

¹ This Policy Brief is based on a presentation to the Centre for Energy and Security Studies, Moscow, 28 August 2014.

Korean Peninsula issues, to rejoin the NPT as a non-NWS. Accordingly it is not discussed any further in this Policy Brief.

4. With Australia now joining the ranks of NPT parties prepared to conclude a nuclear cooperation agreement with India, it is timely to review the relevance of the NPT to India and the other non-parties, and whether and how NPT disciplines can be extended to these states. This is not just a question of non-proliferation. Non-proliferation and nuclear disarmament are inextricably linked – the NPT’s provisions encompass nuclear disarmament, and the treaty is essential to ensuring the conditions under which nuclear disarmament is possible. There are limits to how far disarmament can proceed if there are nuclear-armed states remaining outside key commitments and norms that bind the NWS.

The NPT and the Non-Parties – Comprehensive Safeguards

5. By implication all NPT states parties other than the five NWS are *non-nuclear weapon states*, though the NPT has no specific definition of a non-NWS. In 1968 when the NPT was concluded no states other than the five recognized NWS had conducted nuclear tests, so all other states were non-NWS in fact as well as in law. Subsequently, however, India, Pakistan and North Korea have conducted nuclear tests (their first tests being in 1974, 1998 and 2006 respectively). While Israel is not known to have conducted a nuclear test, as noted above it is believed to have nuclear weapons – around 80, according to estimates by the Stockholm International Peace Research Institute (SIPRI).

6. Under the NPT, all non-NWS parties commit to accept International Atomic Energy Agency (IAEA) safeguards on all their nuclear material, to verify that no nuclear material is diverted from peaceful use to nuclear weapons. Such safeguards used to be called *full-scope* safeguards, but today are referred to as *comprehensive safeguards*.

7. As the NPT is drafted, the non-NPT states are unable to join the treaty as NWS. While there have been regular calls for these states to join the NPT, they would have to do so either: (a) as NWS, which would require an amendment of the NPT – but any attempt to do so is likely, on present and prospective indications, to be overwhelmingly rejected; or (b) as non-NWS, which would require them to divest them-

selves of nuclear weapons. This too is unrealistic in the near term.

8. Many NPT states parties, including Australia, interpreted the NPT as requiring comprehensive safeguards for nuclear supply to any non-NWS, that is, any state other than the five recognized NWS. Effectively this would limit nuclear supply to NPT parties² – establishing a major incentive for non-parties to join. However, this never became the universally accepted legal interpretation of the treaty – major nuclear suppliers, including the US and Russia, did not accept the comprehensive safeguards interpretation. In 1992 the Nuclear Suppliers Group (NSG) adopted the requirement for comprehensive safeguards for supply to any non-NWS, but this was a policy position, not a legal interpretation.

9. The comprehensive safeguards requirement made sense when the aim was to universalize NPT membership. The three remaining non-parties (setting aside North Korea) are unlikely to be permitted to join the NPT as NWS, and are also unlikely to disarm and join the NPT as non-NWS in the near term. Therefore a new approach is needed for dealing with them.

10. Today the generally accepted interpretation of the NPT is that, if an NPT party transfers nuclear material or items to a non-party, the party is obliged to require safeguards only on the transferred material/items. The NSG’s decision in 2008 to exempt India from its comprehensive safeguards policy (the *India exception*) is consistent with this interpretation.

Applicability of Other NPT Principles to Non-Parties

11. While nuclear-armed states cannot, manifestly, join the NPT as non-NWS, there are other NPT provisions that could be adopted by the non-parties, if there were an appropriate mechanism for them to do this. These provisions include:

- (a) not to transfer nuclear weapons to other states or assist others to acquire nuclear weapons (NPT Article I);
- (b) to require safeguards on nuclear transfers to non-NWS (Article III.2);

² Historically there were exceptions for France and China, which were recognized by the NPT as NWS but did not join the treaty until 1992.

- (c) to pursue negotiations on cessation of the nuclear arms race, nuclear disarmament and general disarmament (Article VI).

12. In addition the NPT has implicit principles, for example:

- (d) separation of military and civil programs;
- (e) effective control of sensitive nuclear technology;
- (f) effective security for nuclear materials (physical protection).

13. Separation of military and civil programs is implicit in the practice of NPT NWS to accept IAEA safeguards on a voluntary basis. Currently the scope of these *voluntary offer* safeguards agreements ranges from nominated facilities (for example Russia and China) to all civil facilities (US and UK). In the future, as peaceful use commitments and verification are extended into the NWS (for example under bilateral agreements, excess materials disposition agreements and the proposed fissile material cut-off treaty), the need to verify non-diversion from civil programs will become increasingly important.

14. Effective control and security arrangements for sensitive technology and nuclear materials are essential aspects of non-proliferation – that is, the responsibility of a state to ensure it does not assist, even inadvertently, the efforts of another state to acquire nuclear weapons. Also there are important principles in NPT Review Conference statements that could be adopted by the non-parties, especially the moratorium on nuclear tests and support for negotiation of a fissile material cut-off treaty (FMCT).

Making These Principles Legally Binding for Non-NPT States

15. How could the non-parties make legally binding commitments to these principles? One approach is to develop a new multilateral treaty for this purpose. This could take either of two forms:

- (a) a free-standing treaty between the non-NPT states and whichever other states wished to become contracting parties. Since all NPT parties would have an interest in the commitments being given by the non-parties, all NPT

parties may wish to become contracting parties to the new treaty; or

- (b) a protocol to the NPT. The main problem here might be that some non-NPT states may object to becoming associated with the NPT. For example India regards the NPT as discriminatory: would it be prepared to join a protocol to the NPT? As currently no proposal for an NPT protocol has been made, it is not known if this would have support amongst NPT parties.

16. A less ambitious approach is to pursue these various commitments through other treaties and mechanisms – bilateral and multilateral – as opportunities arise. The obvious issue here would be how to ensure these efforts encompassed all the relevant states and the full range of commitments.

Bilateral Agreements

17. Negotiation of bilateral agreements, such as nuclear cooperation agreements, provides an opportunity to influence the NPT non-parties. For example, in the 2005 Bush/Singh statement India undertook, *inter alia*:

- (a) to separate civil and military programs and place civil facilities under IAEA safeguards, and to conclude an IAEA *additional protocol* for civil facilities;³
- (b) to continue its unilateral test moratorium;
- (c) to work towards a fissile material cut-off treaty; and
- (d) to strengthen export controls.

18. Consequently India has concluded an expanded IAEA safeguards agreement covering 14 out of 20 existing reactors, related facilities, and future facilities that *it designates* as civil. India has also concluded an additional protocol, though this does not meet the commitment to cover civil facilities (in its additional protocol India undertakes only to report nuclear exports to non-NWS).

19. Regrettably, the 2007 US–India nuclear cooperation agreement, following on the

³ For states with comprehensive safeguards, the additional protocol broadens the information to be reported to the IAEA and the access given to inspectors. Other states can determine how much of the model additional protocol they are prepared to accept.

Bush/Singh statement, must be seen as a lost opportunity. The 2007 agreement does not include major commitments from the statement, such as the test moratorium. Nor does the agreement include most of the NPT principles discussed above. The 2007 US–India agreement has set the bar low for other agreements – as demonstrated by subsequent agreements with India. The nuclear supply or nuclear cooperation agreements concluded by, for example, Russia, France, UK, South Korea, Mongolia, Namibia, Argentina, Canada and Kazakhstan do not cover these broader issues. As a consequence, leverage to cover these issues with India and other non-NPT states has been diminished.

Multilateral Agreements/Mechanisms – Current and Prospective

20. Multilateral agreements and mechanisms provide an opportunity to engage the non-NPT states, provided they are willing. Relevant agreements and mechanisms include:

- (a) IAEA safeguards agreements;
- (b) the NSG;
- (c) the Convention on the Physical Protection of Nuclear Material (CPPNM) and its 2005 Amendment;
- (d) the Comprehensive Nuclear-Test-Ban Treaty (CTBT);
- (e) the proposed FMCT; and
- (f) arms control agreements.

21. **IAEA safeguards agreements.** Safeguards are not mandatory for nuclear-armed states, but safeguards can clearly indicate separation of military and civil programs, even if, as is currently the case in the NWS, the IAEA selects only a small number of facilities for actual inspection.

22. In the US and UK all civil facilities and nuclear materials are designated under their respective voluntary offer safeguards agreements (VOAs). The French VOA covers those facilities and materials that are subject to bilateral agreements. The Russian and Chinese VOAs cover facilities considered useful to safeguards (for example for the IAEA to gain experience with new facility types), as well as facilities and materials subject to bilateral agreements. Currently, due to resource constraints, IAEA inspections in NWS are limited, comprising around 5 per cent of the IAEA’s total safe-

guards effort.⁴ In addition to IAEA safeguards, in the UK and France Euratom inspections apply to all civil facilities.

23. India has undertaken to separate military and civil programs. IAEA safeguards apply to the majority of India’s civil facilities. Unlike in the NWS, in India the IAEA inspects all facilities designated for safeguards. However, important “civil” material stocks and facilities remain outside safeguards. At best this causes ambiguity – and some facilities are officially described as dual purpose. Also concerning are India’s plans to use fast breeder reactors to produce weapon-grade plutonium for “civil” use⁵ – these developments unhelpfully heighten tensions with Pakistan. In Pakistan and Israel, currently safeguards are limited to facilities and materials that were supplied subject to a safeguards commitment.

24. **Nuclear Suppliers Group.** The NSG coordinates national export controls, though its decisions are not legally-binding.

25. India has undertaken to harmonize its national export controls with the NSG guidelines. This does not require membership of the NSG, but India is seeking to join, and the US has undertaken to promote India’s membership. This has not yet been agreed by NSG members. Indian membership is contentious – the NSG was established largely in response to India’s misuse of supplied technology (the 1974 “peaceful nuclear explosion”). NSG establishment was also prompted by France’s sale of a reprocessing plant to Pakistan. Some members are concerned about how India would use membership. The NSG operates by consensus – would India block changes to the supply guidelines, and block new members (for example if Pakistan were proposed)?

26. The possibility of Pakistan and Israel joining the NSG is not under consideration. Given the appalling history of A. Q. Khan’s proliferation activities, the question is whether Pakistan

⁴ For a paper arguing for greater application of IAEA safeguards in the nuclear weapon states, see John Carlson, “Expanding safeguards in nuclear-weapon states”, http://www.nti.org/media/pdfs/NWS_safeguards_carlson_fin.pdf.

⁵ Internationally there is increasing recognition that production of weapon-grade plutonium in civil programs should be avoided, but India says it needs this as part of the fuel for planned thorium reactors. Adding to concerns, India has not placed its first large-scale fast breeder reactor, now nearing completion, under IAEA safeguards.

could demonstrate it has credible export controls.⁶

27. Nuclear security. Effective security is an important aspect of ensuring that nuclear material does not fall into the hands of proliferators. The principal treaty in this area is the 1980 CPPNM which currently has 150 parties. This applies primarily to international transport. The 2005 Amendment extends the CPPNM commitments to domestic programs, and sets out fundamental security principles. The Amendment is not yet in force – this requires ratifications or accessions by two-thirds of the parties to the CPPNM. To date the number of ratifications or accessions is 79, well short of the 100 required for it to enter into force.

28. India and Israel are parties to both the CPPNM and the 2005 Amendment. Pakistan is a party to the CPPNM but not the Amendment.

29. In nuclear security, regrettably, international governance is weak compared with safeguards or nuclear safety. There are no binding international standards or accountability mechanisms, though efforts are being made to improve this situation. It is difficult to assess nuclear security standards in the non-NPT states. Out of 25 states with weapon-usable materials, on available indicators the Nuclear Threat Initiative's Nuclear Security Index ranks Israel 21st, Pakistan 22nd, and India 23rd.

30. Encouraging Pakistan to join the 2005 Amendment should be a priority, along with pursuing the further ratifications and accessions needed to bring the Amendment into force. Additionally, states should engage with the non-NPT states to encourage them to participate in peer reviews and other mechanisms.

31. Nuclear testing. The CTBT is not yet in force. This requires ratification by another eight specified states: China, Egypt, Iran, Israel and the US, which have signed but not yet ratified; and India, Pakistan and North Korea, which have not signed.

32. The proposed FMCT. The verifiable cessation of fissile material production for nuclear weapons is an essential step towards deep nuclear cuts and eventual disarmament. Pakistan is frustrating efforts to start FMCT negotiations in the Conference on Disarmament. If Pakistan cannot be persuaded to stop blocking, it is es-

sential to find another way to start negotiations.⁶

33. Pakistan is clearly concerned about India's withholding of "civil" stocks and facilities from safeguards, and its expanding fissile production capabilities (reprocessing, fast breeder program, enrichment). Addressing the developing South Asian arms race is central to FMCT prospects – this should be a key priority for the P5.

34. Arms control agreements. To date, formal arms reduction agreements have been bilateral, between the US and Russia. As the US and Russia reduce (New START limits deployed strategic warheads to 1,550 each), smaller arsenals become more significant, especially where these arsenals are increasing (as is the case in China, India and Pakistan). It is essential to engage all nuclear-armed states in future negotiations (whether collectively or in appropriate groupings).

Conclusions

35. The non-proliferation regime is essential to establishing the conditions in which nuclear disarmament is possible. The regime is underpinned by legally binding commitments accepted by all NPT parties. Although they might not appreciate it, the non-NPT states all benefit from the regime without, however, contributing to it. This benefit is due to the regime's success in limiting the number of states with nuclear weapons. Without the NPT, the security environment for all states, including the non-NPT states, would be far more challenging. Because achieving deep nuclear cuts and eventual disarmament will require universality, it is essential to extend equivalent commitments to the non-NPT states.

36. Engaging the non-NPT states requires nuclear cooperation, rather than isolation. However, it is important for this to be on the basis of reciprocity – cooperation should be based on these states being prepared to participate constructively in regime-equivalent commitments.

37. Some NPT-related commitments – support for non-proliferation, effective export controls, separation of military and civil programs, a

⁶ See John Page, "Bringing the UN Disarmament Machinery Back to Life," APLN/CNND *Policy Brief* No. 6 (Canberra: Centre for Nuclear Non-Proliferation and Disarmament, October 2013).

moratorium on nuclear testing – should be readily acceptable to the non-NPT states. The only question is *form* – how to give these commitments legal effect. Other commitments, such as capping fissile production and warhead numbers, will require regional tensions to be addressed. This needs active engagement by other states, especially the P5. The entire international community has an interest and will benefit through these issues being resolved.

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