Summary of Implementation of Actions

**Action 1:**

All States parties commit to pursue policies that are fully compatible with the Treaty and the objective of achieving a world without nuclear weapons.

The continued reliance on nuclear weapons in security doctrines and policies and the on-going modernization plans of all nuclear weapon states (NWS) are neither compatible with the NPT’s letter nor spirit. If this action is to be implemented, modernization of nuclear weapons, delivery systems, and related facilities must stop and the NWS and those involved in nuclear-armed alliances must significantly reduce the role of nuclear weapons in their respective security doctrines and policies.

**Action 2:**

All States parties commit to apply the principles of irreversibility, verifiability and transparency in relation to the implementation of their treaty obligations.

For the reductions of nuclear arsenals that have taken place since the adoption of the NPT Action Plan, NWS are failing to adequately apply the principles of irreversibility, verifiability, and transparency. The inspection scheme under the New Strategic Arms Reduction Treaty (New START) between Russia and the United States is a step in the right direction of transparency and verification. However, the fact that non-deployed warheads are not covered by New START shows that the principle of irreversibility is not adequately addressed. The new counting rules for warheads also undermine transparency. Aside from the reductions through the New START, any additional lowering by Russia, US, and the UK overall stockpiles of nuclear weapons has not been accompanied by any verification mechanism. This action can therefore not be considered implemented.

**Action 3:**

In implementing the unequivocal undertaking by the nuclear-weapon States to accomplish the total elimination of their nuclear arsenal, the nuclear-weapon States commit to undertake further efforts to reduce and ultimately eliminate all types of nuclear weapons, deployed and non-deployed, including through unilateral, bilateral, regional and multilateral measures.

The overall global stockpile of nuclear weapons is decreasing. However, it is important to note that qualitative and quantitative disarmament are equally important to achieve a world free of nuclear weapons. The research in this publication shows that the majority of reductions have been of non-operational warheads and warheads in storage. Meanwhile, qualitative disarmament has as of yet not been addressed adequately and the modernization plans of the NWS undermine the minimal reductions undertaken. In addition, progress on “all types of nuclear weapons” has not been seen, since tactical nuclear weapons have still not been addressed. Therefore, this action cannot be considered implemented.
Action 4:
The Russian Federation and the United States of America commit to seek the early entry into force and full implementation of the Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms and are encouraged to continue discussions on follow-on measures in order to achieve deeper reductions in their nuclear arsenals.

The ratification and implementation of New START by both the United States and Russia means that the first part of action 4 is being implemented. Recent statements by President Obama suggest that his administration could be interested in pursuing follow-on measures for further reductions, but discussions with Russia have yet to materialize due to Russian concerns about tactical nuclear weapons and missile "defence" plans of the United States and NATO. This action cannot be viewed as fully implemented yet, as it remains to be seen whether future discussions will be held.

Action 5:
The nuclear-weapon States commit to accelerate concrete progress on the steps leading to nuclear disarmament, contained in the Final Document of the 2000 Review Conference, in a way that promotes international stability, peace and undiminished and increased security. To that end, they are called upon to promptly engage with a view to, inter alia:
(a) Rapidly moving towards an overall reduction in the global stockpile of all types of nuclear weapons, as identified in action 3;
(b) Address the question of all nuclear weapons regardless of their type or their location as an integral part of the general nuclear disarmament process;
(c) To further diminish the role and significance of nuclear weapons in all military and security concepts, doctrines and policies;
(d) Discuss policies that could prevent the use of nuclear weapons and eventually lead to their elimination, lessen the danger of nuclear war and contribute to the non-proliferation and disarmament of nuclear weapons;
(e) Consider the legitimate interest of non-nuclear-weapon States in further reducing the operational status of nuclear weapons systems in ways that promote international stability and security;
(f) Reduce the risk of accidental use of nuclear weapons; and
(g) Further enhance transparency and increase mutual confidence.

The nuclear arsenals of four out of five of the NWS continue to decrease, while one has been recorded to have a slight increase of its arsenal. Though reductions are taking place at a different speed in each NWS, this is a positive development and means that action 5(a) is currently being implemented by the majority of the NWS, though not "rapidly" as the action demands. However, the research in this publication has shown that most reductions are done through dismantlement of non-operational warheads and warheads in storage. In addition, modernization and qualitative improvement of nuclear arsenals, reluctance by NWS and others to endorse progressive UN General Assembly (UNGA) resolutions on nuclear disarmament, lack of progress on removing or reducing non-strategic nuclear weapons, the outspoken intention to continue to rely on nuclear weapons for "security" for decades to come, the reluctance to decrease operational readiness, failure to address risks of accidental use, the opposition to begin preparatory discussions on a nuclear weapons convention or a framework of mutually reinforcing instruments, and the lack of progress within the Conference on Disarmament mean that the obligations in this important action cannot be considered to be implemented. While the NWS have met on a few occasions since the adoption of the action Plan, the nature and scope of their discussions are either not reported on or have focused on items outside the scope of this action, such as a dictionary of nuclear terms or standard reporting forms.

Action 6:
All States agree that the Conference on Disarmament should immediately establish a subsidiary body to deal with nuclear disarmament, within the context of an agreed, comprehensive and balanced programme of work.

Attempts to establish a subsidiary body to deal with nuclear disarmament through a programme of work in the Conference on Disarmament have repeatedly failed. While the opposition to the most recent proposals comes from a non-NPT state, the reluctance of some states parties to the NPT to come up with new and creative solutions has prevented this action from being implemented.

The UN General Assembly in 2012 established an open-ended working group to "develop proposals to take forward multilateral nuclear disarmament negotiations for the achievement and maintenance of a world without nuclear weapons", which met 14–24 May, 27 June, and 19–30 August 2013. Additionally a high-level meeting of the UNGA on nuclear disarmament was held 26 September 2013. Furthermore, in 2013 the CD established an Informal Working Group to agree on a programme of work for the Conference, but failed to do so in the time allocated to it. In March 2014, the group was re-established, whether it will be successful for the 2014 session remains to be seen. While all these initiatives were welcomed by the great majority of states, they have not yet lead to the establishment of a subsidiary body on nuclear disarmament in the Conference on Disarmament.
All States agree that the Conference on Disarmament should, within the context of an agreed, comprehensive and balanced programme of work, immediately begin discussion of effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons, to discuss substantively, without limitation, with a view to elaborating recommendations dealing with all aspects of this issue, not excluding an internationally legally binding instrument. The Review Conference invites the Secretary-General of the United Nations to convene a high-level meeting in September 2010 in support of the work of the Conference on Disarmament.

No progress has been made on a global instrument on negative security assurances (NSAs) as mandated by action 7. While the most recent proposal for a programme of work in the Conference on Disarmament was opposed only by a non-NPT state, NPT states parties have not made adequate efforts to come up with alternative and creative solutions. While the high-level meeting on the work of the CD did take place in September 2010 and a follow-up meeting of the UN General Assembly was held in July 2011, these meetings had no concrete results on starting discussions on negative security assurances or any other topic on the CD’s agenda. An Informal Working Group of the CD was established in 2013 to agree on a programme of work for the conference, but has not yet achieved concrete results.

All nuclear-weapon States commit to fully respect their existing commitment with regard to security assurances. Those nuclear-weapon States that have not yet done so are encouraged to extend security assurances to non-nuclear-weapons States parties to the Treaty.

There has not been much progress on the issue of NSAs since the adoption of the 2010 NPT Action Plan. Both the US and UK have made recent changes in the language of their nuclear postures concerning this issue, but China is still the only nuclear weapon state that has made a pledge to not use nuclear weapons against non-nuclear weapon stats (NNWS) without any conditions or reservations. The US and UK have a policy not to use nuclear weapons against NPT NNWS that are in compliance with “non-proliferation obligations,” which is an undefined concept. France, UK, US, and Russia still abstain on the annual UNGA resolution “Conclusion of effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons”.

The establishment of further nuclear-weapon-free-zones, where appropriate, on the basis of arrangements freely arrived at among States of the region concerned, and in accordance with the 1999 Guidelines of the United Nations Disarmament Commission, is encouraged. All concerned States are encouraged to ratify the nuclear-weapon-free zone treaties and their relevant protocols, and to constructively consult and cooperate to bring about the entry into force of the relevant legally binding protocols of all such nuclear-weapon-free zones treaties, which include negative security assurances. The concerned States are encouraged to review any related reservation.

Since the adoption of the 2010 NPT Action Plan, Russia has ratified protocols I and II to the Pelindaba Treaty. The US submitted the protocols of the Pelindaba and Rarotonga treaties for approval of ratification to its Senate in 2011, but the Senate has yet to take formal action on this. Since 2010, seven African states have ratified the Pelindaba Treaty, leaving 15 African states that have not yet ratified. Consultations between the members of the Bangkok Treaty and the NWS looked promising in 2012, but have since then stalled and no formal progress have been made on ratification of the protocols. While Russia and China have expressed support for the Semipalatinsk Treaty, France, the United Kingdom, and United States oppose article 12 of the Treaty. However, consultations to discuss outstanding difficulties were launched during the 2013 NPT Preparatory Committee in Geneva. In September 2012 all NWS signed parallel declarations regarding Mongolia’s nuclear-weapon-free status. The progress made on the establishment of a zone free of nuclear weapons and other weapons of mass destruction in the Middle East, such as appointing a facilitator and agreeing on a venue, is overshadowed by the postponement of the conference initially planned for December 2012. Finally, no modifications of any reservations by NWS to any of the protocols of NWFZ treaties have taken place. Despite some positive steps, states parties need to make additional efforts in order to fully implement this action.
Action 10:

All nuclear-weapon States undertake to ratify the Comprehensive Nuclear-Test-Ban Treaty with all expediency, noting that positive decisions by nuclear-weapon States would have the beneficial impact towards the ratification of that Treaty, and that nuclear-weapon States have the special responsibility to encourage Annex 2 countries, in particular those which have not acceded to the Treaty on the Non-Proliferation of Nuclear Weapons and continue to operate unsafeguarded nuclear facilities, to sign and ratify.

There are 31 parties of the NPT, including four Annex II countries—China, Egypt, Iran, and the United States—that have not yet signed or ratified the CTBT. However, China and the United States have a special responsibility under this action as they are the only NWS under the NPT that have not yet ratified the Treaty. Both states have made clear their intention to ratify the CTBT since the NPT Review Conference in 2010, but have not laid out any concrete timetable for when this will happen.

Action 11:

Pending the entry into force of the Comprehensive Nuclear-test-Ban treaty, all States commit to refrain from nuclear-weapon test explosions or any other nuclear explosions, the use of new nuclear weapons technologies and from any action that would defeat the object and purpose of that Treaty, and all existing moratoriums on nuclear-weapon test explosions should be maintained.

Action 12:

All States that have ratified the Comprehensive Nuclear-Test-Ban Treaty recognize the contribution of the conference on facilitating the entry into force of that Treaty and of the measures adopted by consensus at the Sixty Conference on Facilitating the Entry into Force of the Comprehensive Nuclear-test-Ban Treaty, held in September 2009, and commit to report at the 2011 Conference on progress made towards the urgent entry into force of that Treaty.

Action 13:

All States that have ratified the Comprehensive Nuclear-Test-Ban Treaty undertake to promote the entry into force and implementation of that Treaty at the national, regional and global levels.

Action 14:

The Preparatory Commission for the Comprehensive Nuclear-Test- Ban Treaty Organization is to be encouraged to fully develop the verification regime for the Comprehensive Nuclear-Test-Ban Treaty, including early completion and provisional operationalization of the international monitoring system in accordance with the mandate of the Preparatory Commission, which should, upon entry into force of that Treaty, serve as an effective, reliable, participatory and non-discriminatory verification system with global reach, and provide assurance of compliance with that Treaty.

Many states parties participated in the CTBT Ministerial Meetings in September 2010 and 2012 as well as the Article XIV Conferences in September 2011 and 2013, and repeatedly called for the prompt entry into force of the CTBT. Furthermore, during the 2013 CTBT Article XIV Conference, a Group of Eminent Persons was created to support and complement efforts for the CTBT’s entry into force as well as international efforts to that end. It is not clear to what extent states promoted the entry into force of this instrument in their bilateral relations with the outstanding annex II states, though official statements and documents indicate that states are currently complying with these actions. The monitoring system of the CTBT continues to be developed by the Preparatory Commission to the CTBTO and therefore action 14 is also complied with.
Action 15:
All States agree that the Conference on Disarmament should, within the context of an agreed, comprehensive and balanced programme of work, immediately begin negotiation of a treaty banning the production of fissile material for use in nuclear weapons or other nuclear explosive devices in accordance with the report of the Special Coordinator of 1995 (CD/1299) and the mandate contained therein. Also in this respect, the Review Conference invites the Secretary-General of the United Nations to convene a high-level meeting in September 2010 in support of the work of the Conference on Disarmament.

Not much progress has been made on negotiations of a treaty banning fissile materials for use in nuclear weapons in the CD. While the most recent proposals for a programme of work in the CD have been opposed only by a non-NPT state, NPT states parties have not made adequate efforts to come up with alternative and creative solutions. The high-level meeting on the CD's revitalization took place in September 2010 and a follow-up meeting of the UN General Assembly was held July 2011, without having a great effect on discussions within the CD. However, in 2012 at the UNGA adopted a resolution establishing a Group of Governmental Experts (GGE) to make recommendations on possible elements of such a treaty. The GGE, consisting of 25 states, will meet in 2014 and 2015. In preparation, the UNSG sought the views of member states on this issue and collected them in a report to the 68th session of the UNGA. While this is a positive step, it does not fulfill the requirements set out by the action, to begin negotiations on such an instrument within the CD.

Action 16:
The nuclear-weapon States are encouraged to commit to declare, as appropriate, to the International Atomic Energy Agency (IAEA) all fissile material designated by each of them as no longer required for military purposes and to place such material as soon as practicable under IAEA or other relevant international verification and arrangements for the disposition of such material for peaceful purposes, to ensure that such material remains permanently outside military programmes.

Action 17:
In the context of action 16, all States are encouraged to support the development of appropriate legally binding verification arrangements, within the context of IAEA, to ensure the irreversible removal of fissile material designated by each nuclear-weapon State as no longer required for military purposes.

No significant changes after the adoption of the 2010 NPT Action Plan have taken place. Three out of the five NWS have declared excess fissile material for military use, although IAEA involvement has been limited. The remaining stockpile of HEU in both Russia and the US exceeds their military requirements and both countries could declare more HEU as excess to national security requirements. No developments of any legally-binding verification arrangements as described in action 17 have taken place, and therefore states are not considered to have implemented this action.

Action 18:
All States that have not yet done so are encouraged to initiate a process towards the dismantling or conversion for peaceful uses of facilities for the production of fissile material for use in nuclear weapons or other nuclear explosive devices.

Since a moratorium on production of fissile material for weapons purposes has been announced by four of the five NWS, most production facilities have been dismantled. While not publicly declaring such a moratorium, China is also believed to have stopped production of fissile material for weapons purposes and to have closed or converted such facilities, but it should announce this publicly. This action is considered being as complied with, but it needs to be noted that no specific steps have been taken since the 2010 NPT Action Plan.

Action 19:
All States agree on the importance of supporting cooperation among Governments, the United Nations, other international and regional organizations and civil society aimed at increasing confidence, improving transparency and developing efficient verification capabilities related to nuclear disarmament.

The UK-Norway-VERTEC initiative is the only significant project related to cooperation on these issues although some countries are reportedly developing new projects on similar issues. More efforts are needed to fully implement this action.
**Action 20:**

States parties should submit regular reports, within the framework of the strengthened review process for the Treaty, on the implementation of the present action plan, as well as of article VI, paragraph 4 (c), of the 1995 decision entitled “Principles and objectives for nuclear non-proliferation and disarmament”, and the practical steps agreed to in the Final Document of the 2000 Review Conference, and recalling the advisory opinion of the International Court of Justice of 8 July 1996.

The national reporting system under the NPT had a low level of participation in the lead-up to the 2010 NPT Review Conference. More than halfway through the 2015 Review cycle, only seven countries have submitted reports. Significant progress needs to be made during the upcoming Preparatory Committee and Review Conference if this action is to be implemented.

**Action 21:**

As a confidence-building measure, all the nuclear-weapon States are encouraged to agree as soon as possible on a standard reporting form and to determine appropriate reporting intervals for the purpose of voluntarily providing standard information without prejudice to national security. The Secretary-General of the United Nations is invited to establish a publicly accessible repository, which shall include the information provided by the nuclear-weapon States.

The NWS are reported to have discussed a standard reporting form at their meetings, and the Non-Proliferation and Disarmament Initiative (NPDI) sought to contribute to this objective by making a concrete proposal. However, there have been no official comments from the NWS on the NPDI proposal, and no similar proposal has been put forward by the NWS. The NWS should agree on and present a standard reporting form as a first step in order to fulfil this action. The United Nations has created an online repository for reports from the NWS, which remains empty at the time of printing of this report. In its 2013 report, the International Panel on Fissile Material has proposed measures to increase transparency of nuclear warhead and fissile material stocks.

**Action 22:**

All States are encouraged to implement the recommendations contained in the report of the Secretary-General of the United Nations (A/57/124) regarding the United Nations study on disarmament and non-proliferation education, in order to advance the goals of the Treaty in support of achieving a world without nuclear weapons.

Reporting on implementation of the UN Secretary-General’s recommendations on disarmament education has been poor, with only nine states submitting information for the 2012 update of the Secretary-General’s report. In order for this action to be implemented, NPT states parties must significantly improve their disarmament education efforts.

**Action 23:**

The Conference calls upon all States parties to exert all efforts to promote universal adherence to the Treaty, and not to undertake any actions that can negatively affect prospects for the universality of the Treaty.

By examining the concrete events that have taken place since the adoption of the 2010 NPT Action Plan, it is possible to conclude that states parties are not exerting all efforts in order to reach this goal. While some have made statements on the topic, many consistently avoid calling out the names of the non-members of the NPT. Furthermore, the increased nuclear cooperation with India and Pakistan show that such rhetoric is not matched by corresponding actions. In fact, any calls for universalization are undermined by the reality of the international community's relations with these two states as well as with Israel. Also, the voting results in the UN General Assembly concerning resolutions calling for universalization of the NPT have not significantly changed since the conclusion of the Action Plan. The recent nuclear test by the DPRK signals a negative development that moves the country even further away from once again adhering to the Treaty, and the end of diplomatic efforts through the six-party talks makes significant progress on this in the near future rather unlikely.

**Action 24:**

The Conference re-endorse the call by previous review conferences for the application of IAEA comprehensive safeguards to all source or special fissionable material in all peaceful nuclear activities in the States parties in accordance with the provisions of article III of the Treaty.

Only ten countries have not yet implemented a comprehensive safeguards agreement (CSA) with the IAEA, and most of those countries do not carry out any noteworthy civilian nuclear activities. Therefore, the call in this action can be considered implemented.
Action 25:
The Conference, noting that 18 States parties to the Treaty have yet to bring into force comprehensive safeguards agreements, urges them to do so as soon as possible and without further delay.

This action calls specifically on the states parties that had not brought into force a CSA by May 2010 to do so. Since that date, eight out of eighteen countries have done so. No progress by the remaining ten countries has been noted. Thus while some progress in implementing this action item has been achieved, further efforts by the remaining ten countries will need to be carried out if this action is to be fully complied with by 2015.

Action 26:
The Conference underscores the importance in complying with the non-proliferation obligations, addressing all compliance matters in order to uphold the Treaty’s integrity and the authority of the safeguards system.

Action 27:
The Conference underscores the importance of resolving all cases of non-compliance with safeguards obligations in full conformity with the IAEA statute and the respective legal obligations of Member States. In this regard, the Conference calls upon Member States to extend their cooperation to the Agency.

These two actions are complicated to evaluate since the phrases “non-proliferation obligations” and “non-compliance” are open for interpretation. The view on what constitutes mandatory obligations and thereby compliance with such obligations differs quite significantly. “Non-proliferation obligations” is not a legally-defined term, whereas the safeguards agreements of each country are very specific. Furthermore, it can be argued that the term “respective legal obligations” in action 27 also includes those obligations arising from UNSC resolutions. The IAEA Board of Governors has reported that Iran, Syria, and the DPRK are currently not complying with certain obligations. All parties need to implement their non-proliferation obligations to the fullest extent. However, the three above-mentioned states do not agree that they are in violation of any of their legal obligations. Additionally, DPRK has withdrawn from the NPT and has no agreements with the IAEA. Iran is in compliance with its CSA obligations (though not the (voluntary) implementation of the additional protocol).

The joint plan of action agreed upon in November 2013 between Iran and the E3/EU+3 is a significant positive step towards resolving remaining issues in this regard. While it is not yet possible to conclude that this action therefore is fulfilled, successful implementation of the joint action plan and a permanent agreement between Iran and the E3/EU+3 will contribute positively to any evaluation of the NPT action plan in 2015. The current situation in Syria does not allow for the implementation of any safeguards agreement. However, it is imperative that the concerned states implement their legal obligations in good faith and exercise flexibility and transparency in their cooperation with the IAEA. Depending on the reading of action 27 and the respective developments, this action could be considered as not complied with by several states or only partly complied with.

Action 28:
The Conference encourages all States parties which have not yet done so to conclude and to bring into force additional protocols as soon as possible and to implement them provisionally pending their entry into force.

Currently, 122 states have additional protocols in force, an increase of 21 states since May 2010. This is a positive development, but 68 member states of the NPT have still not brought into force an additional protocol. While the discussion around the ratification of the additional protocol has lost intensity due to the development of a “state-level approach” to safeguards, this action needs to see more progress if it is to be considered implemented by 2015.

Action 29:
The Conference encourages IAEA to further facilitate and assist the States parties in the conclusion and entry into force of comprehensive safeguards agreements and additional protocols. The Conference calls on States parties to consider specific measures that would promote the universalization of the comprehensive safeguards agreements.

One of the priorities of the IAEA is to facilitate and assist states parties on progress on CSAs and additional protocols. Several initiatives to further facilitate the entry into force and universalization of CSAs and additional protocols by the IAEA have taken place and the progress on adherence to such instruments shows that this action is currently being implemented.
The Conference calls for the wider application of safeguards to peaceful nuclear facilities in the nuclear-weapon States, under the relevant voluntary offer safeguards agreements, in the most economic and practical way possible, taking into account the availability of IAEA resources, and stresses that comprehensive safeguards and additional protocols should be universally applied once the complete elimination of nuclear weapons has been achieved.

There have been no reported changes in the application of the Voluntary Offer Agreement in the nuclear weapon states since May 2010 and therefore this action cannot be considered implemented.

The Conference encourages all States parties with small quantities protocols which have not yet done so to amend or rescind them, as appropriate, as soon as possible.

Since the adoption of the action Plan, 13 states parties have amended their small quantities protocols (SQP). In addition, three new SQPs have entered into force, two new SQP have been signed, and the IAEA Board of Governors has approved one. However, a large number of SQPs from before 2005 remain and therefore this action will require further efforts by these states in order to be implemented fully.

The Conference recommends that IAEA safeguards should be assessed and evaluated regularly. Decisions adopted by the IAEA policy bodies aimed at further strengthening the effectiveness and improving the efficiency of IAEA safeguards should be supported and implemented.

There has been some significant progress in this area, through new IAEA, multilateral, and national initiatives on optimizing the IAEA safeguards system. While it remains to be seen if any of these activities will have any concrete results on improving effectiveness and efficiency of safeguards, the action is currently being implemented.

The Conference calls upon all States parties to ensure that IAEA continues to have all political, technical and financial support so that it is able to effectively meet its responsibility to apply safeguards as required by article III of the Treaty.

The Conference encourages States parties, within the framework of the IAEA statute, to further develop a robust, flexible, adaptive and cost effective international technology base for advanced safeguards through cooperation among Member States and with IAEA.

There has been modest progress reported on actions 33 and 34 dealing with the IAEA and safeguards. However, the actions do not call for a specific increase of activities, but rather for continued support and to “further develop” activities. The work of the IAEA in this area appears to be moving forward and to be of a predictable nature, and therefore these actions seem to be implemented.
Action 35:
The Conference urges all States parties to ensure that their nuclear related exports do not directly or indirectly assist the development of nuclear weapons or other nuclear explosive devices and that such exports are in full conformity with the objectives and purposes of the Treaty as stipulated, particularly, in articles I, II and III of the Treaty, as well as the decision on principles and objectives of nuclear non-proliferation and disarmament adopted in 1995 by the Review and Extension Conference.

This action does not add any additional obligations aside from what is already in the NPT and previous decisions, but it does serve as a reminder that states are obliged to ensure that their nuclear-related exports do not directly or indirectly assist the development of nuclear weapons and that the 1995 decision on objectives and purposes of the Treaty requires states parties to promote transparency in nuclear-related export controls. In order to fully comply with this action, all states with nuclear cooperation agreements with states non-parties to the NPT need to provide transparent information on how their nuclear exports do not directly or indirectly assist the development of nuclear weapons in these countries. As this is not the case, in particular in nuclear energy cooperation agreements with India and Pakistan, this action cannot be considered implemented.

Action 36:
The Conference encourages States parties to make use of multilaterally negotiated and agreed guidelines and understandings in developing their own national export controls.

Action 36 is simply an encouragement and will be dependent on the state involved. The research in this study has shown that many countries have developed national export controls based on multilaterally negotiated guidelines, and therefore this action is considered implemented.

Action 37:
The Conference encourages States parties to consider whether a recipient State has brought into force IAEA safeguards obligations in making nuclear export decisions.

The implementation of this action depends on how one interprets safeguards obligations. As the action only refers to “IAEA safeguards obligations,” it could be interpreted as meaning that the limited safeguards agreement on certain specified nuclear facilities in states not party to the NPT would be enough to implement this action. With such an interpretation, one could argue that the action is being implemented. If one interprets “IAEA safeguards obligations” as meaning the comprehensive safeguards agreement and additional protocol, then nuclear exports to countries outside the NPT and to countries without an additional protocol in place means that this action is not being implemented.

Action 38:
The Conference calls upon all States parties, in acting in pursuance of the objectives of the Treaty, to observe the legitimate right of all States parties, in particular developing States, to full access to nuclear material, equipment and technological information for peaceful purposes.

States parties are encouraged to facilitate transfers of nuclear technology and materials and international cooperation among States parties, in conformity with articles I, II, III and IV of the Treaty, and to eliminate in this regard any undue constraints inconsistent with the Treaty.

Many states continue to highlight the importance of having the right to develop nuclear energy for peaceful purposes and to have the ability to participate in nuclear technology exchange programmes. At the same time, there are few examples of states parties making additional and publicly visible efforts to make sure that all states parties can participate in nuclear energy exchanges. The statement by the G8 from 2011 shows that countries continue to support the notion of exchange of technology for development of nuclear energy, but it remains difficult to assess what this actually means in practice. It is therefore appropriate to conclude that states parties are currently complying with the obligations under action 38 and 39 of the 2010 NPT Action Plan, but that disagreement on the implementation of these commitments is based on the interpretation of certain wording in the Action Plan and the NPT itself.
Action 40:
The Conference encourages all States to maintain the highest possible standards of security and physical protection of nuclear materials and facilities.

The term “highest possible standards” is not defined in the Action Plan. The IAEA provides a list of instruments that are “fundamental for nuclear security” but does not indicate if these are considered to be a general interpretation of the “highest possible standards”. If such an interpretation is made, a clear majority of states parties are complying with this action. Since it was launched in April 2010, the Nuclear Security Summit process as well as the 2013 IAEA Nuclear Security Conference reinforced Action 40.

Action 41:
The Conference encourages all States parties to apply, as appropriate, the IAEA recommendations on the physical protection of nuclear material and nuclear facilities (INFCIRC/225/Rev.4 (Corrected)) and other relevant international instruments at the earliest possible date.

As the IAEA recommendation does not entail a legal commitment and does not require signature and ratification of member states, it is difficult to assess compliance levels. However, nothing indicates that states parties are not continuing to promote and work on physical protection of nuclear materials so therefore the action is considered implemented.

Action 42:
The Conference calls on all States parties to the Convention on the Physical Protection of Nuclear Material to ratify the amendment to the Convention as soon as possible and encourages them to act in accordance with the objectives and the purpose of the amendment until such time as it enters into force. The Conference also encourages all States that have not yet done so to adhere to the Convention and adopt the amendment as soon as possible.

Adherence to this convention and its amendments is improving, but a significant number of countries still remain outside. Therefore, additional progress by those states remaining outside is needed in order to fully implement this action.

Action 43:
The Conference urges all States parties to implement the principles of the revised IAEA Code of Conduct on the Safety and Security of Radioactive Sources, as well as the Guidance on the Import and Export of Radioactive Sources approved by the IAEA Board of Governors in 2004.

A clear majority of NPT states parties have expressed support for this Code and many of those have explicitly supported all aspects of the supplementary Guidance on the Import and Export of Radioactive Sources. At the same time, adherence has not increased significantly since May 2010. Therefore, additional efforts are needed to fully implement this action.

Action 44:
The Conference calls upon all States parties to improve their national capabilities to detect, deter and disrupt illicit trafficking in nuclear materials throughout their territories, in accordance with their relevant international legal obligations, and calls upon those States parties in a position to do so to work to enhance international partnerships and capacity-building in this regard. The Conference also calls upon States parties to establish and enforce effective domestic controls to prevent the proliferation of nuclear weapons in accordance with their relevant international legal obligations.

The amount of activities dedicated to prevention of nuclear terrorism and the illicit trafficking of nuclear materials is significant. It has continued to grow after the conclusion of the 2010 NPT Action Plan. However, most initiatives are multilateral and not national. The action requires states to improve their national capabilities to detect illicit trafficking. While the multilateral initiatives are important for assisting states in improving their national capabilities, their direct effects are difficult to assess. Aside from the difficulties to assess the impact of multilateral activities on national capacities, preventing nuclear terrorism and illicit trafficking of nuclear materials is one of the most fast-paced areas of implementation of the NPT Action Plan. The cooperation between governments, organizations, and some non-governmental actors is significant and therefore states parties are currently implementing this action.
Action 45:
The Conference encourages all States parties that have not yet done so to become party to the International Convention for the Suppression of Acts of Nuclear Terrorism as soon as possible.

Since May 2010, the Convention has 23 new parties. While this is a positive step in the right direction, there are still 52 states that have signed but not yet ratified the Convention. Further progress on adherence to this convention is needed in order to fully implement the action by 2015.

Action 46:
The Conference encourages IAEA to continue to assist the States parties in strengthening their national regulatory controls of nuclear material, including the establishment and maintenance of the State systems of accounting for and control of nuclear material, as well as systems on regional level. The Conference calls upon IAEA Member States to broaden their support for the relevant IAEA programmes.

There has been modest progress reported on action 46, dealing with the activities of the IAEA. As the action does not call for specific increases of activities, but rather for member states to assist and broaden support for the IAEA, this action seems to be implemented.

Action 47:
Respect each country’s choices and decisions in the field of peaceful uses of nuclear energy without jeopardizing its policies or international cooperation agreements and arrangements for peaceful uses of nuclear energy and its fuel cycle policies.

Action 48:
Undertake to facilitate, and reaffirm the right of States parties to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy.

The research shows that states continue to highlight the importance of having the right to develop nuclear energy for peaceful purposes and to have the ability to participate in nuclear technology exchange programmes. At the same time, there are few examples of states parties making additional and publicly visible efforts to make sure that all states can participate in nuclear energy exchanges. Despite the Fukushima accident, most states continue to support the notion of exchange of technology for development of nuclear energy, but it remains difficult to assess what this actually means in practice.

It is therefore concluded that states parties are currently complying with the obligations under these actions, but it is essential to note that disagreement on the implementation of these commitments can exist due to differences in interpretation of certain wording of the Action Plan and the NPT itself.

Action 49:
Cooperate with other States parties or international organizations in the further development of nuclear energy for peaceful purposes, with due consideration for the needs of the developing areas of the world.

Nuclear energy continues to be a source of extensive international cooperation. The earthquake and tsunami in Japan and the following disaster at the Fukushima nuclear power plant have given pause to some negotiations and some states are reconsidering their continued use or development of nuclear power, but most states continue to expand their nuclear options. The number of technical cooperation initiatives through the IAEA continues to rise and so does bilateral cooperation among states. Immediate connection to the NPT Action Plan, however, is difficult to ascertain, since no significant increase in training or cooperation activities since May 2010 can be detected. IAEA Technical Cooperation Programmes (TCP) and regional cooperation under the umbrella of the respective regional division of the TCP mostly focus on the training of personnel and the education of experts. Bilateral cooperation among states also includes the training of personnel but mainly focuses on the exchange of nuclear technology and expertise. States are therefore considered to be in compliance with action 49.
Action 50:
Give preferential treatment to the non-nuclear-weapon States parties to the Treaty, taking the needs of developing countries, in particular, into account.

While some have argued that through sharing of best practices and technical cooperation agreements of the IAEA, NPT states parties with developing nuclear energy programmes are indeed given preferential treatment, the extent of cooperation with states outside the NPT gives cause to question whether this action is being implemented. The scope of cooperation of NPT states parties with nuclear weapon-possessors not party to the NPT, especially the increased cooperation with India since the Nuclear Suppliers Group (NSG) exception was granted, shows that the line between states not party to the NPT and NNWS parties to the NPT is diminishing. Such a development has inevitably raised concerns about the compliance with this action and will continue be a source of significant disagreement at future NPT conferences, especially since the United States has formally introduced the issue of the India's membership in the NSG.

Action 51:
Facilitate transfers of nuclear technology and international cooperation among States parties in conformity with articles I, II, III, and IV of the Treaty, and eliminate in this regard any undue constraints inconsistent with the Treaty.

While there continues to be some reluctance to share technology in the field of enrichment and processing of nuclear material, nuclear energy cooperation amongst NPT states parties is significant and continues to expand. The earthquake and tsunami in Japan and the following disaster at the Fukushima nuclear power plant have given pause to some negotiations and some states are reconsidering their continued use or development of nuclear power, but most states continue to expand their nuclear options. Differences in interpretation of the NPT and its articles can lead to different conclusions on the implementation of this action, but our research has not found anything concrete that would indicate that this action is not currently being implemented.

Action 52:
Continue efforts, within IAEA, to enhance the effectiveness and efficiency of its technical cooperation programme.

Action 53:
Strengthen the IAEA technical cooperation programme in assisting developing States parties in the peaceful uses of nuclear energy.

The technical cooperation programmes between states parties and the IAEA are continuing to be developed and implemented and new ones are initiated constantly. Progress on action 52 and 53 is significant and is therefore considered implemented.

Action 54:
Make every effort and to take practical steps to ensure that IAEA resources for technical cooperation activities are sufficient, assured and predictable.

For the timeframe of 2010–2015, the IAEA Board of Governors increased by over five million dollars the estimated target figure for the Technical Cooperation Fund. If states parties continue to pledge and pay at the same rate as they did in 2009, the funding for the technical cooperation programme should increase from its 2009 levels. Based on the target figures, action 54 is considered complied with by the IAEA member states as a group.
Action 55:
Encourage all States in a position to do so to make additional contributions to the initiative designed to raise 100 million dollars over the next five years as extra budgetary contributions to IAEA activities, while welcoming the contributions already pledged by countries and groups of countries in support of IAEA activities.

Action 55 encourages states to make additional contributions to the initiative designed to raise 100 million dollars. So far, the United States has contributed $31 million. Several other countries have announced that they either will or are considering contributing to this initiative, but recently no figures have been made public. In order to fully implement action 55, states would need to increase their publicly pledged donations and deliver what was pledged. Since the technical cooperation is a statutory task of the Agency, the debate on diminishing the importance of extrabudgetary funding by introducing the Technical Cooperation Fund in the IAEA regular budget has become more intense since 2010.

Action 56:
Encourage national, bilateral and international efforts to train the necessary skilled workforce needed to develop peaceful uses of nuclear energy.

The action does not require any increase in activities; it mainly calls upon states to encourage training programmes. No decrease of training programmes has been found, and therefore this action is considered implemented.

Action 57:
Ensure that, when developing nuclear energy, including nuclear power, the use of nuclear energy must be accompanied by commitments to and ongoing implementation of safeguards as well as appropriate and effective levels of safety and security, consistent with States' national legislation and respective international obligations.

The Fukushima disaster has raised significant concerns around the world about the safety of nuclear energy and has highlighted that existing nuclear power plants are not always accompanied by “appropriate and effective” levels of safety. Fukushima has led to renewed focus on nuclear safety, and states are engaging in additional efforts to improve nuclear safety. While not without criticism and reservations, the adopted IAEA action plan on nuclear safety is a positive step. Additionally during the meeting of the Convention on Nuclear Safety in August 2012 a working group on nuclear safety was created to discuss measures to strengthen nuclear safety. While these worldwide efforts are a step in the right direction, there is a reluctance to adopt more legally-binding measures. More concrete measures and improvements in nuclear safety need to be implemented. The significance of this action is evolving and therefore needs to be implemented more strictly.

Action 58:
Continue to discuss further, in a non-discriminatory and transparent manner under the auspices of IAEA or regional forums, the development of multilateral approaches to the nuclear fuel cycle, including the possibilities of creating mechanisms for assurance of nuclear fuel supply, as well as possible schemes dealing with the back-end of the fuel cycle without affecting rights under the Treaty and without prejudice to national fuel cycle policies, while tackling the technical, legal and economic complexities surrounding these issues, including, in this regard, the requirement of IAEA full scope safeguards.

The decision to establish a new nuclear fuel bank under the auspices of the IAEA is one of the most significant developments since the Action Plan was adopted in May 2010. The decision was made in the IAEA, and therefore is compatible with the requirement of the action. The financial and rhetorical support from several states shows a continued commitment to this action. The Fukushima accident does not appear to have had any significant impact on the debate on multilateral approaches to the nuclear fuel cycle.

Action 59:
Consider becoming party, if they have not yet done so, to the Convention on Nuclear Safety, the Convention on Early Notification of a Nuclear Accident, the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, the International Convention for the Suppression of Acts of Nuclear Terrorism, the Convention on the Physical Protection of Nuclear Material, and to ratify its amendment so that it may enter into force at an early date.
The conventions on nuclear safety and security, as well as civil liability in case of nuclear accident, are growing in importance since the Fukushima disaster. The conventions in action 59 have seen some modest progress in signatures and ratifications, but it is far from any significant achievement to increase adherence. Even though the action only obliges states to “consider” becoming parties to these conventions, states need to make further efforts in order to implement action 59.

**Action 60:**
Promote the sharing of best practices in the area of nuclear safety and security, including through dialogue with the nuclear industry and the private sector, as appropriate.

This action does not require any increase of activities; it mainly calls upon states to promote sharing of best practices. However, new initiatives for sharing of best practices have taken place and therefore it is considered being implemented.

**Action 61:**
Encourage States concerned, on a voluntary basis, to further minimize highly enriched uranium in civilian stocks and use, where technically and economically feasible.

The global amount of highly-enriched uranium (HEU) has decreased from 2009 to 2013, indicating that some progress has been made. Many states have since May 2010 made significant progress in removing their entire stockpiles of HEU. Despite the voluntary nature of this action, more efforts to reduce HEU should be made in order to fully implement this action. States should also consider measures to increase transparency in the field of fissile material, in order to facilitate additional reductions in the future. Unfortunately, there has been no significant discussion on whether the security and transparency concerning such material really is best served by transferring it to an NWS or whether other mechanisms, such as within the framework of the IAEA should be developed.

**Action 62:**
Transport radioactive materials consistent with relevant international standards of safety, security and environmental protection, and to continue communication between shipping and coastal States for the purpose of confidence-building and addressing concerns regarding transport safety, security and emergency preparedness.

No significant changes can be mentioned in connection with the transport of radioactive material. Several IAEA initiatives continue to take place and international standards for transport and communications seem to be complied with. The concerns expressed by the Caribbean Community (CARICOM) show that more communication and confidence-building measures are needed to address this issue, but the action is considered to be implemented.

**Action 63:**
Put in force a civil nuclear liability regime by becoming party to relevant international instruments or adopting suitable national legislation, based upon the principles established by the main pertinent international instruments.

With regards to international civil liability regimes, only limited progress has been achieved. As the action includes a concrete commitment that states parties “shall” put such civil liability regimes in place, it cannot be considered fully implemented.

**Action 64:**
The Conference calls upon all States to abide by the decision adopted by consensus at the IAEA General Conference on 18 September 2009 on prohibition of armed attack or threat of attack against nuclear installations, during operation or under construction.

No attack against a nuclear installation has been reported since the adoption of the NPT Action Plan. However, concrete threats of attacks on Iranian nuclear facilities have been made by Israel while the US has publicly stated that “all options are on the table”. This raises concerns with regard to the implementation of this action.