



CONFERENCE A

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Documentation of the Work of the Treaty on the Non-Proliferation of Nuclear Weapons Review Conference

NPT Review Conference

Committee Staff

Director	Dominika Ziemczonek
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Agenda

- I. Advancing Technical Cooperation in the Peaceful Use of Nuclear Energy
- II. Article X and Measures to Address Withdrawal from the NPT
- III. Denuclearization of the Korean Peninsula

Report Segments adopted by the Committee

Code	Торіс	Vote
NPT/1/1	Improving Cooperation through	Adopted without a vote
	Information Sharing	
NPT/1/2	Strengthening Regional Cooperation	Adopted without a vote
NPT/1/3	Promoting Education through	Adopted without a vote
	Technical Cooperation	
NPT/1/4	Enhancing the Role of the IAEA	Adopted without a vote
NPT/1/5	Implementation of IAEA Safeguards	Adopted without a vote
NPT/1/6	Collaborative Enhancement of Nuclear	95 votes in favor, 22 abstentions, 5 votes against
	Energy Facilities	
NPT/1/7	Safety of Personnel and Facilities	Adopted without a vote
NPT/1/8	Addressing the Physical Security of	Adopted without a vote
	Nuclear Energy Facilities	
NPT/1/9	Ensuring Secure Access to Nuclear	87 votes in favor, 28 abstentions, 6 votes against
	Energy Material	

Summary Report

The NPT held its annual session to consider the following agenda items:

- I. Advancing Technical Cooperation in the Peaceful Use of Nuclear Energy
- II. Article X and Measures to Address the Withdrawal from the NPT
- III. Denuclearization of the Korean Peninsula

The session was attended by representatives of 128 States.

On Sunday, the committee adopted the agenda in the order of I, II, III, beginning discussion on the topic of Advancing Technical Cooperation in the Peaceful Use of Nuclear Energy. The committee organized into several working groups debating potential strategies on topics including nuclear safety standards, development strategies, information sharing and transparency. Monday afternoon and evening sessions were dedicated to a fruitful and productive debate. By the end of Monday evening session, 19 separate working papers were submitted to the Dais.

By Tuesday morning, the committee began cooperatively merging their proposals into nine comprehensive draft report segments, covering a wide range of subtopics including: information sharing, regional cooperation, physical security, education, safeguards, security, facilities, and the role of the International Atomic Energy Agency (IAEA). Some working groups found consensus at a very early stage, others had to overcome greater differences and were engaged in strong debates. All papers merged by the conclusion of the fifth session.

During the Wednesday morning session, several delegations delivered speeches in order to achieve consensus in a number of working papers on the floor. The Dais approved a total 9 draft report segments. Two amendments were later introduced for the consideration of the body. During voting procedure, 7 draft report segments were adopted by acclamation while 2 draft report segments were adopted by 2/3 majority of the committee. The outcome of the 2015 NPT Review Conference is a comprehensive report composed of a great variety of topics aiming to advance technical cooperation and peaceful use of nuclear energy.



Committee: The Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons **Topic:** Advancing Technical Cooperation in the Peaceful Use of Nuclear Energy

1	I. I	I. Introduction				
2 3 4	A. 1	A. Improving Cooperation through Information Sharing				
5 6 7 8 9 10 11 12	1.	The States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) recognize the necessity of a more transparent flow of information among Member States, a notion affirmed by Article IV of the NPT, especially considering the lack of a stable and effective method of data sharing and technical cooperation. Currently, bodies such as the International Physical Protection Advisory Services and the Incident and Trafficking Database work to achieve such transparency, however there is a need to strengthen measures of transparency and increase the circulation of resources concerning nuclear technology, nuclear security, and the environmental concerns of nuclear technology.				
13 14 15 16	2.	The Outernet, an initiative to bring information and the sharing of technological assets to areas without Internet access such as parts of Africa or Asia, can be utilized to a much greater degree via a cooperative with States Parties and Member States in the context of Technical Cooperation.				
17 18 19 20 21 22	3.	While the Conference recognizes the inherent dangers related to traditional nuclear power plants, it highlights the potential solutions offered by moves toward safer methods of power generation such as thorium and closed fuel cycles. The Conference aims to integrate International Atomic Energy Agency (IAEA) Technical Documents, containing a critical review by IAEA on current projects on thorium fuel cycle and its potential challenges, into the international research on thorium.				
23 24 25 26 27 28	4.	Given the issues that could arise from the use of uranium as a fuel source, such as the environmental damage, potential for meltdown, and weaponization, technical cooperation can be inhibited severely. Many states are concerned with the dangers presented by the utilization of highly volatile fissile materials. Replacing these materials with safer variants is the most efficient way of reducing these risks and enhancing the potential for multilateral cooperation and sharing of technology.				
29 30 31 32 33	5.	The Conference considers an expansion of relationships between the IAEA and the various bodies that make up the United Nations (UN), especially in the following topics: scientific cooperation and intercultural understanding, sustainable development, the involvement of women in security, healthcare coordination and measures addressing medical technology, and risk reduction management.				
34 35 36 37 38 39 40 41 42	6.	The Conference highlights its commitments to the UN which have existed since 1970. Such partnership was referred to in the Treaty's preambles by highlighting the importance of UN resolutions aimed at the conclusion of an international agreement on nuclear disarmament. In accordance, General Assembly resolution 66/33 (2011), established that the UN shall render the necessary assistance for the efforts of nuclear non-proliferation efforts. Therefore, we emphasize the necessity of establishing Joint Divisions of the IAEA within the UN Framework that will ensure the accurate advancement in technical cooperation of peaceful nuclear energy, taking into account the already existent IAEA's Joint Division with the UN's Food and Agriculture Organization to provide cooperation in the matters of food security.				
43 44 45 46 47 48 49	7.	The need for cooperation between United Nations Educational, Scientific and Cultural Organization (UNESCO) and the IAEA has been proven by the previous joint work between such bodies, for instance the establishment of the joint seminar to discuss educational problems in connection with the development of the peaceful uses of atomic energy held in the French Centre for Nuclear Research at Saclay in 1959. We believe there is an inherent need to discuss the pursuit of scientific cooperation, continuing efforts to maintain peace, and building intercultural understanding to address the advancement in research and development of the peaceful uses of nuclear energy. However, there is no permanent agency in charge of coordinating the fulfillment of the				

- relationship agreement between the IAEA and the UNESCO which came into force in 1958, and of ensuring the
 accomplishment of UNESCO's role in the domestication of atomic energy.
- 8. According to the IAEA Gender Equality Policy, the inclusion of men and women as equals in the decision-53 54 making process for peaceful nuclear development and in the research and educational process is of high 55 importance to improve and ensure an accurate technical cooperation. Therefore, the Conference is deeply concerned by the lack of an agency in charge of evaluating the effectiveness of the mentioned IAEA policy. 56 57 Taking the already existing organization Women in Nuclear as an example for involving women in nuclear 58 development, the Committee considers an establishment of such an approach in the IAEA in coordination with 59 the UN system, thus providing a network through which women can work in the nuclear energy and other 60 industries that use nuclear technology, thus extending their professional development.
- 9. Since the introduction of nuclear fission and atomic energy, this technology has been used for the diagnosis and treatment of various diseases. These technologies, such as Nuclear Magnetic Resonance Imaging, are of the utmost importance in the modern world. They are, however, not accessible to every individual of humankind.
 Therefore, this problem should be addressed by the World Health Organization (WHO) jointly with the IAEA, seeing as it is the relevant body on nuclear affairs. Nuclear radiation, on the other hand, has been the cause of another number of diseases, which should also be addressed by the WHO in cooperation with the IAEA.
- 10. The Conference acknowledges the imbalance of nuclear power among States Parties. According to the Nuclear Energy Institute, as of January 2015 only thirty Member States have functional nuclear reactors. However the majority of both States Parties to the NPT and Member States in the IAEA lack either the informational resources or the technological capacity to safely pursue and develop a nuclear energy program, demonstrating the need for a strengthening of information sharing initiatives.
 - 11. One of the obstacles that many State Parties face is a scarcity of resources. This acts as an almost insurmountable barrier to technical cooperation in many instances. Lack of water, food, electricity, and infrastructure are all threats to the goal of cooperation and the advancement of the peaceful use of nuclear energy.
- 12. The advance of alternative energies within States Party is highly important for achieving sustainable
 development in an accurate way. Considering nuclear energy as an effective and accurate form of alternative
 energy, and focused on the foundation of sustainable development in every aspect of development, such as the
 Rio Declaration, the Millennium Development Goals, Security Council resolution 1645 (2005) and The Future
 We Want Outcome Document, the Conference highlights the importance of involving sustainability in the
 advancement towards international peace and security and the involvement of sustainability in the development
 of energy systems.

88 B. Strengthening Regional Cooperation89

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- 13. The 2010 Review Conference recognized the importance of cooperating to the fullest to improve the
 development of applications of nuclear energy for peaceful purposes. The Conference noted under section 43
 that Regional Cooperative Agreements (RCAs) can benefit developing States Parties in improving technical
 assistance. Sections 48 and 49 also provide specific recommendations on improving cooperation on a regional
 level as well.
- 14. It is evident that the maladies stemming from climate change are consistent throughout regions. For example,
 Small Island States in the Pacific struggle with rising sea levels and devastating storms, as evidenced in 1978 by
 the tide gauge installed at Funafuti, Tuvalu by the University of Hawaii and the cyclone that struck Vanuatu in
 March 2015. In this sense, a regional scope on the development of nuclear technologies, which have proved to
 be a realistic way to limit the exacerbation of climate change and its consequences, as they significantly cut
 down the emission of greenhouse gas, would be highly efficient in dealing with these problems.
- 103 15. Mismanagement of nuclear material and nuclear accidents is a major liability of nuclear technology.
 104 Contamination from Fukushima Daiichi accident of 2011, for example, has had detrimental effects on the

Pacific Ocean, affecting vulnerable Small Island Developing States (SIDS), which underscores the need for
 regional approaches to manage nuclear safety.

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- 16. The World Nuclear Association (WNA) estimates that 20% of all nuclear reactors in the world are located in zones of significant seismic activity. Whereas these reactors are designed to shut down automatically in the event of an earthquake, Fukushima Daiichi still managed to become a major threat to the environment. Regional cooperation in the Pacific in the form of training programs provided by Australia has been key to prevent further damage to SIDS. Preemptive regional cooperation is key to preventing future catastrophes in other regions.
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 17. The IAEA promotes the advances in nuclear technology to further medical purposes, combat climate change, and improving the well-being of all if the benefits are also shared with developing States Parties to the NPT.
 17. The IAEA conducted the Pan African Rinderpest Eradication Campaign (PARC) in the 1980s to combat the Rinderpest in Africa. The program succeeded in limiting the spread of the pest to only two countries, which made a tremendous difference in the lives of African farmers.
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 18. The IAEA PARC program is a collaboration between the IAEA, the African Union (AU), the Food and Agricultural Organization (FAO), the Institute for Livestock and Veterinary Medicine for Tropical Countries. The partnership helped overcome the capital investment costs of nuclear technology application, which can be very high for developing Member States. The 2010 Review Conference under section 35 recognizes the need to improve the scientific, technological and regulatory capabilities of developing States.
- 127 19. RCAs have made significant progress in furthering the research, development and training of Member States in 128 nuclear energy. In particular, the Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology for Asia and the Pacific has provided resources and workshops, 129 130 which further the capacity of Member States in the region on nuclear technology. Improving Cancer Management through Strengthening the Computed Tomography Cancer Staging Process, and Building Capacity 131 132 for Applications of Advanced Non-Destructive Evaluation Technologies for Enhancing Industrial Productivity 133 are a few successful initiatives that work under the RCA for Asia and the Pacific, which improve the peaceful 134 use of nuclear application and Member States' capacities in that application.
- The Conference commends the IAEA Technical Cooperation Programmes and the Member States that sponsor
 them. These Technical Cooperation programs are operated at the level of the IAEA and various states' nuclear
 development agencies. Currently, states must cooperate with the IAEA Department of Technical Cooperation as
 well as the several states that sponsor them to participate in these technical cooperation programs.
- 141 21. Currently the AU and European Union (EU) cooperate with each other and have established the Roadmap 2014-142 2017 tasked with promoting sustainable and inclusive development. The sustainable development goals include 143 sustainable energy such as nuclear energy. In order to follow through on the Roadmap goals, the AU and EU 144 must utilize their function bodies, African Commission on Nuclear Energy (AFCONE) and the European 145 Commission's European Atomic Energy Community (EURATOM) group. These functional bodies encounter 146 many of the same barriers and need access to many of the same resources. However these functional bodies do 147 not have formal cooperation with each other and therefore cannot communicate with each other on effective 148 strategies and other forms of collaboration.
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 22. The Conference is concerned by states not party to the NPT who are not under the regulation of the IAEA, but
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157 C. Promoting Education through Technical Cooperation

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159 23. Today, there are 30 countries that have functional nuclear power plants, of the 194 Member States of the UN and the 190 States Parties to the NPT, according to the World Nuclear Association. The lack of public

awareness regarding peaceful nuclear energy can potentially create stigma among states that do not have access
 to nuclear technology. To eliminate this issue we must increase access to research and education in all
 countries; the NPT should aim to create a greater understanding peaceful nuclear technology.

- As designated by General Assembly resolution 42/427 (1987), sustainable development is development that
 meets the needs of the present without compromising the ability of future generations to meet their own needs.
 Among other alternative energy resources, nuclear energy can provide an alternative to petroleum-based fuels
 for states seeking other options for economic, environmental, health and social benefits. This is currently under
 explored and as such the economic, environmental, health and social benefits of safe nuclear electricity
 production warrants further investigation and study.
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Regarding issues hindering sustainable development of nuclear and non-nuclear energy sources, the IAEA has
worked with The African Regional Cooperative Agreement for Research, Development and Training Related to
Nuclear Science and Technology (AFRA). The Conference supports technical cooperation between regional
organizations to develop policies for sustainable and comprehensive nuclear development. To facilitate this
process, cooperative efforts could mirror OLADE and the European Commission, which have proven to be
successful bodies for their Member States to achieve regional and sub-regional energy integration.

179 **D. Enhancing the Role of the IAEA**

- 181 26. The Conference recognizes the energy challenges of the 21st century and the important role that nuclear energy plays, as it aids in protecting the environment, human health, and energy production. Nuclear energy is commonly developed and used as an alternative to other sources of energy, such as fossil fuels, and approximately 16% of the world's energy comes from nuclear power supplied by more than 70 countries worldwide, according to the Nuclear Energy Institute.
- 187 27. Nuclear energy may also be used to support advancements in non-energy technology, including from medical 188 innovations that prolong the human lifespan, insect control procedures that prevent widespread crop failure, 189 radiation techniques to lengthen the survivability of food, and tracing mechanisms in reservoirs and streams that 190 help irrigation planners discover and cultivate critical water resources. These advancements are essential to the 191 sustainability of developed and developing States, industrial and agricultural, resource-heavy and resource-poor. 192 Furthermore, the area of nuclear energy in healthcare can have profound impacts, particularly in developing 193 countries. Nuclear energy can be highly beneficial, yet a majority of States Parties lack the resources for nuclear 194 energy infrastructure to be developed and have received inadequate amounts of technical cooperation. 195
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 28. The IAEA is the main vehicle in which actions within the NPT are executed, such as supervising safeguards and being responsible for providing technical assistance. At the United Nations Climate Change Summit in 2014, the General Assembly passed a resolution affirming the Assembly's support of IAEA's work in facilitating cooperation.
- 29. The IAEA remains at the center of coordinating technical cooperation and capacity-building projects through the agency's Technical Cooperation (TC) Programme. The IAEA's TC Programme is the pivotal mechanism to assists Member States in facilitating resource transfer and providing nuclear assistance through information sharing. A major issue facing the IAEA is the expansion of membership to all States as it is currently leaving out twenty-six. As of 31 December 2014, 147 States Parties have signed Additional Protocols of the IAEA stated in the Conclusion of Additional Protocols, and only 124 States Parties enforce them.
- 30. Furthermore, the IAEA has established RCAs to strengthen and enlarge the contribution of nuclear science and technology to provide socio-economic development. Agreements of this nature are the bedrock of international cooperation in facilitating the peaceful use of nuclear energy.
- 31. The majority of nuclear power is concentrated and consumed mainly in Europe, as developing states continue to
 struggle with resource prices and greenhouse gas emissions from unsustainable energy sources. The Conference
 is concerned at the lack of access to energy and sustainable modern energy services for States Parties in other
 parts of the world. The World Food Programme Hunger Statistics Report states that there are approximately 805
 million people around the world who suffer from malnutrition due to lack of access to food. Every year, 3.1

- million children die due to malnourishment. Ninety percent of these hunger-related diseases and deaths are
 concentrated in the developing parts of the world. FAO works with IAEA on programs to improve food
 sustainability, assisted by nuclear and related biotechnologies.
- 32. In conjunction with the IAEA's TC Programme, the IAEA produced the 2010 Action Plan, which was included
 in the Final Document of the 2010 NPT Review Conference. Despite the implementation of the 2010 Action
 Plan and the progress of the IAEA's TC Programme, the Conference recognizes the gaps that exist within
 existing frameworks. Without resources and technology possessed by States Parties development of nuclear
 programs is a concern, as there is an increasing number of Member States within the IAEA TC Programme
 requesting TC projects, according to IAEA statement GC(58)/RES/12.
- 228 33. The Conference recognizes that the IAEA's TC Programme does not focus on assisting developing states. 229 Despite the presence of existing regional frameworks created and largely funded by the IAEA to aid developing 230 States Parties, much of the infrastructure required to administer and facilitate technical cooperation are 231 underfunded. Thus, established agreements are incapable of meeting the needs within and across regions, such 232 as promoting sustainability and development cooperation, and States Parties lack the requisite educational and 233 managerial structure to ensure depth of qualified personnel and prevent issues relating to turnover. Though there 234 are numerous educational programs and services throughout the IAEA, they are currently focused around 235 experts and programs from developed, western States.
- 34. The Conference recognizes concerns that the resources and capacity of the IAEA are insufficient to meet the
 needs of Member States aiming to develop and strengthen their nuclear capabilities. The Conference is
 concerned with the access to energy and sustainable modern energy services, as energy directly affects towards
 poverty eradication. The world lacks cooperation that could envelop regional nuclear projects and foster
 discussion between all interested States under IAEA-guidelines.
- 35. The Conference recognizes the IAEA has not yet used their potential in the health division. Although the TC
 Programme of the IAEA provides assistance to African Member States, about 80 % of Africa's population still
 lacks access to basic cancer therapy and radiation. This lapse in health care is in part because the TC
 Programme focuses on sending foreign experts without providing adequate training to medical professionals in
 regards to nuclear technology.
- 36. The Conference emphasizes that natural and man-made disasters are issues that cause concern to all members of
 the international community. The Conference recognizes the IAEA Mandate and their guidelines have been
 successful in preventing and safeguarding against many nuclear disasters. However, the 2011 Fukushima
 Daiichi power plant breakdown demonstrated gaps remain. More importantly, the safeguards are not legally
 binding and numerous states may become non-compliant.

255 E. Implementation of IAEA Safeguards

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- 37. The Conference recognizes the essential nature of the IAEA in assuring compliance with the three pillars of the
 NPT: disarmament, nonproliferation, and the peaceful utilization of nuclear resources.
- 38. One of the key activities of the IAEA is assisting Member States in creating and upholding procedures and
 standards for the safe disposal of nuclear waste in order to prevent radiological contamination of the
 environment and to safeguard the health of the international community. As evidenced by such incidents as the
 1986 nuclear meltdown in Chernobyl resulting from poor technical operation, the tsunami-induced meltdown of
 the Fukushima-Daichii nuclear reactor in 2011, and the ongoing radiological crisis in Central Asia resulting
 from the by-products of Soviet nuclear weapons testing and unsafe uranium mining practices, there is a great
 need worldwide for an increased focus on safe, practical, and effective nuclear waste disposal methods..
- 39. Another crucial activity of the IAEA is to ensure that NPT States Parties undertake enrichment of nuclear
 material for solely peaceful purposes. While it is necessary in almost all cases to enrich nuclear material such as
 uranium through the nuclear fuel cycle process in order to render it usable for power, this cycle can also be used
 to refine this material to such an extent that it becomes a weapon. This is one of the most dangerous issues
 confronting the IAEA and the international nuclear regime and while all Member States have the right to

peaceful nuclear energy development according to Article IV of the NPT, ensuring that States Parties do not
abuse this right in order to covertly weaponized their nuclear capabilities is an integral part of the IAEA's role
in ensuring nuclear nonproliferation.

- F. Collaborative Enhancement of Nuclear Energy Facilities
- 40. Current standards for the IAEA administration of fuel cycle facilities provides for structures, systems and
 components of enrichment plants in addition to guiding the initial construction and commissioning of a plant.
- 282 41. The Conference duly notes and expresses concerns over the possible risks associated with nuclear fuel cycle 283 facilities. A plethora of facilities have the capacity of utilizing high uranium enrichment reactors, which can be 284 used for the proliferation of nuclear weapons. Moreover, fuel cycle facilities that are owned and operated by individual Member States often lack the transparency necessary to ensure trust amongst other Member States 285 286 due to the sovereignty concerns of Member States housing nuclear facilities. Member States are often concerned 287 by the lack of transparency in facilities with the capability to develop weapons grade uranium. The design of 288 multilateral fuel facilities ensures facilities maintain a peaceful trajectory due to International Atomic Energy 289 Agency oversight and increased transparency. Thus, the Conference recognizes the apparent benefits of 290 multilateral facilities in maintaining the peaceful use of nuclear energy.
- 291 292 42. The Conference recognizes the large financial burden that comes with the process of creating safe and 293 sustainable nuclear energy facilities. Many developing states are limited in their abilities to develop nuclear 294 facilities due to the costs associated with the development, maintenance, and personnel management of said 295 facilities. The IAEA relies on voluntary donations to their TC Programme's funding and thus relies heavily on 296 developed States' willingness to support its services. According to the Nuclear Energy Institute the costs to maintain a nuclear facility, not including waste management, are upwards of 40 million USD for an 18 month 297 298 duration. Furthermore, it is often difficult for developing states to receive the resources necessary to maintain 299 the facilities that have already been established, namely mineral resources for the purposes of fuel sources.
- 301 43. The Conference strongly supports the tenet ingrained in Article IV of the NPT maintaining that all Member 302 States have the right to pursue the development and use of peaceful nuclear energy and energy technology. In 303 addition, the Conference is wholly cognizant of the great benefits to nuclear energy technology in providing both sustainable energy and medicinal support, such as vaccine production, to developing states. Many Member 304 305 States have expressed security concerns regarding highly enriched uranium, its weaponization capacity, and its 306 presence in conflict zones. Thus, it is necessary that the development of facilities with high uranium enrichment 307 capacity is limited to already established nuclear weapons regions as they have already registered and 308 internationally recognized high uranium enrichment capacity. 309
- 44. The Conference further recognizes the need for alternative options in nuclear technologies such as thorium and
 light water reactors, for future production of nuclear energy. Developments can include research and
 development of thorium, to that of increased filtration systems to limit the nuclear by-product from uranium
 reactors. There are multiple benefits to designing nuclear facilities to meet the needs of the regions in which the
 multilateral facilities are housed; thus, by providing multiple energy source options the Conference could ensure
 these facilities are shaped to the needs of the individual Member State and/or group of states.
- 317 45. The NPT Review Conference recognizes the work done in the Conference on Disarmament via the drafts of the Fissile Material Cut-off Treaties, as previously endorsed in General Assembly resolution 66/44 (2011), as a 318 319 potential source for quantitative guidelines for enrichment activities. The Conference notes the inability of the 320 Conference on Disarmament to successfully negotiate a Fissile Material Cut-Off Treaty, and notes that such a 321 treaty is vital to ensuring nuclear material is not weaponized. The Fissile Material Cut-Off Treaty addresses the 322 need to limit and/or regulate the production of highly enriched uranium that has been of concern to this body. As the Conference is addressing exceptions to the limitations in this Treaty on highly enriched uranium, for the 323 324 purposes of vaccine production in the established regions mentioned above, it is important the relationship 325 between the NPT and the Fissile Material Cut-Off Treaty is considered.
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- 46. High enrichment uranium isotope 235 is utilized in nuclear weapons technology, as stated in Annex 3 of the
 IAEA Ongoing Monitoring and Verification Plan. However, low enrichment uranium is exclusively utilized in
 nuclear reactors and for research purposes.
- 47. The international community is aware of the importance of nuclear energy for the economic and social
 development of many Member States, and acknowledges that the domestic demand for electrical energy is
 expected to grow by more than 29% from 2011 to 2040, as stated in the report by the US Energy Information
 Administration. Nuclear energy, among other alternatives, can fill this demand.
- 48. There is not, at present, any comprehensive, safe and sustainable procedure for the disposal of nuclear waste,
 including its storage or neutralization. As such, continued research in all fields of nuclear technology is vital to
 finding an active solution to the nuclear waste question.
- 49. Nuclear technology has not advanced to the point where there is an effective solution to the nuclear waste
 question. Until then, passive measures must be undertaken to store the waste in a way as to be least detrimental
 to the wellbeing of all involved.
- 50. The conference recognizes the historical successes of multilateral collaboration, as well as the scope of
 functionality presented between enrichment facilities, reactors, and waste storage facilities, which together
 constitute the entire lifespan of fissile material for peaceful use.

348 G. Safety of Personnel and Facilities

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- 350 51. In its 2891st Competitiveness Council meeting, the Council of the EU acknowledged that the lack of engineers 351 and researchers hinders the development of nuclear facilities. The EU recognizes the importance on the teaching 352 of skills across all stages of nuclear development, including design, construction, waste management, and 353 decommission. The lack of engineers and researchers in developing countries is slowing the process for the 354 emergence of a strong nuclear industry. In order for NPT to ensure that countries have developing power and 355 access to materials, there must be a solution to the lack of a strong localized workforce, that is properly trained to ensure that current nuclear power plants remain open and to avoid the issue of outsourcing the workforce so 356 that not only are the independent economical interests of each State Party protected, nuclear power plants will 357 have the capacity for long term stability. 358
- 360 52. To date, nearly 100 mines, over 100 commercial power reactors, 46 experimental or prototype reactors, over 250 research reactors, and a number of fuel cycle facilities have been retired from operation. The abandonment 361 362 and decommissioning of nuclear power reactors places a huge financial burden on States Parties, due to the 363 degrade of uranium inventory and investment in construction of the plant. This places roadblock that halts the 364 mission of NPT to ensure every State Party has the right and the resources available to develop nuclear energy 365 and causing States Parties to halt demolition thus resulting in radioactive risks that can dangerously affect a 366 State Party's population. These risks are currently being seen in South Africa with the delayed demolition of the Koeberg nuclear plant. Such risks can be avoided and prevented through the education of operations and 367 safeguards of nuclear plants, which in turn would be pivotal in enhancing political cooperation by establishing 368 more efficient and successful uses of nuclear power. The financial burden among States Parties is significant, 369 and to solve this issue, we must eliminate damages to property due to misuse and the premature retirement of 370 371 nuclear facilities that are in good working order. 372
- 373 53. The Conference reaffirms the importance of the 1994 Convention on Nuclear Safety. This obliges the States Parties to implement safety regulations in civil nuclear energy facilities. There is a need to promote, discuss, 374 375 and educate the workforce with internationally collaborated oversight of safety training for workers involved 376 with nuclear developments. According to the National Institute for Occupation Safety and Health, there were 377 371 deaths from lung cancer in uranium miners who worked underground for a minimum of one month in 2000 378 in the United States of America alone. This number was 6 times higher than what was originally projected. 379 Other causes of death include pneumoconiosis, tuberculosis, and emphysema. Ensuring the intervention of power plant mismanagement will directly improve the safety and protection of the environment for the 380 population as well as the materials and infrastructure invest by States Parties. Implementation of safety 381 regulation oversight is of the utmost importance for the mission of the NPT. 382

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- H. Addressing the Physical Security of Nuclear Energy Facilities
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- 54. Since its establishment in 1968, the NPT has been concerned with the spread of nuclear technology as stated in
 the Treaty. Additionally, the protection of the global environment from climate change due to greenhouse gases
 is ensured by these alternative energy sources, in accordance with the Millennium Development Goals (MDGs).
- 55. According to Article 4 to the NPT, all States Parties to the Treaty are required to participate and aid the exchange of scientific and technological experience as well as equipment materials concerning the peaceful use of nuclear energy. State Parties have also brought attention to the threat of non-state actors to said exchange. Those non-state actors include but are not limited to organized political actors not directly connected to a state but effecting vital state interests, civil society, criminal groups and terrorist organizations. Furthermore the possibility of nuclear material being stolen or used by those non-state actors poses an immense threat to global security and must be addressed by enhancing the physical protection of nuclear material.
- 398 56. According to Article 4, all States Parties to the Treaty are required to participate and aid the exchange of 399 scientific and technological experience as well as equipment materials concerning the peaceful use of nuclear 400 energy. States Parties have also brought attention to the threat of non-state actors to said exchange. At this point 401 in time the international community has not been able to define non-state actors threatening international peace under a term such as "terrorism". In order to ease communication and aid in time of conflict involving non-state 402 403 actors, the Conference strongly recommends a universal definition of the term "terrorism". Furthermore the 404 possibility of nuclear material being stolen or used by those non-state actors poses an immense threat to global 405 security due to a lack of authority of the IAEA over non-state actors possessing nuclear material, and must be addressed by enhancing the physical protection of nuclear material. 406
- 57. The 2010 NPT Review Conference Outcome Document expressed an increased concern to ensure universal adherence to the Convention on Physical Protection of Nuclear Material introduced in 1980, and its amendment. The amendment builds a milestone in international efforts to ensure a certain level of nuclear security worldwide. It also aims to reduce the vulnerability of states to nuclear terrorism. Moreover the Convention intends to prevent and combat offences relating to such material and facilities all over the globe; as well as to facilitate cooperation among the States Parties to those ends.
- 58. In September 2005, the International Convention for the Suppression of Acts of Nuclear Terrorism was adopted. In accordance with the IAEA, it aims to criminalize acts of terrorism and promote police and judicial cooperation in order to prevent and punish terrorist acts. Over the past two years it has been ratified by 99
 Member States and has 115 signatories.
- 420 59. According to Security Council resolution 1540 (2004) there is a concern with the possibility of non-state actors
 421 and terrorist organizations acquiring fissile material from current and proposed nuclear facilities due to lack of
 422 international cooperation with regard to the protection and security of nuclear materials. Resolution 1540 states
 423 that the Security Council is "gravely concerned by the threat of terrorism and the risk that non-state actors such
 424 as those identified in the UN list established and maintained by the Committee established under Security
 425 Council resolution 1257 (1999) and those to whom resolution 1373 (2001) applies, may acquire, develop, traffic
 426 in or use nuclear, chemical and biological weapons and their means of delivery.
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- 60. Terrorist activities of the past years have posed great threats to international peace. Terrorist organizations have
 been trying to seize nuclear material. In July 2014, the Iraqi UN ambassador, Mohamed Ali Alhakim, informed
 the UN Secretary-General Ban Ki-moon that terrorist groups had seized nuclear material from an Iraqi nuclear
 site. Therefore, the protection of nuclear materials, especially in the Middle East, must be increased.
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- 433 I. Ensuring Secure Access to Nuclear Source Material
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 61. The NPT is committed to nuclear safety as stated in Article III; the sovereign right of every state party to use 436 nuclear energy peacefully without discrimination as stated in Article IV; and the non-proliferation of nuclear 437 material and technology for military purposes as stated in Article II.
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- 62. Nuclear power presents a unique opportunity for developing Member States because of its sustainable and
 efficient nature, which is underscored in IAEA-CN-164-1P06. Nuclear energy requires stable political and
 regulatory conditions as well as huge start-up costs. Many developing Member States, lack necessary capital for
 establishing nuclear power plants.
- 63. Through INT/4/142 under the IAEA Technical Cooperation Project Promoting Technology Development and
 Application of Future Nuclear Energy Systems in Developing Member States, Member States have expressed
 interest and willingness to provide further financial assistance and regulatory oversight to developing Member
 States for the purpose of nuclear energy development.
- 64. Some developed states have expressed their interest and willingness to assist financial support and to provide
 regulatory oversight to developing nations for the purpose of nuclear energy development. The Conference
 hopes that measures will be instituted that can enable willing developed states to provide such support.
- 65. Recalling IAEA statements GOV/INF/2007/11 and GOV/2009/30, the Conference notes with appreciation the
 efforts that have been taken to establish an International Nuclear Fuel Bank (INFB). These efforts underscore
 the need to establish a reserve of uranium that would be available to Member States that face supply disruptions
 unrelated to technical or commercial reasons. The fuel bank concept is intended to build confidence that
 sovereign states using nuclear power would be able to purchase nuclear fuel reliably and predictably.
- 66. The IAEA is the world's center for cooperation in the nuclear field and has key roles and responsibilities under
 the NPT. An INFB could provide easy access to peaceful nuclear power without increasing the risk of
 proliferation.
- 67. Security measures and export controls on nuclear materials of the INFB could be enhanced through the Nuclear
 Suppliers Group (NSG) and the Zangger Committee, along with the oversight of the IAEA and in accordance
 with the IAEA Convention on Nuclear Safety. The NSG is a body of 46 nuclear suppliers which since 1975
 coordinate their exports though the signature of a common code of conduct. The Zangger Committee is a
 subgroup of 36 nations within the NSG establishing further safeguards on non-proliferation commitments.

469 **II. Mandate**

68. The Review Conference of the Parties to the NPT is responsible for reviewing and supporting the
implementation of the treaty, be guided by its three pillars of disarmament, non-proliferation, and the peaceful
uses of nuclear technology. In order to comply with this mandate, the Review Conference shall consider any
questions or matters within the scope of the NPT, arriving at conclusions and making recommendations related
to the implantation of the Treaty.

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477 III. Conclusions and Recommendations478

479 A. Improving Cooperation through Information Sharing480

- 69. The Conference concludes that it is necessary for the usage of a transparent and accurate information exchange
 system between States Parties and Member States. This system should be designed as a multilateral platform of
 data sharing based on the pillar of TC in the advancement of the peaceful use of nuclear energy.
- 485 70. As it is important to bear in mind the obligations and responsibilities to states of all development levels and 486 geographic locations, the Conference concludes that Member States and States Parties should both utilize and 487 support the implementation of the Outernet Program in areas that have little or no internet access. The NPT 488 urges the IAEA to investigate the possibilities of a junction of the IAEA, and the Outernet, called the Archive 489 Initiative. The Archive Initiative will use the same routers and devices as the Outernet to transmit and share 490 information to areas without sufficient information transmission infrastructure to utilize the internet on a 491 constant basis. This is not only to cooperate technologically but also foster a spirit of cooperation while 492 offering a method of information access globally. This will also be the chief method of communication in this

493 context via establishment of a special link between the internet and the Outernet through the IAEA and the494 organizations responsible for the maintenance and execution of the Outernet programs.

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496 71. The Conference concludes that there is a need for an IAEA platform which could serve as a point of contact for 497 States Parties who wish to transfer information and/or expertise regarding nuclear development policy and a 498 safeguards Regime. State Parties that have advanced their nuclear programs and those State Parties who wish to 499 advance further, or establish new nuclear programs, could utilize this platform to protect sovereignty and 500 privacy of sensitive information while facilitating the transfer and sharing of technical and informational 501 cooperation. These seminars could be hosted at suitable venues such as the IAEA's Vienna International Centre, 502 and funding managed by the Division of Budget and Finance (MTBF). Seminars may discuss the parameters of 503 technological exchange, environmental and sustainable appliance of nuclear programs, counter-terrorism 504 measures, research and education programs, the protection of nuclear facilities, and other fiscal needs. 505

- This body advises that this platform, should it be created, be comprised of States Parties representatives who
 could also be tasked with the delivery of a biannual report to the IAEA Board of Governors on how such
 projects may have developed and progressed, including individual specialized sections for each seminar that
 might be activated. Such reports shall be kept by the IAEA Publications division and be delivered to the NPT
 Review Conference meeting according to article VIII of the NPT.
- 512 73. The Conference commends the adoption of safer forms of nuclear power as a legitimate and accessible choice 513 of power generation for states who seek nuclear power. We see the need to not only expand the utilization of nuclear energy, but to shift the types of nuclear power generation facilities from uranium-based fission to 514 thorium fueled reactors, and eventually fusion reactors. The infrastructure change that traditionally occurs with 515 the adoption of stable power generation can generate the economic momentum necessary for developing states, 516 or any state without nuclear power, to increase their overall financial health and stability. With these reactors, 517 518 Member States can utilize technologies such as water desalinization, hydroponics, and nuclear waste disposal simply by constructing desalinization facilities in close proximity to these power generation facilities. 519
- 521 74. Construction of facilities such as these in this fashion will aid States Parties and Member States to address 522 resource scarcity, specifically scarcity of water, agriculture, medicine, and most importantly, energy. However 523 given the prevalence of uranium-fueled reactors, and the general ease of conversion possible, the Conference recommends that all currently operating open fuel cycle power plants be examined and assessed by the state 524 525 who utilizes them as to the viability of conversion to closed fuel cycle technologies in order to prolong the use 526 of any given amount of fuel. This may also shift the global nuclear environment closer and closer to a safe and 527 minimally hazardous system of power generation. This should be addressed specifically by individuals and experts named by the IAEA Board of Governors. 528
- The Conference recommends that the IAEA investigate potential joint actions in unison with UN bodies,
 including but not limited to UNESCO for issues regarding the economic and social impacts of nuclear
 technologies and their use; UN-Women, for issues such as the lack of gender equality in STEM programs
 around the world; the World Health Organization for matters pertaining to radiological medicine and the impact
 of nuclear technologies on health; and the United Nations' Office for Disaster Risk Reduction, dealing with
 precautionary measures regarding nuclear safety in facilities and nearby areas, as well as post disaster agendas.
- 76. The World Health Organization (WHO) may be able to undertake the task of solving the major healthcare
 issues arising from the peaceful use of nuclear energy and would help heighten the standards of these
 technologies. This Joint Division may fall under the mandate of the Technical Cooperation Program of the
 IAEA, which will be in responsible for defining the working parameters of the division and its budget along
 with the Division of Budget and Finance, as there are a number of issues that have arisen in recent years that
 have links to the generation of Radiological Isotopes used in radiological medicine such as PET /CT,
 SPECT/CT, PET/MR and SPECT/MR which are limited largely by the discrepancies
- The issues of environmental effects rising from the use of nuclear energy, the refinement of radiological
 materials, and the disposal of waste are all in dire need of address. As such it is our recommendation that an
 IAEA expert related to the particular environmental issue at hand be linked with a United Nations
 Environmental Programme (UNEP) representative and be sent to areas of pressing need of examination, study,

- and aid due to IAEA or other nuclear activities. Algae blooms, the potential for a reduction of greenhouse gas
 emissions due to livestock farming, water purification and conservation, and sustainable development. The
 Conference further calls for the exchange of such information and reports with the International Cooperation on
 Radiological Protection (ICRP) and the United Nations Scientific Committee on the Effects of Atomic
 Radiation (UNSCEAR) as well as the Sustainable Development Knowledge Platform which can maintain a link
 between these actions and other UN actions such as the SDGs and the Post 2015 Agenda.
- 78. The conference supports research into the viability of, and technologies necessary for, fusion. The logistics of
 which should be addressed by Member States, through the expansion of relations between the IAEA Board of
 Governors (BoG), States Parties, Member States, and non-governmental organizations (NGOs) who have the
 resources and expertise necessary for this type of research and development.
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 561 79. It is our position that a large portion of research efforts be made towards integrating thorium reactors by
 562 addressing many of the issues in existing technology and the limitations therein, such as the materials necessary
 563 for construction of these reactors, the equipment necessary for maintaining them, and the techniques necessary
 564 for the disposal of waste. Further technical complexities that shall arise from implementations of these
 565 technologies shall be addressed as they are discovered. Experts both in the IAEA and the private sector, such as
 566 research experts and engineers, shall be nominated and invested with the responsibility of action on these issues
 567 by the BoG.

569 **B. Strengthening Regional Cooperation**

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- 80. States Parties to the NPT should engage in developing technical education programs with their respective RCA, with a special focus on improving regional cooperation to ensure the region as a whole can achieve the proper management of nuclear materials. These could be modeled after the Australian Nuclear Science and Technology Organization (ANSTO) provides training to Small Island States in the Pacific in the topic of nuclear safety and security. This will assist regional organizations in better securing their materials and avoiding disasters. States Parties to the NPT should designate specific country points-of-contact to improve information-sharing in regards to nuclear materials safety during disasters.
- 579 81. All possible efforts should be taken to establish jointly-managed research programs through each respective RCA if Member States desire to further the non-energy application of nuclear technology. In particular, 580 581 programs currently managed through the IAEA Peaceful Use Initiative (PUI) such as the Ocean Acidification 582 International Coordination Center (OAICC), may assist Member States in advancing climate change research 583 through nuclear application jointly. These initiatives can make more resources available to States Parties in their region to improve capacity building efforts and other applications of nuclear technology. States Parties are 584 encouraged to support the work of the IAEA by making more technical, financial and personnel resources 585 586 available to strengthen the efforts of RCAs in furthering joint programs. 587
- 588 82. The Conference encourages RCAs to partner with research institutions and universities in their region to assist 589 in the training and development of future scientists and current nuclear research personnel. As a guiding 590 example, the European Nuclear Education Network Association (ENEN) pursues the development of expertise 591 in nuclear training through such a partnership with several universities and regulatory bodies. Many RCAs 592 already host workshops and training events for nuclear scientists within the region. Together these efforts 593 improve capacity building efforts of each State Party to the NPT to better utilize nuclear energy peacefully and 594 increase partnerships within the region.
- 83. RCAs are encouraged to facilitate conducting regional forums to discuss best practices and information-sharing
 on the peaceful application of nuclear energy. These forums can build from and contribute to the IAEA's
 Technical Cooperation Best Practices Initiative, which currently makes available best practices in nuclear
 application for all Member States. The Conference suggests that they be hosted in varying cities in the region
 with the capacity and resources to do so appropriately, in cooperation with their respective RCA.
- 84. Recommends that Member States develop regional emergency plans in the event of a disaster that damages
 regional nuclear research facilities or plants. Member States should follow the Convention on Nuclear Safety of
 1994, which can be found in the IAEA's Safety of Nuclear Instillations. These obligations cover design,

location, and other important aspects of emergency preparedness in regards to nuclear plants and can be appliedto other nuclear installations.

607 608 85. Regional cooperation on the construction, maintenance, and emergency repair of nuclear facilities cannot be effective if regional partners are not aware of the technical details of their partners' facilities. The Conference 609 calls on all Member States pursuing the utilization of nuclear energy as well as corporations constructing plants 610 to adhere to IAEA Specific Safety Requirements SSR-2/1. A standardized and similar layout and operational 611 612 plan will promote successful nuclear cooperation between developing nations. This will help increase 613 cooperation between organizations and states as it will allow those educated in this technology to help those who seek it. Standardization helps further regional cooperation because workers and experts are trained on the 614 615 same standards and can aid surrounding nations using the same standards.

- 86. Further, Member States can work collaboratively with their respective regional organization such as the African
 Union, or Pacific Island Forum, to set guidelines on emergency preparedness, as well as deadlines to ensure
 plans are developed. The Association of South East Asian Nations (ASEAN) has considered establishing a
 Regional Radiological and Emergency Preparedness and Response Center to improve technical expertise and
 assistance in the event of radiological or nuclear emergencies. The Conference recommends States Parties to
 further consider such initiatives.
- 87. The Conference maintains the belief that the IAEA must remain the central authority on nuclear energy
 development and that any efforts to strengthen regional organizations should seek the support of the IAEA in
 these efforts. The Conference takes note of the AFCONE's subsidiary the AFRA's resolution RAF/0/031,
 Promoting Human Resources Development and Nuclear Knowledge Management. The Conference takes note
 of the OLADE 2014 Seminar on Renewable Energy. Finally, the Conference takes note of the EURATOM
 Treaty and its efforts to ensure nuclear safety and security.
- 88. Additionally, the Conference recommends that the IAEA begin fostering collaborative efforts between
 AFCONE, EURATOM, and OLADE. Such collaborative efforts may take the form of conferences, seminars, or
 shared databases that will enable each organization to learn effective strategies on nuclear development at the
 regional level.
- 89. The Conference recommends that regional organizations such as AFCONE, EURATOM, and OLADE begin
 working with the IAEA's TC programs. This cooperation could materialize by having representatives from the
 TC programmes meeting regularly with Member States of the regional organizations. The Conference believes
 that greater cooperation between the IAEA and regional nuclear organizations will allow states easier and more
 centralized access to programs dealing with safety and oversight. The Conference also believes that the IAEA
 should invite regional nuclear development organizations to participate in conferences and seminars that
 involve discussion among general Member States.
- 90. The conference suggests that in order to better facilitate access to capital for developing Member States,
 AFCONE and OLADE establish a Nuclear Buyers Group within the mandate of the each of these organizations,
 capable of appealing to nuclear corporations as one entity representing all Member States of the regional
 organizations desiring to participate in a bid. In this way, individual states will not have to individually bid for
 nuclear plants in their states, instead a stronger collective group may negotiate on their behalf. The Conference
 believes that such an entity will be able to reduce costs to African and Latin American states seeking nuclear
 energy and help further facilitate participation of a greater number of African and Latin American states.
- 652 91. The Conference believes that a cost-effective and diplomatically sensitive method of assessing the stability of nuclear power infrastructure is through the IAEA peer review program. The 2014 IAEA's Integrated Regulatory 653 Review Service Mission of Pakistan led by China's National Nuclear Safety Administration evidenced that 654 Non-Parties to the NPT are willing to submit their facilities to peer review. The World Association of Nuclear 655 Operators (WANO) is the most prominent association of international cooperation with regards to nuclear 656 energy observation. One of the main components of the WANO is peer review. The Conference suggests 657 regional organizations, such as AFCONE, OLADE, and the EURATOM group of the European Commission, 658 facilitate peer review among Member States. 659
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661 C. Promoting Education through Technical Cooperation

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- The Conference encourages multilateral information exchange facilitating the cooperative development of
 nuclear energy sources, which should be outlined by Goals 8, 10, and 12 of the Sustainable Development Goals
 (SDGs). Doing so would promote sustained, inclusive, and sustainable economic growth by reducing inequality
 between Member States to ensure sustainable consumption and production patterns. Therefore, multilateral
 information exchange facilitating the development of cooperative nuclear energy sources is essential.
- 669 93. Based on the success of the Latin American Energy Organization and the European Commission, we encourage regional cooperation for the development of safe and secure nuclear energy. Regional organizations are 670 671 recommended to endorse the comprehensive development, via technical cooperation policies such as an 672 establishment of a research institute that oversees collaboration, between Member States. Furthermore, reenforcing and updating information accessible by all Member States of the NPT is necessary to enhance the 673 674 advantages of the peaceful nuclear energy. Through increased financial contributions from Member States, projects concerning access to education and information regarding nuclear energy will further the cooperation 675 676 processes under the guidance of the IAEA. 677
- 678 94. It is highly recommended that the IAEA increase already existing funding to educational programs, similar to
 679 the Nuclear Law Institute, to offer all nations access to education and information regarding nuclear energy
 680 regardless of their development status. This can also be accomplished in cooperation with the IAEA's TC
 681 Program, which sponsors the International School of Nuclear Law that was created in 2011 and offers a two682 week intensive training session for lawyers working on national nuclear legislation via the Nuclear Law
 683 Institute.
- The Conference encourages the IAEA to provide professional education for those administering and managing
 enrichment facilities, such as the joint Masters Program in Nuclear Security. This program is housed in several
 European States with curriculum established by the IAEA. Being the only program of its kind, it is encouraged
 that regional organizations investigate the creation of similar programs. Additionally, we endorse the IAEA to
 promote international student exchange programs and academic scholarships for students in the fields of in
 nuclear security, finance, missile technology, export control, maritime transportation, customs, and air
 transportation as a means to further information sharing and regional cooperation.

692693 **D. Enhancing the Role of the IAEA**694

- 695 96. This Conference recommends that States Parties recommit to the 2010 Action Plan. We encourage States
 696 Parties to evaluate the steps they have taken since the 2010 Review Conference, and advocate for States Parties
 697 to further take concrete actions in achieving the goals that this Conference agreed to in 2010. Our delegations
 698 advocate for collaboration by all States Parties primarily in the promotion of technical cooperation of peaceful
 699 uses of nuclear energy.
- 701 97. This Conference recommends, in line with ideas expressed within A/RES/32/50 that States Parties continue
 702 voluntary international contributions to development funds. These funds are designed to augment nuclear
 703 capacity in developing nations, as well as continued participation of all States Parties in forums concerning the
 704 proliferation of nuclear technology.
- 706 98. This Conference further asks that all States Parties wishing to purse nuclear development through the IAEA TC
 707 Programme voluntarily produce a Nuclear Energy Development Report about the current status of their Nuclear
 708 Energy Production and Development, paying particular attention to sustainability, financial solvency,
 709 environmental effect, and infrastructure. These reports will be posted on the IAEA website under a database
 710 labeled "Nuclear Energy Development Report" to promote transparency in this process.
- 99. Furthermore, the Conference recommends that discussion be held during the 2020 Revisionary Conference, as
 well as in the General Assembly, about the creation of partner organization to this Conference, to meet
 concurrently to this Conference, and to analyze and summarize these reports to help inform policy decisions and
 track progress of development on a regional and country-specific basis. The Nuclear Energy Development
 Report Review Committee could then advise the future agenda for the next NPT Review Conference.

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718 100. This Conference recommends that the IAEA's TC Programme work in conjunction with regional and local
719 authorities within States Parties to ensure the accountability of TC programs and projects. If regional or local
720 authorities are not in place within the States Parties, we recommend that the IAEA TC Programme aids in
721 establishing and training such bodies to help States Parties, if they so choose, to help monitor and ensure
722 success of TC programs and projects.

- 101. This Conference advocates for all States Parties to demonstrate an enhanced usage of nuclear energy through
 the IAEA TC Programme in the area of health. We recommend that all States Parties fully adhere to the
 commitments of Article IV paragraph 2 of the NPT, specifically in the area of health, as this area remains
 unexplored in many States Parties. Moreover, the Conference calls for more investments in research and
 development through the medical departments of universities, as in grants for study abroad programs and
 internships. In addition, this Conference advocates for increasing investments within the IAEA TC Programme
 for those developing countries that exhibit a commitment to the area of health.
- 731 732 102. This Conference calls upon the IAEA Nuclear Power Technology Development Section to convene a High-Level Summit on the Exchange of Experts. The mandate of this High-Level Summit is to gather, examine, and analyze 733 734 information from Member States of the IAEA, relevant UN bodies and other interested parties regarding the 735 implementation of Country Programme Frameworks, International Cooperative Mechanism and other regional and 736 trans-regional agreements. A planning committee, consisting of the Member States to the IAEA would meet in six 737 months to set the agenda and finalize logistics. The conference suggests that The High-Level Summit on the 738 Exchange of Experts will meet annually for its first three years, after which a special session will be commissioned to 739 assess the effectiveness and periodicity of this summit. The Conference further suggests that the Summit be held in 740 Vienna since being in the vicinity of the IAEA headquarters would make transmission of information and exchange easier. Funding for the summit could be derived from the IAEA TC Programme's budget, along with voluntary 741 742 donations from interested Member States and relevant stakeholders. The High-Level Summit on the Exchange of 743 Experts should be focused on holding several workshops and Training Seminars to increase knowledge about nuclear 744 technology and foster a higher level of cooperation between countries and experts, specifically to developing States 745 Parties. The High-Level Summit on the Exchange of Experts should produce an outcome report on its final day 746 outlining their progress and recommendation to the international community. 747
- 103. In addition, the Conference calls on States Parties to cooperate and coordinate outside of the High-Level
 Summit through the sharing of information on a national level and in assisting in training of experts. We
 recognize that through the use of experts, States Parties who have nuclear technology and the adequate training
 necessary would be in a position to benefit those States Parties wishing to expand and develop their nuclear
 capabilities for peaceful purposes.
- 104. The conference recommends that experts employed by the IAEA act as advisors to those States Parties wishing
 to start, add to, develop, maintain or further expand their nuclear programs, and to ensure success and
 sustainability of such programs. The IAEA should facilitate arranging agreements between States Parties who
 wish to have an expert sent to their country and countries where these experts currently reside. This Conference
 recommend that such experts be clearly demarcated as employees of the IAEA, and not their national
 governments, and be required to continuously submit reports with the cooperation and full support of their host
 country to the IAEA detailing progress, goals, and sustainability of programs or projects being administered.
- 761 762 105. The Conference recognizes that despite a wealth of information on nuclear disarmament, research on the 763 relationship between nuclear energy and agriculture, health care, food preservation, and IAEA safeguards is 764 underdeveloped. The IAEA is concerned with these topics, but lacks of forum to properly address them. Therefore we recommend the inclusion of all topics related to the implementation of nuclear technology to be 765 766 incorporated into one forum; the Nuclear Technological Cooperation Forum (NTCF). The NTCF will aim to enhance transparency and achieve a universal security among all Member States. This would provide improved 767 768 multilateral technical discussion by enhancing the ease of access to knowledge for Member States. These 769 incentives would appeal to NPT parties to adhere to the IAEA-guidelines and Additional Protocols. 770
- 106. The Conference therefore recommends to the IAEA to establish the NTCF. The NTCF will be complimentary
 to the existing IAEA TC program but will extend the items of discussion to include the following;

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774	a.	Focusing on nuclear medicine, agriculture, food preservation, strengthening regulations, providing	
775		education about safety protocols and economic safety especially with regards to natural disasters and	
776		also calls for the creation of a nuclear developments board which will prevent covert, illicit dealing of	
777		nuclear fissile material;	
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779	b.		
780		while encouraging governments to closely collaborate on a regional level by forming regional	
781		technical and nuclear safety cooperation groups;	
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783	с.	The forum could also provide a platform to resolve all cases of non-compliance of the safeguard	
784		obligations provided in the IAEA statute in a peaceful manner;	
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786	d.	In case a state has been unable to maintain or conform with the aforementioned safeguards due to a	
787		lack of financial or logistical means, the NTCF could provide assistance;	
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789	e.	Inviting every State while guaranteeing the possibility of every interested State being able to	
790		participate, which will provide better organization and coordination to the research discussions in the	
791		specific topics;	
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793	f.	It is advised that this forum will be working together with and report to the NPT Review and	
794		Preparatory Conferences as well as the IAEA Director General and IAEA Secretariat;	
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796	g.	Furthermore inviting Non-Government Organization (NGOs) as well as the World Health	
797	-	Organization (WHO) and regional organizations as participants;	
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799	107.The Co	nference recommends to the IAEA to extend their funds to the NTCF through the Technical Cooperation	
800		ΓCF) of the IAEA and the agency's Peaceful Uses Initiative (PUI).	
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802	a.	The PUI raises budgetary contributions from the European commission and the PUI Member States,	
803		and supports the agency's activities to promote the peaceful uses of nuclear technology. The budget of	
804		the TCF was increased to 67.4 million Euros in 2013.	
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806	b.	In the recent survey of IAEA fellows, a suggestion was made to establish an international discussion	
807		forum. This shows there is a necessity in the IAEA community for the NTCF proposed in this paper.	
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809	с.	Additionally, the Conference suggests that Member States increase annual voluntary contributions to	
810		the TCF that will benefit the NTCF. An annual target for the contributions to the NTCF could be set	
811		one year in advance in consultation with the NPT Review and Preparatory Conferences.	
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813	d.	The Conference would also advise that the NTCF will receive a contribution to their start capital by the	
814		UN Fund for International Partnerships (UNFIP).	
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816	e.	The Conference suggests that the NTCF would convene twice a year to discuss and evaluate the work	
817		that has been done throughout the year by the Member States in conjunction with the Forum and the	
818		IAEA.	
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820	108.The NT	CF could build a secure extranet interactive information sharing system which will allow for the	
821	discussions between the different bodies of the forum and the Member States to share information on a		
822	continual basis throughout the year. This system facilitates faster transmission of important data between the		
823	States, the experts and all associated personnel of the IAEA. The Conference also recommends the NTCF be		
824	used as a platform and a safe-source for gathering information about the safety mechanisms currently in place in		
825	the nuclear power plants. To accomplish this, the NTCF will work with Member States willing to share the data		
826	from the self-powered sensors monitoring the nuclear reactors by linking it up to an online extranet system,		
827	which will be administered and controlled by the unit of the scientific experts assembled by the NTCF.		
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- 109. The Conference suggests that any Member State receiving assistance from the IAEA to establish nuclear
 facilities and programs, or to expand those already existing, would be required, through the use of the NTCF, to
 report on those facilities and programs, in full, to the international community. Currently, the IAEA monitoring
 and evaluation guidelines encourage the dissemination and sharing of information only among the stakeholders
 of a program. In doing so, a formal statement of intent by these Member States will eliminate any later
 confusion on the uses of nuclear facilities and programs.
- 110. The Conference recommends all Member States in the bi-yearly NTCF adhere to the IAEA's safety
 requirements. In light of recent disasters, the forum necessitates the cooperative and cohesive behavior of all
 States to protect their citizens. Upholding the minimum safety guidelines set by the IAEA will be required by
 all Member States to maintain continued participation at the forum.

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- 111. The Conference suggests the NTCF aim to provide for a straightforward system to assess and evaluate the
 safeguards already in place in the nuclear facilities owned by States. The NTCF, with collaboration of the
 Member States, will assemble a unit of nuclear experts to work with Member States gauging the current status
 of the nuclear reactors and recommending upgrades to the inoperative or malfunction parts.
- 112. The Conference also recommends the NTCF be used as a safe platform for all Member States to share
 information regarding safety measures, mechanisms, technologies, and resources promoting development in
 healthcare, agriculture, and trade.
- 113. The Conference recommends the import and export of fissile materials, such as uranium, should be monitored
 by the IAEA and the sale of fissile material to non-state actors should be prohibited. Furthermore, any exchange
 of nuclear materials or technologies must reported to all state parties, as transparency is crucial in enhancing
 global technical cooperation as developed in the agreement between Member States and the IAEA for the
 application of safeguards in connections with the treaty of the NPT. To ensure that the safeguard agreements are
 not violated, the IAEA needs to be empowered both financially and physically.
- 114. The Conference recommends to all nuclear energy-advanced States to help providing developing States with
 information, resources, and access to education regarding medicinal uses of nuclear energy. There are countries
 around the world that have significant amounts of nuclear resources, yet due to financial and educational
 restrictions; they are unable to utilize it properly. The Conference recommends this NTCF, with the cooperation
 of the World Health Organization, would ensure that these countries, and others, receive the necessary
 information, resources and education so they could expand research and experimentation on the medicinal uses
 of nuclear energy.
- 115. The Conference furthermore concludes there is a necessity for the UN, IGOs and NGOs to actively to utilize the
 NTCF to increase the effectiveness and efficiency of the IAEA and facilitate cooperation regarding nuclear
 energy in the following areas:
 - a. Medicine: the Programme of Action on Cancer Therapy (PACT) can foster cooperation among other cancer-related organizations to build and fund the creation of nuclear reactors and supply radioisotopes to developing nations.
 - b. Agriculture: in constructive collaboration with medicinal institutions, agricultural safety facilities, and the assistance from the IAEA, the NTCF invites The World Food Programme (WFP) to engage in cooperative measures with the World Health Organization to educate nations on the benefits of food irradiation for disease prevention, selective breeding of crops for higher yields, disease resistance, fertility, and to facilitate access to these foods to these States.
- c. Building Nuclear Infrastructure: by working closely with the United Nations Conference on Trade and
 Development (UNCTAD), the NTC-forum aims to facilitate access to research and development to
 developing States and establish fair trade standards on the import and export of nuclear materials.

- 883d.Promoting Education on Safety Measures: acting within the United Nations Institute for Training and884Research (UNITAR) offers various learning and educational institutes to engage countries in achieving885expansive social and economic development.
- 116. The Conference suggests that the NTCF will work towards resolving the issue of improving food sustainability
 mentioned above in Hence, working closely with IAEA will help to make significant steps to combat poverty,
 hunger, diseases, illiteracy and environmental degradation. The Conference is pleased that IAEA is working
 hard to promote socio-economic impact, which has continued to contribute directly in a cost effective manner to
 the achievement of the major sustainable development priorities of each country.
- 117. The Conference suggests the NTCF would assist in implementing processes for increasing food production in
 order to improve the economy of the developing regions and by using nuclear energy adequate management
 practices, breeding programs for indigenous and other animals as well as pest control, diagnostic tools and
 measure for the control and prevention of animal and zoonotic diseases. These technologies will help greatly in
 regions like South American to greatly improve on food production.

899 E. Implementation of IAEA Safeguards

- 900 901 118. The Conference notes with approval the precedent set by the Joint Convention on the Safety of Spent Fuel Rod 902 Management and on the Safety of Radioactive Waste Management (1997) regarding the need for an 903 international standard regarding the safe and practical disposal of nuclear waste. Historically, an inevitable side 904 effect of the utilization of nuclear energy is the production of radioactive nuclear waste products, such as spent fuel rods, heavy water effluent, and airborne radioactive particles. These waste products are almost always 905 extremely harmful to both human health and to the health of the greater natural environment, as was detailed in 906 the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste 907 908 Management. 909
- 119. The Conference declares that the safe disposal of nuclear waste is not merely a national issue, but an
 international one, which has the capacity to negatively affect humanity for generations. The significant number
 of nuclear accidents and incidents that have occurred since the inception of nuclear power, including the reactor
 meltdowns at Chernobyl and Fukushima, as well as the near-meltdown at Three-Mile Island have raised the
 specter of the release of vast amounts of nuclear waste into the greater environment, leading to catastrophic
 economic, medical, and environmental damage on a global scale.
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- 917 120. The Conference deplores the long history of nuclear pollution and waste resulting from the developing, manufacturing, testing, and active use of nuclear weapons such as explosive warheads and depleted-uranium 918 919 ammunition, actions that are already contrary to both the spirit and letter of the NPT. An additional significant 920 source of nuclear waste has been the mining of nuclear materials such as uranium, due to the fact that these 921 mining efforts were often undertaken with inadequate or outright nonexistent safety measures in place in order 922 to prevent contamination and pollution. In cases such as these, poor nuclear policy can be just as dangerous as 923 high-profile nuclear accidents, as can be seen in the long-term environmental damage present in numerous 924 Central Asian countries as a result of such practices. 925
- 121. The Conference acknowledges that effective techniques, such as using sealed concrete-capped pits to contain nuclear waste, have been developed to facilitate long-term containment and quarantine of nuclear pollutants. However, such measures are frequently difficult to implement, are massively expensive for countries to undertake, and are not sure solutions to the problem of nuclear waste disposal. In numerous cases, attempts to contain nuclear waste have failed to do so, resulting in a radiological catastrophes that are as potentially dangerous as a reactor failure, as can be seen in the case of the failed attempts to contain nuclear waste present at the Hanford Nuclear Reservation and the Rocky Flats Plant.
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122. The Conference also emphasizes, however, that there is not yet a way to entirely neutralize the radioactive
properties of nuclear waste. These wastes have the capacity to harm both people and the environment for
thousands of years, as detailed in the IAEA Safety Standards, Volume SSG-5. And yet despite this, countries
afflicted with nuclear waste disposal issues are frequently left to manage these issues themselves, greatly
reducing the potential aid rendered by the international community to resolve waste disposal issues. The

- Conference thereby affirms the need for a stronger set of international standards regarding the disposal of nuclear waste in order to resolve nuclear pollution crises and issues.
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942 123. The Conference affirms the need for a stronger international nuclear safeguard regime in order to facilitate the safe and clean disposal of nuclear waste and the resolving of related nuclear pollution issues, as a result of the 943 944 above conclusions. In order to fulfill this aim, further voluntary funding ought to be solicited from States Parties 945 to go to the IAEA's TCF for the purpose of developing nuclear waste disposal techniques, with the specific aim 946 of developing a way to permanently neutralize the harmful properties of nuclear waste. The Conference further 947 recommends that if Member States find directly contributing funding to the TCF is difficult or prohibitive, that 948 those Member States contribute in-kind resources, such as used nuclear equipment, nuclear expertise, best 949 practices, fissile material, or other relevant commodities. In addition, States Parties are encouraged to create 950 nuclear oversight bodies on the national level, in order to achieve same aims as detailed above. 951

- 124. The Conference further recommends that a major target of this new TCF funding should be research into new techniques to neutralize the radioactive properties of nuclear waste. New containment measures and research in cleaning and refining existing nuclear utilization procedures should be prioritized, rather than creating entirely new ones, which would be impractical and expensive.
- 957 125. The Conference encourages all Member States afflicted by nuclear waste issues to meet at conferences among 958 themselves at regular intervals, on a regional and global basis, in order to encourage mutual cooperation and 959 assistance in resolving these pollution issues. States Parties are encouraged to collaborate in providing mutual cleanup assistance, establishing protocols for waste removal, and creating plans laying out how to resolve 960 nuclear crises that could result in the release of nuclear pollutants when such a crisis should arise. In addition, 961 all States Parties are encouraged to collaborate with the private sector on elements that relate to the field of 962 963 nuclear cleanup and safety, in order to coordinate their abilities and specialties regarding this subject with 964 national and international goals regarding the disposal of nuclear waste.
- 126. The Conference recognizes that in order to effectively make use of uranium, likely the most common nuclear catalyst, as a source of nuclear power, it must be enriched via the nuclear fuel cycle. However, a deeply concerning factor is that if uranium is enriched beyond approximately twenty percent, it can become suitable for use as a necessary component of nuclear weaponry. Therefore, it is integral for the IAEA to play an important role in preventing the enrichment and subsequent weaponization of uranium in order to ensure that the "nuclear disarmament" pillar of the NPT is upheld.
- 127. The Conference also recognizes that many developing Member States that are interested in developing nuclear
 power are often priced out of more advanced and cleaner nuclear reactors. As a result, these Member States are
 forced to make do with older, dirtier reactors and infrastructures that produce more waste, are at greater risk for
 meltdown, and often contain the capability to refine uranium to a dangerous and potentially weaponizable
 extent. To combat this worrying pattern, States Parties are encouraged to increase financial and technical
 assistance through the TCF for the specific goal of aiding new nuclear states in procuring safe, clean, and
 modern nuclear equipment in order to avoid the prospect of nuclear weaponization.
- 128. The Conference further recognizes that given recent advances in nuclear technology, enriching uranium to the point of weaponization is not necessary for any peaceful nuclear energy purpose, and that economic and development difficulties are the only legitimate obstacles in the path of all states members' pursuit of lowered levels of uranium enrichment.
- 129. The Conference notes with approval that in recent years, technological innovations have provided States Parties
 with ways to enrich and utilize nuclear material for peaceful purposes without risking potential weaponization.
 These measures include, for example, research reactors that incorporate cyclotrons, which act to enrich uranium
 for medical research. However, these devices lack the capacity to refine uranium to the point where it would be
 produced in a quantity suitable for use as weaponry. Another example would be thorium reactors, which can be
 used to replace the older, uranium-dependent nuclear energy plants and utilizes a type of nuclear material that is
 not capable of being weaponized.
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- 130. The Conference calls upon all States Parties to utilize the technology and materials transfer programs mandated
 in the NPT and their related operational bodies contained within the IAEA to expand the use of low or non enriched uranium for peaceful nuclear energy, and to limit and eventually eliminate the usage of Highly Enriched Uranium (HEU) from all nuclear programs in order to forestall the creation and development of
 nuclear weapons.
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- 1000 131. The Conference believes the ideal maximum ceiling of allowable enrichment should be below 8% enrichment 1001 for uranium and 7% for plutonium nuclear fuel sources, and that the intermediate goal should be set at a ceiling 1002 of 20%, as uranium enriched beyond twenty percent qualifies as being highly-enriched. Special considerations and assistance are to be provided by the IAEA and voluntary States Parties' contributions to ameliorate cost and 1003 1004 technology hurdles faced by developing States Parties in reducing their nuclear fuel sources to the 1005 aforementioned goals. The Conference seeks to remind states members that in the other fields of peaceful nuclear technology excluding nuclear energy production, the use of comparatively tiny amounts of HEU is 1006 1007 currently common and necessary in the pursuit of nuclear medicine and its associated research, and that this 1008 body does not seek to curtail this right of states members to utilize HEU in minute quantities for other-than-1009 energy purposes.
- 1011 132. The Conference seeks to support, in the pursuit of a lowered usage of HEU, the IAEA's practices of offering
 access to states members to the IAEA's enriched uranium resources, and the IAEA's offer to developing nations
 of support for research and development initiatives and/or the chance to export radioisotopes.
- 1015 133. The Conference calls upon all States Parties to utilize the technology and materials transfer programs mandated
 1016 in the NPT and their related operational bodies contained within the IAEA to expand the use of low or non 1017 enriched uranium, and to limit and eventually eliminate the usage of HEU from all nuclear energy programs.
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- 1019 134. The Conference urges that all States Parties uphold the IAEA's uranium verification standards as elaborated in
 1020 IAEA Safety Manual SSG-5, and draws special attention to the Nuclear Material Laboratory for Safeguards
 1021 Analysis as a vital facility in the effort to verify that all States Parties abide by this directive.
- 1023 135. The Conference emphasizes the need for regional and international multilateral agreements, working in
 1024 conjunction with the IAEA, to govern transfers and sales of nuclear material and associated components
 1025 between States Parties, in order to ensure that the end use of the nuclear material is legitimately required for
 1026 energy purposes, medical purposes, research purposes, or other, similarly peaceful aims.
- 136. The Conference believes that the transfer of nuclear materials, components, and technology should continue to
 be conducted with the participation of the NSG and the Zangger Committee, and be subject to the latter entity's
 Trigger List, which serves to identify the type and quantity of nuclear items being transferred, and help to
 implement safeguards pertaining to the risk inherent in proliferating the involved materials.
- 1033 137. The Conference desires to act in accordance with the goals of the IAEA's Additional Protocol which aims to
 promote coordination between nuclear supplier states, and wishes to state that these multilateral agreements
 should consider including measures for the suspension of nuclear trade with countries that violate safeguard
 obligations.
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 1038 138. The Conference encourages States Parties to draft agreements amongst themselves, which will apply to the sale and transfer of nuclear materials while remaining in compliance with all relevant IAEA regulations on the subject, and will seek to establish precautions for their transport. These agreements should specify which government or private domestic agency/entity are authorized to sell and receive this material, and should work towards establishing a guarantee that the sale and use of this nuclear material is only for peaceful purposes.
- 1044 139. The Conference requests that, as a prerequisite for the transfer of fissile materials or nuclear components, an
 1045 existing domestic receiving and regulatory body located within the receiving States Parties to should be named
 1046 in order to coordinate with and assist the IAEA transfer.
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- 1048 F. Collaborative Enhancement of Nuclear Energy Facilities

- 1049 140. The Conference requests that IAEA evaluate the option of developing multilateral fuel facilities organized via a networking system similar to that in design of CASA-1000, but for the purposes of developing all forms of 1050 1051 peaceful nuclear facilities between interested Member States. It is the Conference's recommendation that the 1052 multilateral facilities should be funded by multiple Member States with the assistance of the IAEA in the 1053 development process; and will be overseen by the IAEA BoGs, authorized by the IAEA Director General. As 1054 the IAEA aids states via the TC Programme, their services can assist State Parties in the development of the multilateral facilities. The Conference suggests that these facilities develop various forms of nuclear fuel for 1055 1056 atomic energy reactors, most notably uranium. By engaging multiple states' collaboration in these facilities, the 1057 increased technical cooperation will help to promote transparency in the system through increased information exchange. The Conference suggests IAEA coordinate the pairing up of any States Parties to the NPT who are 1058 interested in assisting and participating in the establishment of peaceful nuclear multilateral fuel facilities. 1059 1060
- 1061141. The Conference strongly suggests the IAEA create a contractual agreement with the States Parties participating1062in the multilateral facilities outlining the financial contributions each state must contribute to the facility with1063the advice of the Economic and Social Council as there are societal concerns as to the long term effects of1064nuclear facilities. Moreover, the contract will detail the geographic location of the facility, the disbursements of1065its energies and vaccines, and management of the facility.
- 142. The Conference recommends that multilateral facilities be created on a regional basis, with consideration of the nuclear energy needs of each region. Moreover, the Conference suggests that multilateral fuel facilities housed within Nuclear Weapons states be granted the permission to use and maintain high uranium enrichment reactors for the sole purpose of vaccine production as they have already developed the capacity.
- 143. As the Conference wishes to ensure the risk of proliferation is nearly eliminated, it is imperative that the
 Conference strongly caution and recommend that the states who are granted the resources necessary to develop
 highly enriched uranium are only States Parties to the NPT. This will prevent these materials from contributing
 to the development and proliferation of nuclear weapons. As these reactors allow for the efficient and expedient
 production of vaccines that are in high demand in several developing States and could increase the overall
 health of many States Parties to the NPT they should be restricted but not banned.
- 144. While the conference recognizes the concerns of Member States to the possible weaponization of high
 enrichment uranium, the threat of these reactors becoming proliferated is nearly eliminated due to the
 international community's oversight via the IAEA coordination of the multilateral facilities. The transparency
 of the multilateral facilities will prevent the development of nuclear weapons, but will still allow the
 development of vaccines.
- 1085 145. The IAEA should initiate a safeguards initiative for each multilateral facility by following the same protocol
 1086 they already conduct for individual Member States establishing a facility. The Conference recommends these
 1087 safeguard agreements to be as equally binding as the Safeguard Initiatives all States must enact with the IAEA
 1088 for individual nuclear facilities.
- 146.States Parties of the NPT that already possess fully functioning and stabilized fuel cycle facilities would be
 encouraged to transform them into multilateral fuel facilities in order to reduce costs and assist other Member
 States in developing expertise needed to sustain their facilities as well as provide energy and vaccination
 support to other Member States.
- 1095 147. The Conference advocates for increased attention to research areas in the development of thorium and other 1096 fusion sources with more environmentally friendly effects. The Conference supports and encourages states to 1097 promote the production of low uranium enrichment reactors where it is economically and socially feasible, on a 1098 voluntary basis. The Conference supports the production of low uranium enrichment reactors, thorium reactors, 1099 light water reactors, and for the purposes of vaccination, high uranium enrichment reactors in already existing high uranium enrichment areas. Creation of these various reactors should suit the needs of the States Parties 1100 participating in the multilateral fuel facilities. Thus, the Conference suggests facilities are designed for 1101 increased safety and efficiency with the geographic location and socio-economic standing of the States Parties 1102 to the facilities taken into consideration. 1103
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- 148. The multilateral fuel facilities service will only be available to States Parties to the NPT. If any State Parties
 participating in the multilateral facilities withdrawals from the NPT, they automatically withdraw from the
 benefits of and stakes in the facilities. The implementation and production of multilateral fuel facilities will
 provide an incentive for states to remain within the NPT and will rectify the transparency and security concerns
 of Member States.
- 1111 149. The Conference encourages developed states with nuclear capacity to support investment in multilateral fuel
 1112 facilities as such actions would satisfy Article IV of the NPT. As the IAEA TC Programme relies heavily upon
 1113 developed States Parties donations, the Conference urges developed states to fulfill their obligations in this
 1114 regard.

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- 1116 150. The Conference asserts that light water reactors can meet the demand for sustainable energy sources due to the
 1117 ease of their construction and the minimal resources required for their construction, including only water for
 1118 coolant and the neutron moderator for the reactor.
- 1120 151. According the US Nuclear Regulatory Commission, the Light Water Reactors system is a safe means of energy production with the radiation produced by nuclear power remaining entirely within the confines of the Treaty.
 1122 In the event of reactors damage, release of the light water moderator will act to stop the nuclear reaction and shut the reactor down, which assures that no nuclear damage would occur in cases of emergency.
- 1125 152. Due to the harmful impact of nuclear waste on human life and the environment, the question of nuclear waste disposal is of great concern to the Conference. The Conference strongly believes that the most effective 1126 solution to the nuclear waste question is the continuance of research in all aspects of nuclear technology. The 1127 Conference supports the research and creation of new reactor designs that function without producing any waste 1128 product in their electricity producing process. The Conference supports the continued research of shelved 1129 1130 nuclear designs with specific attention to light water reactors. Furthermore, the Conference recommends continued research of thorium as an alternative to uranium. Thorium reactors have an effective design that 1131 1132 depends on fissile material that cannot be weaponized.
- 1133 1134 153. Until nuclear technology has advanced to the point where a viable solution to the nuclear waste question is 1135 found, the following passive storage measures are recommended as the most sustainable, economically viable, and safest in conjunction continued IAEA involvement. In-ground sequestration (alternatively deep geological 1136 1137 repository), spent-fuel pool storage (alternatively controlled decay) and dry cask storage have been approved by 1138 the IAEA as effective measures to store nuclear waste. Each of these methods serve to isolate people and the 1139 environment as much as possible from the detrimental effects of nuclear waste, and to safely store nuclear waste in a manner that is both economical and sustainable. The Conference recognizes that nuclear waste can be 1140 extremely harmful and therefore promotes the use of in-ground sequestration, spent-fuel storage, and dry cask 1141 1142 storage, as a method of protecting human beings from radiation. However, due to the temporary nature of 1143 sequestration, the Conference recommends that alternatives solutions to the nuclear waste dilemma be sought 1144 out. The Conference suggests that continued research be pursued in this field, into options of active nuclear 1145 waste disposal. 1146
- 1147 154. The Conference recommends the use of Office of the Disarmament Affairs (ODA) loans as a viable option for member nations with low Gross National Income (GNI). In order to maintain the multilateral nature of this 1148 project, and to facilitate greater access to these loans, the Conference recommends the repayment period be 1149 1150 based on the GNI of each nation, among other primary concerns such as risk and length of loan, and consist of various options with various levels of a grace period. ODA loans support developing countries by providing 1151 1152 low-interest, long-term and concessional funds to finance their development efforts. Ownership is crucial for 1153 economic growth and poverty reduction in developing countries. ODA loans do require repayment; however, they promote the efficient use of the borrowed funds and appropriate supervision of the project they finance. 1154 The Conference recommends cooperating with NGOs to serve as intermediaries between the developing and 1155 1156 developed nations. NGOs may take the form of brokers and financiers. NGOs could use their tools to verify the 1157 GNI of each state and produce assessments on appropriate interest rate and financing options. 1158
- 1159 155. The Conference observes that under the ODA infrastructure is the Project-Type and Non-Project Loans and
 recommends the use of Project-Type loans to focus on financing projects such as roads, power plants,

1161 irrigations, water supply and sewage facilities. The loans are used for the procurement of facilities, equipment 1162 and services, or for conducting civil and other related works. Thus, the use of ODA Project-Type Loans for the 1163 use of facilitating the development of nuclear power plants to promote the use of peaceful nuclear energy 1164 development. However, while ODA Loans consist of Project-Type Loans and Non-Project Type Loans, it fails 1165 to adequately deal with the acquisition of nuclear fuel without encroaching on Member States' independence 1166 and sovereignty. Thus, by ensuring the independence of the International fuel bank system through the creation 1167 of an ombudsman, Member States will not feel their independence and sovereignty have been encroached upon.

1169 G. Safety of Personnel and Facilities1170

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1171 156. This Conference recommends international cooperation when suggesting the oversight of safety regulations in 1172 nuclear plants for the proper training of the workforce, in order to ensure the long-term sustainability of nuclear 1173 power plants. It is extremely important that the development of nuclear technologies is accompanied by the 1174 implementation of safety regulations. Safety is in the interest of the community of sovereign nations, all of 1175 whom share the same concerns for the well being of its citizens. This committee is mindful of the sovereign 1176 right of each state to make its own assessment to undertake nuclear power plant construction, under IAEA 1177 safeguards. This includes the right to develop the complete nuclear fuel cycle. In the consideration of national 1178 sovereignty and States Parties' right to develop nuclear energy for peaceful purposes, this Conference 1179 recommends implementing oversight to ensure that safety regulations are streamlined. This Conference 1180 recommends that oversight be comprised of regional experts in nuclear physics, which will not only ensure the 1181 safety of States Parties' population, but also the long term sustainability of the power plant itself due to the 1182 reduction of accidents cause specifically by a lacking of workers and training.

1184 157. This Conference acknowledges the importance of the 1994 Convention on Nuclear Safety. This creates
1185 obligations for States Parties to implement safety regulations at all civil nuclear energy facilities. These
1186 regulations govern many facets of security including the development and placement of mines, creating nuclear
1187 reactors, and the transfer of power. It is extremely important to develop these types of programs in the
1188 appropriate locations in order to ensure the environmental and public safety; in the wake of serious nuclear
1189 disasters, we must endeavor to strengthen safeguards while respecting national sovereignty.

1191 158. This Conference recommends expert driven, streamlined design construction, safety regulation and emergency
preparedness of international nuclear power plant facilities. These regulations will directly facilitate states'
development of nuclear energy while reducing costs, ensuring that the NPT remains with great momentum to
develop new and improved technological applications. It is imperative that current operations remain
sustainable long-term, otherwise this will cause the current global need to improve technology within the plants
to become stagnant. This convention is greatly concerned about solving these issues so that States Parties may
continue with future developmental plans, while demonstrating attention to maintaining current plants.

1199 159. This Conference recommends the IAEA to create standards on the safety of power plants for the workforce.
1200 Two nuclear power plants in Taiwan are facing closure due to not being able to safely operate storage facilities of these nuclear power plants. This exemplifies the need to promote, educate, and discuss the importance of safety within the nuclear energy workforce. The Conference recommends that guidelines be more efficiently implemented, utilizing the groundwork created by the International Labor Organization (ILO). Once workers are informed about their safety, they will be able to promote the IAEA's Specific Safety Guidelines, to ensure future development in nuclear power.

1207 160. This Conference recommends that States Parties collaborate with programs like that of IAEA's DAT program 1208 and other programs such as AREVA, where companies create model power plants in order to better train their 1209 employees. If employees are inadequately trained on how to run and operate nuclear power plants, these plants will shut down. An example of this can be referenced in the 1999 accident that occurred at a Japanese nuclear 1210 power plant; three workers who were conducting research on experimental nuclear fuel suffered extreme 1211 1212 consequences due to their lack of expertise and education on this matter. This accident was caused by insufficient access to crucial information that is necessary in order for the nuclear energy workforce to 1213 1214 efficiently perform their work duties.

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1216 161.As discussed in the 2010 Review Conference of the Parties to the NPT Final Document, it is important to have 1217 safety records from all participating Member States. This Conference recommends the creation of an annual 1218 health surveillance of all mining sites, opened and closed. This Conference recommends detailed reports 1219 including the baseline testing results mentioned above, the health conditions of the workers, and the health 1220 conditions of the local populations. The Conference recommends surveillance of these sites so that continued 1221 security in these locations can persist. As detailed in the IAEA's report on Monitoring and Surveillance of 1222 Residues from the Mining and Milling of Uranium and Thorium there must be routine inspections that have 1223 detailed reports on the erosion of water and wind, waste management facilities, radon and dust emissions. These 1224 detailed reports will help educate future populations on how peaceful nuclear energy can be developed, harnessed and used with the least amount of destruction possible to the people and to the environment. 1225 1226

7 H. Addressing the Physical Security of Nuclear Energy Facilities

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- 1229 162. The States Parties are deeply concerned by the lack of a stable cooperation between UN institutions, such as the
 1230 IAEA, and states suffering from instability in their region in the combat against nuclear terrorism, considering
 1231 such as a direct threat to the universality of the NPT.
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- 163. The States Parties to the Treaty recognize the authority provided to the IAEA safeguards over nuclear facilities
 in Member States that possess such infrastructure. It is imperative that these nuclear facilities be used solely for
 the peaceful advancement of humankind; thereby, providing the IAEA with greater capability to assess their
 purpose can be an effective method by which to avoid the misuse of nuclear technology.
- 1238 164.In light of the threat of nuclear terrorism and the heightened security measures needed to combat this threat, it is advised that all States Parties to the NPT ratify both the Convention on the Physical Protection of Nuclear 1239 1240 Material as well as the International Convention for the Suppression of Acts of Nuclear Terrorism and 1241 implement their provisions to the fullest extent possible. These two documents endorse stricter export, import, and transit controls, encourage multilateral co-operation in the event of nuclear theft, and set a precedent for the 1242 1243 criminalization of non-state actors who seek to obtain nuclear material and equipment for hostile intentions. All 1244 of these stipulations are fundamental to the development of an adequate multilateral basis upon which to combat 1245 the threat Non-State actors represent to nuclear disarmament.
- 1247 165. The obligation of States Parties to the NPT to contribute to the TCF of the IAEA is not to be neglected. Further,
 1248 it is suggested that additional funds, such as those provided for in the Nuclear Security Fund of the IAEA, be
 1249 provided for the purpose of establishing training programmes for civilian security personnel tasked with the
 1250 protection of nuclear facilities in states that require such security presence against Non-State actors.
- 1252 166.Considering the IAEA is the institution responsible for verifying and assuring the use, in accordance with the
 1253 statute of IAEA and the IAEA safeguards system, we recommend the further implementation of the IAEA's
 1254 Nuclear Safety Action Plan. In addition it is encouraged that enhanced cooperation with the IAEA be pursued
 1255 via ratification of IAEA Safeguard Additional Protocols. This would allow for a more thorough monitoring
 1256 process and accurate accounting of nuclear material and equipment, thereby helping to mitigate the risk of theft.
- 1258 167.We recognize that regional cooperative arrangements such as AFRA, and other arrangements strengthening and
 1259 enlarging the contribution of developing countries, for the promotion of peaceful use of nuclear energy can be
 1260 an effective means of providing assistance and facilitating technological transfer, and technical cooperation of
 1261 the IAEA in developing countries.
- 1263 168. Considering the importance of tackling terrorism within the framework of nuclear programs, the States Parties 1264 advise a common agreement amongst the international community in order to prevent non-state actors from 1265 acquiring nuclear precursors. The States Parties affirms that a definition of "terrorism" is of high importance for 1266 the States Party to accurately tackle this matter. Further, the States Parties extend a recommendation to the UN Security Council Counter-Terrorism Committee, the GA Sixth Committee and the Commission on International 1267 Law – wishing for their joint work – to establish a common ground on the official definition of the term 1268 "terrorism" that would be accepted by state actors and non-state actors alike. Said definition shall include the 1269 parameters considering and exact definition of terrorism and types of terrorism existing, such as, nuclear 1270 terrorism, chemical terrorism, biological terrorism, among others. 1271

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1273 I. Ensuring Secure Access to Nuclear Source Material

1274 1275 169. The Conference recommends that the IAEA take up the creation of an International Nuclear Fuel Bank as 1276 encouraged by IAEA statement GOV/2010/67. In this document, the BoGs mandated the Director General "to 1277 accept voluntary contributions of funds, services and material offered to the Agency for the establishment and 1278 operation of an IAEA bank" and authorized the Director General to operate the IAEA LEU bank. The creation 1279 of an INFB could enable sovereign governments to buy guaranteed capacities of low-enriched uranium (LEU) 1280 to run their exclusively peaceful national nuclear programs. The INFB has the potential to provide LEU stocks 1281 to respective governments for lower than prevailing market prices determined by full consensus among the 1282 Board of Governor of IAEA and NPT review conference.

- 1284 170. The Conference recommends States Parties planning to conduct a national nuclear program for peaceful
 purposes to join in the creation of the INFB in order to further regional and international cooperation. Such
 measures could save immense costs by abstaining from the construction of separate uranium enrichment
 facilities and by equally ensuring energy supply from the bank
- 1289 171. The Conference suggests that the IAEA establish a linkage between the nuclear development status of Member
 1290 States and create a safeguards process for fuel procurement. These safeguards would ensure that all procured
 1291 materials would be in line with Articles I, II, and III of the NPT.
 1292
- 1293 172. The Conference wishes to see the INFB grown into a self-sustaining institution through any possible measures.
 1294 The Conference recommends the Member States to financially contribute to the reserves of the LEU. With these
 1295 financial resources the INFB could have LEU energy for all the nations who seek safe energy source and
 1296 development of the nuclear energy.
- 173. The Conference recognizes the Development Assistance Committee (DAC) as mandated by the Organization
 for Economic Cooperation and Development (OECD) to "promote development co-operation and other policies
 so as to contribute to sustainable development." The Conference recommends that the DAC consider assisting *NPT* State Parties with low GNIs. The Conference suggests that financial assistance in the form of loans could
 be used for procurement of facilities, equipment, services, or for conducting civil and other related works.
- 1304 174. The Conference encourages improvements in transparency in conjunction with the IAEA Nuclear Safety Action
 1305 Plan Platform (NSAT) and Application of Safeguards to Geological Repositories to facilitate activities
 1306 associated with implementing the IAEA Action Plan on Nuclear Safety and promote the IAEA's objective to
 1307 obtain credible assurance that nuclear material and technology associated with geological disposal activities are
 1308 not diverted from peaceful nuclear uses.
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 175. The Conference recommends collaboration between the INFB and the Zangger Committee. The Committee's standards cover nuclear related technologies and source materials including: heavy water production equipment, zirconium, isotope separation, clarification on reprocessing plants. The Conference suggests that transfers of public production equipment, and under the suggests that transfers of the LAEA
- nuclear material be done in accordance with the NSG Guidelines and under the auspices of the IAEA.