



**Nuclear weapon
modernisation
Attitudes of non-nuclear
weapon states**

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About this briefing

This briefing collates the recent public positions taken by states without nuclear weapons on the nuclear modernisation programmes of the nuclear-armed states. It looks at official statements on the issue in a number of intergovernmental disarmament conferences: Nuclear Non-Proliferation Treaty (NPT)¹ Review Conferences (RevCon) and Preparatory Committees (PrepCom), negotiations for the Treaty for the Prohibition of Nuclear Weapons (TPNW)², and the 2016 Open Ended Working Group (OEWG) which preceded the TPNW. The briefing covers positions taken by states in these fora from the 2015 RevCon up to the present. An overview of the different fora can be found below.

This briefing lists all Non-Nuclear Weapon States (NNWS) that made a statement on this topic, and gives a brief summary of the comments made. These positions are presented to allow the reader to consider the extent to which modernisation programmes are contributing to dissatisfaction within the NPT and support for the TPNW. Although the focus of the briefing is on NNWS, the positions of Nuclear-Weapon States (NWS) are also listed in a separate section.

This briefing covers both written reports and spoken statements delivered by NNWS during the meetings. Written reports are submitted ahead of the fora or produced during the meetings and form part of the official records of the conference. In the NPT PrepComs and RevCons written reports can take the form of 'national reports', which focus on the activities or record of that particular state, or 'working papers', which address a particular subject area. Both written reports and verbal contributions can either be made on behalf of an individual state or on behalf of a group of states.

Much of the material for this briefing is drawn from United Nations (UN) documentation. The UN website archives the written reports for each of the fora, and these were the source material for the relevant section for each forum. The UN also compiled a written summary record of verbal proceedings for the NPT RevCon and the plenary sessions from the NPT

PrepComs. Many of the statements delivered verbally during the meetings were also circulated during the meetings in written form, and were originally archived on the UN website.³ The Reaching Critical Will (RCW)⁴ website has a more complete record of these statements.

On 38 occasions where NNWS raised the issue of modernisation, this element of the statement either appears to have been omitted from the summary record, or the statement occurred in a meeting that was not included in the summary record.⁵ Where this is the case the archived written statements are used as source material; the remainder of the NPT verbal proceedings sections are based on the summary records.

The UN did not compile a summary record of the meetings held during the OEWG and TPNW negotiations. In both cases, the source material for these meetings were the regular updates published by RCW that summarised the negotiations while they were taking place.

When a state or group raised the issue of modernisation in both a written report and in the meetings at one of the fora both have been included in this briefing. However, multiple written or verbal mentions by a state or group during a single conference have been omitted for reasons of brevity.

All mentions of the modernisation issue that treat the issue as a problem or a source of concern have been included in this briefing. Mentions of the issue when states expressed the hope that ratification of the Comprehensive Test Ban Treaty (CTBT) or the Fissile Material Cut-Off Treaty (FMCT) would prevent modernisation programmes have not been included if the practice of modernisation was not explicitly criticised. Instances where the issue of modernisation was raised but was not distinguished from concerns about the acquisition of nuclear weapons by a possessor state, such as North Korea, have also not been included.

International fora covered in this briefing

This briefing covers the NPT RevCon in 2015 and PrepComs leading up to the planned 2020 RevCon,⁶ as well as the Open Ended Working Group (OEWG) and Treaty on the Prohibition of Nuclear Weapons (TPNW) negotiations.

The Nuclear Non-Proliferation Treaty (NPT) was signed in 1968 to try and reduce the threat from nuclear weapons by limiting the number of nations that possess them and compelling possessor states to pursue disarmament. It entered into force in 1970 and is one of the most widely adopted international treaties, with 191 States parties.⁷

The NPT recognises five named States parties as NWS: the United States (US), the United Kingdom (UK), France, Russia and China.⁸ There are four additional nuclear possessor states. Pakistan, India and Israel have never signed the NPT. North Korea signed the treaty, but announced its withdrawal from it in 2003.⁹

Every five years, RevCons are held within the NPT to review the operation of the Treaty.¹⁰ The RevCons are intended to culminate in agreeing a consensus document. Since the 1995 RevCon agreed that the NPT should remain in force indefinitely, consensus documents have been agreed at the 2000 and 2010 RevCons, but no agreement was reached in 2005 or 2015.¹¹ A series of PrepCom meetings are held in the three years leading up to each RevCon. The summary documents produced by these meetings do not have to achieve consensus.¹²

After the failure to achieve consensus at the 2015 RevCon, there is significant pressure on states to agree a consensus document at the postponed 2020 RevCon. The ability to achieve consensus has long been considered a key indicator of the health of the treaty regime, and additional significance would be attached to a second consecutive failure to do so during the conference that marks the treaty's 50th anniversary.¹³

Article 6 of the NPT requires all NWS members to engage in disarmament efforts in good faith, but along

with the four nuclear weapon possessors outside the NPT, all five NWS members are engaged in modernising their nuclear weapon capabilities. The question of whether modernisation is permitted by the NPT and the agreements at subsequent RevCons is contested.

Dissatisfaction with the lack of progress on disarmament in the NPT led to a 2015 UN General Assembly resolution, which set up the OEWG to 'address concrete effective legal measures, legal provisions and norms that will need to be concluded to attain and maintain a world without nuclear weapons'.¹⁴ The OEWG met over three sessions in February, May and August 2016.¹⁵ and produced a report that said a majority of states supported negotiations on a new treaty to prohibit nuclear weapons.¹⁶

These negotiations began the following year and resulted in the TPNW. The TPNW is a separate treaty from the NPT. While the TPNW is opposed by the NWS and many of their allies, many other NPT States parties regard it as complementary to the NPT.¹⁷ The TPNW was agreed by 122 states in 2017 and entered into force in January 2021. In December 2020, at the UN General Assembly, 130 states¹⁸ voted in favour of a resolution welcoming the treaty and calling for states to join and ratify it.¹⁹



UN PHOTO/JEAN-MARC FERRE

Opening session of the 2017 NPT PrepCom 23 April 2017, UN.

What is modernisation?

Nuclear weapon modernisation can refer to upgrades to existing nuclear warheads themselves, to their delivery vehicles or to the platforms that carry them, such as aeroplanes or submarines. This can involve modifications to existing stock, building replacements or an increase in overall numbers. In states with long-established nuclear weapon programmes and existing systems that are nearing the end of their service lives, modernisation takes on a different form to states at an earlier stage of development.

States use a variety of terms to refer to modernisation, including 'qualitative improvement', 'development' and 'upgrading'. However, 'modernisation' is the term most commonly employed, and is therefore used in this briefing to encompass the full range of activities described below.

For most of the five NWS, the current period of modernisation follows substantial reductions in total warhead numbers following the end of the Cold War,²⁰ whereas some of the other four nuclear possessor states acquired nuclear weapons more recently. While this means that modernisation takes on different forms in different states, the common element across modernisation programmes is that they are all expected to deliver an increase in the nuclear capabilities of the possessor state in some way, such as increased range, destructive power or survivability.

The level of disclosure about nuclear modernisation also varies dramatically between states, and this is reflected below. The level of detail in this summary tends to be lower for states where there are fewer public sources. States are listed alphabetically, with the five NWS listed first as a group, followed by the other four nuclear possessor states.

China's modernisation efforts involve increased numbers and more mobile versions of land-based intercontinental ballistic missiles (ICBMs) with multiple independently targetable re-entry vehicles (MIRVs). China is also building additional nuclear-armed submarines, and is expected to begin constructing a new submarine design in the 2020s.²¹

France is developing a new submarine-launched ballistic missile (SLBM), and has begun developing a new generation of nuclear armed-submarines.²²

Russia is modernising its land-based ICBMs, nuclear-armed submarines, and nuclear-armed aircraft.²³ It is also developing 'non-traditional delivery systems such as a hypersonic glider vehicle, a nuclear-powered cruise missile, and an underwater nuclear-powered vehicle.'²⁴

The United Kingdom (UK) began work on a new generation of nuclear-armed submarines in 2007, and expects the first to enter service in the 'early 2030s'.²⁵ A life extension for the UK warhead has improved its accuracy.²⁶ In February 2020, the UK announced its decision to begin building an entirely new nuclear warhead.²⁷ In March 2021 it announced that the official size limit on its warhead stockpile, previously planned to be reduced to 180, would instead increase to 260.²⁸

The United States (US) has numerous modernisation programmes, including warhead modification and life extension projects, new ballistic and cruise missiles and new nuclear-armed submarines.²⁹ In 2020 the Trump administration proposed a budget which included work on a new warhead, the W93, which would be a parallel development to the new UK warhead.³⁰

"The common element across modernisation programmes is that they are all expected to deliver an increase in the nuclear capabilities of the possessor state in some way."

The Democratic People's Republic of Korea (DPRK) has developed a diverse range of land-based ballistic missiles and carried out six nuclear tests between 2006 and 2017.³¹ In early 2021, at the Eighth Congress of its ruling party, the DPRK announced its intention to develop tactical nuclear weapons and multiple re-entry vehicles.³²

India has quadrupled its number of warheads over the last two decades, has recently upgraded its nuclear-armed aircraft, and has signed a deal to purchase new Rafale aircraft from France.³³ It has been developing longer-range, land-based ballistic missiles, and deployed its first nuclear-armed submarine in 2018.³⁴ Construction on a further submarine has begun, and two more are planned to follow.³⁵

Little is in the public domain about Israel's nuclear weapons or any modernisation programmes involving the warhead. However, it is thought that Israel operates a nuclear triad of land-based ballistic missiles, submarine and air-launched weapons.³⁶ These delivery systems are being upgraded, with F-35I aircraft being brought into service, along with new ballistic missiles and submarines.³⁷

Pakistan, has increased its warhead stockpile by a factor of ten over the last two decades, and further increases are predicted over the next five years.³⁸ Pakistan continues to produce both plutonium and highly enriched uranium (HEU) for weapons production.³⁹



CREDIT: PANTEX LABS

Warhead being removed from a container during the US W76-1 Life Extension Programme.

Statements

2015 NPT Review Conference

The 2015 RevCon heard critical statements on modernisation from four groups and 22 individual NNWS, representing 162 states in total. The statements are ordered so that similar themes and topics are grouped together. The scale of concerns was reflected in the president's working paper, which noted that NNWS had expressed concerns about modernisation.⁴⁰

2015 RevCon written reports

Brazil called for states to refrain from modernisation and said that subcritical testing goes against the objectives of the Treaty.⁴¹ Chile said that NWS were not fulfilling their commitments and obligations under the Treaty by modernising their nuclear weapons.⁴²

The New Agenda Coalition (NAC)⁴³ and the States Parties to the Treaty of Tlatelolco⁴⁴ called for a moratorium on nuclear modernisation.

The League of Arab States (LAS) stated that modernisation of nuclear arsenals pose a threat to international peace and security, and emphasised the need for states to respect the 'articles and spirit' of the Treaty.⁴⁵ The De-Alerting Group cited modernisation as being among the negative consequences of nuclear forces being kept at high alert levels.⁴⁶ Austria said the risks of accidental, mistaken or intentional nuclear explosions were in part due to NWS modernising and maintaining their arsenals, and that the risks were increasing over time.⁴⁷ Iran said the development of new types of nuclear weapons lowered the threshold for their use.⁴⁸

The Non-Aligned Movement (NAM)⁴⁹ expressed concern about the lack of progress on disarmament and said that modernisation programmes undermined any bilateral or unilateral reductions in the stockpiles

of NWS.⁵⁰ Similarly, Algeria cited modernisation programmes as one of the reasons reductions in nuclear arsenals had been insufficient.⁵¹

Switzerland raised concerns that NWS were not only maintaining deterrence policies, but also modernising their arsenals, and called on NWS to comply with Article VI of the NPT.⁵²

2015 RevCon meetings

During the conference itself Papua New Guinea stated that the retention and modernisation of nuclear weapons was contrary to the NWS' obligations under the Treaty.⁵³ The Maldives⁵⁴ and Namibia⁵⁵ said modernisation is contrary to the NPT's disarmament objectives. Switzerland said that the motivations behind modernisation programmes did not appear to conform with the purpose of the Treaty.⁵⁶ Similarly, Austria argued that the modernisation programmes of NWS are contrary to the spirit of the Treaty and commitments made at RevCons.⁵⁷

Cuba called for the modernisation of nuclear weapons to be halted immediately and for the elimination of nuclear weapons within 20 years under a new legal instrument.⁵⁸

Myanmar, on behalf of the ASEAN countries,⁵⁹ and Singapore⁶⁰ called for an end to nuclear modernisation. Niger also supported appeals to the NWS to cease their modernisation programmes.⁶¹

Canada expressed concern about the development of missile technologies.⁶² Australia expressed concern about the battlefield-scale weapons being developed.⁶³ Venezuela stressed that modern nuclear weapons were much more powerful than the ones used in the Second World War, and mentioned US modernisation plans.⁶⁴ South Africa said that new categories of delivery

2015 RevCon

162 states in total. 4 groups. 22 individual states.



CREDIT: UNITED NATIONS

Izumi Nakamitsu, Under-Secretary-General and High Representative for Disarmament Affairs speaking at the opening session of the 2017 PrepCom.

vehicles and nuclear weapons were being developed and stressed that indefinite extension of the Treaty did not mean indefinite retention of nuclear weapons.⁶⁵ New Zealand, speaking on behalf of the NAC, argued that modernisation programmes were evidence of NWS' reluctance to fulfil their obligations under the NPT.⁶⁶ Likewise, Egypt said that billion-dollar investments in modernisation signalled a long-term intent to retain nuclear weapons.⁶⁷

Zimbabwe said that nuclear modernisation programmes did not make the world safer, but 'sharpen the destructive capabilities' of nuclear weapons.⁶⁸ Ireland criticised the suggestion that nuclear weapons contributed to stability in the world order.⁶⁹ Costa Rica said that modernisation would not help to achieve collective security and peace.⁷⁰

On behalf of a group of 26 states, Australia expressed concern about new weapons being produced by current possessor states.⁷¹

Indonesia argued that a lack of progress on disarmament brought into question the rationale behind the Treaty and that investments in nuclear modernisation undermined the credibility of its goal of a nuclear-free world.⁷² Chile believed that to 'boost the political legitimacy of the Treaty regime', NWS should transparently and verifiably eliminate their weapons, instead of modernising them.⁷³

Libya called for a new legal instrument to prohibit 'the storage, modernization, production, acquisition, testing, accumulation, transfer and use or threat of use of nuclear weapons'.⁷⁴ Norway said that the New START Treaty should be a first step in a process

of nuclear arms reduction that prohibited the development of new nuclear weapons.⁷⁵

Jamaica, speaking on behalf of the Caribbean Community (CARICOM), noted that many NNWS were dissatisfied with the NWS' failure to comply with the Treaty, and said modernisation programmes increased the risk of further proliferation.⁷⁶ A similar point was made by Montenegro.⁷⁷ Iran said that modernisation programmes were one of the factors eroding the credibility of the NPT.⁷⁸

Iran, speaking this time on behalf of the NAM, said that stockpile reductions were offset by the NWS' ongoing modernisation programmes, and argued that these programmes and the increasing role of nuclear weapons in security doctrines lowered the threshold for their use.⁷⁹

Ecuador, on behalf of the Community of Latin American and Caribbean States (CELAC),⁸⁰ and Brazil⁸¹ argued that the resources used for nuclear weapon modernisation should be used to fund development instead. Sweden⁸² also expressed concern about the funds being spent on modernisation.

Belarus stated that it had a 'zero tolerance' policy with regard to nuclear weapons, including modernisation.⁸³ Palau said that the Treaty had not achieved much in the field of disarmament, and expressed concern about the modernisation programmes of the NWS.⁸⁴ Malawi said the ongoing impact of the nuclear weapons on Nagasaki and Hiroshima was being disregarded by the NWS with their modernisation programmes.⁸⁵ The Marshall Islands criticised modernisation and said NWS did not have a right to 'indefinite possession' of nuclear weapons.⁸⁶

2017 NPT Preparatory Committee

In the 2017 PrepCom two groups and 18 individual NNWS made critical statements about modernisation. Together 134 states were represented by these statements. Again the scale of concern was indicated by the chair's summary, which noted that some states expressed the view that modernisation could undermine nuclear stockpile reductions and contribute to a new arms race.⁸⁷

2017 PrepCom written reports

Syria said that nuclear modernisation was contrary to the NPT and to UN resolutions such as resolution 70/38.⁸⁸ Iran called for a halt to modernisation programmes by 2025.⁸⁹

The NAC stated that developments such as 'modernising and qualitatively improving nuclear weapons' were contributing to a renewed arms race,⁹⁰ and suggested that NWS should include modernisation plans in their reports for the 2020 RevCon.⁹¹

The NAM focused on the future of arms control, and the potential for the New START Treaty between the United States (US) and Russia to expire in February 2021, if the parties did not agree to an extension.⁹² After concerns that President Trump would allow the treaty to expire,⁹³ the treaty was renewed under the Biden administration on February 3rd.⁹⁴

Ireland said many of the modernisation programmes would make it easier for states to use nuclear weapons.⁹⁵

2017 PrepCom meetings

The Philippines condemned modernisation programmes as being contrary to the disarmament commitments of NWS.⁹⁶

2017 PrepCom

134 states in total. 2 groups. 18 individual states.

Bulgaria⁹⁷ suggested a moratorium on nuclear modernisation as a feasible step that could be undertaken by NWS on the path to disarmament. Kazakhstan also called for a moratorium on modernisation.⁹⁸ Vietnam⁹⁹ and Cuba¹⁰⁰ called for an end to modernisation.

Tanzania called for NWS to refrain from any modernisation efforts and fulfil their obligations under the NPT.¹⁰¹ CELAC called for nuclear possessor states to refrain from conducting nuclear testing.¹⁰²

Iran submitted a report saying that there is a persistent lack of progress on disarmament and issues such as ‘vertical proliferation, including modernisation of nukes and development of mini-nukes’.¹⁰³

South Africa stated that some countries aspire to the indefinite retention of nuclear weapons, which is in contravention of their legal and political obligations.¹⁰⁴ The NAM, said that modernisation undermines the cuts in nuclear weapon stockpiles by the NWS.¹⁰⁵

The Holy See, which has observer status at the UN, stressed the ‘urgent need’ for states to make progress on not only the NPT, but also the Fissile Material Cut-off Treaty (FMCT), Comprehensive Nuclear-Test-Ban Treaty (CTBT) and New START. In response to growing tensions in world politics and modernisation plans it called for full compliance with Article 6 of the NPT.¹⁰⁶

Belgium stated in its report to the 2017 Preparatory Committee that global distrust has been sharpened by the modernisation programmes and this further deepens non-compliance with the non-proliferation treaty.¹⁰⁷ Malaysia¹⁰⁸ and Nicaragua¹⁰⁹ said that modernisation undermined disarmament and non-proliferation regimes. Brazil stated that the NPT

had not proven successful in curbing modernisation programmes and nuclear weapons made the world order more uncertain.¹¹⁰ Costa Rica said that peace and security would not be achieved while modernisation programmes continue.¹¹¹

Indonesia said that NWS were relying on nuclear weapons in their security doctrines and modernising them instead of eliminating them, and called for a change.¹¹² The NAC also linked modernisation with a failure to reduce the role of nuclear weapons in security policies.¹¹³

Ireland criticised the resources spent on modernisation and the development of ‘so-called tactical’ nuclear weapons.¹¹⁴

Austria called for NWS to answer questions about their modernisation programmes during the PrepCom.¹¹⁵ Ecuador said that modernisation programmes were concerning.¹¹⁶ Algeria made the case for the elimination of nuclear weapons as the only way to prevent modernisation programmes and proliferation.¹¹⁷ Mexico said that geopolitical tensions did not justify modernisation programmes¹¹⁸.

2018 NPT Preparatory Committee

Three groups and 27 individual countries discussed nuclear modernisation at the 2018 PrepCom. In total these statements represented the views of 133 states. The issue was again noted in the chair’s factual summary, which noted concerns that some modernisation programmes were inconsistent with NPT commitments.¹¹⁹ This language was challenged by Brazil¹²⁰ and the NAC¹²¹ on the basis that it underplayed the level of concern, and many states believe all modernisation programmes are contrary to the NPT’s purposes.

2018 PrepCom

133 states in total. 3 groups. 27 individual states.

2018 PrepCom written reports

As noted above, Brazil stated that any modernisation programme is contrary to the NPT's purposes.¹²² Switzerland said that modernising nuclear weapons was not compatible with nuclear disarmament efforts.¹²³

The NAM called upon all NWS to refrain from conducting tests or modernising nuclear weapons.¹²⁴ It also said that the modernisation programmes lower the threshold for use of nuclear weapons and constitute a new arms race.¹²⁵ Ireland drew attention to nuclear weapons' 'disproportionate gendered impacts on women', and called all NWS to cease maintaining and modernising them.¹²⁶ Japan called for restraint or even a freeze of modernisation programmes.¹²⁷

New Zealand, on behalf of the NAC, said that modernising nuclear weapons poses a threat to the NPT treaty regime.¹²⁸

Egypt argued that modernisation programmes are an indication that 'nuclear deterrence continues to feature highly in the defence and security doctrines'. It also said that these programmes weaken the commitments of NWS to the objectives of the NPT.¹²⁹

Iran criticised the US plans to spend more than \$1 trillion on modernising its arsenal and called for NWS to commit to ceasing their modernisation plans in the 2020 RevCon final document.¹³⁰

2018 PrepCom meetings

South Africa cited the presence of nuclear weapons in the security doctrines of some NWS, alongside modernisation, as being against both the 'letter and spirit' of the Treaty.¹³¹ Thailand said that modernisation was inconsistent with the purpose of the NPT,¹³² and The Philippines,¹³³ and Nigeria¹³⁴ said modernisation was contrary to the NPT commitments of NWS. Austria made a similar point and said that the 'catastrophic humanitarian consequences' of nuclear weapons had been underestimated.¹³⁵ New Zealand, speaking on behalf of the NAC, said that many States

parties did not believe modernisation programmes were consistent with the objectives and the purpose of the Treaty.¹³⁶

Namibia, on behalf of the Group of African States,¹³⁷ and Indonesia, on behalf of the NAM,¹³⁸ called for an end to modernisation. Ukraine called for the cessation of modernisation programmes.¹³⁹ Kenya said that NWS ceasing their nuclear weapon modernisation programmes would assuage NNWS's concerns over the threat of the use of nuclear weapons.¹⁴⁰

Brazil said there was a widespread belief that a new arms race was under way with the modernisation programmes of nuclear-armed states' arsenals, and that this raised doubts about NWS commitment to the Treaty.¹⁴¹ Mexico stated that modernisation suggests NWS are not committed to their NPT obligations.¹⁴² The League of Arab States expressed concern about the importance attached to modernisation by the NWS.¹⁴³

Sweden, speaking on behalf of the Nordic countries, cited the threat to the INF Treaty, and said that a 'rules-based system' had become vital in the context of modernisation.¹⁴⁴ The US withdrew from INF in August 2019 citing longstanding allegations of Russian non-compliance.¹⁴⁵

Costa Rica expressed dissatisfaction over the lack of progress on disarmament and said that investment in modernising, maintaining and producing nuclear weapons was making nuclear weapons use more likely.¹⁴⁶

Kuwait included modernisation programmes in a list of challenges to the NPT regime.¹⁴⁷ Iran said modernisation was an obstacle to disarmament,¹⁴⁸ and Cuba said that modernisation weakened the Treaty.¹⁴⁹

On behalf of the NAM, Venezuela stated that the role of nuclear weapons in security doctrines had increased, and expressed concern about modernisation programmes.¹⁵⁰ Panama expressed concern about the NWS giving prominence to nuclear weapons within military doctrines and modernising and broadening

their arsenals.¹⁵¹ Ireland¹⁵², Switzerland¹⁵³, and Morocco¹⁵⁴ also linked modernisation with a failure to reduce the role of nuclear weapons in security policies.

The Holy See¹⁵⁵ and Nicaragua¹⁵⁶ argued that the resources devoted to nuclear modernisation should have been spent on poverty and human development. Nepal expressed a similar view, arguing that the resources should instead be used to help achieve the UN Sustainable Development Goals.¹⁵⁷ Algeria also decried the sums spent on modernising nuclear weapons.¹⁵⁸ Chile called for reductions in spending on nuclear weapons and modernisation programmes.¹⁵⁹

Belgium criticised the modernisation programmes and behaviour of several NWS and nuclear possessor states without specifically naming them.¹⁶⁰ Egypt cited modernisation as a regressive development,¹⁶¹ and Malaysia called for NWS to take steps to prevent the problem of modernisation.¹⁶²

2019 NPT Preparatory Committee

Three groups and 27 individual states took critical positions on modernisation during the 2019 PrepCom. In total this represented the views of 143 states. The Chair's recommendations to the 2020 Review Conference included a call for NWS to halt modernisation programmes.¹⁶³

2019 PrepCom written reports

The NAM recommended that the 2020 RevCon should call on NWS to cease modernisation plans.¹⁶⁴ It also expressed its deep concern regarding the lack of progress towards achieving nuclear disarmament and said that modernisation undermined the stockpile reductions of the NWS.¹⁶⁵ This position was echoed by the Treaty of Tlatelolco members.¹⁶⁶

As in its report to the 2018 PrepCom, Iran criticised the US's plans to modernise and develop new types of nuclear weapons, and argued that the US puts the NNWS 'under the real threat of the possible use of nuclear weapons'.¹⁶⁷

The report that Brazil submitted on behalf of the NAC said that NWS modernisation increases the risk of a conventional conflict turning into a nuclear one.¹⁶⁸ Japan said that nuclear arms modernisation is potentially destabilising.¹⁶⁹

Sweden's report to the 2019 PrepCom called for NWS to provide clarity about modernisation plans as a confidence-building measure.¹⁷⁰

Austria, Costa Rica, Indonesia, Mexico, Nigeria, San Marino and Thailand argued in a joint report that the spectacle of nuclear modernisation may tempt some NNWS into developing nuclear weapons.¹⁷¹

2019 PrepCom meetings

Morocco stated that the international situation was deteriorating and modernisation programmes contravene the 'letter, spirit and purpose of the Treaty'.¹⁷² Liechtenstein said that there was backtracking on disarmament, and that modernisation was in contravention of the Treaty.¹⁷³ Mexico¹⁷⁴ and Nicaragua¹⁷⁵ both said that security doctrines involving nuclear weapons and modernisation programmes are contrary to the NPT obligations of NWS. Ecuador¹⁷⁶, Nigeria,¹⁷⁷ and Costa Rica¹⁷⁸ also said that modernisation is contrary to NWS's NPT obligations.

Bangladesh said that modernisation programmes must be reversed because nuclear weapons cause misery and insecurity.¹⁷⁹ Antigua and Barbuda, speaking on behalf of CARICOM, suggested that NWS

2019 PrepCom

143 states in total. 3 groups. 27 individual states.



Meeting of the 2018 NPT PrepCom.

should report on their actions which are consistent with 'achieving and maintaining a nuclear-weapon-free world', and suggested the termination of modernisation programmes could be one of them.¹⁸⁰ Nepal said that NWS should halt their modernisation programmes¹⁸¹. Similarly, Nigeria, speaking on behalf of the Group of African States, called for modernisation programmes to be stopped and for nuclear weapons to be eliminated.¹⁸² Kazakhstan called for an end to modernisation.¹⁸³

Belgium said missile system developments needed to be addressed.¹⁸⁴ Iran singled out the US's modernisation programmes as threatening to start a new arms race.¹⁸⁵

Venezuela¹⁸⁶ and Guyana¹⁸⁷ were concerned that the modernisation programmes of NWS were indicative of a new arms race. The NAM said that the trend of modernisation was a new nuclear arms race and a violation of Article 6 of the NPT.¹⁸⁸ The NAC,¹⁸⁹ Canada,¹⁹⁰ and Malaysia¹⁹¹ all warned of the prospect of a nuclear arms race.

Austria expressed concern over the fate of the New START and INF Treaties, and said that the modernisation programmes of the NWS contradicted previous commitments.¹⁹² The LAS said that the largest NWS used the security of their nations as a pretext for withdrawing from treaties and were modernising and developing their nuclear arsenals, and called for the final document of the PrepCom to express concern.¹⁹³

Cuba said that the threshold for the use of nuclear weapons was being lowered, and called modernisation programmes 'unacceptable'.¹⁹⁴ Sweden said the global security environment was the worst since the Cold War, and disarmament was being replaced by modernisation.¹⁹⁵ Syria said the 'world was facing increased dangers' from the modernisation of nuclear weapons.¹⁹⁶

Ireland said that modernisation programmes are a threat to the NPT and called for NWS to 'engage constructively' with the TPNW for a world without nuclear weapons.¹⁹⁷ Finland also said that development

of new nuclear weapons represents a threat to the NPT.¹⁹⁸ Switzerland said that the long-term success of the NPT was threatened by the development of new nuclear weapon capabilities.¹⁹⁹ In a joint statement the sponsors of UN resolution 73/48 said that modernisation was overshadowing progress on disarmament and undermining the implementation of NPT Article 6.²⁰⁰ Niger argued that the efforts of the international community to ensure peace and security were undermined by modernisation programmes.²⁰¹

Uruguay regretted the modernisation of nuclear weapons and their role in military doctrines.²⁰² Peru²⁰³, Chile²⁰⁴ and Moldova²⁰⁵ also criticised both modernisation and the role of nuclear weapons in security doctrines. South Africa said modernisation programmes indicate that some NWS intend to retain nuclear weapons indefinitely.²⁰⁶

The Philippines²⁰⁷ and Guatemala²⁰⁸ criticised the sums spent on nuclear modernisation. Equatorial Guinea stated that the sums spent on modernisation is preventing money being spent on attaining the UN Sustainable Development Goals.²⁰⁹

Brazil said that significant reductions in nuclear weapons had been made since the Cold War peak, but since then the NWS have been reversing course by pursuing modernisation.²¹⁰

Thailand also stated that ongoing modernisation programmes were a concerning aspect of the international security context.²¹¹ Côte d'Ivoire said that the ongoing modernisation programmes, tensions between NWS and stagnation in disarmament efforts were worrying.²¹² Kuwait called on the Preparatory Committee to take a strong stance on the development and modernisation of nuclear weapons.²¹³

Open Ended Working Group

The OEWG was set up by United Nations General Assembly resolution 70/33, entitled 'Taking Forward Multilateral Nuclear Disarmament Negotiations'. The OEWG had a mandate to consider 'effective legal



The Open Ended Working Group vote on a report recommending negotiations begin on a treaty to prohibit nuclear weapons. Geneva, August 2016.

measures, provisions and norms that would need to be concluded to attain and maintain a world without nuclear weapons'.²¹⁴ Two groups and four individual states, representing 15 states in total, made critical statements about modernisation during the OEWG. The OEWG met in February and May 2016.²¹⁵ The UN hasn't published an official record of the proceedings, but Reaching Critical Will (RCW) produced detailed daily reports of proceedings.

In written reports to the OEWG Fiji, Nauru, Palau, Samoa and Tuvalu categorised 'contributing funds for modernisation of nuclear weapons and their delivery vehicles' as a problematic policy area that should be prohibited by a ban treaty.²¹⁶ Costa Rica and Malaysia cited the modernisation programmes of the five NWS as evidence that stockpile reductions were unlikely to take place and therefore other measures, including a ban treaty, would be more fruitful.²¹⁷ In similar language to their 2015 NPT RevCon report, the De-Alerting Group cited vertical proliferation and modernisation as being among the negative consequences of nuclear forces being kept at high alert levels.²¹⁸

Ireland argued that OEWG was timely, in the light of the fact that many countries include nuclear weapons in their security doctrines and make efforts to modernise them.²¹⁹ Iran, in its report to the OEWG, argued that nuclear-armed countries should publish

information about their nuclear weapons, including their modernisation plans, expenditure and related facilities.²²⁰

During the meetings Malaysia asked whether modernisation programmes might increase the risks of accidental nuclear weapons use.²²¹

Nicaragua suggested that prohibitions of modernisation and subcritical testing could be features of a treaty, as well as prohibitions on possession and use.²²² Mexico also argued that prohibitions on financing and modernisation should be included.²²³

Although the total numbers of states recorded as making statements discussing modernisation during the OEWG was lower than in the NPT fora, concerns about modernisation were cited in its final report and sharing information about or cancelling modernisation programmes were both suggested as a possible way to take forward multilateral disarmament.

TPNW negotiations

On the recommendation of the OEWG, the UN convened a conference to negotiate a treaty for the complete elimination of nuclear weapons in 2017.²²⁴ The negotiations led to the TPNW, which entered into force on January 22nd 2021.

In the written reports submitted by states, modernisation was only directly referenced by Papua New Guinea, which suggested the treaty preamble should call for the redirection of funds spent on modernisation towards social and economic development and for States parties to be prohibited from investing in companies involved in modernisation programmes.²²⁵

During the negotiations on the Treaty text nine countries expressed concern about nuclear modernisation. Ethiopia said modernisation programmes increased the risk from nuclear weapons.²²⁶ Ecuador and Cuba spoke about the cost of

modernisation programmes and asked for a paragraph in the treaty preamble calling for the economic resources spent on nuclear arsenals to be devoted to social and economic development. This suggestion was supported by Brazil, South Africa, Venezuela, Mexico and Austria.²²⁷ Similarly, Sweden criticised the large amount of resources spent by the NWS on their production and modernisation of nuclear weapons.²²⁸

In the final text of the TPNW modernisation programmes are prohibited under Article 1 (a), which forbids the development, testing and manufacturing of nuclear weapons.²²⁹

Statements by nuclear-weapon states



CREDIT: UNITED NATIONS, GENEVA

US Assistant Secretary for International Security, Christopher A. Ford, speaking at the 2017 PrepCom.

Although the focus of this briefing is the positions of NNWS, most of the NWS have also discussed modernisation at one or more of the fora. The majority of the interventions portray modernisation as a problem, taking the form of criticisms of each other or of the four nuclear possessor states who are not NPT members. There are also instances where they try to justify their own modernisation programmes.

In 2017 the United States (US) warned that several countries were 'expanding their nuclear arsenals or developing new nuclear capabilities'.²³⁰ In 2018 the US said the bleak prospects for disarmament were in part due to states expanding and modernising their stockpiles,²³¹ singling out Russia,²³² China and North Korea for criticism.²³³ In 2018 the United Kingdom (UK) said that the development of new missile systems would undermine strategic stability and called for Russia to engage in constructive dialogue regarding the Intermediate-range Nuclear Forces (INF) Treaty.²³⁴

In 2019 China said NWS should refrain from developing new types of nuclear weapons,²³⁵ and Russia proposed 'comprehensive discussions' on international security issues including the 'improvement of existing types of weapons and the emergence of new ones', though this appears to refer more to US missile defence systems and the imbalance of conventional forces between the US and Russia, rather than nuclear modernisation.²³⁶

At the 2015 RevCon the US justified its modernisation programmes on the basis that they were only intended to increase 'safety, improve security and use control features',²³⁷ and would enable further reductions in its arsenal.²³⁸ In 2015 China stated that its modernisation programme is only to ensure 'safety, security, reliability and effectiveness' of its nuclear stockpile.²³⁹ This language was repeated in its statement to the 2019 PrepCom.²⁴⁰ In 2017 UK said that its nuclear modernisation was not an upgrade in capabilities.²⁴¹

Findings

The statements summarised in this briefing show there is significant concern about nuclear modernisation within the NPT. In NPT meetings from 2015 onwards, the states behind statements expressing concerns about modernisation programmes number more than 130 at each meeting.²⁴² The 162 NNWS at the 2015 RevCon dropped to 134 at the 2017 PrepCom and 133 in 2018, then rose to 145 in 2019. The group statements of the Non-Aligned Movement (NAM), which includes 117 NPT member states, accounts for a significant proportion of these totals. The number of individual NNWS raising the issue has been rising over the three recent PrepComs. Having dropped from 22 at the 2015 RevCon to 18 in 2017, the number of individual interventions rose to 27 in 2018 and 31 in 2019.

Iran is the state which has most consistently objected to modernisation during this time period, no doubt in part in response to the level of scrutiny given to its own nuclear activities. However Iran's record of both written reports and verbal contributions at all four of the NPT fora covered by this briefing is matched by both the NAM and the New Agenda Coalition (NAC).

The numbers of states raising the issue during the OEWG and the TPNW negotiations was smaller than in the NPT meetings, but the two are not directly comparable due to the different scope and purpose of those events. The references to modernisation in the OEWG outcome document and concerns raised by the TPNW core states²⁴³ both suggest that modernisation was one of the motivating factors in the push for the TPNW.

Concerns about nuclear modernisation are nearly universal. In total 172 UN member states, out of a total of 193, were party to statements that treated the issue as a problem during the four year period covered by this briefing. These included NWS and many of their allies.

The scale of concern about modernisation programmes voiced in the NPT RevCon and PrepComs indicates that this issue is likely to be a cause of friction at the postponed 2020 RevCon. There is no indication so far that NWS are willing to alter their modernisation plans in light of the concerns of NNWS, but it does not seem likely that they will be able to ignore the clamour indefinitely if faith in the global arms control regime is to be sustained.

"Concerns about nuclear modernisation are nearly universal. In total 172 UN member states, out of a total of 193, were party to statements that treated the issue as a problem during the four year period covered by this briefing."

Endnotes

1. Treaty on the Non-Proliferation of Nuclear Weapons (NPT) – UNODA. n.d. United Nations Office for Disarmament Affairs. Accessed 28 May 2021. <https://www.un.org/disarmament/wmd/nuclear/npt/text/>
2. Treaty on the Prohibition of Nuclear Weapons – UNODA. n.d. United Nations Office for Disarmament Affairs. Accessed 28 May 2021. <https://www.un.org/disarmament/wmd/nuclear/tpnw/>
3. A number of these statements are still hosted on the UN website, but are no longer linked to from the web pages for the NPT fora. See: <https://papersmart.unmeetings.org/secretariat/unoda/npt/2019-third-session-of-the-preparatory-committee/statements/>
4. RCW is the disarmament programme of the Women's International League for Peace and Freedom (WILPF). <https://www.reachingcriticalwill.org/about-us/who-we-are>
5. These were: the Marshall Islands, and Costa Rica at the 2015 Revcon, see notes 83 and 99; the Philippines, Bulgaria, Kazakhstan, Cuba, South Africa, the NAM, Malaysia, Nicaragua, the NAC, Ireland, and Mexico at the 2017 PrepCom, see notes 109, 110, 111, 113, 117, 118, 121, 122, 126, 127, and 131; Thailand, the Philippines, Nigeria, the NAM, Ukraine, Mexico, Iran, Ireland, Belgium, Egypt, and Malaysia at the 2018 PrepCom, see notes, 145, 146, 147, 151, 152, 155, 161, 165, 173, 174, and 175; and Costa Rica, Kazakhstan, Belgium, the NAM, the NAC, Canada, Malaysia, Ireland, Finland, the sponsors of resolution 73/48, Peru, Chile, South Africa, and Equatorial Guinea at the 2019 PrepCom, see notes 191, 196, 197, 201, 202, 203, 204, 210, 211, 213, 216, 217, 219 and 222. Statements that were published in languages other than English were reviewed using the Google Translate tool in March 2021. Statements by the USA and UK in 2017 and 2018 that mention modernisation are also not included in the summary record for those years, see notes 39, 41, 50 and 43. For the sake of brevity, additional discrepancies between the summary record and written versions of statements have been omitted from this list when the state in question raised the issue of modernisation elsewhere in the summary record.
6. Due to the coronavirus crisis the 2020 RevCon was postponed and at the time of writing it is scheduled for January 2022.
7. Disarmament Treaties Database: Treaty on the Non-Proliferation of Nuclear Weapons (NPT). n.d. Accessed 18 January 2021. <http://disarmament.un.org/treaties/t/npt>
8. NPT Conference 2020. United Nations. <https://www.un.org/en/conferences/npt2020>
9. Democratic People's Republic of Korea: Accession to Treaty on the Non-Proliferation of Nuclear Weapons (NPT). United Nations. <http://disarmament.un.org/treaties/a/npt/democraticpeoplesrepublicofkorea/acc/moscow>
10. Treaty on the Non-Proliferation of Nuclear Weapons (NPT). n.d. United Nations Office for Disarmament Affairs. <https://www.un.org/disarmament/wmd/nuclear/npt/text>
11. 'Nuclear Non-Proliferation Treaty'. n.d. Accessed 2 February 2021. Reaching Critical Will. <https://www.reachingcriticalwill.org/disarmament-fora/npt>
12. A detailed account of the history and politics of the NPT and recent review conferences can be found in: John Simpson and Hassan Elbahtimy, eds. 2019. NPT Briefing Book (2019 Edition). King's College London & James Martin Center for Nonproliferation Studies (CNS). <https://nonproliferation.org/wp-content/uploads/2019/04/npt-briefing-book-2019-full.pdf>
13. Robert Einhorn. 2020. COVID-19 Has given the 2020 NPT Review Conference a Reprieve. Let's Take Advantage of It. Bulletin of the Atomic Scientists. 13 May 2020. <https://thebulletin.org/2020/05/covid-19-has-given-the-2020-npt-review-conference-a-reprieve-lets-take-advantage-of-it/>
14. Resolution Adopted by the General Assembly on 7 December 2015: 70/33 Taking Forward Multilateral Nuclear Disarmament Negotiations. 2015. United Nations General Assembly. <https://undocs.org/A/RES/70/33>.
15. Open-Ended Working Group on Nuclear Disarmament. Reaching Critical Will. Accessed 1 June 2021. <https://www.reachingcriticalwill.org/disarmament-fora/oewg>
16. Report of the Open-Ended Working Group Taking Forward Multilateral Nuclear Disarmament Negotiations. UN General Assembly, 1 September 2016. <https://undocs.org/A/71/371>.
17. See, for example, Brazil's comments: Summary record of the 3rd meeting. Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.II/SR.3. p13. <https://www.undocs.org/NPT/CONF.2020/PC.II/SR.3>

18. UN General Assembly Vote A/75/399 DR II Treaty on the Prohibition of Nuclear Weapons. 2020. United Nations. <https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com20/votes-ga/399DRII.pdf>
19. Treaty on the Prohibition of Nuclear Weapons – Resolution Adopted by the General Assembly. 2020. United Nations. <https://undocs.org/pdf?symbol=en/A/RES/75/40>
20. See Hans M. Kristensen. 2014. ‘Nuclear Weapons Modernization: A Threat to the NPT?’ *Arms Control Today* 44 (4): 8–15.
21. Hans M. Kristensen and Matt Korda, 2019. Chinese nuclear forces. *Bulletin of the Atomic Scientists*, 30 June 2019. <https://thebulletin.org/2019/06/chinese-nuclear-forces-2019/>
22. *Assuring Destruction Forever: 2020 Edition*. Reaching Critical Will. June 2020. p11. <https://reachingcriticalwill.org/images/documents/Publications/modernization/assuring-destruction-forever-2020v2.pdf>
23. President of Russia, Presidential Address to the Federal Assembly, 1 March 2018. <http://en.kremlin.ru/events/president/news/56957>
24. *Assuring Destruction Forever: 2020 Edition*. Op. Cit. p87.
25. The United Kingdom's Future Nuclear Deterrent: The 2020 Update to Parliament. n.d. GOV.UK. Accessed 14 January 2021. <https://www.gov.uk/government/publications/the-united-kingdoms-future-nuclear-deterrent-the-2020-update-to-parliament/the-united-kingdoms-future-nuclear-deterrent-the-2020-update-to-parliament>
26. Hans M. Kristensen, Matthew McKinzie, and Theodore A. Postol. 2017. How US Nuclear Force Modernization Is Undermining Strategic Stability: The Burst-Height Compensating Super-Fuze. *Bulletin of the Atomic Scientists*. 1 March 2017. <http://thebulletin.org/how-us-nuclear-force-modernization-undermining-strategic-stability-burst-height-compensating-super10578>
27. Defence Secretary Announces Programme to Replace the UK's Nuclear Warhead. 2020. GOV.UK. 25 February 2020. <https://www.gov.uk/government/news/defence-secretary-announces-programme-to-replace-the-uks-nuclear-warhead>
28. *Global Britain in a Competitive Age: The Integrated Review of Security, Defence, Development and Foreign Policy*. 2021. HM Government. p76. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/975077/Global_Britain_in_a_Competitive_Age_the_Integrated_Review_of_Security_Defence_Development_and_Foreign_Policy.pdf
29. Amy F. Woolf, U.S. Strategic Nuclear Forces: Background, Development, and Issues. Congressional Research Service. 27 April 2020. <https://fas.org/sgp/crs/nuke/RL33640.pdf>
30. *Assuring Destruction Forever: 2020 Edition*. Op. Cit. p19.
31. Hans M. Kristensen and Robert S. Norris, North Korean nuclear capabilities. 2018 *Bulletin of the Atomic Scientists* <https://www.tandfonline.com/doi/pdf/10.1080/00963402.2017.1413062?needAccess=true>
32. Ankit Panda. What Biden Should Know About North Korea's New Nuclear Plans. 2021 Carnegie Endowment for International Peace. <https://carnegieendowment.org/2021/01/15/what-biden-should-know-about-north-korea-s-new-nuclear-plans-pub-83638>
33. Annual Report 2018-2019, New Delhi: Ministry of Defence, Government of India, 2019, p41. <https://www.mod.gov.in/sites/default/files/AR1718.pdf>
34. *Assuring Destruction Forever: 2020 Edition*. Op. Cit. p13.
35. Rajat Pandit, Govt Approves Construction of 7 Stealth Frigates, 6 Nuclear-Powered Submarines. *The Times of India*, 18 February 2015. <https://timesofindia.indiatimes.com/india/Govt-approves-construction-of-7-stealth-frigates-6-nuclear-powered-submarines/articleshow/46281364.cms>
36. Hans M. Kristensen and Robert S. Norris, Israeli Nuclear Forces, *Bulletin of Atomic Scientists*, 2014. <https://thebulletin.org/2014/11/israeli-nuclear-weapons-2014/>
37. *Assuring Destruction Forever: 2020 Edition*. Op. Cit. p14. June, 2020.
38. Hans M. Kristensen and Robert S. Norris, Pakistani Nuclear Forces, *Bulletin of Atomic Scientists*, 2018. <https://www.tandfonline.com/doi/pdf/10.1080/00963402.2018.1507796?needAccess=true>
39. Global Fissile Material Report 2015. International Panel on Fissile Materials, December 2015. <http://fissilematerials.org/library/gfmr15.pdf>
40. 2015 Review Conference of the Parties to The Treaty on the Non-Proliferation of Nuclear Weapons – Working Paper of the President on the Final Document. United Nations, 11 June 2015. <https://undocs.org/NPT/CONF.2015/WP.58>
41. National implementation of the action plan of the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons: Report submitted by Brazil. 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. NPT/CONF.2015/30. <http://undocs.org/NPT/CONF.2015/30>
42. Ninth Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons: Report submitted by Chile. 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. NPT/CONF.2015/16*. <http://undocs.org/NPT/CONF.2015/16>

43. Taking Forward Nuclear Disarmament: Working Paper Submitted by New Zealand on Behalf of the New Agenda Coalition (Brazil, Egypt, Ireland, Mexico, New Zealand and South Africa) – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. United Nations, 9 March 2015. NPT/CONF.2015/WP.8. <https://undocs.org/NPT/CONF.2015/WP.8> The NAC consists of Brazil, Egypt, Ireland, Mexico, New Zealand, and South Africa. See Nuclear Threat Initiative. 'New Agenda Coalition | Treaties & Regimes | NTI'. Accessed 20 May 2021. <https://www.nti.org/learn/treaties-and-regimes/new-agenda-coalition/>.
44. Recommendations for Consideration by the 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons – Working Paper Submitted by the States Parties to the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco). 28 April 2015. United Nations. NPT/CONF.2015/WP.40 <https://undocs.org/NPT/CONF.2015/WP.40> The States Parties to the Treaty of Tlatelolco are: Antigua and Barbuda, Argentina, the Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, the Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, and Venezuela. See: UNODA Treaties – Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean. United Nations Office for Disarmament Affairs. Accessed 18 May 2021. <https://treaties.unoda.org/t/tlatelolco>.
45. Disarmament and the peaceful uses of nuclear energy and nuclear non-proliferation: Working paper submitted by Bahrain on behalf of the League of Arab States – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. NPT/CONF.2015/WP.34. <http://undocs.org/NPT/CONF.2015/WP.34>
46. Taking action on de-alerting at the 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons: Working paper submitted by Chile, Malaysia, New Zealand, Nigeria, Sweden and Switzerland (the De-alerting Group) – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/WP.21. <http://undocs.org/NPT/CONF.2015/WP.21>
47. The Vienna Conference on the Humanitarian Impact of Nuclear Weapons (8 and 9 December 2014) and the Austrian Pledge: Input for the 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons: Working paper submitted by Austria. 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/WP.29. <http://undocs.org/NPT/CONF.2015/WP.29>
48. Non-proliferation in all its aspects: Working paper submitted by the Islamic Republic of Iran. 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/WP.41. <http://undocs.org/NPT/CONF.2015/WP.41>
49. The Non-Aligned Movement includes India, North Korea and Pakistan, who are not parties to the NPT, so NAM submissions to the NPT are submitted as the 'Group of Non-Aligned States Parties to the Treaty'. A full list of NAM members can be found at: Non-Aligned Movement (NAM) | What Is the Non Aligned Movement | NTI. Nuclear Threat Initiative. Accessed 20 May 2021. <https://www.nti.org/learn/treaties-and-regimes/non-aligned-movement-nam/>
50. Nuclear disarmament: Working paper submitted by the Group of Non-Aligned States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/WP.13. <http://undocs.org/NPT/CONF.2015/WP.13>
51. Nuclear disarmament: Working paper submitted by Algeria – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/WP.52. <http://undocs.org/NPT/CONF.2015/WP.52>
52. Implementation of the action plan of the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons: Report submitted by Switzerland – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/22/Rev.1. <https://undocs.org/NPT/CONF.2015/22/Rev.1>
53. Summary record of the 7th meeting – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/SR.7. p4. <http://undocs.org/NPT/CONF.2015/SR.7>

54. Summary record of the 8th meeting – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/SR.8. p9. <http://undocs.org/NPT/CONF.2015/SR.8>
55. Summary record of the 3rd meeting – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/SR.3. p8. <http://undocs.org/NPT/CONF.2015/SR.3>
56. Main Committee I: Summary record of the 2nd meeting – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/MC.I/SR.2. p13. <http://undocs.org/NPT/CONF.2015/MC.I/SR.2>
57. Summary record of the 5th meeting – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. NPT/CONF.2015/SR.5. p4. <http://undocs.org/NPT/CONF.2015/SR.5>
58. Summary record of the 6th meeting – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. NPT/CONF.2015/SR.6. p12. <http://undocs.org/NPT/CONF.2015/SR.6>
59. Summary record of the 3rd meeting, 2015. Op. Cit. p9. The ASEAN countries are: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam. See: Association of Southeast Asian Nations (ASEAN) | Treaties & Regimes | NTI. Nuclear Threat Initiative. Accessed 4 May 2021. <https://www.nti.org/learn/treaties-and-regimes/association-southeast-asian-nations-asean/>
60. Summary record of the 5th meeting, 2015. Op. Cit. p11.
61. Summary record of the 7th meeting – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. NPT/CONF.2015/SR.7. p10. <http://undocs.org/NPT/CONF.2015/SR.7>
62. Summary record of the 3rd meeting, 2015. Op. Cit. p4.
63. Australian National Statement, Statement by H. E. Gillian Bird, Ambassador and Permanent Representative of Australia to the United Nations. 28 April 2015. https://www.un.org/en/conf/npt/2015/statements/pdf/AU_en.pdf
64. Summary record of the 7th meeting, 2015. Op. Cit. p5.
65. Main Committee I: Summary record of the 2nd meeting, 2015. Op. Cit. p12.
66. Summary record of the 2nd meeting – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/SR.2. p12. <http://undocs.org/NPT/CONF.2015/SR.2>
67. Main Committee I: Summary record of the 3rd meeting. 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/MC.I/SR.3. p4. <http://undocs.org/NPT/CONF.2015/MC.I/SR.3>
68. Summary record of the 7th meeting, 2015. Op. Cit. p8.
69. Main Committee I: Summary record of the 3rd meeting, 2015. Op. Cit. p2.
70. Statement at the 2015 Review Conference of the Non Proliferation Treaty General Debate, Juan Carlos Mendoza, Ambassador, Permanent Representative. 29 April 2015. https://www.un.org/en/conf/npt/2015/statements/pdf/CR_en.pdf
71. Summary record of the 7th meeting, 2015. Op. Cit.; Statement on the Humanitarian Consequences of Nuclear Weapons – Statement by H.E. Gillian Bird, Ambassador and Permanent Representative of Australia to the United Nations, 30 April 2015. https://www.un.org/en/conf/npt/2015/statements/pdf/HCG_en.pdf The group consisted of Australia, Belgium, Bulgaria, Canada, Croatia, the Czech Republic, Estonia, Finland, Georgia, Germany, Greece, Hungary, Iceland, Italy, Japan, Latvia, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Turkey.
72. Summary record of the 6th meeting, 2015. Op. Cit. p7-8. <http://undocs.org/NPT/CONF.2015/SR.6>
73. Summary record of the 2nd meeting – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/SR.2. p13. <http://undocs.org/NPT/CONF.2015/SR.2>
74. Summary record of the 6th meeting, 2015. Op. Cit. p10.
75. Summary record of the 5th meeting, 2015. Op. Cit. p12.
76. Summary record of the 3rd meeting, 2015. Op. Cit. p10. The members of Caricom are: Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Lucia, St Kitts and Nevis, St Vincent and the Grenadines, Suriname, and Trinidad and Tobago. See: Member States and Associate Members. CARICOM. Accessed 19 May 2021. <https://caricom.org/member-states-and-associate-members/>
77. Summary record of the 7th meeting, 2015. Op. Cit. p11.
78. Main Committee I: Summary record of the 2nd meeting, 2015. Op. Cit. p10.
79. Main Committee II: Summary record of the 2nd meeting – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/MC.II/SR.2. p11. <http://undocs.org/NPT/CONF.2015/MC.II/SR.2>
80. Summary record of the 5th meeting, 2015. Op. Cit. p12.

81. Main Committee I: Summary record of the 4th meeting – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/SR.4 p6. <https://undocs.org/NPT/CONF.2015/SR.4>
82. Summary record of the 1st meeting – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/SR.1. p11. <http://undocs.org/NPT/CONF.2015/SR.7>
83. Summary record of the 5th meeting, 2015. Op. Cit. p7.
84. Summary record of the 7th meeting, 2015. Op. Cit. p4.
85. Summary record of the 8th meeting, 2015. Op. Cit. p10.
86. Hon. Mr. Tone deBrum. Minister of Foreign Affairs. Republic of the Marshall Islands. 9th Review Conference of the States parties to the Treaty on Non-Proliferation of Nuclear Weapons General Debate. 27 April 2015. https://www.un.org/en/conf/npt/2015/statements/pdf/MH_en.pdf
87. Chair's Factual Summary (Working Paper) – Preparatory Committee for the 2020 Review Conference of the Parties to The Treaty on the Non-Proliferation of Nuclear Weapons. 2017. United Nations. NPT/CONF.2020/PC.I/WP.40 <http://undocs.org/NPT/CONF.2020/PC.I/WP.40>
88. Working Paper Submitted by the Syrian Arab Republic – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2017. United Nations. <http://undocs.org/NPT/CONF.2020/PC.I/WP.15>
89. Non-Proliferation in all its aspects: Working paper submitted by the Islamic Republic of Iran – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2017. United Nations. NPT/CONF.2020/PC.I/WP.14. <http://undocs.org/NPT/CONF.2020/PC.I/WP.14>
90. Taking Forward Nuclear Disarmament: Working Paper Submitted by Ireland on behalf of Brazil, Egypt, Mexico, New Zealand and South Africa, as Members of the New Agenda Coalition – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. NPT/CONF.2020/PC.I/WP.9. <http://undocs.org/NPT/CONF.2020/PC.I/WP.9>
91. Strengthening accountability through enhanced transparency and measurability of the implementation of nuclear disarmament obligations and commitments under the Non-Proliferation Treaty: Working paper submitted by Ireland on behalf of Brazil, Egypt, Mexico, New Zealand and South Africa as members of the New Agenda Coalition – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. NPT/CONF.2020/PC.I/WP.13. <http://undocs.org/NPT/CONF.2020/PC.I/WP.13>
92. Nuclear Disarmament: Working Paper Submitted by the Group of Non-Aligned States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. NPT/CONF.2020/PC.I/WP.24. <http://undocs.org/NPT/CONF.2020/PC.I/WP.24>
93. Steven Pifer, 1 July 2020. Unattainable Conditions for New START Extension? Brookings. <https://www.brookings.edu/blog/order-from-chaos/2020/07/01/unattainable-conditions-for-new-start-extension/>.
94. New START at a Glance. Arms Control Association. Accessed 5 February 2021. <https://www.armscontrol.org/factsheets/NewSTART>
95. Nuclear Disarmament in context: a global governance issue: Working paper submitted by Ireland – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2017. United Nations. NPT/CONF.2020/PC.I/WP.37. <http://undocs.org/NPT/CONF.2020/PC.I/WP.37>
96. Philippine Statement: Delivered by H. E. Maria Zeneida Angara Collinson. 1st Meeting of the Preparatory Commission of the NPT. 2-12 May 2017. https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom17/statements/3May_Philippines.pdf
97. The Republic of Bulgaria General Statement. 2017 Session of the Preparatory Committee for the 2020 Treaty on Non-Proliferation of Nuclear Weapons (NPT) Review Conference. 2 May 2017. https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom17/statements/3May_Bulgaria.pdf
98. Statement by the delegation of the Republic of Kazakhstan at the First Session of the Preparatory Committee for the 2017 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 28 April 2017. https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom17/statements/5May_Kazakhstan.pdf
99. Summary record of the 6th meeting. Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2017. United Nations. NPT/CONF.2020/PC.I/SR.6. p3. <http://undocs.org/NPT/CONF.2020/PC.I/SR.6>
100. Declaración de la delegación cubana bajo el Grupo de Temas 1 'Temas específicos: Desarme Nuclear y garantías de seguridad'. 5 May 2017. https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom17/statements/5May_Cuba.pdf

101. Summary record of the 5th meeting. Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2017. United Nations. NPT/CONF.2020/PC.I/SR.5. p14. <http://undocs.org/NPT/CONF.2020/PC.I/SR.5>
102. Summary record of the 1st meeting – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2017. United Nations. NPT/CONF.2020/PC.I/SR.1. p13. <https://undocs.org/NPT/CONF.2020/PC.I/SR.1>
103. Summary record of the 3rd meeting. Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2017. United Nations. NPT/CONF.2020/PC.I/SR.3. p7. <http://undocs.org/NPT/CONF.2020/PC.I/SR.3>
104. Statement by Ambassador Tebogo Seokolo: Resident Representative of the Republic of South Africa. First Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. May 2017. https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom17/statements/3May_SouthAfrica.pdf
105. Statement by Mr. M. Zaim A. Nasution Minister Counsellor – Permanent Mission of the Republic of Indonesia To the United Nations and Other International Organizations in Vienna On behalf of the Non-Aligned Movement. 2-12 May 2017. https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom17/statements/4May_NAM.pdf
106. Summary record of the 2nd meeting – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2017. United Nations. NPT/CONF.2020/PC.I/SR.2. p12. <http://undocs.org/NPT/CONF.2020/PC.I/SR.2>
107. Ibid. p5.
108. Statement by Representative of Malaysia. Cluster 1: Nuclear Disarmament of the First Session of the Preparatory Committee for the 2020 Review Conference to the Treaty on the Non-proliferation of Nuclear Weapons. 5 may 2017 https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom17/statements/5May_Malaysia.pdf
109. Discurso Delegacion de Nicaragua 1ra Reunion Del (PrepCom) de la Conferencia de Examen del Tratado de no Proliferacion (TNP). 2-12 May 2017. https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom17/statements/5May_Nicaragua.pdf
110. Summary record of the 3rd meeting, 2017. Op. Cit. p10.
111. Summary record of the 5th meeting. Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2017. United Nations. NPT/CONF.2020/PC.I/SR.5. p7. <http://undocs.org/NPT/CONF.2020/PC.I/SR.5>
112. Ibid. p7.
113. Statement by H. E. Ambassador Patricia O'Brien Permanent Representative of Ireland to the United Nations and other international organisations at Geneva, on behalf of the New Agenda Coalition. 2 May 2017. https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom17/statements/2May_NAC.pdf
114. Cluster 1 Statement by Ms Helena Nolan, Director for Disarmament and Non-Proliferation, at the 2017 Preparatory Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). 4 May 2017. https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom17/statements/4May_Ireland.pdf
115. Summary record of the 1st meeting, 2017. Op. Cit. p4.
116. Ibid. p13.
117. Summary record of the 5th meeting, 2017. Op. Cit. p15.
118. Intervencion de Mexico Primer Comite Preparatorio de la X Conferencia de Examen del Tratado Sobre la no Proliferacion de las Armas Nucleares. 4 May 2017. https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom17/statements/4May_Mexico.pdf
119. Chair's Factual Summary (Working Paper) – Preparatory Committee for the 2020 Review Conference of the Parties to The Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/WP.41. <http://undocs.org/NPT/CONF.2020/PC.II/WP.41>
120. Comments on the Chair's Summary: Working Paper Submitted by Brazil – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/WP.40. <http://undocs.org/NPT/CONF.2020/PC.II/WP.40>
121. New Agenda Coalition Comments on Draft Chair's Factual Summary (NPT/CONF.2020/PC.II/CRP.3) – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. <http://undocs.org/NPT/CONF.2020/PC.II/WP.39>
122. Comments on the Chair's Summary: Working Paper Submitted by Brazil. Op. Cit.

123. Implementation of the action plan of the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons: Report submitted by Switzerland. Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/2. <http://undocs.org/NPT/CONF.2020/PC.II/2>
124. Nuclear Testing: Working Paper Submitted by the Group of Non-Aligned States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/WP.18. <http://undocs.org/NPT/CONF.2020/PC.II/WP.18>
125. Security Assurances against the Use or Threat of Use of Nuclear Weapons: Working Paper Submitted by the Group of Non-Aligned States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. NPT/CONF.2020/PC.II/WP.22. <http://undocs.org/NPT/CONF.2020/PC.II/WP.22>
126. Impact and Empowerment: The Role of Gender in the Non-Proliferation Treaty: Working Paper Submitted by Ireland – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/WP.38. <http://undocs.org/NPT/CONF.2020/PC.II/WP.38>
127. Note Verbale dated 20 April 2018 from the Government of Japan to the Conference on Disarmament addressed to the Chair of the Committee: Working Paper Submitted by Japan – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/WP.37. <http://undocs.org/NPT/CONF.2020/PC.II/WP.37>
128. Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons: Reiterating the Urgency of its Implementation: Working Paper Submitted by New Zealand on behalf of the New Agenda Coalition (Brazil, Egypt, Ireland, Mexico, New Zealand and South Africa) – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/WP.13. <http://undocs.org/NPT/CONF.2020/PC.II/WP.13>
129. The role of Nuclear Weapons in Security and Defence Doctrines: Working Paper Submitted by Egypt – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/WP.2. <http://undocs.org/NPT/CONF.2020/PC.II/WP.2>
130. Nuclear Disarmament: Working Paper submitted by the Islamic Republic of Iran – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/WP.27. <http://undocs.org/NPT/CONF.2020/PC.II/WP.27>
131. Summary record of the 18th meeting – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/SR.18. p4. <http://undocs.org/NPT/CONF.2020/PC.II/SR.18>
132. Statement by the Delegation of Thailand by Ms. Morakot Sriswasdi, Deputy Director-General, Department of International Organizations, Ministry of Foreign Affairs. 26 April 2018. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom18/statements/26April_Thailand.pdf
133. Statement Delivered by Ambassador H.E. Mme. Maria Cleofe Natividad Permanent Representative of the Philippines to the UN IAEA and other International Organisations in Vienna. 26 April 2018. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom18/statements/26April_Philippines.pdf
134. Statement by Ambassador Audu Kadiri, Permanent Representative of Nigeria to the United Nations Office and Other International Organizations in Geneva. April 2018. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom18/statements/30April_Nigeria.pdf
135. Summary record of the 18th meeting. Op. Cit. p15.
136. Summary record of the 18th meeting. Op. Cit. p4.

137. Summary record of the 4th meeting – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/SR.4. p2. <http://undocs.org/NPT/CONF.2020/PC.II/SR.4> There are 54 members of the Group of African States: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cape Verde, Cameroon, the Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, the Democratic Republic of the Congo, Djibouti, Egypt, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, the Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia, and Zimbabwe. Of these 54 only South Sudan is not currently a member of the NPT. See: Regional Groups of Member States. Department for General Assembly and Conference Management. Accessed 20 May 2021. <https://www.un.org/dgacm/en/content/regional-groups>.
138. Statement by Delegation of the Republic of Indonesia On behalf of the Non-Aligned Movement At the Second Session of the Preparatory Committee for the 2020 Review Conference of the Treaty on the Non-Proliferation on Nuclear Weapons. 25 April 2018. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom18/statements/25April_Indonesia.pdf
139. Statement by H.E. Ambassador Yurii Klymenko, Permanent Representative of Ukraine to the United Nations Office and other International Organizations in Geneva. 26 April 2018. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom18/statements/26April_Ukraine.pdf
140. Summary record (partial) of the 6th meeting – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/SR.6. p4. <http://undocs.org/NPT/CONF.2020/PC.II/SR.6>
141. Summary record of the 3rd meeting – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/SR.3. p13. <http://undocs.org/NPT/CONF.2020/PC.II/SR.3>
142. Intervencion de Mexico en el Debate Sobre la Comision Principal I del Segundo Comite Preparatorio (Comprep) de la X Conferencia de Examen de 2020 del Tratado Sobre la no Proliferacion de las Armas Nucleares. 25 April 2018. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom18/statements/25April_Mexico.pdf
143. Summary record (partial) of the 6th meeting, 2018 Op. Cit. p8.
144. Summary record of the 1st meeting – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. NPT/CONF.2020/PC.II/SR.1. p13. <https://www.undocs.org/NPT/CONF.2020/PC.II/SR.1> The Nordic countries are Denmark, Finland, Iceland, Norway and Sweden.
145. Timeline of Highlighted U.S. Diplomacy Regarding the INF Treaty Since 2013. United States Department of State. Accessed 19 May 2021. <https://2017-2021.state.gov/timeline-of-highlighted-u-s-diplomacy-regarding-the-inf-treaty-since-2013/>
146. Summary record of the 2nd meeting – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/SR.2. p5. <http://undocs.org/NPT/CONF.2020/PC.II/SR.2>
147. Summary record of the 3rd meeting. Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. NPT/CONF.2020/PC.II/SR.3 p12. <https://undocs.org/NPT/CONF.2020/PC.II/SR.3>
148. Statement by Head of the Delegation of the Islamic Republic of Iran H. E. Ambassador Reza Najafi. 26 April 2018. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom18/statements/26April_Iran.pdf
149. Summary record of the 1st meeting – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/SR.1. p17. <http://undocs.org/NPT/CONF.2020/PC.II/SR.1>
150. Summary record of the 1st meeting, 2018. Op. Cit. p8.
151. Summary record of the 3rd meeting, 2018 Op. Cit. p15.
152. Statement by Ambassador Michael Gaffey, Permanent Representative of Ireland to the United Nations and other International Organisations in Geneva at the 2018 Preparatory Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). 24 April 2018. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom18/statements/24April_Ireland.pdf

153. Summary record (partial) of the 6th meeting, 2018. Op. Cit. p5.
154. Summary record of the 4th meeting, 2018. Op. Cit. p7.
155. Summary record of the 1st meeting, 2018. Op. Cit. p14.
156. Summary record (partial) of the 6th meeting, 2018. Op. Cit. p2.
157. Summary record of the 3rd meeting, 2018. Op. Cit. p6.
158. Summary record (partial) of the 6th meeting, 2018. Op. Cit. p3.
159. Summary record of the 18th meeting. Op. Cit. p10.
160. Permanent Mission of Belgium to the United Nations and Other International Organizations in Geneva. Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). 25 April 2018. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom18/statements/25April_Belgium.pdf
161. Statement by H. E. Ambassador Alaa Youssef, Permanent Representative of Egypt to the United Nations, Geneva. The Second Session of the Preparatory Committee to the 2020 NPT Review Conference. 27 April 2018. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom18/statements/27April_Egypt.pdf
162. Statement by Ambassador Dato' Amran Mohamed Zin Permanent Representative of Malaysia to the United Nations in Geneva. 26 April 2018. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom18/statements/26April_Malaysia.pdf
163. Explanatory Note – Preparatory Committee for the 2020 Review Conference of the Parties to The Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. <http://undocs.org/NPT/CONF.2020/PC.III/WP.49>
164. Substantive Recommendations for Incorporation into the Final Document of the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons: Working Paper Submitted by the Group of Non-Aligned States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.III/WP.11. <http://undocs.org/NPT/CONF.2020/PC.III/WP.11>
165. Nuclear Disarmament: Working Paper Submitted by the Group of Non-Aligned States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.III/WP.12. <http://undocs.org/NPT/CONF.2020/PC.III/WP.12>
166. Elements proposed for consideration at the third session of the Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, with the objective of their inclusion in the final document of the 2020 Review Conference: Working paper submitted by the States parties to the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco) – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.III/WP.32. <http://undocs.org/NPT/CONF.2020/PC.III/WP.32>
167. Security Assurances Against the Use or Threat of Use of Nuclear Weapons: Working Paper Submitted by the Islamic Republic of Iran – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.III/WP.8. <http://undocs.org/NPT/CONF.2020/PC.III/WP.8>
168. Taking Forward Nuclear Disarmament: Working Paper Submitted by Brazil on behalf of the New Agenda Coalition (Brazil, Egypt, Ireland, Mexico, New Zealand and South Africa) – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.III/WP.35. <http://undocs.org/NPT/CONF.2020/PC.III/WP.35>
169. Note verbale dated 23 April 2019 from the Government of Japan addressed to the Chair of the Committee: Working Paper Submitted by Japan – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.III/WP.29 <http://undocs.org/NPT/CONF.2020/PC.III/WP.29>
170. Unlocking Disarmament Diplomacy Through a 'stepping stone' Approach: Working Paper Submitted by Sweden – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.III/WP.33. <http://undocs.org/NPT/CONF.2020/PC.III/WP.33>

171. The Treaty on the Non-Proliferation of Nuclear Weapons as the Cornerstone of the Nuclear Disarmament and Non-Proliferation Regime and Its Relationship to Other Relevant Treaties: Working Paper Submitted by Austria, Costa Rica, Indonesia, Mexico, Nigeria, San Marino and Thailand – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.III/WP.46. <http://undocs.org/NPT/CONF.2020/CPC.III/WP.46>
172. Summary record of the 6th meeting – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.III/SR.6. p12. <http://undocs.org/NPT/CONF.2020/PC.III/SR.6>
173. Summary record of the 4th meeting – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.III/SR.4. p5. <http://undocs.org/NPT/CONF.2020/PC.III/SR.4>
174. Summary record of the 2nd meeting. Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.III/SR.2. p10. <http://undocs.org/NPT/CONF.2020/PC.III/SR.2>
175. Summary record of the 5th meeting. Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.III/SR.5. p3. <http://undocs.org/NPT/CONF.2020/PC.III/SR.5>
176. Summary record of the 6th meeting, 2019 Op. Cit. p6.
177. Summary record of the 2nd meeting, 2019. Op. Cit. p6.
178. Tercera Session del Comité Preparatorio de la Conferencia de Revisión Del Tratado de no Proliferación 2020. 30 April 2019. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom19/statements/30April_CostaRica.pdf
179. Summary record of the 4th meeting, 2019. Op. Cit. p3.
180. Summary record of the 3rd meeting – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.III/SR.3. p4. <http://undocs.org/NPT/CONF.2020/PC.III/SR.3> See note 86 for group membership.
181. Summary record of the 4th meeting, 2019. Op. Cit. p6.
182. Summary record of the 2nd meeting, 2019. Op. Cit. p6. For group membership, see note 150.
183. Statement by the delegation of the Republic of Kazakhstan at the Third Session of the Preparatory Committee for the 2019 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2 May 2019. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom19/statements/2May_Kazakhstan.pdf
184. Belgium: Cluster I Nuclear Disarmament Preparatory Committee for the 2020 NPT Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). 29 April – 10 May 2019. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom19/statements/2May_Belgium.pdf
185. Summary record of the 1st meeting. Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.II/SR.1. p6. <http://undocs.org/NPT/CONF.2020/PC.II/SR.1>
186. Summary record of the 1st meeting, 2019 Op. Cit. p10.
187. Summary record of the 6th meeting, 2019 Op. Cit. p5.
188. Statement to Be Delivered by H.E. Mr. Samuel Moncada, Ambassador. Permanent Representative of the Bolivarian Republic of Venezuela to the United Nations. On Behalf of the Non-Aligned Movement (NAM). During the General Debate of the Third Session of the Preparatory Committee for The 2020 Review Conference of the Treaty on the Non-Proliferation on Nuclear Weapons (NPT). 29 April 2019. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom19/statements/29April_NAM.pdf
189. III PrepCom to 2020 NPT Review Conference Statement by the New Agenda Coalition Thematic Debate on Nuclear Disarmament. 1 May 2019. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom19/statements/1May_NAC.pdf
190. Statement delivered by Ms. Cheryl Cruz Deputy Director, Non-proliferation and Disarmament Division, Global Affairs Canada. 2 May 2019. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom19/statements/2May_Canada.pdf
191. Statement by Mr. Mohd Suhaimi Ahmad Tajuddin Deputy Permanent Representative and Charge D'Affaires A. I. Permanent Mission of Malaysia to the United Nations. 3 May 2019. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom19/statements/3May_Malaysia.pdf
192. Summary record of the 2nd meeting, 2019. Op. Cit. p8.
193. Summary record of the 6th meeting, 2019. Op. Cit. p14.
194. Summary record of the 6th meeting, 2019. Op. Cit. p7.
195. Summary record of the 3rd meeting, 2019. Op. Cit. p10.

196. Summary record of the 4th meeting, 2019. Op. Cit. p15.
197. General Debate Statement by H.E. Ambassador Geraldine Byrne Nason Permanent Representative of Ireland At the 2019 Preparatory Committee Meeting of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). 30 April 2019. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom19/statements/30April_Ireland.pdf
198. General debate Statement by Finland H.E.Ambassador Jarmo Viinanen Head of Delegation. NPT Review Conference Preparatory Committee Session. 29 April 2019. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom19/statements/29April_Finland.pdf
199. Summary record of the 5th meeting, 2019. Op. Cit. p3.
200. Joint Statement on the Treaty on the Prohibition of Nuclear Weapons (TPNW). 2 May 2019. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom19/statements/2May_Austria_Group.pdf The states involved were Austria, Brazil, Costa Rica, Ireland, Indonesia, Mexico, New Zealand, Nigeria and South Africa.
201. Summary record of the 2nd meeting, 2019. Op. Cit. p9.
202. Summary record of the 6th meeting, 2019. Op. Cit. p8.
203. Tercer Comite Preparatorio de la Conferencia de las Partes Encargada del Examen Tratado de no Proliferacion Nuclear 2020. 2 May 2019. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom19/statements/2May_Peru.pdf
204. Intervencion Inaugural de Chile Comite Preparatorio del Tratado de no Proliferacion Nuclear. 30 April 2019. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom19/statements/30April_Chile.pdf
205. Summary record of the 4th meeting, 2019. Op. Cit. p4-5.
206. Statement Delivered During the Thematic Debate of the Third preparatory Committee of the Treaty on the Non-proliferation of Nuclear Weapons. 2 May 2019. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom19/statements/2May_SouthAfrica.pdf
207. Summary record of the 3rd meeting, 2019. Op. Cit. p11.
208. Ibid. p6.
209. Borrador de Intervencion: De la Conferencia de las Partes Encargada del Examen del Tratado sobre la No Proliferacion de las Armas Nucleares. 2 May 2019. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom19/statements/2May_EquatorialGuinea.pdf
210. Summary record of the 3rd meeting, 2019. Op. Cit. p9.
211. Summary record of the 3rd meeting, 2019. Op. Cit. P7.
212. Summary record of the 6th meeting, 2019. Op. Cit. p9.
213. Summary record of the 3rd meeting, 2019. Op. Cit. p12.
214. Taking Forward Multilateral Nuclear Disarmament Negotiations – Resolution 70/33. 2015. United Nations General Assembly. <https://undocs.org/en/A/RES/70/33>
215. United Nations Conference to Negotiate a Legally Binding Instrument to Prohibit Nuclear Weapons, Leading Towards Total Elimination. United Nations. Accessed 1 June 2021. <https://www.un.org/disarmament/tpnw/>.
216. Elements for a treaty banning nuclear weapons. 2016. United Nations General Assembly. <https://undocs.org/A/AC.286/WP.14>
217. Empirical Analysis of pathways for taking forward multilateral nuclear disarmament negotiations, United Nations General Assembly, 2016. A/AC.286/WP.8 <https://undocs.org/A/AC.286/WP.8>
218. De-alerting, United Nations General Assembly, 2016. <https://undocs.org/A/AC.286/WP.18>
219. Nuclear Disarmament in context – a global governance issue. 2016. United Nations. A/AC.286/WP.35 <https://undocs.org/A/AC.286/WP.35>
220. Views and Recommendations with Regard to Issues Related to Taking Forward Multilateral Nuclear Disarmament Negotiations. 2016. United Nations General Assembly. A/AC.286/WP.7 <https://undocs.org/A/AC.286/WP.7>
221. Mia Granderberger, and Ray Acheson. 'Transparency, trust and the irrationality of nuclear deterrence: day four of the OEWG' OEWG Report Vol. 2, No. 5. 25 February 2016. Reaching Critical Will. <http://www.reachingcriticalwill.org/disarmament-fora/oweg/2016/february/reports/10761-oweg-report-vol-2-no-5>.
222. Mia Granderberger. 'News in Brief', OEWG Report Vol. 2, No. 11. 10 May 2016. Reaching Critical Will. <https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/OEWG/2016/reports/OEWG2.11.pdf>
223. Mia Granderberger, 'News in Brief', OEWG Report Vol. 2, No. 12. 11 May 2016. Reaching Critical Will. <https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/OEWG/2016/reports/OEWG2.12.pdf>
224. Treaty Adopted on 7 July. United Nations. Accessed 28 May 2021. <https://www.un.org/disarmament/tpnw/>
225. Possible Elements of a United Nations Nuclear-Weapon-Ban Treaty. 2017. United Nations. A/CONF.229/2017/WP.4 <https://undocs.org/A/CONF.229/2017/WP.4>
226. Allison Pytlak, 'News in Brief', Nuclear Ban Daily Vol, 1, No. 3. March 29, 2017. Reaching Critical Will. <https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/nuclear-weapon-ban/reports/NBD1.3.pdf>
227. Tamara L Patton and Allison Pytlak, 'News in Brief', Nuclear Ban Daily Vol. 2, No. 2. June 16, 2017. Reaching Critical Will. <https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/nuclear-weapon-ban/reports/NBD2.2.pdf>

228. Tamara I Patton and Allison Pytlak, 'News in Brief', Nuclear Ban Daily Vol. 2 No. 3. June 19, 2017. Reaching Critical Will. <https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/nuclear-weapon-ban/reports/NBD2.3.pdf>
229. Treaty on the Prohibition of Nuclear Weapons. United Nations General Assembly, 7 July 2017. A/CONF.229/2017/8. <https://undocs.org/A/CONF.229/2017/8>.
230. Ambassador Robert Wood 2017 NPT PrepCom Cluster One Statement on Disarmament. 4 May 2017. https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom17/statements/5May_USA.pdf
231. Summary record of the 1st meeting. Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/SR.1. p11. <https://undocs.org/NPT/CONF.2020/PC.II/SR.1>
232. Opening Statement by the United States of America, Second Session of the Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 23 April 2018. https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom18/statements/23April_US.pdf
233. Creating the Conditions for Nuclear Disarmament (CCND): Working paper submitted by the United States of America – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/WP.30. <https://undocs.org/NPT/CONF.2020/PC.II/WP.30>
234. 2018 Preparatory Committee for the 2020 Review Conference of the Treaty on Non-Proliferation of Nuclear Weapons. General Statement by the United Kingdom. 24 May 2018 https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom18/statements/24April_UK.pdf
235. Nuclear issues: Working paper submitted by China – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2018. United Nations. NPT/CONF.2020/PC.II/WP.32. p3. <https://undocs.org/NPT/CONF.2020/PC.II/WP.32>
236. Nuclear Disarmament – Working Paper Submitted by the Russian Federation. 2019. Preparatory Committee for the 2020 Review Conference of the Parties to The Treaty on the Non-Proliferation of Nuclear Weapons. NPT/CONF.2020/PC.III/WP.6 <https://undocs.org/NPT/CONF.2020/PC.III/WP.6>
237. Implementing the Treaty on the Non-Proliferation of Nuclear Weapons: Disarmament: Working paper submitted by the United States of America – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations NPT/CONF.2015/WP.44. <http://undocs.org/NPT/CONF.2015/WP.44>
238. Actions 5, 20 and 21 of the Action Plan of the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons: Report Submitted by the United States of America – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/38. P7. <http://www.undocs.org/en/NPT/CONF.2015/38>; Main Committee I: Summary record of the 1st meeting. 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/MC.I/SR.1. p4. <http://www.undocs.org/en/NPT/CONF.2015/MC.I/SR.1>
239. Implementation of the Treaty on the Non-Proliferation of Nuclear Weapons in the People's Republic of China – 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2015. United Nations. NPT/CONF.2015/32. <http://undocs.org/NPT/CONF.2015/32>
240. Implementation of the Treaty on the Non-Proliferation of Nuclear Weapons in the People's Republic of China – Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. 2019. United Nations. NPT/CONF.2020/PC.III/8. <https://undocs.org/NPT/CONF.2020/PC.III/8>
241. The United Kingdom of Great Britain and Northern Ireland. Statement on Pillar I. 2017 Preparatory Committee for the 2020 Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons. https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom17/statements/4May_UK.pdf
242. Figures in the briefing findings discussion include Palestine and the Holy See within the total number of states where applicable. Although both entities have non-member observer status at the UN General Assembly, both are members of the NPT and other international fora. The figure for UN member states does not include Palestine and the Holy See.
243. These were Ireland, Austria, Brazil, Mexico, Nigeria, and South Africa. See: Ciarán Cannon, 2019. Statement by Minister of State for the Diaspora and International Development. <https://www.dfa.ie/our-role-policies/international-priorities/peace-and-security/disarmament/prohibition-of-nuclear-weapons-bill-2019-statement/> All these states have raised concerns about modernisation in at least one NPT meeting.

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