57th ISODARCO Course "THE PAST AND FUTURE OF ARMS CONTROL, NONPROLIFERATION AND DISARMAMENT"

Andalo (Trento) – Italy 6-13 January 2019

Session 6 – Thursday, 10 January 2019 Linking Proliferation and Arms Control: Understanding Regional Nuclear Orders SERGIO DUARTE



ARMS CONTROL vs. DISARMAMENT

UN Charter: no specific mention to "disarmament" nor to "arms control" – No mention to nuclear weapons or weapons of mass destruction.

Purpose: Art. 1: "To maintain international peace and security with the least diversion for armaments of the world's human and economic resources."

"To prevent and remove threats to peace; suppress aggression"

Art. 2.3: "Refrain from threat or use of force".

Art. 47: "Regulation of armaments and possible disarmament"

Art. 26: UNSC to submit plans for regulation of armaments

Art. 51: "Right of individual or collective self-defense against armed attack."

- Many international treaties and documents mention "general and complete disarmament (GCD) under effective international control".
- Hague Conferences 1898 and 1904: first international Conventions.
- Arms Control: reduction of armaments to "the lowest level consistent with national security" (Woodrow Wilson, 2018).
- League of Nations: Members accept working toward a treaty on disarmament

ARMS CONTROL vs DISARMAMENT (continued)

UN General Assembly Resolution no. 1 (1946): Established a Commission "to eliminate nuclear weapons and other weapons of mass destructions" – no progress.

- From comprehensive approach to "partial and "step by step" measures – "arms control" and "non-proliferation" gradually acquire importance over "disarmament" - No disarmament multilateral treaty except Chemical and Biological weapons.

Main agreements on weapons of mass destruction: Non-proliferation Treaty (NPT), Comprehensive Test-ban Treaty (CTBT), Biological Weapons Convention (BWC), Chemical Weapons Convention (CWC), Nuclear Weapon Free Zones, Treaty on the Prohibition of Nuclear Weapons (TPNW).

Conventional Weapons: Mostly confidence building measures, but also the Arms Trade Treaty (ATT).

UN Secretary General's efforts:

Hammarskjold "hardy perennial" Ban Ki-Moon: 5-point plan (2008)

Guterres: Disarmament Agenda (2018)

THE REGIONAL DIMENSION

- UN Group of governmental Experts (1981):
- "Progress in regional disarmament, equitable solution of problems, just settlement of disputes, confidence building measures could create conditions that would promote disarmament and relaxation of tensions at the global level."
- UN Disarmament Commission adopted guidelines and recommendations for regional approaches to disarmament:
- "Regional and global approaches complement each other and should be pursued simultaneously."
- UN General Assembly Resolution 65/45: "support and promote regional disarmament efforts and initiatives".
- Three Regional Centers created: Latin America and Caribbean (Lima), Asia and Pacific (Kathmandu) and Africa (Lomé)
- At each Session the First Committee of the General Assembly discusses and adopts Secretary General's reports on the work of the Centers.

NUCLEAR WEAPON FREE ZONES at the UN

- UN General Assembly Resolution 3472 B (XXX Session 1975)
- Final document of First Special Session of the General Assembly on Disarmament (SSOD I)
- 1. Initiative for creation of NWFZs exclusively by States within the zone.
- 2. Instrument establishing zone must be necessarily an international treaty or convention.
- 3. NWFZs must recognize complete and total absence of nuclear weapons in the area of application.
- 4. NWFZs must establish a system of verification and control of nuclear facilities.
- 5. NWFZs must be recognized by the UN General Asembly.
- 6. The area of application of NWFZs must be clearly specified.
- There should be commitments and participation of the nuclear weapon States.

REGIONAL EFFORTS

- **Europe: Treaty on Conventional Forces in Europe (CFE) (1990)**
 - Organization For Security and Cooperation in Europe (OSCE)
 - -NATO and WARSAW PACT: reductions, CBMs and SBMs)
- **Latin America: TREATY ON THE PROHIBITION OF NUCLEAR WEAPONS (Tlatelolco)**
 - Convention on Illicit Trafficking (1997)
 - Convention on Transparency (1999)
- Asia: ASEAN Regional Forum Confidence building measures
- Shanghai Cooperation Organization (SCO) to promote mutual confidence and trust to strengthen peace and security.

Africa: Programme of Action on Small Arms & Light Weapons (2001)

UN Security Council Resolution 1631 (2005) - mandates regional instruments enabling States to identify and trace illegal SALWs.

BILATERAL: United States-Russian Federation (USSR)

Intermediate Nuclear Weapons Treaty (INF) 1987: banned missiles from 500 to 5.000 km. Strategic Offensive Reductions Treaty (SORT) – Strategic Arms Limitation Treaties I and II ((SALT I and II)

NEW START (LIMITATIONS ON TOTAL WARHEADS AND DELIVERY VEHICLES) Expires 2021.

Proliferation

U.S. Trinity test (July 16 1945)
First Soviet nuclear test (Semipalatinsk - November 28 1949)





Nuclear arms race: proliferation continues



UNITED KINGDOM (1952)



CHINA (1964)



FRANCE (1960)

CASTLE BRAVO TEST (USA) – Marshall Islands, 1954 – 15 Mt TSAR BOMBA TEST (USSR) – Novaya Zemlya, 1961 – 50 (100) Mt





FURTHER PROLIFERATION

Israel (1973?) - India (1974) - Pakistan (1998) - DPRK (2006)









YIELD AND MUSHROOM CLOUD COMPARISON

(Nuclear bombs from use to tests)

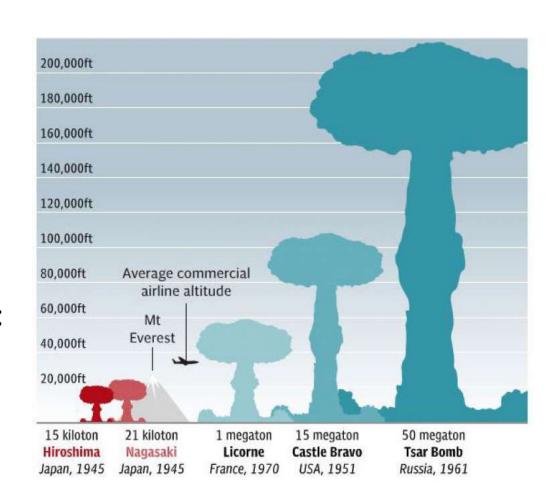
Hiroshima: 15 kt

Nagasaki: 21 kt

Licorne: 1Mt

Castle Bravo: 15 Mt

Tsar Bomba: 50 (100)Mt



WEAPONS OF MASS DESTRUCTION International instruments

- Bacteriological (biological) Prohibition: Biological Weapons Convention, 1972 – Entry into force 1975
- Chemical Prohibition: Chemical Weapons Convention, 1996 – EIF?
- Nuclear Non-proliferationTreaty (1970) Recognizes 5 nuclear weapon States – Prohibits proliferation – Art VI on disarmament
- Treaty on the Prohibition of Nucelar Weapons (2017) Prohibition leading to abolition

UNITED NATIONS DISARMAMENT ORGANS

Ten-Nation Disarmament Committee (1960)
Eighteen - Nation Disarmament Commitee (ENDC)
Conference on Disarmament (CD) - 1978

I SSOD – Final Document

Mechanism: Conference on Disarmament
I Committee of the General Assembly
General Assembly Disarmament Commission
Advisory Board on Disarmament Matters



Main Results: Non-proliferation Treaty; Biological Weapons Convention; Compreehensive Test Ban Treaty; Chemical Weapons Convention; Nuclear Weapon Free Zones; Treaty on the Prohibition of Nuclear Weapons.

(No nuclear weapon has been ever destroyed or dismantled by multilateral agreement)

current Status

NUCLEAR WEAPONS IN THE WORLD

Country	Strategic operational	Non-strategic operational	l n	Stoc ked	TOTAL DEL ARSENAL
Russia	1.780	0	2.720	4.50 0	7.500
United States	1.900	180	2.620	4.70 0	7.200
France	290	n.a.	10	300	300
China	0	?	260	260	260
United Kingdom	150	n.a	65	215	215
Israel	0	n.a	80	80	80
Pakistan	0	n.a.	120-13 0	120- 130	120-130
India	0	n.a.	110-12 0	110- 120	110-120
DPRK	0	n.a.	<10	<10	<10

BILATERAL TREATIES AND UNILATERAL

INITIATIVES

- BILATERAL:
- Interim Agreement on Offensive Arms (SALT I) 1972: froze ICBMs y SLBMs
- Anti-Ballistic Missile Treaty (ABM) 1972
- <u>Strategic Arms Limitation Treaty</u> (SALT II) 1979: limited number of ICBM launchers,
 SLBMs heavy bombers and MIRVs.
- <u>Intermediate-Range Nuclear Forces Treaty</u> (INF) 1987: prohibited short and mediumrange systems
- Strategic Arms Reduction Treaty (START I)—signed 1991, ratified 1994: Limited US and USSR to 6.000 warheadss on 1.600 ballistic missiles and bombers
- <u>Strategic Arms Reduction Treaty II</u> (START II)— signed 1993, never entered into force.
- <u>Strategic Offensive Reductions Treaty</u> (SORT or Moscow Treaty)—signed 2002.
- New START Treaty
 Superseded previous agreements; signed 2010, entry into force 2011: reduction of deployed warheads. Will remain in force up to 2021.
- Recent proposals refused: to extend New START; to meet on alleged violations of INF. Mutual accusations; resolution defeated by 46 to 43, 78 abstentions.
- UNILATERAL:
- Moratoria on nuclear tests
- Unilateral limitations and caps (United Kingdom an France)
- Close of fissile material production (France)

VERIFICATION INSTRUMENTS

I – NUCLEAR

NPT States – a) Art. III – NNWS to negotiate safeguards agreements with IAEA "to prevent diversion" of source or special fissionable material from peaceful uses to nuclear weapons.

- Comprehensive (full-scope safeguards) apply to material in all peaceful nuclear activities. (1995 NPT Review and Extension Conference). 174 States
- b) ADDITIONAL PROTOCOL Voluntary agreement additional to a safeguards agreement between a State and IAEA applies to all installations (nuclear or otherwise) and provides assurance of absence of undeclared material and activities . (128 States and EURATOM)

5 NWS concluded "voluntary offer" agreements specifying the facilities to which safeguards can be applied.

NON NPT States – India, Israel and Pakistan concluded "item-specific" agreements with IAEA

BILATERAL TREATIES: Specific provisions

CONTROL REGIMES (Like-minded States) - Missile Technology Control Regime (MTCR) Zangger Committee (lists nuclear items); Nuclear Suppliers Group (NSG) (nuclear export controls); Wassenaar (dual use technologies); Australia Group (chemical export control).

Ad hoc arrangements: Brazil-Argentina (ABACC)

II - OTHER WEAPONS: Provisions under each treaty: Chemical Weapons: OPCW provides verification; can now attribute responsibility for episodes of alleged use.

NUCLEAR WEAPON FREE ZONES

First proposal (1957)

Adam Rapacki – (Poland)

Central Europe as Nuclear Weapon Free Zone

PDR of Poland, PDR of Germany and FR of Germany

GA Resolution 1652 – (1961) – (called upon States to refrain from testing, storing or transporting nuclear weapons in Africa)

Melo Franco proposal - XVI UN General Assembly (1962)

Cuban Missile Crisis (1962)

CONCEPT OF NUCLEAR WEAPON FREE ZONE

- UN General Assembly Resolution 3472 B (XXX Session 1975)
- I Special Session on Disarmament (1978)
- 1. Initiative for creation of NWFZs exclusive by States within the zone.
- 2. Instrument establishing zone must be necessarily an international treaty or convention.
- 3. NWFZs recognize complete and total absence of nuclear weapons in tghe area of application.
- 4. NWFZs must establish a system of verification and control of nuclear facilities.
- 5. NWFZs must be recognized by the UN General Asembly.
- 6. The area of application of NWFZs must be clearly specified. In addition: There should be commitments and participation of nuclear weapon States.

NUCLEAR WEAPON FREE ZONES

Mapa - zonas libres de armas nucleares



Treaty of Tlatelolco

- Common origins Iberian peninsula Bolivar OAS
- Legal tradition
- Latin American statements at UNGA (Resolution Brazil, Bolivia, Chile, Ecuador - 1963)
- Initiatives at UNGA and ENDC
- (Joint declaration 29-4-63 (Brazil, Bolivia, Chile, Ecuador, Mexico)
- Decision to start negotiations
- Preliminary meeting REUPREDAL 23 a 27-11 -64
- Negotiation (COPREDAL) March 65 to February 67







Treaty of Tlatelolco

Prohibits development, acquisition, testing and deployment of nuclear weapons in Latin America and the Caribbean. Preamble with objective, operative articles and control system to verify compliance, plus two Protocols signed by extraterritorial States, including the 5 nuclear weapon States recognized by the NPT.

THE TREATY AT A GLANCE



STRUCTURE OF THE TREATY

- Structure
- Preamble means to achieve disarmament; unacceptable effects of N weapons;
- Objectives military denuclearization; contribution to peace & security;
- Obligations use exclusively for peaceful purposes; prohibit test, use, manufacture, acquisition, receipt, storage, deployment;
- Area of application: "territory" includes territorial sea, air space;
- Control system agreement w/IAEA; report to OPANAL; special inspections;
- Signature and ratification: open to all Latin American & Caribbean States
- Entry into force: possibility to waive conditions
- Protocols I y II States with jurisdiction; 5 NPT nuclear weapon States
- Particularities:
- (pioneer instrument; originally permitted explosions; contains definition of nuclear weapon; no reservations admitted; unlimited duration)
- OPANAL Organism for the Prohibition of Nuclear Weapons in Latin America structure and operation

PROTOCOLS I AND II

 PROTOCOL I – EXTERNAL COUNTRIES THAT POSSESS TERRITORIES IN THE REGION (France, Holland, United Kingdom, United States)

Commit to apply, in the teritories *de jure* or *de facto* under their international responsibility, within the limits of the geographic zone established by the Treaty, the statute of denuclearization for weapons purposes defined in Articles 1, 3, 5 and 13 of the Treaty.

 PROTOCOL II – FIVE NPT NUCLEAR WEAPON STATES (China, France, Russia, United Kingdom, United States)

Commmit not to contribute in any form to the practice, in the territories to which the Treaty applies, of acts that involve a violation of the obligations mentioned in Article I of the Treaty. Additionally commit not to use or threaten to use nuclear weapons against the Contracting Parties of the Treaty. (OBSERVATIONS AND "RESERVATIONS" – demarches to revise)

Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC)

 Agreement on the Exclusive Peaceful Use of Nuclear Energy (1991): bilateral agreement between Brazil and Argentina created the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials Nucleares (ABACC).

 This made possible the signature and ratification of the Treaty of Tlatelolco and the NPT by both countries.

Other nuclear weapon free zones

- Existing zones:
- South Pacific (Rarotonga)
- Southeast Asia (Bancoc)
- Africa (Pelindaba)
- Central Asia (Semipalatinsk)
- Mongolia (single State zone)
- Signatory Conferences 2005, 2010, 2015
- Other areas free of nuclear wepons:
- Antarctica, Outer Space, Seabed and subsoil
- Future zones prospects
- Middle East Arctic Northeast Asia (?)

Treaty of Rarotonga



TREATY OF RAROTONGA (South Pacific) Entry into force: 11 December 1986

13 members - Australia, Cook Islands, Fiji, Kiribati, Nauru, New Zealand, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu.

Depositary: Pacific Islands Forum

Protocol I (USA and UK): apply prohibition to territories under their jurisdiction Protocol II (5 NPT NWS): not to use nuclear explosives against Parties to the Treaty Protocol III (5 NPT NWS): not to carry out nuclear explosive tests within the zone.

<u>Characteristics</u>: not to produce or obtain control on nuclear explosive devices; not to provide fissionable material except under NPT safeguards (art. III.1); each Party to decide on permission of visits by ships or planes in territorial waters; prohibition of tests in the territories; prohibition of dumping radioactive waste; control system by information and consultation –

South Pacific Economic Cooperation Office: establishes Consultative Committee; Treaty does not admit reservations; into force indefinitely; violation by any Party results in right of other Parties to withdraw.

Treaty of Bangkok (Southeast Asia)



TREATY OF BANGKOK (Southeast Asia) Entry into force: 1997

<u>10 members</u>: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam

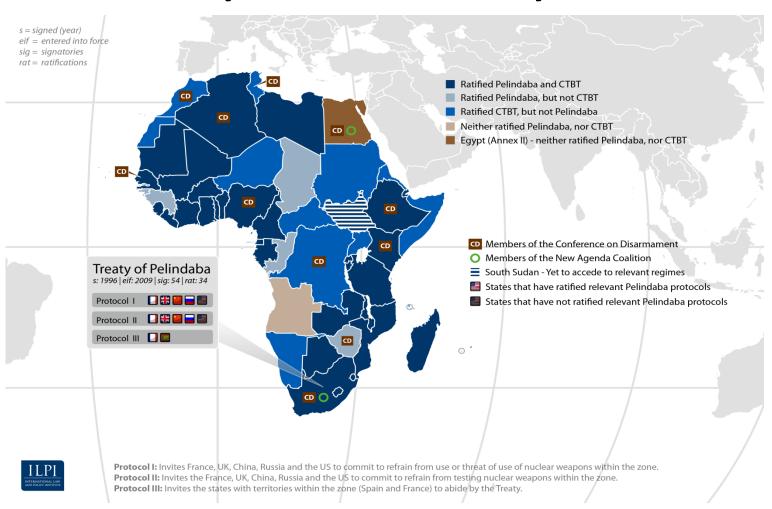
Depositary: Government of Thailand

Protocol I (5 NPT NWS): respect the Treaty; not to contribute to violations; not to use or threaten to use nuclear weapons against any of the Parties or within the Zone Characteristics: applicable to territory, continental shelf and exclusive economic zone; prohibits production, acquisition, control, nuclear explosive tests; no dumping of radioactive waste in sea and atmosphere; exclusive peaceful use of materials and facilities; not to provide fissionable material unless under NPT safeguards (art. III.1); conclude agreement with IAEA within 18 months; each Party to decide about visits of foreign ships and planes in territorial waters; no reservations; in force indefinitely; violation by any Party results in right of other Parties to withdraw from the Treaty.

<u>Non-permanent organs</u>: Commission for Southeast Asia Nuclear Weapon Free Zone to assure implementation: (Executive Committee); Control System: IAEA safeguards, exchange of information, consultation (clarification requests, data collecting missions).

NONE OF NPT 5 NUCLEAR RATIFIED PROTOCOL I -

Treaty of Pelindaba (Africa) Entry into force – 15 July 2009



TREATY OF PELINDABA (Africa)

Entry into force: 2009

- 51 members entire African continent plus islands.
- Depositary: African Union
- **Protocol I (5 NPT NWS):** not to use or threaten to use nuclear explosions; not to contribute to para violations
- Protocol II (5 NPT NWS): not to carry out or encourage tests within the Zone.
- Protocol III (France & Spain): apply Treaty provisions to territories under their responsibility.
- Characteristics: prohibitions: not to obtain nuclear explosives or control over them; not to carry out tests; declare capacity to manufacture; destroy or dismantle devices existing prior to the Treaty; not to dump waste within the Zone; exclusively peaceful uses; IAEA safeguards (Art. III NPT); prohibition of armed attack against nuclear facilities; African Commission on Nuclear Energy (annual meetings) to ensure implementation and solution of disputes; unlimited duration.

TREATY OF CENTRAL ASIA (Semipalatinsk)



TREATY OF CENTRAL ASIA (Semipalatinsk)

Entry into force: 21 March 2009

5 members: Kyrgyzstan, Uzbekistan, Turkmenistan, Tajikistan, Kazakhstan.

Depositary: Government of Kyrgyzstan

Protocol: (5 NPT NWS) – not to use or threaten to use nuclear weapons or explosive devices; not to contribute to violations.

Characteristics: applies to territory and airspace; obligations: not to acquire or obtain control over nuclear arms or explosives nucleares; exclusively peaceful use; conclude agreement with IAEA (art. III NPT) and an Additional Protocol; not to provide fissionable materials to States that have not concluded an Additional Protocol; to maintain physical protection standards (CPPMN); solution of controversies through negotiation; does not affect obligations assumed under previous treaties; no reservations.

Mongolia



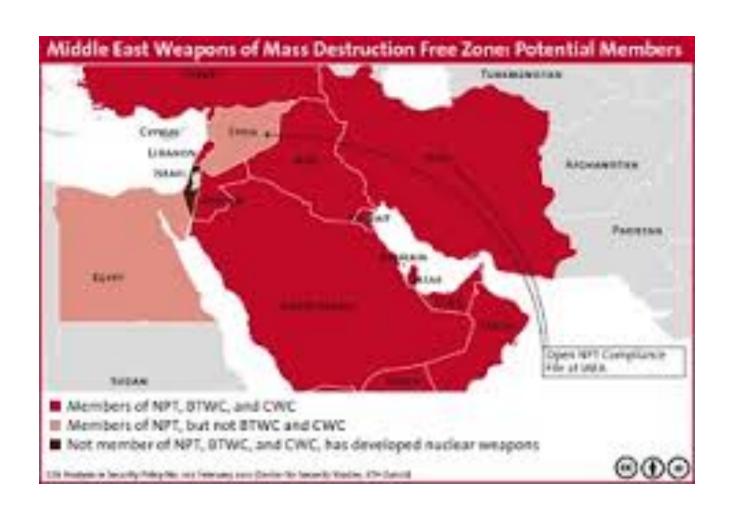
MONGOLIA

Entry into force: 2000

- Declaration of intention 1992
- Self Initiative UNGA Resolution 3261F (1974) recognizes individual NWFZs
- Recognition by UNGA: Resolution 53/77D)
- Political declaration (5 NPT NWS) 2012 formal recognition of Mongolia's nuclear weapon free statu; commit not to use nuclear weapons against Mongolia and respect its satatus..
- Characteristics: Apply to territory airspace, waters and subsoil; prohibitions apply to foreign States and persons; prohibits transportation of nuclear weapons and components, including radioactive waste and material for nuclear weapon production; prohibits stationing and dumping of radioactive waste; verification in cooperation with international agencies; peaceful solution of suspected violations through request of information and recourse to IAEA or international tribunal, including arbitration..

MIDDLE EAST

Resolution: 1995 NPT Review and Extension Conference



ZONE FREE OF WEAPONS OF MASS DESTRUCTION IN THE MIDDLE EAST

Initial proposal: Iran, Egypt, 1974 (adopted without a vote)

Resolution of NPT Review and Extension Conference 1995:

- Establishment of an effectively verifiable zone free of weapons of mass destruction in the Middle East" (Co-sponsored by the 3 Depositaries of NPT)

General support but very little progress

NPT Review Conference 2010:

- Reaffirmed decision to work toward Middle East WMD Frezz Zonbe

NPT Review Conference 2010:

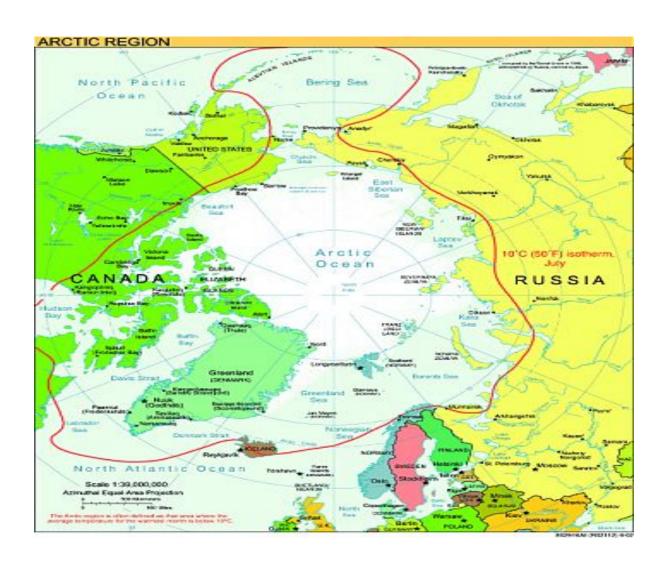
- Commitment to work for Conference to take place no later than 2012 - UN SG designates Facilitator (Jaakko Laajava - Finland - five consultations until 2014.

Proposal NPT Review Conference 2015:

- UNSG to convene Conference on March 1 2016 and name Special Representative

United States, United Kingdom and Canada did not accept – NPT RevConf failed. Issue likely to reappear at NPT Review Conference.

Arctic



ZONE FREE OF NUCLEAR WEAPONS IN THE ARCTIC REGION

- Environmental and security concerns
- Circumpolar States: (Canada, Denmark, United States, Finland, Iceland, Norway, Sweden, Russia)
- All are Parties of NPT, CCW and signed CTBT
- Two possess nuclear weapons
- Four are members of NATO
- Seabed Treaty prohibits nuclear weapons on Arctic Ocean seabed and its subsoil.

NORTHEAST ASIAN STATES



NORTHEAST ASIA NWFZ - PROPOSALS

- 12 PROPOSALS TO DATE SINCE 1995
- Difficulties:
- 2 nuclear weapon States within zone;
- United States influence "extended deterrence" to
 Japan
- Rise of China as pacific power;
- North Korea as possessor of nuclear weapons
- Lack of confidence historical antecedents

TREATY ON THE PROHIBITION OF NUCLEAR WEAPONS (2017)

- Antecedents: Malaysia-Costa Rica proposal (2007); Ban Ki-Moon 2008; NPT Review Conference 2010
- Role of NGOs
- Conferences Oslo (2012), Nayarit and Vienna (2013)
 - Conclusions Vienna: catastrophic and lasting consequences; not limited to national borders; would affect a several generations; no sufficient means to deal with effecthay medios suficientes pra asistencia.
- Creation of Open-Ended Group (2016)
 - **UNGA** agrees on negotiating mandate (2017) Conference
 - Treaty July 2017 Text: Preamble Prohibitions Relations with other instruments adherence signature ratification
 - 60 ratifications (19 so far) 50 needed for entry into force

PROHIBITION TREATY

- First legally binding instrument on prohibition leading to elimination of all nuclear weapons.
- Adopted by 122 States July 2017 (Holland against Singapore abstained)
- <u>Objective</u>: Stigmatize and reject nuclear weapons; lead to elimination. Establish positive norm of International law
- Preamble: humanitarian motivation
- Provisions for non-possessors:
 - accept prohibition to develop, test, product, stockpile, deploy, transfer, use and threat of use; obligation to declare existence in territory; keep existing safeguards.
- Provisions for possessors:
- May eliminate weapons before or after adhesion. <u>Before:</u> accept verification. <u>After:</u> accept to negotiate elimination plan with timelines.
- Parties established "International Competent Authority Internacional"
- Assistance to victims of tests (hibakusha)
- Explicit militant opposition of nuclear weapon States and allies

SIGNATURE CEREMONY – UNITED NATIONS 20 SEPTEMBER 2017



HUMANKIND FACES CHOICES

Current panorama:

- growing mistrust and confrontation reminiscent of Cold War;
- lack of confidence in existing arrangements;
- renewed armaments race
- some regional rivalries exacerbated;
- new technologies

Ways forward:

- use multilateral forums (IV Special Session, High Level Meeting);
- renew faith in negotiated agreements;
- revive bilateral negotiations;
- increase bilateral informal contacts (Track 2)
- respect commitments (pacta sunt servanda)

PROSPECTS FOR THE FUTURE

Do we have to be pessimistic?



DISARMAMENT EDUCATION

Member States encouraged to accord importance to disarmament and nonproliferation education and training in their programs and policies.

UN to prepare, adapt and disseminate educational material on disarmament and non-proliferation.

UN to translate its disarmament and non-proliferation educational material and publications into all United Nations official and other languages.

UN to increase capacities to disseminate disarmament and non-proliferation educationrelated materials

ODA to gather information about the involvement of regional and intergovernmental organizations in disarmament and nonproliferation education.

Religious leaders and institutions encouraged to promote a culture of peace and disarmament.

ODA encouraged to organize a program of training for educators and trainers in disarmament and nonproliferation.

International organizations, regional organizations and representatives of civil society, where appropriate, are encouraged to include disarmament education and training in their programs in post-conflict situations.