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**Working Group 3: Regional Working Group - Europe (20 person maximum)**

- a. Tactical nuclear weapons
- b. Nuclear doctrines/nuclear sharing
- c. Missile defense
- d. Impact of Ukraine/Crimea crisis on disarmament prospects
- e. Regional security and disarmament
- f. Confidence building measures
- g. Forums for regional dialogue

**Proffered Paper**

**PREVENTION OF ARMS PROLIFERATION: A SHORT VADEMECUM**

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Being in Nagasaki in the 70th anniversary of its devastation - and the one of Hiroshima, by the first and only ever atomic bombs to be deployed in warfare, is a more than appropriate occasion for reiterating a plaint against weapons proliferation. The horror of the atomic bombings elicited by the hibakusha (the “explosion-affected people”, or survivors of the atom bomb) care more about campaigning for the global eradication of nuclear weapons, much more powerful nowadays than when “Little Boy” and “Fat Man” were used in 1945 (see fig. 1).
This clearly explains how timely was the “Russell-Einstein Manifesto”, written at the peak of the Cold War, warning against the dangers of hydrogen bomb and unlimited nuclear armament. On July 9th, 2015 Egon Bahr, "the architect of German Ost-Politik", who has just passed away two months ago, in the night of August 20 of this year, said in Berlin that this Manifesto “marks the revolution, that scientists must warn so that politics must answer to that.” And these are the undeniable merits of Pugwash, because –we keep his words- "scientists under the term Pugwash analyzed the threats to our modern world in personal responsibility and exert a moderate influence (...) creating confidence and slowing negative developments."

As we move into different kinds of confrontation/containment after the Cold War and now in the beginning of the 21st century, the need of preventing nuclear armament, which control was a clear product of the Cold War, has been widen to Weapons of Mass Destruction (WMD). Even if there is no generic definition of WMD as such, but only their enumeration in UN documents, it commonly includes what is known as BCRN: Biological, Chemical, Radiological and Nuclear Weapons in a rather confused way, which does not allow important generalizations. Which are the main motivations for acquiring WMD?

Strengthen national prestige or international status, deter a potential regional enemy with conventional superiority or an external power or coalition from intervening in a conflict, or preserve a regime, blackmail enemies to reach goals, or use of them in case of a conflict (chemical weapons).

This concept is not exempt of limitations. First, it puts together very different categories (in lethality, feasibility of defence, potential uses), trivializing nuclear weapons of lower threshold, as the ‘dirty’ weapons, which may be made in a garage. Second, they are treated differently: Even if Biological and Chemical Weapons are always banned, Nuclear Weapons –of higher lethality-: are legal for the 5 “official” Nuclear-Weapon States (see fig. 2). And, third, in practice, WMD are less deadly than the casualties produced by conventional arms, legal for all state actors. Since 1945, small arms & light weapons caused 300,000 direct deaths per year & landmines 20,000 dead per year. And just in 2013, 18,000 people were killed in terrorist acts by conventional means (Source: 2014 Global Terrorism Index). As very appropriately asserted the former UN Secretary-General Kofi Annan (2006), “the death_toll_from_small_arms dwarfs that of all other weapons systems – and in most years greatly exceeds the toll of the atomic bombs that devastated Hiroshima and Nagasaki. In terms of the carnage they cause, small arms, indeed, could well be described as ‘weapons of mass destruction’

“.
Kofi Annan's assertion backs the main point of the present lines: that the control of Conventional Armaments has to be considered too. Obviously broaden to the new technologies which may lead to the development of weapons unknown in old times, such as cyberwarfare, drones (remote-controlled), robots (automated/autonomous), precision-guided long-distance and other ‘science-fiction’ weapons base on nanotechnology or ultrasound, for mention just a few.

When we come to the point of how to control arms, we have to clarify first some definitions of several terms, similar at first sight, in order to pinpointing their differences:

A. ARMS CONTROL rules the limitation or containment of the arms race, by:
   1. Freeze, ceilings on, or prohibition of some categories
   2. Regulation of deployment of forces / weapons, or use of weapons
   3. Prohibition / regulation of transfer or testing
   4. Reduction of risks of accidental war
   5. Confidence and transparency measures

B. DISARMAMENT is understood as the reduction or elimination of stockpiles of armaments (WMD or conventional), which may be:
1. unilateral or by agreement (bilateral or multilateral)
2. result of a post-conflict action, as was the case after the disappearing
   of the former DDR as a state, and
3. with or without verification.

C. NON-PROLIFERATION is any form of preventive action against the
   uncontrolled spread of WMD and their means of delivery (e.g. of missiles).
   1. It may have a bilateral, multilateral or regional approach
   2. resulting from treaties, agreements, supplier arrangements… and
   3. progressively extended to some conventional weapons (antipersonnel
      landmines, small arms…)

D. In case of failure of WMD non-proliferation, COUNTER-PROLIFERATION
   may be taken, understood as some action or measures, such as a counter-
   attack (nuclear vs. chemical/biological?), anti-missile defence, pre-emptive
   attack… They may be unilateral, discriminatory or product of a repressive
   doctrine.

E. Finally, DE-PROLIFERATION is another similar concept, meaning a
   voluntary or forceful dismantlement or transfer of nuclear weapons or
   programmes. We have quite a few historical examples:
   1. Transfer of Soviet Union weapons to Russia from Belarus, Kazakhstan,
      Ukraine, such as the Budapest Memorandum, signed by Russia, USA & UK,
      agreed to guarantee their territorial integrity in exchange for giving up their
      nuclear arsenal to Russia
   2. Dismantlement of the Iraqi programme by the UN
   3. Voluntary renunciation to weapons (South Africa, after apartheid)
   4. Voluntary renunciation to programmes:
      • Before 1970: Germany, Egypt, Italy, Japan, Norway, Sweden
      • After 1970: Argentina, Australia, Brazil, Canada, South Korea,
        Romania, Spain, Switzerland, Taiwan, Yugoslavia
      • 2003: Libya

The traditional responses to the proliferation of arms have been a
combination of disarmament, arms control and non-proliferation instruments,
and mainly targeting state actors, through plenty of treaties on WMD (see fig.
3):
1. **Nuclear Weapons**, limited to the 5 nuclear states plus another 5 non-nuclear states suspected of having them too (fig. 2).

2. **Biological Weapons** (1925 Geneva Protocol, banning the use in war of means of bacteriological warfare; 1972 Convention on Biological and Toxin Weapons, banning development, production, stockpiling, acquisition and transfer of microbial or other agents & toxins, and any means of delivery, for hostile purposes or in armed conflict), finding difficulties in the determination of the BW capability or in the lack of declaration of BW possession.

3. **Chemical Weapons** (1925 Geneva Protocol, banning on use in war of asphyxiating or poisonous gases; 1993 CW Convention, banning development, production, stockpiling, acquisition, use & transfer of toxic chemicals and precursors for non-peaceful uses, as well as any equipment for such activities), covering by its ban 98% of world population. Results: 7 states have declared CW possession for destruction (US, Russia, India, Libya, S. Korea, Albania, Iraq), with 85% (58,528 t) of declared stocks (72,524 t) destroyed and with 5,500 inspections conducted.

4. **Radiological Weapons** (1988: India-Pakistan Agreement on prohibition of attack against all declared nuclear facilities)

The control of WMD, though, is not exempt of **difficulties**, such as its **verification** (for instance, dual use, industrial property and its secrecy, dissimulation, and even byas in the verification’s priority (see fig. 4), or its non-
compliance (proof of violations, sanctions, deterrent role of inspections...). and USA with a similar amount: 4'4%, and the PDRK with an exorbitant 23%.

This explains what history shows: when nuclear disarmament started after WWII, proliferation of other kind of weapons increased. The global military spending is approximately the 2'5% of the GDP, with the stronger potencies with an over-average expense: Russia with about 4'5%, and USA with a similar amount (4'4%), and the PDRK with an exorbitant 23% (fig. 5).

The appearance of NEW ACTORS is another challenge of our times. Whereas during the Cold War WMD were target of state actors, in the post-Cold War non-state actors seeking for WMD have also appeared. Remember the A.Q Khan network trafficking nuclear material; the Aum Shinrikio sect in Japan dealing with chemical ones (sarin attack in Tokyo 1995); and the 2001 anthrax scare in US, in relation to the biological weapons. And 18,000 people were killed in terrorist acts by conventional means in only one year, 2013 (Global Terrorism Index, 2014). This explains the need of NEW APPROACHES, such as: the Post 9/11 New Security Strategies of the US and the EU, the Proliferation Security Initiative (PSI), the Cooperative Threat Reduction (CTR), or the G8 Global Partnership against WMD.
An important initiative in this context is the **WMD-free Zone Project**, which main steps may be summarized as following:

- 1974: (pre-revolutionary) Iranian proposal of a nuclear-weapon free zone (NWFZ)
- 1988: Report of the UN Secretary-General on a NWFZ
- 1990: Egyptian proposal of a WMD-free zone
- 1991: UN Security Council Resolution 687 on Iraq
- 1995: NPT Review and Extension Conference resolution
- 2000: NPT Review Conference
- 2004: UN Security Council Resolution 1540 (28 Apr. 2004), 1. imposing obligations on all States to adopt legislation to prevent the proliferation of WMD and their means of delivery to non-state actors; and to establish appropriate domestic controls over related materials to prevent their illicit trafficking; 2. encouraging enhanced international cooperation on such efforts; 3. affirming support for the multilateral treaties aiming to eliminate or prevent the proliferation of WMD and the importance for all States to implement them fully; and 4. establishing a Supervision Committee.
- 2004: WMD-free Zone in the Gulf Project
- 2009: UNSC Resolution 1887, establishing a WMD-free zone, including means of delivery: “calls upon all States that are not Parties to the NPT to accede to the Treaty as non-nuclear-weapon States so as to achieve its universality at an early date, and pending their accession to the Treaty, to adhere to its terms.”
- 2010: NPT Review Conference planning a following Helsinki Conference for 2012: unfortunately it was postponed and, after consultations during
2013-2015, the NPT Review Conference has failed to adopt a final document.

After this experience of more than forty years, it seems reasonable to consider if this proposed WMD-Free Zone is the Solution. A **WMD-free Zone is feasible** IF: 1. confidence-building measures and the architecture of a future regional security system is developed; 2. external security assurances are included and experience of other regions is discussed; and 3. both WMD and conventional armaments are addressed.

Yes. This last assertion wants to be the main message of the present lines: the **control of conventional armaments**, the so called SALW (Small Arms & Light Weapons) and MANPADS (Man-Portable Air Defense Systems), has to be considered too, because it is estimated the existence of between 640 to 1000 million in circulation, plus the illegal ones, 33% held by regular armed forces, 66% by civilians, and 1% by non-state armed groups. SALW cause 300,000 direct deaths per year (100,000 in conflict [Iraq, Sudan, DR Congo…] and 200,000 outside conflict [US, Brazil, Colombia, S. Africa…]) plus uncounted indirect deaths (insecurity, unemployment, diseases, infrastructure destruction…). Even more, 600 companies produce them in 95 countries, with a total trade of $4 billion (~10% of all conventional armaments), and an estimated illicit trade of $1 billion (50%: ammunition).

An UN Register of Conventional Arms distinguishes three categories: warships, missiles and launchers, and SALW plus the most destabilizing 5 categories of armaments: battle tanks, armoured combat vehicles (AVCS), heavy artillery, combat aircraft, and attack helicopters.
Besides these armaments, characteristic of developed countries (see fig. 6), other ones, affecting underdeveloped countries (see fig. 7), have to be included as well. They are the several millions of antipersonnel landmines still operational, affecting 90 countries and causing 20,000 victims per year (mostly civilians in countries in peace). The cost of demining has been calculated in $1-2 million for each sqkm. Among other humanitarian initiatives on this direction worthy to be mentioned are the International Campaign to Ban Landmines (ICBL) and the 1992 Ottawa Treaty (in force since 1999 with 162 states parties – US, India, China, Israel, Iran, South Korea, DPRK are among those states who have not signed it yet).

Cluster munitions may also be included within this category, because there is a failure rate between 5 and 15%: 2 weapons containing each 150 bomblets leave 15 to 45 unexploded bomblets (this percentage is much higher in Lebanon, with a 50% => 1 million unexploded ordnance in 2006). 34 countries produce over 210 different types of cluster munitions, and 73 countries stockpile these dangerous weapons, which caused 100,000 civilian casualties during the decade 1966-2006.

Countries affected by landmines
Luckily, conventional armaments are not short of international control initiatives:

1. The Arms Control & Regional Security (ACRS) 1992-1996: its Declaration of Principles mentions as objectives: 1. the prevention of conflict through CSBMs (preventing large-scale offensive or surprise attack), increase transparency, reduce risk of surprise attack, develop regional institutions; 2. the limit of military spending; and 3. the reduction of conventional stockpiles, enhancing of security at lower levels, reducing threat of destruction, and not exceeding defence requirements.
2. The UN 2001 Programme of Action (PoA), strengthening the legislation against illicit manufacture & transfers; ensuring safety & management of stocks; and collecting & destroying post-conflict SALW, as happened once the former DDR disappeared.
5. The Oslo Treaty banning the “use, production, transfer, and stockpiling of cluster munitions that cause unacceptable harm to civilians” (signed in 2008 by 89 states parties).

Conclusions: After introducing some conceptual clarifications between several different terms, similar at first sight, such as arms control, disarmament / non-proliferation, counter-proliferation or de-proliferation, the present lines remind some historical responses to arms proliferation, considering the appearance of new weapons and actors during the last decades. Our main conclusion is that the quite needed non-proliferation of weapons cannot be limited to WMD, but applied to conventional armaments too.

Nuclear arms build-up is a history of arms proliferation, which starts just after WWII. And, when actual disarmament started after Cold War, proliferation continued. Then, in a sense of double standards, whereas non-nuclear weapon states demand more disarmament to justify non-proliferation, nuclear-weapon states justify maintaining armaments by proliferation (most nuclear-weapon states, based on their higher development, invest in new technologies and become the top arms suppliers, specially of new weapons, such as: cyberwarfare, remote-controlled weapons (drones), automated/autonomous weapons (robots), precision-guided long-distance weapons, and “science-fiction” weapons (nanotechnology, ultrasound guns...).
Nuclear weapons and other WMD are often developed to offset conventional superiority in the future; the emergence of their threats has prompted states to increase their conventional armaments. Consequently, serious efforts to eliminate WMD must not result in conventional build-ups aggravating the risk of war. The humanitarian criterion, stressed in the present lines, has to increasingly apply both to WMD and conventional arms, because, even if somebody might believe that the use of nuclear weapons may be possible in some cases, being realistic, the use of conventional weapons is much more credible.

Finally, according to UNSCR 1540, all states are under legal obligation to prevent access of non-state actors to WMD. But, even if treaty obligations are important, there are not sufficient: domestic measures (export controls, legislation, border management, etc.) are also needed. And in internal conflicts, the main risk from proliferation of SALW and MANPADS is to be found in non-state armed groups, related with organized crime, trafficking, terrorism, etc.

We cannot stop doing military research or spending money on the military. Many of us would much rather see expenditures devoted to infrastructure, or scientific research, or free preschool for everybody-things that would carry big economic benefits. We also wish we did live in that world, but unfortunately it's not realistic. In this world, you'll still be spending money on the military and on military research. But, being realistic about that, Civil Society can play an active role in pressuring states for arms control/disarmament. And this is what Pugwash Movement is doing since half a century. An excellent way of remembering our humanity!

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