

## The Have and Have nots - their strategies for Nuclear Zero

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Until very recently all the issues concerning nuclear armaments, including disarmament, were the exclusive realm of the nuclear-armed states. In fact the Nuclear Nonproliferation Treaty itself (NPT) divided the world into the Have and Have Nots. This divide was reached by freezing the situation on the date of January 1, 1967 (art. IX.3 of NPT). Of course the number of nuclear-armed states later became greater than the number of “nuclear weapon states” as defined in art. IX. Anyhow the great *quantitative* divide among the super powers and any other nuclear-armed state *de facto* limited the players in this field even more to just United States and Soviet Union (now Russia). Then something unexpected happened: most of the *non* nuclear-armed States, albeit with a few exceptions, stepped forward, declaring that the survival of mankind was by definition, a matter of universal concern. Hence, in their view, nuclear disarmament had to be discussed among the representatives of *all* nations, even if this meant at least initially, that the discussions would take place without the participation of all or even any of the nuclear-armed states. The aim of this paper is, after presenting certain critical aspects of the current situation of nuclear armaments, to illustrate the strategies of *non* nuclear-armed states towards *total* nuclear disarmament. This will be attempted in the simplest possible way albeit not an exhaustive one.

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<sup>1</sup>Speaker

## 1. Introduction

*“What then is the point of national security guaranteed by nuclear weapons, the use of which would inevitably produce catastrophic consequences and result in immense suffering and sacrifice throughout the world? What exactly is it that is protected by a security regime premised on the possibility of inflicting irreparable damage and devastation on vast numbers of people? Is this not a system in which the true objective of national security - protecting people and their lives - has in fact been forsaken?”*

[Daisaku Ikeda  
Peace Proposal to the United Nations – 2016]

The data and views in the present paper are reported with the sole purpose of giving the widest and clearest possible picture of a *major paradigm shift* in nuclear disarmament which has recently come to the fore. This will be done in compatibility with the limits of space of a paper of this kind. It is important to note that no endorsement whatsoever is implied of any of the reported positions. Moreover the new paradigm still coexists with previous ones as well as with other new ones.

Put it simply: *new types* of questions, like the one in the epigraph, have begun to be asked by *new groups*: NGOs, religious people and some governments. All this obviously implies *new ways* of looking at nuclear disarmament issues.

It is out of the scope of this paper to establish which one of these new ways is best, the only scope of it is to illustrate *some* of them. Comparison with more long standing scopes has been unavoidable though. Again the author tries to avoid any intentional value judgements.

### 1.1 A brief history

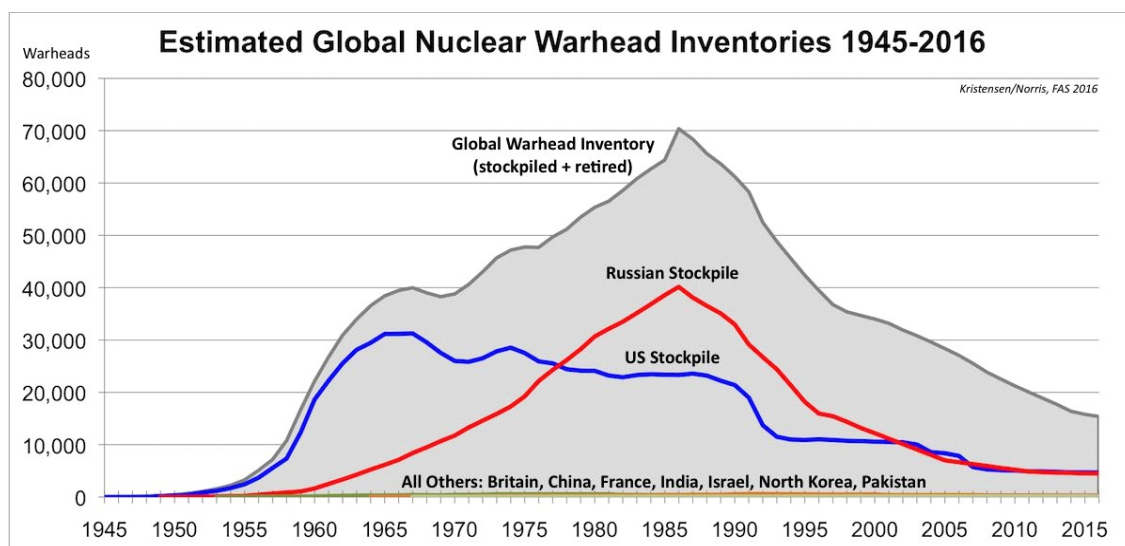


Fig. 1.1: History of nuclear stockpiles

After looking at the historical data of nuclear stockpiles Fig. 1.1, Fig. 1.2 it is tempting to conclude that, once the Cold War surges had finished, the decline of US inventories has been

followed, after a delay, by Russia and continues to date. It would appear total nuclear disarmament would just a matter of time.

However looking at the US *expenditures* Fig. 1.3 the situation may look to some quite different. Albeit with some oscillations the long term trend seems to indicate an overall substantial *growth* of these expenditures. The nuclear budgets of Russia is more difficult to assess but the general trend is also towards an increase. [1].

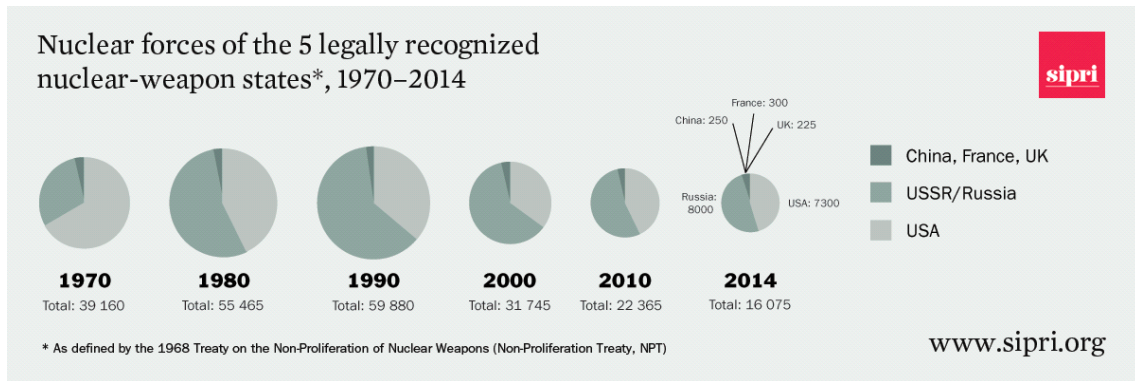


Fig. 1.2: Breakdown of nuclear stockpile (historical view)

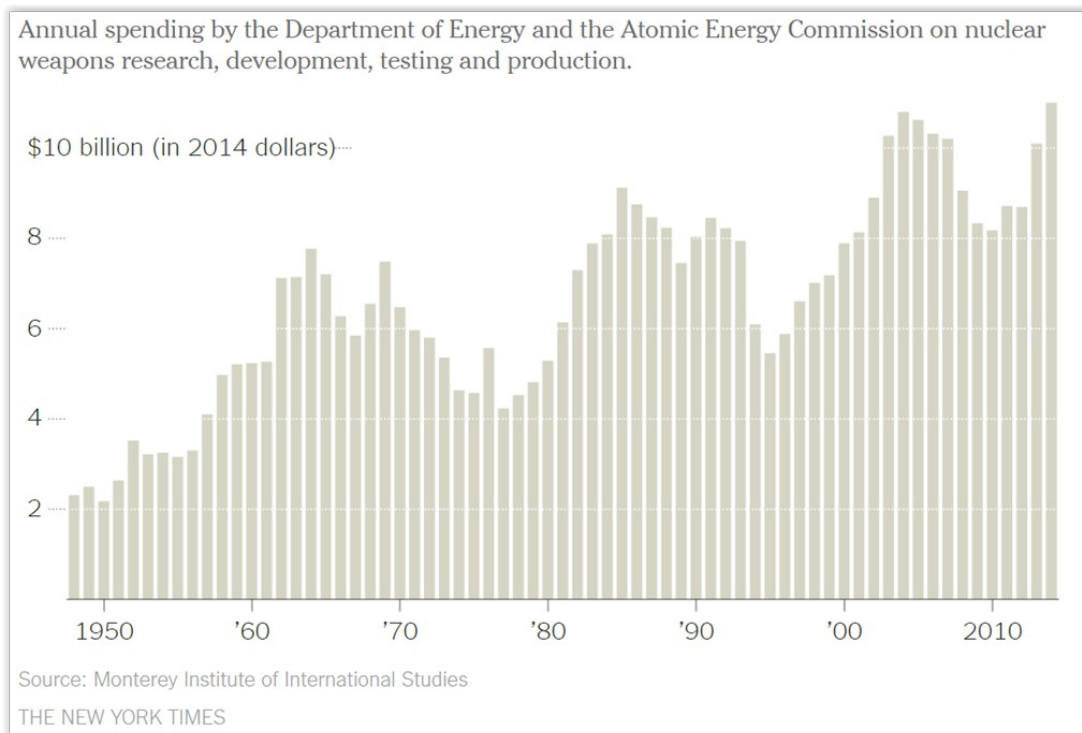


Fig. 1.3: US Annual Spending (DOD and AEC combined)

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## 1.2 The current situation

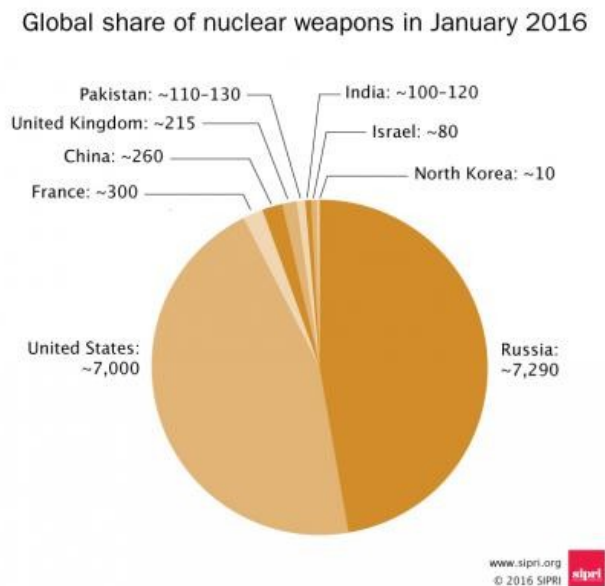


Fig. 1.4: SIPRI Most recent breakdown of global nuclear stockpile

The current situation Fig. 1.4, as far as *quantitative* size of nuclear inventories is concerned, looks, generally and very broadly speaking stationary [see as well Fig. 1.2]; the two big players and the rest of the nuclear-armed states following at orders of magnitude.

This has implied that, *de facto*, the responsibility of nuclear disarmament was felt to be (almost) exclusively that of the US and Russia. The rest of the governments could only *hope* for certain outcomes to happen.

Capitalizing, among other events, on a widespread dissatisfaction with the implementation and interpretation of NPT article VI<sup>2</sup> which continued to come to the fore for example at the NPT Review Conferences, more and more governments of non-nuclear armed states and NGOs began to propose new ways out of the “nuclear impasse”.

In order to do so it became necessary to take into account new quantitative and geopolitical dimensions of the problem. In the following, an estimate of these dimensions will be attempted. These new dimensions were obviously not the sole cause and motivation for such a bold paradigm shift, nevertheless the scope of this paper is to

<sup>2</sup> Article VI

“Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.”

focus on them in order to cast some light on some facts not so often evidenced in this realm.

A brief analysis of those new dimensions follows.

**1.3A more detailed analysis**

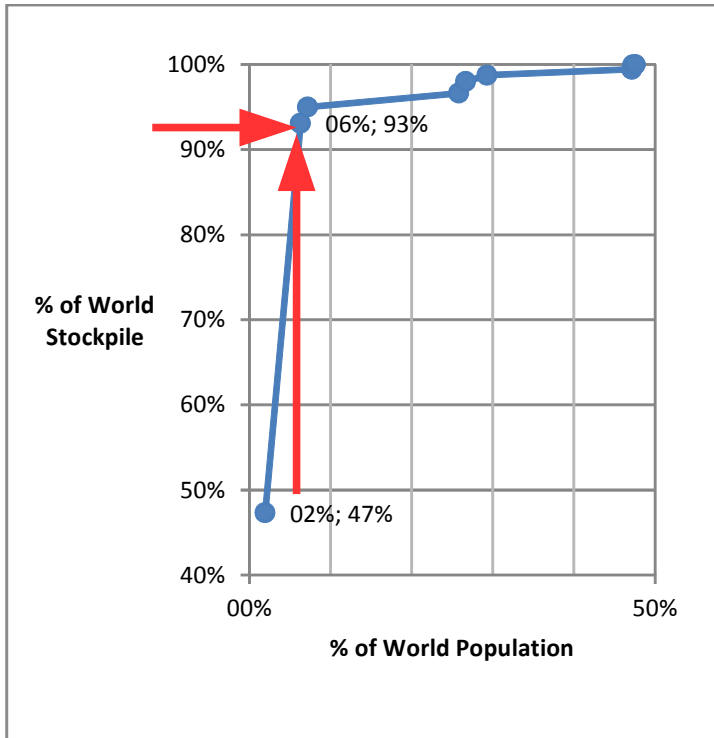


Fig. 1.5: How many people are "defended" by so many warheads (Authors Elaborations on Public Domain Data)

In the view of many people, as illustrated in Fig. 1.5 and in Fig. 1.9, over the years, the successive Governments of less than 6.3% of the world's population maintained the position that, in order to "defend" their citizens, they need around 93% of the Global Nuclear Warhead Inventories (GNWI).

On the other hand all the other Governments of the nuclear armed states maintain the position that in order to "defend" their citizens they need less than 2% of the GNWI each. These governments include China (18.6% of world population) with 1.6 of the GNWI and India (17.9% of world population) with 0.7 of the

GNWI.

Country	Estimated Stockpile (Max)	Population	Warheads Per Million Citizens	Warhead Incr %	Warhead Incremental	Population on incremental %	Population Incremental (Millions)	Warheads % of Total	Population % of Total
Russia	7,500	143,439,832	52.3	47.3%	7,500	1.9%	143	47.3%	1.9%
United States	7,260	324,118,787	22.4	93.1%	14,760	6.3%	468	45.8%	4.4%
France	300	64,668,129	4.6	95.0%	15,060	7.2%	532	1.9%	0.9%
China	260	1,382,323,332	0.2	96.6%	15,320	25.8%	1,915	1.6%	18.6%
United Kingdom	215	65,111,143	3.3	98.0%	15,535	26.7%	1,980	1.4%	0.9%
Pakistan	120	192,826,502	0.6	98.8%	15,655	29.3%	2,172	0.8%	2.6%
India	110	1,326,801,576	0.1	99.4%	15,765	47.1%	3,499	0.7%	17.9%
Israel	80	8,192,463	9.8	99.9%	15,845	47.2%	3,507	0.5%	0.1%
North Korea	8	25,281,327	0.3	100.0%	15,853	47.6%	3,533	0.1%	0.3%
<b>Total</b>	<b>15,853</b>	<b>3,532,763,091</b>	<b>4.5</b>						
WorldPopul	15,853	7,424,348,000	2.1						
HaveNots	15,853	3,891,584,909	4.1						

Fig. 1.6: Single and cumulative figures of Nuclear Warheads and Population by Country (Author's Calculations using Public Domain Data)

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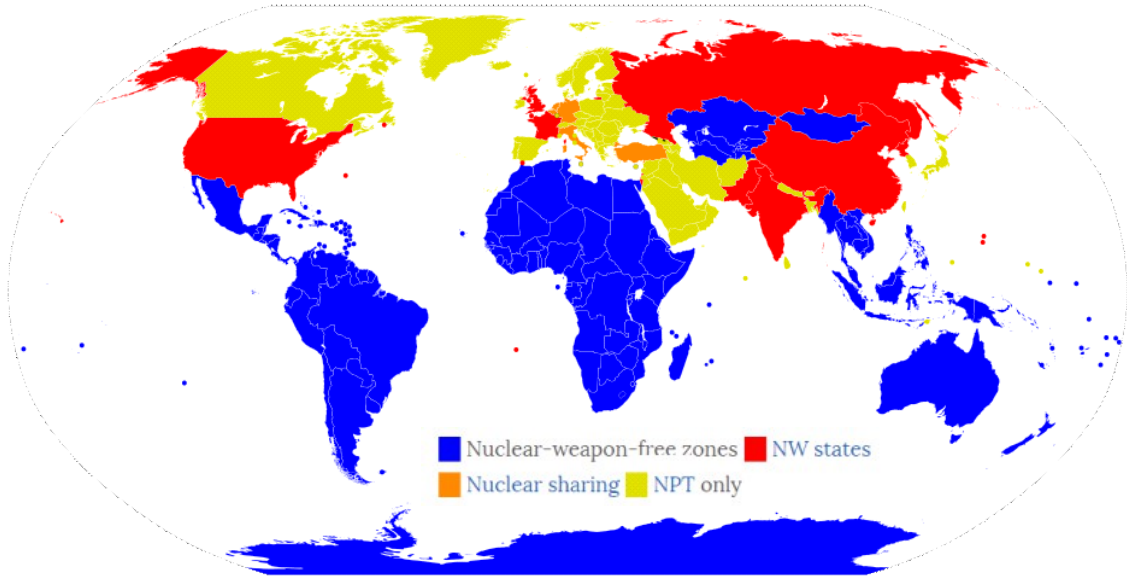


Fig. 1.7: Geographical distribution of Haves and Haves Not (credit: Wikipedia -Creative Commons Attribution-Share Alike 3.0)

Looking at the above map<sup>3</sup>, Fig. 1.7, it is evident that if we exclude the vast surface area of Russia which only hosts 1.9% of the world's population, the total surface of the world occupied by Nuclear Armed States would only be a small percentage of the total. Even adding Russia, they still occupy less than 50% of the world's dry land.

## 2. The road to zero – the strategies of nuclear and non nuclear-armed states

### 2.1 Strategies of Nuclear-armed states

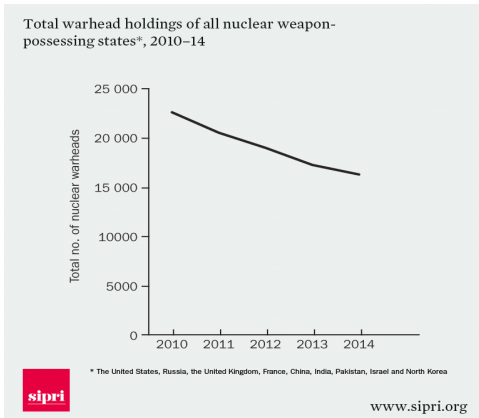


Fig. 1.8: 2010-2014 global trend in warheads holdings

This asymptotic trend combined with the upward movement in expenditure and financial magnitude [2], [3] and scope [4] of the programs of the so called “modernization” (of nuclear weapons systems) are in direct conflict with the official position of US President Barack Obama as stated in Fig. 1.9

The massive reductions of Russia and US nuclear arsenals continued until very recently albeit their inventories combined look at present as if they were heading towards an “asymptotic” level of around 15,000. Fig. 1.8

The trend is *not* promising.

THE WHITE HOUSE  
Office of the Press Secretary

FOR IMMEDIATE  
RELEASE April 5, 2009

REMARKS BY PRESIDENT BARACK OBAMA  
Hradcany Square  
Prague, Czech Republic  
10:21 A.M. (Local)  
PRESIDENT OBAMA:

So today, I state clearly and with conviction America's commitment to seek the peace and security of a world without nuclear weapons. (Applause.) I'm not naive. This goal will not be reached quickly – perhaps not in my lifetime. It will take patience and persistence. But now we, too, must ignore the voices who tell us that the world cannot change. We have to insist, "Yes, we can." (Applause.)

Fig. 1.9: US President Barack Obama "Prague Speech"

<sup>3</sup> The map uses “Mercator” projection which is well known to penalize, as far as area sizes are concerned, the southern hemisphere)



January 15, 2008

OPINION

DOW JONES REPRINTS

# Toward a Nuclear-Free World

By GEORGE P. SHULTZ, WILLIAM J. PERRY, HENRY A. KISSINGER and SAM NUNN  
January 15, 2008

The accelerating spread of nuclear weapons, nuclear know-how and nuclear material has brought us to a nuclear tipping point. We face a very real possibility that the deadliest weapons ever invented could fall into dangerous hands.

The steps we are taking now to address these threats are not adequate to the danger. With nuclear weapons more widely available, deterrence is decreasingly effective and increasingly hazardous.

Fig. 1.10: H. Kissinger et al. - The Wall Street Journal - "Towards a Nuclear Free World" article (excerpt)

and many other statements by other senior officials Fig. 1.10

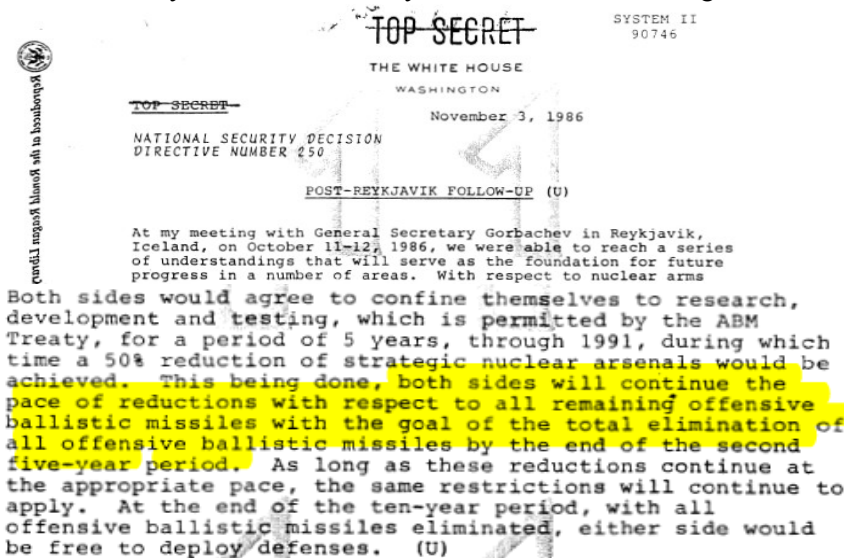


Fig. 1.11: Post Reykjavik Follow-up memorandum

Added to this, the “u-turn” taken by both US and USSR after the discussions in Reykjavik in October 1986 Fig. 1.11 must have seemed appalling to the non nuclear armed states.

POS (FRAPWS2016) 091

## 2.2 Strategies of Non Nuclear-armed states

In order to illustrate the announced new views two approaches will be illustrated in some detail considering them somehow paradigmatic. Again no endorsement is implied.

### 2.2.1 UN Fold Zero

*“The aim of zero nuclear weapons – the prohibition and complete elimination of nuclear weapons under strict and effective international control – was first affirmed by UN General Assembly resolution 1 (I) on January 24, 1946.*

*A reliance on nuclear deterrence by some countries in response to regional and international tensions since then has thwarted the achievement of this goal. However, a number of recent developments bring this goal into sight. These include globalisation, the strengthening of international law, a growing public aversion to all weapons of mass destruction and the increasing effectiveness of the United Nations and other cooperative security mechanisms to address core security issues.” [5]*

*“UNFOLD ZERO called on those countries reliant on nuclear weapons to relinquish nuclear deterrence policies – as most other countries in the world have already done – in order to be able to join nuclear abolition negotiations. UNFOLD ZERO highlighted common security approaches and mechanisms – such as those available through the United Nations – as being less destabilizing, less threatening and more suitable for the 21st Century than the reliance on annihilation of other countries with nuclear weapons.*

*UNFOLD ZERO called on non-nuclear countries to take action to prohibit nuclear weapons – nationally, regionally and internationally – without waiting for the nuclear reliant countries.” [6]*

The last line (emphasis mine) constitutes probably the most evident departure from the approaches to nuclear disarmament based on bi-lateral negotiations between the two major players.

Another obvious departure is constituted by the reliance on the successfully renewed and reinforced role of UN General Assembly in contrast with the role of the Security Council whose composition coincides with the one of the nuclear weapons state as defined by art. IX.3 of NPT.



## 2.2.2 Humanitarian Pledge

United Nations

A/RES/70/48



General Assembly

Distr.: General  
11 December 2015

Seventieth session  
Agenda item 97 (b)

### Resolution adopted by the General Assembly on 7 December 2015

[on the report of the First Committee (A/70/460)]

#### 70/48. Humanitarian pledge for the prohibition and elimination of nuclear weapons

*The General Assembly,*

*Ever mindful of the unacceptable harm that victims of nuclear weapon explosions and nuclear testing have experienced, and recognizing that the rights and needs of victims have not yet been adequately addressed,*

*Understanding that the immediate, medium-term and long-term consequences of a nuclear weapon explosion would be significantly graver than was understood in the past and would not be constrained by national borders but have regional or even global effects, potentially threatening the survival of humanity,*

*Recognizing the complexity of and relationship between these consequences for, inter alia, health, the environment, infrastructure, food security, climate, development, social cohesion, displacement and the global economy, which would be systemic and potentially irreversible,*

*Aware that the risk of a nuclear weapon explosion is significantly greater than previously assumed and is indeed increasing with increased proliferation, the lowering of the technical threshold for nuclear weapon capability, the ongoing modernization of nuclear weapon arsenals in States possessing nuclear weapons and the role that is attributed to nuclear weapons in the nuclear doctrines of such States,*

*Cognizant that the risk of the use of nuclear weapons, with its unacceptable consequences, can be avoided only when all nuclear weapons have been eliminated,*


*Emphasizing that the consequences of a nuclear weapon explosion and the risks associated with nuclear weapons concern the security of all humanity and that all States share the responsibility to prevent any use of nuclear weapons,*

*Emphasizing also that the scope of the consequences of a nuclear weapon explosion and the associated risks raise profound moral and ethical questions that go beyond debates about the legality of nuclear weapons,*

*Mindful that no national or international capacity exists that would adequately respond to the human suffering and humanitarian harm that would result from a nuclear weapon explosion in a populated area, and that such capacity most likely will never exist,*

15-16802 (E)



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*Affirming* that it is in the interest of the very survival of humanity that nuclear weapons are never used again, under any circumstances,

*Reiterating* the crucial role that international organizations, relevant entities of the United Nations, the International Red Cross and Red Crescent Movement, elected representatives, academia and civil society play in advancing the shared objective of a nuclear-weapon-free world,

*Recalling* the three international conferences convened, respectively, by Norway in March 2013, Mexico in February 2014 and Austria in December 2014 on the humanitarian impact of nuclear weapons, and the compelling evidence presented at these conferences,

*Welcoming* the fact that 120 States have drawn inescapable conclusions from the evidence on the humanitarian impact of nuclear weapons and, consequently, supported or endorsed the Humanitarian Pledge,<sup>1</sup>

1. *Stresses* the importance of having fact-based discussions and presenting findings and compelling evidence on the humanitarian impact of nuclear weapons in all relevant forums and within the United Nations framework, as they should be at the centre of all deliberations and the implementation of obligations and commitments with regard to nuclear disarmament;

2. *Appeals* to all States to follow the imperative of human security for all and to promote the protection of civilians against risks stemming from nuclear weapons;

3. *Urges* all States parties to the Treaty on the Non-Proliferation of Nuclear Weapons<sup>2</sup> to renew their commitment to the urgent and full implementation of their existing obligations under article VI, and calls upon all States to identify and pursue effective measures to fill the legal gap for the prohibition and elimination of nuclear weapons and to cooperate with all stakeholders to achieve this goal;

4. *Requests* all States possessing nuclear weapons, pending the total elimination of their nuclear weapon arsenals, to take concrete interim measures to reduce the risk of nuclear weapon detonations, including by reducing the operational status of nuclear weapons and moving nuclear weapons away from deployment and into storage, diminishing the role of nuclear weapons in military doctrines and rapidly reducing all types of nuclear weapons;

5. *Calls upon* all relevant stakeholders, States, international organizations, the International Red Cross and Red Crescent Movement, parliamentarians and civil society to cooperate in efforts to stigmatize, prohibit and eliminate nuclear weapons in the light of their unacceptable humanitarian consequences and associated risks;

6. *Decides* to include in the provisional agenda of its seventy-first session, under the item entitled "General and complete disarmament", a sub-item entitled "Humanitarian pledge for the prohibition and elimination of nuclear weapons".

*67th plenary meeting  
7 December 2015*

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<sup>1</sup> See CD/2039 and [www.himw14vienna.at](http://www.himw14vienna.at).

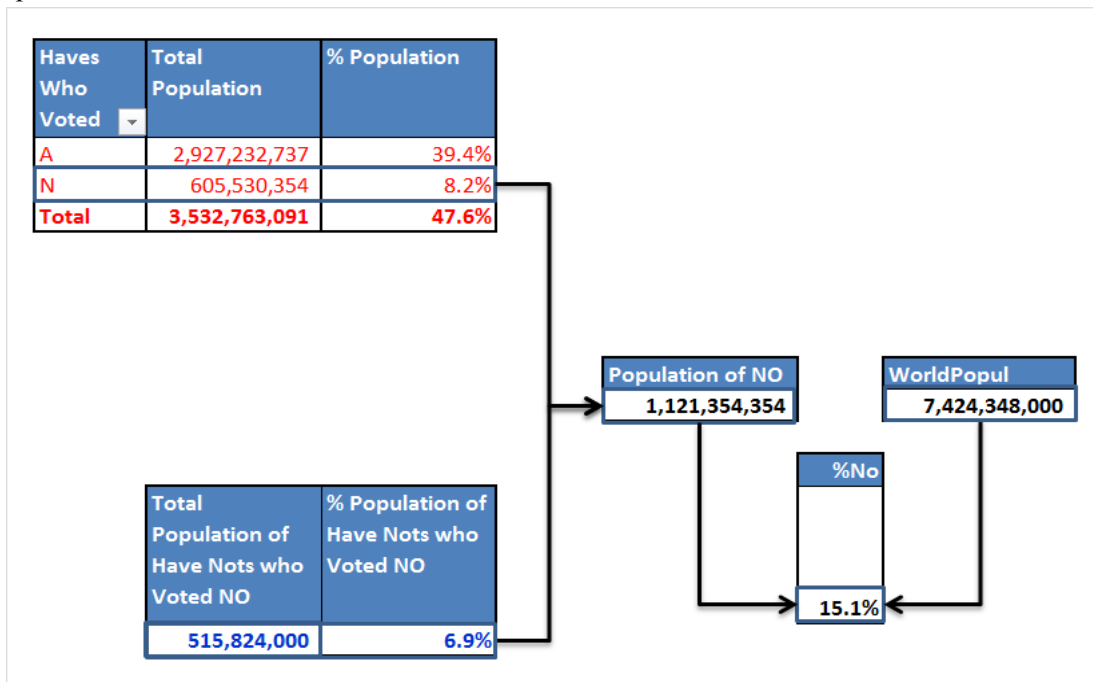
<sup>2</sup> United Nations, *Treaty Series*, vol. 729, No. 10485.

The above text speaks for itself and constitutes along with the original Humanitarian (Austrian) Pledge [7], the “Manifesto” of the parties who identify themselves with this bold approach which, again, departs from the historical bi-lateral negotiations between super powers.

It is not difficult to believe, after reading such a compelling and authoritative text, that there is a very strong political will in favour of the abolition of nuclear weapons to be achieved by the means outlined there. Obviously the situation is more complex than can be discussed in this paper however here follows the list of official votes for it at UN General Assembly.

It is extremely interesting to note that the Governments of nuclear-armed states who voted NO to the resolution account for a bare 8% of world population. Even taking into account the populations of non nuclear-armed states which still voted NO (less than 7% of world population), the total population living in states which voted no, regardless of their nuclear status, is just a little more than 15%.

The vast majority of people who live in countries whose governments voted either YES or ABSTAIN therefore **represents 85%** of the world population. Even taking into account that both the Chinese and Indian Governments abstained (accounting together for 39.4 of world population), the net YES is still from governments accounting for more than 45% of world population.



Have	V	Country	Population
Y	A	CHINA	1,382,323,332
Y	A	DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA	25,281,327
Y	A	INDIA	1,326,801,576
Y	A	PAKISTAN	192,826,502
Y	N	FRANCE	64,668,129
Y	N	ISRAEL	8,192,463
Y	N	RUSSIAN FEDERATION	143,439,832
Y	N	UNITED KINGDOM	65,111,143
Y	N	UNITED STATES	324,118,787

POS (FRAPWS2016) 091

Have	V	Country	Population
N	N	AUSTRALIA	24,309,330
N	N	BELGIUM	11,371,928
N	N	BULGARIA	7,097,796
N	N	CANADA	36,286,378
N	N	CROATIA	4,225,001
N	N	CZECH REPUBLIC	10,548,058
N	N	DENMARK	5,690,750
N	N	ESTONIA	1,309,104
N	N	GERMANY	80,682,351
N	N	HUNGARY	9,821,318
N	N	ITALY	59,801,004
N	N	LATVIA	1,955,742
N	N	LITHUANIA	2,850,030
N	N	LUXEMBOURG	576,243
N	N	MONACO	37,863
N	N	MONTENEGRO	626,101
N	N	NETHERLANDS	16,979,729
N	N	POLAND	38,593,161
N	N	REPUBLIC OF KOREA	50,503,933
N	N	ROMANIA	19,372,734
N	N	SLOVAKIA	5,429,418
N	N	SLOVENIA	2,069,362
N	N	SPAIN	46,064,604
N	N	TURKEY	79,622,062

### 3. Conclusions

A possible conclusion to be drawn from this brief paper about the new approaches to total nuclear disarmament is that nuclear weapons are considered a liability rather than an asset by many.

New, apparently minor developments like the steerability and the “dial a yield” feature of the B61-12 nuclear weapon, unknown to the general public<sup>4</sup>, may well have been a wake up call for many concerned politicians because the threshold of use of nuclear weapons might become too low to be a real barrier to use in certain military situations.

The concern is that if the 70+ year old taboo were broken, no real barrier would exist to the field use of nuclear weapons. The first circumscribed “surgical” use, many argue, may well be limited in initial operations. However, nothing, they say, will stop an escalation to *megatonnage* further on, and the survival of mankind itself will be yet again in jeopardy.

<sup>4</sup> “buried” among other ordinary “routine maintenance” performed under the *Stockpile Stewardship and Management Plan* [4]

The governments whose populations account for 85% of the world population, and among them even nuclear armed states, have at least abstained from voting NO to the humanitarian pledge, signalling, in the view of many, that the logic of deterrence is not tantamount to security and that some of the recent attempts to look for a way out of the nuclear (disarmament) *impasse* (i.e. “modernization” programs) may in fact lead to disaster.

Their desire is to pave the way to nuclear zero before it is too late.

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