

## NUCLEAR BUSSINES, SAFETY AND NUCLEAR SECURITY SUMMIT

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***ABSTRACT:** A NEW COLD WAR WILL BRING UP THE US-RUSSIA NUCLEAR RIVALRY AND STRATEGIC LANDSCAPE WILL DRAMATICALLY CHANGE AND REFOCUS ON NUCLEAR WEAPONS, INCLUDING INCREASING THE NUMBER AND LOCATIONS OF NUCLEAR WEAPONS. A SERIOUS THREAT LIES IN THE CONSEQUENCES OF NUCLEAR DECISION MAKING, ESPECIALLY THAT PREDICTIONS WERE OFTEN WRONG, MAKING THE NEW GLOBAL NUCLEAR ORDER UNCLEAR. EFFORTS FOR NON-PROLIFERATION WERE MADE IN "THE NUCLEAR SAFETY CONVENTION," THE "GLOBAL INITIATIVE TO COMBAT NUCLEAR TERRORISM" AND THE "NUCLEAR SECURITY SUMMIT PROCESS."*

***KEYWORDS:** A NEW COLD WAR, NON-PROLIFERATION, BUSSINES, SAFETY, NUCLEAR SECURITY SUMMIT*

Definitely, a substantial reduction of nuclear weapons accompanied by NPT, CTBT[1] and FMCT[2] will reduce appetite for NWS[3] to have nuclear weapons.

In a newly perspective, international security must face the challenges of the nuclear age: safety, sabotage, theft or purchase of weapons or nuclear materials for terrorist purposes and destruction of nuclear facilities in a conventional war. To these are added costs, nuclear waste and human capital in terms of configuring global security safety, security, non-proliferation and monitoring of nuclear states in the new nuclear order.[4]

In order to configure a second nuclear age by interacting levels: the relation between NWS and NNWS; relationship between on the one hand, nuclear technology - the nuclear fuel cycle and on the other hand, the IAEA regulatory function; interactions on the one hand, states and the private sector on the other hand, international agencies; cooperation between states and the IAEA to develop nuclear energy.[5]

A certain global governance structured on nuclear business - on the level of state and corporate IAEA and NSG for WANO corporations - takes place in a certain framework - treaties, regulations, guidelines, standards and regulations – ant it offers limited space for decisions in the field, member continuing to play a central role.[6] A serious threat lies in

the consequences of nuclear decision making, especially that predictions were often wrong, making the new global nuclear order unclear.

A new Cold War will bring up the US-Russia nuclear rivalry and strategic landscape will dramatically change and refocus on nuclear weapons, including increasing the number and locations of nuclear weapons.

Limited availability of information on nuclear safety are particularly difficult to evaluate and consistent indexing, however efforts in this respect are like Nuclear Threat Assessment Initiative (NTI).[7] However, ratings are approximate and dependent on the will of the member states providing measurements of risk trends.

Good faith efforts to increase nuclear safety can be measured by outputs (eliminating nuclear weapons from the territories of several countries, ratification of conventions and amendments to several countries, call on the International Physical Protection Advisory Service) and the future directions of work so within international structures created both by regulations adopted and by understanding the importance of the threat.

A number of economic considerations suggest that with alternative energy, nuclear power will play an increasing role in the future, especially in China, India, the emerging powers and as a corollary, many of these countries could be tempted and option of producing nuclear weapons. Nuclear safety is essential for all countries to nonproliferation, the peaceful use of nuclear energy for a comprehensive disarmament. The requirements of this concept can not wait: the sabotage of nuclear facilities, procurement of materials and expertise to produce nuclear weapons are targeted in terrorist attacks, especially since nuclear energy will require reinvention and risk prevention through improved security procedures in many countries of the world.[8]

An international nuclear fuel market is preferable to a full nuclear cycle available to a state that allows the development option of producing bombs. New nuclear era accompanied by certain constraints to prevent negative consequences on nuclear safety as an imperative; limiting the number of plants producing nuclear material for reactors, monitoring and blocking waste reprocessing may limit the potential for bombs. However, there can be a rapid conversion of HEU reactors (planned to be completed in 2025) or a comprehensive approach that includes supervision of all facilities and materials.

On the one hand, several reactors mean more potential places for the purchase of material for terrorist purposes. Most reactors operate with LEU less interesting material to terrorist activities, causing waste material with energy and having a small amount of plutonium, reprocessed particularly hazardous can be used to produce nuclear weapons. At this stage no interest but after plutonium reprocessing is used to produce nuclear weapons, the only constraint being that reprocessing is very expensive out of reach of most states. However, several reactors mean more protection systems to operate at high standards and do not allow attempts to sabotage. The effects of an act of sabotage mean a disaster not only for the state of the reactor owner but for the whole region where it is located. Hence the importance of location reactor security measures for the region.

On the other hand, both politicians and managers of nuclear power minimizes potential nuclear disaster considering sufficient security measures an impediment generated by national responsibility to protect the military dimension of technology advantages possessed. It raises the importance of keeping secrets to potential adversaries not to give states any benefits that could put it in inferiority.

Safety regulations[9] require the need for rules, but their establishment was not achieved, especially since the 2005 amendments are unlikely to enter into force and the UNSC 1540 does not specify what should be done exactly and IAEA recommendations are implemented only on a voluntary basis. International standards established principle states possessing voluntary reactors to accept international verification of their security measures.[10]

A serious problem is that the costs of processing and storage of radioactive nuclear waste and potential can be sabotaged on the storage places, especially if they contain plutonium that could be reprocessed. Even if technology cement and metal containers is safe, there are required new solutions.

International safety standards for nuclear weapons, HEU and plutonium, an international verification mechanism, a permanent framework for discussion are still desiderata. On the other hand, there are not likely to succeed in improving agreements on whether or they did not found ways to exchange information without affecting the regime's secret for vital information.

The relationship between nuclear security and safety is inclined in the security more important in terms of the nature and substance of threats (establishing national legal regulations on protection against hazardous radioactive substances, the promotion of international standards of protection detail and high standards even when negotiating regarding an international treaty in the field is unlikely international policy statement is a positive sign).

### **NUCLEAR SECURITY SUMMITS**

In 1974, it was established the Nuclear Suppliers Group NSG[11] following the Indian nuclear test as an institution on the basis of consensus and it was joined by several states. However, the institution has fewer opportunities to adapt to this reality, many states questioning its legitimacy, considering it a group that imposes unfair rules to restrict nuclear trade.[12] Although most member states support the provisions of the Additional Protocol to nuclear exports rounds conducted on adapting nuclear export guidelines failed, allowing member nuclear power technology not to be constrained by clear rules.[13]

Nunn-Lugar[14] Program was designed to improve control and security systems especially in the former USSR, conversion technology, reducing the risk of theft of materials did not allow sabotage. It is widely recognized that sabotage may have disastrous consequences and theft of materials can occur within civilian facilities.

If in the safety field is analyzed periodically provisions "The Nuclear Safety Convention" WANO[15] meetings take place, in the security field is not recorded by any meeting and there be any mechanism.[16]

The "Global Initiative to Combat Nuclear Terrorism" although attracted 82 nations, modest progress in the field of nuclear safety.

Efforts for non-proliferation may take place outside existing treaties and institutions being able to talk about new institutions, an option that involves considerable cost and time with questionable results. The "Nuclear Security Summit Process" that probably will end in 2016, attracted 50 countries and made some political statements, many of national significance. Unable to establish a minimum standard of security on HEU and plutonium.

Initiative formed to secure voluntary proliferation[17] to stop water and air transport illicit nuclear, chemical or biological flag states participating in the structure or in the

waters and / or their space and GICNT[18] have become institutions, preferring international institutions sustainable in the nuclear field.[19]

In 2009, President Obama announced that over the next four years will make efforts for nuclear safety[20], giving the impression of institutionalization intention in this regard, but demonstrating after all it's just about organizing summits. It argues that it is possible that nuclear security issues to be addressed specifically in the context of the nuclear issue. It is a reality of meetings - such summit conferences IAEA - that discussed international monitoring or implementation of collective or individual, particularly important activities are carried out only by the academic world.[21] USA used its contacts to bilateral and multilateral diplomacy to promote nuclear security policy to more restrictive exclusive clubs diplomatic instruments.[22]

In 2010, in Washington DC, based on a selection that does not repeat formats for nonproliferation and disarmament, 47 states are invited to form a group exclusively multilateral agenda for the next four years "the most dangerous global cleaning materials nuclear"[23] and the repatriation of HEU in states possessing nuclear weapons to the United States and Russia by converting HEU reactors to LEU reactors or close them, accompanied by the underlying measures.[24] Selecting participants sought to avoid difficult procedures UN, based on a certain unity of purpose and a particularly intense training process.

The concept of the summit aims narrowly to exclude nuclear safety issues of nuclear safety constitutive (physical protection of nuclear materials and facilities; nuclear safety, nuclear weapons, nuclear disarmament) not to dilute the "global cleansing" and focusing only on "technical issues", less familiar leaders participating States, and to avoid topics "hot spots" that could be raised. The objectives supported by documents summit[25] agreed to convert HEU civilian installations, methods and technologies to improve detection and tracking.

In 2012, in Seoul, the summit earlier format plus six states[26] conducted the second summit with a broad agenda of the nuclear material to material and radiological weapons,[27] to which was added the issue of nuclear safety due to the Fukushima disaster (March 2011), although secondary relevance. Communication Summit brings definition corrections Washington nuclear security, nuclear disarmament and non-proliferation including the "common goals", but without the work discussed in Seoul. The crisis and possible collapse of the Ukrainian Crimea would have been a disaster if both the 2010 summit would not be pressured to eliminate nuclear bombs[28] so Summit 2012, Ukraine declared the area free of material for nuclear weapons[29]. The achievements of the summit are perceived differently[30], observing that there were no transfers of political declarations international obligations to contribute to better definition of safety and their contributions were due to voluntary decisions of states.

Unable to establish a structure to monitor the implementation of the objectives of nuclear safety, there have been established financial support. At this summit does not set new responsibilities IAEA and any additional funds, although the global nuclear safety regime is connected with the agency in the eyes of the participants.[31]

In 2014, in Hague,[32] the third summit aims highlighted the risks and consequences of nuclear and radiological terrorism as a starting point to establish clear timelines for future international cooperation to materialize in agreements, institutions substantial and consistent regulation of nuclear safety.

US led international community's efforts to reduce the number of states possessing nuclear material used in building nuclear weapons (HEU or Plutonium) decreased significantly in the last 20 years - 52 (1991), 38 (2009), 25 (2014). Note that spectacular is reduced by 13 states due to nuclear security summit.

Cycle summits considered a transient process has the merit to highlight the need for nuclear safety, urging states to improve security materials used to produce nuclear weapons without showing how.[33]

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