

Chapter 1

Introduction



Alberto Quadrio Curzio

As Chairman of the panel, “New and evolving voices in arms control and disarmament”, I take the opportunity to start with an evaluation as president emeritus of Lincei and member of the board of Amaldi Conferences.

In fact, this initiative has many aspects of method that fulfill the aims of a National Academy like Lincei. I refer mainly to the role of sciences for policies¹ in fields that are relevant for human development. In the case of Amaldi Conferences, sciences are connected both to policies and to politics in the worldwide scenario under the umbrella of mutual understanding that this initiative has built up since 1988.

The panel of my chairmanship implies many of these aspects that can be classified, at least, in the two broad categories of institutional and economic issues while heavily focusing on the core topic of international security.

Security and Complexity—The concept of security, in its very general meaning, points to the preservation of a condition of safeness, both for states and individuals but in a more precise meaning must be considered in the context of a global growing condition of complexity and economic interdependence.

The concept of complexity in contemporary world reveals to be of great interest when it is associated with the issue of nuclear disarmament, which implies now an interplay of institutional and political, economic and social factors.

One way to show this complexity of interplays is to start with the problem of climate change which is in these days one of the most known and discussed. To many it might appear far from that on nuclear disarmament and this is exactly the reason on which we base our reasoning to demonstrate the connections.

To date, the debate around climate change is framed in terms of adaptation. If adaptive actions to climate change are to be taken, there could be a point beyond

¹See also Accademia Nazionale dei Lincei, “G7 Science Academies Meeting 2017”, Bardi Edizioni, Rome 2017.

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L. Maiani et al. (eds.), *International Cooperation for Enhancing Nuclear Safety, Security, Safeguards and Non-proliferation*, Springer Proceedings in Physics 243, https://doi.org/10.1007/978-3-030-42913-3_1

which adaptation could be more cost sensitive than nuclear deterrent. This is the case of the would-be water scarcity in the Himalayan region, related to the melting of the Himalaya's glaciers, that constitute the major source of fresh water for, at least, India, Pakistan and the western regions of China. These three countries are all nuclear powers and, in the worst-case scenario, their nuclear deterrent could turn into the most viable option to exert political and military pressure over their neighbors in order to secure their fresh water supplies. This example, extensively cited in international fora to address the theme of climate change, helps us in understanding many of the facts and findings exposed by the contributors to this panel.

Bilateralism and Multilateralism—The institutional and economic aspects of nuclear disarmament are strictly intertwined to the extent that the institutional framework of disarmament initiatives must always take in consideration the economic landscape in which such disarmament should take place.

Looking to the past we must say that most of the existing nuclear arms control instruments reflect the cold-war concerns towards nuclear arms reduction and, in general, the U.S.–Russia competition for nuclear supremacy. Although a reduction in both the U.S. and Russia's nuclear arsenal is highly desirable, today most of the challenges arise from regional instability and nuclear proliferation by countries tempted by regional hegemonic 'adventures'.

Looking to the present and to the future the scenario changes. While maintaining a stronghold on existing bilateral disarmament initiatives, like the START, the INF and the Russian-U.S. arms control treaties, new emphasis should be put on existing global and multilateral nuclear disarmament initiatives, like the EU's and UN's. A particular stress is to be put on this point as multilateralism is the most powerful tool to achieve peace and development and is as well the issue-area in which Europe plays an important role. I would say that this role is fundamental, given the rising worldwide tendency towards neo-protectionism and neo-confrontation.²

The EU non-proliferation and disarmament consortium, as we all know, embodies the European Union's commitment to nuclear disarmament. The consortium is overtly devoted to make its contribution to nuclear disarmament worldwide, also at the legal level through a resolution of the European Parliament (res. 2016/2936).

United Europe has been built on peace, that is also one of its fundamental values as it is clearly stated in the preamble of the Treaty of Rome (1957):

[...] *Intending* to confirm the solidarity which binds Europe and the overseas countries and desiring to ensure the development of their prosperity, in accordance with the principles of the Charter of the United Nations,

Resolved by thus pooling their resources to preserve and strengthen peace and liberty, and calling upon the other peoples of Europe who share their ideal to join in their efforts,

Determined to promote the development of the highest possible level of knowledge for their peoples through a wide access to education and through its continuous updating [...]

²On these topics, see also: Alberto Quadrio Curzio, "Europa e profili di sviluppo", Accademia Nazionale dei Lincei, Relazione Conclusiva dell'Anno Accademico 2018-2019, Roma 20 Giugno 2019: https://www.lincci.it/sites/default/files/A_QuadrioCurzio_Europa_e_profili_di_sviluppo2019_06_20.pdf; and Alberto Quadrio Curzio, "Europa: il Futuro", Federazione Nazionale dei Cavalieri del Lavoro, Napoli 28 Settembre 2019.

Extremely clear on these principles is article 11 of the Italian Constitution, which states:

Italy rejects war as an instrument of aggression against the freedom of other peoples and as a means for the settlement of international disputes. Italy agrees, on conditions of equality with other States, to the limitations of sovereignty that may be necessary to a world order ensuring peace and justice among the Nations. Italy promotes and encourages international organisations furthering such ends.

The United Nation multilateral initiative, as we all know, is constituted by the new agenda ‘Securing Our Common Future’, launched by the Secretary General António Guterres, in May. In December, the UN General Assembly First Committee adopted a resolution calling for the UN Secretary General to convene a conference in 2019 on creating a weapons of mass destruction free zone in the Middle East and every year thereafter until a zone is achieved.³

Nuclear disarmament: the inadequate transparency—Moreover, when addressing the problem of nuclear disarmament, two key issues deserve great attention: transparency and cost.

As for January 2019, the estimation for the total amount of nuclear weapons stockpiles around the world was of 13,865, distributed among 9 countries. The United States and Russia hold the 90% of the world total with respectively 6185 (USA) and 6500 (RUS), followed by France (300), China (290), the UK (200), Pakistan (150–160), India (130–140), Israel (80–90) and North Korea (20–30).

All these estimations are based on analytically based researches of independent bodies, like SIPRI,⁴ according to the information disclosed by certain States. To this respect, attitudes vary significantly. Among the most transparent States, there are the United States and the UK, followed by France. These three States have disclosed reliable information about the status of their nuclear arsenals and the planned military spending in nuclear weapons (be it maintenance or renewal). Other States, like China, India and Pakistan, make no secret of their nuclear status, but disclose no information about the status of their arsenals or their planned military spending in that area. Finally, a longstanding domestic political tradition put Israel on the list of the total non-disclosure policy.

The Russian Federation follows a particular policy of public non-disclosure. The Russian government prefers instead to share the information with the U.S. government, in the framework of the New Start treaty negotiations.

Given this picture of the international reality, what can be said is that even if nuclear stockpiles followed a declining path across the last decades, the issue of nuclear disarmament keeps being obstructed by the lack of transparency by some of the existing nuclear powers. The main point is that, even if the total number of nuclear warheads declines, nuclear capabilities do not. The lack of transparency in military spending for nuclear programmes make it difficult to assess whether or not

³Res. A/C.1/73/L.1 (<https://undocs.org/A/C.1/73/L.1>). Israel, Micronesia and the United States voted against the resolution and 71 countries abstained.

⁴SIPRI Yearbook 2019. *Armaments, Disarmament and International Security*, pp.10–11 https://www.sipri.org/sites/default/files/2019-08/yb19_summary_eng_1.pdf.

governments invest money to increase the efficiency of smaller arsenals. This is a great challenge for nuclear disarmament and international peace.

This opens the issues of controls and sanctions, which will be dealt in the contribution of Tibor Tóth—Executive Secretary Emeritus CTBTO.

Nuclear disarmament and military spending—In 2018, the world total military spending has been estimated to be \$1.8 trillion in 2018, accounting for 2.1% of world gross domestic product (GDP) or \$239 per person. For the first time in history, the 2018 represented the highest point of global military spending. According to SIPRI 2019 yearbook data,⁵ the five biggest spenders in 2018 were the USA, China, Saudi Arabia, India and France, which together accounted for 60% of global military spending. The USA increased its military spending for the first time in seven years to reach \$649 billion in 2018. Spending by the USA accounted for 36% of world military spending and was 2.6 times more than the next highest spender, China. The rise in U.S. military spending can be attributed to two factors: a 2.4% increase in the salaries of military personnel; and the implementation of large and costly conventional and nuclear arms acquisition programmes. China allocated an estimated \$250 billion to its military in 2018. This represented a 5.0% increase compared with 2017 and an 83% increase since 2009. China's military spending is roughly linked to the country's economic growth, which slowed in 2018 to the lowest level in 28 years. Slower growth in military spending can therefore be expected in the coming years.

Some final remarks: Peace and Sustainable development goals—To date, disarmament is included only implicitly and not explicitly in the Sustainable Development Goals (SDGs). The disarmament issue could be desumed from SDGs 16.1 and 16.4. According to the SDG 16.1, the aim must be that of “*Significantly reduce all forms of violence and related death rates everywhere*”, while the SDG 16.4 says that “*By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime*”. Another source from which one can desume a commitment to disarmament can be found in the SDGs 3 (Good health and well-being), 4 (Quality education) and 8 (Decent Work and economic growth).

Besides the explicit reference of SDGs 16.1 and 16.4 to violence, arms trafficking and financial related issues, the linking point of SDGs 3, 4 and 8 to disarmament is represented by the different use of financial resources, from nuclear arms development towards social, sanitary and educational purposes.

To have an idea of the volume of the financial resources devoted to nuclear programmes development and of the possible different uses that public authorities could do of these resources, I will give you two examples.

The first one concerns the costs of the British ‘Trident’ nuclear programme. Every year, it costs to british taxpayers around £ 2bn and the british government has planned a total expense in nuclear programme's related activities a total amount of £ 100bn. At the same time, there are many studies pointing to the underfinancing of the National Health System (NHS), which is quantified in a gap of £ 2bn per year.

⁵ *SIPRI Yearbook 2019. Armaments, Disarmament and International Security*, pp. 6–7 https://www.sipri.org/sites/default/files/2019-08/yb19_summary_eng_1.pdf.

Just to have an idea, the necessary investment to meet the requirements of SDG 9/6—Basic infrastructure: roads, rail and ports; power stations; water and sanitation; SDG 2—food security: agriculture and rural development; SDG 12/13—climate change mitigation and adaptation; SDG 3–5: health and education, should be comprised between 4 and 7 trillion U.S. dollars per year globally (World Investment Report 2014, UNCTAD).

Obviously the goal of disarmament, at least at the nuclear level, is both ambitious and difficult to realize. As it happens in every field of human activity, uncertainty and lack of complete informations could discourage international actors to take disarmament initiatives. To this respect, as Robin Grimes—Rs And Mod, United Kingdom, in this session tells us, interests and needs are to be taken in consideration also in the institutional design process of disarmament initiatives.

I like to conclude mentioning the speech of Amb. Cardi who express the official position of the Italian Institution. He is very clear on the possibility of factoring in the element of multilateralism. In a condition of uncertainty, incomplete information and cost-benefit approach to nuclear disarmament, the multilateral institutional design is the only viable option in taking new initiatives and boosting existing ones in the field of international nuclear security.

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