

Peaceful Uses: Facilitating Cooperation, Ensuring Safety, and Strengthening Safeguards

Opening Remarks by Dr. Juan Francisco Facetti

Good afternoon, it is an honor and pleasure to be here with all of you. Thanks a lot to NTI and NPSGlobal for inviting me to present some reflections from the daily work that I carry out in Vienna. This initiative is somewhat exemplary. The presentations and the discussions are of a high quality with robust arguments. We are going to have a lot of input for the Review Conference.

I welcome that this debate is held in Brazil, a country that was the second in Latin America to have a research reactor and has reached a very high nuclear development. I am referring to the peaceful use that Brazil has given to nuclear energy in different areas and of course, this is part of the legitimate right that our countries have in taking advantage of these applications for the benefit of the population.

I would also like to repeat what Paraguay mentioned yesterday at the Extraordinary General Conference held to make official the election of Ambassador Rafael Grossi after he was elected by the Board of Governors last October: “*We are proud as Latin-Americans, that two countries in the region were the first in the world to have a Bilateral Accounting Agency: ABACC*”. This is a good example for the rest of the world regarding nonproliferation.

The NPT is the result of the *aggiornamento* of our countries to the UN Security Council Resolutions. Now, 50 years later we face another reality. Today there is no rationality or predictability that existed during the Cold War. Today unilateralism is generating scenarios of imbalanced relations: the issues of Iran, Jerusalem, and North Korea; etc., all of this drive us to a growing instability and unpredictability.

I would like to underline the long standing position of Paraguay that multilateralism is a fundamental principle in negotiations.

We are all aware of the multiple applications of nuclear energy across medical, agricultural, industry and environmental fields, and the role that these applications can play in helping to reach the Sustainable Development Goals. First I would like to mention some provisions and pillars of the NPT that drive our actions:

- a. Pillar III is an essential constituent of the overall bargain that drives the NPT.
- b. Article IV exists to ensure that non-proliferation does not overreach and suppress legitimate development needs.
- c. Article III exists to ensure those needs are met in ways that do not undermine non-proliferation.
- d. The full implementation of Article IV is essential to achieving the overall balance across the three pillars of the NPT’s work that, in turn, ensures the Treaty continues to function effectively and act as a fortress of our collective security.

This treaty is to provide a framework that channels the increase of national capacities in the development of nuclear energy through nuclear safeguards, which is administered by the International Atomic Energy Agency. On the other hand, we have to remember that many countries with nuclear development, before signing this Agreement, had specific safeguards agreements for specific nuclear facilities. Through this treaty, countries can prove and demonstrate that the nuclear materials entrusted to them are being used correctly and properly and in a transparent manner.

Also in relation to the particular topic of this panel, it is true that certain political forces or dominant technology groups could be imposing limitations on countries interested in developing their capabilities. Adapting and integrating efficiently discriminatory regimes is crucial and is what will allow access to technology and prevent discriminatory and protectionist attitudes with respect to sensitive technologies. It is important to mention some examples of cooperation, and for me, a very successful case is Argentina.

Indeed, what Argentina envisioned 50 year ago or more, was its technological development and increased innovation capacities in this area rather than purely the acquisition of technology. That vision allowed Argentina to continue making great advances in other areas as in the enrichment of uranium, design and development of research reactors, nuclear medicine (to which the Argentine population has high access), and recently the development of the SMR CAREM 25. It is also worth highlighting the south-south cooperation that Argentina always provided, in the case of Paraguay since 1967 in the health and agriculture sector and since 1974 in monitoring the fallout of nuclear explosions in French Polynesia.

But other examples of much more comprehensive assistance are the construction of research reactors in Algeria, Egypt, Peru, Australia and now with the Netherlands. Both Argentina and Brazil are developing the multipurpose reactor. By the way, I am confident that in the medium or long term, they can jointly export nuclear technology to other countries.

This bilateral cooperation I think is an excellent example of how the adherence to the NPT of Argentina and Brazil in the 1990s has been beneficial to increase their scientific and technological capabilities. This not only happens in the nuclear engineering sector but also in radiochemistry, in the mechatronics, electro-mechanics, metallurgy, welding technology, material sciences and many other areas.

On the other side we have the cooperation provided through multilateral channels, in other words the IAEA. The technical cooperation program is funded through the TC Fund, with an average annual budget of 100 million USD. In addition, the IAEA Peaceful Uses Initiative, launched in 2010, has helped to raise over 180 million USD for more than 300 projects that benefit more than 150 countries.

Regarding nuclear reactors, globally there are about 450 NPPs in 30 countries, 58 NPPs under construction, more than half of them in Asia, the rest in Europe, the Middle East, South America and Africa. For research and medicine there are 240 NRRs in 56 countries. It is true that there is no renaissance of nuclear energy, but there was neither phase-out after the Fukushima accident in 2011. These examples indicate that it is clear that no nuclear program

in the world can be autonomous. It is not viable. There are different levels of cooperation and integration between nuclear programs and it is clear that there are limitations in the capabilities of the programs.

Without a large international cooperation through the signature, ratification and implementation of bilateral or multilateral treaties, it is almost impossible to have a comprehensive nuclear development for peaceful uses.

How much have we evolved in these last 10-20 years regarding *International Cooperation vs. Protectionism (barriers/deny access) or autonomy (national effort)*? We are in a world where governments are forced to invest less in technological development prioritizing other sectors, leaving some niches of nuclear development partially in the hands of the private sector (as is the case of Small Modular Reactors where there is a constellation of alliances in the private sector).

We must also consider that in this world of constellations of alliances, they are formed and developed at different speeds. Some countries are slow, others are agile and fast, part of it is because they have policies where technological protectionist barriers are minimal or do not exist, others are slow because they believe that being autonomous, they will achieve development and technological independence.

These different speeds directed by the development of the technologies are also not accompanied by an evolution in the ministries of foreign affairs of many countries that want to reach the domain of nuclear technology, as can be the case of the IAEA and other specialized agencies of the UN linked to the use of nuclear energy and its applications (FAO, WHO). We still live in a diplomacy environment with the speed and mentality of the beginning of the twentieth century.

This same technological development has allowed a great leap in terms of verification of compliance with safeguards. The use of new remote sensor technologies makes it much more efficient and effective in the control and accounting of nuclear material and technological development. The future of block-chain in safeguards verification is also promising (Distributed Ledger Technology). The IAEA's great challenge today in the area of safeguards is to maintain its credibility as an administrator of the NPT and to efficiently plan ahead its capacity and know how to take advantage of them.

In Brief

Many countries converged thanks to the joint development of nuclear technology. Scientific diplomacy is a fundamental tool to use. Peaceful uses of nuclear energy and technology are of great significance to all State Parties to the NPT, particularly in addressing many aspects of human life, including in the areas of health, pest management, food and agriculture, water resource management, environmental protection and industry.

- The NPT establishes a framework for international cooperation in the peaceful uses and applications of nuclear energy for human development that can be achieved by bilateral or multilateral means.

- In this matter the IAEA TC is widely recognized as an important and essential element for the implementation of Article IV of the NPT.
- All state parties to the NPT support the collaborative work with the IAEA towards the reach of the Sustainable Development Goals (SDGs).

Future steps for the 2020 NPT RevCon:

- We could underline the need for prioritizing areas of common concern that are easily achievable, such as the issue of peaceful uses of nuclear energy.
- We should promote within all State Parties at the RevCon to keep the deliberation of Pillar 3 (peaceful uses of nuclear energy) in “general agreement,” without major “discrepancy.”
- Keep the motion favorable. Different accents and priorities need to be kept under control, preventing any aggressive and divisive responses.
- Considering experiences in previous Review processes, all parties should keep in mind that the objectives of the NPT can only be achieved through a balanced, comprehensive and non-discriminatory implementation of all three pillars.

Finally, I would like to highlight one additional point:

- Regional dialogue on the RevCon is an effective vehicle in gathering the views and priorities on the progress of the implementation of the Treaty across the region and across regions.

Thank you again to NTI and NPSGlobal for organizing this Dialogue.