The relationship between the 123 Agreement and international environmental law

Due to the rigidity of the international law framework concerning nuclear energy, particularly the Treaty on Non-Proliferation of Nuclear Weapons (NPT) of 1967, the United States and India created a parallel cooperation agreement on civilian nuclear energy, thus overcoming the deadlock created by the NPT. Why is the NPT so important?

This treaty was ratified in 1967. It sets a list of rights and obligations for Nuclear Weapon States such as an obligation to prevent proliferation of nuclear weapons\(^1\). It also gives a right to non nuclear-weapon states to develop technology related to nuclear energy used for civilian and peaceful purposes\(^2\) and sets a duty to disarm as a “third pillar”. The main issue here is that to become a party to the NPT a nuclear-weapon state must have exploded the bomb before 1 January 1967.\(^3\) India has exploded the bomb in 1974 and thus falls outside of the scope of the NPT, finding itself in a deadlock situation. The NPT was accused of creating a “nuclear apartheid”, preventing nuclear weapon states that did not explode the bomb before 1967 to enjoy the rights granted by the NPT while enabling the older nuclear weapon states to maintain their status. The only possible solution for India seemed to negotiate a redraft of the NPT, but some States feared that if it were to be done, the International Community would appear too lenient towards States that developed the nuclear bomb.

The Agreement for Cooperation Between the Government of the United States of America and the Government of India Concerning Peaceful Uses of Nuclear Energy, also known as the 123 agreement, is a cooperation agreement on civilian nuclear energy between the USA and India. It creates a series of rights and obligations and frames the exchanges of nuclear-related goods and information between the two states. This creation of a parallel agreement and the possibility of its extension to other states was the source of worries for some states and the members of civil society that saw that parallel network as a potential threat to the imperfect but reassuring balance created by the NPT. This parallel network was perceived as a black market of nuclear energy deprived of the general rules and principles of the main network. Those worries were not shared by everyone, as many saw it as a positive way of developing

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3 Treaty on the Non-proliferation of nuclear weapons 1967, INFCIRC/140, article 9 § 3
international law related to nuclear energy\textsuperscript{5} while others celebrated the end of the deadlock in which India seemed to be inextricably entangled\textsuperscript{6}.

As for international environmental law, its development is linked with the trauma caused by the Chernobyl accident. Ever since this accident, the international community realized the potential drawbacks of this energy\textsuperscript{7}, not only for the human beings, but also for the environment. This led to the creation of several treaties in international environmental law as it appeared soon enough that this issue could not be tackled individually and that cooperation between States was needed to counter the possibility of transnational nuclear pollution. As a consequence, the International Atomic Energy Agency focused more on health and safety regulations, and international treaties were drafted. The 123 Agreement was created, in part, to free India from the rigid NPT framework. Indeed, it is precisely the fact that India is not a party to the NPT that restrained the development of Indian nuclear energy. Indeed for countries party to the NPT, providing assistance to a country not party to the NPT might appear as a breach of the duty to prevent proliferation because of the lack of legal framework controlling this exchange.

But does it free the two parties, the USA and India, from other preexisting obligations under international law? How is the environment protected by the 123 Agreement and by previous treaties? The problem is then to assess how independent is the 123 Agreement from these treaties. Is the 123 agreement free of any restraints?

To answer this question, this essay begins by assessing whether the 123 agreement is free of any restraint under international environmental law. Then, the analysis will focus on how other obligations under international law can influence the content of the 123 agreement and how those obligations can be mutually reinforced.

\textsuperscript{5} Mohamed El Baradei, Rethinking Nuclear Safeguards, Washington Post, 14 June 2006
\textsuperscript{6} R. N. Burns, “A Future Unbound: U.S.-India Relations” (2007)
I – The 123 Agreement : free of any restraints?

A – The provisions of the 123 agreement related to the environment.

The environment is mentioned twice in the 123 agreement : The first time in the Preamble,\(^8\) the second time in article 11 : “The Parties shall cooperate in following the best practices for minimizing the impact on the environment from any radioactive, chemical or thermal contamination arising from peaceful nuclear activities under this agreement and in related matters of health and safety.”\(^9\)

A detailed analysis of article 11 is required to determine exactly what obligations parties to the treaty have to comply to be able to assess the effectiveness of protection of the environment under the 123 Agreement. To grasp the meaning of article 11, article 31 of the Vienna Convention on the Law of Treaties\(^10\) is useful. According to this article, treaties have to be “interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.”

If we scrutinise article 11 further, the meaning appears to be quite vague. For example article 11 refers to the “best practices for minimising the impact” of the use of nuclear energy on the environment. But it does not name which practice has to be followed nor does it provide an annex which the best practices mentioned. It also provides that the parties have to cooperate to fulfill that aim, but again no precision is given to clarify the meaning of cooperate. Cooperation could mean anything from the mere exchanges of views concerning environmental protection to the setting up of a common plan of action to tackle this issue. Such a lack of clarity and precision allows the creation of shallow obligations giving wide discretion to states. Nevertheless it also gives the opportunity to states to make the meaning of the obligation more precise in the future by adding protocols to the treaty or by redrafting it.

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\(^8\) Agreement for Cooperation Between the Government of the United States of America and the Government of India Concerning Peaceful Uses of Nuclear Energy (123 Agreement) (2007), “Mindful that peaceful nuclear activities must be undertaken with a view to protecting the environment.”

\(^9\) Agreement for Cooperation Between the Government of the United States of America and the Government of India Concerning Peaceful Uses of Nuclear Energy (123 Agreement) (2007), Article 11. “The Parties shall cooperate in following the best practices for minimizing the impact on the environment from any radioactive, chemical or thermal contamination arising from peaceful nuclear activities under this agreement and in related matters of health and safety.”

\(^10\) Vienna Convention on the Law of Treaties (1969), article 31
According to Kenneth W. Abbott\textsuperscript{11}, there are three dimensions to legalisation “obligation, precision and delegation”. Depending on the gradation of each characteristic, the strength and the restraining character of a rule will change. An obligation will be strong if the gradation of two of those elements are high. For example if the obligation characteristic is strong, this can be compared to “hard law”, and if the delegation is consequent the overall obligation will have an important binding force. Indeed, even if precision is low, delegation to an independent body gives this body the opportunity to implement the obligation and to clarify its scope without leaving room for state discretion. Using this framework to analyse article 11 might be useful to clarify its scope. The obligation dimension here is quite clear, it is a binding obligation as it is set out in a bilateral treaty that has been ratified\textsuperscript{12}. Nevertheless, as the wording is quite vague, it is difficult to enforce, as compliance with this obligation is encompassed in a wide range of actions, from mere consultation to the creation of a comprehensive common scheme. As for the delegation characteristic, there is no mention of it in article 11. Therefore, delegation here is inexistent allowing states to interpret freely, within the limitation of article 31 of the Vienna Convention\textsuperscript{13}, the vague obligations set in article 11 of the 123 Agreement.

Even if the 123 Agreement does mention the environment issue, it does it in a shallow way. But does it mean to say that the 123 agreement creates a parallel network independent of all external influences?

**B- The IAEA regulations and the 123 agreement**

The Agency is the main regulatory body concerning nuclear energy. It was created in 1957 and has ever since accumulated a considerable amount of expertise and prestige. To make the 123 agreement enforceable, India had to pass an Agreement with the Agency


\textsuperscript{12} Vienna Convention on the Law of Treaties (1969), art 26

\textsuperscript{13} Vienna Convention on the Law of Treaties (1969),
concerning non-proliferation safeguards. The Agency has the ability to adopt standards of safety. It is worth pointing out that this article of the IAEA statute is centered on the health and safety of human beings and thus extends to the environment when linked with human beings’ safety. Then, it is completely human-centered as it deals with the environment of human beings and does not consider the environment as a separate and independent entity that needs protection. This may limit the scope of the Agency’s safeguards as it systematically has to link protection to the environment with human beings. The health and safety safeguards adopted by the agency are divided into three different categories. “Safety fundamentals” provide the basic principles that have to be complied with by Member States. The Agency can precise those “Safety Fundamentals” by adopting “safety requirements” which detail what technical specificities have to be met for each type of facility. “Safety guides” are recommendations that can help Member States to meet the standards.

All these health and safety safeguards are available for USA and India which are members of the Agency. Date of their membership. But do they have to enforce it? Even if the Agency can adopt those health and safety standards, they are not compulsory as such. They are mere recommendations based on the most advanced technical knowledge on the nuclear energy field. Still, even if they are not legally binding, Member States use them because of the quality of those standards.

Nevertheless, in certain circumstances, the Agency has the power to check if minimum health and safety standards are applied by Member States. This procedure is described in article III-A-6, XI and XII of the IAEA statute. In Nuclear Energy and the Environment, the extremely

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15 Statute of the IAEA (1957), Article III-A-6

16 Statute of the IAEA (1957), Article III-A-6

17 Elena Molodtsova, nuclear energy law and international environmental law: an integrated approach, 13 J. Energy Nat. Resources L. 297 1995

restricted powers of the Agency are underlined\textsuperscript{19}. The control powers of the Agency regarding health and safety standards are limited to the cases where the Agency is itself providing the goods and the facilities. Despite the restricted scope of control and review, the Agency enjoys a quite important power of sanction as in case of non-compliance, according to article XII of the Statute of the IAEA, the Agency may withdraw from the project concerned and ask for the return of the material and facilities given for the project.

How can this affect the 123 agreement? Even if the 123 agreement is a bilateral agreement between the US and India a more developed cooperation in the future between the Agency and one of these countries cannot be excluded. If this is the case, article 11 of the 123 Agreement will gain strength because of the combination of the obligations under the 123 Agreement and the bilateral agreement or agreements that fall in the scope of article XI of the statute of the Agency, in the same way as the non-proliferation safeguards of the Agency gained strength with the NPT. This combination of obligations might be an answer to strengthen the obligations of India and the USA concerning environment. Interaction between treaties must not be underestimated.

\textbf{II – The solution : An integrated approach?}

\textbf{A – Interaction between the 123 agreement and other treaties.}

The Chernobyl disaster that occurred on the 26\textsuperscript{th} April 1986\textsuperscript{20} brought a new light on health and safety issues related to nuclear energy. It triggered the realization that nuclear safety was not a issue that could be dealt exclusively with domestic rules. This realization triggered the drafting of several treaties, but we will focus uniquely on treaties dealing with prevention and will put aside treaties dealing with the aftermath of a nuclear accident as the latter are not concerned with health and safety safeguards of the IAEA.


\textsuperscript{20} International Safety Advisory group, Summary Report of the Post-accident Review Meeting on the Chernobyl Accident, IAEA Safety series No75-INS61
The Convention on Nuclear Safety’s (CNS) main source of inspiration are the safety fundamentals published in 1993 by the IAEA\textsuperscript{21}. As said previously, under the IAEA statute the Agency can adopt three different types of safeguards. The highest in the hierarchy and the ones that have been codified by the nuclear safety convention are the Safety fundamentals. According to article 26 of the Vienna convention on the law of treaties, the parties to a treaty must perform their duties in good faith. The CNS was ratified by the US on 11 April 1999 and by India on 3 March 2005. As a consequence, the safety fundamentals codified in the NSC are binding on India and the US.

As a case study we will analyse article 6 of the CNS which deals with upgrading existing nuclear installations in compliance with health and safety standards. According to this article\textsuperscript{22}, “the contracting party shall ensure that all reasonably practicable improvements are made as a matter of urgency to upgrade the safety of the nuclear installation.” But the convention does not provide a definition of “reasonably practicable improvements”, nor does it refer to IAEA safety requirements. The language used reveals that is more an obligation of conduct that an obligation of result. Indeed the parties to the convention do not need to comply with a specific objective obligation, their obligation is rather a contextual one, and the scope of the obligation will depend on the situation of each state. Thus there is no clear unification or harmonization of the standards. If we can borrow again the framework used by Pr. Abbott\textsuperscript{23}, the obligation lacks precision, the margin of appreciation of states is thus important.

As for the delegation aspect, this characteristic is quite limited as the review is ensured by all contracting parties\textsuperscript{24}. Each contracting party has to submit report on compliance with the obligations of the treaty\textsuperscript{25}. Thus there is no intervention of an independent body. The US and India comply with the obligation to present a detailed report on compliance with each article.

\textsuperscript{21} The Safety on Nuclear Installations, IAEA Safety Series, No 110, 1993


Nevertheless, it sometimes lacks precision\textsuperscript{26}, but again this may be because of the too vague obligations.
In short, the convention actually strengthens to obligations concerning the environment contained in the 123 agreement but a large discretion is given to the parties. The failure of the 123 agreement to effectively provide protection of the environment can be seen as a direct consequence of a failure of the international framework.

\textbf{B – An inherently decentralized international framework}

The discrepancy between the legal strength of health and safety safeguards and non-proliferation safeguards is particularly striking. Indeed, even with the combination of different treaties, the obligations under the 123 agreement and the CNS remain dramatically weak. Nevertheless, it is difficult to blame the 123 agreement for its lack of effective measures related to the environment when it follows the logic of the general international framework related to nuclear energy and the protection of the environment. As Menno Kamminga says\textsuperscript{27}, some states declared that in any event, effectively harmonizing health and safety requirement was nearly impossible due to the variety of nuclear installations and to the amount of technical divergence. Nevertheless, it is pointed out that this hurdle is exaggerated.

The international community failed to create a general binding scheme that provides clear and harmonised health and safety standards. Even if since the Chernobyl accident, it clearly appeared that consequences of nuclear accidents crossed the borders, States preferred to keep a wide discretion to tackle these issues. The CNS is a good example as no precise international standards are given, but States are expected to enforce national legislation that complies with safety fundamentals\textsuperscript{28}. One of the rationales behind the CNS could be that as the main aim of the convention is to protect the environment of human beings and as states are the entities, in International Law, that are primarily in charge of protecting individuals, then it

\textsuperscript{26} Government of India, National Report to the Convention on Nuclear Safety, Fourth Review Meeting of Contracting Parties, April 2008, p 42

\textsuperscript{27} Menno Kamminga, The IAEA Convention on Nuclear Safety, International & Comparative Law Quarterly 1995

is the responsibility of states to enforce in their domestic legal system a proper framework regarding health and safety safeguards.

States also tend to adopt an individual-centered approach to liability. Indeed, the Vienna Convention on Civil liability for nuclear Damages creates a strict liability rule for operators. This could be perceived as a very positive feature of the treaty. Nevertheless due to the importance of these actors for States, the other side of the coin of this imposed strict liability is that the amount that can be claimed by the victims is limited. Why is this an individual-centered approach? Here the liability is placed on the entity that is directly operating the facility. The individual victim of the accident can directly claim to the operator compensation for the damage incurred. This treaty creates a series of rights and obligations that link to individual entities: the company operating the facility and the alleged victim. There is no duty owed to the environment as such nor a duty to compensate for any damage not directly linked to a specific victim.

The human-centered approach gives wider discretion to states and focuses more on reparation than prevention. In the nuclear energy field, this is particularly problematic due to the difficulty to repair the harm caused by nuclear accidents. How could the drawbacks of the human-centered approach be overcome? Luis E Rodriguez Rivera suggests to create a human right to the environment. The aim here is to accentuate this human-centered approach and reinforce it. The previous approach focuses on civil liability and reparation. It only gave the individual the right to claim damages. With a human rights approach, prevention and risk minimising would prevail. Moreover it would not just be a horizontal right but a vertical right, allowing to individual to confront the State effectively. If such a human right crystallises in the years to come, article 11 of the 123 Agreement will acquire a completely different dimension.

29 Jutta Brunee, Of sense and sensibility : reflections on international liability regimes as tools for environmental protection, International & Comparative Law Quarterly, 2004

In his article about environmental standards in the EU, W. Howarth\footnote{William Howarth, The progression towards ecological quality standards, Journal of Environmental Law, 2006}, suggests to change the perspective of European legislation by changing the object protected. He calls it the progression towards ecological standards. While environmental standards deal with the environment of human beings, ecological standards are concerned with maintaining the pre-existing biological balance. While in practice it may be difficult to determine with accuracy the boundary between environmental and ecological standards, this change of perspective would give a more important role to prevention.

**Conclusion**

As regards environmental protection, the 123 Agreement follows to pattern of the international system. Widely human-centered and depending mainly on the will of States, it does not provide clear objectives standards. Even if a positive evolution is not to be excluded\cite{Howarth2006}, it does not provide an harmonised comprehensive scheme and leaves the initiative to States. This is mainly because of the human-centered approach. To depart from the current paralysis of the system, a more ecological approach has to be reached. But it appears that the political will needed to further an evolution of international environmental law related to nuclear energy seems to be missing. For now the obligations of the 123 agreement remain weak and interaction with agency health and safety safeguards are limited.
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