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XIX Regular Session of the General Conference  
Agenda Item 13  
Santiago, Chile, 7-8 November, 2005.

**PREVENTION OF RADIOACTIVE CONTAMINATION OF THE MARINE  
ENVIRONMENT WITHIN THE FRAMEWORK OF THE TREATY OF TLATELOLCO**

**MEMORANDUM OF THE SECRETARY GENERAL**

1. At the initiative of the Delegation of the Republic of Peru, the issue of the Prevention of Radioactive Contamination of the Marine Environment within the Framework of the Treaty of Tlatelolco was addressed for the first time at the X Regular Session of the General Conference held in Montevideo, Uruguay from 27 to 30 April 1987, which approved Resolution 223 (X), whose operative paragraphs read:
  1. **To entrust** the Council of the Agency to examine the question of the banning of radioactive pollution with the aim to identify alternative means, including an Additional Protocol to the Treaty of Tlatelolco, with the support of competent international organizations, to prohibit the dumping of radioactive waste and other radioactive materials in the adjacent seas to the continental and insular territories of Latin America and the Caribbean, which are included within the Zone of implementation foreseen in Article 4, paragraph 2, of the Treaty of Tlatelolco.
  2. **To request** the Council of the Agency to submit a Report on this matter to Member States at the latest by July 30, 1988.
  3. **To inscribe** a new item in the Provisional Agenda for the Eleventh Session of the General Conference, entitled: 'Banning of Radioactive Pollution of the Marine Environment within the framework of the Treaty of Tlatelolco.'
2. Resolutions 252 (XI), 278 (XII), 299 (XIII), 331 (XIV), 357 (XV), 390 (XVI), 420 (XVII) and 444 (XVIII) resolved that the Secretary General World request the Member States' opinions regarding the way to extend the reach of the Treaty of Tlatelolco.
3. The Secretary General was also instructed to follow up on the subject based on the opinions received and maintain close contact with the International Atomic Energy Agency (IAEA) and

the International Maritime Organization (IMO) so as to submit, when appropriate, any relevant matter for the Council's consideration and decision.

4. It is worth recalling that in 1989, the Secretary General, pursuant to Resolution 223 (X), informed that he had been in contact with Dr. José M. Lizárraga Núñez, Director and Representative of the United Nations Environment Programme (UNEP), who together with UNEP Legal Consultant Dr. Raúl Brañes, prepared a study that was analyzed by the Agency's Council (Doc.S/Inf.400). Given its complexity, the Council decided to continue studying matter and in agreement with the UNEP, the Secretariat retained the services of an expert in the field, Dr. Patricio Aranda-Coddou, who was to prepare a document that serve as a basis for the OPANAL Member States to study and decide on its legal nature (a convention, agreement, additional protocol, etc.). The document was distributed to the Member States as S/Inf.444 "Draft International Legal Instrument to Establish a Prohibition on the Radioactive Contamination of the Marine Environment within the Zone of Definitive Application of the Treaty of Tlatelolco." The Council, through the Secretary General, requested that the Member States study the document and send their opinions on it in order to have the necessary elements to fulfill the mandate of presenting a report on the matter.
5. Also of note, the General Conference at its XIV Regular Session held in Viña del Mar, Chile, conducted an exhaustive study and subsequently approved a Declaration expressing:

"The XIV General Conference of the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL) declares:

1. Its deep concern for the increase in the maritime transport of radioactive wastes in the zones subject to the sovereignty and jurisdiction of the States and the conditions in which it is done.
2. That it is necessary to initiate an analysis on maritime transport of radioactive wastes in the scope in the competence of international organizations, particularly the International Atomic Energy Agency (IAEA) and the International Maritime Organization (IMO), in order to promote the development of the international legislation which will effectively allow to avoid the high risks inherent to such carriage.
3. That it is convenient to maintain a permanent interchange of information between State Parties to the Treaty of Tlatelolco on the activities of said international organizations performed in regard to relevant events that may occur in this matter."

6. The Secretary General corresponded with the IMO and received as a response Resolution A.748 (18) of 4 November 1993, which approved the “Code for the Safe Carriage of Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes in Flasks on Board Ships.” This resolution was sent to the Member States as note S-14493 of 23 June 1995. No response was received.
7. The Council also received the Declaration of the President of the Republic of Panama on the contamination of United States bases, in particular Sherman Base, and a press communiqué. In addition, the Mexican Representative on the Council presented an official letter from Greenpeace International send to the Secretariat of Foreign Relations on the transportation of radioactive material though the Zone of Application of the Treaty of Tlatelolco. The Council also took note of a letter sent in June 1999 by Mr. Raul Maxwell on behalf of the Nuclear Age Peace Foundation, regarding the radioactive contamination of the Island of Vieques, Puerto Rico. The Council took note of the Secretary General’s reply.
8. The Secretariat General has also stated: “it is an effort to achieve adequate, mandatory international regulation that provides for and protects the rights and interests of the States as regards the international transportation of radioactive material, including liability for nuclear damages. This action has been undertaken in various fora and organizations, such as the IAEA, IMO, the Meeting of the Parties to the NPT and the CPPS. It is, therefore, not a matter that exclusively concerns OPANAL, but nevertheless should not be absent from its agenda.

Therefore, in coordination with the organizations and agencies to which our governments belong—IAEA, IMO, CPPS, UNDP (PNUMA), Rio Group, etc.—OPANAL could join these efforts to contribute to the closing of international legal loopholes that persist today applicable to the transportation of radioactive materials and those aspects relative to the non-contamination of the marine environment; pertinent and timely information on the selection and frequency of use of international maritime routes; the communication of contingency plans in the event of and accident; the commitment to recover the radioactive materials in the event of a spill; the establishment of verification and transparency mechanisms to ensure compliance with applicable security regulations for this type of transportation; and the establishment of effective liability mechanisms and regulations in the event of nuclear damages.

This is an important XXI Century matter, similar to one that emerged three decades ago with the renewal of the law of the sea, in which we Latin Americans contributed to expanding our maritime jurisdictions to defend our natural wealth, without affecting the legitimate rights of the international community of freedom of navigation. Our region and OPANAL cannot be absent from the discussion that is now taking shape.” (Doc. S/Inf.802)

9. The Secretariat General informed the Council of initial contacts and presented IAEA document GC(45)INF.18 of 17 September 2001 “Declarations by Member States and Regional Groups Regarding Safety in the Maritime Transport of Radioactive Material,” as well as document GC/(45) Res.10. regarding the matter. The Director of the IAEA Office of Foreign Relations and Coordination, Mr. Piet de Klerk acknowledged receipt of the note sent by the Secretary General in fulfillment of Resolution 420.
  
10. The answers of the Member States to the resolutions issued by the General Conference on this important matter are included below:

**Resolution CG/Res.252 (XI)**

**ECUADOR**

“[Ecuador] supports the Project all the more, considering that it will soon ratify the Paipa Protocol for the Protection of the Southeast Pacific Against Radioactive Pollution.” (10/VIII/89)

**MEXICO**

“As a result of broad consultation, [Mexico] considers that it would not be appropriate to create an Additional Protocol on this matter because it would go beyond the original scope and spirit of the Treaty of Tlatelolco, which focuses on the non-proliferation of nuclear weapons. Mexico is also of the opinion that the drafting of said Protocol would require modifications to the Treaty’s preamble and objectives, which would detract from its purpose of keeping its spirit intact and promoting the consolidation of the denuclearization regime of Latin America and the Caribbean. Therefore, the Government of Mexico maintains that this matter should be the subject of another treaty and specific international agreement, rather than an Additional Protocol to the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean.” (15/II/90)

**VENEZUELA**

“The establishment of an Additional Protocol to the Treaty of Tlatelolco would be an appropriate vehicle for a regime preventing the radioactive contamination of the marine environment, without it being strictly necessary to modify the Treaty for the inclusion of such a protocol.

Regardless of the regime that the States Parties to the Treaty of Tlatelolco approve as the most appropriate way to prevent radioactive contamination, it must take into account the International Basel Convention on the Transboundary Movement of Hazardous Wastes, to the extent that it goes beyond the mere prevention and control of contamination caused by spills, as this term is used in the London Agreement. The regime must contain measures regarding the use of radioactivity for peaceful purposes since it could also cause serious and irreversible harm to the marine environment in general and to human health. Moreover, provisions must be included on international liability and compensation, as well as contingency plans in the case of emergencies and force majeure. An annex of technical definitions would be very useful, given the nature of the subject.” (5/IV/90)

#### **Resolution CG/Res.278 (XII)**

##### **COSTA RICA**

“[Costa Rica] would be willing to sign the Protocol, after consideration. Costa Rica would even be willing to go further so that the regulations contained in these legal instruments (in the Convention and the Protocol) be adhered to not only by itself but by neighboring countries. Signature of the Protocol itself would have the added benefit of having OPANAL, the regional Agency responsible for the application of the Treaty of Tlatelolco, oversee the fulfillment thereof.” (8/VI/92)

#### **Resolution CG/Res. 299 (XIII)**

##### **MEXICO**

“Regarding the matter, Mexico confirms its position stated on that occasion that the matter of preventing the radioactive contamination of the marine environment is a matter not in keeping with the nature of the Treaty of Tlatelolco, because it would go beyond the original scope and spirit of same, which is aimed at the non-proliferation of nuclear weapons.” (18/V/94).

##### **CHILE**

“Regarding the matter, the Government of Chile is of the opinion that an Additional Protocol on this subject would go beyond the original scope and spirit with which the Treaty was conceived, those being the non-proliferation of nuclear weapons in the region and the peaceful use of nuclear energy (Preamble, Articles 1 and 12). It would require modifications to the Preamble and Treaty Objectives. There are, however, other appropriate venues for regulating radioactive waste spills at sea. There is the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1972); for part of the region, the Protocol for the Protection of the Southeast Pacific against Radioactive Pollution is in force, both of which have been ratified by Chile; and the Basel Convention on the same subject is also in force.” (5/VIII/94)

11. Regarding Resolution CG/Res.331, the XIV General Conference took note of the results in document CG/432 of 14 March 1995 and approved Declaration Res. 331 (XIV). The Agency also corresponded with the International Maritime Organization (IMO) and received a response

in the form of Resolution A.748 (18), “Code for the Safe Carriage of Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes in Flasks on Board Ships” approved on 4 November 1993. The Secretariat General sent the aforementioned resolutions to the Member States together with note S-Num. 14493 of 23 June 1995, to which no response was received.

### **Resolution CG/Res.357 (XV)**

#### **PARAGUAY**

“That the Republic of Paraguay, true to its traditional policy of environmental protection, of which the protection of the marine environment is a fundamental part, is sympathetic to any action aimed at protecting the environment and would emphatically support any initiative to achieve such a laudable goal.” (11/IX/98).

#### **DOMINICAN REPUBLIC**

“...We consider it prudent to organize international fora among the countries of Latin America and the Caribbean in order to raise awareness among the authorities involved in each country responsible for the subject under discussion and build them on the existing techniques and equipment in order to achieve the desired goals.” (19/III/99).

#### **BRAZIL**

“The Brazilian Government has expressed in the competent international fora the importance it gives the need to adopt appropriate measures to regulate international maritime transport of radioactive waste and spent nuclear fuel, in accordance with the highest international security standards. Those measures should take into account, among other aspects, guarantees against the contamination of the marine environment, the exchange of information on the chosen routes, the obligation of informing the coastal States of contingency plans in the case of accidents during international maritime transport, the commitment to recover radioactive waste, in the case of accidents involving the ships that transport them, and the payment of damages in the case of injury or damages. Brazil has supported and will continue to encourage efforts to reach international legislation in this area within the International Atomic Energy Agency (IAEA). In this regard, Brazil recalls that there are several international instruments in this area, like the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management of 1997, Resolution 13, adopted by the XLII Regular Session of the General Conference of the IAEA, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, and the Code for the Maritime Transport of Irradiated Nuclear Fuel, of the International Maritime Organization (IMO).

-The Embassy of Brazil equally refers to the Final Declaration of the V Meeting of the Member States of the Zone of Peace and Cooperation of the South Atlantic, held in Buenos Aires on 21 and 22 October 1998 and calls upon the Member States to continue their efforts to establish regulations for the maritime transport of radioactive and toxic waste, considering the interests of the coastal States, especially in conformity with the rules of the International Maritime Organization (IMO) and the International Atomic Energy Agency (IAEA).

-The Brazilian Government will continue to put forth its best efforts in competent international fora, like the IMO and the IAEA in order to achieve as soon as possible international legislation on the transport of radioactive waste and consider the elements mentioned in paragraph 2..." (4/11/99)

### **Resolution CG/Res.390 (XVI)**

#### **ANTIGUA AND BARBUDA**

"...the views of Antigua and Barbuda on the "Prevention of Radioactive Contamination of the Marine Environment within the Framework of the Treaty of Tlatelolco", be it recorded that Antigua and Barbuda has made numerous statements in international fora, most notably at the United Nations and the Organization of American States in support of the concept. In this regard we have actively and persistently condemned the transshipment of nuclear waste through our waters; and have reiterated the idea that we will not accept the fact that there has never been an accident in regard to the transshipment. In fact, we have called upon their countries involved in the said transshipment, to seek out the dictionary's definition of an accident. In short, Distinguished Secretary General, Antigua and Barbuda will insist most ardently on the Prevention of Radioactive Contamination of the Marine Environment within the Framework of the Treaty of Tlatelolco, as there is absolutely no estimate as to when there could be rehabilitation from such". (Nota PM/LS/88/00 of 20 July 2000).

#### **PANAMA**

"The Republic of Panama has ratified by passing Law No. 20 of 18 February 1991, the Protocol for the Protection of the South Pacific against Radioactive Contamination. This is a precedent for our country, which is most interested in contributing to the preservation and protection of maritime areas against radioactive contamination. We consider that this protocol could serve as a basis or model for a future legal instrument regarding the matter or if so desired, to support the initiative to draft an Additional Protocol III to the Treaty of Tlatelolco, to cover maritime areas," (Note 091 SSDP-DCSA of 2 August 2000)".

#### **PERU**

"Regarding the measures that should be taken to prevent the radioactive contamination of the marine environment in the definitive zone of application of the Treaty of Tlatelolco, the Peruvian Nuclear Energy Institute (IPEN) is of the opinion that it is absolutely necessary given the interest and common need to protect and preserve the marine environment against any dumping and/or storage of radioactive waste that may contaminate our marine resources. It would be recommendable, the IPEN added, to expand the scope of the Treaty through an Additional Protocol III so as not to affect the spirit of the Treaty, which is basically one of non-proliferation of nuclear weapons and putting a stop to the arms race." (7 August 2000).

#### **TRINIDAD AND TOBAGO**

"The Ministry of Foreign Affairs of the Republic of Trinidad and Tobago wishes to inform His Excellency that the Government of the Republic of Trinidad and Tobago is cognisant of the deleterious effects that radioactive waste can have on the marine environment. The Ministry also wishes to recapitulate that the Government of the Republic of Trinidad and Tobago remains steadfast in its resolve to prohibit any contamination of the marine environment within the context of the Treaty of Tlatelolco and supports any technical and legal measures for the prevention of radioactive contamination of the marine environment. Trinidad and Tobago

views a Resolution CG/Res.390 as very timely in facilitating the continued work of OPANAL and hereby affirms its full support of the Resolution.” (18 August 2000).

#### **BOLIVIA**

“...In this regard, Bolivia wishes to communicate that at the next OPANAL General Conference the Government of Bolivia will make its opinion known regarding the matter.” (Note E.B.MX No.212 of 16 August 2001).

#### **PERU**

“Regarding the matter, the Embassy of Peru wishes to reiterate what it expressed to the Council of OPANAL at its session on 7 August 2000. That is that the Peruvian Institute of Nuclear Energy, the competent organization in this field, feels that it is absolutely necessary that measures be taken to prevent the radioactive contamination of the marine environment within the definitive zone of application of the Treaty of Tlatelolco, given the interest and common need to protect and preserve the marine environment against any dumping and/or storage of radioactive waste that may contaminate our marine resources. To this end, it would be recommendable to expand the scope of the Treaty through an Additional Protocol III so as not to affect the spirit of the Treaty, which is basically one of non-proliferation of nuclear weapons and putting a stop to the arms race.” (Note Num. 5-19-5.O/09 of 4 September 2001).

#### **URUGUAY**

“From a technical standpoint, the most credible problem situation would be associated with the transportation of a nuclear explosive in the definitive zone of application. The transportation of nuclear fuel in association with a nuclear fission reactor, such as those used to generate energy for propulsion systems on ships (aircraft carriers and submarines) would appear to be a matter that should not be addressed within the framework of a treaty on nuclear weapons. A reactor is not designed to function as a weapon, just as a passenger plane is not designed to be used as such. Moreover, fission reactors have been used in generally non-military vessels such as icebreakers. This other type of transportation of radioactive materials should therefore be considered within another regulatory framework. Returning to the most credible problem situation and based on the fact that the countries of the region do not have nor will ever have nuclear weapons, the transportation of nuclear explosives or their possible testing or use in conditions that could affect the marine environment of the Treaty region could occur associated with: a) Formal military activities of the central countries (the most credible scenario being an air or maritime accident involving vehicles carrying nuclear weapons), b) Informal military activities associated with organizations with combatants based in peripheral countries.” (Note Núm. E.15/001-258 of 8 November 2001).

#### **Resolution CG/Res.420 (XVII)**

#### **JAMAICA**

“As a small Island State, Jamaica is vulnerable to the effects of environmental events that can affect our marine habitat. Marine Pollution and its transboundary implications are disastrous to the fragile ecology of small island developing states such as Jamaica. This problem is exacerbated by the semi-enclosed nature of the Caribbean Sea within which we are located. Jamaica is extremely concerned as to the safety and environmental risks to which we are exposed by the maritime transport of nuclear waste and other radioactive material through Caribbean waters. We therefore reiterate the need for the strengthening of measures and



International regulations to guard and protect states from these untold risks. While we appreciate the steps taken by states to prevent the likelihood of accidents, we must emphasize that if a disaster were to occur, the result would cause untold damage to our environment with consequent implications for our people and already fragile economies. Jamaica therefore underscores the need for the international community to consider the establishment of a comprehensive regulatory framework that would promote state responsibility in the areas dealing with disclosure, liability and compensation in case of accidents. Jamaica also reaffirms the need for states involved in the transshipment of hazardous wastes to provide relevant information to affected states as to the transshipment of such material. Jamaica recognizes the need for safety and security relating to these transshipments and the right of States under Article IV of the NPT to benefit from the peaceful uses of nuclear energy. We believe however that these considerations should not be inimical to the sustainable development of other states. Jamaica welcomes the affirmation given by some states that all possible steps are being taken to provide the necessary information and security assurances to countries affected by the transshipment of radioactive and hazardous material. Jamaica urges all similarly concerned states to adopt this approach to the sharing of pertinent information.” (Note 121/1 of 24/IX/02).

## **GUATEMALA**

“Guatemala has solid nuclear legislation for controlling, supervising, and overseeing peaceful applications of nuclear energy, as well as the control of radioactive waste and the safe transport of radioactive materials. In the event of the radioactive contamination of our marine environment, we have a National Radiological Emergency Response Plan in addition to being a signatory of the Conventions on Early Notification of a Nuclear Accident and on Assistance in the case of a Nuclear Accident or Radiological Emergency and the Additional Protocol on Safeguards. As regards the monitoring of our coasts, the Ministries of Energy and Mining, and Defense through the General Directorate of Energy and the Atlantic and Pacific Naval Bases, respectively, developed in 1995 a Permanent Marine Radioactive Monitoring Program. So far the natural and artificial radioactive limits reported along the coasts of our country are very low.” (Note VM-130-2003 of 21/VII/03).

12. During the XVIII Regular Session of the General Conference held in Havana, Cuba, the Delegation of the Republic of Cuba stated:

“The international concern for environmental protection and in particular the protection of marine resources stemming from the cross-border movement of nuclear and radioactive materials is significant for our region and in particular for the zone of application of the Treaty of Tlatelolco. Especially for the Caribbean, the declaration of the Caribbean Sea as a sustainable growth zone demands that priority attention be given to this matter. It has been the subject of debate in several international fora and has the attention of specialized international agencies, such as the International Maritime Organization (IMO) and the International Atomic Energy Agency (IAEA). Moreover, it has been discussed within the framework of OPANAL since the X Regular Session of the General Conference. My delegation feels it would be appropriate to point out the fundamental elements that underlie our position regarding the matter. Although some technical regulations have been developed and govern the matter today at the international level, Cuba considers it necessary to continue working to strengthen the international legal regime regarding the security and protection of the transportation of these materials. This regime must include provisions relative to prior notification of the States that may potentially be affected by their transportation, the need to have contingency plans in the event of spills and accidents, guarantees that all the waste materials will be recovered in such cases, and a compensation regime for nuclear damage to the marine environment. In this

regard and bearing in mind that these matters fall within the competence of other international organizations, Cuba considers it necessary that there be an ongoing exchange of information within the framework of OPANAL among the States Parties to the Treaty regarding the activities that those international organizations carry out relating to the international transportation of radioactive waste.”

13. The Delegation of the Republic of Guatemala also expressed at the same session:

“The Guatemalan Delegation recognizes the efforts of OPANAL to maintain the subject of the transportation of radioactive material and the prevention of the contamination of the marine environment on the Agency’s and the General Conference’s agenda and manifests, together with other countries, that a modification of the Treaty of Tlatelolco to introduce the matter may not be in keeping with the Treaty’s spirit. However, the Guatemalan Delegation expresses its concern over the flow of radioactive and potentially polluting materials through our region and reiterates its commitment to continue seeking, within the framework of the competencies and capacities of the appropriate organizations and instruments, the best way to address the problem.”

14. It is the opinion of the Secretariat General that this matter has been under consideration in various fora and international organizations, which are not mutually incompatible. The Latin American and Caribbean region could join forces with the international community to close the legal loopholes in the area of security applicable to the transportation of radioactive material as regards preventing the contamination of the marine environment. It is not a matter that directly concerns OPANAL, however, the Secretariat General considers that the matter should remain on the Agency’s agenda, which would allow it to have the appropriate information and promote, if necessary, greater coordination between the States of Latin America and the Caribbean, which are Parties to the Treaty of Tlatelolco.