WRITTEN RESPONSE OF THE UNITED KINGDOM

INTERNATIONAL TRIBUNAL FOR THE LAW OF THE SEA

THE MOX PLANT CASE

(IRELAND v. UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND)

REQUEST FOR PROVISIONAL MEASURES

WRITTEN RESPONSE

OF THE

UNITED KINGDOM

15 NOVEMBER 2001

TABLE OF CONTENTS

PART I

THE UNITED KINGDOM'S RESPONSE IN SUMMARY

1. The request for provisional measures in this case meets none of the conditions prescribed for such relief by Article 290 of the *United Nations Convention on the Law of the Sea* ("UNCLOS").

(1) The International Tribunal of the Law of the Sea ("ITLOS") cannot be satisfied *prima facie* that the tribunal to be established under Annex VII of UNCLOS ("Annex VII Tribunal") will have jurisdiction. The matters of which Ireland complains are governed by regional agreements providing for alternative and binding means of resolving disputes and have actually been submitted to such alternative tribunals, or are about to be so submitted. Moreover, it is a condition of jurisdiction that the parties should first have exchanged views with the aim of settling the dispute by negotiation. Ireland has, however, declined the United Kingdom's invitation to do so.

(2) Ireland cannot demonstrate the urgency prescribed by Article 290(5) of UNCLOS and Article 89(4) of the Rules of the Tribunal ("ITLOS *Rules*"). The United Kingdom does not contemplate taking any step, pending the constitution of the Annex VII Tribunal, which might infringe the rights of Ireland under UNCLOS or cause serious harm to the marine environment.

(3) The arguments that Ireland advances in its *Statement of Case* fail to make out a *prima facie* case that the action that the United Kingdom proposes to take will, even in the long term, infringe the rights of Ireland under UNCLOS or cause serious harm to the marine environment.

(4) Instead of adducing cogent evidence of a threat to the marine environment arising specifically from the operation of the MOX Plant, Ireland relies on general assertions of dangers arising in connection with the nuclear industry or nuclear reprocessing or the practice of transporting radioactive materials or plutonium by sea. Moreover,

these allegations do not even appear in the *Statement of Claim* before the Annex VII Tribunal.

(5) If ITLOS were to grant the relief that Ireland seeks, it would not "preserve the rights of the parties to the dispute". It would threaten the future of the MOX Plant, which in turn would have serious financial consequences, not only for the owners, British Nuclear Fuels plc ("BNFL"), but also for the local economy.

A. Jurisdiction

2. By Article 290(5) of UNCLOS no provisional measures are to be prescribed unless ITLOS is satisfied *prima facie* that the tribunal to be established will have jurisdiction. Ireland bases its case for provisional measures on Article 287(5) of UNCLOS.[1] But the jurisdiction of the Annex VII Tribunal is subject to Article 282, which provides:

> "If the States Parties which are parties to a dispute concerning the interpretation or application of this Convention have agreed, through a general, regional or bilateral agreement or otherwise, that such dispute shall, at the request of any party to the dispute, be submitted to a procedure that entails a binding decision, that procedure shall apply in lieu of the procedures provided for in this Part, unless the parties to the dispute otherwise agree."

3. In the present case, the Parties have agreed to seek settlement by such alternative means entailing a binding decision on the matters now raised by Ireland. Indeed, Ireland expressly relies on "other international instruments including international conventions and European Community laws".[2] Foremost among those "other international instruments" is the *Convention for the Protection of the Marine Environment of the North-East Atlantic* ("the OSPAR Convention").[3] This provides for the compulsory settlement of disputes arising thereunder by tribunals established pursuant to its terms. Four months before instituting the present proceedings, Ireland instituted proceedings before an OSPAR tribunal. That OSPAR tribunal has now been constituted. In the present proceedings, Ireland repeats the complaints that it has made to the OSPAR tribunal. The Annex VII Tribunal does not have, even *prima facie*, jurisdiction to adjudicate on the matter of which the OSPAR tribunal is now seised. If

[1] *Statement of Claim*, at paragraph 39.
[2] *Statement of Claim*, at paragraphs 2 and 3.
[3] 22 September 1992.

it were otherwise, there would be duplication of proceedings with the attendant risk of inconsistent rulings.

4. The principal provisions of European Community law on which Ireland relies are certain Directives made pursuant to the Treaty establishing the *European Atomic Energy Community* of 1957 ("Euratom Treaty") and the *Treaty Establishing the European Community* ("EC Treaty"). The *Euratom* and *EC Treaties* provide for the resolution of disputes between the Member States by various means, including in the European Court of Justice ("ECJ"). Indeed, both of these Treaties expressly prohibit the Member States from making use of any means of settlement of disputes arising under those Treaties other than those prescribed therein. Ireland has made public its intention of initiating separate proceedings in respect of the United Kingdom's alleged breach of obligations arising under the *Euratom* and *EC Treaties*. In so far as Ireland relies on the provisions of UNCLOS, its submissions are to a substantial degree reformulations of Ireland's submissions on the meaning and effect of certain European Directives. The United Kingdom and Ireland would be in breach of their obligations under the *Euratom* and the *EC Treaties* if they invited or permitted ITLOS to rule on those matters.

5. Article 283(1) of UNCLOS provides:

> "When a dispute arises between States Parties concerning the interpretation or application of this Convention, the parties to the dispute shall proceed expeditiously to an exchange of views regarding its settlement by negotiation or other peaceful means."

Ireland asserts "that there has been a full exchange of views on the dispute for the purposes of Article 283(1)".[4] This is plainly not the case. When the United Kingdom received notification from Ireland that the latter considered that there was a dispute under UNCLOS, it offered to proceed expeditiously to an exchange of views with the object of seeking a settlement by negotiation.[5] The United Kingdom has reaffirmed that offer more than once, and at the highest level, but Ireland has persisted in its refusal to engage with the United Kingdom. Ireland responded that "[n]o such settlement will remain possible so long as the

[4] *Statement of Claim*, at paragraph 36.
[5] Letter of 18 October 2001. **(Annex 1)**

MOX plant remains authorised".[6] Since the authorisation of the MOX Plant is, according to Ireland's own characterisation, the subject of the dispute, the Irish response amounted to a refusal to exchange views.

6. If Ireland had accepted the United Kingdom's offer to exchange views, it would as a minimum have been disabused of a series of misconceptions of fact on which it bases its case. Moreover, Ireland's complaint that the United Kingdom has failed to cooperate with Ireland must be judged in the light of Ireland's refusal to exchange views. For instance, in its *Statement of Claim*, Ireland complains that the United Kingdom has failed to exchange information on a confidential basis about precautions taken against the risk of terrorist attacks.[7] Ireland first raised this matter on 16 October 2001 in a letter from the Irish Minister of State at the Department of Public Enterprise to two United Kingdom Secretaries of State.[8] This letter did not did not contain an offer to treat any information received on a confidential basis. Even so, the United Kingdom responded two days later offering an exchange of views. Ireland did not accept that offer.

7. The Annex VII Tribunal cannot have jurisdiction, even *prima facie*, to determine this complaint so long as Ireland refuses to engage in an exchange of views. If such an exchange were to take place, some or all of Ireland's complaints might be resolved. Even if that were not the case, those aspects of the parties' differences that had not been resolved might have been expected to crystallise into disputes on identified points of fact or law suitable for resolution by arbitral means. In making the exercise of jurisdictinn under Section 2 of Part XV of UNCLOS contingent on a prior exchange of views, Article 283 of UNCLOS seeks to avoid the very situation presented in this case: the constitution of a tribunal to adjudicate on disputes that might have been resolved by negotiation, or might at least have crystallised so as to be amenable to arbitral resolution.

[6] Letter dated 23 October 2001. **(Annex 2)**
[7] *Statement of Claim*, paragraph 19.
[8] *Statement of Claim*, at Annex 1.

B. Urgency

8. In the words of Article 290(5) of UNCLOS, ITLOS can prescribe provisional measures only if it considers "that the urgency of the situation so requires". As is evident from Article 290(5), as well as from Article 89(4) of the ITLOS *Rules* and from authoritative commentary, "the urgency of the situation" denotes, in this context, an urgent necessity to prescribe measures pending the constitution of the Annex VII Tribunal. In the present case, Ireland has appointed Professor James Crawford SC as a member of the Tribunal and the United Kingdom has appointed Sir Arthur Watts KCMG QC. The United Kingdom has indicated its wish to discuss the names of the remaining three members at an early date and hopes to reach agreement with Ireland within a short space of time. Even if Ireland and the United Kingdom were unable to agree on the other three members of the Annex VII Tribunal, contrary to the United Kingdom's expectation, their appointment by the President of ITLOS in accordance with Article 3 of Annex VII could not, in any event, be delayed beyond 6 February 2002.

9. There are no steps to be taken or authorised by the United Kingdom in the intervening period which might even arguably prejudice the rights that Ireland claims to enjoy under UNCLOS or which would seriously affect the marine environment. The Irish Minister of State at the Department of Public Enterprise contends that BNFL intended "to take irreversible steps in relation to the operation of the MOX Plant on or around 23rd November 2001".[9] The steps to be taken between now and next February are not, however, irreversible.

10. Uranium commissioning of the MOX Plant is already complete. The final stage of plutonium commissioning is now scheduled to begin on or around 20 December 2001. It is not "irreversible" in the proper sense of the word. At the worst, a plant, once commissioned, can be decommissioned. It is accepted that if BNFL were obliged to decommission the Plant prematurely, it would suffer substantial expenditure but that is not itself a fact making the commissioning irreversible. Indeed, Ireland now apparently acknowledges that commissioning will not constitute an irreversible step. Ireland now qualifies the Minister's

[9] Letter from Joe Jacob T.D., Minister of State at the Department of Public Enterprise, Ireland, to the Rt. Hon Margaret Beckett MP, Secretary of State for Environment, Food and Rural Affairs, United Kingdom, 25 October 2001 (at Annex 10 to the Irish *Notification under Article 287 and Annex VII, Article 1 of UNCLOS and the Statement of Claim and Grounds on Which it is Based, 25 October 2001*)

assertion and claims that "the commissioning of the plant is, in practical terms, itself a near-irreversible step. Once plutonium has been introduced into the system it is both technically difficult, and expensive, to 'decontaminate' the plant ...".[10] The difficulties to which Ireland here refers are technical ones, familiar in the industry and not insurmountable. The expense that would be caused (to BNFL, not Ireland) is not a matter making the commissioning "near-irreversible".

11. The commissioning of the MOX Plant will have no significant adverse environmental effects from the point of view of public health, even on those on groups most likely to be affected by it. In the words of the Commission of the European Communities, whose *Opinion* on the matter has never been contested by Ireland, even when the MOX Plant is fully operational its discharges will be "negligible from the health point of view".[11] In the period pending its full operation, any discharges are likely to be infinitesimal.

12. There will be no marine transports, in the Irish Sea or elsewhere, arising from the commissioning of the MOX Plant, prior to the constitution of the Annex VII Tribunal. The plutonium dioxide to be used in the manufacturing of MOX fuel at the MOX Plant in this period is already present at the Sellafield site. No exports from the MOX Plant are planned until the summer of 2002 at the earliest.

C. The weakness of Ireland's case

13. Even a cursory review of Ireland's arguments reveals their weakness:

(1) Ireland relies on the duty of cooperation under Article 197 of UNCLOS. This requires States to cooperate on a global and, as appropriate, regional basis in formulating international rules, standards, practices and procedures for the protection and preservation of the marine environment. This is precisely what the United Kingdom has done, *inter alia*, through its ratification of the *OSPAR Convention* and also in its role as a Member State of the European Community and *Euratom*. Even

[10] *Statement of Case*, at paragraph 146.
[11] *Opinion* of the European Commission with the UK submission in accordance with Article 37 of the Euratom Treaty, dated 25 February 1997. **(Annex 3)**

without a close examination of the facts, there can be no question of breach of Article 197 by the United Kingdom. Precisely the same point may be made in respect of Article 123 of UNCLOS on which Ireland also relies (insofar as this is applicable).

(2) Ireland relies on the duty to assess the potential impacts of activities on the marine environment under Article 206 of UNCLOS. This requires States to carry out such assessments where they "have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment". As appears from Part II below, there are no such "reasonable grounds" with respect to the operation of the MOX Plant. Its impacts are negligible. It has scarcely been suggested otherwise. In any event, an *Environmental Assessment* has been carried out in accordance with the applicable EC Directive.

(3) Ireland relies on Articles 192 and 194 of UNCLOS. In circumstances where, as established in Part II, the operation of the MOX Plant will lead to only negligible discharges, it is impossible to see how the United Kingdom can have breached its obligations in relation to the protection and preservation of the marine environment.

14. In order to advance these submissions under UNCLOS, Ireland contends that there is a risk of discharges from the MOX Plant to the Irish Sea. It is, however, important to bear in mind that the MOX Plant is essentially a dry process. The process itself does not give rise to liquid radioactive discharges. It is possible to anticipate some liquid discharge from the Plant resulting, for instance, from use of water in washing floors and fuel assemblies. This water will absorb some ambient radioactivity. It will, however, be treated and, after monitoring, discharged into the Irish Sea. The radioactive content of such discharges would be infinitesimally small. The same is true of any discharges through the atmosphere. BNFL characterises the annual combined liquid and gaseous discharges from the MOX Plant as giving rise to a radiation dose to the most exposed members of the public equivalent to a dose received during 2 seconds of a flight in a commercial aircraft at cruising altitude or about 9 seconds spent in Cornwall in south west England (this being an area underlain by granite).

15. Further, if the MOX Plant were not to be commissioned, plutonium already separated at the THORP Plant would still have to be transported back to customers or taken to a third country for manufacture into MOX fuel or for some other form of treatment. The point is not merely that the transport of nuclear materials in some form is inevitable, irrespective of the operation of the MOX Plant. In addition, the shipping of MOX fuel (in the form of ceramic pellets), rather than of separated plutonium (which is in the form of plutonium oxide powder), reduces any security threat because MOX fuel is less attractive to potential terrorists and has safety advantages over separated plutonium during transport.[12]

16. Ireland expresses a fear of "serious harm to the marine environment" arising from the shipping of materials to and from the MOX Plant, asserting that "[t]he operation of the plant will result in a large number of international movements of large quantities of highly radioactive nuclear materials, including plutonium, into and out of the United Kingdom, in and around the Irish Sea".[13] As has been explained, there are to be no relevant marine transportations at all in the period pending the constitution of the Annex VII Tribunal. Thereafter, exports from the MOX Plant will not be of separated plutonium dioxide powder but of MOX fuel containing plutonium in ceramic form. The point is therefore without relevance, but the United Kingdom wishes to assure ITLOS that sea transports undertaken by BNFL are carried out in full compliance with international regulations in force on the international transport of nuclear materials by sea. The claim that there will be a large number of international movements of plutonium must also be judged in the light of published information[14] showing that some 15 flask movements to the Far East are envisaged annually. One vessel can carry a plurality of flasks and the exported product will be MOX fuel rather than separated plutonium. Moreover, there will not be any shipments related to the MOX Plant pending the constitution of the Annex VII Tribunal.

17. In so far as Ireland relies on security risks, the United Kingdom has in place very extensive security precautions (and has reviewed those precautions since 11 September 2001). As ITLOS will, however, appreciate, the details of these arrangements cannot responsibly be disclosed.

---

[12] See the Decision of 3 October 2001 at paragraphs 67-68, and Annex 1, paragraphs 27-28. See, also, the Proposed Decision, Appendix 4, paragraph A4.142 and Appendix 7, paragraphs A7.16-A7.20. **(Annex 5)**
[13] *Statement of Claim*, at paragraph 2.
[14] *Environmental Statement*, paragraph 5.39. **(Annex 6)**

D. The evidentiary burden

18. In determining whether it is appropriate to prescribe provisional measures, ITLOS must ascertain whether there is before it credible evidence providing reasonable grounds for concluding that, in the absence of provisional relief, the applicant faces a real risk of irreparable prejudice or there is a need to prevent serious harm to the marine environment for which no adequate compensatory measures could be provided.

19. It is precisely this evidential element, demonstrating a need to prevent serious harm in consequence of the operation of the MOX Plant, that is so conspicuously absent from the Irish *Statement of Case*. The *Statement of Case* contains generalised and largely unsubstantiated allegations of risks arising from facilities other than the MOX Plant, including facilities not operated in the United Kingdom at all. What it signally fails to do is to show how the operation of the MOX Plant would itself give rise to a real risk of irreparable prejudice to Ireland's interests or of serious harm to the marine environment.

E. The measures sought are not conservatory

20. Ireland asks ITLOS, first, to restrain the United Kingdom from authorising the commissioning of the MOX Plant. A "provisional" measure in that form is likely to result in the loss of commercial business for the MOX Plant amounting to approximately £10 million as a minimum, with the real prospect of further losses of business valued at several tens of millions of pounds. The maintenance of the MOX Plant in a state of operational readiness will also carry a further cost of approximately £385,000 per week. There will also be less tangible, but nevertheless real, damage caused to BNFL's competitive position by continuing delay. Far from preserving the *status quo pendente lite*, the measures sought by Ireland would have the reverse effect.

21. Ireland next asks ITLOS to restrain shipping "associated" with the MOX Plant. In this context, the word "associated" is dangerously imprecise. Ireland has long made public its objection to the Sellafield site generally and, in particular to the THORP Plant. The reprocessing of spent fuel at Sellafield (in THORP or otherwise) is a completely separate

industrial process which has been conducted at Sellafield for some thirty years, during which time spent fuel deliveries to Sellafield have been on-going. The THORP Plant itself has operated since 1994 in accordance with authorisations granted by the relevant United Kingdom regulators in accordance with the relevant provisions of European law.

22. The subject of the present dispute is not, however, the THORP Plant but the MOX Plant (which is not a reprocessing facility at all). Throughout the Irish *Statement of Claim* and *Request for Provisional Measures*, references are made to transportation of plutonium. The reference should in fact be to spent nuclear fuel, of which 1% in volume is plutonium. Further, such spent fuel is not destined for the MOX Plant but, rather, for the THORP Plant. A measure restricting transportation of materials to the THORP Plant would not conserve the rights of the parties in the present dispute. It would restrain the conduct of persons subject to the United Kingdom's control in respect of a matter falling outside the jurisdiction of the Annex VII Tribunal.

23. There would also be a social cost to the United Kingdom from a provisional measures order of the kind requested by Ireland. The *Decision* of 3 October 2001 by the United Kingdom Secretaries of State that the manufacture of MOX fuel is justified notes that the operation of the MOX Plant is likely to support up to 480 jobs in West Cumbria, an area of high unemployment.[15]

24. Further, as was explained above, there would be safety and security advantages to the process of the manufacture of MOX fuel that would otherwise be lost.

25. These issues are addressed in detail in this *Response* as follows. In **Part II**, the United Kingdom sets out the facts of the case. In **Part III**, the United Kingdom addresses a large number of misapprehensions disclosed in the Irish *Statement of Claim* of 25 October 2001 and its *Statement of Case* of 9 November 2001. In **Part IV**, the United Kingdom addresses the procedural framework and law applicable to the prescription of provisional measures. **Part V**, which deals with the application of the law to the circumstances of this case, comprises five chapters dealing respectively with: jurisdiction, urgency, irreparable

[15] *Decision* of 3 October 2001, at paragraph 86. **(Annex 4)**

prejudice to Ireland's rights and serious harm to the marine environment, evidentiary burden, and conservatory measures. **Part VI** contains the United Kingdom's submissions.

PART II
THE CONTEXT OF THE CASE

I. The factual background to the decision of 3 October 2001

26. BNFL has, since its incorporation in 1971, operated a civil nuclear site in West Cumbria in the north-west of England. The site has been used as a nuclear facility since the early 1950s. Ireland has a long-standing objection to the facility. In its submission to the first Public Consultation on the Sellafield MOX Plant, the Irish Department of Public Enterprise stated: "the Irish Government has long-standing objections to existing nuclear operations at the Sellafield site and has consistently opposed any expansion of these operations."

27. It may be helpful to give a brief explanation the nature and purpose of a MOX plant.

28. Most fuel for nuclear reactors is made from enriched uranium oxide. During the operation of the reactor, a small quantity of uranium is converted into plutonium and some waste products are generated. Over time (3 to 5 years), the fuel becomes less efficient because of the build-up of waste products. Therefore, fuel is sent for reprocessing, which removes the waste products allowing the uranium to be reclaimed. In the reprocessing, the plutonium is also separated and reclaimed. It either has to be stored or recycled as set out below.

29. BNFL carries out the reprocessing of spent nuclear fuel at the THORP Plant and one other reprocessing plant (the Magnox Plant) at Sellafield. Plutonium which is separated as a result of the reprocessing procedure is either stored at Sellafield or returned to the customer. Research and experience (over decades) has identified a use for reclaimed plutonium. It has been shown that nuclear reactors may operate efficiently with a fuel called MOX, which is a mix of plutonium dioxide and uranium dioxide. The manufacture of MOX enables reclaimed plutonium to be recycled, thereby reducing the inventories of stored plutonium, in addition to taking the place of fresh uranium fuel. A MOX plant is not a reprocessing plant. It is a fuel manufacturing facility.

30. On 3 October 2001, the United Kingdom Secretary of State for Environment, Food and Rural Affairs and Secretary of State for Health decided that the manufacture of MOX fuel was justified in accordance with the requirements of Article 6(1) of *Directive 96/29/Euratom*. This is referred to as the *Decision of 3 October 2001*.[16] This was a necessary stage prior to plutonium commissioning of the MOX Plant.

31. With respect to the MOX Plant, Ireland alleges that the United Kingdom has failed to take the necessary measures to protect the marine environment. However, the *Decision of 3 October 2001* was in fact the culmination of a process lasting 8 years that reveals how, at every step, the United Kingdom has insisted that the environmental and other requirements for the construction and operation of the MOX Plant have been satisfied.

A. The Environmental Statement

32. In 1993, BNFL applied for permission from the planning authority local to Sellafield (Cupeland Borough Council) to build the MOX Plant. As part of its obligations under the *Town and Country Planning (Assessment of Environmental Effects) Regulations 1988*, BNFL was required to and did produce an *Environmental Statement* to identify, describe and assess the likely significant effects that might be brought about by the construction, operation and eventual decommissioning of the MOX Plant.[17] This *Environmental Statement* recorded as follows:

(1) The manufacture of MOX fuel is a well-established process. It involves mixing and processing uranium dioxide and plutonium dioxide powders to produce small ceramic pellets, which are then loaded into fuel rods.[18]

(2) It is essentially a dry process. Accordingly, any discharge of liquid effluent will be minimal. Low-level radioactive liquid discharges from the MOX Plant will be negligible.[19]

---

[16] **Annex 4.**
[17] BNFL *Environmental Statement*, October 1993. **(Annex 6)**
[18] *Environmental Statement*, paragraph 4.20.
[19] *Environmental Statement*, paragraphs 4.37 and 5.49.

(3) Low-level radioactive gaseous discharges from the MOX Plant will be insignificant.[20]

(4) Overall, the radiological impact of discharges from the MOX Plant will be insignificant. Further, as discharges will contribute only a tiny fraction to the discharges from Sellafield as a whole, there will be an insignificant effect on flora and fauna.[21]

(5) Transport of the MOX fuel is to be in containers subject to tests, including a rigorous regime of impact onto an unyielding target followed by an all engulfing fire (during which the containment system must remain leaktight to the limits prescribed by the International Atomic Energy Agency ("IAEA")).[22]

33. The relevant IAEA Regulations have been implemented at the national level.[23] As to transport of MOX fuel by sea, in 1994 the *Irradiated Nuclear Fuel Code* ("INF Code") was developed under the auspices of the IAEA, the International Maritime Organisation ("IMO") and the United Nations Environment Programme ("UNEP"). The *INF Code* sets out how nuclear material, including MOX fuel, should be carried. Further, in April 1993, a working group composed of representatives from the IAEA, IMO and UNEP commented on the safety of transport of radioactive materials and the adequacy of the IAEA Regulations as follows:

> "All the available information demonstrates very low levels of radiological risk and environmental consequences from the marine transport of radioactive material ... It was the unanimous conclusion of the Member States that there was no information or data that would cast doubt on the adequacy of the IAEA Regulations."[24]

34. This Working Group also established a major coordinated research project on the severity of accidents in the maritime transport of radioactive material. The conclusions of

---

[20] *Environmental Statement*, paragraph 5.50

[21] *Environmental Statement*, paragraphs 5.51 and 5.92.

[22] *Environmental Statement*, paragraph 5.55

[23] The Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997 SI 2367; Merchant Shipping Notice M175(M) "The Carriage of Dangerous Good and Marine Pollutants in Packaged Form – Amendment 30-00 2IMDG Code". This applies to all British registered ships wherever they may be and to other ships while they are in UK waters.

[24] Second Technical Committee Meeting of the Joint IAEA/IMO/UNEP Working Group on the Safe Carriage of Irradiated Nuclear Fuel (INF) By Sea: Report of the Second Session of the Joint IAEA/IMO/UNEP Working Group, Vienna 26-30 April 1993.

that research project were published by the IAEA in 2001 (IAEA TECDOC 1231). This project concludes firmly "that the risks of maritime transport in type B packages [i.e. the packages used for transporting highly radioactive materials] of highly radioactive material are very small".[25] All transports by the United Kingdom are undertaken in full compliance with all relevant standards.

35. Consent to the construction of the MOX Plant was given by the local planning authority on 23 February 1994. Construction was completed in September 1996 at a cost of approximately £300 million.[26]

B. The Opinion of the European Commission

36. On 2 August 1996, in accordance with its obligations under Article 37 of the *Euratom Treaty*, the United Kingdom supplied the European Commission with data relating to the disposal of radioactive waste from the MOX Plant. On 25 February 1997, the Commission gave its Opinion as follows:

> "(a) the distance between the plant and the nearest point on the territory of another Member State, Ireland, is 184 km;
>
> (b) under normal operating conditions, the discharge of liquid and gaseous effluents will be small fractions of present authorized limits and will produce an exposure of the population in other Member States that is negligible from the health point of view;
>
> (c) low-level solid radioactive waste is to be disposed to the authorized Drigg site operated by BNF plc. Intermediate level wastes are to be stored at the Sellafield site, pending disposal to an appropriate authorized facility;
>
> (d) in the event of unplanned discharges of radioactive waste which may follow an accident on the scale considered in the general data, the doses likely to be received by the population in other Member States would not be significant from the health point of view.
>
> In conclusion, the Commission is of the view that the implementation of the plan for the disposal of radioactive wastes arising from the operation of the BNFL Sellafield mixed oxide fuel plant, both in normal operation and in the

[25] IAEA-TECDOC-1231, "Severity, probability and risk of accidents during maritime transport of radioactive material: Final report of a co-ordinated research project 1995-1999" (IAEA July 2001) (extracts). **Annex 7**
[26] Subsequent capital expenditure since completion has meant that the total cost of the MOX Plant to BNFL has been approximately £470 million.

event of an accident of the type and magnitude considered in the general data, is not liable to result in radioactive contamination, significant from the point of view of health, of the water, soil or airspace of another Member State."[27]

C. The justification process

37. In November 1996, BNFL applied to the United Kingdom Environment Agency for variations to the gaseous and liquid discharge authorisations granted under the *Radioactive Substances Act 1993* for the Sellafield site. At the time, the Environment Agency when considering an application under the Radioactive Substances Act 1993 was under a legal obligation to consider the justification of [an activity giving rise to] a new practice giving rise to ionising radiation under the terms of the then applicable *Euratam Directives* (*Directives 80/836 and 84/467*). The process of justification requires a consideration of whether the benefits of the practice outweigh the detriments. Although the radioactive discharges from the MOX Plant would be so low as not to require any variation to the then existing limits in the discharge authorisations for the Sellafield site, the application to vary the limits in respect of other discharges on the site included information on the MOX Plant. As the manufacture of MOX fuel was an activity resulting in exposure to ionising radiation, the Environment Agency was under a duty to consider whether it was justified in accordance with Euratom provisions and accordingly requested BNFL to provide information specifically relating to the MOX Plant in a separate application, which was done by BNFL in January 1997.

38. The justification process involving the MOX Plant has comprised five extended public consultations and the commissioning of two independent reports on the economic case for the MOX Plant, followed by review in the High Court in London.[28]

39. A first round of public consultations (lasting eight weeks) was conducted by the Environment Agency and concluded on 7 April 1997. In response to concerns that there was insufficient information on the economic case for the MOX Plant, the PA Consulting Group

[27] Official Journal 1997/C 68/03. **(see Annex 3)**

[28] The first report by the PA Consulting Group was published in December 1997. The second report by Arthur D Little Limited was published in July 2001. Both reports concluded that the operation of the MOX Plant would produce a strong net present value. Ireland maintains that it has a right to commercially sensitive information excised from the publicly available versions of these reports. The United Kingdom contests this entitlement. As discussed further in Part V below, it considers that Ireland's allegations in this respect can only properly be judged by a tribunal seised under the *OSPAR Convention*.

report was commissioned by the Environment Agency. The report was released for public consultation in December 1997 (subject to excision of certain commercially confidential information). A second round of public consultation then took place in early 1998 and concluded on 16 March 1998.

40. In October 1998, the Environment Agency issued a *Proposed Decision* to the effect that the plutonium commissioning and full operation of the MOX Plant was justified.[29] The Environment Agency concluded that there was a net economic benefit in allowing the MOX Plant to operate, and that on environmental and other issues the balance was broadly neutral. With specific regard to the radiological impact of the MOX Plant, it stated:

> "The Agency is satisfied that the gaseous, liquid and solid wastes arising from the operation of the MOX plant can be disposed of within the constraints of the existing Sellafield authorisations under [the Radioactive Substances Act 1993]. It is also satisfied that these authorisations meet all national and international standards and legal requirements. The Agency is proposing to apply more restrictive limits for specific radionuclides as a result of variations to the existing authorisations. It is satisfied that the MOX plant can be operated in accordance with these more restrictive limits."[30]

41. In coming to its *Proposed Decision*, the Environment Agency considered a broad range of issues. In particular, in a series of Appendices:

(1) It considered the United Kingdom's legal limits for radiation exposure and the concept of optimisation for the design of nuclear facilities to ensure that the exposure of members of the workforce and the public is kept as low as reasonably achievable (*Proposed Decision*, Appendix 1).

---

[29] *Proposed Decision on the Justification for the Plutonium Commissioning and Full Operation of the Mixed Oxide Fuel Plant*, October 1998. **(Annex 5)** In fact, the Environment Agency issued three proposed decisions affecting the MOX Plant at this stage: (i) approving the variations to the liquid and gaseous discharge authorisations for the Sellafield site, (ii) finding that the uranium commissioning of the MOX Plant was justified, (iii) finding that the plutonium commissioning of the MOX Plant was justified. The proposed decision as to uranium commissioning was accepted by the relevant Secretaries of State in June 1999.

[30] *Proposed Decision*, paragraph 3.1. The conclusion that the MOX Plant could be operated within the existing discharge authorisations was approved by the relevant Secretaries of State in June 1999.

(2) It described the Environment Agency's regulatory powers and its legal obligation to consider justification, as well as the manner in which it set about this task (*Proposed Decision*, Appendix 2).

(3) It dealt with radioactive discharges and disposals from the MOX Plant (*Proposed Decision*, Appendix 3).

(4) It considered the benefits and detriments of operating the MOX Plant and addressed the responses received by the Environment Agency during the public consultations (*Proposed Decision*, Appendix 4).

(5) It dealt with the consultation process and related issues (*Proposed Decision*, Appendix 5).

(6) It identified matters for consideration by other bodies (*Proposed Decision*, Appendix 6).

(7) It discussed wider issues associated with the management of plutonium, including the issue of terrorist diversion (*Proposed Decision*, Appendix 7).

42. It is evident that, at each stage, the Environment Agency was considering and responding to concerns raised in the two public consultations. This is particularly apparent from paragraphs A4.14 to A4.164 to Appendix 1, which show the Environment Agency considering issues raised in the public consultations including as to the economic case, confidentiality of information, plutonium management, decommissioning, radioactive discharges, waste management, health and safety, transport, proliferation of nuclear weapons, wildlife and sustainable development. It is important to note that one of the participants in the public consultation exercise was Ireland, which made submissions dated April 1997 and March 1998 and is listed as one of the consultees in Annex 1 to the *Proposed Decision*.

43. The conclusion that the MOX Plant could be operated within the existing discharge authorisations for the Sellafield site was approved by the relevant Secretaries of State in June

1999.[31] Although they were provisionally of the view that on balance plutonium commissioning and full operation of the MOX Plant was justified, they considered that further consultation should be carried out to test that view. Accordingly, the Secretaries of State launched a third round of public consultation in June 1999.

44. The justification process was interrupted at this juncture by the data falsification incident. In September 1999, BNFL reported to the Nuclear Installations Inspectorate (part of the United Kingdom Health and Safety Executive) that some of the secondary checks on MOX fuel pellet diameter in the MOX Demonstration Facility ("MDF") at Sellafield had been falsified. This led to a full investigation by the Health and Safety Executive.[32] This investigation found that several process workers had not been following quality control procedures agreed with the customer, and had used MOX pellet diameter measurements from previous spreadsheets instead of making measurements afresh.[33] The report of the Health and Safety Executive, including its December 2000 conclusion that all of its recommendations relating to the incident had been implemented, is considered further below. It must be stressed that the MDF is an entirely separate facility to the MOX Plant, which employs an automated process such that data falsification could not occur.

45. In the light of the data falsification incident, and its potential impact on Japan as a MOX customer, BNFL submitted a revised economic case for the MOX Plant in January 2001. A consultation document was published in March 2001. In April 2001, the relevant Secretaries of State commissioned independent consultants Arthur D. Little to assist them in their evaluation of BNFL's revised economic case. This report considered *inter alia* the volumes of business which BNFL may expect for the production of MOX, the prices which BNFL may expect for its product, the likely costs of production, the timing for deliveries and the risk of delays, alongside various downside scenarios. The conclusion reached was that the overall value of proceeding with the operation of the MOX Plant, rather than cancelling it, was £216 million. The report was made public in July 2001 with a view to a further round of public consultation that ended on 24 August 2001.

---

[31] *Decision* of 3 October 2001, paragraph 5. **(Annex 4)**

[32] Health and Safety Executive, Nuclear Installations Inspectorate, *An investigation into the falsification of pellet diameter data in the MOX demonstration facility at the BNFL Sellafield site and the effect of this on the safety of MOX fuel in use*. **(Annex 8)** Extracts (only) of this report form Annex 91 to Ireland's Request of 9 November 2001.

[33] At paragraph 38.

46. It was in the context of the evidence on the environmental impacts of the MOX Plant and this extensive period of public consultation that the decision authorising the commissioning of the MOX Plant of 3 October 2001 was made.

47. The *Decision* was the subject of an application for judicial review to the High Court in London made by two environmental organisations, Friends of the Earth and Greenpeace, which advanced arguments similar to those now advanced by Ireland as to the meaning and effect of certain Euratom Directives. By a Judgment dated 15 November 2001, Mr Justice Collins dismissed the application, upholding as lawful the *Decision* of the Secretaries of State. Leave to appeal has been given in the case. The appeal will be heard on 27 November 2001.[14]

48. As will readily be seen from the *Decision* and its annexes, concerns raised in the public consultations were considered and responded to. In particular, Annex 1 to the *Decision* demonstrates how the United Kingdom considered and addressed concerns raised by respondents as to:

(1) Environmental issues (Annex 1 to the *Decision*, paragraphs 6-14).

(2) Health and safety issues (Annex 1 to the *Decision*, paragraphs 15-20).

(3) Implications for plutonium and uranium (Annex 1 to the *Decision*, paragraphs 21-24).

(4) Security issues (Annex 1 to the *Decision*, paragraphs 25-28).

(5) Transportation issues (Annex 1 to the *Decision*, paragraphs 29-33).

(6) Wider nuclear issues (Annex 1 to the *Decision*, paragraphs 34-36).

(7) Local issues (Annex 1 to the *Decision*, paragraphs 37-40).

(8) Economic issues (Annex 1 to the *Decision*, paragraphs 41-53).

(9) Arthur D Little's assessment (Annex 1 to the *Decision*, paragraphs 54-62).

(10) Trust issues (Annex 1 to the *Decision*, paragraphs 63-65).

(11) International and other issues (Annex 1 to the *Decision*, paragraphs 66-69).

---

[14] *R. (Friends of the Earth Ltd. and Greenpeace Ltd.) v. Secretary of State for the Environment, Food and Rural Affairs and Secretary of State for Health, High Court of Justice Administrative Court*, Mr Justice Collins of 15 November 2001, Case No. 4012/2001. **(Annex 9)**

(12) Issues relating to the decision making process (Annex 1 to the *Decision*, paragraphs 70-80).

49. The final paragraph to Annex 1 to the *Decision* concludes:

> "Ministers view the requirement of justification as a very serious issue and as a result have taken the necessary time to collect all the relevant information, have sought the views of interested organisations and individuals on several occasions and have considered all the relevant factors carefully before reaching a final decision".

II. The current situation with respect to plutonium commissioning

50. Following the *Decision* of 3 October 2001, the only further authorisation BNFL is required to obtain before it can commence operation of the MOX Plant are consents from the Health and Safety Executive for the plutonium commissioning and full operation of the Plant. This is required under the terms of the nuclear site licence for the Sellafield site.

51. Plutonium commissioning of the MOX Plant is divided into two stages: initial and active plutonium commissioning. Initial plutonium commissioning involves the transfer of a sealed plutonium canister into the MOX Plant in order to calibrate radiation monitoring equipment and test shielding. These initial stages are part of a commissioning programme which will lead to active commissioning involving the opening of a plutonium canister, thereby allowing plutonium to be fed into the process as a prerequisite to the manufacture of MOX fuel. This second phase of commissioning is currently planned to take place on or around 20 December 2001.

52. Uranium and plutonium will then be processed through the MOX Plant progressively to produce ceramic pellets, which will be contained in fuel rods in turn coupled into fuel assemblies which will be exported to meet customer orders. During the plutonium commissioning period the Plant will be tested, performance will be optimised and throughput will be progressively increased. Qualification testing will also be carried out to confirm that the product meets customer requirements. When satisfactory plant performance has been demonstrated BNFL will aim to commence routine manufacturing operations.

53. No MOX fuel, during commissioning or full operation, is programmed to leave the physical confines of the MOX Plant until the summer of 2002 at the earliest.

54. Active plutonium commissioning is not irreversible. Active plutonium commissioning can be halted, although certain materials within the MOX Plant would then have to be conditioned, treated and stored, according to their level of radioactivity, with a view to their ultimate disposal (in accordance with all relevant regulatory requirements).

III. The radiological impact of MOX Plant operations and transport

A. The radiological impact of MOX operations

55. The basic principles of measurement of radiological impact and dose limitation are set out in the Environment Agency's *Proposed Decision* of October 1998.[35] For present purposes, it is sufficient to note that the relevant principles have been developed and applied in the United Kingdom as follows:

(1) The International Commission on Radiological Protection issues recommendations including on the subject of maximum exposure to man made sources of radioactivity. The relevant unit of measurement for radiation doses is the "sievert" ("Sv"). It is estimated that a radiation dose of 1 millisievert ("mSv") (i.e. one thousandth of a sievert) results in a one in twenty thousand risk of contracting a fatal cancer. A radiation dose of 1 microsievert ("μSv") (i.e. one millionth of a sievert) results in a one in twenty million risk of contracting a fatal cancer.

(2) The recommendations of the International Commission on Radiological Protection are reflected in Euratom Directives. In 1990, the International Commission on Radiation Protection recommended that the limit on whole body exposures to members of the public of man-made sources (other than from medical exposure) should be set at 1 mSv per year. This recommendation was implemented in *Directive*

[35] See Appendix 1 to the *Proposed Decision* at paragraphs A1.1-A1.24 and Appendix 3 at paragraphs A3.7-A3.15. **(Annex 5)**

96/29/Euratom of 13 May 1996 laying down Basic Safety Standards. The relevant parts of this Directive were implemented by United Kingdom legislation in 2000.

(3) A limit of 1 mSv per year may be compared with an average radiation dose to members of the United Kingdom population of 2.2 mSv per year from natural background sources.

(4) The United Kingdom National Radiation Protection Board has recommended that the exposure to members of the public from a single new source of ionising radiation should not exceed 0.3 mSv. This recommendation was adopted by the United Kingdom Government in 1995. It follows that the standards applied in the United Kingdom are considerably more stringent than those imposed under the Euratom Directive.

56. The impact from the MOX Plant in terms of radiological dose is measured in microsieverts (μSv), not millisieverts (mSv). In other words, the impact is very small indeed, and within a fraction of one per cent of permissible limits. As noted in the Environment Agency's *Proposed Decision* of October 1998, the United Kingdom Ministry of Agriculture, Fisheries and Food estimated the dose to the most exposed UK group (known as the "critical group") to gaseous discharges from the MOX Plant to be 0.002 μSv per year (two thousandths of a millionth of a sievert).[36] It estimated that the dose to the critical group in relation to liquid discharges from the Plant is 0.000003 μSv per year (three millionths of a millionth of a sievert). As noted by the Environment Agency, these doses are of negligible radiological significance. The Environment Agency further noted that the MOX Plant would make a very small contribution to the critical group dose for the Sellafield site as a whole.

57. This conclusion is of course entirely consistent with the European Commission's *Opinion* of 11 February 1997 under Article 37 of the *Euratom Treaty*.

58. Further, as part of its Article 37 submission to the European Commission, the United Kingdom had calculated the aerial discharges from the MOX Plant affecting a critical group at the nearest point to Sellafield in Ireland. It noted:

[36] Appendix 4 to the *Proposed Decision* at paragraphs A4.95-A4.97. **(Annex 5)**

> "The closest of other Member States is the Republic of Ireland. The effect of aerial discharges has been evaluated using the same methodology for a member of an equivalent critical group assumed to be located at the nearest part of the coast to Sellafield (180 km). For a member of the local critical group long term average depletion of the plume over a distance of 1.5 km is negligible but, for a member of the most exposed group in the Republic of Ireland, the plume becomes depleted. The dose to a member of the critical group in Eire owing to discharges to the atmosphere which are attributable to SMP is estimated to be 4 x 10^{-5}μSv/year in the most restrictive age group, which in this case is the inhalation route by adults."[37]

59. The exposure of the critical group in Ireland to gaseous discharges from the MOX Plant is thus 0.00004 μSv per year (four hundred thousandths of a millionth of a sievert). The submission also noted that the exposure of the critical group in Ireland to liquid discharges from the MOX Plant would be "considerably less" than the exposure to the United Kingdom critical group, which is 0.000003 μSv (three millionths of a millionth of a sievert) per year.

60. In the light of the above, the Secretaries of State concluded at paragraph 60 of the *Decision* of 3 October 2001 that the radiological detriments that would arise from the manufacture of MOX fuel would be very small and that any effects on wildlife would be negligible.

61. The *Decision* of 3 October 2001 also recorded (at paragraph 59) the fact that the total volume of plutonium contaminated solid waste arising from operation of the MOX Plant is predicted to be around 120 cubic metres per year, and that this can be safely stored for many years under the regulatory overview of the Health and Safety Executive and the Environment Agency.

---

[37] General Data Relating to the Arrangements for Disposal of Radioactive Wastes as Called for under Article 37 of the Euratom Treaty, May 1996 (UK submission to the European Commission). **(Annex 9)**

B. The radiological impact of MOX transport

62. The plutonium dioxide used in the manufacture of MOX fuel is expected to be sourced from reprocessing operations at Sellafield (as appears to be accepted by Ireland in its submissions of 4 April 1997).[38]

63. With respect to transports of MOX fuel from the MOX Plant, as noted at paragraph 30 of the *Decision* of 3 October 2001, BNFL's transportation of nuclear fuel complies with all applicable international and national safety and security standards.

64. Packages will be in compliance with the relevant IAEA regulations: *Regulations for the Safe Transport of Radioactive Material, 2000 Edition, TS-R-1*.[39]

65. Carriage will be in accordance with the standards of the IMO: the *International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships* ("INF Code"). The *INF Code* became mandatory on 1 January 2001. By this time, BNFL had already adhered to its requirements.

66. In addition, it is to be noted that:

(1) In over thirty years of transporting radioactive materials by all forms of transport, BNFL has had no case of a release of radioactivity.[40]

(2) MOX fuel for light water reactors has been transported safely in Europe since 1966.[41]

(3) In terms of transportation of spent nuclear fuel by sea, some 8,000 tonnes has been transported over a distance of approximately 4.5 million miles over a thirty year period. There have been over 160 transports of nuclear materials from Japan to

---

[38] *Environmental Statement* (paragraph 3.4). **(Annex 6)**

[39] The general aim of the Regulations is set out at paragraph 101: "These Regulations establish standards of safety which provide an acceptable level of control of the radiation, criticality and thermal hazards to persons, property and the environment that are associated with the transport of radioactive material." Responsibility for the implementation of these Regulations lies with the appropriate national bodies according to the mode of transportation.

[40] *Decision* of 3 October 2001, paragraph 69. **(Annex 4)**

[41] *Environmental Statement*, paragraph 5.53. **(Annex 6)**

Europe in the same period. In neither case has there been a single incident involving the release of radioactivity.[42]

C. Security issues related to operation and transport

67. Security and safety precautions at nuclear sites are kept under regular review by the United Kingdom Office for Civil Nuclear Security and the Health and Safety Executive. Both regulators are reviewing all relevant precautions in the light of the events of 11 September 2001 in New York and Washington. The Royal Air Force maintains certain assets on a high state of readiness in support of the air defence of the United Kingdom. The number of assets and their readiness status was reviewed in the light of the events of 11 September 2001. It is not Government policy to discuss the details of these arrangements or to disclose details of security measures at nuclear installations.

68. With specific regard to the MOX Plant, safety and security issues were expressly treated in the *Decision of 3 October 2001* (at paragraphs 65-70). As noted at paragraph 69 of the *Decision*, the advice of the Office for Civil Nuclear Security is that the manufacture of MOX fuel and its transport present negligible security risks. The Office for Civil Nuclear Security was asked to review its views in the light of the events of 11 September 2001 and has confirmed that its view remains unchanged.[43] Further, it may be noted that the operation of the MOX Plant does not materially affect the targeting options for hijacked aircraft (or other forms of terrorist attack).

69. It is not Government policy to disclose details of security measures taken in connection with the transport of nuclear material. Security for the transportation of nuclear material is regulated by the Office for Civil Nuclear Security. Security and safety precautions for the transportation of nuclear material are kept under constant review. The Office for Civil Nuclear Security has reviewed all relevant precautions in the light of the events of 11 September 2001. The security arrangements in place are appropriate and are in

---

[42] BNFL/COGEMA/ORC document dated 1998 entitled *Safety in Depth – the Reliable Transport of MIOX Fuel to Japan*

[43] See, also, Annex 1 to the *Decision* of 3 October 2001 at paragraphs 25-31. **(Annex 4)**

line with IAEA guidance.[44] The precautions taken to prevent theft or sabotage of MOX fuel during transport comply with all relevant international obligations and recommendations and are amply robust to cope with any credible threat. MOX fuel will be protected during transport by an armed escort.

70. There is a distinct advantage to the processing of separated plutonium into MOX fuel. A large amount of plutonium has already been separated from foreign customers' spent nuclear fuel at the THORP Plant in Sellafield. If the MOX Plant were not to operate, that separated plutonium would have to be transported either back to the respective customer or to a third country for manufacture into MOX fuel or some other form of treatment (such as storage). The shipping of MOX fuel (which is in the form of ceramic pellets) involves less risk than the shipping of separated plutonium (which is in the form of plutonium dioxide powder) because MOX fuel is less attractive to potential terrorists and has safety advantages during transport.[45]

71. Finally, in the light of the events of 11 September 2001, the United Kingdom Government has brought emergency legislation before Parliament relating to further security measures in the United Kingdom. This Bill, published on 13 November 2001, contains provisions relating to the security of nuclear sites.

IV. The likely impact of any delay to plutonium commissioning

72. A delay in the commencement of active plutonium commissioning of the MOX Plant caused by the prescription of provisional measures along the lines requested by Ireland would be very likely to result in the production programme for MOX fuel being compromised leading to financial losses to BNFL in the order of some tens of millions of pounds.[46] There is also a very serious risk that BNFL will lose contracted business for MOX fuel and incur

[44] The Physical Protection of Nuclear Material and Nuclear Facilities, INFCIRC/225/Rev.4 (Corrected). **(Annex 11)**

[45] Decision of 3 October 2001, Annex 1, at paragraph 23.

[46] There is a direct relationship between delay to active plutonium commissioning and delay to the start of full operation. The remaining commissioning steps for the MOX Plant will take a set period of time which cannot be compressed into a shorter period, so there is very little or no opportunity to "catch-up" any time lost during plutonium commissioning. Accordingly, every day that active plutonium commissioning is delayed there is a corresponding day of delay to full operation of the MOX Plant.

other significant losses. Further details of these potential losses and their consequences are set out below, but in summary these are:

(1) Loss of revenue from losing contracted business;

(2) Cost to BNFL of maintaining the MOX Plant in a "static state" pending the removal of any legal restriction on operations; and

(3) General damage to BNFL's competitive position.

A. Loss of revenue from losing contracted business

1. Fuel supply to the first customer

73. A particular customer (the "first customer") has agreed to accept qualification fuel from the MOX Plant.[47] BNFL is working to a very tight timetable to deliver this qualification fuel in accordance with contractual delivery schedules. Against the possibility that BNFL may not be able to meet these delivery schedules, the first customer has taken out an option for reserved capacity with one of BNFL's competitors to produce the fuel instead of BNFL. The first customer is expected to decide imminently whether to exercise this option, and is expected to exercise the option if it is not satisfied with BNFL's progress towards meeting its delivery schedules.

74. Accordingly, BNFL is not only under severe operational pressure to manufacture the relevant fuel on time but, more pressingly, it needs to be able to assure the first customer that it will be in a position to meet its delivery schedules. Any delay to active plutonium commissioning caused by a provisional measures order will naturally be a primary factor increasing uncertainty in the mind of BNFL's first customer and thereby increasing the probability of the customer exercising the option.

[47] To appreciate the importance of BNFL commencing active plutonium commissioning as soon as possible it is important to first understand the concept of "qualification" fuel: the first batch of fuel made in a nuclear fuel production plant. Production of qualification fuel is subject to a very high degree of scrutiny (usually by the fuel customer as well as regulators and the production team) and involves meticulous monitoring, testing (both destructive and non-destructive), inspection, measurement, assessment and documentation. Because of this, the

75. The probability of the first customer exercising its option must be taken very seriously. It should be noted that the first customer previously ordered a larger quantity of MOX fuel from BNFL but, because of the years of delay in obtaining regulatory approval for the MOX Plant, the customer has already moved a substantial part of its business to one of BNFL's competitors.[48]

76. If the first customer does in fact exercise its option, the value of the contract will be lost. This would amount to a cost to BNFL of over £10 million.

77. In addition, there would be additional costs associated with the first customer exercising the option. The MOX fuel production programme involves scheduling a number of production "campaigns" for various customers in order to meet agreed fuel delivery timetables. The MOX Plant is initially being configured to fabricate fuel for the first customer. If the first customer decides not to proceed, BNFL will incur substantial costs in reconfiguring the plant to another customer's fuel specifications. Furthermore, there would be a significant period of lost production whilst the plant was reconfigured. The up-front cost to BNFL of doing this (given that it would not otherwise have had to) would take the total cost to over £10 million.

2. Potential loss of the second customer

78. Delays to plutonium commissioning will not only affect the delivery schedule for the first customer but will also impact (directly and indirectly) on MOX fuel production for the second customer, another utility (the "second customer").

79. The most immediate impact will be that, at least temporarily, BNFL will be left without a customer for the qualification fuel. As noted above, every step of the qualification process will be closely scrutinised by the first customer. The first customer has its own obligations to ensure that the fuel produced meets all of its (and its regulator's) specifications

production of qualification fuel is always much slower and more challenging that the production of subsequent fuel from the same plant.

[48] The first customer has recently visited the MOX Plant to assure itself of the operational readiness of the Plant. Whilst the visit gave assurance in relation to operational readiness, concern still remains on BNFL's overall ability to make fuel on the necessary timescale due to the possibility of any provisional measures delaying operations

in terms of suitability, safety, integrity, quality, and reliability. While another customer (such as the second customer) might agree to take on this role and accept qualification fuel from the MOX Plant, no such alternative arrangements are in place at present and the possibility of making such arrangements is by no means guaranteed.

80. Accordingly, a direct knock-on consequence of BNFL losing the contract with the first customer may be the loss of the second customer if (a) the second customer is not willing to take the qualification fuel, (b) an alternative customer for the qualification fuel cannot be found, and (c) no alternative arrangement with the second customer can be made.

81. If, as the result of the above, BNFL also loses part of its contract with its second customer, the value of this contract will also be lost. This would amount to a loss of over £10 million (in addition to the figure of over £10 million in total lost as a result of BNFL losing its contract with its the first customer).

82. Leaving the above issue to one side (and therefore assuming the first customer does not exercise its option to move production to BNFL's competitor) any delays to the production schedule for the first customer would nevertheless have a serious impact on the follow-on production campaigns programmed for other customers, including the second customer.

83. The contracted delivery date for the fuel to be produced for the second customer now also requires BNFL to work to a very tight timetable. In order to meet this timetable, BNFL will need first to have completed production for at least some of the first customer's fuel and then to reconfigure the plant in order to be able to produce the second customer's fuel. The MOX fuel assemblies for the second customer have different specifications to those of the first customer. In addition, the configuration of both the fuel pellets and fuel assemblies is different. This means that, following completion of the fuel campaign for the first customer, changes will need to be made to the settings and equipment of the MOX Plant in order to make the fuel for the second customer.

84. Any significant delay beyond the programmed date for completion of the first customer's fuel (i.e. the programmed date for completion of fabrication, with delivery to

follow) would seriously prejudice BNFL's ability to meet the delivery date for the second customer.

85. Because of the delays in obtaining regulatory approval for the MOX Plant, BNFL has already missed three out of four agreed delivery dates for the second customer. This has resulted in the second customer placing orders with one of BNFL's competitors for the fuel which BNFL was unable to deliver. If BNFL is unable to produce the fuel to meet the required delivery date for the second customer, the value of the contract with the second customer could be lost. As noted above, this would amount to a loss of over £10 million.

86. The second customer has also reserved additional capacity with BNFL for further MOX fuel production (scheduled for delivery in subsequent years), but BNFL is seriously concerned that the second customer may decide not to proceed with these orders in the event their first delivery date is not met. The financial impact on BNFL of losing this further business would be very serious indeed, in the order of several tens of millions of pounds.

3. Potential loss of the third customer

87. BNFL is also in advanced negotiations with a further customer (the "third customer") for all its plutonium arising from THORP reprocessing to be used to produce MOX fuel. Such an order would potentially take up the production capacity of the MOX Plant for the first three to four years of operation. However, like the other customers for the MOX fuel, the third customer is also reviewing progress on active plutonium commissioning of the MOX Plant. If it is not confident in BNFL's ability to produce the fuel, it may utilise existing capacity with one of BNFL's competitors and not progress contracts with BNFL.

B. Cost to BNFL of maintaining the MOX Plant in a "static state"

88. In addition to the serious financial and commercial implications of delays to plutonium commissioning, there are other more immediate costs which BNFL will begin to incur as a result of maintaining the MOX Plant in a permanent state of readiness to commence plutonium commissioning pending the removal of any legal impediment to doing so.

89. If BNFL is not able to commence active plutonium commissioning, BNFL will have no choice but to retain a working level of MOX Plant personnel pending resolution of the case before the Annex VII Tribunal. Significant time, expense and effort has already been expended in training the MOX Plant workforce. To stand down and then retrain and re-employ necessary personnel would delay the MOX Plant by at least 12 months. This is particularly the case for many of the computer-skilled personnel working at the MOX Plant (whose skills are very much in demand at present) and any re-employment of personnel in this specific area would prove very difficult and cause very significant and long-term disruption to the MOX Plant.

90. There would also be a "utilities" cost of delay as a result of continuing to maintain the MOX Plant in a state of readiness if BNFL is not able to commence active plutonium commissioning. In BNFL's view it would not be practicable (and would not be financially cost-effective) to shut down the MOX Plant pending resolution of the dispute before the Annex VII Tribunal. The main utilities used in maintaining operations at a static operational level are water, electricity and various chemicals.

91. In circumstances where BNFL is not able to commence active plutonium commissioning but a decision on Ireland's allegations remains imminent, BNFL would have no realistic alternative but to retain an operational level of MOX Plant personnel and utility services on standby to commence plutonium commissioning. BNFL estimates this would cost approximately £385,000 for each week active plutonium commissioning is delayed. It should be noted that the above cost takes account of useful work which the MOX Plant workforce could be doing pending final resolution of the dispute.

C. Damage to BNFL's competitive position caused by continuing delay

92. The impact of further delays to MOX Plant operation was highlighted in BNFL's updated *Economic Case*, dated March 2001, which was included in the fourth public consultation on the MOX Plant. In section 2.3.5 of the BNFL updated *Economic Case*, BNFL referred to the importance of avoiding delay in the MOX Plant start date:

> "... A major threat to the Reference Case is if there were to be any possibility of further significant delays to the approval for SMP [Sellafield MOX Plant] plutonium commissioning. Any further delay could have a significant impact on BNFL's market share, as much as a result of loss of customer confidence as through lost opportunity."[49]

93. Significant delay to the commencement of MOX Plant operation would affect confidence in BNFL in the market and would reduce BNFL's chances of securing further orders for the MOX Plant on an early timescale. This would be to the advantage of BNFL's competitors, who would be able to build market share to the prejudice of BNFL. This in turn could threaten the future of the MOX Plant with resulting serious financial consequences and the threat of job losses and damage to the local economy.

[49] The Economic and Commercial Justification for the Sellafield MOX Plant (the *Economic Case*), prepared by BNFL March 2001. **(Annex 12)**

PART III

MISAPPREHENSIONS OF FACT IN THE IRISH *STATEMENT OF CASE*

94. Before turning (in Part IV) to the legal principles relevant to Ireland's *Request for Provisional Measures*, it is necessary to consider the allegations of fact that are made in the Irish *Statement of Case* of 9 November 2001. At the outset, it may be noted that there are key differences between the allegations contained in the Irish *Statement of Case* (in the present proceedings before ITLOS) and those contained in the Irish *Statement of Claim* of 25 October 2001 (which is the claim that the Annex VII Tribunal will have to determine). In particular, whereas in the *Statement of Case* there is an allegation that the manufacture of MOX fuel involves significant risks for the Irish Sea, there is no such allegation in the *Statement of Claim*. It is difficult to see this as a mere oversight. This is, after all, the allegation that would appear to be at the heart of Ireland's allegations of breach of UNCLOS. The United Kingdom submits:

(1) The absence of an allegation of harm in the *Statement of Claim* reflects the true position in terms of significant risks to the Irish Sea caused by the operation of the MOX Plant. As already been shown in Part II, and as is considered further below, there are no such risks.

(2) The complaint that Ireland has brought before the Annex VII Tribunal is essentially procedural in nature. It is said that an environmental statement has not been correctly drawn up, that the justification exercise has not been carried through correctly, that information has not been supplied to Ireland, and that the United Kingdom has failed to publish or provide to Ireland an assessment of terrorist threats.[50] It is not said that the *Environmental Statement* is wrong. It is not said that there is a risk of significant harm to the Irish Sea arising from MOX operations. It is not said that there is a significant terrorist threat arising from MOX operations.

(3) The allegations have evolved for the purposes of the provisional measures request. It can only be assumed that such evolution has taken place with an eye to the applicable

[50] *Statement of Claim*, paragraph 21.

law in terms of Article 290 of UNCLOS and, in particular, the power under Article 290(1) to prescribe provisional measures to prevent serious harm to the marine environment. Yet, pursuant to Article 290(5), ITLOS may prescribe measures only with respect to the dispute that has been submitted to the Annex VII Tribunal. It is not open to Ireland to rely before ITLOS on a different dispute based on different allegations. It may be that Ireland will seek to amend its *Statement of Claim*, but as things now stand, the United Kingdom is entitled to know the case that it has to meet, and is entitled to see the same case being put forward before ITLOS as is put forward before the Annex VII Tribunal.

95. Without prejudice to the above, and on the assumption that Ireland will rely on the allegations of fact in the *Statement of Case* of 9 November 2001, these are now considered in order.

1. Ireland's allegations relating to the impacts of nuclear activities at Sellafield on the Irish Sea (paragraphs 9-13 of the *Statement of Case*)

96. The generalised impacts of activities at Sellafield on the Irish Sea (or indeed the impacts of activities at La Hague in France) are wholly irrelevant to this case and to the provisional measures request. This case concerns the "authorisation and operation of the MOX plant at Sellafield", as appears from the very first sentence of the *Statement of Case*. If Ireland is to obtain a provisional measures order in respect of the "dispute concerning the authorisation and operation of the MOX plant at Sellafield", it must show that there is a need for such measures in order to prevent serious harm to the marine environment arising as a result of the authorisation and operation of the MOX Plant (or that measures are necessary to preserve the respective rights of the parties to the dispute).

97. There is no such risk of serious harm. The impacts of the authorisation and operation of the MOX Plant on the Irish Sea are negligible. As already noted, the then Ministry of Agriculture, Fisheries and Food estimated the dose to the critical group to be 0.002 μSv (two thousandths of a millionth of a sievert) per year in respect of gaseous discharges, and 0.000003 μSv (three millionths of a millionth of a sievert) per year in relation to liquid

discharges from the MOX Plant.[51] This is in the context of the United Kingdom regulations restricting exposure to members of the public from a single new source to 0.3 mSv (three tenths of a thousandth of a sievert), which regulations are three times more stringent than the requirements imposed as a matter of Euratom law.[52]

98. To provide some perspective, the combined annual doses to the most exposed members of the public (for gaseous and liquid discharges from the MOX Plant) would be less than one millionth of the annual dose that the average person receives from background radiation occurring naturally in the environment. Doses to the critical group in Ireland would be considerably lower. The radiological impact on the general public from the MOX Plant during plutonium commissioning and ramp-up to full operations will be smaller still than that from normal operations.[53]

99. Indeed, by submissions dated 4 April 1997 and 16 March 1998, the Irish Government acknowledged that any discharges were "likely to be small".[54] Its position was that, irrespective of the low level of discharges associated with operation of the MOX Plant, it was opposed to any expansion of the operations at Sellafield. This is so even though the Radiological Protection Institute of Ireland ("RPII") has itself confirmed that radiation doses to Irish people continue to fall each year and do not pose significant health risks. In the words of the Deputy Chief Executive of the RPII, "the dose to a heavy consumer of fish and shellfish from the northwest of the Irish Sea was 1.6 micro-sieverts in 1996 and 1.4 micro-sieverts in 1997. These doses are less that 1% of the average dose of 3,000 micro-sieverts received in a year from all sources of radiation." He went on to emphasise that "it is safe to continue eating fish and shellfish from the Irish Sea and enjoying the amenities of our seas."[55]

---

[51] Appendix 4 to the *Proposed Decision* at paragraphs A4.95-A4.97. **(Annex 5)**

[52] The Environment Agency noted in its *Proposed Decision* that the assessed dose due to gaseous and liquid discharges from the MOX Plant would make a very small contribution to the dose from the Sellafield site as a whole and would be less than one millionth of that due to natural background radiation. Accordingly, suspending or prohibiting production at the MOX plant will not materially alter the discharges from the Sellafield site as a whole.

[53] No quantitative assessment of these further reduced doses is available, but given the extremely small radiological impact from normal operations, the dose from normal operations could be treated as a conservative upper limit on doses arising during the commissioning phase.

[54] Irish submissions of 4 April 1997 and 13 March 1998. **(Annexes 13 and 14 respectively)**

[55] *Annual Report and Accounts* of the Radiological Protection Institute of Ireland. 1999. **(Annex 15)**

100. In any event, the allegations made by Ireland with respect to the generalised impacts of the Sellafield facility are misleading or wrong.

101. As to Ireland's allegations that discharge of radionuclides into the Irish Sea from Sellafield increased significantly in the 1970s and have resulted in pollution that directly affects Ireland, including its waters:

(1) Discharges have been reduced significantly since the 1970s. Discharges of the principal radionuclides are now less than 1% of their peak values in the 1970s.[56]

(2) The RPII Annual Report for 1999 has stated publicly that Sellafield discharges do not pose a significant health risk to people living in Ireland:

> "Radioactive contamination of the Irish marine environment is primarily caused by the discharge of radioactive effluents from the Sellafield reprocessing plant into the northeast Irish Sea.
>
> The dose to heavy consumers of seafood during 1999 due to artificial radionuclides was estimated to be similar to that in 1998, i.e. less than 2 microsieverts (μSv). The doses arising from recreational activities such as swimming, walking on beaches or fishing are smaller than this. The significance of these doses may be put into context by comparing them to the annual dose to a member of the Irish public from all sources of radiation which can range from around 2000 μSv up to 20,000 μSv, or even higher in cases of exceptional exposure to radon gas. While radiation doses to Irish people resulting from the Sellafield discharges are clearly objectionable, they do not pose a significant health risk to people living in Ireland."[57]

102. Ireland relies on a report commissioned by the European Parliament's Panel for Scientific and Technical Office Assessment ("STOA"). As reported in a recent article in the Irish press, the resulting report (conducted by World Information Service on Energy ("WISE")) has been "slammed" as "unscientific".[58] The report has been leaked; it has not

---

[56] In response to a written question to the European Commission on 23 October 1997, it was stated: "Enforcement of [the ALARA principle] has led to the continuing development and refinement of technology, and has resulted in as much as 99% reduction in radioactivity discharged from Sellafield to the marine environment since the peak discharges in the 1970s" (OJ No.C117, pg.121).

[57] *Annual Report and Accounts* of the Radiological Protection Institute of Ireland, 1999. **(Annex 15)**

[58] Sunday Business Post (Ireland) article of 4 November 2001, "Leading scientists slam EU report on Sellafield". **(Annex 16)**

been published. The Chairman of STOA is quoted as saying that the behaviour of WISE has not been "in line with the long standing tradition of STOA, which always endeavoured to associate its work with the highest scientific and ethical standards".

II. Ireland's allegations relating to regulatory compliance and safety issues at Sellafield (paragraphs 14-18 of the *Statement of Case*)

103. In its *Statement of Case*, Ireland asserts that there is a poor safety record at Sellafield and that there are numerous examples of violations of regulatory authorisations.[59] It concentrates, however, on just one incident, the data falsification incident concerning the MOX Demonstration Facility. This incident is to be seen in the following context:

(1) The falsification of the diameter measurements of MOX pellets had no potential environmental or safety implications. The data went only to the quality of the fuel supplied to the potential customer with reference to that customer's specific requirements.

(2) The incident happened at the MOX Demonstration Facility. This is a different plant in a different building to the MOX Plant. The MOX Plant uses an automated procedure which would in any event prevent similar incidents.[60]

(3) A full investigation was carried out by the United Kingdom Health and Safety Executive.[61] An investigation was also carried out by BNFL.[62] Three process workers were dismissed. People who were suspected of involvement or of having knowledge of the falsification were removed from the MOX business. Extensive changes at all levels of measurement (from supervisor to Chief Executive Officer) took place.

---

[59] *Statement of Case*, paragraph 15.

[60] Health and Safety Executive, Nuclear Installations Inspectorate, *An investigation into the falsification of pellet diameter data in the MOX demonstration facility at the BNFL Sellafield site and the effect of this on the safety of MOX fuel in use*, at the Foreword. **(Annex 8)**

[61] **Annex 8.**

[62] As noted at paragraph 69 of the Health and Safety Executive report **(Annex 8)**, the BNFL investigation was a "thorough investigation"

(4) It is said by Ireland that all the recommendations of the Health and Safety Executive report have not been complied with. This is wrong. The Health and Safety Executive report made 15 recommendations relating to the MOX Demonstration Facility data falsification incident. All 15 of these recommendations were accepted by BNFL and implemented. The Nuclear Installations Inspectorate (part of the Health and Safety Executive) confirmed to its satisfaction that these recommendations had been implemented in December 2000. In its report dated 22 February 2001, the Nuclear Installations Inspectorate stated that meeting these recommendations "had been a significant achievement which has been brought about by major efforts by BNFL's staff".[63]

III. Ireland's allegations relating to the MOX authorisation process (paragraphs 19-25 of the *Statement of Case*)

104. Ireland alleges that the impacts of the MOX Plant on the marine environment have never been assessed and that no account has been taken of international movements associated with the MOX Plant.[64] This is wrong. The United Kingdom has implemented (and even exceeded) the relevant European and international regulations in its consideration of these issues, as has been shown in Part II. The consideration of the issues is recorded at:

(1) The *Environmental Statement*, at paragraphs 5.43 to 5.56 and 5.89 to 5.95.

(2) The *Proposed Decision* of October 1998, paragraphs 22-31 and Appendix 3 and Appendix 4, at paragraphs A4.95 to A4.164.

(3) The *Decision* of 3 October 2001, at paragraphs 56-70 and Annex 1, at paragraphs 6-20 and 29-33.

105. Ireland has offered no support in relation to (for example) allegations as to the inadequacy of the 1993 *Environmental Statement*. The *Environmental Statement* makes

[63] Health and Safety Executive, Nuclear Installations Inspectorate, Progress on BNFL's response to three reports issued by HSE on 18 February 2000, *Report* of 22 February 2001. **(Annex 17)**

[64] *Statement of Case*, paragraph 19.

public information as to the anticipated radioactive discharges from the MOX Plant. Ireland has had over eight years to put forward evidence to suggest that such important data are wrong. It has not done so, and does not suggest that the data are wrong.

106. Ireland also places considerable weight on the United Kingdom's alleged failure to supply information to it and to cooperate. The information sought is commercially confidential information relating to the economic case for the MOX Plant. Ireland has sought the disclosure of such information pursuant to Article 9 of the *OSPAR Convention* and has seised an OSPAR tribunal with an alleged violation of Article 9. As is shown in Part V below, disclosure of information is evidently a matter for the OSPAR tribunal, not for the Annex VII Tribunal. As to the failure to cooperate, this sits very uneasily with the fact that Ireland has featured as one of the consultees in a public consultation comprising five rounds of consultation, that it has made submissions in each consultation round,[65] and that its submissions along with those of the other consultees have been considered and addressed.[66] Ireland confuses a refusal to agree with its submissions with a failure to cooperate.

107. As will be developed in Part V below, Ireland's allegation is more truly an allegation that the United Kingdom has failed to supply information to Ireland, which information Ireland is not entitled to receive. This is the very subject of the OSPAR proceedings initiated by Ireland in June 2001.

IV. Ireland's allegations relating to the manufacture of MOX fuel and the related issues regarding transport (paragraphs 26-38 of the *Statement of Case*)

108. Ireland asserts that the production and use of MOX fuel involves three stages – transport to the MOX Plant, manufacture at the MOX Plant, and transport from the MOX Plant – and that each of these stages has significant implications for the marine environment.

A. Allegations relating to risks relating to transport of radioactive materials to the MOX Plant (paragraph 27 of the Statement of Case*)*

[65] *Statement of Case*, paragraph 24.
[66] As is apparent from both the *Proposed Decision* of October 1998 and the *Decision* of 3 October 2001.

109. This allegation may be dealt with very briefly. There will be no transport of radioactive materials to the MOX Plant. The plutonium dioxide used in the manufacture of MOX fuel will be sourced from reprocessing operations at Sellafield.

B. Ireland's allegations relating to risks relating to the manufacture of MOX fuel (paragraphs 28-32 of the Statement of Case*)*

110. At the outset, it should be pointed out that Ireland does not allege serious harm to the marine environment arising as a result of manufacture of MOX fuel at the MOX Plant.

111. Ireland does allege the existence of "significant risks for the Irish Sea", but this allegation is based on a misguided view of the risks associated with production at the MOX Plant.

(1) While it is correct that the production process involves the production of wastes in solid, liquid and gaseous form, the quantities involved are such that there could not possibly be any harm – serious or otherwise – to the marine environment of the Irish Sea.

(2) Ireland does not explain how a dose to the critical group of 0.002 μSv (two thousandths of a millionth of a sievert) per year in respect of gaseous discharges from the MOX Plant could cause harm to marine environment of the Irish Sea. Nor does it suggest that this figure – which is the tiniest of fractions of the legally authorised limit – is wrong.

(3) Ireland does not explain how a dose to the critical group of 0.000003 μSv (three millionths of a millionth of a sievert) per year in relation to liquid discharges from the MOX Plant could cause harm to marine environment of the Irish Sea. Nor does it suggest that this figure – which is the tiniest of fractions of the legally authorised limit – is wrong.

(4) While it is correct that plutonium dioxide in powder form is highly toxic, the purpose of the MOX Plant is to convert that plutonium dioxide powder into a ceramic state

(MOX fuel) and then deliver it to customers safely and in accordance with all applicable international and national standards.

112. It is suggested that the production processes of the MOX Plant may not be reliable.[67] Yet the support for this is "experience in other powder processing industries, such as the pharmaceutical industry", which are not remotely comparable with a nuclear plant subject to the stringent safeguards and regulatory controls. There is no explanation as to how the alleged difficulties could harm the marine environment of the Irish Sea. It is said that lapses in the qualities of inspections may have extremely serious safety implications. Again, no evidence is offered. Again, there is no explanation as to how the alleged difficulties could harm the marine environment of the Irish Sea.

113. Ireland raises a spectre of danger and threat, but this is in the face of precise information on radiological impact that has been in the public domain for over eight years. No scientific analysis, no scientific data, no scientific opinion is brought into play to support this spectre.

C. Allegations relating to risks relating to the transport of MOX fuel (paragraphs 33-38 of the Statement of Case*)*

114. Ireland addresses the topic of the transport of MOX fuel by sea as if the United Kingdom were about to embark upon a dangerous activity to which neither it nor any international regulatory body had ever given any thought. It conjures up an image of accident, fire or sinking, all inexorably leading to the release of radioactive material.

115. It is important to bear in mind:

(1) The transport of MOX fuel from Sellafield will be undertaken in strict compliance with internationally agreed standards, which provide for a very high level of safety and security.

[67] *Statement of Case*, paragraph 32.

(2) The transport flasks in which radioactive materials are carried effectively preclude the possibility of those materials being exposed to the environment even in the most severe accident conditions (such as collision, fire and sinking).

(3) MOX fuel is not volatile.

(4) Transports by sea of radioactive spent fuel to Sellafield (via Barrow) for reprocessing have been undertaken for many years without incident.

(5) Further, with respect to Ireland's allegation at paragraph 86 of its *Statement of Claim* that the consequences of transport accidents have not been assessed, it should be noted that the IAEA standards related to the transport of nuclear materials are reviewed regularly to ensure their adequacy.

V. Ireland's allegations relating to the threat of terrorist attacks against Sellafield and international movements associated with the MOX Plant (paragraphs 39-43 of the *Statement of Case*)

116. Ireland states, quite correctly, that nuclear materials are at risk from two types of terrorist threat: seizure, with a view to later use, and direct attack, with a view to causing destruction of assets and radioactive release.[68] It is, however, quite wrong in its assertion that the existence of these two threats has only become clear since 11 September 2001. The existence of these two threats has been known to the United Kingdom and has been the object of various security measures for many years.

117. In terms of the protection of the Sellafield site, including the MOX Plant, security and safety precautions are kept under regular review by the Office for Civil Nuclear Security and the Health and Safety Executive, and measures of protection have been reviewed in the light of the events of 11 September 2001. The MOX Plant is one of many plants within a large industrial site and has no special features that would single it out for terrorist attack.

[68] *Statement of Case*, paragraph 39.

118. The advice of the Office for Civil Nuclear Security is that the manufacture of MOX fuel presents negligible security risks. This advice has been reviewed since 11 September 2001.[69]

119. Security and safety precautions for the transportation of nuclear material are also kept under constant review. The advice of the Office for Civil Nuclear Security is that the transport of MOX fuel presents negligible security risks. This advice has been reviewed since 11 September 2001. The security arrangements in place are appropriate and are in line with IAEA guidance.[70] The precautions taken to prevent theft or sabotage of MOX fuel during transport comply with all relevant international obligations and recommendations and are amply robust to cope with any credible threat. In short, the commissioning of the MOX Plant will not make Sellafield a more likely or a more vulnerable target of terrorist attack.

VI. Ireland's allegations relating to the history of the dispute (paragraphs 44-54 of the *Statement of Case*)

120. In its *Statement of Case*, Ireland seeks to give the impression that it has set out in clear terms and in good time the substance of its UNCLOS dispute with the United Kingdom, but that the United Kingdom has failed to engage constructively in any dialogue. This is wrong. It is Ireland that has refused to participate in negotiations.

121. Ireland instituted the present proceedings one week after being informed by the United Kingdom that the latter was "anxious to exchange views on the points you raise in your letter as soon as possible".[71] In rejecting this offer, Ireland responded that:

> "The object of any exchange of views pursuant to Article 283 of [UNCLOS] is to achieve a settlement of the dispute between Ireland and the United Kingdom concerning the interpretation and application of UNCLOS by negotiation or other peaceful means. No such settlement will remain possible so long as the MOX plant remains authorised".[72]

[69] See, also, Annex 1 to the *Decision* of 3 October 2001 at paragraphs 25-31. **(Annex 4)**
[70] INFCIRC/225/Rev. 4. **(Annex 11)**
[71] Letter of 18 October 2001. **(Annex 1)**
[72] Letter of 23 October 2001. **(Annex 2)**

122. In effect, Ireland has refused to exchange views. Its precondition was acceptance of the primary provisional measure that it seeks and, for the reasons given in Part II above, acceptance of this precondition would cause severe loss to BNFL, and is in any event unnecessary, as could have been explained in an exchange of views. Indeed, Ireland did not wait for a response to its letter establishing that precondition, but instituted the present proceedings only two days later.

123. Prior to 25 October 2001, Ireland failed to set out, in sufficient detail to enable the United Kingdom to respond, why it considered that the approval of the MOX Plant would contravene UNCLOS. Its letter of 30 July 1999 was written in the context, and addressed the issue, of the economic case for the MOX Plant. While its letter of 23 December 1999 did refer to various provisions of UNCLOS, no explanation was given to the United Kingdom as to why these provisions might have been breached. The same may be said for the oral statement of Ireland at the meeting of 5 October 2001. That statement, which was made at a meeting of the United Kingdom and Irish Agents in the OSPAR proceedings (convened for the sole purpose of agreeing practical arrangements for that arbitration), referred to a written communication that would come in a few days (in fact, the letter of 16 October 2001).[73]

124. The extent of Ireland's failure to exchange views with the United Kingdom, before instituting the present proceedings, is illustrated in Ireland's complaint that the United Kingdom has not exchanged information with Ireland, on a confidential basis, about the risk of terrorist attacks and the precautions that the United Kingdom has taken.[74] Nowhere, prior to lodging the *Statement of Claim*, did Ireland express the desire to obtain such an assessment or preparedness to receive information on a confidential basis. It is difficult to see how the United Kingdom can be criticised for failing to respond to a request that has never been made.

125. It is true that by its letter dated 16 October 2001 Ireland raised the question of security, stating that following the attacks on the World Trade Centre on 11 September, further precautionary steps needed to be taken to protect nuclear installations such as the

[73] See *Statement of Case*, paragraphs 45-46.
[74] *Statement of Claim*, paragraph 19. *Statement of Case*, paragraph 43.

MOX plant.[75] As already noted, the *Decision of 3 October 2001* (a copy of which was supplied to Ireland as soon as it was taken) makes it clear at paragraphs 65 to 70 that the events of 11 September 2001 had been taken into account. The claim that further precautionary measures need to be taken is advanced in circumstances in which Ireland has failed to enquire what steps have been taken or otherwise to engage in any exchange of views or information on the subject of its professed concern.

[75] See *Statement of Case*, paragraphs 47-49.

PART IV
THE PROCEDURAL FRAMEWORK AND LAW APPLICABLE TO THE PRESCRIPTION OF PROVISIONAL MEASURES

126. Insofar as is material for present purposes, Article 290 of UNCLOS provides:

> "1. If a dispute has been duly submitted to a court or tribunal which considers that *prima facie* it has jurisdiction under this Part or Part XI, section 5, the court or tribunal may prescribe any provisional measures which it considers appropriate under the circumstances to preserve the respective rights of the parties to the dispute or to prevent serious harm to the marine environment, pending the final decision.
>
> ...
>
> 5. Pending the constitution of an arbitral tribunal to which a dispute is being submitted under this section, any court or tribunal agreed upon by the parties or, failing such agreement within two weeks from the date of the request for provisional measures, the International Tribunal for the Law of the Sea ... may prescribe, modify or revoke provisional measures in accordance with this article if it considers that *prima facie* the tribunal which is to be constituted would have jurisdiction and that the urgency of the situation so requires. Once constituted, the tribunal to which the dispute has been submitted may modify, revoke or affirm those provisional measures ..."

127. Thus it is clear from the text of Article 290 that there are three conditions which must be satisfied before provisional measures can be prescribed in proceedings initiated under Article 290(5):

(1) ITLOS must consider that *prima facie* the Annex VII Tribunal will have jurisdiction under Part XV of UNCLOS to address the merits of the case;

(2) the urgency of the situation must require the prescription of provisional measures pending the constitution of the Annex VII Tribunal;

(3) provisional measures must be necessary to preserve the respective rights of the parties or to prevent serious harm to the marine environment.

I. Provisional measures are an exceptional form of relief

A. The exceptional character of provisional measures

128. The underlying principle in the settlement of disputes – reflecting most basically the burden of proof – is that an applicant cannot obtain relief until it has proved its case. The power to prescribe provisional measures constitutes an exception to this principle. The issue, as expressed by Judge Shahabuddeen in the *Great Belt* case before the International Court of Justice ("ICJ"), is whether

> "it is open to the Court by provisional measures to restrain a State from doing what it claims it has a right to do without having heard it in defence of that right".[76]

The presumption is thus necessarily against such measures of restraint. It is for the applicant to make a compelling case showing the necessity for such measures.

129. The most recent provisional measures order of the ICJ – the *Arrest Warrant* case – illustrates the exceptional character of the procedure and the burden upon the applicant to show that the conduct that it seeks to restrain posses a real and significant threat.[77] Notwithstanding that there remained a real risk that an arrest warrant might be executed against a DRC Minister, the ICJ rejected the DRC's request for provisional measures on grounds that it had

> "not been established that irreparable prejudice might be caused in the immediate future to the Congo's rights nor that the degree of urgency is such that those rights need to be protected by the indication of provisional measures."[78]

130. The Court's rejection of the provisional measures request reflects the appreciation that such measures are an exceptional form of relief that ought only to be ordered in the most pressing of circumstances.

---

[76] *Passage through the Great Belt (Finland v. Denmark), Provisional Measures, Order of 29 July 1991, ICJ Reports 1991*, p.12, Separate Opinion of Judge Shahabuddeen, at p.28.
[77] *Case Concerning the Arrest Warrant of 11 April 2000 (Democratic Republic of the Congo v. Belgium), Provisional Measures, Order of 8 December 2000.*
[78] *Arrest Warrant* case, *supra*, at paragraph 72.

131. The jurisprudence of ITLOS under Article 290 of UNCLOS affirms the exceptional character of provisional measures under UNCLOS. While the provisional measures Orders in the *M/V Saiga (No.2)* and *Southern Bluefin Tuna* cases[79] make no express comment on the character of provisional measures as a form of relief under UNCLOS, it is evident that the approach adopted by ITLOS is substantially the same as that adopted by the ICJ.

B. A request for provisional measures must be supported by evidence

132. Any claim for provisional measures must be supported by evidence. The point is cogently illustrated by the case-law. In the *Southern Bluefin Tuna* case, for example, ITLOS was presented with detailed scientific evidence supporting the claims of the parties. This stands in sharp contrast to the present case in which Ireland has not presented any evidence showing a real risk of serious harm from the MOX Plant.

133. The point is further illustrated by the provisional measures proceedings before the ICJ in the *Nuclear Tests* cases. In those cases, the Court had before it detailed evidence from objective sources pointing to (a) previous conduct of precisely the kind complained of, (b) measurable concentrations of radio-activity from that previous conduct in the territory of the applicants or relative to their populations, (c) the irremediable nature of the harm caused, and (d) the declared intention on the part of the respondent to undertake further acts of the kind complained of in the immediate future.[80] The credibility and weight of this evidence was central to the decision of the Court to order provisional measures. For example, Sir Garfield Barwick, voting in favour of the indication of provisional measures, observed as follows:

> "... the material before the Court, particularly that appearing in the [United Nations Scientific Committee on the Effects of Atomic Radiation] reports, provides reasonable grounds for concluding that further deposit in the [Australian] [New Zealand] territorial environment [and that of the Cook

[79] *M/V Saiga (No.2), Provisional Measures, Order of 11 March 1998*. ITLOS Reports 1998, p. 24; *Southern Bluefin Tuna (Australia v. Japan; New Zealand v. Japan), Provisional Measures, Order of 27 August 1999*.
[80] See, for example, *Nuclear Tests Cases*, Volume I (Australia v. France), *Pleadings, Oral Arguments, Documents* (ICJ, 1978), at pp.43 – 146.

> Islands] of radio-active particles of matter is likely to do harm for which no adequate compensatory measures could be provided."[81]

The significance, to the decision of the ICJ, of the reports of the United Nations Scientific Committee on the Effects of Atomic Radiation, as well as other information submitted to the Court, is also evident on the face of the Court's Orders themselves.[82]

134. In the present case, it is precisely this evidential element, pointing to a real risk of serious harm to Ireland or the Irish Sea from the operations of the MOX Plant – as opposed to some vaguely stated hypothetical risk – that is so patently absent from the Irish *Statement of Claim* and *Statement of Case*. There is virtually nothing in the material submitted to ITLOS by Ireland which establishes the existence of a real risk associated with the commissioning of the MOX Plant. The case against the MOX Plant has been constructed by innuendo and by association with wider practices – often not even by the United Kingdom – concerning the movement and processing of nuclear material. In the United Kingdom's submission, it would be wholly inappropriate for ITLOS to prescribe provisional measures in the absence of credible evidence pointing to a real and imminent risk of irreparable prejudice to Ireland's rights or serious harm to the marine environment *from the MOX Plant*.

II. The requirement of *prima facie* jurisdiction

135. The requirement that *prima facie* jurisdiction must be established as a pre-condition to the prescription of provisional measures is stated expressly in paragraph 5 of Article 290 of UNCLOS and further emphasised in paragraph 1 of that Article. Before ITLOS can prescribe provisional measures it must consider that *prima facie* the Annex VII Tribunal which is to be constituted will have jurisdiction to address the merits of the case.

136. These provisions must be read together with Article 286 and with Articles 281(1), 282 and 283(1) of UNCLOS which provide that a dispute concerning the interpretation or application of UNCLOS may only be submitted *inter alia* to an Annex VII Tribunal where no

[81] *Nuclear Tests (Australia v. France), supra*, Declaration of Judge *ad hoc* Sir Garfield Barwick, at p.110; *Nuclear Tests (New Zealand v. France), supra*, Declaration of Judge *ad hoc* Sir Garfield Barwick at pp.146 – 147.

[82] See *Nuclear Tests (Australia v. France), supra*, at paragraph 29; *Nuclear Tests (New Zealand v. France), supra*, at paragraph 30.

settlement has been reached by recourse to other agreed methods and after there has been an exchange of views between the parties. The effect of these provisions is to preclude recourse to the provisional measures procedure under Article 290 of UNCLOS in circumstances in which other agreed methods of settlement have not been pursued and there has not been an exchange of views. In the United Kingdom's contention, the initiation of proceedings by Ireland, and the present request for provisional measures, are incompatible with these provisions of UNCLOS. ITLOS accordingly lacks jurisdiction in this matter. The substantive issues relevant to this submission are addressed in Part V below.

III. Urgency

A. The requirement of urgency

137. The requirement of urgency as a condition precedent to the prescription of provisional measures is laid down explicitly in Article 290(5) of UNCLOS. This provides that the court or tribunal seised of the request for provisional measures, not being the arbitral tribunal that will be seised of the merits of the case, must be satisfied that the urgency of the situation is such as to require the prescription of provisional measures *pending the constitution of the arbitral tribunal that will address the merits*.

138. This element is uncontroversial. It is further addressed in Article 89(4) of the ITLOS *Rules* which provides that a request for provisional measures under Article 290(5) must indicate *inter alia* "the urgency of the situation." It was expressly acknowledged by ITLOS to be a necessary requirement in proceedings under Article 290(5) in the *Southern Bluefin Tuna* case.[83]

139. The requirement of "substantive urgency" is no less evident and important. This refers to the requirement that provisional measures may only be prescribed if the court or tribunal seised of the matter considers that the urgency of the situation more generally requires such measures *pending the final decision in the matter*.

140. While Article 290(1) of UNCLOS makes no express reference to substantive urgency, such a requirement is readily apparent. It is, for example, implicit in the language of Article

[83] *Southern Bluefin Tuna*, *supra*, at paragraphs 63 – 65.

290(1) which provides that provisional measures may be prescribed *pending the final decision*. It is also evident implicitly from paragraph 6 of Article 290 which provides that the parties to the dispute "shall comply promptly with any provisional measures prescribed under this article." An obligation to comply promptly suggests that there is a risk of imminent harm. The requirement of substantive urgency is also well established in international law more generally. It has been repeatedly affirmed in the jurisprudence of the ICJ. In the *Great Belt* case, for example, the ICJ stated as follows:

> "Whereas provisional measures under Article 41 of the Statute are indicated 'pending the final decision' of the Court on the merits of the case, and are therefore only justified if there is urgency in the sense that action prejudicial to the rights of either party is likely to be taken before such final decision is given".[84]

141. The point is echoed even more directly in other decisions of the ICJ.[85] It is also evident in the practice and procedure of other international and supra-national tribunals.[86]

B. The content of the requirement of urgency

142. The requirement of urgency is not satisfied simply by showing that some event may, hypothetically, occur. Three elements must be shown. First, an event must be specified and must be shown to be "critical", i.e., it must be shown that a specified event will cause prejudice of some significant order to the rights of the parties or serious harm to the marine environment. Second, there must be a real risk of harm occurring, i.e., the risk of harm must not be merely hypothetical. Third, the risk of the critical event occurring must satisfy the temporal conditions relevant to provisional measures under UNCLOS, namely, insofar as is relevant to these proceedings, pursuant to Article 290(5), there must be a real risk of the critical event occurring before the Annex VII Tribunal is itself able to act. These elements follow directly from the language of Article 290 of UNCLOS as well as from the character of

[84] *Great Belt* case, *supra*, at paragraph 23.
[85] See, for example, the case of *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda), Provisional Measures, Order of 1 July 2000*, at paragraph 39, where the Court stated simply that "[provisional] measures are only justified if there is urgency".
[86] See, for example, Bernhardt (ed.), *Interim Measures Indicated by International Courts* (1994), at pp.51 *et seq*, as regards the European Court of Justice, and pp.69 and 77 *et seq*, as regards the Inter-American Court of Human Rights.

provisional measures as an exceptional form of relief. They are also evident from the wider jurisprudence on provisional measures.

1. The requirement of a critical event

143. The requirement that a specified event must be shown to be critical flows from the language of Article 290(1) of UNCLOS read in the light of the exceptional character of provisional measures. The court or tribunal seised of the matter must consider that provisional measures are appropriate in the circumstances to preserve the respective rights of the parties or to prevent serious harm to the marine environment. If provisional measures are not simply to provide cover for a court or tribunal to give a preliminary decision on the merits of the case, the threat to the rights of the applicant or to the marine environment must be of a significant order.

144. The point is most readily illustrated by the *Arrest Warrant* case before the ICJ, in which the Court refused to order provisional measures. In that case, the ICJ declined to order provisional measures on the grounds of absence of urgency and a risk of irreparable prejudice to the rights of the DRC.[87] The fact that there was a real risk of a specified, identifiable act occurring that might affect the rights of the DRC was not of itself sufficient to warrant provisional measures. The threatened act was not of a sufficient order of gravity.

145. The *Southern Bluefin Tuna* case further illustrates the point. Here, ITLOS prescribed provisional measures. The Order was, however, made on the premise that there was no dispute between the parties that "the stock of southern bluefin tuna is severely depleted and is at its historically lowest levels and that this is a cause for serious biological concern".[88]

146. The issue in the present case is not therefore whether some specified event may or may not occur at some point in the future. It is whether, were that event to occur, it would be of a sufficient order of gravity as to warrant provisional measures. In the United Kingdom's contention, Ireland has failed to show that the event of which it complains - the commissioning of the MOX Plant on or around 20 December 2001 - would of itself pose a

[87] *Arrest Warrant* case, *supra*, at paragraph 72.
[88] *Southern Bluefin Tuna*, *supra*, at paragraph 71.

threat of sufficient gravity as to warrant the prescription of provisional measures. Indeed, in the United Kingdom's contention, there is nothing associated with the act of the commissioning of the MOX Plant that poses any threat to Ireland or to the marine environment.

2. The requirement of a real risk of harm

147. The requirement that the risk of harm must be real and not merely hypothetical flows from the exceptional character of the provisional measures procedure as well as from normal principles of burden of proof. The question is whether a court or tribunal should restrain a respondent from pursuing a course of conduct which it claims it has a right to pursue without hearing it in defence of that right. If it is to do so, the risk of harm occurring must in some measure be a real risk. It cannot be simply the merest suggestion that harm might occur. While this is not to suggest that the threshold is one of the probability of harm occurring, it must be more than the hypothetical or remote possibility of such harm.

148. The importance of this element emerges clearly from the jurisprudence of the ICJ on provisional measures. The point is illustrated by the *Great Belt* case in which Finland's request for provisional measures to restrain the construction by Denmark of a fixed bridge over the Great Belt was rejected by the Court. While noting that it was not disputed that completion of the bridge would prevent passage through the strait by vessels of certain dimensions, the Court observed that no physical hindrance to the claimed right of passage was imminent.[89] It further observed that no evidence had been adduced – "proof of the damage alleged has not been supplied" – supporting the claim of tangible damage to Finland's economic interests.[90]

149. In the *Southern Bluefin Tuna* case, evidence was provided to ITLOS supporting the claim of a real risk of harm as a result of the Japanese conduct that was the subject of the complaint. In the present case, however, Ireland provides no support for its allegations of a real risk of harm from the principal act that it seeks to restrain, namely, the commissioning of the MOX Plant on or around 20 December 2001. Its case rests on allegations alone.

[89] *Great Belt* case, *supra*, at paragraphs 24 and 27.
[90] *Great Belt* case, *supra*, at paragraph 29.

150. The United Kingdom accepts that, in assessing the level of risk in any given case, considerations of prudence and caution may be relevant. The United Kingdom notes that, in the *Southern Bluefin Tuna* case, ITLOS indeed considered that, in the circumstances of that case, the parties should act with prudence and caution.[91] Precautionary dictates cannot, however, be relied upon as a substitute for a basic foundation of evidence supporting the tangible reality of the risk that is alleged. In this case, Ireland has not adduced such a basic foundation of evidence showing a real risk of harm such as to warrant pre-emptive restraint of the rights of the United Kingdom on grounds of precaution.

3. The temporal dimension

151. The temporal dimension of the requirement of urgency – that there must be a real risk of the critical event occurring before the Annex VII Tribunal is itself able to act – is stated expressly in Article 290(5) of UNCLOS. Once the Annex VII Tribunal is constituted, it has jurisdiction to prescribe provisional measures subject to the terms of Article 290(1). The pre-eminent competence of the Annex VII Tribunal in respect of provisional measures is confirmed by Article 290(5), which provides that, once constituted, the tribunal may modify, revoke or affirm provisional measures ordered *inter alia* by ITLOS.

152. The period within which the risk of the critical event occurring must be shown is precisely quantifiable. Pursuant to the terms of Article 3 of Annex VII of UNCLOS, the Annex VII Tribunal must be constituted within a maximum a period of 104 days following the notification of the dispute. Ireland submitted its notification of dispute in the present case on 25 October 2001. The Annex VII Tribunal must therefore be constituted at the very latest by 6 February 2002. To satisfy the temporal conditions relevant to provisional measures, there must therefore be a real risk of a critical event occurring before the Annex VII Tribunal is itself able to act. As has already been observed, the commissioning of the MOX Plant on or around 20 December 2001 does not of itself amount to a critical event. No marine transports to or from the MOX Plant are anticipated before June 2002. These would not in any case constitute a critical event. Ireland has not pointed to anything that would amount to a critical event that is likely to occur before the Annex VII Tribunal is constituted. There is,

[91] *Southern Bluefin Tuna*, *supra*, at paragraph 77.

accordingly, no basis of urgency on which ITLOS can prescribe provisional measures pending the constitution of the Annex VII Tribunal.

IV. The preservation of the respective rights of the parties or the prevention of serious harm to the marine environment

153. Pursuant to Article 290(1), it must be shown that provisional measures are necessary to preserve the respective rights of the parties or to prevent serious harm to the marine environment.

154. The reference to measures necessary "to preserve the respective rights of the parties" in Article 290(1) of UNCLOS follows closely on the language of Article 41 of the *Statute* of the ICJ which provides that "[t]he Court shall have the power to indicate, if it considers that circumstances so require, any provisional measures which ought to be taken *to preserve the respective rights of either party*."[92] In the recent *Cameroon v. Nigeria* case, the ICJ addressed the matter as follows:

> "Whereas this power to indicate provisional measures has as its object to preserve the respective rights of the Parties, pending a decision of the Court, *and presupposes that irreparable prejudice shall not be caused to rights which are the subject of dispute in judicial proceedings*; whereas it follows that the Court must be concerned to preserve by such measures the rights which may subsequently be adjudged by the Court to belong either to the Applicant or to the Respondent; and whereas such measures are only justified if there is urgency".[93]

155. As this makes clear, the preservation of rights criterion is construed as meaning that there must be a threat of irreparable prejudice to the rights which are in issue in the proceedings. It also emphasises that the rights that the Court must be concerned to preserve are the rights of both the applicant and the respondent. It presupposes that the rights claimed are not illusory. It presupposes that the conduct which the applicant seeks to restrain poses, in some manner, a threat to the applicant's rights. It also presupposes that prejudicial effects on rights or on persons or on property which would be capable of reparation by appropriate

[92] Emphasis added.
[93] *Land and Maritime Boundary Between Cameroon and Nigeria, Provisional Measures, Order of 15 March 1996, ICJ Reports 1996*, p.13, at paragraph 35 (emphasis added).

means will not amount to irreparable prejudice warranting the prescription of provisional measures. This last point was the subject of comment by the ICJ in the *Aegean Sea* case in the following terms:

> "33. Whereas, in the present instance, the alleged breach by Turkey of the exclusivity of the right claimed by Greece to acquire information concerning the natural resources of areas of continental shelf, if it were established, is one that might be capable of reparation by appropriate means; and whereas it follows that the Court is unable to find in that alleged breach of Greece's rights such a risk of irreparable prejudice to rights in issue before the Court as might require the exercise of its power under Article 41 of the Statute to indicate interim measures for their preservation".[94]

156. As regards the prevention of serious harm to the marine environment, guidance comes in the first instance from the adjective used expressly in respect of this element: that provisional measures will only be appropriate where they are necessary to prevent serious harm to the marine environment. The risk of harm that must be established is therefore a real risk of harm on some quite significant scale. The harm alleged, and in support of which a basic foundation of evidence must be adduced, must therefore be harm that, at the very least, would be substantial, enduring and incapable of easy rectification.

157. This reading of the phrase accords with the approach adopted by ITLOS in the *Southern Bluefin Tuna* case. ITLOS, in that case, noted expressly that there was no disagreement between the parties that the stock of southern bluefin tuna was severely depleted, that it was at its historically lowest levels and that this was a cause for serious biological concern.[95] It further noted the claim by the applicants that the available scientific evidence showed that the amount of southern bluefin tuna to be taken under the Japanese experimental fishing programme "could endanger the existence of the stock".[96]

---

[94] *Aegean Sea Continental Shelf Case (Greece v. Turkey), Interim Protection, Order of 11 September 1976, ICJ Reports 1976*, p.3 at paragraph 33.
[95] *Southern Bluefin Tuna*, *supra*, at paragraph 71.
[96] *Southern Bluefin Tuna*, *supra*, at paragraph 74.

V. The principles relevant to an assessment of Ireland's request for provisional measures

158. In summary, if Ireland is to sustain its claim to provisional measures, it must establish that:

(1) the Annex VII Tribunal which is to be constituted will *prima facie* have jurisdiction on the merits of the case;

(2) provisional measures are required as a matter of urgency – that there is (a) a real risk (b) of a critical event occurring (c) prior to the Annex VII Tribunal itself being in a position to prescribe provisional measures;

(3) the risk of harm is such that it would cause irreparable prejudice to Ireland's rights or serious harm to the marine environment; such harm being substantial, enduring and incapable of easy rectification;

(4) the risk of harm must be supported by evidence

159. These elements are addressed in turn in Part V

PART V
IRELAND'S REQUEST FOR PROVISIONAL MEASURES SHOULD BE REJECTED

CHAPTER 1
NO *PRIMA FACIE* JURISDICTION

160. If Ireland is to sustain its claim for provisional measures, it must establish that the Annex VII Tribunal has *prima facie* jurisdiction on the merits. This condition is not satisfied. First, the matters in dispute come within the scope of other binding dispute settlement arrangements as contemplated by Article 282 of UNCLOS. Second, Ireland has not respected the requirements of Article 283(1) of UNCLOS which impose an obligation to exchange views. The United Kingdom contends therefore that ITLOS lacks jurisdiction in this matter.

161. Article 286 of UNCLOS reads:

> "Subject to section 3, any dispute concerning the interpretation or application of this Convention shall, where no settlement has been reached by recourse to section 1, be submitted at the request of any party to the dispute to the court or tribunal having jurisdiction under this section."

As this makes clear, before commencing proceedings in an Annex VII Tribunal, the requirements of Articles 282 and 283(1) of UNCLOS must be observed.

1. Article 282 of UNCLOS: Agreements to submit the dispute to a different procedure

162. Article 282 of UNCLOS provides that, where States Parties to UNCLOS have agreed that disputes are to be submitted to some other procedure entailing a binding decision, that procedure shall apply *in lieu* of procedures under UNCLOS.[97] The matters of which Ireland seeks to seise the Annex VII Tribunal, and on the basis of which it seeks provisional measures from ITLOS, are matters in respect of which the Parties have agreed to seek

[97] See paragraphs 3 and 4 above.

settlement by alternative means of their own choice. They are alleged breaches of obligations under regional agreements, and the disputes in respect of them have been, or are about to be, submitted to other tribunals. The Annex VII Tribunal does not, accordingly, even *prima facie*, have jurisdiction to address the merits of this case.

163. At paragraph 3 of its *Statement of Claim*, Ireland forewarns ITLOS of its intention to rely not only on UNCLOS but also on the *OSPAR Convention* and certain *Euratom* and European Community Directives.

164. In the case of the *OSPAR Convention*, Article 32(1) provides that:

> "Any disputes between Contracting Parties relating to the interpretation or application of the Convention, which cannot be settled otherwise by the Contracting Parties concerned, for instance by means of inquiry or conciliation within the Commission, shall at the request of any of those Contracting Parties, be submitted to arbitration under the conditions laid down in this Article".

165. Indeed, by application dated 15 June 2001, Ireland requested the constitution of an arbitral tribunal, submitting with that request a *Statement of Claim* containing allegations, by reference to Article 9 of the *OSPAR Convention*, concerning the same contentions relating to the withholding of information on grounds of commercial confidentiality that it now makes before the Annex VII Tribunal. The Annex VII Tribunal has no jurisdiction to determine a dispute which the parties have agreed through a regional agreement to submit to an alternative procedure entailing a binding decision. In the present instance, the dispute as to the withholding of commercially sensitive data, on which Ireland relies for its contention that the United Kingdom has failed to cooperate as required by UNCLOS, is actually the subject of proceedings before another tribunal, separately seised at Ireland's instigation. That OSPAR Tribunal, indeed, has its own powers in respect of provisional measures. The first (procedural) meeting of that Tribunal is scheduled to take place on 8 December 2001

166. As regards other aspects of Ireland's present complaint, these are governed by Directives made pursuant to the *Euratom* and *EC Treaties*. Those Treaties also constitute regional agreements providing for alternative binding dispute resolution provisions. The European Court of Justice ("ECJ") has powers pursuant to both Treaties to afford interim

relief. Both the *Euratom* and *EC Treaties* also provide in express terms:

> "Member States undertake not to submit a dispute concerning the interpretation or application of this Treaty to any method of settlement other than those provided for therein".[98]

167. Moreover, the Member States of Euratom and the European Community have agreed to invest the Community institutions, including the ECJ, with exclusive jurisdiction to resolve disputes between them concerning any alleged failure to comply with the obligations incumbent on them, by reason of Directives made pursuant to those Treaties. Ireland has made public its intention to raise before the ECJ the matters on which it now seeks to rely before the Annex VII Tribunal. In these circumstances, it would not only be inappropriate for the Annex VII Tribunal to interpret Community law, but it has no jurisdiction to do so. The United Kingdom accordingly goes little further into the questions of European Community law, including *Euratom* law, raised in the Irish *Statement of Claim*, beyond drawing attention to the wording of Article 6 of *Council Directive 96/29/Euratom*,[99] which provides that:

> "Member States shall ensure that all new classes or types of practice resulting in exposure to ionizing radiation are justified in advance of being first adopted or first approved, by their economic, social or other benefits in relation to the health detriment they may cause."

168. This provision refers expressly to "classes or types of practice". Before the appropriate court, the United Kingdom will submit that Ireland's contentions about the specific justification of the MOX Plant at Sellafield are beside the point. What has to be justified is a new class or type of practice. Indeed, this point was argued, on behalf of the Secretaries of State, in the judicial review proceedings in the High Court in London which concluded in 15 November 2001. The Judge, it will be recalled, upheld the *Decision* of the Secretaries of State. Besides this, it must be borne in mind that the European Community is itself a party to UNCLOS and insofar as the obligations arising from UNCLOS are matters of Community competence, Member States are under an obligation to submit any disputes that they may have with one another in respect of such matters exclusively to the means of settlement provided by Community law.

---

[98] *EC Treaty*, Article 292 (ex Article 219); *Euratom Treaty*, Article 193.
[99] OJ 1996 L159/114

169. When depositing its instrument of formal confirmation of UNCLOS, the European Community made a Declaration on the competence of the Community with regard to matters governed thereby. It stated, with regard to the provisions contained in Part XII of UNCLOS, that this was a matter for which the Community shares competence with its Member States. It continued:

> "With regard to the provisions of marine transport, safety of shipping and marine pollution contained inter alia in Parts II, III, V, VII and XII of the Convention, the Community has exclusive competence only to the extent that such provisions of the Convention or legal instruments adopted in implementation thereof affect common rules established by the Community."

170. The Community appended to its Declaration an extensive list of Community acts establishing common rules established by the Community in the matters covered by UNCLOS.[100]

171. The case that Ireland advances is based on a series of allegations that are summarised at paragraph 21 of its *Statement of Claim*. Each is a matter to be determined by the dispute settlement procedures established under either the *OSPAR Convention* or under the *EC* or *Euratom Treaties*.

(i) The 1993 Environmental Statement failed properly to address impacts on the marine environment

172. The adequacy or otherwise of the 1993 *Environmental Statement* ultimately falls to be determined by reference to the question whether *Directive 85/337/EEC* has been correctly implemented by the United Kingdom. The applicability of this Directive is evidently accepted by Ireland, as appears from its letter to the United Kingdom of 16 October 2001. Any dispute as to the adequacy of the *Environmental Statement* is therefore to be resolved by the ECJ, which has jurisdiction in this respect, and not by the Annex VII Tribunal:

(1) which has no jurisdiction to interpret Community law, and

[100] European Community Declaration concerning the competence of the European Community with regard to matters governed by UNCLOS. **(Annex 18)**

(2) whose jurisdiction has, by virtue of Article 282 of UNCLOS, been displaced.

(ii) No further Environmental Statement has been prepared

173. This raises precisely the same issues as in relation to allegation (i). It follows that the Annex VII Tribunal could have no jurisdiction in this matter.

(iii) Flawed economic justification

174. The adequacy or otherwise of the economic case for the MOX Plant ultimately falls to be determined by reference to *Directive 80/836/Euratom* (as amended in 1984) and *Directive 96/29/ Euratom*. The applicability of these Directives is accepted by Ireland in its letter to the United Kingdom of 16 October 2001. Indeed, it would appear, both from that letter and from the consideration of the provisions of UNCLOS in respect of which Ireland alleges breach,[101] that no breach of UNCLOS is advanced in relation to the alleged inadequacy of the assessment for the economic case for the MOX Plant.

175. Any dispute as to the adequacy of the economic case is therefore to be resolved by the ECJ, which has jurisdiction in this respect, and not by the Annex VII Tribunal:

(1) which has no jurisdiction to interpret Community law,

(2) whose jurisdiction has, by virtue of Article 282 of UNCLOS, been displaced, and

(3) which could not, in any event, have jurisdiction given that no breach of UNCLOS is alleged.

(iv) Failure to supply information

176. It is recalled that Ireland has already invoked the binding dispute resolution procedure in Article 32 of the *OSPAR Convention* in relation to a dispute concerning access to

[101] *Statement of Case*, at paragraphs 228-233.

information under Article 9 of the *OSPAR Convention* regarding the economic case for the MOX Plant.

177. The allegation that the United Kingdom has failed to supply information in relation to the operation of the MOX Plant, including information as to (i) the volumes of radioactive material to be processed, (ii) the total period of plant operation, and (iii) the international movement of radioactive materials, is currently the subject of the dispute before the arbitral tribunal already constituted under Article 32 of the *OPSPAR Convention*. It follows that, not only is this a case where the Parties have agreed, by a regional agreement, that the dispute on the subject-matter of Ireland's *Request* of 25 October 2001 be submitted to some other procedure that entails a binding decision, but that the very dispute has already been so submitted.

178. The allegation that the United Kingdom has failed to supply information in relation to the volume of expected discharges of radioactive material into the Irish Sea falls to be considered under Article 9 of the *OSPAR Convention*. It follows that this aspect of the dispute also falls to be resolved by reference to Article 32 of the *OSPAR Convention*.

179. Any dispute as to the failure to supply information is therefore to be resolved by the OSPAR Tribunal, which already has specific jurisdiction in respect of a dispute in relation to the greater part of the information sought, or pursuant to a further reference to Article 32 of the *OSPAR Convention*. The dispute is not to be resolved by the Annex VII Tribunal:

(1) which has no jurisdiction in respect of Article 9 of the *OSPAR Convention*, and

(2) whose jurisdiction has, by virtue of Article 282 of UNCLOS, been displaced.

(v) Failure to supply information on security matters

180. The allegation that the United Kingdom has failed to publish or supply to Ireland information in relation to terrorist threats to the MOX Plant or associated movements of radioactive materials, or as to emergency response plans in this respect, is also a matter

falling *prima facie* within Article 9 of the *OSPAR Convention*. It follows that a dispute in this respect also falls to be resolved by reference to Article 32 of the *OSPAR Convention*.

181. It is to be noted that, pursuant to Article 9(3)(b) of the *OSPAR Convention*, a Contracting Party from whom information is sought may refuse that request where the information affects public security. The information sought by Ireland is, by definition, information that affects public security. It is not just that the suggestion that security precautions taken by the United Kingdom should be made public is an inappropriate one. Ireland should not be allowed to bypass a vital qualification to the right to information under Article 9 of the *OSPAR Convention* by formulating its dispute as being under UNCLOS.

182. Any dispute as to the failure to supply this information is therefore to be resolved by a reference to Article 32 of the *OSPAR Convention*, and not by the Annex VII Tribunal:

(1) which has no jurisdiction in respect of Article 9 of the *OSPAR Convention* including Article 9(3)(b), and

(2) whose jurisdiction has, by virtue of Article 282 of UNCLOS, been displaced.

(vi) The MOX Plant will cause pollution/lead to discharge of radioactive material into the Irish Sea

183. It is immediately noted that this factual allegation did not appear in Ireland's summary of the factual situation at paragraph 21 of the *Statement of Claim*. Indeed, in the light of (*inter alia*) the European Commission's Article 37 *Opinion* of 11 February 1997, it is difficult to see on what basis the allegation could be made.

184. Nonetheless, allegations of risk of harm do now appear in the *Statement of Case* of 9 November 2001. These are, however, unsubstantiated, as noted further in Chapter 2 below. Ireland, of course, invokes the precautionary principle. Without entering into the precise content or legal status of this principle, it is generally accepted that it can operate only where there are some reasonable grounds for concern.[102] Ireland does not even make a preliminary

[102] See for example Article 2(2) of the OSPAR Convention.

showing of such grounds for concern. The precautionary principle does not apply in a situation in which the environmental impact of the operation of a plant has already been assessed in an environmental statement and has been given *Euratom* approval.

185. In the absence of the necessary factual allegations, the allegation of breach of UNCLOS necessarily falls away. It follows that there can be no *prima facie* jurisdiction in respect of such breaches either.

2. Article 283(1) of UNCLOS: Failure to Exchange Views

186. Article 283 of UNCLOS provides that if any dispute should arise between States Parties concerning the interpretation or application of UNCLOS, the parties to the dispute must proceed to exchange views regarding its settlement by negotiation or other peaceful means. The wording is mandatory: "the parties to the dispute shall proceed expeditiously to an exchange of views".

187. Ireland claims that "there has been a full exchange of views on the dispute for the purposes of Article 283(1). Ireland has written to the United Kingdom on numerous occasions, and has received either inadequate or no responses".[103]

188. The letters to which Ireland appears to be referring are requests for the public disclosure of certain information withheld from the public versions of the reports following public consultations on the economic case for the MOX plant.[104] They did not invite the United Kingdom to engage in any exchange views with the aim of settling by negotiation or other peaceful means what Ireland now characterises as the dispute arising under UNCLOS.[105] Indeed they did not mention UNCLOS at all. Nor did they contain any indication that Ireland would be prepared to exchange views as to how any interest that it might have in seeing the commercial data in question might be reconciled with the interest of BNFL in protecting that material from public disclosure. On the contrary, Ireland's stated

[103] *Statement of Claim*, paragraph 36.
[104] *Statement of Claim*, paragraph 11, note 2; Annex 2, items 2, 5.
[105] Indeed, when Ireland stated, in its letter of 25 May 2001, that it was prepared to exchange views with the United Kingdom on the question of commercially confidential data, the letter made no mention of UNCLOS. It referred instead to the *OSPAR Convention* and was a prelude to the institution of the OSPAR proceedings: Annex 2, page 14.

position was that the withholding of the information from the public was inconsistent with Article 9(3)(d) of the *OSPAR Convention*, which provides that Contracting Parties may, in accordance with their national legal systems and applicable international regulations, refuse to make information public where it affects "commercial and industrial confidentiality".

189. Ireland next asserts that it wrote to the United Kingdom in December 1999 setting out its views as to violations of UNCLOS that would be occasioned by authorisation of the MOX Plant. This is a reference to a letter dated 23 December 1999,[106] which "call[ed] upon the United Kingdom to carry out a new environmental impact assessment procedure" for the MOX Plant. That letter was sent during the course of the authorisation procedure for the MOX Plant and at a time when authorisation was uncertain. It concerned an aspect of the procedure for authorisation, to which certain *Euratom* Directives apply. In essence, it concerned only one of the matters now raised before ITLOS; and it contained no expression of interest in engaging in an exchange of views with the United Kingdom on the matters now raised.

190. Ireland then asserts that it amplified its views at a meeting on 5 October 2001 and in its letter of 16 October 2001. The meeting on 5 October 2001 was concerned with proceedings before the OSPAR Tribunal. It is true that, at the end of the meeting, counsel for Ireland read a prepared statement warning the United Kingdom of Ireland's intention to commence proceedings under UNCLOS and referred to a written communication to be sent within a few days. He did not, however, offer to exchange views but expressly refused to be drawn into any discussion about the precise nature of Ireland's complaints under UNCLOS. The letter of 16 October 2001 simply announced its intention to institute the present proceedings, identifying certain Articles of UNCLOS.

191. There was therefore no exchange of views on the subject prior to the letter of 16 October 2001. As has been shown, on receiving that letter, and subsequently, the United Kingdom stated that it was anxious to exchange views with Ireland and asked why the Irish Government considered the United Kingdom to be in breach of the provisions and principles cited therein.

[106] *Statement of Claim*, Annex 1, at p.192.

192. Ireland declined that invitation unless the United Kingdom would first suspend authorisation of the MOX Plant. Ireland continued to decline to exchange views, even when invited to do so by letter from the Prime Minister to his Irish counterpart, the Taoiseach. It follows that there has been no exchange of views such as is required by Article 283(1) of UNCLOS.

193. The first consequence of the institution of the proceedings without a prior exchange of views is that the application has proceeded on the basis of a large number of misapprehensions of fact. The United Kingdom has endeavoured to dispel these in Part III of this *Response*.

194. The second consequence is that the Parties have been deprived of a real opportunity of settling the dispute, or much of it, by negotiation. Many of the matters of which Ireland complains appear, even at this stage, amenable to settlement by negotiation conducted in good faith.

195. For instance, Ireland contends that the United Kingdom has failed to protect the marine environment and to reduce pollution from land-based sources.[107] Had the point been articulated prior to issuance of Ireland's *Statement of Claim*, the United Kingdom would have been able to place before the Irish authorities material showing that, on the contrary, the United Kingdom has taken the most stringent measures to meet those objectives. Ireland would have found the United Kingdom ready to consider any suggestions for further measures that could be taken to the same end. To take another example, Ireland complains that the United Kingdom failed to discuss in confidence measures taken to guard against security risks.[108] Had Ireland agreed to exchange views, the United Kingdom would have learned, at least, what are Ireland's concerns; and would have been in a position to determine whether they could be met. To take yet another example, Ireland complains that the United Kingdom failed in its duty to co-operate by withholding from the public domain certain information considered as commercially confidential relating to frequency of shipments. This, too, is a matter on which useful discussions could take place, on a confidential basis.

[107] *Statement of Claim*, paragraph 28.
[108] *Statement of Claim*, paragraph 32.

196. It may be that Ireland took the view that it would not be possible through an exchange of views to achieve what appears to be its real objective, to halt all operations at the Sellafield site. That, of course, is the case. But that does not affect Ireland's obligation to enter into an exchange of views in relation to the dispute under UNCLOS that it has now brought.

CHAPTER 2
THERE IS NO SITUATION OF URGENCY

197. There is no urgency in this matter as required by Article 290(5) of UNCLOS such as to require the prescription of provisional measures pending the constitution of the Annex VII Tribunal.

198. As has been shown, in order for ITLOS to prescribe provisional measures, Ireland must adduce evidence to demonstrate that there is a real risk of the occurrence, prior to the constitution of the Annex VII Tribunal, of a critical event posing a real risk of serious harm to the marine environment or irreparable prejudice to the Ireland's rights. Nothing in the materials presented by Ireland comes close to demonstrating any such risk.

199. The only event that Ireland can identify as likely to occur before the constitution of the Annex VII Tribunal is the commissioning of the MOX Plant on or around 20 December 2001. This will not, even arguably, cause serious harm to the marine environment or irreparable prejudice to the Ireland's rights, in the period prior to the constitution of the Annex VII Tribunal or at all.

200. Ireland's expression of fear that the MOX Plant might pollute the Irish Sea is unsupported by any evidence and is at variance with verifiable fact. The manufacture of MOX fuel is essentially a dry process. Liquid discharges from such functions as washing of floors do not present any risk from the point of view of health. The matter has been tested by the European Commission, whose *Opinion* Ireland never sought to challenge. Indeed, in correspondence with the United Kingdom, Ireland appears to have accepted, on several occasions, that any emissions from the Plant will be very small indeed.

201. Ireland's expression of fear of a marine casualty, resulting in a release of plutonium destined for the MOX Plant or radioactive products emanating from it, is at variance with the fact that there are to be no voyages of vessels carrying any such material to or from the MOX Plant before the summer of 2002 at the earliest. (During the next three months there are to be shipments to the Sellafield site of spent nuclear fuel for reprocessing at the THORP Plant.

These imports are to be undertaken pursuant to reprocessing contracts entered into many years ago.) The plutonium to be used as a feedstock at the MOX Plant during next three months at least is already at Sellafield and no exports of MOX fuel are anticipated before the summer of 2002 at the earliest.

202. Ireland's assertion that the commissioning of the MOX Plant will be "irreversible", now qualified to an assertion that it will be "in practical terms near-irreversible" because of the cost involved, falls far short of a claim that Ireland will suffer irreparable prejudice if the Plant is commissioned. Should Ireland succeed in its claim before the Annex VII Tribunal (which the United Kingdom does not anticipate), the operator of the Plant might suffer a substantial cost in decommissioning it. There would be no loss to Ireland in such an event. An applicant cannot be awarded provisional measures on the ground that, if it were to succeed on the merits of the case, some other party might sustain a loss.

203. Ireland relies on a series of expressions of opinion about nuclear processing generally or the transportation of nuclear materials by sea or the conduct of the French nuclear facility at La Hague. These have no direct bearing, and in some cases no bearing at all, on the authorisation of the MOX Plant at Sellafield.

204. For instance, Ireland relies on a report written by Mycle Schneider, working for "World Information Service on Energy", with the financial support of the European Parliament.[109] The express purpose of this report is to support a petition of a Member of the European Parliament expressing concern about radioactive discharges from the nuclear reprocessing sites at Sellafield in the United Kingdom and La Hague in France. As appears from the article reproduced at **Annex 15** to this *Response*, that Report is regarded as unscientific, reflecting nothing but the personal views of the contractor's team members. For the purposes of the present case, however, it is immaterial. This report is not concerned with alleged risks arising from the MOX Plant, which is not a reprocessing plant, still less with such risks arising in the period between now and the constitution of the Annex VII Tribunal. It advances a case against nuclear reprocessing and in favour of dry storage. That is not the subject of this case.

[109] *Statement of Case*, Annex 2, page 40.

205. The same observation applies to the two letters from Norwegian ministers about emissions from the Sellafield site generally, and the subsequent press releases.[110] The letter from the Norwegian Prime Minister dated 12 August 2001 is not concerned with authorisation of the MOX Plant at all but with the regulation of the disposal of radioactive waste from plants at Sellafield other than the MOX Plant. As has been noted, the MOX Plant will not entail discharges of the kind of which the Norwegian Prime Minister expressed concern. The letter from the Norwegian Minister of the Environment dated 8 October 2001 mentioned, among other matters, the MOX Plant. But the concern was not that it would generate discharges but that, if successful, the MOX Plant would strengthen the commercial base of the reprocessing operations at Sellafield. There is nothing in this letter amounting to evidence of a real risk of the occurrence of a critical event threatening serious harm to the marine environment or irreparable prejudice to Ireland's rights in the period pending the constitution of the Annex VII Tribunal.

206. Still less is there anything of relevance in the collection of statements made on behalf of certain States in the Caribbean and the South West Pacific, and one letter from a United States Congressman,[111] about the marine transportation of radioactive materials between Japan, France and the United Kingdom.[112]

207. Ireland relies next on a number of press releases concerning what Ireland calls "BNFL's Regulatory and Safety Failures".[113] What the press releases show is that BNFL is subject to close regulatory control by the Health and Safety Executive, among others, and that the latter take vigorous action to secure high levels of safety. Further, any lapse at Sellafield, and any additional precaution taken there on account of actual or anticipated underperformance of equipment or staff, is (rightly) given wide publicity. When lapses occur (as in the case of an escape of acid while a valve was being replaced[114]) penalties are imposed. In the case of the data falsification episode in 1999, on which Ireland places much reliance, the staff responsible were dismissed, and remedial action was taken. According to material adduced by Ireland itself, the episode "was never, in fact dangerous. But it's a fact

[110] *Statement of Case*, Annex 2, pages 33-36 and 63-64.
[111] *Statement of Case*, Annex 2 pages 78-80.
[112] *Statement of Case*, Annex 2, pages 81-86.
[113] *Statement of Case*, Annex 2, pages 65 to 72.
[114] *Statement of Case*, Annex 2, page 66.

that you can't deal with nuclear material and be sloppy because customers expect the highest standards on everything".[115] A similar failure could not occur at the MOX Plant since measurements are taken there automatically and not by hand. No such escape has occurred. None involved the MOX Plant. Ireland gives no reason to fear that the operation of the MOX Plant will present dangers of radioactive emissions at all, let alone emissions liable to affect Ireland.

208. Finally Ireland relies on press reports about the privatisation of BNFL, and an account of jets "screaming" over Sellafield in what the writer took to be a precaution against a terrorist attack.[116] These reports are in some cases speculative, in one case sensational, and in no case related to the commissioning of the MOX Plant. They do not demonstrate a real risk of the occurrence of a critical event prior to the constitution of the Annex VII Tribunal. As regards flights by Royal Air Force aircraft in the Sellafield vicinity, the United Kingdom prefers not to be drawn in a public forum beyond stating that it has long maintained defensive assets in the area and conducts exercises and reviews from time to time.

[115] *Statement of Case*, Annex 2 at page 74.
[116] *Statement of Case*, Annex 2 pages 73 to 77 and 95.

CHAPTER 3
THERE IS NO THREAT TO IRELAND'S RIGHTS OR OF SERIOUS HARM TO THE MARINE ENVIRONMENT

209. As was noted in Part IV, if Ireland is to sustain a claim for provisional measures it must adduce a basic foundation of evidence showing that such measures are necessary to preserve its rights or to prevent serious harm to the marine environment. In the United Kingdom's contention, Ireland has not adduced such evidence. Nor do its allegations, even at face value, meet the conditions required in respect of these substantive criteria of harm. These elements are addressed below.

210. It is implicit in its *Statement of Case* that Ireland considers that certain of its rights under UNCLOS are threatened by the actions of the United Kingdom. It is not entirely clear, however, what those rights are, how they arise under UNCLOS, and how they are threatened.

211. Unpicking the various elements, the allegations of violation of Ireland's rights are essentially procedural in nature: that the United Kingdom is under an obligation to cooperate with Ireland in taking measures to protect and preserve the Irish Sea and that the United Kingdom is under an obligation to carry out a prior environmental assessment of the effects on the environment of the MOX Plant and of international movements of radioactive materials associated with the operation of the Plant.[117]

212. In respect of the obligation to cooperate, Ireland argues that:

> "the United Kingdom is obliged to *inter alia* (a) to notify Ireland of the activities it is proposing to authorise, (b) to respond in a timely fashion to requests for information from Ireland, and (c) to taken into account Ireland's rights and interests in the protection of the Irish Sea from further radioactive pollution and not merely insist upon the United Kingdom's own position."[118]

213. Each of these elements is the subject of further comment and allegation.[119]

---

[117] *Statement of Case*, at paragraph 55(1) and (2).
[118] *Statement of Case*, at paragraph 64.
[119] *Statement of Case*, at paragraphs 65 – 81.

214. In respect of the obligation to carry out an environmental assessment, Ireland argues that:

> "the United Kingdom is in violation of this Article 206 [of UNCLOS] by reason of its having failed to carry out an adequate environmental assessment of the MOX plant, and for having failed entirely to carry out any assessment of the associated international movements of radioactive materials."[120]

215. In respect of this element, however, Ireland acknowledges that an *Environmental Statement* was prepared. Furthermore, it is nowhere said that the *Environmental Statement* is wrong. Ireland notes also that it has, at various points, made its views known to the United Kingdom. Its allegations appear therefore very largely to be that the course of action decided upon by the United Kingdom does not accord with that urged upon it by Ireland.

216. The present phase of proceedings is not concerned with the merits of the case. But for the avoidance of doubt, it must be made clear that the United Kingdom takes issue with each of the allegations advanced by Ireland, including each of the alleged violations of UNCLOS. The following brief observations with respect to Ireland's three principal allegations are warranted at this point.

217. Ireland contends that the United Kingdom has failed to cooperate in the protection and preservation of the marine environment of the Irish Sea as required by Article 197 of UNCLOS. That Article provides:

> "States shall cooperate on a global basis and, as appropriate, on a regional basis, directly or through competent international organisations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with the is Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features."

218. It is plain from the wording of that provision that it has nothing to do with the matters of which Ireland complains, such as withholding of certain data on grounds of confidentiality, save insofar as it envisages the conclusion of regional agreements which may deal with these matters. It was precisely in fulfilment of this obligation that the United Kingdom entered into

[120] *Statement of Case*, at paragraph 84.

commitments, on which Ireland relies, under the *OSPAR Convention*. Both the United Kingdom and the European Community have discharged their obligations under this provision in making arrangements, under the *EC* and *Euratom Treaties* which Ireland also invokes. Ireland also relies on Article 123 of UNCLOS, which proclaims that States should cooperate on certain matters. To the extent that Ireland cannot make good its case by reference to Article 197, it is not improved by reference to Article 123.

219. Ireland next relies on Article 206 of UNCLOS which reads as follows:

> "When States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution or significant and harmful changes to the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment and shall communicate reports of the results of such assessments in the manner provided in Article 205."

220. An environmental assessment was carried out in accordance with the applicable EC Directive. It is, in any event, wholly unnecessary for ITLOS to determine whether the *Environmental Statement* was as full as it should have been, or whether it ought to have been revised in the light of subsequent legal developments, as Ireland pleads. The simple fact is that the United Kingdom does not have reasonable grounds for believing that the operation of the MOX Plant may cause substantial pollution or significant and harmful changes to the marine environment. The evidence is to the contrary. This is confirmed in the European Commission's *Opinion*.

221. For the same reason, there is no force in the argument advanced by Ireland on the basis of a compendium of provisions in UNCLOS, including Articles 192 and 194, that the operation of the MOX Plant is inconsistent with the United Kingdom's duty to protect and preserve the marine environment.

222. What is in issue at this point is whether these allegations are sufficient to sustain Ireland's request for provisional measures. That will be the case only if Ireland can demonstrate a threat to its rights under UNCLOS or to the marine environment such as require pre-emptive and extraordinary protection pending the constitution of the Annex VII Tribunal. In referring to the preservation of the respective rights of the parties pending the

final decision, Article 290(1) of UNCLOS requires an applicant to show that there is a threat to its rights which could not be remedied in due course if the final decision were to be in its favour.

223. Leaving aside the question whether the rights claimed by Ireland are illusory – which will be addressed on the merits – there is no basis on which Ireland can sustain a claim that the threat to its rights is a threat of irreparable prejudice under UNCLOS. The principal conduct that Ireland seeks to restrain as posing a threat to its rights is the commissioning of the MOX Plant. Yet the highest at which Ireland can put its case is that decommissioning would present BNFL (not Ireland) with technical and financial difficulties.[121] As noted in Part I of this *Response*, near-irreversibility and difficulty and expense in decontamination cannot form a sound basis for a claim of irreparable prejudice. Moreover, it is clear that any prejudicial effect resulting from the conduct that Ireland would restrain would be capable of reparation by appropriate means.

224. Beyond the commissioning of the MOX Plant, Ireland also seeks to restrain the United Kingdom in other ways in the exercise of its rights – notably relating to movements into or out of United Kingdom waters. Ireland, however, advances no basic foundation of evidence in support of a claim of a risk of irreparable prejudice to its rights in consequence of such movements. As already observed, Ireland's allegations under this heading are largely procedural in nature. It is difficult to see how an allegation of violation of an obligation to cooperate or to conduct an environmental impact assessment could amount to a sufficient justification for the prescription of exceptional measures of restraint in circumstances in which the applicant fails to adduce any evidence supporting the risk of irreparable prejudice in consequence of that alleged breach.

225. In the United Kingdom's contention, there is nothing in respect of the allegations of a threat to Ireland's rights in its *Statement of Claim* (or indeed in its *Statement of Case*) which warrants provisional measures directed to the preservation of those rights. There is no risk of irreparable prejudice to Ireland's rights from the conduct that Ireland now seeks to restrain. Were there, hypothetically, to be any prejudicial effect resulting from the conduct that Ireland would restrain, this would be capable of reparation by appropriate means in due course. As

[121] *Statement of Case*, at paragraph 146.

the jurisprudence concerning this criterion for the prescription of provisional measures makes clear, when assessing Ireland's claim under this heading, ITLOS must also have regard to the rights of the United Kingdom and the consequence of such measures on its exercise of rights.

226. It is implicit in Ireland's *Statement of Case* that the commencement of plutonium commissioning will create a risk of serious harm to the marine environment. Again, there is no precise allegation of the existence of such a risk, and there is no evidence proffered in support of it. Against this:

(1) The *Environmental Statement* records that low-level radioactive liquid discharges from the MOX Plant will be negligible, and that low-level radioactive gaseous discharges from the MOX Plant will be insignificant.[122] It finds overall that the radiological impact of discharges from the MOX Plant will be insignificant, and that there will be an insignificant effect on flora and fauna.[123]

(2) The *Opinion* of the European Commission is that the MOX Plant "both in normal operation and in the event of an accident of the type and magnitude considered in the general data, is not liable to result in radioactive contamination, significant from the point of view of health, of the water, soil or airspace of another Member State".[124]

(3) The applicable recommendation of the United Kingdom National Radiological Protection Board (in line with international standards) is that the exposure to members of the public from a single new source should not exceed 0.3 mSv (three tenths of one thousandth of a sievert):

   (a) in respect of the MOX Plant, the dose to the critical group most exposed to gaseous discharges will be 0.002 μSv (two thousandths of one millionth of a sievert) per year;

[122] *Environmental Statement*, paragraphs 5.49-5.50.
[123] *Environmental Statement*, paragraphs 5.51 and 5.92.
[124] Official Journal 1997 C291/9.

(b) the dose to the critical group in relation to liquid discharges will be 0.000003 μSv per year (three millionths of one millionth of a sievert);

(c) the exposure to the critical group in Ireland will be considerably lower.[125]

(4) In its *Proposed Decision* of October 1998, the United Kingdom Environment Agency found that these doses are of negligible radiological significance. The Environment Agency further noted that the MOX Plant would make a very small contribution to the critical group dose for the Sellafield site as a whole.

(5) The proposed transportation of materials related to the MOX Plant complies with all applicable international and national safety and security standards. In addition, MOX fuel for light water reactors has been transported safely in Europe since 1966,[126] some 8,000 tonnes of nuclear materials has been transported (over a thirty year period) without a single incident involving the release of radioactivity, and in over thirty years of transporting radioactive materials by all forms of transport, BNFL has had no case of a release of radioactivity.[127]

(6) Security and safety precautions at nuclear sites and in connection with the transport of nuclear material are kept under regular review by the United Kingdom regulatory bodies. The security and safety issues in relation to the MOX Plant have been considered and the relevant conclusions have been reviewed in the light of the events of 11 September 2001. The advice of the Office for Civil Nuclear Security is that the manufacture of MOX fuel and its transport present negligible security risks.

---

[125] Appendix 4 to the *Proposed Decision* at paragraphs A4.95-A4.97. **(Annex 5)** UK submission under Article 37, *Euratom*. **(Annex 10)**
[126] *Environmental Statement*, paragraph 5.53. **(Annex 6)**
[127] *Decision* of 3 October 2001, paragraph 69. **(Annex 4)**

CHAPTER 4
THE RISK OF HARM MUST BE SUPPORTED BY EVIDENCE

227. As noted in Part IV, the relief that is granted by way of provisional measures is an exceptional one. It provides protection to an applicant in circumstances where its factual and legal allegations have not been tested. This does not, of course, mean that allegations of a risk of irreparable prejudice or serious harm may be taken on trust. For an application for provisional measures to be sustainable, it must be supported by a basic foundation of credible evidence of irreparable prejudice or serious harm. This conclusion, which is self-evident, is supported *inter alia* by the *Nuclear Tests* cases.

228. Ireland has submitted no evidence to support the allegations of serious harm reviewed in Chapter 3 above. Whereas in the *Nuclear Tests* cases, the ICJ had before it detailed evidence that went to *inter alia* (a) the previous nuclear testing, (b) the concentrations of radioactivity from the previous tests, and (c) the irremediable nature of the harm caused, ITLOS has been supplied with nothing in this case.

229. Moreover, the allegations of harm are not even to be found in the *Statement of Claim*. Whereas, in the *Statement of Case* of 9 November 2001, there is an allegation that the manufacture of MOX fuel involves significant risks for the Irish Sea, there is no such allegation in the *Statement of Claim* of 25 October 2001 (which is the claim that the Annex VII Tribunal will have to determine). This cannot be taken to be mere oversight:

(1) The absence of an allegation of harm in the *Statement of Claim* reflects the true position in terms of significant risks to the Irish Sea caused by the operation of the MOX Plant. There are no such risks.

(2) The allegations have evolved for the purposes of the provisional measures request. It can only be assumed that such evolution has taken place with an eye to Article 290(1) and the power to prescribe provisional measures to prevent serious harm to the marine environment. Yet, pursuant to Article 290(5), ITLOS may only prescribe measures with respect to the dispute that has been submitted to the Annex VII Tribunal. It is

not open to Ireland to rely before ITLOS on a different dispute based on different allegations.

230. In circumstances where (i) there is no evidence in support of the allegations of harm arising from the operation of the MOX Plant, (ii) there is abundant evidence to show that there is no significant risk of harm from the MOX Plant, and (iii) the key allegations have not even been made in the dispute before the Annex VII Tribunal, the provisional measures sought must be refused.

CHAPTER 5
DAMAGE TO THE UNITED KINGDOM

231. In its *Request for Provisional Measures*, Ireland makes no reference at all to the rights of the United Kingdom. Yet it is of course the case that Article 290(1) requires a consideration of the rights of both parties. In the event that provisional measures were granted, the United Kingdom would suffer serious a infringement of its rights, and real harm. What is in issue in these proceedings is not an abstract entitlement to authorise the conduct of an industrial activity on a State's territory, but the exercise of rights with important economic consequences.

232. If the United Kingdom were restrained from authorising the operation of the MOX Plant – in advance of any finding that such operation entailed an infringement of rights pertaining to Ireland – real injury would be sustained not only by the employees of BNFL, and by others in West Cumbria and further afield whose livelihoods depend on this venture, but also by BNFL itself. ITLOS should recall that the capital expenditure to date on the MOX Plant has been £470 million. Its operation has already been delayed. Provisional measures in that form requested by Ireland would be likely to result in the loss of commercial business for the MOX Plant amounting to approximately £10 million as a minimum, with the prospect of further losses of business valued at several tens of millions of pounds. The maintenance of the MOX Plant in a state of operational readiness will also carry a further cost of approximately £385,000 per week. There will also be a cost to BNFL's competitive position by continuing delay.

233. Notwithstanding these potential losses, Ireland makes no offer to indemnify the United Kingdom in the event that its case fails in due course.

PART VI
SUBMISSIONS

234. For the reasons given in this *Response*, the United Kingdom requests the International Tribunal for the Law of the Sea to:

(1) reject Ireland's application for provisional measures;

(2) order Ireland to bear the United Kingdom's costs in these proceedings.

Michael C Wood

M.C. WOOD
Agent of the United Kingdom
of Great Britain and Northern Ireland

15 November 2001

LIST OF ANNEXES

1. Letter from UK to Ireland of 18 October 2001
2. Letter from Ireland to UK of 23 October 2001
3. *Opinion* of the European Commission with the UK submission in accordance with Article 37 of the Euratom Treaty, dated 25 February 1997
4. *Decision* of the Secretary of State for Environment, Food and Rural Affairs and the Secretary of State for Health on the Justification for the Manufacture of MOX Fuel, 3 October 2001 (with Annex 1 only)
5. Environmental Agency's *Proposed Decision* on the justification for the plutonium commissioning and full operation of the MOX plant, October 1998
6. BNFL *Environmental Statement*, October 1993
7. IAEA-TECDOC-1231 *Severity, probability and risk of accidents during maritime transport of radioactive material: Final report of a co-ordinated research project 1995-1999* (IAEA July 2001) (extracts)
8. Health and Safety Executive, Nuclear Installations Inspectorate: *An investigation into the falsification of pellet diameter data in the MOX demonstration facility at the BNFL Sellafield site and the effect of this on the safety of MOX fuel in use*, February 2000
9. *R.(Friends of the Earth Ltd. and Greenpeace Ltd.) v. Secretary of State for the Environment, Food and Rural Affairs and Secretary of State for Health*, High Court of Justice Administrative Court, Judgement Mr Justice Collins of 15 November 2001, Case No. 4012/2001.
10. General Data Relating to the Arrangements for Disposal of Radioactive Wastes as Called for under Article 37 of the Euratom Treaty, May 1996 (UK submission to the European Commission)
11. The Physical Protection of Nuclear Material and Nuclear Facilities, INFCIRC/225/Rev.4 (Corrected)
12. The Economic and Commercial Justification for the Sellafield MOX Plant ("*The Economic Case*"), prepared by BNFL March 2001
13. Irish submission of 4 April 1997
14. Irish submission of 13 March 1998
15. *Annual Report and Accounts* of the Radiological Protection Institute of Ireland, 1999.
16. Sunday Business Post (Ireland) article of 4 November 2001, "*Leading scientists slam EU*

report on Sellafield".

17. Health and Safety Executive, Nuclear Installations Inspectorate, *Progress on BNFL's response to three reports issued by HSE on 18 February 2000*, Report of 22 February 2001.

18. European Community Declaration concerning the competence of the European Community with regard to matters governed by UNCLOS.

Corrigendum

1 Letter from the Agent of Ireland to the Registrar of the Tribunal dated 16 November 2001 requesting a copy of the letter mentioned in paragraph 192 of the Written Response

An Príomh-Aturnae Stáit
THE CHIEF STATE SOLICITOR
Osmond House, Little Ship Street, Dublin 8
Tel: 01-4176100 Fax: 01-4176299

My Ref: Your Ref: If telephoning please ask for:-
Christine Loughlin, 4176238
Fax: 4780133

16 November, 2001

Philippe Gautier
Registrar
International Tribunal for the Law of the Sea
Am internationalen Seegerichtshof 1
22609 Hamburg
Germany

By fax: 00 49-40-35607-245

15 November 2001

Dear Registrar:

Ireland v United Kingdom:
Request for Document

We are now in receipt of the United Kingdom's Statement in Response. At paragraph 192 of the Response reference is made to "a letter from the Prime Minister to his Irish counterpart". That letter is not included in the United Kingdom's annexes.

We would be grateful if the United Kingdom could provide a copy of that letter at its earliest convenience.

Yours sincerely,

David J.O'Hagan
Chief State Solicitor.

(Corrigendum continued)

2 Letter from the Registrar of the Tribunal to the Agent of the United Kingdom dated 16 November 2001 transmitting a copy of the request from Ireland (attachment not reproduced) (see 1 above)

INTERNATIONAL TRIBUNAL FOR THE LAW OF THE SEA
TRIBUNAL INTERNATIONAL DU DROIT DE LA MER

Am Internationalen Seegerichtshof 1, 22609 Hamburg, Germany
Tel: 49 (40) 3560-7270 Fax: 49 (40) 3560-7275

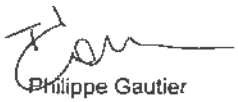
16 November 2001
BY FACSIMILE

Dear Sir,

The MOX Plant Case

Please find attached a letter from the Agent of Ireland requesting to be provided with a copy of the letter from the Prime Minister to his Irish counterpart referred to in paragraph 192 of the Response from the United Kingdom.

Yours sincerely,



Philippe Gautier
Registrar

Mr. Michael C. Wood, CMG
Agent for the United Kingdom of Great Britain
and Northern Ireland
British Consulate General
Harvestehuder Weg 8a
20148 Hamburg

Fax 410 72 59

cc Foreign and Commonwealth Office, Fax 0044-20-7270-3071

(Corrigendum continued)

3 Letter from the Agent of the United Kingdom to the Registrar of the Tribunal dated 16 November 2001 responding to the request for documentation by the Agent of Ireland (see 1 above)

Foreign &
Commonwealth
Office

London SW1A 2AH

Telephone: 020–7270 3052
www.fco.gov.uk

From the Legal Adviser

16 November 2001

M. Philippe Gautier
Registrar
International Tribunal for the Law of the Sea
Am Internationalen Seegerichtschof 1
22609 Hamburg
Germany

Sir,

THE MOX PLANT CASE

I refer to your letter of 16 November concerning paragraph 192 of the United Kingdom's written response, which I have discussed with the Irish side.

Paragraph 192 should read as follows:

"Ireland declined that invitation unless the United Kingdom would first suspend authorisation of the MOX plant. It follows that there has been no exchange of views such as is required by Article 283(1) of UNCLOS."

Yours sincerely,

M. C. Wood

M C Wood
(Agent of the United Kingdom of
Great Britain and Northern Ireland)