THE MOX PLANT CASE

BETWEEN

IRELAND — Applicant

- and -

THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND — Respondent

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THE JAPANESE ROOM
THE PEACE PALACE
THE HAGUE
THE NETHERLANDS
FRIDAY, 20TH JUNE 2003

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BEFORE:
THE TRIBUNAL:

HE JUDGE THOMAS A MENSAH (President)
Prof JAMES CRAWFORD SC
Maitre L YVES FORTIER CC QC
Prof GERHARD HAFNER
Sir ARTHUR WATTS KCMG QC

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PERMANENT COURT OF ARBITRATION:
Ms Anne Joyce (Registrar)
Mr Dane Ratliff (Assistant Legal Counsel)

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PROCEEDINGS DAY SEVEN
(Revised)

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THE PRESIDENT: We now resume the hearings with the submissions by the United Kingdom.

LORD GOLDSMITH: Mr President, Members of the Tribunal, Winston Churchill once described the qualities of a politician as someone who was able to foretell what would happen tomorrow, next week, next month and next year, and be able to explain afterwards why it happened. I am, obviously, not much of a politician, because I certainly did not foretell, when we were preparing to come for this hearing before you, that we would end up, actually, rearguing an application that we had argued in November 2001. Whilst I have the honour to address you on this case, as the Attorney General for the United Kingdom, it is tinged with a little regret and a little dismay that we are doing that.

I make it very clear, in saying that, that the relations between Ireland and the United Kingdom are longstanding, excellent, close, within the framework of bilateral, regional and international affairs, but this particular application does cause some dismay. Some might speculate - and I am not enough of a politician to foretell why it has happened - that it is a last-ditch attempt to get something out of this hearing for public consumption.

We understand, Mr President, why you and your colleagues offered Ireland the opportunity to make an application for interim measures in the light of the suspension or adjournment of the hearing, which we entirely understand, although you will understand why, in public, I just want to make it clear, as I have before, that we did not ask for it. But we note that Ireland had waited for 18 months without any hint that they required further interim measures over and above those which had been ordered by the International Tribunal on the Law of the Sea. There was no hint when they came to this hearing, that knowing, of course, that you would not be giving an instant decision, which would have been entirely not to have been expected, that they wanted to take the opportunity to ask for any interim measures here. But we accepted, and do accept, that the adjournment or suspension of the hearing for another few months might have given rise to an issue. We had hoped to deal with that by offering the assurances which are contained in the letter of last Friday to which I will come. It is probably as well, in fact, to invite you to look at it at this stage. I know that you have looked at it before, but let me just make the point that I want to at this stage. We have produced a folder for you, which I hope will be of assistance. I confidently predict that this is the first tab in the bundle. Later predictions as to whether I have got the right reference I may not be so confident about. In a letter of 13th June, which is at the very beginning of this bundle, we really said three important things. First of all, we confirmed our intention, as we had assumed was also the case with Ireland, to continue the cooperation between the parties pursuant to the Provisional Measures Order issued by ITLOS on 3rd December 2001, which Order remains in force. That remains our position. It is in force and we intend - and I am happy to confirm the intention - to continue to comply with it, as we believe we are.

Further, and this was the second point that we made, given the emphasis that Ireland placed on the potential for new THORP contracts, a point to which I will return very shortly, we confirm that there are no current proposals for new contracts for reprocessing at THORP or for the modification of existing contracts so as to process further materials, We went on to say, as indeed, we had said in our pleadings,

that no decision to authorise further reprocessing at THORP would be taken without consultation in which Ireland would be invited to participate.

Thirdly, we informed Ireland, as Mr Wood was authorised to do, of a matter which is set out in the third paragraph of this letter. The point about THORP is that that is an important aspect, because it is plain, I will suggest, that, without THORP, no case on discharges even gets off the ground as far as Ireland is concerned. I will come back to that. We say that it does not get off the ground even with THORP, but, without THORP, it simply is not there even on their own case. That is the significance of having given that assurance. They have as good as conceded that, in my submission,

So far as the other matter that is referred to in the letter is concerned, that, in our submission, is not a problem at all, whatever period of time one is looking at, but, if one is looking at the period of time until this Tribunal might be sitting again, given what is said in that letter, there is no difficulty.

We had hoped that that genuine, sincere statement might have avoided the need for this further hearing and we are somewhat saddened that it has not.

Instead of that, we have a wholly unexpected major interim measures application of quite remarkable scope. Let me just illustrate. Item A of the Orders sought, in effect - I do not shrink from this - is seeking the closure of the MOX plant. No liquid waste discharges from the MOX plant at Sellafield into the Irish Sea. I know that there is some vague, unworked-up suggestion coming from Ireland that there is something else that can be done, but they have not identified what it is; they have not demonstrated that it is possible to do it without closing the plant; they have not demonstrated that one could do it without, as would be the case, authorisations from all sorts of people. In effect, it is saying "Close MOX". And that is how, as I shall show you, this is being interpreted by the press in Ireland.

Item B, which seeks cooperation, seeks information which is, in fact, already provided, and goes beyond the MOX plant or even MOX plus some THORP, which is the basis of this claim. I will just give one example of it going to information already provided. One of these heads refers to receiving information about reportable incidents. I am told, and you will hear more about this from Dr Plender, who will address you, I would think, tomorrow on these issues, that Ireland have this, not once, not twice, but three times in different forms already - the same information but three ways. It is quite extraordinary, if that is right, that this forms the basis of an application to you for such information to be provided as if suggesting that somehow the United Kingdom is unwilling to provide information that it is already providing. Indeed, that very information was relied upon by Ireland in making its first application, because they were able to draw upon it - you have seen something in their pleadings about saying, "Look at all these instruments which take place. Doesn't this demonstrate the sort of problems that we have got?" It is extraordinary.

On the third head, which is Item C, we simply do not know what it is that it is suggested we should do if you were minded to make such an order against us. There is no indication as to which of the steps they are concerned about, how it is that we are supposed not to do them and, if I were advising a private client in front of a court that had powers of imprisonment for contempt, I would be saying that you could not possibly agree to an order such as that, because you have no knowledge at all as to

whether or not, inadvertently, you were committing a breach by doing something which, after the event, turned out fell within its terms. It is of quite remarkable scope.

I will be making shortly, by which I mean soon, some submissions about the legal requirements for seeking interim relief that we would suggest that you, Mr President, and your colleagues should be applying. They will include, of course, two fundamental requirements. They will include a requirement of demonstrating an urgency and they will include a requirement of demonstrating, we would say at least, a likelihood of serious harm. And neither element, we will say, is present. These are necessary conditions, although not even themselves, if there were there sufficient conditions for relief - and we very respectfully would draw attention to your observations, Mr President, in your separate Opinion in the ITLOS case, where you made just that point. The requirement of urgency is important. Of course, it is one that is present in municipal systems, too, because most municipal systems will also have some system for interim relief, interim injunctions or whatever they are called, but they will all recognise that Provisional Measures are an exceptional form of relief, as will international mechanisms. Although, no doubt, such mechanisms will differ, one from the other, there will be some common threads which run through them. One of those will be the exceptional nature and character of Provisional Measures. That is a point that has been described as so self-evident that it was described as a banal truth by one authoritative commentator. I referred to him in the ITLOS hearing and I will take you to the passages in the judgment. He said, Jerzy Sztucki, that "it follows from the exceptional nature of the Provisional Measures that the discretion in these matters is probably not supposed to manifest itself too liberally and should rather be used with restraint and prudence". We respectfully agree, again, Mr President, with you, when you said in your separate Opinion, "Exceptional and so to be used".

There is a very important reason which one must not lose sight of why it is important to demonstrate the urgency in relation to it, why it is exceptional. The reason is because somebody seeking interim relief is not going to have his claim determined at that point, nor will the defendant's claim be determined. So frequently people seeking interim relief are able to say, "I don't have to prove to you that I am right about this. All I have to demonstrate is that there is a risk and then you ought to protect me". That lowers in some sense the standard. If one is going to do that, it becomes essential that strong and credible evidence is at least presented and that one pays strict attention to the requirement to demonstrate the likelihood of serious harm and to demonstrate the urgency for the measure. It is no good simply saying, "Well, there may be a risk". Goodness knows, scientists may discover some time in the future that there is a problem. That simply is not good enough. Ireland, I am sorry to say, takes the position that it is enough for it to say that. The problem is that, of course, talk of radioactive pollution resonates widely, whether it is substantiated or not. One entirely understands why, as far as the general public is concerned, these are matters which are, of course, important - I entirely respect that - but also give rise to particular concerns and fears. But one must avoid, and I have no doubt, if I may respectfully say so, that this Tribunal will, moving away from the evidence, moving away from the facts and not being drawn into an emotional as opposed to a factual and rational argument.

That is why it is so important - and I will want, therefore, to spend a bit of time on it - to

recognise that it is no use Ireland postulating some uncertain risk of pollution when all the facts are that no such risk exists for MOX.

Those are, therefore, the general considerations which I would suggest would apply to any application for interim measures, but here there is a super-added feature. This is a second application. We will submit that, as a matter of common sense and, indeed, of law, it is incumbent upon an applicant who brings, in effect, a second application to change a show of circumstances, to show new facts, which justify looking again. It is not just a threshold requirement: as it were, if you can show some new facts, that means that all should be at large again. You need to demonstrate that what you are asking for, where it is inconsistent with what has been ordered before, is justified by the change of circumstances or the new facts.

As I have said, the ITLOS Order stands. The adjournment for the few months that this Tribunal has, entirely understandably, ordered does not begin to justify the new application that has been made. But I would emphasise one specific feature here. It is, if one looks at the first head, in effect, an application to try to close MOX. I know that Ireland will deny that, but how else does one comply with the orders which are being sought? That was explicitly rejected by the ITLOS Tribunal. It was rejected at an earlier and, if I can put it this way, easier moment. ITLOS were asked to stop MOX starting - to stop the authorisation and to stop it starting. That would have been bad enough - it was a big problem, we said that it would be a big problem to stop a huge commercial project in its tracks like that - but, once it started, then, of course, the problems of stopping it are even greater. That is an issue, whether it should be stopped, that was looked at by ITLOS and was rejected. There is no justification, in our submission, for going back.

The second point that I want to emphasise at this stage - and I hope that my Irish colleagues and good friends will forgive me for saying so - I do not detect (I may have missed it through not having been present throughout the hearing) in the application that they have made that reflection of the interests of the United Kingdom and of BNFL which an interim measures application ought to take into account. It is to look at the respective positions of the parties, to protect the respective positions of the parties, and one does not, I am afraid, detect in what they have said any concern or consideration for the United Kingdom or BNFL.

I am just going to give one example of that, because I think that it is a point that Sir Arthur Watts raised with my colleagues. It is quite common, of course, in domestic injunctions that someone who wants an injunction before his rights are determined has to agree that, if it turns out that he was wrong, he will have to pay. He gives an undertaking in damages. Do Ireland offer that, if the plant has to be changed or stopped or closed down, they agree to pay BNFL its costs or the United Kingdom its costs? They do not offer that. I am quite sure that, if one were to put them to that choice - well, I should not speculate - I doubt very much that they would be prepared to do that. That is just a reflection. It is not my case to say that this is all right if they undertake the consequences. It is a reflection of the absence of concern and consideration for our interests.

I will try to focus in the submissions that we will make today and tomorrow - I and my

colleagues to whom I am enormously grateful for the work that they have done so far and are continuing to do on this case, if I may take this opportunity of saying that - on the interim measures application itself and not to try to travel across the case on the merits. It is not easy because Ireland have ranged quite far and wide. They have made allegations in a public forum and it gives rise to some issues, but we will try very hard to stick to that. I would want to say one or two things because of the reason I have given, because when statements about radioactivity, concerns to people which as I say I entirely respect, are made in public of course those can be concerning, and it would be right to remind ourselves of the extent of naturally occurring radioactivity.

You have heard something already indeed from my good friend the Irish Attorney General of how travelling for a few short hours in an aeroplane would expose somebody to a greater risk and to a far greater risk of dosage than from being in proximity to the MOX plant. I am going to give you one or two other examples, including I am afraid some reference to the water we have been drinking for the last two weeks, although you will be pleased to see from the tables I will be showing you that had we chosen a different brand it would have been more of an issue. If one is going to get concerned about simply saying that radioactivity does naturally occur we must put this into context and as lawyers we have to be dispassionate about the facts and the evidence. I want to say something about two critical aspects of the case, and they are very relevant to the interim measures application as well as central to the whole of this case.

First of all the actual discharges, liquid, aerial, whatever, from MOX, and indeed from THORP even if you include it in, and indeed from Sellafield although that is not the case, are not discharges which give rise to any real risk at all. I want to refer to the absence of danger, and we will look particularly in relation to MOX.

The second thing I would want to demonstrate, because it is important, is the regulatory regime which exists. One might have thought from some of the submissions and some of the requests to you that we were living in a world of free for all, where unless you would step in and place some constraints it would be open to the United Kingdom and BNFL simply to do as they would. Of course the position is entirely the opposite. The MOX plant, which is the subject of this case, has been subject to rigorous authorization processes by a number of different people. It has been passed as safe by independent bodies and its continued operation and indeed that of THORP and indeed the other activities of Sellafield are themselves subject to continuing regularity regimes, policed and guaranteed. I include in that the aspect of the shipping, again subject to clear regulation. I would suggest that is very important because you are not here being asked to step into some regulatory vacuum. There is no need for you to act or else like the Wild West people will simply be carrying on an uncontrolled activity. I have no doubt at some stage on the merits we will have discussion and debate about whether regulation by certain bodies should not be stricter. Of course that is very much connected to the issue that you have had to deal with already, which is who is setting the rules in relation to this. If it is the EC that is setting the rules well there may be an issue and it maybe argued that the UK is not complying with those rules or it may simply be what it comes down to is that Ireland wishes the rules were tougher. That is very relevant to

the question of jurisdiction and competence.

I would like at this stage to refer to five statements which refer to the question of risk because that is so key to this application. The first of those - and I know you have looked at it before but because of its importance I am going to weary you by asking you to look at it one more time - the 1997 Euratom Opinion, which is to be found in the Memorial - I do not think that it is in our bundle - volume III, part 3. It is at page 473. It is Annex 124. It might be helpful if we made a copy of this and added it to your folders overnight, so that you have it all in one place. It is the Opinion of 11th February 1997 concerning the Sellafield MOX plant. I refer particularly to (b), (d) and the conclusion.

"under normal operating conditions" - this was the view of the Commission - "the discharges of liquid and gaseous effluents will be small fractions at present authorised limits and will produce an exposure of the population in other Member States that is negligible from the health point of view." - "Negligible from the health point of view".

(d) "in the event of unplanned discharges of radioactive waste which may follow an accident on the scale considered in the general data" - this is now unplanned discharges - "the doses likely to be received by the population in other Member States would not be significant from the health point of view" - "not significant from the health point of view".

The conclusion of the Commission is 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 event of an accident of the 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".

I know that there is a bit of an issue about, does it really mean what it says? We say that it does mean what it says, and it is a very significant statement.

That is the first statement. The second statement that I wanted to refer to is in the proposed decision of the Environment Agency. That is to be found in volume III, part 2 to the Memorial. Again, we will put this extract into your folders for convenience. I want to turn, if I may, just at this stage to paragraph A3.14, which is at page 385 of this volume.

"The Agency notes that the radiation doses assessed by MAFF are extremely small and have negligible radiological significance" - "negligible radiological significance". "Even assuming that the same members of the public belong to the groups most exposed to both gaseous and liquid discharges, and that these people also receive the maximum dose from direct radiation, the dose from the MOX plant would make a very small contribution to the critical group dose for the Sellafield site as a whole. It may be noted that the assessed dose due to gaseous and liquid discharges from the MOX plant is less than one millionth of that due to natural background radiation." "One millionth of that due to natural background radiation".

I would like, thirdly, to refer to some extracts from the report of Professor Jones. That was attached to the United Kingdom's Rejoinder. It is Annex 39. Again, I will have the passages extracted, so that you have them separately. It is volume VII of the annexes of the Rejoinder of the United

Kingdom. I am going to come back to this when I deal with it in more detail, but I would, if I may, just refer to one sentence at this stage, which is the conclusion of Professor Jones at the end of his report. It is page 20 of 54. It is section 9. I will show you in due course how one gets to that. but here is his conclusion.

"The contributions of discharges from SMP [Sellafield MOX plant] to radiation doses received by marine organisms in both the Western Irish Sea and in Cumbrian coastal waters" - Western Irish Sea is what affects Ireland, the Cumbrian coastal waters is what affects people all around Sellafield - "are vanishingly small, and of no possible conceivable significance". This is where this expression "vanishingly small" comes from. It is entirely justified. "No possible conceivable significance".

I am going then to refer to two other statements at this stage, both made by our colleagues from Ireland. The first is to be found in Ireland's Reply, volume I, paragraph 2.77. May I just draw attention to two passages at paragraph 2.77 and paragraph 2.78.

2.77 "Ireland's position is simple. It does not assert that there are proven and serious detrimental effects on the biota of the Irish Sea". I am afraid that my position is simple, too. That being the case, there is no likelihood of serious harm to which Ireland can point.

It is interesting what they say in paragraph 2.78 also. I would draw attention to that.

"In these circumstances it is not enough to assert that doses to human beings are within internationally-agreed safety levels" - I infer from that that they entirely accept that they are within internationally agreed safety levels - "or simply to assert that there is no evidence of a significant impact on non-human species". I infer from that that they accept that there is no evidence of a significant impact on non-human species.

I want, finally, to refer to something that Mr Brady said on the first day. If you have, Mr President, the transcripts of the hearing - I do not know if they are here or not, but, if not, I will simply give the reference and read the passage in, but no doubt you will recall it. It is Day 1, page 11, starting at line 4 down to line 18. I have no doubt that you will recall it in any event, but Mr Brady said this:

"I have already averted to the fact that the level of discharges from the MOX plant as we understand it is to be operated, and is the subject of a licence from the Environment Agency, is not of significant magnitude" - "The level of discharges is not of significant magnitude". In short, they are not radiologically significant.

He went on, however, to make the point, which appears in that passage, "Ah well, it is not enough just to look at MOX, you have to look at THORP, too". You will remember, no doubt, that passage where he developed, as a key part, saying that it was a fatal flaw in the United Kingdom's case that we were not paying enough attention to new contracts from THORP. I am not going to shrink from saying that, actually, with any contracts from THORP, one still does not have an issue. But the significance of that remark in this context is this. I would venture respectfully to suggest that you will have gained a strong impression from what Mr Brady said on the first day of the hearing that Ireland recognises that it needed to establish the MOX/THORP link in order to get the case even off the ground. They believed that they could, but that they needed to do it. That relates to new contracts. That brings

us back to the significance of what is said in the letter of last Friday, about there being no proposals for new contracts and Ireland will be consulted if there are, because, without that link, one is simply back to discharges from MOX which are of no conceivable significance, are well within internationally-agreed levels, one millionth of natural background, of no radiological significance. That is why we thought that by making that clear, that put Ireland in a perfectly good position, they would be consulted and that necessarily means, of course, that, if at some stage something appeared to be about to happen which could change things, they could make - I do not want to encourage them to do so - an application.

You may also recall - it is in the evidence - that actually their evidence up to now has been that we would not get any more contracts. That is an issue that we will have to look at in the case as a whole.

I am, therefore, very tempted to say that this application can, therefore, be dealt with very shortly. Without THORP, they have nothing - except, perhaps, an allegation of uncertainty that somebody might at some stage in the future discover that low-dose radiation causes some risk to marine biota that presently is not understood or not proven, but that cannot represent serious harm. The chance or the uncertainty cannot represent serious harm.

The short answer to this might be to add also the question of shipping, which I have touched on. We think that the shipping issue is a shibboleth. There is no risk because of the great safety of the vessels which are involved and because, for example, materials which come to THORP for reprocessing, which might, if customers wanted them, then be turned into MOX fuel, if they were not turned into MOX fuel, the plutonium would have to be returned, in any event. It is common ground that it is safer to carry plutonium in the form of MOX pellets than in its separated single form, which would be the alternative. I will come to that, but, in terms of timing, you may think that what was said in that letter in the third paragraph, in any event, dealt with that issue.

So far as information is concerned, one might even say, if one looks at section B, requests for discovery, requests for disclosure, and I might be tempted to respond shortly by saying, "Well, why haven't they asked for this before?" We know that there is an issue about security- sensitive information. We know that there is an issue about some commercial confidence. Commercial confidence is being dealt with by OSPAR, for example, and we will have a decision shortly from the OSPAR Tribunal. We know that there is an issue between us about security-sensitive information, but you could not possibly, with respect, sort that out on an interim measures application. That would be to decide the case itself. But, barring that, in the meetings that have taken place, where is the evidence that Ireland have said, "We really need this piece of information" and that we are not providing it. One might have thought, because cooperation is a two-way thing, that, before coming into you with a public application for interim measures for documents, they might have raised with us just what their concerns were. As I have said, one example is information which we say they are getting three times already. Others relate to information which is not MOX, but is Sellafield, a point that the Tribunal has noted already.

That is by way of, I hope you will forgive me, a very rapid canter, but, tempted as I am to say that that is the answer to it and I would sit down at this stage, I am sorry to disappoint you by saying that I do not think that I can do that. What I will, therefore, want to do, I am afraid, is to spend time now

looking at, first of all, the legal provisions which should apply and then something more about the facts, which will probably take us through until the end of the proposed time for today. Dr Plender will follow me tomorrow morning, either straight away, or, if I have not finished, after I have finished, to correct some of what, I am afraid, we say are egregious errors and misstatements made by Ireland in respect of the past in relation to cooperation, although how much the past is relevant to what the predictions for the future are is another matter as well, of course. Then I will want to come back and take you through each of the heads of Ireland's request. We are also going to take this opportunity, which I hope you will not think is inappropriate, to indicate that it might well be helpful if you were to give some directions, particularly, so as to speed up the process of determination as to the European Community issue. We will, therefore, come back shortly and invite you to consider saying something about how that might be progressed and, particularly, how Ireland might proceed, so we have reached a conclusion on that issue one way or another as speedily as may be, of course, consistent with proper justice being done to the case. I am sure that that will happen.

SIR ARTHUR WATTS: Excuse me for interrupting, you have mentioned the letter which Mr Wood wrote last Friday, and you have said various things about it. You will recall - or perhaps you were not here - that during the course of the last few days Ireland drew attention to a number of respects in which they found that that letter was not quite as adequate as they might have hoped it would be, and I wonder whether, at some stage in either your own speech or in that of those who will follow, those comments by Ireland will be addressed.

LORD GOLDSMITH: Certainly. I have seen some of that, I may not have seen it all. We certainly will deal with it and we will deal head on with any question that there is. I just want to make, if I may, two general comments at this stage. First of all, I am little disappointed to see statements such as "We read this with scepticism". I saw that said. I am sorry that that is said, because it was a genuine and sincere letter and I would hope that relations between the two countries are good enough not to have to descend to that sort of suggestion. The second general point is that it is a pity that, we having sent it on Friday, Ireland had not come back to us before you were required to sit again and said, "Look, can you clarify this" or "Can you clarify that, because that then will be satisfactory". Obviously, they have taken the view that they do not want that. They want to go for this "big bang" approach. But, on the details, certainly, we will come back.

I just wanted to start, now dealing in more detail, by noting this. I am told that in the history of the International Tribunal for the Law of the Sea, of the International Court of Justice and of the Permanent Court of International Justice, there has only been one case in which an applicant has made a second request for provisional measures and I am told that was in the Genocide case, the Bosnia and Herzegovina -v- Serbia case, and that was in the circumstances of ongoing military action and allegations of genocide being committed against the civilian population of Bosnia and Herzegovina. You have an extract from that in tab 2 of your folders and it might be worth glancing at that for a moment.

Paragraph 22 - and we have only extracted from the decision but the whole decisions available

if it would be helpful - notes that the Rules of the Court enable provisional measures to be revoked or modified, but only where in its opinion some change in the situation justifies doing so, and where a request for measures has been rejected any fresh request must be based on new facts.

The Court accepted that in the circumstances those conditions were satisfied, but it is indicative, we say, when one sees it in the corresponding provisions of ITLOS as well, that a further application once one has been made has to be justified by new facts or change in circumstances. We will be submitting that that is not this case.

I will come back in a moment to the question what is everything that Ireland needs to show, the threshold that it is required to meet, before there can be any possibility of provisional measures. But it is surprising perhaps that we have heard virtually nothing from Ireland on this element, on the legal framework governing this procedure, even though there has been a day and a half of argument this week. I have seen the transcript and time and again the Tribunal has brought Ireland back to the point that this is not to deal with the case on the merits, it is really trying to deal with provisional measures. I hope my colleagues will not accuse me of discourtesy if I say that time and again the response was rather to contort the case on the merits so that it seemed to fit in with the provisional measures application.

There are a number of elements that plainly have to be addressed when looking at provisional measures. We say one of those is change of circumstances or new facts that warrant reopening the provisional measures granted by ITLOS. We say it has not done so and I will come back to that. It has to show urgency and I have started to illustrate that point; the necessity for provisional measures pending some further decision or further hearing. It has not done that. And thirdly it has to show that provisional measures are necessary to preserve the respective rights of the parties or to prevent serious harm to the marine environment.

Both of those elements reduce to a question of harm, whether Ireland can show a real risk of serious and irreparable harm in the absence of the provisional measures that it requests. The first element, if it is relevant at all, requires attention also be given to the rights of the United Kingdom on which, as I have suggested already, Ireland has been silent.

A key element therefore is the risk of serious and irreparable harm, and in our submission not only has Ireland not demonstrated any risk of serious and irreparable harm; it has not even contended that it will happen. I have referred already to paragraph 2.77 of the Reply which says in terms that Ireland does not assert that there are proven and detrimental effects on the biota of the Irish Sea. So Ireland's whole case is based on the hypothesis that there is some uncertainty about the effect of low-dose radiation.

We will have to come back to that on the merits, because that is the way that Ireland puts its case, but it cannot be a sufficient basis for the indication of provisional measures because the test there must be irreparable prejudice to the rights of a party or serious harm to the marine environment, and the hypothesis of uncertainty and minute and remote risk at some undetermined point in the future does not begin to approach that standard.

Let me just take that a little forward. The first aspect of this is a point which was raised by Sir

Arthur to Professor Sands on Tuesday, and one starts with the definition of pollution. This must be very familiar indeed to the Tribunal; for my benefit at least I put back in front of me article 1.1(4) for the definition of pollution and I see these important words, "which results or is likely to result". So one has already in the definition of pollution the concept of likelihood. Then I look to see what are the provisions upon which Ireland relies as the legal basis for its case, and I find that in article 194, which is obviously a key part of Ireland's case, time and time again the word pollution is used, carrying with it the definition. I find the same in articles 207 and 213, pollution. I note that when we come to article 206, which forms a very substantial part of Ireland's case -- indeed it is the whole basis for head C in their interim measures, which is all to do with environment assessment -- not only does one have the definition of pollution but it has to be substantial pollution. So the test is even higher in relation to article 206.

But of course when one then comes to look at the interim measures provisions under article 290 one adds to it, at least under the second limb and we respectfully agree with Sir Arthur in the question that he put, that that must be at least the most relevant if not the only limb that one is concerned with; at least it must be the most relevant because it is the way that Ireland has puts their case. Then it is not just pollution, it is serious harm. So this threshold is rightly an important one, and it does not, in our respectful submission, work, as Professor Sands was driven to respond, as I have read in the transcript, to say that any introduction of radioactive particles somehow constitutes something which is sufficient to constitute pollution. Even if he could get that far, and in our submission he cannot, he still has got to get it to the next stage, it has to be serious harm, and they do not even assert it, let alone prove it.

In that context it is a very important fact that Ireland has never challenged the discharge figures which have been given by the United Kingdom, that is to say the discharge figures from MOX. From time to time they wriggle a little bit. I think Mr Fitzsimons said "Oh well, are they necessarily reliable?" The fact is they have had them for a very long time, and they have never challenged them. If one looks at their Reply it is quite clear that they are not challenging those figures, they are in no position to do so because there is no reason to think that they are wrong.

That must be the starting point.

I want therefore to note that Ireland's case is being built on conjecture, speculative scientific ideas at the fringes of laboratory research. Just to illustrate the point, Professor Sands said on Tuesday that if the discharge of the amounts of radionuclides, at issue in this case do not constitute a pollutant, then states would be free to discharge these amounts into the atmosphere without constraint, even in relation to atmospheric nuclear testing. He said there would be no polluting limitation on the right to engage in that sort of activity. Day 5, page 57, line 37. I have to say with great respect to him that that is just nonsense. If one puts the emissions in contention in this case in perspective, one can see that, and I will do that with the aid of some uncontroverted scientific reports. At tabs 3 and 4 you have certain refereed scientific studies relating to the consequences of eating Brazil nuts. The first of those is at tab 3 and is a study on collective dose and risk assessment from Brazil nut consumption and at tab 4 there is a 1996 report of the United Kingdom National Radiological Protection Board dealing with the same

subject. As will be evident from that, at page 10, you can see a number of items of everyday food and drink that contain within them radiation, and you see the box in the middle, the average annual dose from food and drink is about 300 µSv. The variation among individual persons being 100 µSv. A typical three course meal with meat gives a dose of 0.2 µSv, typical three course meal with fish a dose of .5 mSv. A small jar of mussels gives a dose of about 5 µSv. A 100 gramme bag of Brazil nuts gives a dose of about 5 µSv. Drinking 1 litre a day of some mineral waters, and I will come back to which ones later, may give an annual dose of 100 µSv. You see right at the top that from one Brazil nut there is a dose of about 0.1 µSv. To put it in terms of mSv, that is 0.0001 mSv, and that is equivalent to over 33,000 times the dose to the UK critical group in a year from liquid discharges from the plant, and that is a startling demonstration of how small, vanishingly small, these discharges are.

I am sorry, but I do not agree with Professor Sands that that is anything like atmospheric nuclear testing.

I need to come back to the question of what amounts to pollution for the purposes of UNCLOS a little later, but it is obviously a threshold element, it is a gateway into the provisions, although more is needed. Can I go back now to what happened before, the relevant background to this request, and that is the ITLOS hearing in November 2001. I am not sure where you have the request for provisional measures in the statement of case that was made in November 2001. I am not sure if it is in any of the bundles. We think it is the Order. I imagine you have a copy of the Order separately. There were four things that Ireland asked for. May I identify what they are. They are to be found at page 9 of the Order.

They ask that the United Kingdom immediately suspend the authorisation of the MOX plant, or something else which would stop its operation.

They ask that we should ensure immediately no movement into or out of the waters over which it has sovereignty or exercises sovereign rights of any radioactive substances or materials associated with the operation of the MOX plant.

They ask that it be ordered that the United Kingdom ensure that no action of any kind is taken which might aggravate, extend or render more difficult of solution the dispute submitted, and that the United Kingdom should ensure that no action is taken which might prejudice the rights of Ireland in respect of the carrying out of any decision on the merits.

Of course their application was set out on that occasion in a very detailed written submission. It was a 64 page submission and it had 30 annexes to it and there were detailed oral statements before ITLOS as those present will well recall. The Tribunal rejected Ireland's application. It is right to note that it rejected it on the ground that there was no urgency - paragraph 81, and it is also right to note that the Tribunal did order the parties to cooperate. Perhaps it was unnecessary to do that but never mind, we are entirely content and the order remains operative. But we would suggest that it is very clear that ITLOS recognised that there was no risk of irreparable harm or prejudice disclosed by Ireland's application , otherwise it would not have been rejected. As I have said the exceptional and discretionary nature of provisional measures was recognised, for example in, Mr President, your separate opinion. And, as I indicated before, in the intervening 18 months, in the 18 months since then, it has been open to

Ireland at any time to say "not enough, now that the annex VII Tribunal has been established we need more". They never have or even hinted that they thought it would be appropriate. It is absolutely clear that they came to this hearing without any intention, certainly none was disclosed, of requesting further provisional measures even though it must have been clear that you would not be announcing a decision next Friday.

That speaks volumes, I would suggest, for the reality, for the reality is that there is not any likelihood of irreparable prejudice. Ireland, who have not been hesitant in bringing legal proceedings, we have got this and the OSPAR proceedings as well, and we may have further ones, we do not know, but there is no reason for believing that if they had thought there was irreparable prejudice, a risk of that, they would not at some stage in the last 18 months have come forward and asked for some sort of order.

The question is what has now changed that warrants a reopening of the ITLOS order? Five possibilities have been suggested, although one has to ferret around a little bit to see what they are. I am afraid I have already indicated a further change of circumstances which is not one which would justify the application but may explain it. Let me go through those that maybe detectable so you know our submissions on the point.

The first possible change of circumstance is the delay in the final decision of this Tribunal consequent upon your decision last Friday. Counsel for Ireland suggested that clarity on this point might not emerge for three to four years. I have to say we do not see why with Ireland's cooperation even from what is on their point of view the worst case, that is to say the Commission does proceed and the matter goes to the European Court, that it needs to be anything like as long as that. But of course I accept that if it does go that far then it may take some time. But it is not the nature of provisional measures, we would suggest, that they should grant open-ended relief to an applicant pending an uncertain legal process on the merits, particularly in circumstances where that applicant can influence the timing in the associated proceedings. That would be particularly a matter for concern if the Tribunal were to accede to Ireland's application under head A of its request, because it would be tantamount to forcing the MOX plant to cease operations.

Interim measures are not a way of getting the relief that you are seeking at the final hearing by instalments. They are exceptional, they are to deal with the position where there is an urgency and a risk of serious harm which cannot otherwise be protected against.

PROF CRAWFORD: Mr Attorney, you mentioned urgency earlier on. Obviously there is a special problem with ITLOS itself because ITLOS is only exercising provisional measures jurisdiction in the period in between the commencement of the proceedings and the establishment of the Tribunal, and the term urgency is used in article 290 in that context, What is the particular relevance of urgency so far as we are concerned, given that there will be some delay, how much is unclear?

LORD GOLDSMITH: In my submission there is a very clear relevance, and one has to approach this on one of two bases, whether we are looking at this on the basis of pending the further sitting of this Tribunal or pending a slightly more distant event. But either way given the way that Ireland puts its case, one has to be saying that there is such a risk that it is so urgent to deal with it now, that MOX cannot be allowed to

continue to operate in the way it has been operating for the next few months or even for the next two or three years. It is in that context that it becomes necessary to demonstrate the need for there to be protection. Maybe the word urgency is too crude a shorthand to capture that.

PROF CRAWFORD: Yes, because article 290 uses the word urgency in relation to ITLOS but not in relation to the annex 7 Tribunal.

LORD GOLDSMITH: Well, given the terms of final words of article 290(5), and I understand the point being put, but given the way that 290(5) brings one back to the other elements - and I think this may still apply - I am going to come on if I may in a little more detail on this and there is some ICJ jurisprudence which helps confirm that. But perhaps if it is acceptable for me to come back to that when I get to it in my submissions. I hope to satisfy you; and if not Mr Bethlehem will have to at a later stage.

I want to make one other point if I may because I have seen in the submissions that Ireland has made much of the likely delay of the final decision and it has also talked about provisional measures directing the relationship of the parties over the next three or four years as being helpful. We are not going to prejudge the outcome of any EC procedure, but it is the fact that we did raise this 18 months ago. We have asked Ireland to address the point. They have been silent on it and we have raised it at every stage. It would not be very satisfactory if now, we having raised it in that way, they were then to rely on this as a way of saying "we are entitled to get interim measures which otherwise we would not have been", particularly if the effect were to be a serious effect as far as the MOX plant is concerned, and I am looking particularly at A and C in the heads that have been put forward. That would be really turning the provisional measures route on its head. if Ireland had really been concerned that there was a need to get a speedy determination because of the risk of irreparable harm there are steps they could have taken. One of them of course would have been to have made an application to you at a much earlier stage saying ITLOS has made an order, it is not good enough, there is a risk of serious harm, or whatever it may be, we must come and have a hearing, and you would have no doubt listened to it and decided the matter. They could have also said to themselves, well now we have this problem. The United Kingdom are saying there is a jurisdictional issue, they said that at the last hearing in November 2001. The last thing we want, they might have said to themselves, is to have our substantive case derailed by a sterile jurisdictional dispute, why do we not accept their point and go off to the Tribunal which they accept has got jurisdiction and then we can get on to the merits. Indeed let us go to the European Commission, let us make our case to the Commission and see if the Commission will put some pressure on the UK. They could have done that. The fact that they simply have not approached this in a way indicative of any sense of urgency themselves - forgive me for using the word again but it is appropriate in this context - really belies the nature of the application that they are making.

That was the first change of circumstance, delay, and it also does depend on how you wish to approach this. Are you just approaching it on the basis of the next few months or approaching it on the basis that it could be a more substantial period of time. I will come back to that.

The second suggestion that they make is that there is a change of circumstances - it is rather more obliquely put but I ought to address it in case it is actually the case that is being said. Ireland

suggests that the International Commission on Radiological Protection, the ICRP, which is the principal international organisation responsible for setting radiological protection standards, has signalled what Ireland calls a change of approach. There is a reference to that for example at day 5, page 55 line 15.

In putting that contention forward Ireland took you to an extract from a recent ICRP memorandum addressing the evolving work of the ICRP, which noted that at present there were no internationally agreed criteria that explicitly addressed protection of the environment from ionising radiation. But there is a passage just before the passage that was read which is very important to set that in context, which you were not taken to, and which explains the raison d'etre of the work that is being done. I would like to go to that. You have the full document should you want it at annex 45 to our Rejoinder. We have reproduced in tab 5,I gather the whole of it. I want to draw attention to page 139. This is a 2003 document. At some stage there is an interesting jurisprudential question as to how a document in 2003 suggesting that there might be a change of approach demonstrates that the United Kingdom was in breach of something before that date which justifies the start of these proceedings, but that is probably not quite for now because I have substantive answers to this in any event. But the relevant passage is at page 139. You will see this paragraph which I will read if I may.

"The Commission has decided that a systematic approach for radiological assessment of non-human species is needed in order to provide the scientific basis to support the management of radiation effects in the environment. This decision to develop a framework for the assessment of radiation effects on non-human species has not been driven by any particular concern over environmental radiation hazards. It has rather been developed to fill a conceptual gap in radiological protection and to clarify how the proposed framework can contribute to the attaintment of society's goals of environmental protection by developing a protection policy based on scientific and ethical-philosophical principles."

So this work is not being driven by a perception that there is some unaccounted-for risk to the environment, or to non-human biota; it is filling a conceptual gap. I really beg to suggest that that is not a change of circumstance which would justify now saying this case is different.

This particular element can also be seen in the ICRP report itself to which this memorandum refers. The full document is annex 184 to Ireland's reply but on this occasion we have extracted two pages. They are at tab 6 of this folder. I want to draw attention to paragraphs 145 and 146.

"From all of the above it is evident that the need to develop a common approach is urgent. It is also feasible. In recent years, a large amount of relevant work has been carried out by individuals, and by international and national organisations. There have been specific research programmes, specialist review groups, and interpretations of the large amount of radioecological information that has been gathered over the last fifty years. All of this work, plus the work of this ICRP task group, provides a basis for the development of a practical framework for the protection of humans and non -human species. However, it first needs to be broadly introduced, developed, and hopefully accepted if some form of international consensus is to be achieved. That is not to say, as is the case with most of our experience with radiation protection, that there are no important data or knowledge gaps. One of the major gaps arises from an earlier lack of any systematic attempt to compile data specifically relevant to

the protection of fauna and flora, both in the context of exposures and effects relevant to defined endpoints. Several time-limited initiatives are already taking place on this subject but ICRP could, in cooperation with others, immediately play a major role in compiling this information in a manner helpful to the development of a workable framework".

Again, there is no new fact or change of circumstance there, I would suggest. It is an initiative. It is drawing together the threads of work that has been done, lots of work that has already been done, it is fitting it, as the first document says, within an appropriate conceptual framework. It is not the case, in my submission, that someone has suddenly discovered that there is an environmental risk gap which everyone has been missing for years and which justifies, now, looking afresh. It is not a change of circumstance, therefore.

The third change of circumstance contention, which was referred to, for example, Transcript Day 5, page 10, line 27, is the suggestion that the Provisional Measures ordered by ITLOS have not worked satisfactorily. Professor Lowe dealt with some of that on Tuesday.

That, of course, could not possibly justify A or C. It could only relate to B of the head of proposed measures. Although, so it appears to me, again it may be different to those who were present, that his submissions on cooperation were developed under the heading that the ITLOS Order had not worked satisfactorily. There was not much of that particular point in what he said. The real suggestion seems to be that the ITLOS Order was unsatisfactory because it was insufficiently specific. But what was heard mostly was Ireland's case on the merits. For example, article 123 of UNCLOS provided the gateway for understanding the whole of the rest of the Convention. Maybe I misunderstand what was being said, but, certainly, that particular point about article 123 seems to us to be a rather new provision and a new argument. It does not justify saying that the Order has not worked. It certainly does not justify saying that Ireland's dissatisfaction with the Order is a change of circumstances. One would have expected to see really a detailed examination of specific aspects of the Order and how they had not worked, if one were going to get into this territory at all. As I say, Dr Plender will deal substantially with this issue.

The fourth change of circumstance is the suggestion that "ITLOS had before it the benefit of only some half an hour or so of discussion touching upon scientific issues very briefly" - I am quoting from the transcript, Day 5, page 10. We really do take issue with that characterisation of what took place. There were fairly full submissions on science before ITLOS, in our view. There, as here, Ireland did not dispute the basic discharge details presented by the United Kingdom. The only thing that is different, and it is not, in our view a new fact or circumstance that Ireland has in the interim submitted evidence on the effects or possible effects of low-dose radiation. We heard something about that from Mr Brady in the opening last week. I smile simply because this is quite an extraordinary way of dealing with it. You are told several times that the Tribunal should not engage in resolving issues of scientific debate. Mr Brady said that, Day 1, page 4, line 36 and again at page 24, line 31. You were also told that the effects of the discharges of radioactive materials "on marine life and on biota other than man is very much in its infancy". That is from Transcript, Day 1, page 24. We were told that the state of knowledge

of the scientific community is at an embryonic stage. That is Day 1, page 24. This then becomes a case to the effect that the very uncertainty translates somehow into "adverse effects and consequences emanating from the discharges of radioactive materials into the Irish Sea". That is Day 1, page 25.

The Tribunal may in its own reading have looked in detail at Dr Mothersill's evidence but that is actually what this part of the case is about. In fact, it is almost the entirety of Ireland's case on harm.

I just want at this stage to make a number of points, if I may. In one sense, there is nothing in Dr Mothersill's evidence that is new. When you come to examine it, you will find that she relies upon experimental work that she has been doing at the Dublin Institute of Technology for a number of years. She cites published works of her own and of others that predate Ireland's institution of proceedings by many years. It is not new in the context of this application.

Secondly, and very importantly, there is nothing in her reports which affirms the existence or even any real likelihood of serious harm to the marine environment. The whole thesis is that there is uncertainty. She does not translate that into assessment of risks. I quoted the Reply, paragraph 2.77. Ireland accepts that there is no proven case of actual harm. There is no suggestion in Dr Mothersill's report or elsewhere that there are proven and serious detrimental effects on the biota of the Irish Sea from emissions from the MOX plant or, for that matter, from THORP or from Sellafield. In fact, there is no evidence of harm anywhere in Ireland's case.

The third point that I would make is that it is actually surprising - although, of course, by saying what I am about to say I have now, no doubt, filled in what part of Ireland's reply is going to be to this - given that this is actually at the heart of their case, that they have not taken you to Dr Mothersill's evidence at any stage. Of course, we were expecting her to be called in the main case and we were anticipating cross-examination. We do not, of course, want to impugn Dr Mothersill's expertise as a laboratory scientist, but our submission is that we are quite clear that her evidence is deficient for the purposes for which it is cited. She does not say that there is any harm. There are a number of fundamental questions which go to the substance of her work, but we just do not see at this stage how the Tribunal could rely upon that. Fundamentally, as I say, it does not establish that there is risk of harm, let alone serious harm. It identifies a possible question of uncertainty.

I am going to come to the fifth and last of the potential change of circumstance arguments advanced by Ireland characterised by Professor Lowe, if I may say so, very elegantly. He described it as an additional factor that provisional measures might be necessary to ensure that the system of dispute settlement under Part XV does not fall apart. You may recall this (Day 5, page 11) and I shall not take time taking you to it again. With respect, we simply do not see how you can justify an application for Provisional Measures on the basis that there is some schematic tension in the tribunals which are seized or possibly seized with the issues. If Ireland have made an error in pursuing their case before this Tribunal, that is not, in itself, a reason for saying that there is now a change of circumstances justifying revisiting the ITLOS Order.

Those are the five reasons we detect that Ireland may be relying upon. Without wishing to be disagreeable, I suggested that we might speculate on what the actual reason is. It is that, because the EC

question has intruded itself, simply Ireland is seeking to salvage something from what otherwise might be perceived back home as (I understate it) something of a set back. That is not a reason for revisiting questions that have been looked at before.

I will turn then, if I may, to the legal framework in a little more detail. The legal framework is Article 290. I do not believe that Ireland took you to the provision earlier in the week. I will start, if I may, with paragraph 5 of 290. That is the logical starting point. It addresses the competence of ITLOS to prescribe provisional measures pending the constitution of the arbitral tribunal to which this dispute has been submitted, in our case, of course, the Annex VII Tribunal, that is to say you. Once the tribunal is established, then the provision provides that the tribunal to which the dispute has been submitted may modify, revoke or affirm those provisional measures, acting in conformity with paragraphs 1 to 4. One is taken back, in our submission, to paragraph 1 to 4. Paragraph 2, "Provisional measures may be modified or revoked as soon as the circumstances justifying them have changed or ceased to exist". In our submission, both of those paragraphs are relevant. Paragraph 5 envisages that this Tribunal, subject to the requirements of paragraph 2, may revisit the question of provisional measures and may modify them, but sets certain conditions out. Paragraph 2 requires that the applicant must demonstrate that the circumstances have changed. I am told, I do not for a moment pretend to have done the research myself, that the Virginia Commentary does not address this point directly, but that it supports the proposition that the language of paragraph 2 was introduced with the object of limiting the prescription of provisional measures in the absence of a change of circumstances. That, I would suggest, makes sense. It would be consistent with the approach adopted in the rules of other courts and tribunals. Articles 92 and 93 of the ITLOS Rules, for example, would be very relevant. They are, of course, based on this provision in Article 290. Article 92 provides that "The rejection of a request for the prescription of provisional measures shall not prevent the party which made it from making a fresh request in the same case based on new facts". Article 93: "A party may request the modification or revocation of provisional measures. The request shall be submitted in writing and shall specify the change in, or disappearance of, the circumstances considered to be relevant. Before taking any decision on the request, the Tribunal shall afford the parties an opportunity of presenting their observations on the subject." That is entirely consistent with the submissions that we are making ....

THE PRESIDENT: Lord Goldsmith, may I ask a question? Do you attach any significance to the fact that the last section of paragraph 5 that you quoted - "revoke or affirm those provisional measures, acting in conformity with paragraphs 1-4" - includes a reference to paragraph 1? If so, what is the significance of paragraph 1 in that context?

LORD GOLDSMITH: The role of paragraph 1 in such a scheme (at least it goes this far) is to make it clear that before revoking, modifying or affirming provisional measures, the tribunal (in this case the Annex VII tribunal) would need to be satisfied that it is necessary to do so to preserve the respective rights of the parties or to prevent serious harm. That does not mean, in our submission, that the requirement under paragraph 2 does not also apply, but, if the change of circumstances is made out, then the Tribunal would still need to direct itself to asking "Well, is it necessary to make this modification to preserve the

respective rights of the parties or to prevent serious harm?"

THE PRESIDENT: Thank you.

LORD GOLDSMITH: Just pausing for a moment on the ITLOS Rules, of course, if Ireland had been required to apply to ITLOS to do what it is trying to do today, it would plainly have been required to comply with those rules and Article 290, too. I noted in my earlier submissions, when talking about the Genocide case, that Article 75(3) and 76(2) of the Rules of the International Court of Justice make the same provision. The same is true for the European Court of Justice. That is Articles 87 and 88 of the European Court of Justice Rules of Procedure. Both, we say, as a matter of law, but we would also say as a matter of common sense and general concepts of how interim relief will be granted, the Tribunal needs to know what are the new facts, what is the change of circumstances that justifies a fresh request for provisional measures. It is an exceptional procedure. It contemplates some order affecting the rights of the parties before those rights have actually conclusively been determined by the Tribunal. It is not a procedure to be employed lightly. Once you have had one go at it, you really have to make out a very good case for coming back on those issues.

MAITRE FORTIER: Lord Goldsmith, I am sure that you have noted, as you dissected Article 290, that the only references to prescription of provisional measures is found in subparagraphs (1) and (3). In (2) you have a reference to modification or revocation. In the last sentence of (5) you have a reference to modification, revocation or affirmation. But the only provisions which deal with prescription of measures is found in (2) and (3).

LORD GOLDSMITH: Yes.

MAITRE FORTIER: It is in (1) and (3) which, as you noted earlier, do not refer to a change in circumstances or circumstances having ceased to exist. What do you make of what could be referred to as this dialectic point?

LORD GOLDSMITH: I probably will not do justice to the point and, therefore, my answer will be defective. Can I try to deal with it in this way? There is a concept here which fits in with other international procedures and fits in with common sense and general principles: interim measures are exceptional, you may apply for them; having applied for them, it is only if there is some change of circumstances or new facts that you can revisit them. It is not, "Well, we would like to have another go". You have to adapt that to some extent to take account of the fact that, unusually here, you have one tribunal with the power to grant an order, and it may not be the tribunal that actually has to deal with the merits. But the way in which you do that is by making it clear in paragraph 5 that, once it has come to, in this case, the Annex VII tribunal, whichever the tribunal is that will deal with the merits, all the provisions of (1) to (4) apply, but including (2). There might never have been any provisional measures made before and, therefore, one has got to apply, but it would be very surprising if matters were entirely at large once one got to the Annex VII tribunal. I can envisage a circumstance in which ITLOS said that it expected the application to be renewed next week before the Annex VII Tribunal. It was not going to deal with it because the Tribunal was going to be formed next week and, therefore, it was not going to deal with it. That would be a change of circumstance. But that is not this case, because ITLOS was presuming that

there would be a period of time, it was presuming that it was setting out a concept of cooperation, which would apply, and, critically, knew that the Order that it was making was one which was denying Ireland substantial relief that it had asked for, which was to stop MOX being started. My fundamental objection to this application is that that is what it is trying to do again. I am not sure that I have dealt adequately with Maitre Fortier's question.

MAITRE FORTIER: That is helpful, thank you. You did refer to paragraph 81 of the ITLOS Order, which deals with urgency. It states that there is no urgency because, as the Tribunal said, of the short period before this Order and the constitution of our Tribunal. Then they deliver themselves of the provisional measure with which we are familiar. I take your point with respect to what has changed in the last 18 months. That point has been made. Can you really criticise Ireland for having accepted to live with the provisional measure which ITLOS issued until such time as it considered that many of the factors that you have listed - mainly delay has become longer. Could that not be at least a partial reply to the UK position?

LORD GOLDSMITH: I have absolutely no idea that Ireland did decide to live with it. I have no evidence at all that Ireland turned their mind to saying, "Oh well, 18 months is all right, but two years won't be". All I can say is that it is astonishing that, having applied for an order which said, "We are not going to stop MOX", having been given provisional measures, waiting 18 months, Ireland gives no hint that they want further interim measures until it turns out that this hearing is being suspended. There is a period of time and you, rightly, if I may say so, but still generously indicate, because Ireland had said so - they said to you, "Well, if you suspend this hearing, we may have to ask for interim measures" - if I may say so respectfully, very rightly, that, "Well, you must have an opportunity of making that application, because you have said that that may happen". I do not want to speculate as to what was in your minds, but I have the greatest question mark in my mind as to whether you envisaged at that stage that they would be coming forward with this application to cover the next three years. I may be entirely wrong and I am quite wrong to presume, but my fundamental point about it is that, having made their application and having stood on it, there is absolutely no evidence at all that they thought, "Oh, it's a difficult decision. There is harm but we can live with it for 18 months, but not for two or three years". There is a factual question there as well as the interesting and important legal question which I will do my best to answer.

PROFESSOR CRAWFORD: I just wanted to make the observation, if I may say so, that the reason why the Tribunal did that is paragraph 3, that the issue of provisional measures cannot be raised by the Tribunal of its own motion, in the sense that there has to have been a request. We had no view as to what we might do, but we simply gave them the opportunity.

LORD GOLDSMITH: If I may say so, I entirely understand and I am sure that you did not take what I said in any way as any suggestion that it was not right for the Tribunal. It seems to me absolutely the right thing for the Tribunal to have done. I am simply saying that it is the response to the invitation to which I take the exception, not the invitation.

I would like, if I may, to move on to a point which is not straightforward, but it is right that it should be touched on. That is the relationship between the provisional measures and the jurisdictional

question. I am looking Article 290, paragraph 1, which says, "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", etc. It is prima face jurisdiction which matters for those purposes. That obviously is the immediate basis of your competence. Mr President, in your statement of 13th June you expressed the view that you had prima facie jurisdiction as to what were described as the "international law points" raised. You did express some reservation in paragraph 5 that aspects of Ireland's case which raised questions arising under non-UNCLOS instruments would be inadmissible. But that does not affect, really, this point, which is that, in respect of the international law points, you considered that you had prima facie jurisdiction. I am not dreaming of trying to go behind that for present purposes.

On the EU point, you did indicate in your Statement, Mr President, that "there is a serious difficulty". Then, having identified those difficulties, you went on to indicate the suspension of proceedings. We note that the Tribunal was silent on the question of prima facie jurisdiction on the EU point. We understand that the finding of prima facie jurisdiction encompasses, for necessary practical reasons, the case as a whole and we do not want the Tribunal to be put back into the EC difficulties that you were seeking, at least, to minimise. Therefore, without wanting to make submissions on the wider question of jurisdiction, I do want to make these points about the actual application that has been made.

First of all, I want to pick up, if I may, on a question that was put by Sir Arthur to Professor Lowe on Tuesday. If you have not Day 5 of the transcript to hand, perhaps I could read it. It is Day 5, page 14, line 37. I recognise, of course, that this is a question that is being put by a Member of the Tribunal and I draw no more from it than that, but Sir Arthur said this: "You may recall from the Tribunal's decision which it made known last week that one of the very questions on which there is some uncertainty and may only be resolved by the European Court of Justice is the very question of who has the rights and who has the obligations which arise under UNCLOS. I can understand the way in which you are presenting your argument. Of course, the answer which this Tribunal must give to Ireland's request must be consistent with that degree of uncertainty which the Tribunal has itself acknowledged".

Professor Lowe sought to circumvent those difficulties by really side stepping the question. He said that, well, Ireland's concern was practical and this was really a linguistic point. He said that, whoever might be the bearer of the rights and duties, whether it is the Community or the Member States, it would be the United Kingdom which would have to discharge the duties. That is Day 5, page 15, line 15. That does, we would say, with respect, rather miss the point, because, if the rights and duties in this case attach to the Community rather than to the Member States, if they are rights and duties in Community law, then their content and mode of execution will have to be assessed as a matter of Community law. It is not simply a practical problem or a question of linguistics, because the whole nature of the content and the nature of the rights and obligations that operate between the two of us may be wholly different. They are arising under different legal systems and, if Professor Lowe were right, it would simply circumvent the difficulty.

The answer may be, as Professor Crawford suggested at Day 5, page 16 in this exchange, that

Article 290 is proleptic in its reference to respective rights of the parties and that what a tribunal orders in respect of provisional measures may not track what the final decision actually is. Well, perhaps, but the reality of the case is that, on the record and expressly, the Tribunal has recognised a very considerable degree of concern over the difficulties presented by the EU law point and, having suspended, of its own motion, the proceedings because of those difficulties, then the concern raised by Sir Arthus is, in our respectful submission, a real concern. Whilst I do not for a moment go so far as saying that the consequence that Ireland cannot have anything at all, if otherwise it were justified, we do respectfully suggest that one needs to approach with particular caution what is being said so as not to be inconsistent with the uncertainty that has been expressed.

Let me develop that by moving into the next observation. The next observation is the reality of the fact that this is or may be a matter of Community or EU law, because the EU is all over this case already. In the sense, there is the Article 37 Opinion which I invited the Tribunal to look at before and, significantly, there are decisions of the European Court of Justice which are at odds with what Professor Sands was saying about the competence of Euratom on matters relating to the environment. You will recall his submission in relation to that. We say that there are European Court of Justice cases which go the other way.

Already we can see that, in determining the rights of the parties, we have aspects of things that have already been done in the EU or EC context which are relevant. It goes further than that still, because one of the key issues, of course, is article 206, the question of environmental impact assessments. There, very importantly, is Directive 85/337 on environmental impact assessment. Then Directive 96/19, which deals also with the justification. That is an EU framework in which the acceptability of MOX will have to be judged. The significance of that point - and I am now coming to the crunch line in relation to this - is that those points not only highly relevant to the merits - they are obviously very relevant to the merits of the case, whether or not compliance with the Directives is properly understood and is interpreted in accordance with Community law and is a proper discharge by the United Kingdom in its obligations - but it also engages Ireland's Request for Provisional Measures. It is for this reason. If the Tribunal were to accede to Ireland's Request for Provisional Measures in a way that cut across what are the EU obligations, the Community law rights and duties, as it were, between Ireland and the United Kingdom, that could affect the balance of the parties and could be really inconsistent with the uncertainty which the Tribunal has already expressed. When we come to look at the detail, we may have to come back to this, but I will just take one example, if I may, at the moment.

Request A in the interim measures is a request that we should ensure that there are no liquid waste discharges from the MOX plant at Sellafield into the Irish Sea. Yet there are approvals and authorisations granted within the framework and in accordance with EU law at the moment that those tiny discharges may be permitted. So to be saying, on the one hand, they are not permitted on an interpretation of UNCLOS, when, in accordance with the Community responsibilities, they are permitted is already cutting across the very uncertainty that the Tribunal has demonstrated. If it actually were to happen and BNFL were not permitted, because of that, to operate the MOX plant in the way that they

have done, that would be a very substantial detriment and it would be a substantial interference with what has been authorised, and at the very least prima facie, I would say quite obviously, inconsistent with the scheme of Community law which operates.

I hope I have indicated why, without saying I am going to try and take the point that you cannot grant interim measures at all, I have respectfully suggested that Sir Arthur's point is an important one to bear in mind, at least when looking at the individual measures, that one must not go in a way which will cut across an uncertainty which might be resolved in saying that these obligations between the two countries are to be determined in a particular way.

The third point I wanted to raise on the jurisdiction is a very important point and which I know the Tribunal is alive to but it is so important I want to underline it, which is what the scope of this dispute is. The dispute with which the Tribunal is seized is that which is described in Ireland's Amended Statement of Claim of the 21st January 2002. Paragraph 1 of that statement describes the dispute as concerning the authorisation of the MOX plant at Sellafield and international movements of radioactive substances associated with the MOX plant. That is annex 1 to the Irish Memorial, but I think the point is that it is common ground, although we respectfully suggest that from time to time Ireland's slips away from that in its submissions.

The document goes on to say - and you may want to look at this later but I will read it now "Ireland's claim is not confined to the immediate consequences arising directly from the MOX plant alone, considered in isolation from the rest of the Sellafield complex, but extends to all the consequences that flow from the establishment and operation of the MOX plant, including the consequences flowing from the increased activity at the THORP plant that is supported by the MOX plant".

I am hesitating slightly because I think this is so important that I do want to ask you to look at it. Annex 1 to Ireland's memorial. Page 5 of the annex has got the passage which I have just read which is the underlying portion. The original Statement of Claim was amended so as to make clear Ireland's claim was not "confined to the immediate consequences arising directly from the MOX plant alone, considered in isolation from the rest of the Sellafield complex, but extends to all the consequences that flow from the establishment and operation of the MOX plant, including the consequences flowing from the increased activity at the THORP plant". That is underlined by the explanatory note at page 27. "Ireland's original Statement of Claim, dated 25th October 2001, as amended on 21 January 2002 is intended to clarify that Ireland's claim is not confined to the authorisation and operation of the MOX plant. [It] encompasses also the consequences that flow from the establishment and operation of the MOX plant, including in particular the consequences resulting from the intensification of use of the THORP plant as a consequence of the commissioning of the MOX plant". That is page 27.

I draw attention to paragraph 1. “The amendment explains the purpose of Ireland's amendments, which are intended to clarify the original Statement of Claim. The amendments are not intended to introduce any new claim or claims, or address any matters that are not associated, directly or indirectly, with the authorisation, commissioning and operation of the MOX plant”. You will forgive me for emphasising that point, but we have heard quite a deal from Ireland about Sellafield as a whole, and I

do not just mean because of the talk about the MOX THORP link which obviously I will come to, but we have talked about the HAST, we have talked about the historic and future emissions from Sellafield more generally and other wider matters and it just needs emphasis that the jurisdiction of the Tribunal is in respect of the dispute which is described in the Statement of Claim, which is MOX, and whatever they can demonstrate as an intensification of THORP associated with the operation of MOX but no further than that. If one looks at the request for provisional measures - and I know the Tribunal are alive to this because the questions were raised during the last couple of days - some of this plainly goes way beyond MOX itself. That is why it is going to be relevant to look at what we said in relation to the THORP new contracts, because that is the only extension beyond MOX that Ireland can arguably make. In request Aii one see that Ireland are asking for example for a limitation of discharges from THORP, irrespective of whether there were new contracts for THORP. They are asking for an order which cannot possibly be within the jurisdiction of the Tribunal to grant or within the competence of Ireland to seek. And when one looks at the cooperation, Biiib, monthly information as to volume of liquid waste in the HAST tanks. The closest that you get to the HAST tanks is if there are new contracts for THORP and there is a bit from those new contracts which goes into the HAST tanks. Otherwise it has nothing to do with MOX at all. There are lots of examples of that and we will come back to it.

I noted with a bit of surprise that when this point was put to Professor Sands when he was asking about the Continued Operation Safety Reports, you, Mr President, asked him why he needed access to documents associated with the Sellafield site as a whole when, as previously indicated, your claims do not relate to Sellafield as a whole. That is Day 6 page 27. Professor Sands said it is sensible not to assume that an incident at the MOX and THORP plants alone might cause consequences within Ireland. That is really with respect not the point. This case is about MOX and not about anything else. I think at one stage he suggested that you might find a means without identifying even a claim to the existence of such a right that we might be able to have access to reports which encompasses that part of Sellafield which is within this dispute, It is not with respect for Ireland to suggest to you that you should find some way of extending the dispute.

You have I know very well my point in relation to that and when we come to look at the detail I will be wanting each time to emphasise this has to be focused on MOX. I see the time; would this be a good moment to have a break?

THE PRESIDENT: I think so. We will have a short break of 15 minutes.

(Short adjournment)

LORD GOLDSMITH: Mr President, could I come back to the question on other jurisprudence which may help on the question of what are the circumstances which may warrant the prescription if provisional measures. We did make detailed submissions before ITLOS and I am not going to repeat those, but you do have those in your bundles at tabs 8 to 11 should you find them of assistance.

The phrase "the preservation of the respective rights of the parties" has in our submission invariably been construed to mean that irreparable prejudice should not be caused to the rights which are the subject of dispute. We suggest that that point was succinctly made in the Order of the International

Court of Justice given only this week in the Congo v France case. You have that Order at tab 12 in the folder. I hope it may be sufficient simply to take you to paragraph 22: "Whereas the power of the Court to indicate provisional measures under Article 41 of the Statute of the Court has as its object to preserve the respective rights of the parties pending the decision of the Court, and presupposes that irreparable prejudice should not be caused to rights which are the subject of dispute in judicial proceedings; whereas it follows that the Court must concern itself with the preservation by such measures of the rights which may subsequently be adjudged by the Court to belong either to the Applicant or to the Respondents and whereas such measures are justified solely if there is urgency".

The appreciation of the concept of preservation of the respective rights of the parties as referring both to the respective rights of both parties, the applicant and the respondent, and connoting a threshold of irreparable prejudice is well established in the jurisprudence of the International Court. Whilst it has not been the subject of express comment by ITLOS in the three cases which have so far come before it concerning provisional measures, there is not reason to suppose, we suggest, that the interpretation of the phrase in article 290(1) of UNCLOS should be any different to that adopted in relation to Article 41 of the ICJ Statute. Indeed, we would expect, given the exceptional nature of provisional measures, that a high threshold would be equally required.

So our submission is that the threshold in respect of the preservation of rights is that of irreparable prejudice to those rights, and it does seem that Ireland accepts that appropriate test, subject to this; that Ireland says that procedural rights are rights too, just as are substantive rights. Day 6, page 13. For us there is an element of déjà vu about that - perhaps also for you Mr President, - because that was the same submission that was advanced at ITLOS. But it did not persuade ITLOS that it should have therefore granted the order that Ireland was there asking for.

I would respond simply by saying that irreparable prejudice to the rights of the parties contemplates the likelihood of irreparable harm being caused to a party, That is not in any way the same as saying a particular procedural provision may not be complied with on this occasion.

The International Court's provisional measures order in the Arrest Warrant case would support that. We have not put this in the bundle. Can I make the submission and if it you would like us to come back to it we will and certainly will provide any document that is helpful. The central point is this; that in the Arrest Warrant case, the Court did not focus on the rights but on whether there was a risk of actual harm. That is the point we are making. We say that that is also evident from the authoritative Commentary on article 290 of UNCLOS, and before ITLOS we referred to the observation by Judge Wolfrum. although in his extrajudicial capacity, to the effect that "a reading of the term preservation of rights as infringement of rights would widen the application of provisional measures in an unacceptable way. In particular it would make it nearly impossible that a provisional measure would not anticipate the final decision of the court." : ITLOS/PV.01/08/Rev. 1, p.19, lines 31-40.

Let me make this point. I have already submitted that the "not a single radionuclide" approach by counsel for Ireland is not a credible way of looking at the question whether there a sufficiently serious risk or sufficient likelihood of serious harm, and I want in that context to come to the point that I

indicated before. Tab 13 in your folder is a report produced in February 1992 by the United Kingdom Ministry for Agriculture, Fisheries and Food on bottled mineral water. The object of this report was to assess compliance with World Health Organisation guidelines which set a particular threshold of 0.1 Bq/l of alpha activity and 1.0 Bq/l of beta activity, and although the focus of research was on radium and strontium the investigations disclosed evidence of other radionuclides. A wide range of mineral waters were investigated, including a number from both the United Kingdom and Ireland. No. 29 on the list actually is the highest. It contains a combined total of alpha and beta activity of 0.815 Bq per litre. Much higher than down at 54 is a well known mineral water which shows a combined total of alpha and beta activity of 10.86 Bq per litre. On the argument which was advanced by Ireland if an official from the Irish agency was strolling along the beach and threw the remnants of his bottle of No 54 into the sea that would engage the responsibility of Ireland for polluting the Irish Sea. We will no doubt return to the issue on merits, but I draw attention to the fact that the water you have been drinking for the last two weeks is at No 53 and has a lower level than the bottle we have been referring to.

PROF CRAWFORD: Ireland relied on the Nuclear Test Cases which is in terms of provisional measures probably the factual situation which is the closest to the one we have here. Obviously there are many differences to the forensic context, but it did involve radioactivity fall out from a different sort of activity, but nonetheless part of the complaint was that the fall out was being caused in particular in the territory and waters of the applicants. Are you going to take us to that or is someone else going to do so?

LORD GOLDSMITH: I will not take you to it now but in light of the question you have raised about it I think we should do. Can I come back to that tomorrow. I will if I may just in this context make this point. If I can take you to tab 15, this is Ireland's presentation in relation to implementation of OSPAR Strategy with regard to Radioactive Substances, and I think that one can see from that, if not from elsewhere, that the discharge that Ireland itself makes from Irish hospitals is some 500,000 times more radioactivity into the Irish Sea than does the MOX plant. I know what Mr Brady will say, that hospitals are one thing and others are another, but I am not sure that I would accept that proposition The fact remains that if it is a nil discharge then what is sauce for the goose might be sauce for the gander. We will come back to the particular case tomorrow.

I dealt with urgency and I have indicated already that there is a question about whether the Tribunal should be looking at interim measures pending the next hearing or for some significantly further point of time. Whilst recognising that that is an important issue at this stage what I would like to do is broadly come back to that when I deal with the detailed measures that are sought because the two things to some extent go together, But I will note at this point that in the Congo v France case that we were looking at before, at paragraph 35 the Court did look at it and say "at the present time" there is no risk of irreparable prejudice. The Court looked at it in terms of the present time, so really focusing narrowly on what is necessary for the determination of the issue now and certainly given that this tribunal has scheduled a meeting with the parties prior to 1st December 2003 then it is seriously for consideration whether one needs go beyond that time in considering what if any measures are appropriate.

At this stage what I would like to do is turn to the issue of the regulatory regime and some of the basic facts. I in doing that it might be helpful to you to have a change of voice and I will suggest with your leave that Mr Wordsworths pick that up at this stage.

MR WORDSWORTH: Mr President, members of the Tribunal, it is of course an honour and a privilege to appear before you. I am going to develop the facts that the Attorney-General has already taken you to in a little detail; but I will take them slightly further. I want to take you briefly to a couple of the sources that Professor Sands took you to on Tuesday. He took you to Agenda 21, paragraph 5.25(c), which reads as follows: "States in cooperation with relevant international organisation where appropriate should", and this is the key part, "not promote or allow the storage or disposal of high level intermediate level and low level radioactive waste near the marine environment unless they determine that scientific evidence consistent with the applicable internationally agreed principles and guidelines shows that such storage or disposal poses no unacceptable risk to people and the marine environment or does not interfere with other legitimate uses of the sea making in the process of consideration appropriate use of the concept of the precautionary approach".

He also took you to article 207(1) of UNCLOS, which of course refers to taking into account internationally agreed rules standards and recommended practices and procedures. Professor Sands neatly skated over two questions. First of all what are the internationally agreed rules, standards and recommended practices and procedures; second is there evidence that shows that disposal poses an unacceptable risk to people or the marine environment? And in this particular application we would be looking specifically at the criterion of serious harm.

The reality is that Ireland is inviting you to trespass into an exceptionally heavily regulated area and to disregard the fact that the United Kingdom has complied with obligations that bind as a matter of Euratom and other law. There are applicable internationally agreed rules, standards and recommended practices and procedures that are implemented and developed by regional bodies, in particular the EC and Euratom, and through to the level of domestic regulation.

I start on the international plane and I want to look first at two bodies, the ICRP of which you have heard a little bit already, and also the IEAA, and to see how these have developed principles and standards. If you could turn to tab 17A of the judges bundle where we have set out the current ICRP recommendation, which is ICRP 60. If you would look briefly at paragraph 10, page 2 of the document. This explains what ICRP 60 is all about. The Commission intends this report to be of help to regulatory and advisory agencies at national, regional and international levels, mainly by providing guidance on the fundamental principles on which appropriate radiological protection can be based. That is the key part of it.

If I could ask you to turn on to page 28, where at paragraph 112 we see the ICRP setting out the fundamentals, the basis of its radiological protection. There are three prongs to the ICRP's attack. Paragraph (a), no practice involving exposure to radiation should be adopted unless it produces sufficient benefit to the exposed individual or society to offset the radiation detriment it causes. This is the justification of a practice and obviously this is a key principle of Euratom law and is in article 6(1) of

Directive 96/29. You will already have heard that the MOX plant has been authorised. It was found to be justified after five rounds of public consultation.

112(b), this is the ALARA principle; in relation to any particular source within a practice the magnitude of individual doses the number of people exposed and the likelihood of incurring exposures where these are not certain to be received should all be kept as low as reasonably achievable, economic and social factors being taken into account.

So there is ALARA, and again that is in Directive 96/29 and also it is a principle that has been implemented into the UK's domestic legislation. Paragraph (c) deals with dose limits and it says that exposure of individuals resulting from the combination of all the relevant practices should be subject to dose limits. If I could ask you to turn over the page you will see at paragraph 191 the ICRP establishes the basic 1 mSv dose limit which is obviously a key standard in this case. Again the 1 mSv limit has become part of European and domestic legislation through Directive 96/29. You should also know that the NRPB, National Radiation Protection Board, has recommended that exposure to members of the public from a single new source of ionising radiation should not exceed 0.3 mSv, and this recommendation has been adopted by the United Kingdom Government in 1995. So for a single facility you have a 0.3 mSv constraint and also for single site you have a 0.5 mSv per year constraint.

If we recall what you have been told about natural background radiation levels, in both the UK and Ireland, I would like to bring to your attention four important benchmarks. One is natural background radiation, which is 2.2 mSvs in the United Kingdom and 3.6 mSvs in Ireland. Second is the limit on radiation from all manmade sources of 1 mSv. Third is the single site constraint in the United Kingdom of 0.5 mSv. Fourth is the single and new source constraint of 0.3 mSv. Ireland says "Well slightly so what? Because you, the United Kingdom, are always focusing on doses to humans, these ICRP limits and constraints are concerned with doses to humans, what about protecting the environment?" There are three answers to this. The first is contained in ICRP 60. If I could ask you just to turn back to paragraph 16, which unfortunately has been chopped off, it is Annex 19 of the UK Counter Memorial. I will tell you what it says. "The Commission believes that the standard of environmental control needed to protect man to the degree currently thought desirable will ensure that other species are not put at risk. Occasionally, individual members of non-human species might be harmed, but not to the extent of endangering whole species or creating imbalances between species."

ICRP 60 is the standard that has been applicable at all material times. Therefore, in applying ICRP 60 and the standards coming therefrom, the United Kingdom has been protecting the environment.

Ireland has said, through Professor Sands, that there has been a change of approach, but the Attorney-General has already taken you to the document on which Professor Sands relied. All it is saying is that there is a conceptual change and there will be, or there may be, a framework, a practical tool, to provide high-level advice and guidance, but, in fact, the document on which Professor Sands relied shows that that high-level advice and guidance is not going to be in place until 2005. On a provisional measures application, which is, of course, an exceptional remedy, the United Kingdom's conduct cannot possibly be judged by a guidance which is not yet in place and which is not going to be

in place until 2005.

In addition, impacts of radiation to the marine environment, specifically to the marine environment (ie not to humans), have been a focus of international attention for many years. The IAEA of which the United Kingdom and Ireland are both members has elaborated an array of principles, guidelines, standards and regulations that cover safety at nuclear installations, radiation protection, the management of radioactive waste, transport safety and physical protection of nuclear material. Of particular importance for this hearing is what it has established in relation to the protection of aquatic species. If I can ask you to turn on still in tab 17 to 17B, we have the 1992 document of the IAEA, "The effects of Ionising Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards". There you will see a reference to something which looks rather difficult to decipher. It is a reference to one milligray per day. One milligray per day equates to 400 micrograys per hour. 400 micrograys per hour is a standard that I want to keep on coming back to, because, in relation to that 400 micrograys per hour standard, which is there to protect the environment, the emissions from MOX are absolutely minuscule and the emissions from THORP are also very, very small indeed. Just to look at what it says in the conclusion at 4.2(a): "There is no convincing evidence from the scientific literature that chronic radiation dose rates below 400 micrograys per hour will harm animal or plant populations". Then it goes on, effectively, to justify the ICRP 60 approach by reference to what happens if you are applying a 1 mSv limit to protect the human population. It is highly probable that limitation of the exposure of the most exposed humans, the critical human group, living on and receiving full sustenance from the local area to 1 mSv will lead to dose rates to plants and animals in the same area of less than 400 micrograys per hour. Therefore, specific radiation protection standards for non-human biota are not needed."

There you can see where the IAEA was coming from. We can see that the approach adopted in ICRP 60 was far from outlandish.

If I can ask you then to turn on to the next document in tab 17, tab 17C, this is an UNSCEAR report of 1996. If I can ask you very quickly to look at paragraph 2, which is on the backside of the cover page, and just to flag up for your attention there, half way down, "The Committee wishes to acknowledge the assistance of a small group of scientists in the preparation of the scientific annex". One of the people there referred to is Denis Woodhead, the principal consultant. Dr Woodhead has agreed to be one of the United Kingdom's experts in this case. His evidence is extremely important, because he is somebody who has been looking specifically at the impacts of Sellafield discharges on marine biota since the late 1960s. You have in your annexes evidence from Dr Woodhead which shows that there have been no significant impacts to marine biota even at the times when Sellafield discharges were many, many times higher than they are today. I will take you to the precise figures on that in a moment.

If I can ask you to turn to page 43 of this document, paragraph 176, at the bottom, you will see the sentence stating "Overall consideration". "Overall consideration of the data available for the effects of chronic irradiation on aquatic organisms has led to the conclusion that dose rates up to 400

micrograys per hour to a small proportion of the individuals in aquatic populations and, therefore, lower average dose rates to the whole population, would not have any detrimental effects at the population level". There we are, the 400 microgray per hour standard.

While we are still looking at the international plane, I would like very briefly to look at the question of research. How much knowledge is actually known about harm to the marine environment? In his evidence, Dr Woodhead stated that there is a very substantial body of knowledge built up over four or five decades by research both in the UK and internationally about the behaviour of radionuclides discharges into the Irish Sea. The publications of Dr Woodhead alone that are referenced in this reports, and which deal specifically with impacts of Sellafield or impacts of the radionuclides generally on the marine environment, are 38. That is quite impressive for one person alone.

What do Ireland's experts say to that? Dr Salbu, about whom you have heard something already, particularly from Mr Fitzsimons last Tuesday, said that she fully agreed with most of Dr Woodhead's statements and expressly agreed that there was a substantial body of knowledge about radionuclides released into the Irish Sea. Dr Salbu takes certain points against Dr Woodhead. I am not going to pretend that there is complete agreement between them. But her points of disagreement mainly focus on technetium-99, which is not an issue in this case, because there is no technetium-99 from the MOX plant. The technetium-99 from THORP is something in the region of 0.05 per cent of the total technetium-99 from Sellafield. It is not an issue in this case.

I might just also refer to the Marina II study on this point. The Marine II study is a very significant European study carried out in recent years. It was published, I think, in August 2002. It was referred to by the Attorney-General for Ireland in his opening last Tuesday.

It says the "The area surrounding Sellafield is by far the most studied area in terms of doses to critical groups". It refers to the fact that the environment and foodstuffs are also closely monitored.

The third point in terms of Ireland saying that the UK is focusing exclusively on radiation doses is that it is just simply wrong. The UK's approach is to go beyond the applicable ICRP standard. This is a point that we will be making good later when we come to the argument that somehow the United Kingdom's consideration of abatement technologies warrants this Tribunal's intervention.

There are three conclusions. The 400 microgray standard is there; there has been very considerable research; and the UK is at the forefront of the development in this area.

I move on to regulations and standards at the regional level. Obviously, the key standards are contained in EC and Euratom legislation. A copy of Directive 96/29 is to be found at tab 18 of your bundle. I will just take you to this very quickly. You will see in the preamble towards the bottom there is a specific reference to ICRP 60, "Whereas the development of scientific knowledge concerning radiation protection as expressed in particular in Recommendation No. 60 of the ICRP makes it convenient to revise the basic standards and to lay them down in a new legal instrument". Euratom is revising its existing regulations on the basis of ICRP 60.

PROFESSOR CRAWFORD: What progress has been made with that revision?

MR WORDSWORTH: In terms of the revision of ICRP 60?

PROFESSOR CRAWFORD: Well, in terms of revising the basic standards and laying them down in a new legal instrument?

MR WORDSWORTH: This is what Directive 96/29 does.

If I can ask you to turn to page 6 of document, which I apologise for having taken it from the internet and therefore not being easy to find your way around it, just above Article 6, under Chapter 1, "General Principles", you will see "Title 4", "Justification, Optimisation and Dose Limitation Practices" - so those three standards that I referred you to in ICRP 60.

Article 6(1) "Member States shall ensure that all new classes or types of practice resulting in exposure to ionising 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". That is a process that has been gone through for the MOX plant.

Paragraph (3) of Article 6, "In addition, each Member State shall ensure that, in the context of the optimisation of all exposures ... shall be kept as low as reasonably achievable, economic and social factors being taken into account". That is a key principle of Euratom and domestic radiological protection.

At Article 13(2) you have the dose limits set out. The limit for effective dose shall be 1 mSv in a year. "However, in special circumstances a higher effective dose may be authorised in a single year, provided the average over five consecutive years does not exceed 1 mSv". Again, 1 mSv per year is the established limit.

You have already heard a good deal about the second limb of radiological protection, which has been laid down by Euratom, Article 37 of the Euratom Treaty. As you already know, there is an Article 37 Opinion in 1992 with respect to THORP and the MOX plant in 1997. The Attorney-General referred to the dispute about whether Article 37 looks to human health alone. There are two European Court of Justice authorities on this and one of them is in your folder at tab 19. It is a recent case. You will see the judgment was given on 10th December 2002. If I could ask you to turn to paragraph 79 of that judgment, where there is a reference back to the earlier decision of the Court in Saarland. It is the judgment in the case 187/87 Saarland. "In a case where the main proceedings concerned the Catanom Nuclear Power Station, France, the Court held that the provisions of the main chapter of the Euratom Treaty entitled 'Health and Safety' form a coherent whole conferring on the Commission powers of some considerable scope in order to protect the population and the environment against the risks of nuclear contamination". That is a case we have referred to in both our Counter Memorial and in our Rejoinder. The fact that Ireland has not brought you back to it perhaps speaks volumes.

The third limb of protection laid down in European law, EC law this time, is, of course, Directive 85/337, which is vital in the context of Ireland's allegation that the UK has breached Article 206 of UNCLOS by a failure to assess the potential effects of the MOX plant on the marine environment. Ireland's case, as I now understand - and I do not really follow it that easily - is that Directive 85/337 establishes some sort of a minimum standard so far as Article 206 is concerned. It is still very much part of Ireland's case, although quite how is unclear.

In terms of ongoing research into the marine environment, I might refer to the EC's FASSET programme. FASSET aims at developing by 2004, so in a year's time, a framework for the protection of the environment from ionising radiation in Europe and in The Arctic. The United Kingdom's Environment Agency is an active participant in the FASSET programme.

This is all legislation of which Ireland has been very shy indeed except to bring it in when it seemed that it was in its interests in its Memorial in terms of the definition of Article 206.

Ireland has focused almost exclusively on the OSPAR Convention and the Sintra Statement. I am not going to take you back to any of that, because Mr Bethlehem took you to it all last Thursday. But I should say quite clearly that the UK's case is certainly not that OSPAR and documents generated within OSPAR are irrelevant to discharges from the Sellafield site. Quite to the contrary, the United Kingdom has been taking some very extensive steps to meet its OSPAR commitments. I will show you that a little later, perhaps by reference to some of the documents.

Of course, the point was made by Mr Bethlehem last week that Ireland's claims raising questions arising directly under other legal instruments are inadmissible and there is a finding, at least in some sense to that effect, in paragraph 5 of the Statement by the President of last Friday.

I now move on to domestic regulatory authorities and regulations. I should make very clear that the ongoing operations at Sellafield, including the operation at the MOX plant, including the operation at THORP, are subject to a highly-developed domestic regulatory regime. There have been four key authorisations in this case. I will just run through these very briefly indeed. There has been a planning consent, which was made in 1994 after the 1993 Environmental Statement of BNFL (that is a statement to which supplemental information was provided on two occasions). The document that you have in volume 3(2) of Ireland's Memorial is not the complete document. Second, of course, has been the Article 37 Opinion of which we have heard a fair deal. Third, there has been justification pursuant to Directive 96/29. That is what the decision of October 2001 is all about.

Ireland has made a big deal of this and Professor Sands came back to this last Tuesday, making the point that the decision of 3rd October 2001 was based, by reference to the 1998 Proposed Decision of the Environment Agency, which, in turn, went back to the 1993 Environmental Statement. That is just wrong. We have made that point again in the Counter Memorial and in the Rejoinder. The dose calculations in the Environment Agency's document, Proposed Decision, of October 1998 are independent estimates carried out by the Ministry of Agriculture, Fisheries and Food. They have nothing to do with the 1993 Environmental Statement. That is A4.95 of the 1998 Proposed Decision.

Mr Fitzsimons has also made the point that the Proposed Decision or the justification process is to be criticised because it did not consider THORP. One would deduce from that that THORP had somehow not been subjected to its own independent justification process. Of course, it has.

Again, you have been told on countless occasions that THORP itself has not been subject to an environmental impact assessment. Well, it is the case that all the planning consent issues in relation to THORP arise before Directive 85/337 came into force, but that does not mean that here has not been an adequate assessment of environmental impacts. That submission has been tested in the English High

Court. It is a decision of 1994 by Potts J where precisely this argument was raised. Potts J decided that, although Directive 85/337 had not applied, its substantive requirements had been met. Again, that is a point that we have made again and again that Ireland has not grappled with.

My bull-point conclusion is that there is applicable law regulating the emissions, such as they are, from the MOX plant. The MOX plant has been authorised in accordance with the applicable law; precisely the point, of course, applies in relation to THORP.

If I can just move on a little bit and just have a look at the general regulation of the Sellafield site, because, obviously, Ireland in a none too subtle way has been trying to turn this case from the MOX plant case to the THORP case and to the Sellafield case to give the impression that the only efficient thing about the site is the pipeline that pumps nuclear fluids into the Irish Sea. That is quite absurd and I want to make three points about the regulation of the Sellafield site.

The first point is that the site is regulated by the Environment Agency under the Radioactive Substances Act. So far as discharges are concerned, the Environment Agency deals with discharges. Safety issues are dealt with by the Health and Safety Executive through the Nuclear Installations Inspectorate.

If I can just take you to the Environment Act 1995 very briefly, which is at tab 20 of your Judges' folder, just so as you get a bit of flavour for the regulatory background and what the Environment Agency has to do as a matter of statute. If I could ask you to turn to page 4 of tab 20, just to look at the principal aim of the Environment Agency. Section 4(1)of the Act, "It shall be the principal aim of the Agency, subject to and in accordance with the provisions of this Act or any other enactment and taking into account any likely costs in discharging its functions, so to protect or enhance the environment taken as a whole as to make the contribution towards obtaining the objective of achieving sustainable development mentioned in subsection 3 below."

I am not going to take you to subsection 3 now, but if I could ask you to move on to look at section 5(1) called "General functions with respect to pollution and control".

"The Agency's pollution and control powers shall be exercisable for the purpose of preventing or minimising or remedying or mitigating the effects of pollution of the environment" - prevent or minimise, remedy.

Just over the page, at section 6(1) there is a specific provision in the Act which deals with protection of water resources. "It shall be the duty of the Agency to such extent as it considers desirable generally to promote" - and, perhaps, it is subsection (b) that is most relevant to this application - "the conservation of flora and fauna which are dependent on an aquatic environment".

I emphasise the words "to the extent that it considers desirable" because the Environment Agency is independent form the United Kingdom Government.

PROFESSOR HAFNER: Since we have been faced with a certain development in the definition of "environment" also in the various international instruments, could you indicate to me whether this Act contains a definition of "the environment"?

MR WORDSWORTH: I do not believe that it does is the answer to that. I will look at that as soon as I get back

and come back to you with an answer to that tomorrow.

PROFESSOR HAFNER: May I explain the reason for my question? We face a certain development in the definition from a anthropocentric definition of "environment" to a more general non-anthropocentric definition, so it would be quite interesting to see which of these definitions is used here.

MR WORDSWORTH: The Environment Agency's remit, as you have already seen from section 6(1) that I have taken you to, is specifically to be protecting, for example, aquatic biota. It is not looking at it purely from a human point of view.

Those are the basic points that I wanted to make on the Environment Agency. I should just add that it is also required by the Basic Safety Standards Directive 2000, which is implementing legislation in the United Kingdom, to ensure that certain provisions of Directive 96/29 Euratom, and notably dose limits, are complied with. I have already referred to the fact that there are independent NRPB generated dose constraints of 0.5 and 0.3 mSvs per year, respectively, for single sites and single facilities.

The second point that I want to make about regulation of the Sellafield site is something that I really do not think that you would have understood at all, which is the fact that in the period 2000 to 2002 the Environment Agency has been engaged in a very detailed review of the discharges from the Sellafield site, which has involved the production of various very extensive documents and various public consultations in which Ireland has been involved. It has split the review exercise into two parts. Part 1 has been looking at technetium-99 discharges and, as I have already made the point, technetium-99 is not relevant to this case. I should also add that technetium-99 is not harmful in the way that Ireland seems to have been suggesting. I think particularly the Attorney-General for Ireland seemed to say last Tuesday that it had a particular radiological significance. According to an OSPAR report, technetium is of a low radiological significance. If I can just give you a reference to that, that is in our Counter Memorial at paragraph 3.50, subparagraph 3.

So much for technetium-99. The Environment Agency has also carried out a detailed review of discharges from all the other radionuclides at the Sellafield site. There is an Explanatory Document of July 2001, which is a very, very substantial document. I wish that I had a copy here to show to you. Unfortunately, I do not. It is back at the hotel. Certain extracts from that document have been put into your folders, so you can just get a feel of the document. I have to say that, if this really were the Sellafield site case, we, the parties, would be having to take you to these documents in extraordinary detail, so that you could see precisely what was happening, how different radionuclides were being regulated, what the specific impacts of individual radionuclides were, and the like.

There is an extract from the July 2001 Explanatory Document at tab 21 of your bundle. If I can just draw your attention to the aims under paragraph 4.2, just casting one's eye down the bullet points, one sees "to strengthen the requirements of the authorisations", to "check that BPEO is currently being used", "best practical and environmental options", to "tighten the regulation of discharges", "where appropriate to introduce new waste disposal limits", to "ensure that headroom is lowered" - that is the gap between actual discharges and discharge limits - to "ensure that any proposed limits will enable BNFL to continue the treatment of the legacy of stored liquid wastes and thereby to reduce the hazard

and potential risk from such wastes".

Again, Ireland is giving you the impression that Sellafield is just a commercial site. It is just there for BNFL to make the profits that it sees fit. That is completely wrong. There are very important non-commercial activities at Sellafield. One of these is the clear up of these historic legacy wastes. In fact, it is the clearance of such historic legacy wastes that has led to the discharge of this technetium-99, because that is actually caused by a new abatement plant called EARP, which came on stream in 1994 and is treating 1970 wastes, inter alia. That is an extremely efficient plant and it is one of the plants responsible for a dramatic reduction in levels of Sellafield discharges, but, unfortunately, it does not treat technetium-99.

There you have a flavour of the aims and background to the Sellafield review. If I could just ask you to turn to the next tab of your Judges' folder, appendix 6, Review of BPEO, BPM for waste disposals. If we have time, hopefully we will be able to come back to this document, because it is an extraordinarily important document. This is all the Environment Agency's consideration of abatement techniques. The basic point is that Ireland's expert, Dr Barnaby, has, as it were, suggested certain abatement methods and these have been picked up in Ireland's Memorial and Dr Barnaby's suggestions are set out twice, I think, in Chapter 9 of Ireland's Memorial. Then Mr Killick makes further comments on these. Then one thinks, well, this is extraordinary. Ireland is suggesting things that the United Kingdom has not even thought about. Of course, that is completely and utterly wrong. All Dr Barnaby has done is to go through this document, which I have to say is made up of three basic things: one is the BNFL proposal as to the abatement method; the second thing is the detailed assessment of that method by the Environment Agency; and the third thing is the Environment Agency's conclusion. All Dr Barnaby has done is to go through this and pick up from the BNFL suggestion as to what the abatement technique might be and put that forward as if it were his own suggestion. It is quite extraordinary. He has taken no steps whatsoever to look at what the Environment Agency said and he has taken no steps whatsoever to look at what the Environment Agency concluded. If we have time tomorrow, we will take you back to this document in just a little more detail.

If I could ask you to turn over the tab, appendix 7 of this document is a review of discharge limits. That is tab 23. Appendix 8 is the radiological assessment. I should say that this radiological assessment in Appendix 8 specifically considers radiological impact of liquid discharges on marine biota; again not a fact that Ireland has been bringing to your attention.

MAITRE FORTIER: Tab 23 begins with Appendix 7. Where does Appendix 8 begin?

MR WORDSWORTH: I am sorry that it is not tabbed for you. You will see that Appendix 7 has 86 pages on a review of discharge limits - that Ireland has not taken you to. Then we have Appendix 8, radiological assessment. For example, if I might ask you to turn to A8.59, where the Environment Agency is specifically considering the issue of the radiological impact of liquid discharges on marine fauna. There you see the Agency has sought an assessment of radiation doses to non-human biota from CEFAS. CEFAS has assessed the radiation dose to representative marine fauna. There you see there is also a reference to the techniques from Dr Woodhead. Then it goes into that in a little more detail.

That was the Explanatory Document. The detailed Explanatory Document is then put forward for public consultation in which Ireland participates. That public consultation lasts five months, as I recall. The new document that you have just been handed up at tab 24 is actually the summary of the Proposed Decision. Again, the Proposed Decision itself is quite a substantial document. It is not as substantial as the Explanatory Document because it does not have the same supporting information. If I could ask you to flip through this, for example, on page 7 there is a heading "Longer term limits to meet OSPAR objectives". This is again quite important, because this is the Environment Agency explaining why it does not think that it is appropriate to have a year-on-year calendar reduction in order to meet the OSPAR commitment. There are different ways of doing things. It is not an issue for this application and we submit that it is not an issue for the case at all as to how the United Kingdom meets its OSPAR commitments by 2020, but there you are, you can see that the Environment Agency is looking at the issue and coming up with its way of dealing with it.

Perhaps, we could just flip through to page 15, assessment of BPEO for individual radionuclides. You see the Environment Agency taking them in turn and seeing what the best practical environmental option is. On page 16 there is a recommendation in relation to further environmental monitoring programmes. Over the page, you will see a reference to a specific abatement technical at THORP that has been recommended by the Environment Agency. Again, on the right-hand page, there you will see some other ones iodine-129, krypton-85 - these are not things that Ireland has taken you to.

On page 20 there is again further monitoring, specifically environmental monitoring requirements. Underneath that, further specific measures to reduce discharges, under that a review of developments in best practices and, over the page, effect of discharges on ecosystems and wildlife. Again, this is all material that is completely new to you that Ireland has not focused on, although it does have these documents. We submit that this is documentation that Ireland should have been taking you to, because it is asking you to make an exceptional and interventionist order. It is asking you, effectively, to step into the shoes of the regulator and add your own layer of regulation to the Sellafield site. If it is going to do that, it should at least be taking steps to show, here is the existing regulation, we think that it is inadequate for the following reasons, one, two, three. It simply has not done that.

For the third point in terms of the Sellafield regime, I just want to turn to the next document, which is the document that Professor Sands spent a good deal of time on last Wednesday. This is a document which is really now the foundation of the whole of Ireland's case, which appears very strange indeed. If I can just take a moment or two to look at the allegations that Professor Sands made last Wednesday by reference to this document and also, particularly, by reference to Ireland's expert, Mr Killick, though why it might be thought that Mr Killick had anything in particular to offer to you by way of interpreting and applying the Sintra statement I have no idea whatsoever. He is not a lawyer. He is certainly not an international lawyer. So how he could assist and why Ireland is bringing its case in terms of the interpretation and application of the Sintra statement by reference to Mr Killick, I have no idea. Professor Sands placed reliance on paragraph 2.41 of Mr Killick's report, where he says, "The Sintra obligations of achieving concentrations in the environment close to zero is not mentioned as part

of the Strategy". Reliance was also placed on paragraph 2.42 of Mr Killick's report. "Secondly, the requirement of the Sintra obligations for sustained and progressive reductions is not met".

If I can ask you just to turn over, you will see the Foreword there, the very start of this document, is looking at the OSPAR Strategy and you will see half way down, "The objective of the Strategy is to prevent pollution of the maritime area as defined under the Convention from ionising radiation through progressive and substantial reductions of discharges, emissions and losses of radioactive substances. The ultimate aim is to achieve concentrations in the environment to near background levels and naturally occurring radioactive substances and close to zero for artificial radioactive substances."

If you look across the page there, you will see, under paragraph 2, that language being picked up specifically by reference to what the aims of this Strategy 2001 to 2020 are. That is in paragraph 2 of this document. If I can just ask you to cast an eye down the next few paragraphs, "The UK Government's view is that the unnecessary introduction of radioactivity into the environment is undesirable even at levels where the doses to both human and non-human species are low and on the basis of current knowledge are unlikely to cause harm". We say that, even if they are low, we still think they are undesirable.

Paragraph 4, I flagged up earlier, I just wanted to come back to the point of how successful BPM has been in terms of regulation of the Sellafield site. You will see in the middle there, "Total discharges of beta activity from BNFL's site at Sellafield have already been reduced to less than 1 per cent at their peak levels in the 1970s and alpha discharges to just 0.06 per cent of peak levels". Again, if Ireland is saying that you must intervene in some way because there is an abatement problem at the Sellafield site, this would be rather a material fact to see how well abatement techniques are proceeding.

Just over the page, at paragraph 5, if I can ask you to look at the United Kingdom's application of the ALARA principle. It is just referring to the fact that ALARA is a requirement in the UK and European law. Half way down the paragraph, "The Government considers that applying the ALARA principle will reduce discharges sufficiently to achieve that objective. In the unlikely event that it appeared that the application of ALARA and BPM would not deliver the objective of the OSPAR Strategy, the Government would urgently review this Strategy." It is not even as if the Government is saying, "Oh well, this is our Strategy and we are not changing it". It is saying, "If it does not work, we will review it". It seems to us that it is fairly extraordinary, to put it at its lowest, that Ireland is bringing a case in relation to the Strategy document. Obviously, one has to bear in mind all the problems on jurisdiction and applicable law and the obvious problem in fact that the obligation or the commitment under the Sintra Statement does not come into play until 2020, and it is now 2003.

If I can just make some very brief conclusions on the applicable international, European, domestic regulatory background, of particular importance is the ICRP recommended 1 mSv dose limit. Then we have the European 0.5 mSv single dose constraint. Then we have the United Kingdom 0.3 mSv single new facility dose constraint. Then we have the IAEA and UNSCEAR 400 microgray per hour standard. One thing that, again, Professor Sands did not take you to in the 2003 memorandum of the

ICRP is an extract which says that, if the effective dose to the most exposed is, or will be, less than 0.01 mSv in a year, then the consequent risk is negligible.

That is another important benchmark to bear in mind because what this recent ICRP memorandum goes on to say is that, if it is less than 0.01 mSv, it is negligible and you do not have to be concerned about regulating that discharge. The emissions from the MOX plant are many orders of magnitude below 0.01 mSv per year. Yet they are regulated by the United Kingdom in the different ways that I briefly took you to.

As for the discharges from THORP about which you have heard so much, and from which you must have built up a picture of it being a very heavy polluter - the effective dose for the critical group is around 0.01 mSv. It is around the level that the latest ICRP Memorandum 2003 is saying is negligible. I think that the reference for that in our Rejoinder document is Annex 44, paragraphs 8.18 to 8.19. That is to be found in the Judge's folder at tab 5, page 135. Despite the fact that the emissions from THORP are around the level which ICRP suggests is negligible, of course, they are heavily regulated by the United Kingdom.

Perhaps I could just deal very briefly with Ireland's suggestion that somehow you should be applying the London Dumping Convention and somehow the de minimis principle is of relevance to this Tribunal.

The London Dumping Convention has nothing to do with discharges from land-based sources, so, if Ireland is taking you to the applicable international law, that is a very odd place to start. If one were to look at the de minimis provisions of the London Dumping Convention, there is a strong argument that the emissions from the MOX plant would fall within those criteria and the effect of falling within the de minimis criteria, as I understand it, is that the activity of dumping is no longer subject to regulation. That is so obviously not the approach of the United Kingdom in relation to the MOX plant. However small the emissions are, however pertinent and obvious the fact that they are only a millionth of the natural background radiation, nonetheless, the MOX plant is subject to this extensive system of regulation.

If I can just conclude on this brief run-through of the applicable and relevant regulatory background by saying that the United Kingdom treats the regulation of its nuclear industry as a matter of the utmost seriousness and has demanded and will continue to demand compliance with stringent regulations that go beyond what is required as a matter of international and European law. The assertion of Mr Fitzsimons that it treats such matters in a casual and offhand way is, to use the polite term, regrettable.

I move on to the second stage of the argument. I had started off by looking at Professor Sands' Agenda 21 reference and I have shown you what the applicable international standards and guidelines are. So what about the evidence? What is the evidence of harm? Is there any evidence that the current emissions are so harmful that this Tribunal must intervene? The effect of your intervention is to stop the lawful operation of the MOX plant and the lawful operation of THORP and to make this series of orders that has been sought on cooperation and environmental assessment.

These submissions, I have to say, are directed to the whole of Ireland's request. I understand President Mensah's request that we should be looking at the paragraphs of the order one by one. The Attorney-General will be returning to do that tomorrow, of course. But these submissions are going to say that you should not be making any order at all, because Ireland is coming nowhere near meeting the applicable thresholds for your intervention.

There are two broad issues before the Tribunal on this application. One, is there any real risk of serious harm to the marine environment from the MOX plant or, put another way, is there a situation of urgency requiring the protection of any rights of Ireland against irreparable prejudice? The same questions we will deal with in respect of THORP, although obviously our position is that any issues of THORP are outside the scope of this application and current discharges from THORP are completely outside the scope of this case. Is there any real risk of serious harm to the marine environment from THORP? Is there a situation of urgency requiring the protection of any rights of Ireland against irreparable prejudice?

The Attorney-General in opening took you to the submission of the Attorney-General for Ireland last Tuesday, to the effect that the level of discharges from the MOX plant is not of a significant magnitude. The Attorney-General also made the point that, in a sense, one is tempted not to go very much further, because it is not plausible to say, on the one hand, not of significant magnitude and, on the other hand, to say a risk of serious harm or irreparable prejudice. It is simply not plausible. These submissions simply address the issue of why the Attorney-General of Ireland made the concession that he did.

The basic point in relation to the MOX plant is that it is a dry process and it does not generate any radioactive liquid discharge at all. The liquid wastes from the MOX plant are solely incidental. They are wastes from water used in washing the floors of the plant and washing assembly equipment. There are some atmospheric discharges also, which is particularly the release of air circulating in the plant. Because of the nature of the MOX process, the emissions are infinitesimally small. The Attorney-General has already taken you to the 1998 Proposed Decision of the Environment Agency where it is reflected that the assessed dose due to gaseous and liquid discharges from the MOX plant is less than one millionth of that due to natural background radiation.

There is no challenge to that from Ireland in its pleadings. There was a suggestion, as the Attorney-General mentioned, from Mr Fitzsimons that, maybe, this was not a reliable estimate. That seems a fairly astonishing submission, given the fact that Ireland has had these figures for so long, if it had sought to challenge them in any genuine way, it would have done so a very long time ago. It would have done so, for example, at the time that it was looking at the 1993 Environmental Statement. It would have done so during one of the five public consultations in the course of the justification exercise. I think that it is rather late in the day to float up in front of you the spectre that somehow these figures might be wrong. I also stress the fact that the 1998 Proposed Decision figures are from independent estimates carried through by MAFF. They are nothing to do with the 1993 BNFL Statement.

The dose figures, if I can just face just putting a few zeros into the transcript, perhaps I will skip over that and just put it into normal language. The annual liquid discharges from the MOX plant are 3 millionths of a millionth of a sievert. So 3 millionths of a millionth of a sievert is to be compared to the ICRP Euratom limit of one mSv. Of course Ireland is concerned in this case with liquid discharges, this is its case, that the United Kingdom is pumping effluent into the Irish Sea. It makes a half submission in relation to aerial emissions. This does not get it very far, because somehow it has to get the aerial emissions blowing offshore and into the Irish Sea. We certainly do not contest that that may happen to a degree, but it is certainly not going to get Ireland very far out of the starting blocks. The aerial emissions from the MOX plant are still two-thousandths of a millionth of a sievert, so that is pretty small as well compared to the ICRP 60 and Euratom 96/29 limit.

Just in terms of the single new source of radiation constraint figure that I just mentioned a short while ago, this is 0.3 mSv per year. The liquid discharges from the MOX plant are 100 millionth of that dose constraint figure, and the aerial emissions are less than 100,000th of that constraint.

A point has been made by Professor Sands that any atom of radionuclide can give rise to a risk of cancer and harm and therefore somehow to pollution of the Irish Sea. That is not a compelling submission and just to give some perspective to the cancer risk, the dose from the MOX plant gives rise to an annual risk in the United Kingdom of developing a fatal cancer of 1 in 10 billion people, which is considerably higher than the population of the United Kingdom.

Just to give that 1 in 10 billion figure a little bit of a flavour, the general risk of death from cancer in Ireland is 1 in 479 in any year. With those two figures in mind, one begins to understand why Ireland has struggled to say that these emissions have any radiological significance at all. They do not.

The dose to the critical group in Ireland is even smaller, of course it is, because somehow these minuscule emissions have got to get across towards Ireland. I will not take you to this now, but in tab 26 of your judges folder there are extracts from the Article 37 Submission of the United Kingdom under Article 37 Euratom and that specifically addresses the issue of whether the MOX plant leads to any significant impact to Ireland and unsurprisingly the answer is "No, it does not". Another interesting feature of this Article 37 Submission is that it also notes the gyre to which Mr Fitzsimons brought your attention last Tuesday, that somehow a movement of water in the Irish Sea which is a seasonal feature could radically change the face of this case. Of course it cannot, and that is dealt with in our expert evidence. Just so that you know it is a factor that was brought to the attention of the European Commission.

In its provisional measures application Ireland has also been focusing on risks from accidental discharges. Again these risks are addressed in the Article 37 Submission and they are found to have been of no significance. If I could ask you to turn to page 35 of the Article 37 Submission, 6.2 is the reference accident, and this is chosen to be the worst case potential fault conditions, having the greatest release of radioactive material which is considered credible. Then 6.3,

radiological consequences of the reference accident. Over the page at 6.4 emergency planning, and 6.4.5 we have a reference to arrangements with EC Member States. The Article 37 Opinion obviously assesses the data that is supplied in relation to the reference accident and the Attorney-General has already taken you to its conclusion, that in the event of unplanned discharges of radioactive waste the doses likely to be received by the population in other Member States would not be significant from the health point of view. So that deals with accidental discharges so far as this Article 37 Submission is concerned.

I would like to refer you to the evidence of Mr Clarke, who is BNFL's head of safety and who explains in considerable detail in his first witness statement, paras 96-114, why the MOX plant is safe.

Our submission is that the unplanned discharge that Ireland has been relying on has been considered and has been quantified and has been addressed, as Mr Clarke's evidence shows, at both the design and operational stages. The Attorney-General for Ireland has sought to make something of the data falsification incident and to suggest that somehow that means there is a safety issue at the Sellafield site. That is wrong and I would refer you to an extract from the evidence of Mr Clarke, para 72.2, footnote 31 of his first statement, the key point in his evidence is as follows: "Although Ireland attempts to place great importance on the above incident in its Memorial", and I should say it made precisely the same points in front of ITLOS as well 18 months ago, "it is apparent that there was and is no safety implication flowing from the incident. While the incident was obviously regrettably it was essentially a quality issue which has been addressed and has no impact on the operation of the MOX plant". He says that because the data falsification incident had nothing whatsoever to do with the MOX plant. It was to do with the MDF facility, the MOX demonstration facility. The MDF uses a completely different technique to the MOX plant in terms of this issue of sizing MOX pellets. In the MDF facility it is manual and in the MOX plant it is automatic. The same quality control issue simply cannot arise.

So the conclusion in relation to doses to humans whether regular, whether accidental doses, is that they are infinitesimally small. In terms of the does to marine biota because of Ireland's position that this is all about marine biota, we have assessed those too. If I can ask you to bear in mind the 400 micrograys per hour standard threshold set by the IAEA and UNSCEAR. In tab 27 in your folder we have set out some extracts from the report of Professor Jones, and if you could look at section 8.2, this deals with doses to organisms in the Cumbrian coastal area which as the Attorney-General has explained is the part of the Irish Sea close to Sellafield. You will see five paragraphs down "even in the Irish Sea close to Sellafield for all organisms the contribution to doses resulting from discharges from SNP is exceedingly small, being at most few millionths of a microgray per hour and in many cases some orders of magnitude lower still". So that is, to put it at its lowest, considerably lower than the 400 microgray per hour standards.

If you turn over the page, you see doses to organisms in the western Irish Sea, so obviously we are going over closer to Irish shores, and the last sentence there, the contribution to SMP

discharges is much lower still, being of the order of hundredths of millionths of micrograys per hour. So hundredths of millionths of micrograys per hour is to be compared to the IAA and UNSCEAR standard.

The conclusion the Attorney-General has taken you to, at the back of this tab and there you will see how the "contribution of discharges from SMP to radiation doses received by marine organisms in both the Western Irish Sea and Cumbrian coastal waters are vanishingly small and of no possible conceivable significance".

That is Professor Jones's report.

MR FORTIER: Was this report prepared in connection with this dispute at all?

MR WORDSWORTH: Yes, it was, sir. This is Annex 39 to our Rejoinder and I understand your puzzlement. Your puzzlement is caused by the fact that Ireland has never mentioned this report to you in the two and a half days of submissions which were made on the facts and the issue of whether there is serious harm to come from the commissioning of the MOX plant.

MR FORTIER: My puzzlement stems from the fact that I have no recollection of having seen it in the Rejoinder, but obviously it was there. It has nothing to do with the presentation or absence thereof by the Irish Sea.

MR WORDSWORTH: Professor Jones' report is bang on point and addresses the issue of impacts to marine biota in the way that Ireland wants to see them addressed instead of merely by reference to the ICRP 60 standard. Mr Fitzsimons did make one point which is to say that it was the nature of the discharges and the pollution thereby caused, not the amount of the discharges that has put the UK in breach of UNCLOS. That is Day 1 page 44 line 30. This evidence does consider the nature of the discharges and their impacts on human and nonhuman biota. The answer is unequivocal. The impacts are negligible. Professor Sands' claim that Ireland would not be able to repair the consequences of three or five years of discharges, and that the Tribunal should therefore effectively halt all the discharges from the MOX plant, was with due respect slightly absurd. I do not want to make a direct comparison or say this has any particular scientific weight to it, but I think in assessing what he is saying one should bear in mind that the consequences of MOX plant operation are not that different from throwing a bag of Brazil nuts into the Irish Sea.

If Ireland is right that a single atom of a radionuclide is pollution that must be halted by your exceptional intervention this will have serious ramifications. I refer you back again to the Marina II study which is Counter Memorial Annex 19, Annex D, page 18. I do not ask you to turn to it now, but just so that you know the biggest contributor to the collective dose is discharges from the NORM, that is the naturally occurring radioactive materials industry. So the NORM industries are the biggest contributors to the radiation dose. Particularly the phosphate industry. "As discharges from the discharges industry into the Northern European waters have fallen discharges of radionuclides with produced water from the oil and gas industry have become more important". In fact it appears from Marina II study, the Executive Summary at page 4, that oil production is currently the major contributor.

If I can deal quickly with Professor Sands' reference to the Savannah River MOX facility, and he is making the point that this gives rise to no liquid discharge at all. Well, that is not right. The Savannah Plant employs a polishing process, which is different to the MOX plant, and that does create liquid effluent. That high alpha liquid effluent from the Savannah facility is the subject of the report which Professor Sands took you to on Wednesday and that Professor Hafner asked a question about at day 6 page 25 line 17, where he asked if Ireland was relying on this report to establish whether it dealt with all liquid waste from the Savannah facility or whether it was confined to high alpha liquid waste and Professor Sands intimated the former. But in fact, when one takes a careful look at the document. it appears very strongly that it is the latter, it is only dealing with high alpha waste. If I can ask you to turn briefly to tab 28 of the judge's folder, I think I can make this point good by looking at the Savannah mixed oxide fuel fabrication facility environmental report, and if you look at 3.3 waste management systems, I flag up MFFF waste management is guided by the principles of as low as reasonably achievable, ALARA. So, precisely the same principle that the United Kingdom applies. It is not surprising given the involvement of ICRP in this field. 3.3.2 liquid waste management, the aqueous polishing process is the primary source of liquid waste, although it is not the only source. So that is the high alpha that the report that Professor Sands took you to is concerned with. If you look at the bottom of page 3-15, rinse water. "Potentially contaminated waste water is collected in the controlled area. This waste water consists of laboratory rinse water, mop water from washing and condensate from room air conditioners". So that is essentially the same sort of waste that we are talking about with the MOX plant. "These rinse waters are collected sampled and analysed. After analysis water with acceptable levels of radioactivity is discharged to the local SRS sanitary sewer line for transfer to the SRS CSWTF". Then you see if levels of radioactivity are above what is permitted for disposal the water stream is discharged to the process sewer for treatment at the SRS Effluent facility. So there you have it. The comparison with the Savannah MOX facility does not work in Ireland's favour. But we are not going to make a big point on it, although actually if you rummage around in this document, and I may be able to get a reference shortly, it appears that something like five times as much waste water arises from the Savannah facility as from the MOX plant. That is really neither here nor there, the simple point is that the discharges from both plants and the resulting radiation doses are negligible.

To add a further way of getting one's mind round the scale of the emissions from the MOX plant, if I could ask you to go to tab 29, where we have another NRPB document, ionising radiation exposure of the UK population 1999 review, and then on the second page of that you will see the second bit of underlined text; an average dose rate of 4 mSv per hour is assumed here for all air travel. This is something that the Attorney-General mentioned earlier. If one does one's maths, 4 mSv per hour in comparison to the MOX emissions in a year, it transpires that the effective dose from the MOX plant to the critical group is equivalent to nine-fifths of a second at cruising altitude in a commercial airliner. That is the scale of emission we are talking about, and that is why we submit there is no question that it does not constitute pollution under Article 1(1)4.

In terms of the comparison with the Savannah MOX facility, who knows? Maybe if one looks into even more detail in this document, one finds that the MOX facility discharge is equivalent to one second in a commercial airliner. It may be, in actual fact, because the wastes appear to be something like five times more, and I am grateful to Mr Bethlehem for passing me the reference, which is page 3-51 of the report, which suggests that the Savannah MOX facility is five times higher. Maybe, the emissions from the Savannah MOX facility go up to something like five or six or seven seconds in a commercial airliner, but our submission is, for the purposes of this application and it will certainly be our submission later on, if this matter ever comes back to you on the merits, that it, frankly, makes no odds whether it is nine-fifths of a second or a little bit higher or a little bit lower.

Mr President, Members of the Tribunal, it is rather late in the day, it is five past seven, it may well be a convenient place to stop.

THE PRESIDENT: Thank you very much. I would like the United Kingdom to give us an indication of how much time they will need, because, as both parties have agreed to end the hearing tomorrow, we would like to be able to organise the time.

MR WOOD: Thank you, Mr President. I think that we would probably be about three hours tomorrow morning.

THE PRESIDENT: That is on the basis that we start at 9.30. You plan to go up to about 12.30. Then we will have a break. Would it be OK then if we start at three o'clock?

MR BRADY: I do not wish to appear miserable, but I am getting distress signals from this side of the desk to the effect that the United Kingdom have only two hours. I do not want to upset the applecart. Whether that is right or wrong, I am told - and unfortunately I was missing for a bit of this - that it was agreed that there would be six hours each, which I understand we have stuck to. I do not want to be niggardly and mean minded about this and, whatever amount of time is necessary to hear the UK case, I am sure you will accord with them, but, if they are to take three hours in the morning, I hope, and I put it no stronger than that, that we would all be out of here at a reasonable hour tomorrow evening.

THE PRESIDENT: Actually, I do not think that the United Kingdom was limited to six hours. The allocation was one and a half days each. Hence, the United Kingdom will use up one and a half days, even if they go up to three hours tomorrow.

We had preliminarily agreed that Ireland would start its response at two pm tomorrow. Ireland will have two hours, and we would have a two hour break and come back for the United Kingdom's submissions at six pm.

MR BRADY: I am going to ask my colleague to deal with this, because I am afraid that I missed out on a bit of these exchanges and I am slightly confused. Perhaps, if I could let my colleague deal with it.

MR FITZSIMONS: Perhaps, if I could deal with this, Mr President. The UK, under the original arrangements, was to commence at 9.45 this morning. That was what was agreed. They chose instead to commence at three this afternoon. It was agreed that they could have some extra time this afternoon in view of the fact that they were losing all of their time this morning, indeed until three

o'clock. That time has gone. They took that decision themselves to suit themselves. It gave them a longer period of preparation, a whole five hours this morning. In consequence, we consider that the time lost this morning must be deducted from the period of time that was agreed. It is all very well for Mr Wood to laugh. He looked for this arrangement. We agreed to the arrangement. But it was not an arrangement whereby we were agreeing to give the United Kingdom five to six extra hours of preparation. It was perfectly understood that that time was being given up by the United Kingdom and any suggestion to the contrary will simply not be accepted.

THE PRESIDENT: Mr Wood, please.

MR WOOD: Mr President, my understanding of what we agreed is that we would have about a day, because we said that we did not need a day and a half. We asked for the meeting to start in the afternoon, and we are grateful for that. We would be completed by lunch time tomorrow. As I have indicated, probably by about 12.30.

THE PRESIDENT: The Tribunal is put in some difficulty, because we had originally arranged for the hearings to go up to Saturday lunch time and then to have the responses on Monday. The parties informed us that they had agreed that the United Kingdom would finish its submission on Saturday morning, starting from this afternoon, and that, so long as we had a two-hour interval between the sitting in the morning and the resumption of the hearing for the subsequent responses, that would be agreeable to them. This is how we understood it. If, in the light of the addition of one hour to the time for the United Kingdom, we started at nine o'clock tomorrow, and the UK had three hours, that would bring us to 12 o'clock. If we then had a three-hour break, we could start at three o'clock. Which would you prefer?

MR FITZSIMONS: That is acceptable to Ireland.

THE PRESIDENT: That would be until five o'clock. Then we will have a break of two hours and then the United Kingdom can begin at seven pm.

MR FITZSIMONS: So starting at nine o'clock, going until 12 and then we would start at two.

THE PRESIDENT: Nine o'clock to twelve o'clock. We then have a two-hour break, and go from two to four. Then we have a two-hour break. Then we start at six and go to eight, if necessary. I want to underline this. If, for instance, Ireland takes less than two hours, then the two hour interval will commence from when we stop. Is that agreed?

MR BRADY: Yes, I will agree to that. Maybe we have all been here too long, but it seems to me to make eminent sense if we proceed on that basis.

THE PRESIDENT: Thank you very much indeed. On that basis, we will adjourn until nine o'clock tomorrow morning.

**(Adjourned until tomorrow morning at nine o'clock)**