DESIGN EXCLUSION WORDINGS (DE1995/LEG1996) AND PHYSICAL LOSS OR DAMAGE

1. INTRODUCTION

This talk reviews the intended effect of these wordings and highlights the various differences between them. It also outlines problems of application that can arise when the nature and extent of the insured "damage" to the "insured property" as a result of a "defect" is the matter of dispute. If taken as a matter of first impression, these issues ought to be straightforward, but the points can often involve significant financial sums, and as always when one is dealing with questions of language, more detailed analysis can often result in more than one answer to the same question. As will be seen, the English Courts encourage a straightforward practical approach to these issues and discourage over-detailed analysis.

2. THE BASIC "ALL RISKS" COVER

The origin of all risks/physical damage cover is that it covers accidental damage to the insured property from an external cause.

In **Gaunt's Case** (1921) the House of Lords stated that:

> *"All risk insurance covers a risk not a certainty; it is something which happens to the subject matter from without not a natural behaviour of that subject matter being what it is..."*

That rule has proven unacceptably narrow in practice. A material defect or a defect in design can result in very serious consequences such as catastrophic failure or explosion. Because the originating cause of the accident comes from within the insured property rather than from some external cause, such an event (although almost certainly accidental in the true sense) would not fall within the kind of cover defined by the House of Lords in **Gaunt's Case**.

Over the years, different markets have worked out different (but broadly similar) compromises. It is a question of trying to strike an appropriate balance between providing the insured with cover for the physical damage resulting from a design or material defect or poor workmanship, while at the same time not guaranteeing the adequacy or suitability of the work.

The insured contractor has an obligation to design and complete the works to the required standard and to rectify defects which are discovered during the currency of the project or the maintenance/ warranty period. The cost of rectifying inadequate performance should be borne by the insured as a commercial risk; but if some defect in material or design results in physical damage to the insured property, many policies will indemnify the contractor for that damage.

At the present time, the 1995 Design Exclusion Clauses and the 1996 London Engineering Group Clauses, represent the balance struck by engineering and machinery insurers in this context.

3. THE DESIGN EXCLUSION CLAUSES

There are five DE exclusions and three LEG wordings.

The full text of each of these is set out in the Appendix to this talk and can be found in the conference pack. Broadly they fall into three categories.

3.1 Outright Exclusion

DE 1 and LEG 1 constitute an outright exclusion for damage resulting from defect. Cover provided by a policy containing these exclusions is the traditional all risk cover of the kind referred to in **Gaunt's Case**. The damage must be referable to external and not internal causes. The exclusion is very broad. It is not expressed by reference to damage proximately caused by defect but damage due to defect, which is wider. Recently I was involved in a case of flood damage to a new office building during the course of a very severe storm. At first sight, there appeared to be a covered fortuity because this was a once in a 30 year storm which was almost certainly the proximate

cause of the loss. However, the building was of a modern design with many terraces; these terraces incorporated the guttering and the guttering was designed in such a way that if it overflowed, the overflow ran inwards rather than outwards. The insurers were therefore able to argue successfully that the damage was due to defective design, notwithstanding the unusual storm.

3.2 Cover for Consequential Damage

Damage to the defective property, resulting from the defect, is excluded but damage to other property (or other parts of the property) occurring in consequence, is covered.

Examples of this approach are LEG2 and DE clauses 2-4.

DE2 and DE3 permit cover for damage to other property which is free of the defective condition and is damaged in consequence of the defect, but excludes damage to the defective property itself and any other property which is damaged to enable the replacement/ repair to take place. The distinction between DE2 and DE3 is only that DE2 also excludes damage to property insured which relies for its support or stability upon the defective property, whereas DE3 omits that provision and thus allows cover in that respect.

DE4 is a similar exclusion but is intended to apply in respect of machinery rather than straightforward building work, because it refers to *"component part or individual item of the property"* and provides that the exclusion will not apply to other parts or items of the property insured which are free from the defect.

LEG2 adopts a fairly similar approach save that it does not specifically exclude damage to the defective property itself. The approach is to exclude the cost that would have been incurred to rectify the defect if that effort had been put in hand immediately prior to the damage. The advantage of this approach is that it avoids a need to distinguish between the "defective property" and "other property" – a consideration which (as I shall explain) can become problematic.

3.3 **Exclusion for Improvement or Betterment**

The relevant clauses are DE5 and LEG3. These clauses permit cover for the damage to the defective property due to the defect within it, but exclude from the recoverable cost of repair any additional cost incurred relating to an improvement in the specification or other cost to improve the design so as to avoid the damage occurring again. DE5 also provides that property damaged in order to enable the repair to take place is not covered, but no specific provision to that effect is made in the LEG3 wording.

4. HOW TO DISTINGUISH "DAMAGE" FROM "DEFECT"?

So far, the matter seems quite simple. Taken as a matter of first impression, there should not be a problem. However, there can be devil in the detail.

There is in English law no comprehensive definition of what constitutes "physical damage". There are times when it can be difficult to distinguish defect from damage.

The best definition of what constitutes a "defect" may be found in **Arnould: Marine Insurance**. (It was in the insurance of ships in the nineteenth century that provision first came to be made in insurance policies to provide cover for damage to machinery by reason of latent defect.) **Arnould** defines "defect" as:

> *"A condition causing premature failure which is present in the relevant part ... when it is constructed or installed ... or which comes into existence as a result of the way in which the relevant part was designed, constructed or installed."*

The traditional distinction between "defect" and "damage" is that damage requires some kind of occurrence whereas defect is a state of affairs.

However, modern technology has progressed considerably, and it is now possible (for instance) to detect molecular change in metal structures and welds that would never have been apparent in the past. This enables insureds to argue that the progressive development of a defect constitutes damage to that thing in circumstances where twenty years ago even the

existence of the defect would not have been apparent to anyone, even if they had set out to specifically look for it. Employing techniques like x-ray and ultrasound, it is possible to detect molecular change to structures and so to predict premature failure. This enables an insured to argue that some damage has occurred by reason of that physical change, causing loss by reason of the reduction in design life, even though the failure has not yet occurred.

This argument has not yet been fully laid to rest, but the Court of Appeal in the recent case of **Pilkington v. CGU** (2004) did draw a line in the sand. Although it was a liability case, not a physical damage cover, the principles are nonetheless equally applicable.

The **Pilkington** case concerned the glass roof of the Eurostar Terminal at Waterloo Station, which was found upon technical investigation to be prone to fracture and therefore too risky for use by the public without additional precautions being taken. Investigation and remedial work was carried out, and a claim was brought against Pilkington to recover the expense incurred. Pilkington could only recover under their liability policy if they could show there had been physical damage to property. The Court of Appeal held that the risk of future damage and reduction in design life and the need for repair did not mean that the glass panes were damaged. Damage required some altered state which was absent in this particular case. The Court stressed the need for physical injury, commenting of this finding that:

"In the context of insurance law [such a finding] *makes commercial sense of an agreement which is designed to protect the insured against liability for physical damage to physical property and not to afford an indemnity by way of guarantee for the quality and fitness of the commodities supplied."*

During the argument in the case, the Court was referred to a line of American cases which held that in some contexts the mere introduction into a unit of some kind of a defective part could constitute physical damage to that unit. It rejected this approach, quoting with approval another earlier Court of Appeal Judgment in a case called **Rodan v. Commercial Union** (1997). Again, this concerned a liability cover rather than a physical damage cover, but the question again was what constituted physical damage. The case concerned defective soap powder which contained too much moisture. When the powder was packed into cartons, some of the liquid constituent of the soap migrated into the cardboard cartons causing them to attract moisture from the atmosphere which then penetrated the powder so that it became

caked. The Court of Appeal held that the caking process was damage, because something had occurred to cause that. However, that damage did not also consist of the original defective quality of the powder as manufactured, which allowed the process to occur in the first place. Here the defect and the damage were clearly delineated.

It is not clear from the case reports whether there was any evidence in **Pilkington** of a progressive deterioration in the glass, but it seems unlikely. The approach in **Pilkington** therefore leaves open the possibility I have referred to that a developing defect reducing design life can be held to constitute damage.

I believe, however, that an English Court would instinctively find against such an argument. The English Courts have traditionally tried to approach issues of this kind as a matter of first impression and not allow the issues to become too complicated. The fact that something has a shortened life, does not mean to say that it cannot be used. It is defective, but does not become damaged until it fails. If that failure is premature, then that premature failure can constitute accidental damage. On the other hand, if there is as yet no failure but premature failure can nonetheless be predicted, nothing fortuitous has occurred.

There is as yet no English case law directly applicable on a point of this kind, but a similar kind of question arose in the **"NUKILA"** (1997), and illustrates a similar approach, again by the Court of Appeal.

This was an offshore case concerning damage to the legs of a jack-up accommodation platform. The legs were of a very simple cheap construction consisting of a tubular column with square boxes (spud cans) welded to the bottom of them to act as feet. The welds joining the spud cans to the columns had been improperly profiled and contained within them from the moment of construction infinitesimal little cracks, which over a three year period opened out into visible cracks. The legs were inspected by divers on a periodic basis. On one inspection they were observed to be sound. On the next, 18 months later, small cracks of about one or two centimetres across were observed to have opened up in some of the welds.

The issue before the Court was whether this was just manifestation of the defect itself or whether it constituted damage. The policy wording covered *"damage caused by latent defect"*, but the insurers argued that all that had happened here was that a crack previously

only detectable by instrumentation had become visible – nothing consequential had occurred. The cracks had just got bigger, as inevitably they would.

The Court of Appeal took a very practical line, criticising the artificiality of "some of the almost metaphysical arguments" which were addressed to the Court. The Court held that where the line is to be drawn is *"a matter of fact and degree"*. In this case, metal had fractured and on any form of straightforward commonsense test, damage had occurred, because *"something different from, something over and above and incrementally greater than the defect itself"* had occurred. At the same time the Court confirmed that *"imminence of loss or damage is not the same as damage: damage is physical damage which has occurred"*. NB: note the past tense.

The **"Rodan"** and "**NUKILA"** cases are different in that in the case of the soap powder the moisture which damaged the soap ultimately came from without, whereas the origin of the damage to the jack up leg came from a defect within. The approach of the Court in both cases was nonetheless very similar. In effect, the Court asked itself whether in each case the soap or the leg was properly still considered just to be defective or whether some additional, tangible injury had occurred. Indeed, the Court in **"NUKILA"** commented that it would be twisting the language to regard the leg in the condition in which it was found as still just merely defective.

It is necessary to digress at this point to discuss another Court of Appeal case, **Skanska v. Egger** (2002), 2 years before Pilkington and also a Court of Appeal case and one which some commentators say is at odds with the **"NUKILA"**. The facts are quite simple. It was a contractual case, not an insurance one:

1. The employer undertook to obtain insurance in joint names of employer and contractor against damage *"from whatever cause arising for which the contractor is responsible"*, but this provision also specified that this should not limit the contractor's existing obligations under the contract, one of which was to *"take care of the work"* and rectify defects.

2. The contract concerned the construction of a factory. The concrete slab on which it was based was defective and broke up.

3. The employer took out insurance with an outright exclusion for "damage caused by defect", equivalent to DE1 in effect.

4. The contractor alleged that procuring insurance on these terms was a breach of the undertaking to insure, but the Court of Appeal said that that was not the case.

The Court took the view that the contract obliged the employer to insure against damage but not against defect and that the only thing that had happened here was that the defect had worked through the material and manifested itself.

This is exactly the argument that the insurers made unsuccessfully in **"NUKILA"**, but here there is a difference:

- In **"NUKILA"** the Court was asked whether any damage had been caused by a latent defect.
- In **SKANSKA** the Court was asked if an employer who undertook to insure damage was in breach if he excluded damage caused by defect.

The Court found that in circumstances where the contractor guaranteed the works (in effect), the employer was not liable for failing to obtain insurance to cover the contractor against the cost of not performing his own contractual obligation.

The question of contractual liability in this case only arose exactly because there was no insurance cover for damage due to defect. In this case, any damage was clearly due to the defect and was excluded. It was faintly argued by the contractor – but without conviction – that the damage here was of a consequential nature, in that the problem was in the foundation of the slab and the damage became apparent on the surface. Only one of the judges referred to this line of argument, dismissing it with the comment that this was an attempt to "*divide the indivisible*".

The Court in **"SKANSKA"** was not referred to the **"NUKILA"**, and the case turns upon the terms of the contractual provisions not a definition of what constituted damage. To my mind, therefore, those who say that the case has in some way modified the rule in **"NUKILA"**

over-emphasise the significance of the case. It is only of marginal relevance and to the extent that it might be proved that it is at odds with **"NUKILA"** I think a subsequent court is likely to say that that was an unintentional by-product. In fact, the Court in **"SKANSKA"** did not have to make a distinction between damage and defect because damage due to defect was excluded anyway.

In short, **"NUKILA"** remains, in my opinion, the leading case on the question of what distinguishes damages from defect. I suppose that it is only fair that I should declare an interest – **"NUKILA"** was my case!

In essence, I believe the decision in **"NUKILA"** was a victory for common sense and the natural use of language. One can see a very similar approach taken by the Court of Appeal in the **"BACARDI BREEZER"** case (2002). This is another contractual case. In this case, the Defendants provided the fizz (CO_2) to go into the bottled drink, and the gas they supplied was contaminated with benzene. As a result there was a very expensive product recall. When they were sued for the resultant losses, the Defendants sought to rely upon a limit of liability in their contract in respect of physical damage, arguing that their "fizz" had caused damage to the liquid with which it was combined. The Court dismissed this as artificial; the more natural approach was to say that the combination of the two produced an end product which was defective and not within specification, rather than a damaged drink. Note, again, the importance of language. All that had happened, the Court held, was the manufacture of a defective product.

In discussing the **Pilkington** case earlier, I also mentioned American case law. The different approach of English and American Courts to this kind of issue can be overstated. Both Courts are agreed that physical damage must consist of physical injury to tangible property. It is the case, however, that particularly in relation to liability policies, the American Courts have often taken a more favourable approach to the insured in the way that they construe the policy wording in cases of ambiguity.

It has sometimes been argued that mere loss of usefulness can constitute damage, but it is settled law on both sides of the Atlantic that that can never be the case absent some kind of physical injury. A convenient illustration of this principle may be found in an Australian case **Transfield Constructions v. GIO Australia** (1996) before the New South Wales Court of

Appeal. The insurance in this case covered the risk of physical damage during the construction of thirty grain silos. Each silo was fitted with fumigation pipes and defuser grids and channels which were used for the purpose of distributing fumigant throughout each silo to control the spread of insects. The defuser grids were defective and permitted grain to pass into and block the fumigation pipes. It was necessary to effect an expensive repair, and the question was whether the blockage of the fumigation pipes constituted physical damage. The Court quite deliberately treated the question as one of "first impression", commenting that:

"No pipes were lost, no pipes were destroyed, no pipes were damaged..."

The fact that the pipes were rendered useless did not constitute physical damage. Functional "inutility" was not the same as physical damage and therefore no insured fortuity had occurred. The evidence is clear in this case that no physical injury had occurred to the defuser grids. They simply allowed grain to pass. If, on the other hand, they had been built of too light a quality of steel so that they had bent allowing grain to pass, then one can see that an insured fortuity of some kind might have occurred.

It is also the case that the grain in the silos did not form part of the insured property. This can be contrasted with a case in the English Court of Appeal in 1994, **Cementation Piling v. Commercial Union**. In this case the insured contractor was building a berm in the docks at Barrow in Furness. The berm consisted of two concrete diaphragm walls with a void in between, which was filled with sand. The walls contained some gaps between the slabs of concrete, through which the sand escaped from the berm.

Insured and insurers both accepted that the escape of the sand from the berm constituted physical damage, but the question was whether the insurers were liable to pay for the cost of rectifying the defects in the walls. The policy contained an exclusion clause similar in effect to that of LEG3, namely that physical damage would be covered but any element of betterment or improvement of the original workmanship, design or plan was excluded.

The Court held here that the repair of the walls did not constitute any improvement, because the repair could not be effected without the holes being blocked and this did not constitute an improvement of the design but part of the repair of the physical damage, and the repair of the

holes did not produce a structure that was better than that originally designed or originally intended.

If the policy had contained an exclusion clause equivalent to DE2 or LEG2, then the cost of repairing the diaphragm walls would have been excluded. The case illustrates the different results that the different exclusion wordings can have, and it also illustrates the point that absent any wording, the cost of remedying the defect itself can quite often be taken as part of the cost of the repair to damage as otherwise the damage will simply occur again if the defect is not dealt with.

5. WHAT IS MEANT BY "OTHER PROPERTY INSURED" (DE2/3) OR "OTHER PARTS OR ITEMS OF PROPERTY INSURED" (DE4)?

It will be seen that the DE exclusions (in contrast to the LEG exclusions) make a distinction between that part of the insured property or part thereof which contains the defect and the other insured property or parts thereof. Again, as a matter of first impression, this seems quite straightforward, but again there can be devil in the detail.

A distinction between one part of the insured property which is defective and another part of the same property which is not, is not always easy to discern. As the Court pointed out in the **"NUKILA"**, it can all depend upon the context or the point of view from which you ask the question. In the context of a large construction project, such as the building of a dam, if there is damage to one part of the dam due to the use of defective concrete, can one really distinguish between one part of the dam and another? Just as with the concrete slab in **SKANSKA**, surely that is attempting to divide the indivisible? On the other hand, it is perfectly easy to distinguish between the dam as such and all the other associated construction work relating to the project, the construction of pump houses, coffer dams, conduits and piping, excavation and so on.

To treat the meaning of "property insured" as being the project as a whole, would make nonsense of the provisions of DE2 and DE3. There are no direct English Court decisions in the insurance context, but in general tortious cases of duty of care, the English Courts when examining whether there has been consequential physical damage or just merely economic loss have on a number of occasions held that (for instance) the defective foundations of a

house can be treated as rendering the whole house defective and so nothing has been damaged other than the thing itself, which means that in tortious terms the loss is economic. I do not believe that in the context of construing the DE exclusion clauses, an English Court would decline to make a distinction between defective foundations of a house and the house itself, but even so (as may be seen from the case study) that does not necessarily mean that the cost of rebuilding the house would be recoverable.

In the case of DE2, the house can be regarded as insured property which relies for its support of stability upon the foundation and is therefore specifically excluded. In the case of DE3, one might accept that if the defective foundations have resulted in physical damage to the structure of the house, cover may be afforded, but if it is merely the case that the house cannot be used because it is prone to damage or failure, then that is a set of facts which falls within the ambit of the decision in **Pilkington**, and the insurers would in all probability be justified in arguing that no consequential physical damage had occurred.

The position is even more complicated when one comes to consider what is meant by "part" for the purposes of DE4. Are we talking here about a failure of a few screws, which results in the collapse of a structure, or are we saying that for the purpose of deciding what is the part, the structure held together by those screws represents the part rather than the screws themselves?

This question has also not been decided in an insurance context. In the ordinary tortious context of the test for economic loss, the House of Lords in **Murphy v. Brentwood** (1990) suggested that the distinction ought to be one of function. If a particular part performs a function which is distinct from other parts then it should be regarded as separate, and vice versa.

The Court of Appeal in a later case in 1998, **Tunnel Refineries** (again in a tortious context) applied the Murphy/Brentwood approach to a compressor. A small fan within a much larger compressor disintegrated, damaging the compressor and causing it to fail. The issue was whether it was right to look at the fan as the defective part which damaged the compressor or whether the compressor as whole should be considered the defective part. The Court of Appeal decided that it could not be said that the fan was really divisible from the compressor nor that it performed a different function. It was a integral part of the function of the

compressor and therefore should not be considered as a separate part from the compressor. The compressor as a whole was properly regarded as the part which was defective.

This is a point which is bound to arise in the insurance context sooner or later, but the fact that it has not yet indicates that on many occasions "first impression" produces a coherent and sensible answer, which the parties doe not seek to challenge,

This underlines the point that I made in my introduction. It is important not to allow these questions to become too complicated since otherwise all that results is what one English Judge in one such case defined as *"confusion both of thought and language"*.

For the most part, neither the insured nor the insurers need a lawyer to tell them whether the insured property is defective or damaged and whether the damage has spread beyond the original defective part, but as I show in the case study, the financial consequences of these questions can be significant.

6. CASE STUDY

I thought it would be instructive to end with a short illustrative problem to show the application of the various design exclusions in the light of all these considerations.

Suppose that we are concerned with the construction of a new seaside leisure complex, which is to be situated on a steel structure built in shallow tidal water just off a seaside resort and connected by a walkway to the shore.

When the construction of the casino and other buildings on the structure is well advanced but not yet complete, extensive cracking is discovered in one of the steel support legs. Investigation reveals that it is the result of accelerated fatigue because the design failed to take into account the stresses caused to the structure by the movement of sand in the tidal waters, and that the failure in the one leg can be anticipated to occur sooner or later in all the other legs. There is in the circumstances no alternative but to condemn the structure as unsafe, remove all the buildings placed upon it and rebuild the structure from scratch. A significant financial loss is incurred.

How much of this would be insured under a typical CAR/EAR all risks policy containing these exclusions?

- If the policy contains an outright exclusion of type DE1 or LEG1, there will be no cover.

- If DE2 or DE3 is applicable, then irrespective of whether the insured property was taken as being only the one leg or the structure as a whole, there cannot in this instance be a right to an indemnity. The DE exclusions apply to loss or damage to the property which is in a defective condition, and thus the whole of the steel structure will be caught by the exclusion. LEG2 excludes the cost which would have been incurred if replacement or rectification had been put in hand immediately prior to the damage to the leg being discovered, but in this case that would replace the whole in any event and therefore there is no significant extra cost over and above what it excludes.

- What about the buildings situated on the structure? If the whole structure and the buildings on it are regarded as one unified structure, then the whole would be treated as being in defective condition and there would be no cover. However, a more reasonable interpretation would be to treat the buildings on the structure as separate from the structure itself. That still does not provide the insured with cover. DE2 contains an exclusion applicable to property insured which relies upon the defective property for its support or stability. Additionally, if DE3 or LEG2 are applicable, it is hard to see how the insured can recover the cost of the removal and ultimate replacement of the buildings. The buildings are not themselves damaged and their removal is necessitated only by the need to repair the steel structure.

- If LEG3 or DE5 (the design improvement exclusions) apply, then the situation becomes very interesting. Both these exclusions apply to exclude cover for the additional costs involved in rebuilding the steel structure to a higher specification and all the additional design involved in that. However, where there is damage, these clauses permit the cost of the repair to that damage. In this case, we have one damaged leg and a structure which is undoubtedly defective. Is the entire structure to be regarded as damaged so that the cost of replacing it all is covered, or should there be an apportionment for the one leg only as one constituent element of the structure as a whole? I would be interested to know what

people think. Instinctively, in view of the distinctions made in the DE clauses between different parts of the insured property, one feels that only the cost of replacing the damaged leg ought to be recovered, but cases like **Tunnel Refineries** could put that conclusion in doubt. The position as regards LEG3 is more straightforward. Arguably, the cost of replacing the defective but non-damaged structure would be costs *"rendered necessary by defects"*, but the second part of the first paragraph of this wording could be construed to mean that where there is damage to any portion of the insured property all that is excluded is the improvement element. Without doubt, serious differences between the parties would arise in this case, given the amounts of money involved.

DESIGN EXCLUSION WORDINGS (DE1995/LEG1996) AND PHYSICAL LOSS OR DAMAGE AND MUNICH RE CAR AND EAR POLICIES

APPENDIX

Text of DE (1995) & LEG (1996) CLAUSES

DE1 (1995) – Outright Defect Exclusion

This policy excludes loss of or damage to the Property Insured due to defective design plan specification materials or workmanship.

DE2 (1995) – Extended Defective Condition Exclusion

This policy excludes loss of or damage to and the cost necessary to replace repair or rectify:

(a) Property Insured which is in defective condition due to a defect in design plan specification materials or workmanship of such Property Insured or any part thereof

(b) Property Insured which relies for its support or stability on (a) above

(c) Property Insured lost or damaged to enable the replacement repair or rectification of Property Insured excluded by (a) and (b) above

Exclusion (a) and (b) above shall not apply to other Property Insured which is free of the defective condition but is damaged in consequence thereof

For the purpose of the Policy and not merely this Exclusion of the Property Insured shall not be regarded as lost or damaged solely by virtue of the existence of any defect in design plan specification materials or workmanship in the Property Insured or any part thereof.

DE3 (1995) Limited Defective Condition Exclusion

This policy excludes loss of or damage to and the cost necessary to replace, repair or rectify:

(a) Property Insured which is in a defective condition due to a defect in design plan specification materials or workmanship of such Property or any part thereof.

(b) Property Insured lost or damaged to enable the replacement repair or rectification of Property Insured excluded by (a) above.

Exclusion (a) above shall not apply to other Property Insured which is free of the defective condition but is damaged in consequence thereof.

For the purpose of the Policy and not merely this Exclusion the Property Insured shall not be regarded as lost or damaged solely by virtue of the existence of any defect in design plan specification materials or workmanship in the Property Insured or any part thereof.

DE4 (1995) – Defective Part Exclusion

This Policy excludes loss of or damage to and the cost necessary to replace, repair or rectify

(a) Any component part or individual item of the Property Insured which is defective in design plan specification materials or workmanship.

(b) Property Insured lost or damaged to enable the replacement repair or rectification of Property Insured excluded by (a) above.

Exclusion (a) above shall not apply to other parts or items of Property Insured which are free from defect but are damaged in consequence thereof.

For the purpose of the Policy and not merely this Exclusion the Property Insured shall not be regarded as lost or damaged solely by virtue of the existence of any defect in design plan specification materials or workmanship in the Property Insured or any part thereof.

DE5 (1995) – Design Improvement Exclusion

This policy excludes:

(a) The cost necessary to replace repair or rectify any Property Insured which is defective in design plan specification materials or workmanship.

(b) Loss or damage to the Property Insured caused to enable replacement repair or rectification of such defective Property Insured.

But should damage to the Property Insured (other than damage as defined in (b) above) result from such a defect this exclusion shall be limited to the costs of additional work resulting from and the additional costs of improvements to the original design plan specification materials or workmanship.

For the purpose of the policy and not merely this Exclusion the Property Insured shall not be regarded as lost of damaged solely by virtue of the existence of any defect in design plan specification materials or workmanship in the Property Insured or any part thereof.

LEG 1/96 – "Outright" Defects Exclusion

"The Insurer(s) shall not be liable for:

Loss or damage due to defects of material workmanship design plan or specification."

LEG 2/96 – "Consequences" Defects Wording

"The Insurer(s) shall not be liable for:

All costs rendered necessary by defects of material workmanship design plan or specification and should damage occur to any portion of the Insured Property containing any of the said defects the cost of replacement or rectification which is hereby excluded is that cost which would have been incurred if replacement or rectification of the Insured Property had been put in hand immediately prior to the said damage.

For the purpose of this policy and not merely this exclusion it is understood and agreed that any portion of the Insured Property shall not be regarded as damaged solely by virtue of the existence of any defect of material workmanship design plan or specification."

LEG 3/96 – "Improvement" Defects Wording

"The Insurer(s) shall not be liable for:

All costs rendered necessary by defects of material workmanship design plan or specification and should damage occur to any portion of the Insured Property containing any of the said defects the cost of replacement or rectification which is hereby excluded is that cost incurred to improve the original material workmanship design plan or specification.

For the purpose of this policy and not merely this exclusion it is understood and agreed that any portion of the Insured Property shall not be regarded as damaged solely by virtue of the existence of any defect of material workmanship design plan or specification."

Text of relevant sections of Munich Re CAR and EAR Policies

Munich Re EAR (Erection All-Risks) Policy

"Special Exclusions to section I

Insurers shall not, however, be liable for

...

c) Loss or damage due to faulty design, defective material or casting, bad workmanship other than faults in erection"

Endorsement 200 Cover of Manufacturer's Risk

"It is agreed and understood that otherwise subject to the terms, exclusions, provisions and conditions contained in the Policy or endorsed thereon and subject to the Insured having paid the agreed extra premium, lit c under 'Special Exclusion Section I' shall be replaced by the following wording:

'c) all costs related to repair and/or replacement of parts and/or items directly affected by faulty design, defective material or casting, bad workmanship other than faults in erection, which the Insured would have incurred for rectifying the original fault had such fault been discovered before the loss occurred;'

This Endorsement does, however, not apply to parts and items of civil engineering sections."

Munich Re CAR (Contractor's All-Risks) Policy

"Special exclusions to section 1

Insurers shall not, however, be liable for

...

c) loss or damage due to faulty design

d) the cost of replacement, repair or rectification of defective material and/or workmanship, but this exclusion shall be limited to the items immediately affected and shall not be deemed to exclude loss of or damage to correctly executed items resulting from an accident due to such defective material and/or workmanship"

Endorsement 115 Cover for Designer's Risk

"It is agreed and understood that otherwise subject to the terms, exclusions, provisions and conditions contained in the Policy or endorsed thereon and subject to the Insured having paid the agreed extra premium, exclusion c) under special exclusions to section 1 of the Policy shall be deleted and exclusion d replaced by the following wording:

'd) the cost of replacement, repair or rectification of loss or damage to items due to defective material and/or workmanship and/or faulty design, but this exclusion shall be limited to the items immediately affected and shall not be deemed to exclude loss of or damage to correctly

executed items resulting from an accident due to such defective material and/or workmanship and/or faulty design.'"