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HOW THE DEFECT EXCLUSIONS ARE OPERATING IN PRACTICE SOME CASE STUDIES

How the defect exclusions are operating in practice

I have been asked to talk about some actual case studies we have on construction and engineering claims relating to the Defect Exclusions. This is a unique opportunity for an adjuster, as plainly our role is to apply the policy wordings in practice. Sometimes these wordings look great on paper, but present major difficulties in their practical application on site. Moreover, it is often our job to explain to an Insured why the policy is paying for certain parts of the claim, and not others. A wording which is straightforward for the contractor to comprehend makes our lives a great deal easier.

The CAR or EAR policies intend to be a policy of indemnity i.e. to put the Insured back in the same position he was in immediately before the incident occurred. On this point, the Insurers and the Insured are broadly united since the principle of indemnity is one which is fairly easy to understand. That is the theme I want to explore but I want to give some examples of where this frequently proves difficult to apply in practice.

If anyone would like to ask questions as I go through this, they are welcome to do so, although there will be an opportunity to ask questions and enter into a discussion when we reach the end.

We will be covering five main points

I will be covering five main points in this talk, each illustrated by actual claims which we have had to deal with - and settle:-

First, a comparison of LEG2 and similar Defect Exclusions which are intended to solely pay for damage resulting from a defect – and exclude the cost of rectifying the defect itself.

Second, what LEG3 covers following the 2006 review. Following the amendments by the London Engineering Group to the LEG3 Clause, upon taking the advice of Colin Edelman QC, the scope of cover seems to be a great deal wider than possibly was Underwriters' desire, and I'll illustrate what I mean by this by describing certain cases.

Third, all is not lost because the cases which create difficulty under LEG3 – where latent defects gradually manifest themselves, require a special form of adjustment which ensures that Insurers are only paying for those areas which are damaged.

Fourth, LEG3 plainly carries an exclusion which is the additional cost of improvement. That presents all sorts of problems which I will describe, and also set out the solution which we apply in this situation.

Fifth, is the LEG3 deductible, and what is known as the drop-down, namely the debate as to whether all losses due to defect attract the highest deductible, normally applicable solely for

LEG3 cover – or whether the Insured is entitled to drop-down to the narrower form of cover attracting a much lower deductible when financially, this makes more sense for him, given the circumstances of the loss.

1. Comparison of LEG2 and other Defect Exclusions

The conventional form of cover is quite simply that Insurers will pay for damage to works which have been properly constructed, but they expect the contractor to meet the cost of rectifying any defects. Of course, the reality is that practically anything which is under construction is a complex structure which is essentially the assembly of many component parts some of which might contain defects. It is difficult to separate out the defective elements from the non-defective elements when there has been a collapse of the whole of the contract works.

The wording which attempted, for many years, to overcome this problem in the London market, eventually, in 1995, became known as DE3. Essentially it stated that the policy excluded the cost of repairing property insured which was in a defective condition, but that exclusion did not apply to property insured which is free of the defective condition, but was damaged as a result. The recurring problem has been that it is difficult to reach agreement in a complex structure over what areas should be excluded, because they comprise “property insured which is defective” as distinct from property which is free of the defective condition.

Explosion Slide

Just to illustrate my point, we had the explosion of a 200m³ capacity liquid natural gas tank some months ago. This occurred during a pressure test and cause was due to the fact that the internal tension stays, built to restrain the walls of this pressurised tank, suffered from a defect in design.

The walls of this tank were reinforced by cross-members, tension stays, which restrained the walls of the tank under pressure .

ADBT Slide

The defect was that cuts had been made immediately below the web of the tensioning stays in order to fit them into the wall fixings. Instead, the cuts should have been made half way through the flange of the tension stay. The location of the cut meant that the I beam suffered a critical weakness in tension. This could have been avoided if the cut was made a mere 6cm lower in the centre of the web. The result was a catastrophic explosion - shattering windows over a kilometre away and the destruction of nearby adjacent buildings. It was only fortunate that the pressure test was done with pressurised air as opposed to pressurised LNG – which would have been even more catastrophic if the tank had been in situ and operating as designed on a fully laden LNG carrier!

I use this example to illustrate that if a DE3 wording had applied here, Insurers would have been at liberty to announce that the tank, as a whole, was property insured which was defective, and consequently none of the loss would have been covered. Some debate might then have ensued since the walls of the tank were free of any defect.

However the entire structure was riddled with these same defects. Lawyers advised that the expression “property insured” is intended to encompass a portion of assembled contract works, as distinct from its component parts, which are dealt with in wider exclusions such as DE4.

However, if LEG2 had applied, this would state that, in the event of a defect causing damage, Insurers would pay the claim, but deduct the cost the contractor would have had to incur in order to rectify the defect immediately before the incident. In the case of this tank, that cost could have been quite small since all the Insured would need to have done would be to weld plates around the defects at relatively modest cost.

DE3 could have been interpreted in very different ways in this example: From the whole of the tank being defective (structurally) to the flanges in the beams themselves – which were otherwise without defect. As you can see, LEG2 was much easier to apply, less controversial, and actually achieved indemnity by putting the insured back in the same situation he would have been in, had he discovered the defect immediately before the loss.

I use that example to illustrate that, what is meant by: the cost the Insured would have had to incur to rectify the defect before the incident. Plainly, it is a quite common occurrence that the contractor has to rectify defective workmanship or defects in design before any accident or damage has occurred and it is not too difficult to identify what that cost should have been.

On the other hand, an exclusion which refers to “property insured which is defective”, or some similar set of words, should draw the distinction between the defective element which is not covered, as opposed to the non-defective element. This is prone to differing interpretations. A classic example of where this debate was never reconciled was on *C A Blackwell –v- Gerling*, where there was an argument as to whether a road and its drainage could be separated into its component parts when one area contained defects and another area of the road was damaged. It is significant that Insurers lost this case and it is one of the very few which has ever gone to Court.

Comparison of LEG2 - Roof

Just to illustrate my point again, I am going to talk about another common problem relating to defects - which is when a storm blows off a roof because of defects in design or workmanship. The photograph we have here shows a roof at a power station where insufficient wall plates have been installed and nails had not been driven to their correct depth and so on - essentially, a catalogue of bad workmanship. This poor workmanship had not been noticed and during an ensuing storm, the whole of the roof was blown off. Under DE3, the Insurers would have been within their rights to treat the whole of the roof as property insured which was defective and therefore not covered. Under LEG2 however the Insured could have quite reasonably announced that, had he known of the defects before the storm, he could have got a carpenter to go up into the roof void, install extra wall plates, etc all at the cost of a few hundred dollars and it would only have been that relatively small cost that would be deducted from his claim.

If you think about it, that is probably quite a fair result in the sense that the contractor should not be recovering the cost of putting right his defective workmanship from Insurers, but if there is an accident which is completely unexpected and unforeseen, it is fair that he recovers the loss which stems from this accident.

At this point I would reiterate the principle of indemnity which is to put the Insured back in the same situation he was in immediately before the loss and the fact that practically mirrors the words of LEG2 and indeed its application.

Moreover, it is a great deal easier to explain all this to a contractor on site who can understand the point, something which should not be under-estimated in its value by Insurers since claims are a great deal easier to settle when the Insured can understand where Insurers are coming from, even if that might mean that he gets less money at the end of the day.

In order to illustrate that last point, I am going to give an example of another common type of situation where contractors have to break out properly constructed areas in order to reach a defect and rectify damage to non-defective areas at the same time. I will use an example which is quite easy to follow, namely windows throughout a building which have defective seals, allowing rainwater to enter. The rainwater damages non-defective plasterwork immediately behind the windows, but unfortunately, because there is expensive oak panelling covering the plasterwork, all of that has to be broken out in order to remedy the plasterwork and in order to remedy the defect. There are plenty more analogies in more complex structures, but to illustrate my point, I prefer to keep issues simple at this stage.

So, if LEG2 applied, the adjuster would be saying to the contractor that he would have had to rectify the defective window seals and, in order to do that, he would have had to break out the oak panelling and all the plasterwork in order to reach the seals and change them. The effect of that is that all of the costs that would be incurred to repair the damaged plaster would not be recovered under LEG2 because all of those costs would have had to have been incurred in order to remedy the underlying defects. This is by far the most common type of defect problem we have in construction claims: normally the job of rectifying an underlying defect entails wholesale breaking out of contract works and effectively the Insured is left with nothing to recover at the end of the day. In that sense, LEG2 is highly beneficial to Insurers from a financial viewpoint.

If however DE3 applied, that states that the exclusion will not apply to property insured which is free of the defective condition but is damaged in consequence thereof. Essentially in order to repair the non-defective plasterwork one has to break out the surrounding non-damaged oak panelling and that is the cost of repairing the damage. Naturally at the same time the Insured will take the opportunity to remedy the underlying defects but there is nowhere in DE3 which explicitly states that if he does this he should be penalised as a result. Some of you might be surprised to hear this and indeed, I am in little doubt that most Underwriters would prefer a clause which states that the breaking out costs are not covered, if these would have to have been incurred to rectify the underlying defect in any event. However we have had numerous lawyers' opinions which state that in these circumstances, the Insured is entitled to recover the full cost of repairing damage including breaking out. In this

way, we have repeatedly seen that DE3 gives wider cover than LEG2. But on top of all that, you have a clause which is regularly the subject of dispute as to what comprises property insured which is defective, so the Insurers are losing out in both ways in this instance. Fortunately, in recent years, the market has gone much more in the direction of LEG2 which I think is completely right because it mirrors the principle of indemnity.

The policy excludes

There are of course variations on a theme, and there is another defect exclusion, very similar to DE3, which we find in policies around the world. This states that:-

“The Policy excludes:-

The cost of repair of damage to items due to defective material workmanship or design

But this exclusion shall be limited to the items immediately affected and shall not be deemed to exclude damage to correctly executed items resulting from an accident but resulting from an accident due to such defects”

As you can imagine, the expression, “limited to the items immediately affected” can be open to debate - with the Insured arguing that, for example, in the case of our windows, only the seals are the items immediately affected and that the plasterwork and oak panelling are correctly executed items which have been damaged as a result. That is not how the Insurers who have drafted this wording have intended it to be applied. Their position is that, if break out costs would have had to be incurred in order to rectify a defect before the incident, those costs are not covered and essentially, these are the items “immediately affected” by the defect. One can have some sympathy for that interpretation. Moreover, it also seems to be significant that the loss which is indemnifiable under the policy is exclusively a loss which stems from an accident, as distinct from the cost for rectifying areas immediately affected. Whichever interpretation you follow, the problem is that there is debate about what is meant by these words, and what “items immediately affected” is meant to encompass. In this way, I would suggest that LEG2 is a much clearer wording.

Issues presented by LEG3

LEG3 is a form of cover which we see frequently in the larger, better risks and my understanding is that the London Engineering Group adapted it from the UK CAR Group who modelled DE5 – a clause which is almost identical in its application although it has to be said that DE5 has distinct, subtle differences to LEG3.

LEG3 developed when contractors approached Insurers to say that, in the event of damage to property insured which contained defects, they would like a form of cover which did not penalise them for the cost of rectifying the defect as well as the damage - since the operation of damage rectification and defect rectification go hand in hand. It is easy to see why the contractor will want to avoid the problems created by enforcing a defect exclusion penalty, when he is being confronted with a major incident of collapse due to defect.

The classic example of where this would seem to make sense would be in something like the Charles De Gaulle Airport collapse where latent unknown defects existed leading to the catastrophic collapse of the works.

However, more frequently, the LEG3 claims that we encounter on a daily basis comprise property which has been constructed with latent defects - which only manifest themselves gradually. In other words, the latent defect becomes a patent defect, normally in the form of cracks.

To illustrate the point I am making here, first I will touch on the Spinnaker Tower in Portsmouth where paint on the concrete structure delaminated due to poor bonding of the paint. The question immediately arises that this layer of paint was of course doomed from the start and would always have delaminated - but then on the other hand, any latent defect which inevitably leads to damage to the works such as the building collapse we just talked about, could be described as doomed from the start or inevitable so those expressions are very unhelpful.

The more important issue is whether there has been actual damage. Damage is a topic which is extensively debated in all classes of insurance and there is a vast amount of case law on the subject. Essentially we work by a convenient set of words which is, “adverse physical change”, or, the even simpler rule of thumb : something good which is turned into something bad. In other words, there must be contract works of value which have then physically, and changed into something bad – i.e., they have been damaged.

I’ll give you another example of where the paint on the Didcot B Power Station was applied in conditions where it was too cold, with the result that, over the ensuing weeks and months, it delaminated and this caused major problems at the power station once it had all been assembled in an eight storey high turbine hall . The liquidated and ascertained damages were running at half a million pounds a week. The issue was whether the paint could be treated as damaged ,bearing in mind it had all appeared absolutely fine during installation of the painted steelwork, but gradually disintegrated or delaminated over time.

We had a similar problem with oil residue from jet engines coating the steelwork or trees at Stansted Airport with the result that when paint was applied, it subsequently delaminated. These claims are often of many millions since we are talking about widespread areas of the works which incorporate a defect and they have to be remedied at a later date at huge expense.

LEG3 The issues

For many years we adopted the ruling of *Oceanic –v- Faber* where, in a marine case in 1906, a latent defect in a propeller shaft eventually led to the fracture of that shaft. In other words, the latent defect became patent. The Judge’s words, explicitly in that case, were that latent defects becoming patent did not constitute damage.

However, more recently in the *Nukila* case, we had a situation where metal spud cans welded to the legs of a jack-up barge incorporated welding defects. Over time those

defects caused cracking in the metal boxes themselves and those cracks propagated up the leg of the jack-up barge. That was treated as damage.

Even more recently, we had the Skanska –v- Egger case which was a contractual dispute, not an insurance dispute. In that case, Skanska built a concrete floor of a factory on poorly laid fill and the concrete floor cracked, as would always have been the case ,due to its latent defects. The Judge mentioned that a latent defect becoming patent did not constitute damage. This immediately caused a flurry of concern because there were plenty of LEG3 policies out in the market where Insureds were expecting that. in circumstances like these, their claims would be paid without penalty. In other words, cracking of works which contained latent defects would be treated as damage.

LEG3 Where the damage is more than the manifestation of a defect

I have spoken to several Underwriters about the problem of these frequent situations where a contractor has built works containing defects, which in normal circumstances he should remedy at his own cost. However at the moment those defects manifest themselves in the form of cracks he can go to his Insurers and ask them to pay for reinstating those cracked areas where a defect also exists. The Charles De Gaulle Airport disaster ,where a latent defect becomes patent ,seems to be an obvious example of damage which should be covered but the Skanska –v- Eggar case seems to be one where the contractor, only through his good fortune, has discovered the defect when cracks appear. A cost which he should have incurred himself will now have to be paid by the Insurer.

The difference between the two is that in Charles De Gaulle, the cost of repairing the problem after the defect manifested itself was vastly greater than the cost of rectifying the defect before the incident. To my mind, that constitutes damage. However, in Skanska –v- Eggar, the cost of repairing the cracked floor after the cracks developed was no greater than the cost that would have been incurred to rectify the defects in the concrete floor immediately before the cracks developed and so I find it much harder to see that as damage.

Definition of damage

If the Underwriters wanted to adopt the policy wording to reflect that Charles de Gaulle does rank as damage, and is covered , whilst Skanska is not , I would suggest that they should consider a definition of damage which I have roughly drafted as follows:-

“Definition of Damage

Damage in this context will be deemed to have occurred if the cost of repair due to the adverse physical change to the works is greater than the cost that would have been incurred to rectify the defect immediately before the adverse physical change.”

A number of Underwriters have seen this and agree that it would reflect their actual intentions as Underwriters. However, it may well be unacceptable to the market.

LEG3 Colin Edelman 2006 Amendment

What then did actually occur was that the London Engineering Group went to Colin Edelman QC and asked him to advise on what they should do about the obiter dicta remarks of the Skanska –v- Eggar case. As a canny lawyer he asked his client what they intended and as an example, they took a turbine blade which was formed of defective material, which subsequently cracked. They said it was definitely their intention, that in those circumstances, the policy should pay for reinstating the cracked turbine blade.

As a result, Edelman wrote a set of words which reflected this intention and those words said:-

“Should damage occur which for the purpose of this exclusion shall include any patent detrimental change in the physical condition of the insured property.”

The words “patent detrimental change” are absolutely essential in reflecting the intention that a latent defect which manifests itself as a patent defect is to be treated as damage. This captures a vast range of areas of defective construction including many of the cases I have referred to earlier.

As a further example, we have a situation where the contractor had used a new type of concrete in the construction of an airport runway which was pushing the boundaries of concrete, in this case from F8 to F9 for the first time ever. It didn't work and shortly after the concrete set, it started to crack. A claim was duly presented. With the 2006 revision to LEG3, there could be difficulties in dealing with this loss if the Insured were to quite reasonably argue that there has been some patent detrimental change to a runway which was smooth and uncracked on day one, but riddled with cracks on day four. I suspect many Insurers here would feel that the policy is not designed to cover that type of problem.

LEG3 damaged area –v- defective area

For some time after the 2006 revision to LEG3 , some underwriters were not aware of the enormous exposure this wording presented to them . Defects in works is nothing uncommon – nor is the fact that these defects are often only discovered when cracks , or similar manifestations , start to appear .

All is not lost though : There are many instances , where a defect rectification cost which hitherto would have to have been born by the insured , has to be borne by insurers , purely because it has manifested itself- the cracks . However the manifestation, in the form of cracks is gradual - sometimes affecting only 5% of the defective area at the outset .

To give you an example of what I mean by this , we have the situation with the Tidal barrier in Rotterdam- one of the largest moving engineering structures in the world. Its size is illustrated by the bus seen in the first of these photographs . In this case, paint was applied too thickly around the steelwork of this vast structure, with the

result that it had a tendency to crack after several months. Given that the coat of paint was meant to last for least 25 years, the client announced that the cracking rendered it unacceptable.

A claim was duly lodged by the Insured under the policy wording which was extraordinarily wide. Indeed, the issue of whether this constituted damage never really came into the debate. That much was conceded by Insurers and they were ready to accept liability from the outset, albeit reluctantly.

However, it was also the case that, when the loss was discovered, there were very few cracks - only to roughly 5% of the entire surface. To remove all of the paint and reapply it would have been prohibitively expensive. So, on day one, upon discovery of these few cracks, the Insured were faced with a very major problem: they knew there were defects in the coat of the paint and it was going to be very expensive to rectify the problem. In normal circumstances, the Insurers should be explaining to the Insured that if they identified defects in their works, they should rectify them at their own cost – although if there is any damage, that can be recovered under a LEG3 policy.

What actually happened was that the Insured simply waited for the cracks to develop over a period of more than five years and gradually rectified each crack, as and when it appeared, by grinding it out and repainting that particular location. The ensuing claim was still over €5m but that solution for dealing with the problem was cheaper than grinding and repainting which would have been the only way of eliminating the defect. We explained that the policy would only meet the cost of repairing the damage discovered on day one, whilst the responsibility for remedying the defect in the rest of the structure, which was as yet undamaged, rested with the Insured. Of all the cracks which developed over some five years, only 5% had occurred at the time of discovery and the claim was settled at that level, although some concession was given to reflect the fact that it takes time to develop a solution, during which more cracks can occur, (It might be reasonable for Insurers to accept that those cracks are also accidental damage up until the time when the Insured could have remedied the defects expeditiously at his own cost.) That is a claim where the full bill for remedying all of the cracks over five years was placed at the Insurer's doorstep for payment - 100%. Ultimately only a fraction was paid under the policy (and the rest was picked up under a PI policy.)

LEG3 Damage Illustrations

A further demonstration of this, is a motorway where a defective base layer caused cracks to the wearing course over a distance of 15km. Unfortunately for the contractor, once he had discovered the cracks appearing soon after he had laid the wearing course, his only option, to be certain of eliminating all the defects, was by planing off 15km of motorway wearing course and base layer. That would have cost in excess of £15m. Instead, he adopted pretty much the same course of action as they did at Rotterdam, namely he remedied the cracks as and when they appeared over several years. I recall that after about one year had elapsed, the contractor asked me whether I agreed with his course of action which was not to plane off the motorway surface (and start all over again in order to remedy the underlying defect), but instead to wait for the cracks to appear - and remedy them, as and when they occurred. It set

an alarm bell ringing and I realised that if Insurers consented to that course of action, they could have impliedly accepted that the contractor was under no obligation to remedy areas which purely contained defects, but which were as yet undamaged. Consequently, I had to inform the contractor that Insurers would pay for the areas which had been damaged at the time of discovery (this was quite a small area) but the policy would not pay to rectify other areas which purely contained defects but which were as yet undamaged.

Just the other day, I encountered a situation of a claim which was some four years old. The insured had got into difficulty because some treatment tanks, built on piles had settled differentially adjacent to the surrounding ground. The result was that pipework in the tanks outside the piled area had ruptured as the surrounding ground settled, but the tanks did not. This had happened throughout a treatment farm and the cost to rectify the problem was many millions of pounds. We had all sorts of experts and lawyers in the room and the question was how could we contain the costs which were getting larger and larger every week as more cracks developed, and more repair work had to be carried out? It seemed a problem without an end.

It struck me that the correct position was that, when the problem was first notified (which in this case manifested itself when one of the pipes cracked), then Insurers should pay for that damage, alone, under LEG3. However, the onus rested with the Insured to rectify the defects in the rest of the tank farm to prevent any further damage. In this case, it was very expensive to do that and actually it cost less to wait for the cracks to develop and then repair them. Nonetheless that is in a sense the cheaper course of action for the Insured to remedy the defect in his works. However the Insurers should only pay for the damage which was discovered on day one - although once again, some latitude would be given for the three or four months it might take to prepare a method statement to rectify the underlying defect.

Another interesting case which is not too dissimilar relates to a tunnel built at a mine to carry a conveyor belt taking Gold ore to a crushing plant. Unfortunately the cut and cover tunnel was laid over a hard spot in existing ground directly below the tunnel. As a consequence, as the area was backfilled, the weight caused parts of the tunnel on either side of the hard spot to settle and crack. Costs were incurred to install steel sets throughout the tunnel, although on closer examination, it emerged that these steel sets were to protect the tunnel and inhibit any further movement should further settlement occur. The actual cost of repairing the bolts securing the metal tunnel segments was quite small, but technically, that was the cost of repairing the damage. The steel sets were to inhibit further movement. The position taken was that the Insured - faced with a defect in the foundations of the tunnel - should rectify that defect to prevent any further damage. That was going to be prohibitively expensive bearing in mind that the area had been backfilled. It was easier and less expensive for him to install strengthening measures to inhibit the settlement of the tunnel around this defect. However, it was said that was a cost connected to defect rectification or rather the avoidance of dealing with the underlying defect, as distinct from damage. As you can imagine, there were some issues which could become very contentious in this case. One of them is that, as in many tunnelling claims, the ground around the tunnel should also be treated as part of the contract works and the correct measure of indemnity is to meet the cost of dealing with the underlying defects so that the tunnel itself could be properly repaired.

A similar set of circumstances emerged in the Aegon –v- Cementation case where the 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. Both the Insured and Insurers accepted that the escape of the sand from the berm constituted physical damage, but the question was whether Insurers were liable to pay for the cost of rectifying the defects in the walls. The Court held that the repair of the walls did not constitute any improvement because the repair could not be effective without the holes being blocked and this did not constitute an improvement in the design but was instead part of the repair of the physical damage. Consequently, the cost of plugging the hole had to be met under the policy.

In these final photographs, illustrating the issue that the policy should be paying for what is damaged but not what is undamaged, we have a wall which was found to contain certain rock materials, which had cracked because the material was unsuitable. Only some of the boulders had cracked but they all came from the same quarry and all were deemed to be defective. When I went out to look at the loss, I suspected we might find that only a very small part had actually suffered physical damage so only part of the cost of stabilising the wall by grout injection would be recoverable. However when I inspected the wall, I found that it had also deflected en masse and therefore in that situation, I was happy to treat that as damage to the wall as a whole and insurers met the entire cost. The situation might have been different if there had been no deformation of the wall but simply that the presence of defective materials throughout had exhibited itself in the form of cracks in one or two instances which technically could be remedied by localised intervention.

2. **The Additional Cost of Improvement under LEG3**

As if determining whether damage has occurred or not on a LEG3 claim isn't hard enough, we also have issues regarding its exclusion which states that:-

“The cost of rectification which is hereby excluded is that cost incurred to improve the original material workmanship design plan or specification.”

When the clause first came into being many years ago, I remember it being argued, in the collapse of a bridge which contained design defects, that the replacement bridge, which achieved exactly the same function, was free of any design defects and thus an improvement and therefore not recoverable. Plainly that would make a nonsense of the cover since any indemnity under LEG3 which also meets the cost of rectifying works containing defects is essentially an improvement.

I think the intention of the Underwriters is not hard to understand: they will meet the cost of rebuilding in such a way that it eliminates defects, but they won't meet the cost of any betterment. This is a reflection of the principle of indemnity - that the Insured should not be financially better off than he was before the incident (although if he gets his defects rectified, once damage has occurred, he is financially better off).

Quite an interesting example of how this issue is resolved in practice occurred on an embankment case we dealt with. In that situation, an embankment, which cost \$10m to build, had to be stabilised by soil nails costing \$200,000. Unknown to all involved, the soil nail design was inadequate from the outset and as a result, the embankment collapsed. The only way of rectifying the damage (and the defect at the same time) was by installing a piled toe along the foot of the embankment, at a cost of approximately \$3m. Indeed, had this been done at the outset, the use of a piled toe, would have been the correct solution, not the soil nails. The Insurer's case was that the piled toe was a cost incurred to improve the original plan, but the Insured argued that he had been left with nothing better other than an embankment which had properly existed before the incident (albeit with defects in its design), and was then damaged. That damage had to be repaired.

The matter was extensively debated and one other twist was that along this 1km embankment, collapse had only occurred in some areas but not in others. Nonetheless the defective soil nails existed throughout and the solution was a piled toe along its entire length.

Ultimately, the problem was resolved by identifying what would have been the cost of putting in the piled toe had the insured embarked on this correct course of action at the outset. At that stage, the cost would have been \$1m since these things are often less expensive to install in controlled and planned circumstances. The cost to the Insured after the incident was \$3m. It seemed logical to recognise that the piled toe was indeed an improvement over the original scheme and moreover that it would have cost \$1m rather than \$200,000 for the soil nails. In other words, an additional \$800,000 to the Insured. Ultimately, the claim was resolved on the basis that the Insured should be meeting that original cost which should have been incurred at the outset but that the Insurers should meet the additional cost which stemmed as a direct result of the incident (namely it was more expensive to put in the piled toe after the damage had occurred in order to rectify it, rather than as part of the original programme). This rule of thumb seems to work quite well in practice when confronted with these troublesome cases. Indeed, there could be a set of words which could be added onto LEG3 to explain this and the example here is:-

“If damage occurs (as defined), the cost excluded is the additional cost of any design changes if they had been implemented at the design stage.”

No doubt a more perfected form of words can be developed, if indeed one is needed at all. However, I think that the rule of thumb for dealing with these things should be in place at the very least, namely, that any additional costs, which should have been incurred by the Insured, had he embarked on the scheme correctly at the outset, are costs which the Insured should absorb, not the Insurers.

3. LEG3 Deductible and Drop-Down

The fifth and final point I want to make, which has lain at the centre of several claims we have dealt with of late, is in the modification of the LEG3 deductible wording. When LEG3 was initially introduced, it attracted a higher deductible but it was worded in such a way that, if the Insured did not want to take advantage of the LEG3

design cover, he could instead present his claim under the policy as if LEG2 applied, not LEG3 and thus only attract the smaller LEG2 deductible. That seemed quite reasonable to me, especially as it meant that the Insured was not being penalised for higher LEG3 deductibles after he had paid a higher premium than he would have done for a LEG2 policy.

LEG3 and the deductible.

In recent years, however, the LEG3 deductible has been worded in such a way that it applies to all losses due to defects in design, workmanship and materials. My understanding is that, although some brokers seeing these words had not thought that the intention was to apply it to all losses due to defects, that WAS very much the intention of the Insurers. It is of course quite a valuable set of words for insurers if it is presented in this way since many losses are due to defective workmanship or design of some form or other. The issue which arises is how far one takes the expression of loss "due to defects of material workmanship or design".

The three examples are: First, an electrical fault which causes a fire. Since the loss is due to defective electrical wiring, the higher deductible applies.

We could then have a situation where a surveyor makes an error in setting out - with the result that the contractor excavates deeper than he should have done, and a collapse occurs. An error has been made by the surveyor and the Insurer wishes to apply the higher deductible because the loss is due to defective workmanship. The expression "defective workmanship" seems to apply to an article which has been constructed, as distinct from not performing an activity properly. We had a situation where one interpretation was that a setting out error by a surveyor was indeed within the expression "defective workmanship" and therefore the higher deductible applied, even though the consequence was in some way remote - in that an excavation collapsed. It illustrates how widely this higher deductible can apply to any types of error on site. However the third analogy is a crane driver not operating a crane properly with the result that he drops a load causing damage. That is said not to be defective workmanship because it is purely an activity, and not the construction of something.

These deductibles which can be as much as £1m, can have a significant impact on the claims and it therefore seems logical that there is some clarity and common understanding as to how they should be applied.

CONCLUSION

To sum up, the five points I said I would be covering, with case examples, at the start of this talk, are:-

1. An illustration of how LEG2 operates very well in the field of claims because the principle of putting the Insured back in the same position he was in immediately before the loss is set out in law and is easy to explain to the Insured. Moreover, it is a perfectly practical way of dealing with claims and I am glad to see that it is used more commonly now than it was five years ago.

2. I think Underwriters should be aware that, following the Colin Edelman amendment by LEG in 2006, the exposure of Underwriters in having to pay for “patent detrimental change” is much wider than it might otherwise have been typically when Manse said in *Skanska –v- Eggar* that manifestation of a defect is not damage.
3. All is not lost because on most of these LEG3 claims, as a latent defect gradually becomes patent, it is a gradual process over time. The actual amount of damage upon discovery of the defect on day one might be a mere 5% of the eventual damage if the defect is left unattended, but the Insured is under an obligation to correct his defect, and undamaged areas, at that point and Insurers should only be paying for the areas damaged at the time of discovery.
4. There needs to be a rule of thumb as to how the additional cost of improvement exclusion is applied in LEG3 and the most effective way seems to be :the cost excluded is the additional cost of any design changes if they had implemented at the outset.
5. The final point is the need for a common understanding on how the larger LEG3 deductible gets applied, since the deductible’s DE1-style wording has a considerable impact on what will , and will not , be paid under the policy.

However I think the most important issue which arises out of this , which should be of interest to Underwriters, is that the most effective set of words are those which mirror the way indemnity is expressed. By this I mean a policy wording which explicitly puts the Insured in the situation he was in before the loss. If a set of words like this is used, it is far more effective than an attempt to separate works out into their component parts (defective and non-defective) . Experience on the claims themselves shows that this technique is not readily applicable because of the complex nature of the construction process.