# Appendix 5: Insuring downside risk

## Introduction

While traditional insurance markets exist for specific established exposures, the insurance industry is starting to innovate successfully by devising new flexible forms of cover which meet the need for an integrated and holistic approach to the insurance of project risks. Emphasis is beginning to shift from the mechanical placement of insurance for single risks, which has hitherto been the traditional approach, to the devising of an optimal outcome for a package of risks over the lifetime of a project.

In the UK, projects coming under the Private Finance Initiative (and derivative programmes like Public-Private Partnerships) typically demand a broader and more flexible stance from insurers in tackling the umbrella of risks within a project, and insurance markets have been able to respond to this demand. As insurance markets become increasingly familiar with the type of risks covered, the scope for continued innovation to the benefit of the client will grow.

## Common risk categories

While all projects are different, common categories of risk for major projects include:

- loss of assets during and after construction
- unforeseen ground conditions
- loss of income stream due to delay in construction completion
- insufficiency of revenue stream (e.g. due to erroneous forecasting)
- liability to third parties
- design liabilities
- liability to employees
- failure of information technology.

## Methods of insurance

Insurance is usually arranged in relation to a particular phase of the project and the following describes some of the ways that large projects are insured.

***The construction phase***

*Construction all risks (CAR):* Insurance against physical loss or damage of assets used during construction, including the contract and temporary works, mechanical and electrical equipment, construction plant and equipment, and any existing buildings or structures to be retained.

*Third party (public) liability:* Indemnity if there is legal liability to third parties for physical injury or damage to property. Extension of cover to provide insurance for pure financial loss and for design faults may be possible.

*Professional indemnity:* Legal liability caused by negligence in carrying out 'professional' duties for third parties. This must be considered alongside the contractual structure, the liabilities of the parties within the project and third party liability insurance.

*Employer's liability:* An indemnity which covers the employer against legal liability if employees suffer physical injury or disease while in their employ.

*Advance loss of profit:* Cover if revenue from a project is interrupted because of delays caused by physical loss or damage insured under a CAR policy. Cover is provided for a range of financial losses such as debt servicing through to remuneration of full gross profits (income less cost savings). The individual exposures of all participants in the project need to be considered.

***The operational phase***

*Material damage:* Cover against loss or damage to the physical assets of the project. Areas of cover that need to be addressed include whether to insure against mechanical and electrical breakdown; whether cover should be against all risks or only for specified perils; whether cover should be 'as new' or should reflect asset depreciation.

*Business interruption:* Interruption to the revenue stream caused by physical loss or damage. Cover can range from the cost of servicing debt through to gross profits foregone. Cover can be extended to include denial of access, utility failure and other risks.

*Latent defects:* Cover for structural damage, imminent threat of collapse or failure of the weatherproofing envelope – including consequential loss – arising from a latent defect in construction which manifests itself in the first 12 years after construction.

*Third party (public) liability:* Legal liability to third parties for personal injury (including disease) and damage. Pure financial loss extension should be considered.

*Employer's liability:* Legal liability for injury to employees. The Transfer of Undertakings (Protection of Employment) Regulations should be considered in relation to questions of liability for employees of acquired businesses.

*Motor:* Damage to owned vehicles, or those leased or hired to the project, together with associated liability to third parties.

*Directors' and officers' liability:* The legal liability of directors and officers of the project arising from their managerial position.

*Others – specific to the project:* Depending on the circumstances of the project, other coverages, such as medical malpractice liability, key-man insurance, etc., need to be considered.

## Extending the risk management strategy

Apart from obvious legislative limitations and restrictions incorporated into the process, the scope for creative solutions increases as we move away from the working layer (attritional losses), and as risks are combined and the terms extended. One of the most important aims in combining risks over a period of time would be to take a more strategic perspective on the handling of risk and achieve longer term objectives – such as the smoothing of the premium levels and the achievement of cash flow stability, as well as building long-term strategic alliances with insurers.

Another key driver to what strategy is adopted is the probable size of projects and exposures, and whether it is likely that traditional insurance markets will find it difficult to absorb the risk. Traditional insurance may exist, but at a price that is not economic. A commercial view may be needed on whether insurance represents value for the risk which is being transferred. When considering whether to insure risks that they have not previously insured, insurers are likely to be much more receptive if relevant statistics of the frequency and severity of the risks concerned are available from past experience.

## Insurance markets available

As well as pre-existing insurance markets, new markets may need to be created and early involvement by insurers and risk experts in establishing these is critically important, especially if projects are very large. The availability of insurance is likely to depend on the availability of data and knowledge of the risks (and familiarity of the insurance markets with the risks). The aim is to design a customised solution package that will give the broadest cover at the most economic price possible, using an optimal combination of financial markets.

## Limited risk transfer

Below are summarised a number of ways in which risk can be transferred to a limited extent, which can be useful where full insurance cover cannot be obtained:

- *Unfunded self-insurance:* whereby the owner would simply pay losses, as and when they arise, from cash flow.
- *Pre-funded self-insurance:* in which cash is set aside for this purpose in a stable financial asset.
- *Owned captive:* a limited purpose insurance company specially formed to insure or re-insure the risks of its parent company.
- *Rent a captive:* this is a funding vehicle owned by a third party which operates as an insurance company for a limited number of participants.
- *Mutual:* an insurance company owned jointly by a group of entities, all of which have homogeneous exposures to risk, such as the partners in a consortium.
- *Post loss funding:* funding of losses by borrowing from equity or debt markets, etc.
- *Financial insurance/reinsurance products:* use of insurance policies to fund risk exposures.
- *Insurance derivative products:* the principle of these products is similar to financial derivatives.

***Acknowledgement***

*The working party is indebted to Aon Risk Consultants for kindly supplying a paper on which this Appendix is largely based.*