

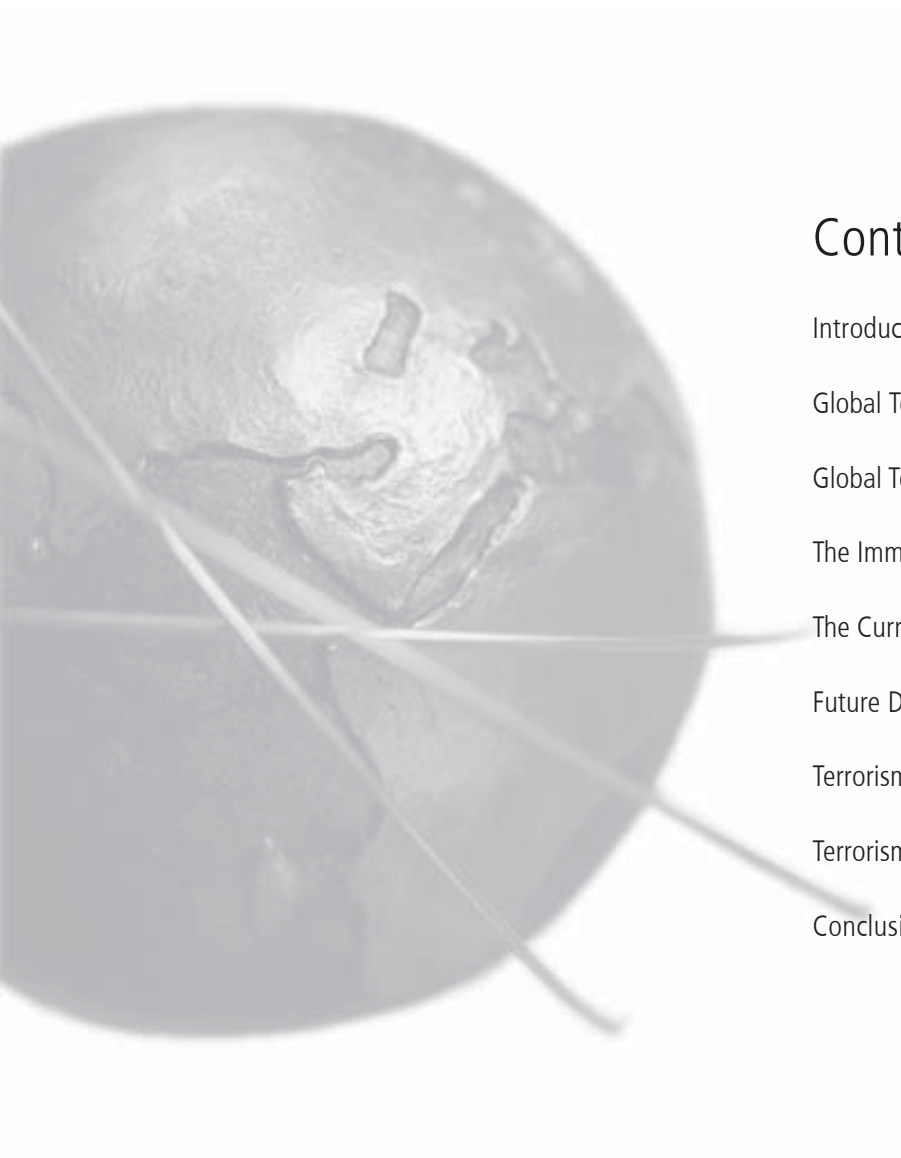
Terrorism Market Review

August 2002



Willis

Terrorism Market Review



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Introduction

The devastating events of September 11, 2001 have resulted in a profound and probably long-lasting change in the insurance market's approach to the underwriting of terrorism risks.

It was the specialist terrorism market that first responded to the need for cover as insurers and reinsurers rapidly withdrew terrorism as an insured peril under traditional property programs. The market, having been re-defined by September 11, remains volatile driven by global demand for a limited capacity. Deep uncertainty continues to overshadow the long-term outlook of the market.

In this review we take a look at terrorism events in recent years and the development of this specialist market. We also identify the factors which are likely to affect the market's response to terrorism cover in the future.

Our review is primarily focused on the property damage and business interruption market but we do include some comments on liability and other lines.

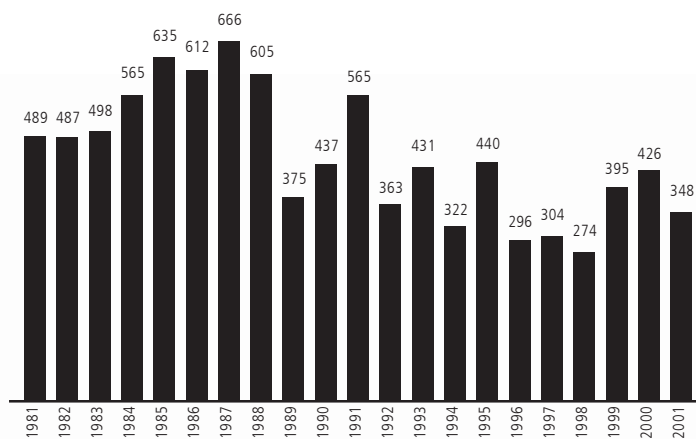


Global Terrorism – A History

The events of September 11, 2001 were unprecedented both in terms of their nature and impact. As a consequence they have had a dramatic and fundamental impact on the perception of terrorism risk.

International terrorism is not a new threat. However, historically, North America has suffered fewer incidents than other regions of the world.

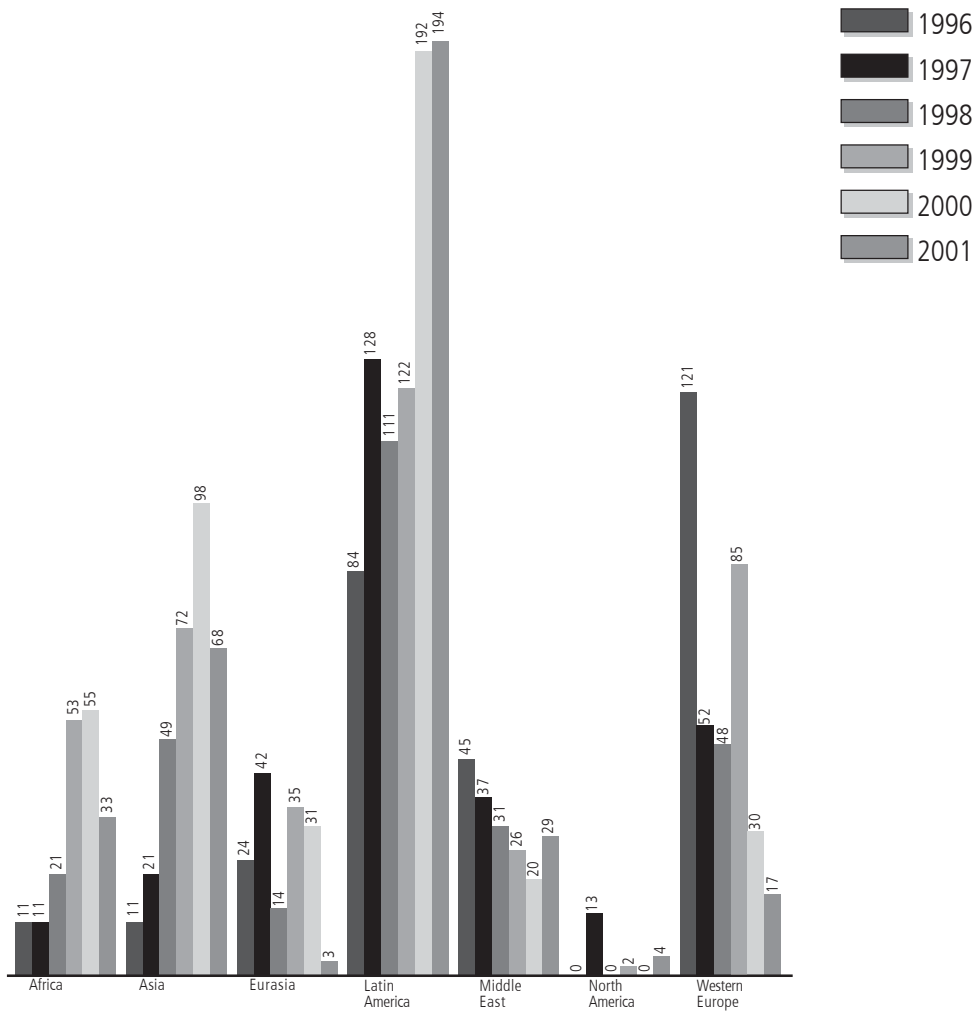
Total International Terrorist Attacks 1981-2001



Source: US Department of State

Global Terrorism – A History continued

Total International Attacks by Region 1996 - 2001



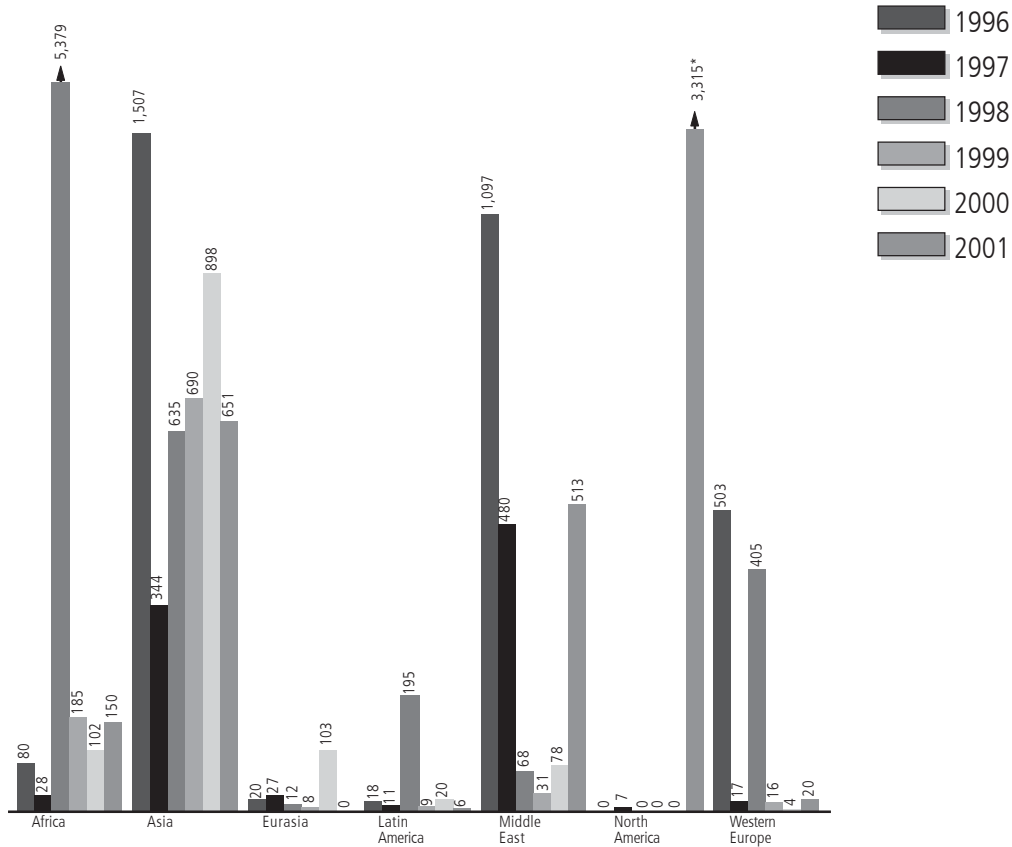
Source: US Department of State

Despite September 11 the number of terrorist attacks in 2001 reduced from 426 to 348. In 2000 there had been no attacks in North America.

However, the magnitude of the loss on September 11 was much greater than that which had ever been contemplated, and the number of casualties were at a level previously considered inconceivable.

Global Terrorism – A History continued

Total International Casualties by Year



* Estimated (unofficial) figure of 3,000 killed in World Trade Center

Source: **US Department of State**

Inevitably events of this scale, in a developed region such as North America, have resulted in significant losses to the insurance market. September 11 has produced the largest ever insured loss, with estimates of total losses to the insurance market, (including casualty and other classes) ranging from US\$50 billion to US\$70 billion and has also resulted in the first ever workers compensation catastrophe.

The largest man-made (non terrorist) property insurance loss before this was the Piper Alpha oil platform in 1989 which totalled US\$3 billion.

Global Terrorism – A History continued

The Worst Terrorist Acts in Terms of Insured Property Losses

Date	Country	Location	Event	Insured (PD, BI or Aviation) loss (US\$ million)	Estimated economic loss (US\$ million)	Injured	Fatalities
11 Sep. 01	USA	New York, Washington DC	Terror attacks against WTC and Pentagon by hijacked airliners	19,000	90 000	2 250	3 122
24 Apr. 93	UK)	London	Bomb explodes near NatWest tower (City)	907		54	1
15 Jun. 96	UK	Manchester	Explosion of IRA car bomb near shopping mall	744		228	0
26 Feb. 93	USA	New York	Bomb explodes in garage of World Trade Center	725	1 311	1 000	6
10 Apr. 92	UK	London	Bomb explodes outside Baltic Exchange (City)	671	2 874	91	3
24 Jul. 01	Sri Lanka	Colombo Intl. Airport	Rebels destroy 3 airliners, 8 military aircraft and heavily damage 3 civilian aircraft	398		15	20
09 Feb. 96	UK	London	IRA bomb attack in South Key Docklands	259	271	100	2
19 Apr. 95	USA	Oklahoma City	Truck bomb attack on government building in Oklahoma City	145	757	467	166
21 Dec. 88	UK	Lockerbie	PanAm Boeing 747 crashes due to bomb	138		0	270
12 Sep.70	Jordan	Zerqa	Hijacked Swissair DC-8, TWA Boeing 707 and BOAC VC-10 dynamited	127		0	0
06 Sep.70	Egypt	Cairo	Hijacked PanAm B-747 dynamited	111		0	0

Source: **Swiss Re**

Over the last decade the most severe terrorist attacks have resulted from either aviation incidents or the bombing of civilian targets – attacks designed to have the maximum catastrophic effect in terms of loss of human life. In the terrorists' pursuit of "mass destruction", it is thought that chemical, biological, radiological and nuclear materials are now being added to their armoury.

The sarin nerve gas attack in the Tokyo subway system in 1995 highlighted the real threat of chemical and biological attacks in public places but it was not until the US anthrax incidents in 2001 that this type of terrorist activity became a real public concern in the western world.

Technological developments and the armoury now available to terrorists, together with the growing evidence that terrorists are prepared to sacrifice their own lives to further their aims, means that the unexpected can be expected with devastating consequences.

Terrorism is a feature of the world in which we live today and it seems unlikely that the threat will diminish.

Global Terrorism Cover Prior to September 11 2001

Before September 11, 2001 terrorism exposures were considered to be manageable within the context of All Risks insurance policies, either specifically defined and sub-limited or not specifically identified within the policy wording.

There were certain countries where terrorism cover was specifically excluded and/or where, because of historic levels of terrorist activity and the lack of cover in the local market, government supported funds had been established.

Country	Terrorism risk insurance provider	Details
UK	Pool Re	The international reinsurance market withdrew capacity as a consequence of IRA terrorism in the 1990s, which, in turn, led to a state-supported solution: Limited private cover with additional excess cover for both property damage and business interruption made available for insurance companies to cede to Pool Re (which sets rates and terms). The British government acts as Pool Re's "reinsurer of last resort", in case of insolvency.
Spain	Consorcio	Consorcio CCS (Consorcio de Compensacion de Seguros) is a state insurance facility guaranteeing cover for "extraordinary risks" such as earthquake, volcanic eruption, flood, storm, terrorism and civil commotion. The cover is for property damage only and is integrated into policies issued by private insurance companies which collect premium on behalf of CCS. After deregulation in 1990, it became possible to insure these risks privately, whereupon CCS provided subsidiary cover only and in accordance with the legal minimum. However, policyholders must pay CCS premium in any case and thus maintain the solidarity principle for catastrophe risks.
South Africa	SASRIA	In 1979, South Africa's particular political situation led to the creation of the national institution SASRIA (South African Special Risks Insurance Association) for the (voluntary) insurance of political risks in respect of property damages and, later, standing charges. While the political situation has improved considerably in recent years, SASRIA still exists.
Israel	PTCF	Terrorism is excluded from standard property policies but the private insurance market grants cover by separate endorsement. Reinsurance coverage is provided by catastrophe excess of loss treaties. In addition, the state of Israel covers property damage losses triggered by politically motivated violence (including terrorism) through the Property Tax and Compensation Fund (PTCF) which was established to cover property losses resulting from war and war-like activities.
Northern Ireland	Government	Terrorism cover for local risks is excluded. Criminal Damage Compensation Order has been in force since 1978 providing compensation on an indemnity basis for property damage and business interruption.
Sri Lanka	Riots and strikes and terrorism fund	Government sponsored riot fund, set up in 1988 includes the risk of terrorism. Limit is Lkr30 million (approximately US\$300 000) per risk, per location and is subject to 10 percent deductible.

Source: **Swiss Re** and **Willis**

The Immediate Market Response to September 11

Following September 11 insurers and reinsurers reviewed their global exposures and, wherever possible, gave immediate notice that terrorism cover, where it was specified, would be excluded in accordance with the cancellation clause – in most cases cancellation of cover would take place 90 days from the date of the notice.

There followed a period of intense activity by insurers, reinsurers, brokers and insured parties to establish the extent of cover provided, that which could be immediately cancelled and the options available.

It is well documented that the aviation industry was affected in a dramatic manner, with the threat of many airlines being unable to operate due to the unrealistic cost of the limited available cover. Eventually governments stepped in to take over this responsibility, many of such covers remaining in place to this day.

At this time the Property market immediately stopped writing business to assess accumulation issues. When underwriting recommenced, terrorism cover was generally excluded. The specialist terrorism markets took this opportunity to address the shortfall but were very cautious in the amount of capacity offered.

In the immediate aftermath of September 11, terrorism underwriters also had to reassess the catastrophe implications now presented by this class of business. The nuclear risk had long been excluded, but quickly added to uninsurable risks were Biological, Chemical, Cyber Terrorism and Hoax, as the financial consequences were now considered too large.

Terms and conditions were restricted and only a narrow wording was available. Only small limits were being purchased.

January 1 2002 saw the continued withdrawal of terrorism from property policies as treaty exclusions came into effect. This continued to stimulate demand for stand-alone cover. Simultaneously, large numbers of insureds changed their perception of their own exposure or had lenders require

cover for terrorism risks, which further drove demand in the market. Many of these risks were situated close to each other in city centres, presenting underwriters with accumulation issues.

Since September 11 a number of countries, in addition to those mentioned in the previous section, have also established specific terrorism funds:

- In France GAREAT, a reinsurance pool, has been established to cover the terrorism exposure of all eligible risks. Membership of the pool is obligatory for all members of FFSA, the French insurers' association. The minimum limit for cover through this scheme is 20% of values or Euro 20 million (US\$17.7 million).
- And, very recently, in Germany Extremos AG, a specialist terrorism reinsurer, has been set up by the government to offer cover up to Euro 10 billion in excess of Euro 3 billion.

In the US, the House and the Senate have each passed bills with two different solutions for a federal terrorism insurance backstop.

The House bill, passed six months ago, establishes a loan program in which the government would provide temporary capital to insurers to pay claims, but which insurers would have to repay.

In June 2002 the Senate's bill was passed with a provision for up to 90 percent of coverage for claims that exceed US\$10 billion. The federal government exposure would be subject to a US\$100 billion cap.

A House-Senate Conference Committee has yet to be appointed, to review both bills and establish the final format for the federal terrorism insurance backstop in the US.

Worldwide, as terrorism cover became excluded from standard property policies both government and commercial markets began to respond to the demand for cover.

The Current Market

Underwriters have responded to the accumulation issues presented to them by embarking on sophisticated aggregation modelling to ensure that they are not over exposed to any one area and by offering cover as a limited, defined amount with re-defined terms in new wordings.

As a sense of normalcy returned to the market, and confidence grew, so too did capacity as more underwriters saw opportunities in writing terrorism. By the end of May, capacity stood at approximately US\$600 million made up as follows:

	US\$
Lloyd's	200 million
AIG	50 million
Axis	125 million
Bermuda	50 million
Berkshire Hathaway	175 million

The above capacity is for both Property Damage and Business Interruption (following loss to insured property).

Although capacity has increased, it is not uniformly offered and depends entirely on the profile of the risk and how it fits underwriting criteria.

For Property Damage only, further capacity is available with AIG being able to offer up to US\$150 million on this basis. Berkshire Hathaway also has the potential to offer more capacity if appropriate. ACE has created a Property Damage facility for US and Canadian risks. Capacity provided is up to US\$100 million for specific sectors such as utilities, telecoms, financial institutions, manufacturing and entertainment. SRIRL, based in Luxembourg, and with shareholders such as Allianz, Zurich Financial Services, Swiss Re, Hannover Re, XL Winterthur and SCOR has been formed to underwrite European risks. Additionally other underwriters are looking to provide a capability but are at an early stage of development.

Rating Factors

Underwriters are concerned almost entirely about the risk's potential and attractiveness as a target and how it is located in relation to other potential targets. Hence the following will attract higher premium rates:

- Iconic or Trophy Buildings
- Risks with open or easy access to the public, such as hotels, retail stores, cinemas and the like.
- Risks with government, military or defence involvement or controversial research and animal testing.
- Risks whose destruction will have a potentially large impact on the public such as utilities, transport infrastructure, and energy risks.
- Risks close to any of the above which could suffer collateral damage or which are situated in a downtown area with a high profile such as Times Square, New York.

In high accumulation areas, most notably Central New York, premium rates continue to reflect the shortage of capacity available. As more capacity is sold in these areas, pricing is rising for the remainder available and it is possible that there may not be capacity available for risks renewing later in the year.

Conversely, premium rates for low profile risks in rural or out of town areas have been falling as capacity increases and competition again starts to play a role. By way of example, industrial risks in rural USA are attracting rates at perhaps one third of those being charged at the start of the year.

Future Developments

There will be a number of factors which will determine the shape of the terrorism market in the future. Another significant insured loss has the strongest potential to curtail development or create such uncertainty as to cause further withdrawal of underwriters from terrorism. Should a loss not occur, or be limited in its impact on the market, then development will be a function of a combination of the following factors.

1. The number of entrants to the specialist terrorism market attracted by the commercial opportunity.
2. The availability of specific reinsurance products to support terrorism underwriters and increase the capacity they can offer.
3. Whether Property Insurers and Reinsurers again begin to offer terrorism as part of property cover and to what extent. Some property insurers may view that offering some terrorism cover is a competitive advantage.
4. More sophisticated modelling of terrorism exposures by underwriters may lead to greater confidence in an ability to underwrite as parameters are identified with a greater certainty.
5. The amount of world-wide government support, or Federal support in the USA, given to the insurance industry, and/or the effect of how insurers may react to their rulings on terrorism exposures.
6. The nature of demand and who buys what and where. Will demand be wide-spread over large geographical areas or continue as at present with high demand from risks with perceived higher exposure, in high accumulation metropolitan areas or where lenders insist that terrorism cover be carried? And, of course...
7. The Loss Activity

However, the consensus of opinion is that terrorism activity will continue and it is likely that there will be another attack in the United States.

As Dick Cheney, US Vice President said in May:

“It is not a matter of if, but when”



Terrorism Cover for Liability Risks

Background

Liability policies have for many years contained war exclusions. Until the events of last year any form of exclusion of terrorism activity was extremely unusual. Liability insurers had not identified terrorism as an issue of concern. This has been true even in territories such as the UK where Pool re, a government backed facility, has been established for nearly ten years to address property exposures following major terrorist events in the early 1990s.

There are other long term problems that impact on the market which have been insurers' primary concern - increasing court awards and long tail liabilities from toxic torts being just two.

Post September 11 Reaction of the Liability Market

A number of international insurers made rapid moves to introduce exclusions of terrorism into liability policies. This happened ahead of any definitive action by reinsurers. Exclusion wordings were drafted in haste by a number of insurers. They were wide in scope and difficult to interpret. In some cases inappropriate property wordings were used as a basis. This created further dislocation in an already very

difficult market. However, at that stage it proved possible to complete many programs without exclusions. In some cases this involved dropping markets from programs and restructuring. The real pressure built towards the end of the year as the reinsurance renewal season approached.

Reinsurers sought to introduce blanket exclusions of terrorism coverage from liability treaties or at the very least to severely restrict the ability of the direct market to provide cover. As with the property market this process extended the treaty renewal process to the extent that many direct insurers did not know what cover they could provide right up to January 1 and in some cases even beyond that date. The initial very tough line softened to some extent. It continued to be possible to renew some accounts without exclusions particularly where insurers recognised that the cover was, in effect, compulsory. For example, at that time, the UK rail regulator was not prepared to accept cover with terrorism exclusions.



Terrorism Cover for Liability Risks continued

The Current Market - Liability

As we approach the anniversary of September 11 it remains the case that the liability market is in some confusion. Exclusions of terrorism cover are widespread but not universal. There is evidence of a hardening of stance in some areas as a number of insurers who have treaties due mid year finalise their negotiations.

Up until now it has been possible to maintain cover for a range of larger risks. This has included the UK rail industry. Resistance by some major insurers of this sector is increasing. Lobbying by one of the principal primary insurers has resulted in the Strategic Rail Authority agreeing to accept cover taken out by industry companies with exclusions. This does not of course remove the potential exposure.

As yet there has been little demand for stand alone solutions for terrorism risks. This reflects the fact that either it has been possible to restructure programmes to avoid exclusions or the client concerned did not believe that the exposure warranted paying the price likely to be demanded by the potential insurers.

We believe that if the market hardens further and terrorism exclusions affect a wider range of insureds then demand for stand-alone solutions will emerge.

Liability Terrorism Exposure Overview

The exposure of property to terrorism is immediate and direct with, in some cases, very large accumulations of values at risk. Where legal liability is involved the issues are different. It is true that as with September 11, in some jurisdictions the workers compensation market may suffer direct loss. However for most liability classes, in most jurisdictions, there has to be some element of fault. The mere fact of a terrorist event does not produce a liability for those affected. Even if there is an element of fault by, for example, a security firm in failing to detect an explosive device, the claims would be against the single program held by that firm and within the limits bought. This should contain the exposure faced by any individual insurer and the market as a whole. It is therefore a risk that can be assessed and underwritten. Indeed a significant part of the market has so far continued to take this view, at least for some risks. However the providers of capital to the insurance market may not be prepared to make the distinction particularly if we see another major event. The pressure remains therefore to further restrict cover.

Terrorism Cover for Other Classes

UK Employers Liability and Motor

A number of UK motor and employers liability treaties were renewable mid year. Some of the key reinsurers in this sector have particular fears in relation to the potential exposures. With motor insurers it is the possibility for liability following use of a stolen vehicle to carry a bomb. The scale of destruction from this source can be enormous as demonstrated by the Docklands attack in 1996.

It is far from clear that there would be a liability in these circumstances. However reinsurers are no longer prepared to accept the property damage risk on an unlimited basis which had been the case until now at least on private cars.

The legislation in the UK only requires a limit of £250 000 for property damage although it is unlimited for personal injury. There has now been a move by a number of insurers to reduce the limit to £5 million or in some cases to the Road Traffic Act limit of £250 000. Others are likely to follow after the next treaty renewal season at the end of the year.

Employer's liability insurers have been under similar pressure from reinsurers. Again a number have sub-limited terrorism cover to £5 million which is the statutory limit. Much of the excess employers liability market is also seeking exclusions. This has limited the total capacity available to around £25 million.

Construction

The issues in relation to the availability of cover for terrorism exposures are similar to the property and liability market generally. There are potentially significant implications for the financing of some large projects. The banks are very sensitive to the possibility of uninsured exposures in sensitive parts of the world. It is conceivable that, if cover is inadequate or limits considered to be too low, that some projects could have difficulty raising funds. The increasing availability of stand alone terrorism cover will to some extent mitigate this issue. However, it is important that at the early stages of the project this aspect of the risk financing is considered in detail.

Political Risks

The political risks insurance market can offer terrorism coverage. It tends to be focused on emerging markets and is not aimed at replacing the exclusions in property programmes in the developed world.

Cover when offered is normally provided as an extension of political risks confiscation insurance. Political violence cover combining physical damage due to terrorism and war on land is also available.

The insurance is provided against physical damage, or in the case of lenders, non-repayment of loans due to terrorism.

Capacity of around US\$150 million per location is available.

Terrorism Cover for Other Classes continued

Marine

Historically the Marine Market has provided terrorism cover under the War & Strikes Risk clauses, charging separately for the cover provided by this clause with premium rates dependent on the geographical area of trade. The highest rates currently apply to trade in waters around the Middle East, parts of the African Coast, Libya and Sri Lanka.

Following September 11 cover continues to be available. However, in respect of cargo risks, cover for terrorism is now restricted to the transit element of the risk i.e. cover for terrorism terminates at the end of the ordinary course of transit and there is no cover for the static element of the risk when, for example, the cargo is in storage. Nearly all policies are now subject to JC2001/056 - Termination of Transit Clause (Terrorism). Separate cover is available at additional premium to cover the static terrorism risk with premiums reflecting the potential threat of war or terrorism activity in that particular area.

In respect of Marine Hull, the market perceives cruise ships with possibly 2,500 to 3,000 passengers on board, to be the biggest potential terrorist targets and these continue to attract significantly higher premiums than the rest of the world's fleets. All shipowners have had their war risk rating reviewed since September 11.

Aviation

Following the terrorist attacks of September 11, the provision of third party liability insurance for war and terrorist risks to the air transport sector was thrown into doubt. Until that date, this type of insurance, which ensures that airlines and other service providers can meet the cost of compensation for persons and property affected by an attack involving an aircraft, was normally incorporated into the general policy of every company in the aviation sector. However, the extreme nature of the damage incurred in New York caused the insurance industry to reassess this situation and virtually all cover for third party war and terrorist risks was withdrawn.

In the immediate aftermath of the attacks, most companies operating in the air transport industry, including airlines, airports and other service providers, such as ground handlers and air navigation providers, were left with either minimal insurance cover of US\$50 million for these risks, or no cover at all. This compared with typical cover available of well over US\$1 billion for most major airlines and airports before the attacks.

The reduced limit available from the market was, in most cases, considerably less than that contractually or statutorily required. Without adequate cover many operators faced the real possibility of having to halt operations.

In this environment, governments stepped forward to provide cover to various levels. However, governments from the outset insisted that they were providing stopgap cover and would look to commercial markets to provide cover in the long term.

The commercial markets response was limited as few in the market wanted the potential risk. A few direct insurers offered cover up to US\$1 billion excess of the new primary limit of US\$50 million. The market basically considered Third Party War Risk to be a political risk and therefore the responsibility of governments. Governments are refuting this argument and are pushing for an answer from the commercial insurance market.

Airlines have grouped together under regional associations to act as pressure groups to find solutions to the lack of cover required.

In the long term, a global program through the International Civil Aviation Organisation (ICAO) backed by national governments is viewed as the best commercial/political answer.

For further information on terrorism cover in any of these markets please speak to your usual Willis contact.

Conclusion

While the conventional markets have responded to the events of the last 12 months by withdrawing terrorism cover, specialist markets have stepped in to fill the gap - a move which we consider to be very positive.

In the medium term, however, we believe that the terrorism market will continue to be volatile and solutions for clients limited by available capacity and the cost associated with obtaining it. Government intervention for the major world economies is likely to be required, given the uncertainties of terrorist capabilities, perhaps modelled on the UK's Pool Re or Spain's Concorio or GAREAT in France. In the USA, political debate continues as to how intervention should be implemented, but it is generally recognised that a Federal back-stop is required. Meanwhile terrorism cover will remain a prominent issue for Insureds as they come to terms with the potential impact on the operation of their business and the amount of cover they can cost effectively purchase.

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