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War and terrorism – collateral consequences for engineering and construction insurers



Crates from weapons left behind in a refinery that had been stored there to “protect” them from airstrikes

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1. Introduction

Conventional engineering and construction policies contain war and terrorism exclusions, but does that mean that insurers are immune from the consequences?

When considering whether to provide cover for an engineering or construction risk and, at what rate, underwriters need to consider whether the risk they are covering might be impacted by the collateral consequences of war or terrorism. Questions that should be asked include:

- Is access to the location sufficient to allow proper assessment of the risk and then appropriate servicing of the cover through on-going visits by surveyors and loss adjusters?
- Is the access situation likely to remain stable or might it deteriorate during the period of policy coverage?
- Will standard war and terrorism exclusions protect underwriters from all the consequences of war and terrorism?
- What unusual threats may be left behind in areas that have been the scenes of past war and terrorism?
- How likely is it that the unanticipated consequences of war or terrorism will create exceptional additional repair costs pushing up material damage claims, or extend delays and push up advanced loss of profits claims?
- Has the risk been properly assessed or is additional analysis required?

The issues that need to be considered are set out below with examples extracted from real situations.

2. Access for surveyors and adjusters

Arrangements for surveys of risks in areas affected by war or terrorism are more complex than normal. Before the survey the surveyor will have to prepare a threat assessment, arrange security and escorts during travel and work on site. The surveyor may face restrictions on taking photographs and time may be limited. Accommodation on difficult projects may also be restricted by security managers. Threats include:

- Attempts to stop projects proceeding
- Attempts to kill or injure either local or non-local staff
- Kidnapping for political reasons or for financial gain
- Terrorist activities aimed at a government or population (rather than at the risk being surveyed but where the risk becomes engulfed)
- Anti-terrorist exercises by military forces which occur without warning
- Attacks on police or military forces guarding a risk being surveyed

Emergency evacuation

During a risk survey of a Middle Eastern oil field, a terrorist attack at an adjacent site resulted in the triggering of a pre-planned emergency response plan. The surveyor, being a non-essential person, was evacuated before the survey could be completed and had to return later to complete the survey when the threat level had diminished. The time and cost of the survey was increased as a result of the incident.

Limited access

A survey of a port in a South American city with an exceptionally high murder rate associated with the activities of drug smugglers and a high kidnap risk required the surveyor to use an infrequent air service rather than travel by road thereby making the survey take longer than normal.

When assessing risks it is tempting to rely on information from the internet. Web based information tends however to focus on recent events but reports may be exaggerated or inaccurate and rarely do they provide advice about upcoming events which can change the situation at short notice. Knowledge from people on the ground and with access to restricted information can prove invaluable.

Government sources, such as the UK Foreign and Commonwealth Office (FCO) often aim mostly at tourists rather than business travellers, and contain advice which is likely to err on the side of caution by comparison to that available from specialist security companies. Security companies can provide useful guidance, particularly if they have in country staff with recent local knowledge, but what they say must be tempered by the fact that they may be selling services to visitors. This can lead to a suspicion, which may or may not be justified, that the threat may, on the one hand, be exaggerated to encourage the purchase of escorting and guarding services or, on the other hand, played down if they fear a visitor may be put off and thus not retain them.

Political rally

A threat assessment indicated that an area in South Asia was peaceful there having been no recent incidents in the months leading up to a planned survey. Information from a local source however warned against a visit on the date planned since an opposition politician was due to return to the country in question and a planned rally on that day might turn violent, which it subsequently did.

Terrorist execution

A survey was delayed after advice from a source with access to restricted information. The justification for the delay was not provided at the time but on the date planned for travelling to the South Asian survey location, a death sentence was carried out on a convicted terrorist leading to protests and unrest.

If the threat level proves too high, surveyors may not be permitted to visit the area and underwriters may decide that they are unwilling to provide cover. Occasionally projects can be the terrorists' target and this has led some projects to be abandoned (occasionally at short notice without the opportunity to protect/preserve what has been constructed).

Target for terrorism

The development of a major mine in a war torn South Asian country became the target for a terrorist group whose aim was to prevent it from proceeding. A visit by road, even using armoured vehicles was assessed as being too hazardous and the cost of using a helicopter was prohibitively expensive making a survey impossible. As a result insurers were unwilling to provide construction coverage since access could not be guaranteed for surveyors or loss adjusters in the event of a claim. The project was subsequently suspended as a result of a deteriorating security situation.

Occasionally simplified risk reports can be prepared without site visits by using information from publically available sources such as press photographs combined with information from earlier surveys produced before the security situation deteriorated. Information can also be obtained using questionnaires completed by operating staff or by non-specialists in the region, who are less likely to be targeted by terrorists. Telephone and video conferencing is also possible but has limitations.

Obviously the quality of information will be lower than in a survey report following a visit by an expert. Nevertheless simplified reports may enable underwriters to provide restricted cover until the security position improves which is often preferable to no cover.

Attacks on Police

A motorway construction project across a remote area in North Africa was guarded by paramilitary Police who became the target of terrorist attacks. The project was not the terrorists' target and the contractor concluded that it was safest to work without using Police escorts. For the risk surveyor, a Police escort is normally a requirement to enter such a high threat area but in these unusual circumstances it was safer to make an exception. Subsequently a military base was established to protect the project and the threat level diminished.

Remote working

A survey of a Middle Eastern refinery complex was completed with the aid of information from the company's website and questionnaires completed by refinery personnel. Whilst the report contained sufficient information for the risk to be written, underwriters accepted that it contained only a portion of the information that would normally be expected.

3. Working difficulties

Occasionally problems can have multiple and prolonged consequences if normal procedures cannot be followed because security issues make it difficult to get access to part of a site before work starts.

Insecure work area

Owing to security concerns in an insecure area in North Africa, a full site investigation proved impossible before the start of tunnelling which passed beneath the area. Ground conditions subsequently proved different from those anticipated and a tunnel boring machine became stuck in squeezing ground. Rescue of the machine by shaft from the surface then required work in the insecure area resulting in increased costs, restrictions on the type of remedial works that could be undertaken and the contractor that could be used.

Moving materials and equipment to construction sites can be time consuming and extremely costly if transport contractors face exceptional risks or loads require special escorts. Where explosives are used for drilling and blasting particularly tight control has to be exercised over their transport and storage.



Helicopter used for a site survey

Supply of explosives

Explosives used in drilling and blasting of rock along the route of a North African railway were only available from a government controlled manufacturing facility and movements were tightly controlled and required a military escort. When more rock than originally anticipated was found along the route, the rate of supply of explosives dictated the critical path for the project programme.

In one project the insured value of the equipment was less than the cost of providing security for the equipment during transit from the port of arrival to site. Care was therefore needed in setting the sums insured to ensure adequate cover was available.

4. Construction site security

Sites and work camps may require a range of security features including substantial fencing/walls, guard posts, double or triple gates, trenches, movement detectors, CCTV cameras, flood lighting, detachments of police and military personnel for guarding and escorting duties.



Site camp perimeter double fence with cameras and movement sensors

If on-site accommodation is not being provided for all, construction sites which require large numbers of workers have the logistical issue of moving these workers daily between the site and accommodation. Daily movements will involve the completion of security procedures which will shorten the working day and increase costs. Even transporting managers/workers between different construction areas can be difficult and costly. Night working can be restricted owing to the threat of attacks. Managers, contractors and workers are likely to expect to be paid more for working in difficult areas and the choice of contractors and working methods may be limited by security concerns. Occasionally helicopters or light planes may be used to avoid road transport but the movement of aircraft together with associated fuel storage may increase the risk of an accident even if this is not caused by war or terrorism.



Guard post and sandbagged trenches at hydro-electric project

Site helicopter

North African site under threat from terrorist attack initially used armoured vehicles with an escort to transport staff to and from the construction site until a roadside bomb destroyed a vehicle killing the driver. Following a risk assessment, the project obtained a helicopter to transport staff to and from the nearest international airport and between two sections of the site separated by an unsafe area beneath which a tunnel was being constructed.

Unusual route to site

Access to high value sites in some locations (onshore and offshore) has involved direct transit from a third country to the site without the need for immigration and security checks at a “gateway” within the country followed by internal travel to the location. For some locations, this is the normal route for ex-pat staff working “rotations”.

Placing military forces at a construction site can introduce additional risks. Military forces may undertake live firing exercises and firearms and munitions can cause accidents.

Army protection

After a hydroelectric project in a remote South Asian mountain area was attacked by terrorists using “pressure cooker” bombs, a detachment of the army was placed in a fortified camp near the project. During a survey, live firing exercises were undertaken by the army.

The risk that live firing might result in accidental damage had to be assessed since it was unclear whether a standard war and terrorism clause would exclude the cost of repairing damage caused by stray ammunition fired as part of an exercise rather than in response to a terrorist attack.

5. Post-conflict threats from war and terrorism

Even once hostilities have ceased and the threat of terrorism has passed, sites can require unexploded ordnance (UXO) clearance (sites across Europe, Far East and North Africa are still encountering unexploded ordnance from the Second World War). Some offshore projects are within or close to areas where ordnance was deliberately dumped.

In some construction policies that have a standard war and terrorism exclusion, there may be an exception clause for damage or liability caused by hidden ordnance for example:

It is agreed that loss or damage or liability caused by hidden bombs, landmines, ammunition or other engines of war left below ground or water prior to commencement of work in connection with the Project shall not be considered as "war risks" as excluded by General Exception 1 hereof.

UXO clearance can raise unusual issues in certain circumstances depending upon the type of ordnance involved and the site conditions

Unexploded ordnance removal

An oil field was located in a Middle Eastern border area which had previously been the site of major battles in an earlier war. Large quantities of unexploded ordnance were removed from the ground surface and probing was undertaken to a suitable depth to allow the construction of foundations. The project however required the drilling of oil wells and a technical disagreement developed between client and contractor as to how far beneath the surface it was necessary to probe before there was a reasonable degree of confidence that all unexploded ordnance in the vicinity had been identified and removed. This required careful analysis by a military scientist of the nature of the munitions used during the war and knowledge of the ground conditions during the fighting. Analysis indicated that the deepest unexploded ordnance was likely to have been the result of bombs dropped onto soft wet ground by aircraft flying at altitude.

Contaminated aggregate

At a Middle Eastern construction site located within a former war zone, ground clearance for UXOs had been completed, in line with established protocols, and construction work started. The programme of civil work required the import of aggregate from another location where UXO clearance had either not taken place or quality assurance procedures were poor. Mortar rounds were found in the imported aggregate.

6. War and terrorism exclusions.

A typical war and terrorism exclusion is shown below:

The indemnity provided by this Policy shall not apply to nor include

1. War and Terrorism

Loss damage, liability, cost or expense of whatsoever nature directly or indirectly caused by, resulting from or in connection with any of the following regardless of any other cause or event contributing concurrently or in any other sequence to the loss, damage or liability:

a) war, invasion, acts of foreign enemies, hostilities or warlike operations (whether war be declared or not), civil war, rebellion, revolution, insurrection, civil commotion assuming the proportions of or amounting to an uprising, military or usurped power; or

b) any act of terrorism

For the purpose of this Exception an act of terrorism means an act, including but not limited to the use of force or violence and/or the threat thereof, of any person or group(s) of persons, whether acting alone or on behalf of or in connection with any organisation(s) or government(s), committed for political, religious, ideological or similar purposes including the intention to influence any government and/or to put the public, or any section of the public, in fear.

This Exception also excludes loss, damage, liability, cost or expense of whatsoever nature directly or indirectly caused by, resulting from or in connection with any action taken in controlling, preventing, suppressing or in any way relating to a) and/or b) above.

There are however many forms of war and terrorism exclusion and buy backs allowing excluded risks to be included in cover. In a number of areas of the world the legal definition of what is taking place generally or the legal definition of the nature of the event that led to the loss are unclear.

Absence of security

Case histories – During the unrest that took place in Libya, following the fall of the Gadhafi government, theft took place from an oil installation. The thieves exploited a lack of security after the evacuation of foreign workers. This was not an act of terrorism, no war had been declared and it was unclear whether the situation amounted to a civil war. Different agencies had differing views.

Uncertain state of affairs

Subsequently, also in Libya, the cost of repair to equipment damaged as a result of a breakdown was increased substantially by the repairer since work had to take place in what was tantamount to a war zone. Legally defining the state of affairs that led to the increased costs (which potentially might fall within a policy exclusion) was not straightforward.

Post-conflict, difficulties can arise in distinguishing previously unidentified excluded damage resulting from an earlier war or terrorism, and fire or explosion damage caused by insured perils.

Terrorism or industrial accident

A major explosion occurred at a Middle Eastern munitions manufacturing and storage area in a country subject to regular terrorist attacks and conflict with neighbouring countries. The storage area was extensively damaged and thousands of nearby buildings suffered blast damage. Initially there was uncertainty as to whether the explosion was the result of a terrorist attack or an industrial accident. Only security cleared persons were allowed access to certain classified information for investigations. A seismologist had to be consulted to determine whether there had been more than one blast before it was concluded that the damage was the result of an industrial accident and thus not excluded from conventional property and liability insurance policies.

7. Extra costs and time for repairs to damage

In areas subject to strict security restrictions, undertaking some repairs can prove difficult if some equipment or materials (including spare parts) cannot be brought to the insured location. If a full repair is impossible due to lack of equipment and materials, insurers will need to assess whether the risk of a future loss has increased because a compromise repair solution has been used.

Maintenance difficulties

In a Middle Eastern area accessible only through military checkpoints, materials and equipment normally used for maintenance activities and for undertaking repairs to a power plant were not permitted. Thermographic equipment normally used to detect hot-spots in electrical equipment was not permitted because of concerns by the military that it might be used for night-vision purposes. Level sensors, usually used to detect movement on structures, were not permitted since they might also be used to improve the accuracy of artillery fire. Photographic drones were not permitted for survey purposes in case they were

used for spying or carrying out aerial attacks. Radioactive sources for checking weld integrity were not permitted in case they were used in bombs.

Expert contractors may not be prepared to enter areas deemed unsafe or may charge a premium for specialist investigations before starting work in areas with a higher than normal threat level or for making specialist protection arrangements.

Repairs can cost more than the original construction if previously used sources of materials become inaccessible as a result of war or terrorism. The need for large numbers of extra security personnel can increase repair costs if the security situation deteriorates during a programme extension whilst repairs following an insured event are undertaken.

Increased transport costs

A road damaged by a storm in Central America required large quantities of rock for repairs. The closest quarry, which had been used for the original construction, had fallen under the control of terrorists who would not allow rock to be removed without payment effectively of "protection money". The next nearest quarry was considerably further away and thus the cost of transporting rock rose significantly by comparison with the original construction cost.

Although, in an unsafe area, a policy may exclude damage caused by war or terrorism, property may be insured against normal perils. Difficulties in accessing the area may increase the risk of damage if maintenance cannot easily be carried out or if equipment has to be contained in a protected installation.

Confined and inaccessible spaces

Mobile phone stations in a Middle Eastern country with a high war and terrorism risk were insured against normal property damage. The stations were built in relatively small compounds and regularly suffered from fires. Power supplies in the area were unstable and so back-up generators with fuel tanks were installed in confined spaces and electronics were reliant during hot weather on cooling from air-conditioning units. When fires occurred, it was not possible for loss adjusters to make visits to establish the cause before equipment had to be removed or repaired. Investigations therefore often had to rely on analysing photographs taken by maintenance staff and simple reports.



Mobile phone station in an area inaccessible to foreign adjusters

Delayed repairs

Wind turbines in Western Asia were damaged by terrorist explosives whilst in operation and a claim was made for the cost of repairing them under a comprehensive machinery policy which included cover for terrorism and Loss of Profits. Repairs, which would normally have been completed within 2 weeks, could not take place because access to the area was not permitted by the Army. The loss of profit for the insured therefore became much greater because repairs could not be made promptly. Whilst the policy covered terrorism, it excluded denial of access as a result of government action and thus most of the lost profit.



Wind turbines in remote mountainous location (not those attacked by terrorists)

8. Additional analysis

If following an assessment of a risk, an underwriter concludes they have insufficient information, then the normal response would be to ask the broker/prospective insured to provide more. Underwriters would be expected to have a good knowledge of any territory where they are insuring a risk but this may be too general since many countries have regions where the war and terrorism risk varied significantly. For projects that extend over several years or for operational covers the situation can deteriorate with time. The rise in the risk of war or terrorism can sometimes be anticipated by those who are well attuned to the sentiment of a population in a particular area. Contractors' appetite to work in high risk zones can vary significantly. Operational risks are usually immovable and if the threat level becomes too high installations would have to be shut down and abandoned. Conversely poor quality information can also lead to an over-estimation of risks. Local knowledge can be invaluable to obtain a true picture of the risks in a particular area at a particular time.

9. Conclusion

As the areas affected by war and terrorism expand, the number of risks seeking insurance in those areas is increasing. It may be tempting to believe that standard exclusions will protect underwriters issuing conventional policies leaving war and terrorism risks to the specialists. Reality is more complex and so underwriters need to be aware that war and terrorism can impact policies in ways that, at first glance, may not be obvious.