

## Cover for Existing Property



Image: Stockholm City Line - Richard Radevsky

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In memory of Álvaro Jaureguizar, a dear friend and enthusiastic member of this working group and IMIA. A very affectionate tribute also to Álvaro's colleagues at RTS and to all his friends and family, especially his parents Maria and Enrique, his dear brothers Diego, Enrique and Ignacio, and to his much loved Penelope.

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## Summary

The cover to existing property on CAR or EAR may lead to important damages especially as a result of fire.

The objective of this paper is to list the different types of exposure resulting from the coverage of existing property and to discuss the different aspects of underwriting to this extension.

This paper also deals with post underwriting consideration in particular with the risk management of existing property

# IMIA Working Group Paper WGP 46 (19)

## Cover of Existing Property

### 1. Introduction

Damage to Existing Property (EP) has for many years been a common extension, section or sub-section of CAR/EAR policies. In its most simplistic form, it covers damage to pre-existing (at inception of the policy) property of the Principal that arises directly from the carrying out of the new Works by the Contractor.

The need for such coverage arises for a number of different issues such as:

- the Principal wishing to protect their Property Insurance,
- an exclusion or restriction in the Principal's Property Insurance when renovation/extension works are being carried out,

But also

- the exclusion in a TPL policy of property in the care, custody or control of the Insured
- the wish of the Contractor ( and/or Principal ) to avoid having to demonstrate negligence/liability of the Contractor when damage is caused to EP ( ie creating instead a "First Party" EP coverage) .

In some instances the EP cover extends to also include consequential loss (such as business interruption) suffered by the Principal as a result of such damage . Usually there is a "first loss" any one occurrence sum insured for EP coverage and the basis of indemnity would be the actual cost of repair - rather than an indemnity based on the age and condition of the EP being covered.

In recent years there has been a significant increase in the demand for various forms of EP cover to be added to CAR/EAR placements. This has arisen for various reasons but in particular:

- the increase in buildings , roads , factories etc being renovated/extended rather than built new (planning permission often easier, usually less expensive, viewed as more environmentally friendly etc )
- the continued growth of the Private Public Partnership ( PPP ) project delivery model , where there are very often pre-existing property or "assets" that the Project Company must take full responsibility for and insure .

The Construction/Engineering market has mainly adopted 2 different approaches to insuring such Existing Property:

- (i) on the basis of only covering damage arising from the new works as referenced above, or
- (ii) Such cover being provided by a Civil Engineering Completed Risks ( CECR ) type product, either within the CAR/EAR policy or as a separate policy (in case of CECR).

However , in recent years the demand on PPP type projects , often driven by Project Financiers /Lawyers , has been to require full “All Risks” cover on both pre-existing project assets AND new works that may be handed over before completion of the final part of the works .

In such instances it is now not unusual for the Delay in Start Up to also include coverage for Business Interruption following damage to the existing (and/or handed over ) property . A good example would be a Motorway widening/expansion project let on a PPP type basis where there is revenue or availability payment risk from day one of the project ( BI ) as well as revenue/availability payment enhancements as sections of the new Works are due to be completed and handed over ( DSU ). In general, for EAR policies it is less frequent for insurers to provide coverage on pre-existing property of the Principal beyond a relatively modest first loss limit and only for damage arising from the performance of the new Works, not “All Risks”. However, EAR Policies are quite frequently extended to provide Property/BI on newly built projects for the first one or two years of operation.

In the absence of an EP or separate Civil Engineering Completed Risks insurance or property coverage, it would normally be the Third Party Liability section of a CAR/EAR policy that would otherwise be expected to address liability of the Contractor for damage they may cause to property in their care, custody or control during execution of the new Works, as well as consequential losses flowing therefrom. In such circumstances the TPL coverage expectations need to be fully understood by all parties as the risk is clearly greater than when only covering truly third party property that could be expected to be generally located outside the boundaries of the work site and not directly worked upon. To set appropriate conditions for such a solution leads the underwriter to follow casualty underwriter considerations, conditions and limitations which are outside the scope of this paper.

Current practice in many areas of the CAR/EAR market is to provide the required levels of EP coverage, where necessary working hand in hand with their Property Departments when very large sums insured for PD and/or BI may be demanded.

Clearly the underwriting considerations for EP are very different to those for construction works and will need to take in to account the basis of coverage, sums insured, catastrophe risk exposure, age and condition of the property etc. Such matters are addressed in more detail later in this WGP.

## 2. Examples of damages to Existing property arising from construction works being undertaken in, upon or in close proximity

### 2.1. CAR case

#### 2.1.1. Fire in the Mandarin Hotel, London - June 2018



Image: Xinhua / Barcroft

In June 2018 a huge fire broke out at the Mandarin Oriental hotel in London a week after the most extensive restoration in its 115 year history (reported to have cost GBP 185m) had been completed.

At the time, it was reported that the London Fire Brigade had said it was believed that the fire started when the by-product of welding work landed on the felt lining of a wall, setting it alight.

In its 2018 Preliminary Announcement of Results on 28th February 2019, Mandarin Oriental international Limited stated: "Following the fire in June 2018 repairs at Mandarin Oriental Hyde Park, London are progressing well, and the hotel re-opened its public areas and facilities on 4th December 2018. All guestrooms are scheduled to re-open in April 2019. The hotel's 2018 results include interim cash payments received during 2018 from insurers, which have financed the replacement of fixed assets and provided some compensation for the loss of profits, as the hotel was originally due to fully open in mid-2018, following the completion of its 22-month renovation programme. Discussions on both property damage and business interruption claims with the Group's insurers are expected to be concluded in 2019."

### 2.1.2. Fire in the Glasgow School of Art - June 2018



Images Police Scotland and the Sunday Post

GSA (Glasgow School of Art) elected to take out an Owner Controlled Insurance Policy (OCIP) to cover the contract works on the Mackintosh Building and the undamaged parts of the building under one policy.

In June 2018, a fire destroyed much of the Glasgow School of Art's grade A Category 1 listed Mackintosh Building described as one of the most significant buildings to Scotland's rich cultural heritage.

The fire occurred as a GBP 36m restoration project (following a major fire four years earlier in 2014 which cost insurers GBP 45m) was nearing completion. The current insurance claim is still under investigation.

### 2.1.3. Fire in Notre Dame de Paris - April 2019



Image: Ouest France



Image: Gigarama.ru/AP

The roof of the cathedral was under refurbishment when the fire started and destroyed most of the roof.

That case is still under investigation but it has been reported by the press (“Le Canard enchaîné”) that the fire security service was poor. The cost of repair is estimated at this stage at 1 billion EUR.

## 2.2. EAR case

### 2.2.1. Collapse of a mobile crane and its consequences on both a desulfurization unit under erection and the operating Thermoelectric Power Plant in which the unit was being erected

The aim of the project was to Increase of the Plant’s capacity.

During the assembly process of one of the desulfurization line elements, with the assistance of a 500 ton crane, the latter lost its stability, resulting in the overturning of the equipment, causing severe damage to elements of the pre-existence facility, as well as for elements that were part of the new works.

Some of the most relevant components that were affected during this event include:

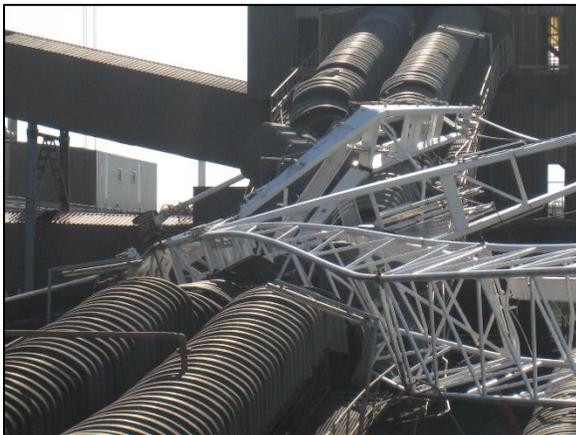
- Carbon supply conveyor belt.
- Power Plant’s main fire-system.
- Desulfurization water treatment plant.
- The 500 ton crane.



Among the most significant challenges to adjust this claim were:

- The assessment of damages to the pre-existing property.
- Evaluation and mitigation of potential consequences for the operation of the Plant
- The consequential business interruption of the 620 MW plant.

As is often the case, there was no specific breakdown of the value of pre-existing assets did not have a specific breakdown (nor an assessment report by an independent firm) that allowed determining the insured value of the affected elements, initially resulting in large differences between the replacement value estimated by the Insured vs the one estimated by specialists retained by the Insurers.





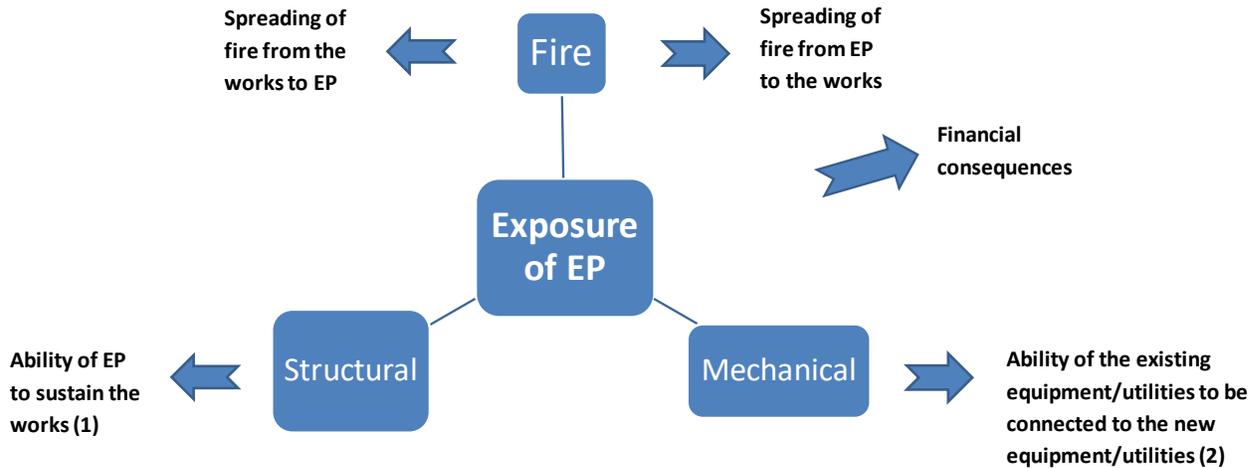
The estimated loss (PD+BI) = USD 2,700,000.

Lessons Learned/recommendations:

- Having an assessment report of a recognized valuation firm at the time of the underwriting, would reduce the future discussions about the replacement value of the affected elements.
- Having all the parties insured under one Policy, reduces the coverage discussions and recovery procedures.
- Have rigorous records of subcontractors, their potential liabilities and corresponding insurance capacity
- Having a business continuity plan dedicated to the Insured project. It enables communication and coordination between crisis teams and avoids flaws in the flow of information needed, amongst other inefficiencies.

### 3. Type of exposures

The exposure of EP is as follows but differences should be made between works in EP and nearby to EP. Indeed the fire exposure for instance may not exist in the case of work nearby to EP



(1): The work may modify the distribution of the loads. Examples:

- In a building an additional level or a new opening or a modification in the foundations
- To Bore a tunnel nearby to a building that belongs to the Principal: Around the tunnel the ground conditions are modified which may impact the stability of the building

(2): The additional equipment needs to be compatible with the other existing equipment and utilities: power supply, gas supply, etc. Example: Electrical Overload caused by the new equipment and the power cable not re-dimensioned to support it.

## 4. Underwriting considerations

### 4.1. Required Underwriting Information for assessing the exposure of EP

We recommend collecting the following documentation to assess the exposure of EP:

- General information about EP: age, location, use contents etc
- Estimated rebuilding cost of EP should it need to be rebuilt
- Description of works on the EP: On the building and/or on the equipment in it
- Soil investigation report: Ability of the existing foundation to support the load transfer, if/where applicable
- Structural engineering report: Special report to determine the condition of the existing structure and to assess the mechanical characteristics of the existing structural elements
- Report regarding the ability of the existing machinery and utilities to support the implemented machinery if any connections
- Risk management organization and procedure especially regarding the fire risk

### 4.2. Risk review

On CAR or EAR risks:

#### **Loss limit of EP compared to the EP reconstruction value and exposure :**

- To assess the possibility to exhaust easily the EP limit following damage: For instance an old historical building is often very expensive to repair/rebuild in the event of it being damaged.

#### **Fire exposure mitigation means:**

- Is the EP equipped with an operating sprinkler system? Is there any Fire policy and hot spot procedure available?

#### **Availability of reports providing the mechanical characteristics of the existing structure:**

- To assess if the EP will resist under the new loads

#### **Would the cover of EP extend to Business Interruption and/or DSU?**

- To assess the possibility to exhaust the Indemnity Period because of the long period to repair EP

**To assess the exposure towards Third Parties if also covered as a result to damages to EP**

On EAR risks:

**To assess the compatibility of the new machinery with the others and the utilities (behavior against pressure/heat/corrosion...):**

- Availability of the corresponding report to underwriters

4.3. Insurance terms and conditions

The coverage and consequences of EP are described in the following board. Depending on the extensions, specific exclusions and the provision that coverage is more and less wider.

SECTION	COVERAGE	DETAILS	EXPOSURE	REMARKS	APPENDIX	
Material Damages	<b>Extensions</b>					
	"Impossibility to repair as original" clause	Let the possibility to indemnify the damages at a cost level higher than initial	What is the detailed value of EP ?	Generally not detailed which means that commitment on EP limited by EP limit	1	
	Authority clause	Cover of additional costs to comply with the regulations to apply on the repair works	Updated regulation can request stronger safety factor or technical arrangements which would lead to higher repair cost and indemnification		2	
	Phased handover	Parts of the project are handed over. These parts become EP <b>but are still covered by the policy</b>	Similar to property policy but nearby the works in progress with possibly an high fire exposure. Question regarding the fire fighting system in operation in the handed over parts	Case of shopping mall construction		
	<b>Special Exclusions</b>					
	Process or special equipment older than... (5 years)			During hot testing high exposure of damages to the old equipment	Important exclusion especially if exposure not detailed in the UW pack	
	Fire in EP	Exclusion of the damages due to fire developping from EP	The fire spreading from the work are still covered under MD		In that case the property/fire policy would cover the fire damages. However the fire developping from the works to EP are covered by the CAR/EAR policy	
	Pre-existing damages to EP				The pre-existing damages need to be recorded during a survey	
	Fire policy not applied	Non compliance with fire policy detailed in the underwriting pack excluded		Fire exposure especially in relation to hot spot works excluded	Stronger approach than provision	
	<b>Provisions</b>					
To apply fire policy	Fire covered but under provision			See above		
DSU/ALOP	<b>Extensions</b>					
	as a result of damages to EP		The reconstruction of EP may be fairly long in the case of historical building and exhaust the full DSU/ALOP limit			
	<b>Special Exclusions</b>					
Damages to EP	Fire spreading from EP won't trigger the DSU/ALOP		However if the fire reach the works the DSU/ALOP would be covered			

## 5. Post underwriting considerations

### 5.1. Requirements:

Where existing property is subject to works as part of a project, the project team will be expected to have undertaken a thorough examination and analysis of the condition of the existing property when determining what work is needed to protect or strengthen it.

In some instances, however, it is possible that full access to EP may come at a late stage if, for example, the EP is occupied up until the point that the project commences.

Assumptions about the EP may have to be carefully examined once full access is available. If this leads to a significant change in the scope or nature of works then insurers should be informed.

Occasionally, EP may be transferred into a project mid-way through the project if, for example, a developer concludes an agreement late.

Therefore:

***Assumptions about the EP may have to be carefully examined once full access is available.***

***After that, it is possible to define an appropriate strategy for safeguarding and monitoring the EP as buildings, tunnels, warehouses or similar units (e.g. Surveillance IP Cameras, CCTV Cameras, Vibration & Humidity Instruments, Restricted Access Control using electronic Access control, Biometric readers, etc.)***

### 5.2. Surveys

Surveys of EP are required to establish its condition **prior to the start of works** (to provide a baseline against which any subsequent damage can be assessed)<sup>1</sup>. **The aim is to avoid insurers having to pay to repair pre-existing damage which was not caused by the works.**

Surveys may also be needed to assess the ability of the existing property **to withstand abnormal conditions to which it might be exposed as a result of the project**. A very common situation of this type arises when a deep excavation will inevitably generate some ground movement. An assessment is needed on whether an existing structure can safely withstand the movement or whether it requires some strengthening to avoid severe damage or even collapse. Existing property can contain unusually fragile and very valuable elements (for example historic murals on plaster) that may be abnormally vulnerable to damage caused by very slight movements. The existence of such elements can result in the need for the project to take exceptional measures to hold such elements rigidly so they are not distorted and damaged

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<sup>1</sup> Appraisal of existing structures Third Edition (October 2010) - The Institution of Structural Engineers

or to use methods of construction that do not result in significant movements. In city centre developments, public buildings such as churches or cathedrals can contain unique and high value interiors which may be exceptionally fragile.

The existence of such elements can result in the need for the project to take exceptional measures to hold such elements rigidly so they are not distorted and damaged or to use methods of construction that do not result in significant movements.

Therefore:

**Survey results should push the scope of Risk Management of Insured Project, to help redefinition of Principal / Contractor strategy to control the exposure to damage to existing property. When the measures to avoid the arising of critical conditions to the existing property (e.g. tunnel collapse), do not satisfy the Insurers recommendations for exposure mitigation, this is a key underwriting consideration.**

Not all EP insured under a CAR or EAR policy may be buildings and structures. Particularly in the case of EAR policies, EP can include operational plant. If this is the case, then surveys may need to extend beyond the physical condition of assets to include the way in which the assets are operated and managed both under “normal” conditions and how they will be managed during the project when abnormal conditions may be present. A good example of this can be seen when a simple cycle gas turbine power plant is converted to combined cycle by the addition of heat recovery steam generators and steam turbines. Since the conversion work requires equipment to be joined to existing plant (which is likely to be operational), the combined cycle works will be directly adjacent and connected to the existing plant. A significant potential exists for a mishap within the combined cycle conversion works to cause damage to the operational plant. To cover such a situation the combined cycle conversion works policy will often include a sum insured for existing property.

Therefore:

**Particularly in the case of operational plants, technical constraints generated from that existing property, could be underestimated in the underwriter approach when identifying possible negative events from construction/engineering works.**

### 5.3. Risk management

During the process of a project, unexpected circumstances can arise, despite efforts to avoid subjecting existing property to conditions where it can become damaged<sup>2</sup>. A sound risk management strategy should be able to anticipate possible adverse conditions that may develop and set out how problems will be detected early and what steps will then be taken. Risk registers can be used to:

- define what risks existing property may be exposed to if mitigation measures are not used
- list what mitigation measures have been put in place
- evaluate what risks remain and how severe they are
- set out who is the owner of each risk and when the risk was last reviewed
- state what contingency plans exist in case something undesirable happens.

Where construction work is taking place near existing property, instruments are frequently installed that can provide regular readings of movements or distortions<sup>3</sup>. Systems are often established for the evaluation of readings and the setting of trigger levels for these readings which result in pre-agreed actions taking place. This could include pausing work whilst the significance of readings is assessed. This does not necessarily mean that work cannot continue but it does provide senior engineers with information which may allow them to consider modifications of their working methods to minimise the risk of serious damage.

Risk management should also include the assessment of risks of adverse incidents occurring within the work area spreading to damage existing property. Examples include a fire breaking out during construction spreading into existing property, the accidental release of water or a collapse of something within the work area that falls onto and damages existing property.

Historic existing property may be particularly vulnerable to fire damage (if large parts of it are made from timber) and water damage (if it contains water sensitive materials).

In the case of EAR projects, these may be taking place next to operational equipment. Good risk management may involve:

- having a system which keeps operators fully aware of project activities in areas which could impact their equipment
- the ability to communicate easily between project engineers and operational staff.
- pre-planning high risk activities (for example temporarily shutting down some operational equipment when high-hazard project activities are taking place close by). This may necessitate a permit system requiring project staff to obtain formal authority to undertake activities which could affect operations.

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<sup>2</sup> Third Party Liability – Risk Scoring Assessment Charts - 2008 - Short Paper on Third Party Liability Contractors' All Risks Insurance Prepared for IMIA

<sup>3</sup> Client Guide – Instrumentation and Monitoring - November 2017 - The Survey Liaison Group comprises the Chartered Institution of Civil Engineering Surveyors, Institution of Civil Engineers, Royal Institution of Chartered Surveyors and The Survey Association

- having plans in place to detect adverse conditions and pre-defined procedures as to how to react to unusual conditions

## 6. Appendix

### Number 1: **Impossibility to repair as original clause**

*" In the event it is not possible to reinstate or repair damaged Insured Property as original, the Insurers will indemnify the Insured for all works and design costs necessary to make that the damaged Insured Property will recover their original use with the same level of quality. The cover provided by this extension shall not exceed the sub-limit stated in the Schedule for this item"*

### Number 2: **Authority clause**

*"It is agreed that, following an insured loss, the Policy covers additional costs of reinstatement of the Insured Property as may be incurred solely by reason of the necessity to comply with the building or other regulations of any State, Municipal, Local or other authority provided that such regulation :*

- requires the demolition of parts of undamaged real property,*
- regulates the construction or repair of damaged real property, and*
- is in force at the time of loss or damage..."*