

integrated

Bringing clarity to complex insurance claims

Issue Four 2018

**A STRATEGIC APPROACH
TO NATURAL CATASTROPHE
CLAIMS HANDLING**

**FIXED AND FLOATING
OBJECT DAMAGE IN
CONTAINER TERMINALS**

LOSS OF PRODUCTION INSURANCE

**FIRE DAMAGE ASSESSMENT FOR THE
REFINING AND PROCESS INDUSTRIES**



CONTENTS

01



EDITOR'S VIEWPOINT

1

Leo Dixon, Chief Executive Officer, Integra Technical Services introduces issue 4 of **integrated** and talks about management changes at Integra Technical Services.

02



DIGEST

2-5

Round The Island Race / Team In The Spotlight / Event Round Up / The Challenge Of Setting An Early Reserve / Nauti Buoys Sponsored / Integra Team Expands / New Singapore Office Administrator

03



FOCUS

6-9

Aligning Expectations and Plans / Claims Handling in Chile

04



INSPIRATION

10-15

Fixed and Floating Object Damage in Container Terminals / Loss of Production Insurance

05



SECTORS

16-21

Show Me The Damage / Fire Damage Assessment For The Process And Refining Industries / The Case For Subrogation

“Whilst Integra Technical Services worked with a (Re)Insurer to place four Loss Adjusters in Puerto Rico ahead of Hurricane Irma this is just not as commonplace as it perhaps should be.”

PAGE 6

We would like to thank Arianna Dean (Zurich), Angela Flaherty (Clyde & Co), Rob Gallie (Scor), Marc Giovannetti (Liberty International), Adrian McAndrew (AIG) and Daniel Wells (Tysers) for their invaluable contribution to this edition of **integrated**.

This publication is for the benefit of Insurers, Insurance Brokers, Insureds and other stakeholders involved in the services that are provided by Integra Technical Services Limited. It is not legal advice and is intended only to highlight general issues relating to its subject matter but does not necessarily deal with every aspect of the topic. © July 2018

Content marketing and design services provided by Chantry Associates Limited. www.chantryassociates.com



Integra Technical Services Ltd.
6th Floor, 117 Houndsditch,
London EC3A 7BT
Tel: +44 (0) 203 879 8320
www.integratechnical.com

Welcome to the fourth edition of **integrated**, our magazine devoted to the specialty insurance lines marketplace and sharing knowledge, experience and insight to improve claims management. We hope you enjoy reading this edition and, as always, would welcome your feedback and ideas for future articles.

As we toast 20 years of trading in 2018, so we have continued to develop both our Adjusting and Shared Services teams. We currently have 40 Loss Adjusters supported by eight Operations and Finance team members working in 12 offices in nine different countries.

Two new Loss Adjusters will be joining the London office in the second half of the year, and we hope to announce new recruits joining our Dubai and North American operations before year end. Simultaneously, we are growing our Shared Services team, with plans for a full time Credit Controller and Head of Operations to join the London office.

Undoubtedly, we're a more robust firm after 20 years of being in business, with a wider offering of product lines, broader geographic representation and an expanding team of multi-disciplined Loss Adjusters.

You only have to look at this edition of **integrated** to see the wide variety of topics being discussed. Discussions as to how we can improve natural catastrophe claims handling and increase the speed of the information flow once a loss occurs (Page 6) and consideration of claims handling in the event of damage to

ship to shore container cranes (page 10) to name just two. I particularly like the technical aspect of the article on page 18 about fire damage assessment for the refining and process industries.

We recognise that to perpetuate our success we must continue to evolve and a key part of that is a management structure that will support the next phase of our development. In July 2018 Ewan Cresswell moved into the role of Chairman, I am delighted to have taken over as Chief Executive Officer, Stephen Thorpe continues in his role as Managing Director of the Asia Pacific region, and Stephen Merrill as Chief Financial Officer.

I hope you enjoy reading the magazine and as always would welcome your ideas for contributions, stimulating topics and discussion for future editions. We want to address the issues that matter to our stakeholders. From Insurers, Brokers, Consultants and Legal Experts to the ultimate beneficiary of the insurance product, be that the Risk Manager, senior company executives or project finance investors.



Leo Dixon BSc (Hons)

Chief Executive Officer

Integra Technical Services Limited



The Race Team (L-R): Leo Dixon, Dan Stobart, Luc Tricard, Etienne Heaume, Gareth Evans, Tom Mallindine, Tom Upton, Charlie Bush, Mark Williams and Steve Cleland.

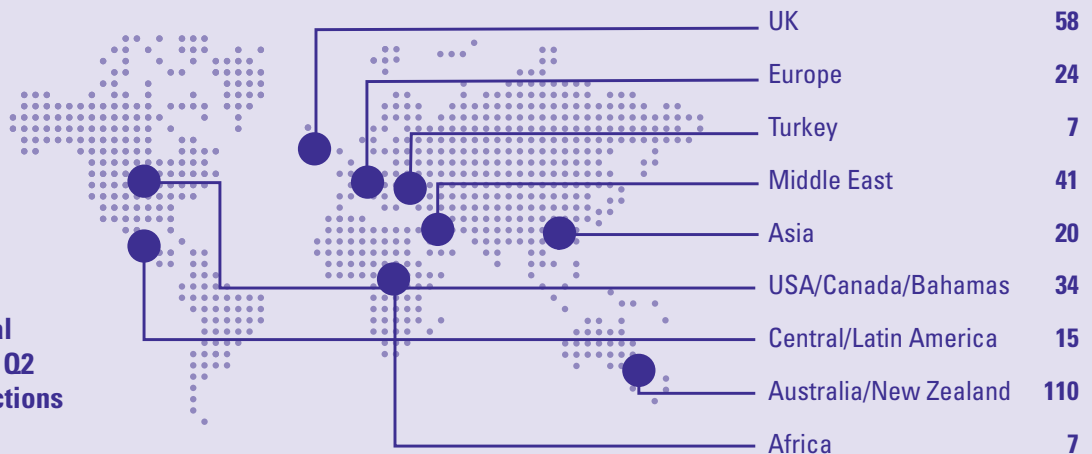
3RD PLACE IN CLASS, ROUND THE ISLAND RACE

The Integra Technical Services team took to the water to compete in the Round the Island Race on 7 July 2018. A one-day yacht race around the Isle of Wight, an island situated off the south coast of England which attracts more than 1,400 boats and 15,000 sailors from all over the UK, other parts of Europe and as far away as the USA. As was to be expected, the competition was fierce.

Unlike the ‘blast’ of 2017, this year’s race was held in light winds. After a tricky start off Cowes, the crew settled into a good rhythm and found clear air on their approach to the Needles, in 8th place. With the wind behind the competitors round the back of the Island, the team flew the spinnaker expertly and took advantage of the fast running tide as best they could.

As the England vs Sweden World Cup Quarter Final kicked off, on went the radio and the team crept around Seaview in 5th place before successfully navigating the doldrums off Ryde Sands and overtaking two more competitors to take 3rd place in approximately 12knts of wind on the approach to the finish line off Cowes.

Integra Technical Services Q1 and Q2 2018 new instructions



TEAM IN THE SPOTLIGHT

AUSTRALIA

Australia, a vast country that has one of the most isolated cities in the World (Perth), is one of the hottest and driest continents and which also experiences some of the regions worst storms, cyclones and floods. A land rich with plentiful natural resources and minerals and one of the leading mining regions of the world.

integrated wondered whether the Integra Technical Services' team had equally interesting facts about themselves to divulge so we spoke with them recently.

We were surprised to hear about intrepid explorers and some, well, let's say 'varied' music taste.

Formed in 2009, the team has grown to seven Adjusters and is a core part of a dynamic and growing Asia-Pacific region proposition. The team hold legal, accountancy and engineering qualifications and three of them are also qualified as Chartered Loss Adjusters.

**01 Andrew Gibson**

Hull & Machinery, Marine Liabilities, Project Cargo, Ports & Terminals

Favourite film: Dr Strangelove

Favourite music: Baroque (mainly English)

Fact: Loves rowing – took part in Henley Regatta 2018

**02 Kevin McElhenny**

Construction, Engineering, Mining, Power, Ports & Terminals

Favourite music: Don McLean

Fact: Once went down a 3,500m mine shaft where rock temperatures are 50°C

**03 Ben Neat**

Construction, Energy, Engineering, Mining, Power, Rail and Property

Favourite film: The Prestige

Favourite music: Deep house and tech

Fact: A keen amateur DJ, Ben likes mixing and producing music

**04 Gavin Penneck**

Construction, Energy Engineering, Mining and Power

Favourite film: Trainspotting

Favourite music: Broad taste, The Stranglers to Angelique Kijo

Fact: Loves motorbikes and once completed a 3 day solo ride across the Simpson Desert

**05 Dennis Speyer**

Hull & Machinery, Marine Liabilities, Project Cargo

Favourite film: The Darkest Hour

Favourite music: Jazz and Blues

Fact: Have sailed four Sydney to Hobart Yacht Races and run five marathons and 20 half marathons.

**06 Stephen Thorpe**

Construction, Energy, Mining and Power

Favourite film: Bond – and French films!

Favourite music: Dire Straits and Amy Winehouse

Fact: A keen swimmer and competes occasionally in ocean swims – sharks notwithstanding!

**07 Brian Whittingham**

Construction, Energy and Mining

Favourite film: Lost in translation

Favourite music: Coldplay

Fact: A keen interest in wildlife conservation and golf

EVENT ROUND UP

It's been a busy first half of the year for the Integra Technical Services team, with key speaking engagements including:

JANUARY

Sydney Maritime Discussion Group

- Andrew Gibson of Integra Technical Services, presented "Where Are They Now? (...and what I didn't see coming over the horizon): the Australia Transport Logistic Sector & Future Risk Issues Report.

APRIL

Engineering Discussion Group,

Sydney - Stephen Thorpe of Integra Technical Services presented "DSU an Adjusters Perspective"

Asia Power Forum, Singapore

– Integra Technical Services were proud to continue as foundation sponsors with their own Alistair Lamb sitting on the organising committee.

MAY

New York Powercon

– Integra Technical Services sponsored this excellent event that was attended by more 220 delegates from the Power Generation and insurance industries.

MAY

Builders All Risk & Construction Symposium, New York

– Ewan Cresswell of Integra Technical Services was a panellist alongside representatives from Chubb, Willis Towers Watson, J S Held and CCI discussing Multi Phase Projects and the challenge for Insurers and the Insured of analysing and quantifying valid DSU claims.

MAY

AC Global Annual Energy

Conference, Istanbul - Gareth Evans and Adam Humphrey of Integra Technical Services respectively presented their approach to claims handling focusing on the use of Loss Management Plans and their potential impact on claims, and whether depreciation should be a saving on Business Interruption claims.

MAY

APAC Energy Engineers Meeting,

Singapore - This group includes most of the Singapore based risk engineers and in a joint presentation with Jui Lien Chung from XL Catlin, Alistair Lamb of Integra Technical Services spoke about "When it goes wrong: a claims handler and adjuster's perspective".

THE CHALLENGE OF SETTING AN EARLY RESERVE

On the 6-8 June 2018 almost 200 delegates got together in Newport, Rhode Island, USA for the Loss Executives Association, Spring Educational Conference. Ewan Cresswell, Chairman, Integra Technical Services organised and facilitated a two hour workshop on the topical subject of "Estimating and Reserving Complex Property Losses", with support from Rabindranath Rajkumar, Zurich North America, Mike Casey, a metallurgist from Failure Analysis and Prevention Inc and Mike Clarke and Tiffany Drane from forensic accountants, Buchanan Clarke Schlader.

The workshop was structured around two case studies, with Raj from Zurich outlining the reasons Insurers seek the earliest, most accurate reserve and Ewan explaining the constraints on the Loss Adjuster in achieving this aim during the early stages of a claim. Mike Casey's role was to describe the approach to securing a scope of physical damage with Mike Clarke and Tiffany setting out the methodology of calculating early estimates of Business Interruption exposures.

An interactive case study then gave the delegates the chance to experience the challenge. They were given the same information available during the first Loss Adjuster visit and asked to set a reserve. The range of calculations was significant, with a difference between high and low of circa USD 500 million, perfectly illustrating the difficulty of coming to an early and accurate estimate and reserve!

SINGAPORE OFFICE ADMINISTRATOR

Integra Technical Services in Singapore are pleased to welcome Dana Zaini as their Office Administrator. Dana joined Integra Technical Services from United Insurance Brokers in February, having previously worked with Brookes Bell, Singapore supporting their marine consultancy and loss adjusting business groups.



NAUTI BUOYS SPONSORED FOR ATLANTIC ROW

Only a few daring individuals have completed an Atlantic crossing in a rowing boat, in fact more have climbed Everest or entered into space. It is therefore no surprise that the Talisker Whisky Atlantic Challenge is one of the toughest feats of physical and mental endurance known to man.

The Nauti Buoys, four enthusiastic and highly motivated young men will be racing 3,000 miles from La Gormera to Antigua in December 2018. The goal is to win their race and challenge the world record for the fastest Atlantic crossing, which currently stands at 29 days.

Leo Dixon, Chief Executive, Integra Technical Services and an avid sailor explains “we are delighted to be sponsoring this exciting challenge and at the same time helping raise funds for Cancer Research UK.” Look out for more about this in the next edition of integrated.

You can find out more about The Nauti Buoys by visiting www.thenautibuoy.com

INTEGRA TEAM EXPANDS TO 40 LOSS ADJUSTERS

Integra Technical Services have expanded their capabilities in Upstream and Renewable Energy, Property, Construction and Business Interruption and in Marine Cargo, Hull, Machinery and Liabilities with new hires in London, Singapore and Sydney respectively.



Phil Poetter
London
MSc (Petroleum Engineering), MBA

Upstream and Renewable Energy



Ian Baxter
Singapore
Chartered Loss Adjuster

Property, Construction, Business Interruption and Machinery Breakdown



Denis Speyer
Sydney
Master Mariner, Masters Degree (Maritime Law)

Hull & Machinery, Marine Liabilities, Project Cargo

ALIGNING EXPECTATIONS AND PLANS

integrated brought together a panel of three leading claims specialists to discuss their thoughts on how to improve natural catastrophe claims handling and to increase the speed of the information flow once a loss occurs. With natural catastrophes fresh in the mind following the events of 2017 that were dominated by the hurricane trio of Harvey, Irma and Maria (HIM), four themes quickly emerged.

1. Pre-catastrophe deployment of assets

Each natural catastrophe event will have its own unique characteristics and challenges. ‘Ground truth’ intelligence plays a vital role in helping (Re)Insurers produce and maintain realistic loss estimates and to organise claims resources. Whilst there are many intelligence inputs, Rob stresses the importance of establishing the ‘ground truth’ early on and that (Re)Insurers “look to our Loss Adjuster partners for this intelligence”.

Where damage is widespread and extensive, as was the case on Puerto Rico after Hurricane Maria struck, getting loss adjusting personnel onsite in the immediate aftermath can be incredibly difficult with air strips damaged and flights limited. With events like hurricanes, Rob feels that ideally “Loss adjusting firms and (Re)Insurers should try to assemble resources in the area as soon as we know something is about to happen.”

There are many examples where this has happened, but Leo explained “whilst Integra Technical Services worked with a (Re)Insurer to place four Loss Adjusters in Puerto Rico ahead of Hurricane Irma this is just not as commonplace as it perhaps should be.”

Marc suggests that “there is definitely an opportunity for better coordination

within the insurance market for the deployment of assets, not just loss adjusting resources but equipment to help the recovery process, for example short term back up power solutions and equipment to help the drying process. This would better position (Re)Insurers to produce more accurate loss assessments and help Insureds deal with post catastrophe scenarios.”

The answer would appear to be a better alignment of (Re)Insurer and Loss Adjuster catastrophe plans and stronger communication lines, especially where it’s possible to forecast a catastrophe like a hurricane, in advance of it striking.

2. Risk interdependency mapping

A feature of many recent natural catastrophes has been the prevalence of unforeseen Contingent Business Interruption that has contributed a large proportion of the final claims cost. According to Marc “thankfully with HIM we did not see the CBI losses that many anticipated, but it is important to consider what could have happened as there are a lot of interdependencies in that south east corner of the US within automotive, engineering, manufacturing and energy.”

Rob feels “this is a really important point. The market is still unsophisticated in working out how different facilities and assets relate to

each other. We've been doing some work looking back at the Papa New Guinea earthquake. There aren't many assets in the region, but they are all inter-related and it's a really complicated picture."

Understanding risk connectivity would help to assess how Business Interruption and CBI losses could flow from a catastrophe event and identify those potentially volatile claims where pre-loss and early intervention measures could benefit the Insured and (Re)Insurer.

3. Review Claims Protocols and Loss Adjuster panels

Much can be done during Underwriting to smooth out the claims handling process, not least having formal Claims Protocols, approved Loss Adjuster panels, and clarity about which (Re)Insurer leads the claims management process. Rob feels that "many policies either don't have these key agreements in place or they are out of date. I would like to see Insurance Brokers and Underwriters reviewing Claims Protocols and Loss Adjusters annually".

Marc suggests that "many of the Loss Adjuster panels repeat the same names over and over again and that this creates a vulnerability in the event of a catastrophe, with key personnel often over-stretched."

It's perhaps not surprising that (Re)Insurers and Insureds want to appoint the best possible Loss Adjuster, but this does raise questions about the strength in depth behind these highly respected Loss Adjusters and how loss adjusting firms and (Re)Insurers work together to manage these vulnerabilities when a catastrophe strikes.

The longer term solution is for loss adjusting firms to actively manage their talent pipeline so that can enhance and, eventually, replace these highly qualified and experienced Loss Adjusters as they retire from the market. Leo explains "this is high up Integra Technical Services' agenda, with continued investment in our team not just in terms of experience but encouraging our team to become Chartered Loss Adjusters."

4. Shorter and more timely Loss Adjuster reports

The tradition has been for Loss Adjusters to thoroughly investigate a loss before providing a comprehensive and often 30 page plus report to (Re)Insurers. It's easy to see how this can slow down the information flow and make it difficult for (Re)Insurers to become involved in any dialogue about the way the claim is handled. Marc feels "Loss Adjusters have to start wrestling with the challenge that technology has markedly sped up communication yet loss adjusting processes remain largely unaltered."

Leo felt this point was well made "Integra Technical Services took a decision after Harvey to issue abbreviated reports, shorter status updates of three to five pages. We just could not keep all clients happy with the normal model of reporting so adapted our approach to make sure we were better aligned with our client expectations and requirements."

Short reports certainly have a role and, perhaps, for all larger or more complex claims, to avoid periods of silence when either nothing has happened or the Adjuster has received a significant amount of claim related data and it is going to take some weeks to produce a full length report.

MEET THE PANEL



Rob Gallie

Global Practice Leader Energy Claims & Head of Business Solutions Claims London, SCOR.

Prior to joining SCOR a year ago Rob was Energy & Construction Claims Manager for XL Catlin for a number of years having previously worked with Zurich and AIG in various claims roles.



Marc Giovannetti

Head of First Party Claims, Liberty International.

Marc has occupied his current role for three years, prior to which he has worked for a number of leading insurers including SCOR, SwissRe, Zurich and AIG and involved in managing complex specialty lines claims.



Leo Dixon

Chief Executive Officer, Integra Technical Services.

Before joining Integra Technical Services in 2015 Leo was Global Head of Energy Claims at Zurich Insurance Company having previously worked with JLT and Indecs LLP.

Claims handling in Chile

Loss adjusting activities in Chile are controlled by the Financial Market Commission (CMF), under the legal framework set out in DL 1055, which came into force on the 1st June 2013. Introduced in the aftermath of the February 2010 earthquake, it was designed to improve claims handling, mainly by expediting the loss adjusting process and providing the Insured with better information on the progress of the adjustment. Patrick Hardy, Licensed Loss Adjuster, Integra Technical Services Chile, outlines some important considerations for Reinsurers.

MAKE SURE YOUR LOSS ADJUSTER IS COMPETENT

Among the CMF stipulations is the necessity for all Loss Adjusters to pass an exam, part of which covers general property claims adjustment. Unfortunately, this does not really provide any indication of an individual's competence to handle complex claims, particularly those within the specialty insurance arena.

Loss Adjusters are appointed by the Cedant and it is commonplace for larger specialty business to have a panel of Loss Adjusters approved by Reinsurers. An option for Reinsurers is to appoint their own Loss Adjuster, to work alongside the locally registered Loss Adjuster, to bring appropriate experience and support, and ensure that Reinsurers' interests are safeguarded during the adjustment process.

THE INSURED IS ENTITLED TO SEE ALL INFORMATION

Whilst the Insurer can appoint an independent Loss Adjuster or adjust the claim in-house, the Insured retains the right to request an independent Loss Adjuster. Whichever route is taken, the following principles must be observed:

- Speed and procedural economy;
- Objectivity and technical in nature;
- Transparency and access.

This final point is particularly important, as it means that the Insured is entitled to receive the same information that the Loss Adjuster provides to the Insurers.

DON'T FORGET ABOUT TIME LIMITATIONS

The legislation allows 45 days to adjust a claim, increasing to 90 days for losses under policies with premiums in excess of UF100 (around USD 4,500) or 180 days for general average losses. It is commonplace to ask for time extensions for large or complex claims which require detailed information or investigation. An unlimited number of time extensions can be requested in writing to the Insured, Insurer and the CMF, but in the event that the Insured or Insurer object, the CMF can compel the Loss Adjuster to issue the final report based on the information available at the time.

THE IMPORTANCE OF INTERIM REPORTS

The Loss Adjuster's Final report is effectively a formal settlement proposal and is issued simultaneously to Insurers and Insured and then:

- Parties have 10 working days to contest the findings and recommendations;
- The Loss Adjuster then has six working days to address any contested issues;
- Insurers then have a further five working days to advise the Insured of their decision, with settlement due within six working days.
- If disagreement remains then Insurers must advise the Insured of the dispute resolution procedure in the policy wording or take the matter to Court, but any undisputed amounts must be paid to the Insured.



These timescales are often insufficient for Reinsurers to be able to voice their opinion and, all too often, local Loss Adjusters will fail to take Reinsurers' needs into account. Preliminary or Interim reports are recommended as these can allow Reinsurers to consider the loss and voice any concerns before the Final report is issued. The Loss Adjuster is free to issue as many Interim reports as he sees fit.

ARTICLE 24

This provides a mechanism to enable the Loss Adjuster to address contentious issues, giving both Insurers and the Insured an opportunity to voice their opinion on these issues. An Article 24 report is issued simultaneously to the Insured and Insurer and provides five working days to respond. In practice this is hardly ever enough time for Insurers, considering the potential need for them to liaise with the consultant engineers and other experts managing the claim. Given this tight schedule, it is almost impossible for Reinsurers to consider and voice their opinion on issues raised in an Article 24 report.

Many experienced Loss Adjusters will, therefore, issue 'ordinary' Interim reports regularly so that there are no surprises and contentious issues can be resolved before the Final report. Another tactic is to propose an interim payment as this can help to draw out any policy liability issues. Policies often contain an Interim Payments Clause, but it is worth noting that these are often not 'payments on account' (of expenses already incurred by the Insured) but 'advanced payments'.

SETTING THE CORRECT RESERVE

The transparency of Loss Adjuster reports places increased importance on the setting of accurate reserves, to avoid raising the Insured's expectations. As a result, Loss Adjusters will often set lower reserves, which will be raised later in the adjustment process. This can create problems for Reinsurers, especially when the Loss Adjuster does not correctly explain their reserve calculation, highlighting any uncertainties or questions that may lead to future reserve increases.

For more information about loss adjusting in Chile and the laws, please email patrick.hardy@integratechnical.com



FIXED AND FLOATING OBJECT DAMAGE IN CONTAINER TERMINALS

Despite their size, ship to shore cranes are comparatively delicate structures and are easily and frequently damaged. The management of these losses can be complex and their cost significant, ranging from USD 2 million to USD 10 million or more plus any consequential loss. Having investigated and advised on numerous crane damage claims Keith Charles, a Marine Civil Engineer with Integra Technical Services, considers some of the key claims management stages and issues.

Container ship carrying capacity has increased by more than 1,400% over the past 60 years, requiring ever larger ship to shore cranes to provide a fast and efficient loading and unloading service. The original quayside crane built in 1959 was designed to lift 23 tonne boxes, 16 metres over rails with an outreach of 24 metres. New Megamax cranes that service the latest Ultra Large Container Vessels have 85 tonne lifting capacity, 52 metres over rails and with an outreach of 72 metres. To put that into perspective, it is the equivalent of 24 containers side by side and up to 10 high on deck.

04 INSPIRATION

Catastrophic incidents

When these cranes are damaged the first consideration is whether repair is possible or if the crane is a constructive total loss (CTL), having toppled. Catastrophic incidents require the safe demolition and removal of the crane from the berth. This can be a difficult operation especially if the crane has fallen onto an adjacent crane or if the berth's structure has been damaged and weakened. Complexities increase if the terminal is in a remote location, particularly if the required heavy lift equipment and specialised expertise is not available.

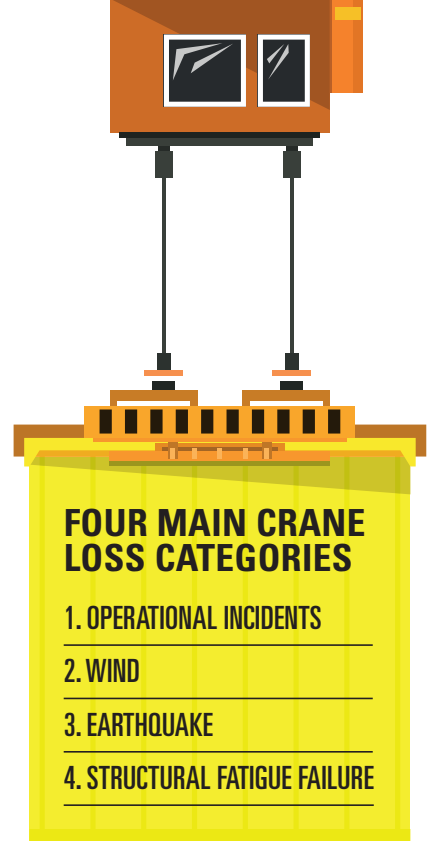
As the demolition and recovery is managed, decisions need to be taken about the replacement. Do you replace the crane with an equivalent used one or install a new crane? The search, assessment and cost of a used crane is time consuming and can often result in little cost difference between used and new when all the additional costs for modification, transportation and installation are included.

Repairable damage

Repairable incidents usually result from the derailing of the long travel gantry system or deformation in the crane's frame and involve two main phases; recovery, and repair and recommissioning.

The recovery phase demands an initial survey, stabilisation of the crane and the isolation and containment of the damaged crane(s) to enable ongoing terminal operations. It is important at this stage to put in place corrective procedures that avoid unnecessary property and business interruption costs, or further damage to the crane or berth.

Once this has been achieved and notifications and initial discussion with insurance and port authorities are carried out, a more detailed structural survey and damage assessment can be performed to allow the repair and re-commissioning of the crane to proceed. This will normally involve parties representing both the vessel and terminal.



A Finite Element Stress Analysis (FEA) assesses the extent of damage and whether the repair is commercially viable taking account of the remaining useful life of the crane. Since cranes are not designed to withstand horizontal impact forces this analysis helps to identify the extent of the structure that has been affected in the incident, any points of damage previously unseen and the correct points of support required during the repair.

Repair and recommissioning

Repairs may take place on the rails or frequently, if more practical and convenient for the terminal, the crane is moved. If the crane is to be moved, temporary supports will be required to reinforce it for the move and a system for moving the crane from its damaged location to the place of repair will need to be installed. Care needs to be taken to avoid further damage to the crane or berth during this operation.

FIVE REASONS CRANES ARE VULNERABLE TO DAMAGE	1. POSITION CLOSE TO THE EDGE OF THE QUAY, SUSCEPTIBLE TO CONTACT WITH THE VESSEL	2. SIZE VISIBILITY AND CONTROL INCREASINGLY DIFFICULT FOR THE OPERATOR
	3. MAINTENANCE CAN LEAD TO FAILURE OR ESCALATION OF DAMAGE IN AN ALLISION INCIDENT	4. OPERATION POOR PROCEDURES CAN RESULT IN CRANE BOOM COLLISIONS

*e.g. berthing position or boom luffed when not in operation

Repairs to the crane's structure normally involve cutting away and replacing the damaged plating. This operation should allow the distorted structure to recover its original form, but jacking or heat application may also be needed. These repairs are frequently carried out at height on the crane's leg, which is a slow and costly operation.

If the crane's leg or frame is twisted or deformed the leg(s) will need to be supported from a tower to relieve the load in the legs whilst the corrective repairs are undertaken. However, if the leg is straight, an expensive tower support is not required and local structural support (stiffening) can be used to transfer the loads across the damaged section of the leg.

The most frequent crane damage incident is to the boom, which can be problematical and costly if the boom needs to be taken down for repair, as the boom's positional height and weight will require the mobilisation of a large mobile or floating crane. Damage to a crane's electrical system can also occur if the power supply trailing cable is pulled out of its protective trench (Panzerbelt) and over-stretched or broken, which can result if the crane is derailed. The cable reel can also be vulnerable to being hit directly and crushed or bent if it is located on the seaward leg. These items have long delivery times and to avoid delay in re-commissioning the crane an order for a new cable or cable reel should be placed early in the repair process.

The final stage in the repair and re-commissioning process involves

non-destructive testing (NDT) of the repaired areas and other critical weld joints that may have been affected in the incident and load testing. Crane geometry dimensional checks will, also, be performed for perpendicularity, diagonal tolerance and boom hinge alignment.

Resolving conflicts between parties

It is completely normal for there to be conflicting issues between the parties and these usually revolve around the method of repair and its influence on quantum. The prompt site attendance by an experienced surveyor can prove to be a key factor providing a smooth claims management process and avoiding potential conflict by capturing contemporaneous evidence, providing expert opinion and importantly establishing an open dialogue around the key issues from the beginning.

GETTING THE VALUATION RIGHT

It is commonplace for cranes to be insured against 'All Risks' of physical loss or damage and for this to extend to include Business Interruption suffered because of the loss of use of the crane and through port blockage. Whilst the cover afforded by these policy wordings is generally broad, the crane valuation can sometimes lead to underinsurance.

According to Daniel Wells, Associate Director of the Ports and Terminals/ Marine Liability Division at International Insurance and Reinsurance Broker Tysers "the Insured should carefully consider and understand the basis of their valuation. Under most insurance policies, the insured value should be the true 'reinstatement value' meaning what Insurers will pay to

reinstatate the Insured to the same position they were in before the loss occurred."

Where the replacement value of a crane is under-estimated this can be the result of a failure to properly account for substantial procurement and transportation costs. As Dan explains, "if the Insured simply lists the market value then this can lead to under-insurance particularly if there is an Average Clause contained in the wording whereby Average is applied, reducing the claim payment for replacement or repair."



Keith Charles

Marine Civil Engineer,
Integra Technical Services

A senior civil engineer with over 35 years' experience in the marine and offshore oil & gas industries, Keith provides specialist civil engineering consultancy services to P&I Clubs, insurance companies, lawyers, ship owners, port owners and operators, and other members of the maritime engineering community.

His principal activities concern the survey of damages to marine structures and mechanical handling equipment on a worldwide basis. Typical services involve providing engineering advice on the scope of damage, methods and costs of repair, review of business interruption and loss of use claims and when required, management of the repair works.

LOSS OF PRODUCTION INSURANCE



Sam Foster

Regional Manager, Middle East & Africa, Integra Technical Services



Adrian McAndrew

Major Loss Claims Adjuster
Property & Energy, AIG



Arianna Dean

Senior Claims Adjuster, Property & Energy Claims, Zurich Insurance

SEVEN POINTS TO REMEMBER

NO. 1

LOPI is not an indemnity insurance

“Loss of Production Insurance (LOPI) is not designed to put the Insured in the same position they were before the loss event but instead it’s a financial insurance product to protect their cashflow and balance sheet.” **Arianna Dean**

“The Insured is not necessarily receiving the barrel price that they would have received if they were selling the product on the open market but instead protection up to the scheduled unit price agreed at inception of the policy.”

Adrian McAndrew

The Insured may have a 10 year licence

to extract oil or gas and will have made cashflow and other financial assumptions based on a forecasted production schedule.

If production suffers an unexpected interruption due to an insured event, then LOPI pays the fixed Unit price per barrel at the agreed volumes for the insured period, but subject of course to a Waiting Period (time deductible, sometimes with a financial threshold) which is typically 60 or 90 days in length.

This raises an interesting dilemma and one that might appear to subvert the principle of insurance. If the spot market price at the time of a loss is less than the unit price, per the policy, then it could be argued the Insured benefits from the outage as they recover a higher price per barrel from their Insurers than they might on the spot market. In the reverse situation, the Insureds absorb the delta between the spot market price and the unit price per the policy.

NO. 2

The Material Damage Proviso must be triggered for a claim to be admissible

“Loss Adjusters have to carry out detailed investigations to establish whether the material damage loss proviso in the policy has been triggered.” **Sam Foster**

As with property damage claims, a covered physical damage trigger needs to be established for a LOPI claim to be paid. This can bring with it all the usual challenges and controversies of determining what constitutes a trigger for cover. Detailed investigations are often required, sometimes delaying confirmation on policy liability. At this time, it is important that Insurers communicate their position with the Insured as it can otherwise create tension between them.

(Angela Flaherty’s article ‘Show me the damage’ on page 16 explains the position in English law on this point)

NO. 3

Adjusting a partial shutdown is complex, compared to that of a full shutdown.

“When the Insured can produce some oil or gas the aim is to try to calculate the ‘but for the loss’ number.”

Arianna Dean

Sometimes this can be challenging, especially when the indemnity periods stretch over two, three or more years. In year one, things may be quite clear as the Insured has a much better idea of how the reservoir is likely to perform, but in later years it becomes more complicated with many more variables affecting the Insured’s production forecasts. Whilst they may have forecast a certain volume, new wells may not produce as expected. This requires the Loss Adjuster and (Re)Insurers to understand and interpret the forecasted production data and determine a loss figure that all parties can agree.

It is important to note that if the oilfield is in its infancy all parties may have difficulty understanding the performance of the reservoir and, therefore, quantifying the impact on production.

NO. 4

When the Insured is a minority JV partner they can be at the mercy of the Operator

“Insurers are often asked to accept that a joint venture partner has no direct control over the scope and management of the repair project or the flow of information.”

Adrian McAndrew

When a LOPI claim is triggered, Loss Adjusters will closely monitor the repair project to ensure timely management

and return to production. Where the Insured is a non-operating Joint Venture (JV) partner, they really are at the mercy of the expediency of the Operator. The Operator may or may not have purchased LOPI cover for their own interest and could therefore have diverging priorities from their JV partners. A limited flow of information makes it more difficult for Insurers to verify the extent to which the loss has been successfully mitigated.

NO. 5

Mitigation costs incurred in the Waiting Period

Costs incurred, by the Insured, during the Waiting Period can benefit the (Re)Insurers but may not be recoverable from the policy” **Sam Foster**

The Insured has an underlying duty to act as a prudent uninsured in the operation of their asset and particularly so in the aftermath of an incident. At the time of a LOPI claim, an Insured might incur costs within the first 60/90 days of the incident happening (the Waiting Period) that mitigate the insured loss. When analysing costs incurred within the Waiting Period, there is an argument that they are not recoverable, as the Insured carries the financial responsibility in this period; although it is not uncommon for the Insured to submit their costs to their Insurers’ for consideration.

NO. 6

Make sure asset registers are up to date

“Incorrect or outdated asset registers within an Insured’s policy schedule, that don’t recognise key dependency premises, could affect the level of indemnity recoverable from the policy” **Sam Foster**

Insureds are typically dependant on key assets in the field to get their hydrocarbons from the ‘well to market’. LOPI typically provides full indemnity (subject to the normal adjustments) when the loss is due to damage resulting from a ‘Scheduled Dependency Premise’. However, the same policy will typically provide a much lower limit of indemnity for losses emanating from damage to an ‘Unscheduled Dependency Premise’. This can dramatically affect the level of indemnity that is recoverable under the insurance policy, which is why it is important for the Insured to keep their asset registers and policy schedules accurate, clearly articulating which premises they are dependent upon to get their oil to market.

NO. 7

Transparency and communication prevent claims settlement delay

“If an Insured has not previously suffered a LOPI loss, they may not fully appreciate the intent of questions that are asked by the Loss Adjuster so it is important that (Re)Insurers are transparent with the Insured in explaining what they are trying to achieve, with the requests for information made by the Loss Adjuster.” **Adrian McAndrew**

It is vital the Insured provides the information requested by the Loss Adjuster as this helps determine coverage at the earliest opportunity and subsequently make expeditious payments. A payment schedule can also be considered by (Re)Insurers in line with the Loss Adjuster’s recommendations following their analysis of the Insured’s claim.



SHOW ME THE DAMAGE

There is often great debate around the application of policy exclusions (defects and corrosion spring to mind) when interpreting Upstream Energy policy wordings. However, a question which often receives less attention is one which goes to the crux of the question on scope of policy cover – what is the damage?

Reaching a consensus on the answer to this question at an early stage of the claims handling process certainly minimises the risk of disputes later on. The question is twofold: firstly, is there damage of the type covered by the policy trigger? This would usually mean physical loss or physical damage, sometimes required to be ‘sudden and accidental’; and, secondly, what is the extent of the damage?

Looking to English law, and in the absence of Energy Insurance specific case-law, judgments in non-energy cases have produced a pretty clear test for damage: 1) there must be change during the policy period; 2) which is physical in nature; and 3) which adversely affects the value or usefulness of the insured property.

The test is straightforward when summarised in that way and when applied to clear-cut incidents e.g. where a well blowout leads to a platform fire, it is obvious that the platform has been damaged by the fire. The ‘clear’ test becomes more difficult to apply when the damage cannot be seen with the naked eye.

Operating in the offshore sector is inherently dangerous and operators and regulators put in place parameters for operating equipment that include large elements of contingency, for example the extent of fatigue life in the legs of a jack-up rig. If something goes wrong during setup of a jack-up, which is suspected to have had an impact, albeit not visible, on the fatigue life of the legs, the question will arise whether or not this is damage, bearing



in mind the contingency element which will have been included in the design of the legs. Whether a change in fatigue life at a microscopic level constitutes ‘damage’ has not been determined as a matter of English law but case law considering microscopic damage generally (such as *Quorum v Schramm*) has shown how English judges are increasingly willing to consider complex expert evidence on this sort of issue.

A similar sort of question arises with pipeline blockages. Pipeline blockages are not uncommon, such as blockage by hydrates or pigs. In the case of blockage, there is not necessarily any change to the physical properties of the pipeline itself. Whether or not a pipeline blockage, which requires money being spent to return it to an operational state, constitutes “damage” has not yet been tested by the English Courts and the question is likely to hinge on factual questions such as the cause and extent of the blockage. This, in turn, gives rise to another inherent Offshore Energy issue regarding damage; the insured property is not easily accessible and so the relevant damage cannot often be seen in situ.

Ideally the damaged property is recovered to inspect and test it, determine root cause and construct a repair methodology. However, where the relevant property is being completely replaced or where the insured is bringing an unrepaired damage claim, it is unlikely that

the ‘damaged’ property will be recovered for visual inspection and testing, subject to ROD/ROW obligations.

The recoverability of the claim under the policy then comes down to proof, firstly whether the Insured can prove that damage has occurred and, if so, whether there is a consensus on the basis of the evidence available regarding how widespread that damage is likely to have been. Without physical evidence, expert witness input on the balance of probabilities (which is the relevant legal test) becomes crucial. This evidential point is not only relevant to the extent of the damage, it is also relevant to the classic coverage issues such as defect and corrosion mentioned above.

This shows how important it is for Insureds and Insurers to have the right experts involved from the outset of a claim in order to navigate these complicated issues that can have a large impact on the outcome of an upstream insurance claim.



Angela Flaherty

Partner, Clyde & Co LLP

Angela is specialist Energy Insurance lawyer with expertise in the Upstream and Downstream Energy sectors.

FIRE DAMAGE ASSESSMENT FOR THE REFINING & PROCESS INDUSTRIES

LIMITING RECONSTRUCTION COSTS, REDUCING PLANT DOWNTIME

Without a carefully structured damage assessment, plant owners run the risk of escalating restoration costs and prolonging plant downtime.

Once the fire has been extinguished and personnel cared for, attention quickly shifts toward getting the damaged plant up and running, as Business Interruption losses accumulate minute by minute. Steve Norrington, Chartered Loss Adjuster and Engineer, Integra Technical Services suggests “a key challenge following every major industrial fire is to develop an orderly and efficient system for the assessment, ensuring that it is sufficiently comprehensive but at the same time quick.”



THREE LEVEL FITNESS FOR SERVICE EVALUATION

A common methodology that has proven itself time and again is the American Petroleum Institute’s Recommended Practice for Fitness for Service, which is often referred to as API RP 579. It is widely recognised as the best way to achieve a cost effective restoration that reduces plant downtime. Steve explains “Section 11 (Assessment of Fire Damage) is tailor-made for the task and far more user friendly than the alternatives, such as British Standard BS7910.”

An important feature of the standard is the three-level system of evaluation shown in Figure 1, which enables ‘run, repair or replace’ decisions to be made at the earliest stage in the

damage assessment. According to Steve “this offers a significant benefit when it comes to procurement of long lead time items that will ultimately determine the critical path of the project and the duration of the outage.”

EVALUATION SCOPE




-  A conservative screening, considering only metallurgy and temperature exposure
-  Metallurgy and temperature exposure plus inspections
-  A detailed evaluation using stress analysis and materials testing

Figure 1. Three level fitness for service evaluation

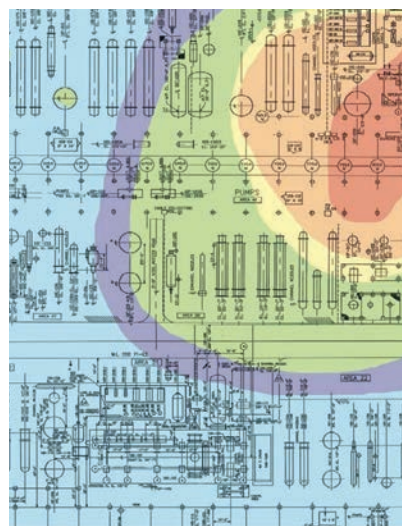
The Level 1 evaluation considers Heat Exposure Zones (HEZ's) as shown in Figure 2, determined from field observations of 'tell-tale indicators' of the temperatures experienced. Knowledge of the degradation associated with the fire damaged equipment and the circumstances of the fire event will also be taken into account, including fuel and ignition source, wind direction, time at raised temperature and cooling rate.

HEZ	Temperature & Description Example	"Tell-Tale" Indicators
I	Ambient, no fire exposure	Clean
II	≤66°C, smoke & water exposure	Soot deposits
III	66°C - 204°C, light heat exposure	Vinyl paint coating blisters
IV	204°C - 427°C, moderate heat exposure	Steel develops blue temper colour
V	427°C - 732°C, heavy heat exposure	Aluminium melts
VI	≥732°C, severe heat exposure	Structural steel deforms

Figure 2 Level 1 Heat Evaluation Zone Assessment

FIVE KEY TIPS

- 1 Assemble a qualified and experienced team of specialists, covering all the relevant engineering disciplines.
- 2 Conduct the damage assessment closely in conjunction with or supplementary to the local or refinery team.
- 3 Ensure regular communications with plant management, with daily meetings as a minimum.
- 4 Carefully document all survey findings, compiling a complete photographic record.
- 5 Identify at the earliest stage the items likely to have the longest lead times and potentially forming the critical path.



LEGEND: API RP 579 SECTION II HEAT EXPOSURE ZONES

	>1350°F . SEVERE HEAT EXPOSURE
	800°F TO 1350°F . HEAVY HEAT EXPOSURE
	400°F TO 800°F . MODERATE HEAT EXPOSURE
	150°F TO 400°F . LIGHT HEAT EXPOSURE
	AMBIENT TO 150°F . SMOKE & WATER EXPOSURE
	AMBIENT TEMP DURING FIRE . NO FIRE EXPOSURE

Figure 3. Example HEZ colour coded map (produced by Failure Analysis & Prevention)

A colour coded map of the various HEZ's at each floor level (figure 3), often with significant variations by elevation, provides a detailed three dimensional picture of the heat exposure from the fire event and enables the bulk of the repair work to be immediately scoped.

Steve emphasises that "whilst the HEZ is based on the maximum exposure temperature reached during the fire, the actual metal temperature of any individual item of equipment could be less than this due to shielding provided by insulation or cooling effect from internal liquid within vessels or exchangers."

"I have seen many examples where the majority of the fire damaged shell and tube heat exchangers are confirmed safe for reuse following Level 2 analysis, in spite of their heavily scorched appearance and classification within HEZ V (heavy heat exposure)."

COMMUNICATION

The management of this process will normally fall to a cross functional team that includes engineering specialists and the Loss Adjuster that has been appointed to manage the insurance claim. Communication is an essential and parallel part of the process and will involve the team providing verbal and written short reports that permit work planning, organisation and procurement.

Steve concludes "a methodical approach to major fires undoubtedly helps avoid over-estimating the remedial measures that, ultimately, increase the cost of refurbishment and prolongs the outage period."

THE CASE FOR SUBROGATION

Haberdashers' Askes Federation Trust v Lakehouse Contracts Ltd & Ors (2018) has raised the possibility of more Construction Insurers pursuing claims against Subcontractors that may believe they are protected by the project policies.

Building works were being carried out for Haberdashers' Askes Federation Trust at Hatcham College. As part of the works, the main Contractor, Lakehouse Contract Ltd appointed Cambridge Polymer Roofing Ltd to undertake some roofing works. On 6th April 2010, hot work on the roof involving the use of a blowtorch on a roofing membrane resulted in a fire and a £8.75 million property damage claim.

Lakeland Contracts had taken out a Project Insurance policy that included cover for Subcontractors. Project Insurers indemnified the loss and then sought to recover some of that payment from Cambridge Polymer Roofing, who resisted on the basis of being a co-insured under the Project Insurance policy. Despite the Project Insurance policy insuring 'the main Contractor and all Subcontractors', a clause in the roofing sub-contract stated that the Cambridge Polymer Roofing would obtain its own Third Party Liability insurance up to a limit of £5 million. As a result the Project Insurers argued that they were not covered by the Project Insurance policy.

The Honourable Mr Justice Fraser heard the case in the High Court, Technology and Construction Court (QBD). He considered that in order to address the opposing arguments he would advise the 'legal mechanics' by which cover was available to a Subcontractor under a project policy. Three different ways of assessing the situation were discussed, these being agency; standing offer; and acceptance by conduct.

The concept of 'agency' could not be accommodated for two reasons. Firstly, the identity of the Subcontractor could not be identified at the time the policy was effected and they would not have been able to agree policy cover as they had no insurable interest at the time the policy was incepted.

When considering 'standing offer' and 'acceptance by conduct' the key issue to consider is the intention of the parties. Reference was made to the Supreme Court decision in *Gard Marine v China National Chartering*, where it was held that subrogated claims cannot generally be brought against co-insureds, regard had to be made to the particular terms of the contract between the co-insureds.

Normally, a Subcontractors appointment might lead to its inclusion in a defined group and cover being afforded by the Project Insurance policy, with the benefit of the Waiver of Subrogation clause. In this particular case, the terms of the subcontract expressly required Cambridge Polymer Roofing to obtain its own Third Party Liability insurance, so they were not an Insured or beneficiary of the Project Insurance. They were not entitled to rely on the waiver clause, and the Contracts (Rights of Third Parties) Act 1999, was of no assistance because a policy term excluded the operation of that act.

Mike Hornby, Chartered Loss Adjuster, Integra Technical Services suggests that "whilst this decision may be challenged in a higher court, it does raise some interesting questions for Insurers, Contractors and Subcontractors about the construction of the terms of the various sub contracts, and differing policy conditions that will inevitably flow through the use of a high number of Subcontractors."

The case was effectively an action between the Insurers of the various responsibilities and the main project policy, previously considered to be a catch-all for any subrogation issue. Whilst it is not yet confirmed whether the decision will be appealed, this could be determined by the Insurers weighing up the potential legal costs of appeal, against merely amending future policy wordings to take note of the decision. This

could be achieved by specifically excluding any Subcontractors with an insurance requirement from policy cover – or at the other end of the scale, expressly stating such insurances will be secondary to the main contract cover.

“Both main Contractors and Subcontractors will need to consider the implications for their insurance risks and costs.”

Mike Hornby, Integra Technical Services.

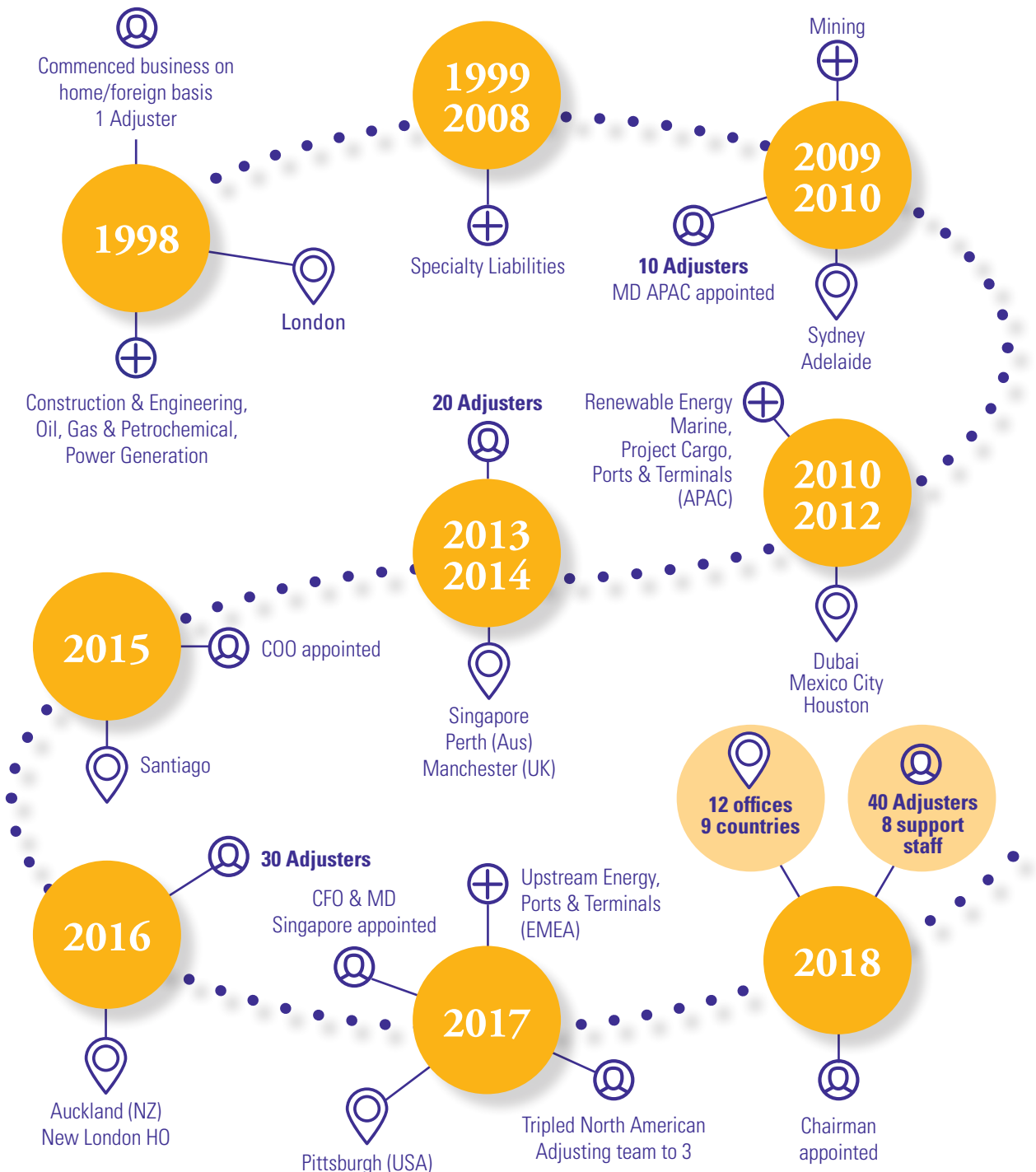
Main Contractors may tighten their bespoke contracts to ensure every Subcontractor has an obligation to insure their works and liabilities, but in so doing a degree of control of a claim may be lost, which may not sit comfortably with the project management. The alternative is to let the Project Insurance policy capture and control the many potential risks, subject to Insurers acceptance.

The other potential consequence is Insurers instructing legal experts more frequently when a loss occurs as they look more closely at the wording, and cover, of every Subcontractor involved in a claim. Mike believes that "this degree of increased scrutiny will, by its very nature, extend the investigation stage of a claim, with consequent delays in establishing liability, and potentially increased costs of claims handling."

THANK YOU FOR THE PAST 20 YEARS

During the first half of 2018 we received 316 new instructions for losses in 52 countries of the world.

We may have grown but we remain as committed as ever to the same values, client service and solutions focus that has driven our success.



Integra Technical Services, specialists in the settlement of complex insurance claims.



To find out more about Integra Technical Services contact Leo Dixon:
E: leo.dixon@integratechnical.com T: +44 (0) 203 879 8320 www.integratechnical.com