

# RISK INNOVATION

SHOWCASING RISK MANAGEMENT MATURITY AROUND EUROPE

**IUNE 2014** 

# Construction



IN ASSOCIATION WITH



# INTRODUCTION

# Light at the end of the tunnel

The worldwide financial crisis affected construction particularly hard. Now all the signs are that the industry in Europe is recovering

he construction industry in Europe is slowly emerging from its leanest period in living memory.

Building work may not yet be booming, but it is certainly in a far healthier state than it has been for several years.

The recovery across the continent remains patchy and not uniform, but most analysts and forecasters agree that the future is extremely positive. Currently, the UK and Germany are faring better in terms of the scale of new developments, while the states of southern Europe are making a more laboured transition.

Southern Europe, in particular Spain, continues to be affected by the effects of the international financial crisis that first manifested itself on the construction sector in 2008 and brought a decade of strong growth to an abrupt halt.

The downturn started in the US when low earners who had been given access to easy mortgage finance started to default on so-called sub-prime loans.

This triggered what would become the most significant global economic collapse since the Great Depression of the 1930s.

The consequences were felt in almost every business sector in the developed world. Not only was construction among the first affected, it was also affected particularly hard.

Overnight, ideas for new building projects were abandoned before work could begin.

In some cases - most notably in Spain, Portugal and Ireland - work that was already under way on developments ceased, leaving half-built housing developments and empty building sites. The public sector was affected just as much as private projects. With government cutbacks initiated across Europe, there was little appetite for major infrastructure projects.

It now appears that the worst of the downturn is over and its damaging effects on the construction sector are starting to recede. Investment in state-backed schemes has broadly started to return and the private sector is seeing funding fuel both commercial and residential growth in northern Europe.

Property buyers are once again getting access to mortgages, albeit on less generous terms, and this is fuelling more activity in the construction sector - particularly in the UK, where the idea of home ownership remains ingrained on the popular consciousness.

According to the latest data from respected forecaster Euroconstruct, "all sectors - housing, non-residential construction and civil engineering, are expected to experience an expansion in volume, but it has to be kept in mind that the growth path starts from a very

The report adds that "non-residential construction will profit from the better economic environment mainly from 2015 on".

# **Ever-growing list**

However, although the economic risks might be less worrying than they appeared even a year ago, other threats to the sector loom large and are becoming increasingly difficult for construction companies to manage.

The financial crisis forced many of Europe's larger construction firms to re-evaluate their business strategies. Some turned their attentions away from the continent and have been seeking growth elsewhere in the world, particularly in rapidly growing emerging nations.

This has been especially evident among construction companies in Spain that have used the country's historic and language connections with parts of Latin America to their advantage in the regional boom.

Although this brings considerable opportunities, it also adds some particularly specialised risks to an ever-growing list.

Supply chain, human capital, political instability and increased competition from rival businesses are only a few of the wide and varied range of risks highlighted by risk professionals in a survey carried out by StrategicRISK in April and May 2014.

The highlights of the survey can be seen in detail on pp4-7 of this special supplement on Construction.



In May 2014, StrategicRISK and Zurich also co-hosted the first European Construction Risk Forum. This saw leading construction risk managers and other key stakeholders from across the continent come together for a highly informative and compelling event in London.

Some of the discussions from the forum are explored in more detail within these pages, which aim to offer a snapshot of the current major risks affecting the European construction sector.

In addition, the supplement looks at those emerging threats likely to have an impact in the near future. SR

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A report this year from the European Commission - entitled The European Construction Sector, A global partner

- says that the sector "generates 10% of gross domestic product in the EU and provides 20 million jobs. It has a direct effect on the safety of persons and on the quality of life."

The report also explains how the "energy performance and resource

efficiency of buildings, infrastructure and construction products have an important impact on energy savings, the

fight against climate change and the environment in general".

It adds: "As such, the construction sector plays an important role in the

delivery of the European Union's Europe 2020 goals for smart, sustainable and inclusive growth."

TOM WYLIE Head of construction, Zurich Global Corporate UK



# TAKING A GLOBAL PERSPECTIVE

More than ever before, construction is a global business - and Zurich is the global insurance partner to meet your needs wherever you choose to build.

With operations all over the planet, we can bring the benefits of our broad expertise to focus on our customers' specific needs.

Every day we see risks from all over the world.

While there is an argument that there has been a global slowdown, the world is always building. There are always countries, sectors and industry segments that are stronger than others.

A few years ago, mining was very strong. Now metros are the big thing.

Places such as Hong Kong and Singapore are always developing their networks, and the same can be said of Transport for London. But we are now seeing big metros constructed in Riyadh, Doha and in Lima. Big extensions are also under way in Buenos Aires and Santiago.

When you take the global perspective, there is always something happening.

The downturn in the UK and Europe has been tough, there's no denying that. But, in other parts of the world, there are consistent developments. These are where our customers look to us to help them manage their risks.

There is business out there. Many emerging countries are either starting to build up their infrastructure or developing what they have, while in the UK, Europe and the US, infrastructure is being replaced, revitalised and upgraded.

When one country is under pressure, another is on the up – and the expertise Zurich develops from its presence in all these different markets brings real benefits to our customers.

Take the example of Spain, which is suffering an extreme slowdown in the construction sector. Faced with the collapse of the domestic market, Spanish firms have been looking abroad for growth. Traditionally, the markets they have expanded into have been in Latin America and the US. But more recently they have been more bold, investing further afield and exporting their skills to the Middle East, Australia and even Asia.

Zurich is there to help in these new markets and assist customers in better managing their enterprise portfolio.

We try to be flexible; we try to be solutionsorientated. We try to anticipate our customers' needs, respond quickly to those needs - and be there to help you succeed, wherever that might be.

# INNOVATION CONSTRUCTION

# What's on your mind?

Supply chain

No change

in supply

risk is

increasing

A revealing survey of risk managers in the construction sector suggests that supply chain is the biggest worry of all, attracting skilled workers is a headache, there are not enough women in the workforce, environmental considerations loom larger than ever – and if they had their way, they would play a key part in the executive decision-making process. StrategicRISK crunches the numbers

trategicRISK's survey of risk managers and brokers in construction found some common trends regarding the perceived risks and challenges facing the industry.

Respondents were asked to identify five risks that they believe present the biggest challenge to the industry - and although there are some novel risks, such as the poor implementation of Building Information Modelling, joint venture failures and unfair competition - traditional risks such as environmental, economic and supply chain are still among the top threats.

Respondents most commonly identified regulatory, economic, environmental, attracting and retaining talent and supply chain as the major risks facing the entire industry.

In fact, supply chain is the top perceived risk to construction companies, with 63% identifying it as one of their top five risks. Moreover, supply chain risks appear to be more prevalent too, with a stagger-

ing 87% of respondents believing this type of

risk is increasing. Understandably, managing suppliers for construction





firms is never easy when taking into account the frequent changes to site locations; meaning new suppliers are needed, depending on logistics and capability to transport materials.

Nevertheless, the risk is increasing because the industry has not adapted to the globalised nature of the modern corporate arena and failed to keep up with modern supply chain complexities, according to Anders Esbjörnsson, group risk manager and managing director at Swedish construction firm NCC AB.

"The supply chain management is not mature in the construction business. We do not yet have the experience in handling the complexities of modern supply chains," he says.

Kevin Morecroft, head of risk management at Skanska UK, agrees. He believes that the effects of globalisation have made supply chain risks volatile by nature, presenting both increased

opportunity and risk.

"Supply chain risk is always increasing," he says. "In boom times, the market inflates the prices and, in lean times, the supply chain goes bankrupt and fails to deliver. The supply chain is no longer limited to your country, bringing both benefits and risk. Competition is fierce, with some of our markets having 40 or 50 competitors in a tender."

Esbjörnsson believes the supply chain management challenges faced by his firm in the Nordic region are related to construction firms around the world

and says it is up to the industry to adapt to modern demands.

"For my company, 95% of all purchasing has been done extremely locally on a regional basis, not even a countrywide basis," he says. "For us, it is definitely a strategic area to first find suppliers with a

countrywide agreement and the Nordic agreements. Then, we are looking at international purchasing because in construction, the purchasing of material goods and sub-contractors represents 85% of all the costs, and we must reduce them."

Another significant trend highlighted in the survey results is construction firms' difficulty in attracting and retaining talent, with half of respondents citing talent management as one of the top five risks facing their company.

Explanations from respondents suggest that this risk entails far more than merely attracting and retaining talent. Skilled workers are ageing, and retaining them is not a solution to the lack of young, skilled workers plying their trade in construction. As a result, the industry must find a way of improving working conditions to increase the longevity of the workforce.

Moreover, a distinct lack of diversity throughout the industry presents firms with a tricky task. Women are particularly underrepresented, according to both Esbjörnsson and the group head of sustainability at Balfour Beatty, Chris Whitehead, who says addressing gender inequality is something risk managers should be doing by interfacing more with human resources.

Furthermore, today's construction risk manager has to consider the firm's environmental responsibilities and duty of care. Almost half (46%) of respondents consider environmental

risk as one of the major threats to their business, while 71% say the

increasing. Environmental risk is

risk is











63%

Overall risks likely to decrease in next 10 years

Overall risk levels not likely to change in next 10 years

Overall risks increase in next 10 years

David Stark, managing consultant at Marsh Risk Consulting, says regulatory scrutiny and compliance demands, such as waste reduction and total carbon footprint requirements in contracts, have raised the importance of environmental risks in construction.

Overall risks

10 years

have increased in the past

Environmental conservation has grown in the public consciousness internationally and now plays an important role in tendering contract negotiations.

Esbjörnsson says: "When working in new cities with dangerous activities,

the environment is, has risk - but when building a highway, for example, it is more about restriction and considering the local

wildlife. This risk is going to increase because there is a growing awareness

This heightened awareness of risk is a theme throughout the survey and translates as 71% of respondents

saving they believe the overall level of risk will increase in the next 10 years. Only 17% do not foresee a significant change in the general risk landscape.

The general expectation of a riskier

been and will always be a

of it."

No change to the overall risk landscape in the past 10 years

Overall risks have decreased in the past

landscape facing the construction industry appears to be the continuation of a worrying trend. More than two-thirds say overall risks have increased for firms in the past decade.

The perceived upward trajectory of risk in construction has raised the risk manager's profile within the sector. The general consensus among respondents points towards granting the position greater responsibility to manage more risks and, in some cases, to be elevated and included in decision-making processes.

Risk manager at Madrid-based Ferrovial SA, Daniel San Millán Del Rio, believes the risk manager's function should develop into an executive role.

"The risk manager's position should evolve to become part of the executive committee at the company," he says.

"I am sure that in the near future, any investment process should have the approval of the enterprise risk management system implemented in the company."

Skanska's Morecroft thinks that the nature and approach to risk management in construc-

tion will lead to a more cultural and

behavioural emphasis. "The industry will realise that behaviours drive success, not necessarily procedures. Tools such as gamification will be used to a greater extent to engage stakeholders and increase collaboration," he says.

For his part, Esbjörnsson hopes risk management will be granted more access to manage the risks in more areas of the business: "I believe, and hope, that risk management will be an even more focused area within construction, and that looking at all risks

- such as injuries, security issues and property risk management for example - will help the entire risk process become more integrated within the organisation." SR

74% say globalisation has *increased* their firm's **exposure** to risk

Average % of risk that is insurable:

Cover is considered the most important factor when buying insurance

Range of products, underwriter relationship and **Drice** were considered the *least* important when buying *insurance*.

Other *notable* **Key** risks: Nat Cat, health & safety and *political* : 🧖

# THE RISK MANAGERS' VIEW

# Facts behind the figures

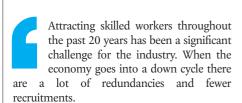
Five industry stalwarts explain the real-world issues highlighted by StrategicRISK's survey



Anders Esbjörnsson, Group risk manager and managing director, NCC AB



Ewan Cresswell, Managing director, Integra **Technical Services** 



"In the long term, we face a lot of experienced people going into retirement in the coming years, yet we need to have the best people in construction. I don't think construction is the most fancy sector engineers want to go into, so we need to do things that will attract more people - and one key point is that we need to attract more women into construction.

"We are improving on this, although most of the staff in my company are men. We definitely need to do something to attract women engineers into the industry, because they represent half of the population and we have been extremely poor in attracting women.

"I think women can help embed a better risk culture and I feel comfortable when we have a female site manager on a complex project because then I know risks are handled in a proper way. Women look at risks in general in a more sober way - they are not so fixed in the traditional way of thinking, which men can be guilty of.

Operating outside Europe and understanding the political risks outside the EU is something the industry doesn't always get right. It isn't just political risks from an insurance standpoint, but it's the geopolitical situations on the ground, how things work in a particular location that are important and, often, contractors fail to price the frustrations of a locality into the overall contract. This can wrongfoot them financially.

"It comes down to contractors needing to price the commercial realities on the ground when tendering for business. Contractual obligations are probably not adhered to as seriously in the developing world as they are in the EU. The biggest sanction you can have over a subcontractor is levying liquidated damages and they will shrug their shoulders, say 'good luck' and disappear into the distance - and you suddenly realise you are the foreigner in their territory.

"This situation will perpetuate with regard to lump-sum EPC contracts, where contractors are having to look up to three or four years ahead, that is, the typical project duration. Are they really confident about how material price inflation, labour costs and exchange rate fluctuations are going to affect their pricing? For instance, if they are pricing in dollars in a nondollar denominated country, how do they lock in the buying power of the hard currency with regard to the local expenditures? That volatility can become a major issue.



Chris Whitehead, Group head of sustainability and innovation, Balfour Beatty

The key risks for the industry are in addressing change and opportunity in our markets. That includes, for example, increasing the prevalence of collaborative working, so the challenge is having staff who have the interpersonal skills to work collaboratively.

"Then, there is the application of technology to construction, so increasing the capacity and utility of existing infrastructure.

"Those are the key changes happening in our markets. The big risk is not being able to adapt - that is clearly a significant material risk, because if we don't adapt to our markets we won't be in business. We have to develop the capacity to address the issue successfully.

"It's all about human capital. It's about recruiting the best people with the collaborative working skills, investment skills and technology skills.

"Going forward, the risk manager must always liaise with the other functions in the business, but particularly interface more broadly with human resources. Lack of diversity is a challenge for us, the need to interface with sustainability and internal audit to get financial data accuracy, and some labour scarcity issues will develop in the medium term, which means addressing gender inequality right from the off.

"Another issue is developing strategies to help people work longer. Employees can work longer through more sophisticated materials handling, so that they don't have to carry heavy materials.



Rob Halstead, Head of risk management, Crossrail



**Kevin Morecroft** Head of risk, Skanska civil engineering

Risk managers are increasingly working within a collaborative sphere and must figure out how to engage with that. That's a macro thing. In terms of specific risk, there are bigger projects coming and technically challenging projects. We can be at the forefront of how people understand these new approaches to risk.

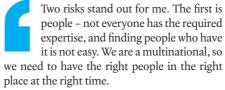
"Construction companies are already recognising that risk is about more than just compliance and that it can support the successful delivery of a project. Certainly where we are, the risk function has had a lot of profile in terms of how we support the programme, and it has enabled us to get into that area where people are making the big decisions. That's where we want to be as risk managers, because this is the interesting side of things.

"The other side is getting the supply chain engaged. Risk managers need to look into this aspect and work with colleagues to get the management of risk effective throughout the chain.

"I'm a risk manager who has come from the project side, but I'm interested in leveraging insurance industry knowledge because I'm sure they can help support construction firms more.

"What I would like to see is the insurance industry recognising that there are some significant risk exposures that we manage day to day that can't be insured.

"I feel they have the expertise to help us manage those risks, and they might find in doing this that there are some things they could insure.



"The other major risk is design and build, namely the movement of the industry towards new types of projects: normally contractual structure, but not necessarily.

"Although we are being asked to build unfamiliar structures more often, the danger is in the way the contract is administered, the way we have to procure materials and the risks we take. For instance, if you ask me to build you a computer, I can build it with little risk involved, but if you ask me to design and build a computer, it requires a different skill set.

"Looking ahead, there will be two tiers to risk management: the lower project level and a higher enterprise level. At the lower level, it will concern cultural change and will involve changing processes or procedures.

"Bad habits have to change and people should be more humble and admit their failings or lack of knowledge in particular areas.

"At a higher level, risk management is about overseeing your business and ensuring it is as fluid as possible. You could have experts in every field, but you may have them spread across different continents and may not know about their existence within the company. This will lead to a focus on expert groups and greater transparency.

The next most **COMMONIY** perceived as uninsurable risks were reputational and political, both chosen by 16% of respondents

The average SIZE of a risk management **team** among respondents is 11

Asked how well their company embeds a risk management culture throughout the organisation on a scale of

1 (very poor) to

10 (very well), respondents averaged

Contractual **ISSUES** such as third-party supplier obligations was most commonly perceived as an uninsurable risk, with 33% of respondents citing this as an **element** they **CONSIDE** uninsurable

# INNOVATION CONSTRUCTION

# On the right track

Europe's biggest building venture, Crossrail, is cutting a swathe through the south-east of England, right into the heart of London. For the £14.5bn project's head of risk management, a key part of the process is keeping senior management engaged and committed – a strategy that has united the organisation from top to bottom

hen it comes to construction,
Crossrail is truly the daddy.
The massive infrastructure effort
tasked with building a railway across London,
from east to west – is currently Europe's largest
building project. Starting in Maidenhead,
Berkshire, the scheme will cut a slice through
the West End and Oxford Street to Canary
Wharf, Essex and on into north Kent.

Much of this route will be underground, with 21km of tunnels stretching from Paddington in the west to Stratford in the east – all the while tunnelling beneath some of the most expensive and densely populated real estate in the world.

With a budget of £14.5bn (€17.9bn), Crossrail is scheduled to open in December 2018. "Building a major railway through a built-up conurbation is clearly going to have major risks," says its head of risk management, Rob Halstead. "There is a significant amount of tunnelling that needs to be well managed and monitored, and a significant number of stakeholders that need to be dealt with.

"Plus, if the design is to link up with existing rail services, we need to be working very close to live railway assets."

Although Halstead's job involves dealing with a massive and complex challenge, he says it would be far more difficult without the support of the senior team. "I meet regularly with them, not only to talk about key risks but also risk management performance, statistics and information we are gathering. We can identify where risk management is and is not taking place properly and flag that up."

Indeed, he believes that the commitment of senior management has been critical in ensuring that the organisation follows through on risk management at every level.

"It helps to make sure that people take it seriously and not regard it as a box-ticking exercise," he says. "When you ask senior managers, they always say that managing risk is critical. But they do not always follow through on that. What we have done [at Crossrail] is make sure that we are engaging with senior

management in a way that keeps them involved to keep their commitment alive.

"Part of that is to ensure that the process supports them. We have been very conscious of building a risk programme that enhances the project rather than gets in the way."

# **Unifying factor**

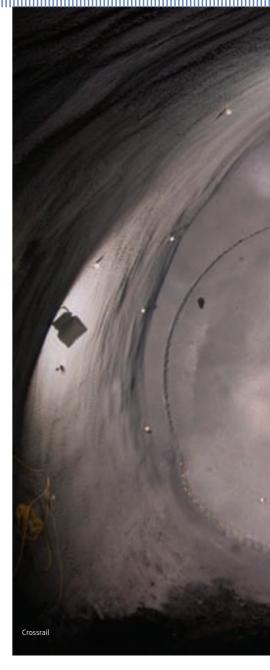
This is a key point for Halstead, who argues that, although everyone has their own objectives to deliver, risk management can assist that process and serve as a unifying factor within the organisation.

"We can help people deliver," he says.
"To do that, we need to keep it simple and not be tempted to overcomplicate things. Risk managers are often good at designing perfect processes that are never used, so we have tried to make sure our approach is useful and gets adopted."

Given the breadth of the operation, it was established early on that Crossrail would need to deploy a common risk management system. The firm selected Active Risk Management and then implemented it across the organisation and tier one suppliers. "It is important that contractors share our approach and so we have insisted they share our risk management systems," says Halstead.

When it comes to risk transfer, this is a big insurance story with a lot of large, insurable risks. "Our insurers have given us a great deal of support in embedding risk management across the organisation," says Halstead. "They have been challenging about the way we were doing things and come up with some good improvements. They have the same objectives as us – the management of risk – and we have found that we have really been able to draw on their expertise and use it to do things better."

But this learning experience has gone only so far, and Halstead believes both sides would benefit further from better engagement from insurers. "In the end, insurance covers only a small amount of our risk," he says. "It would be great for insurers to get a more rounded

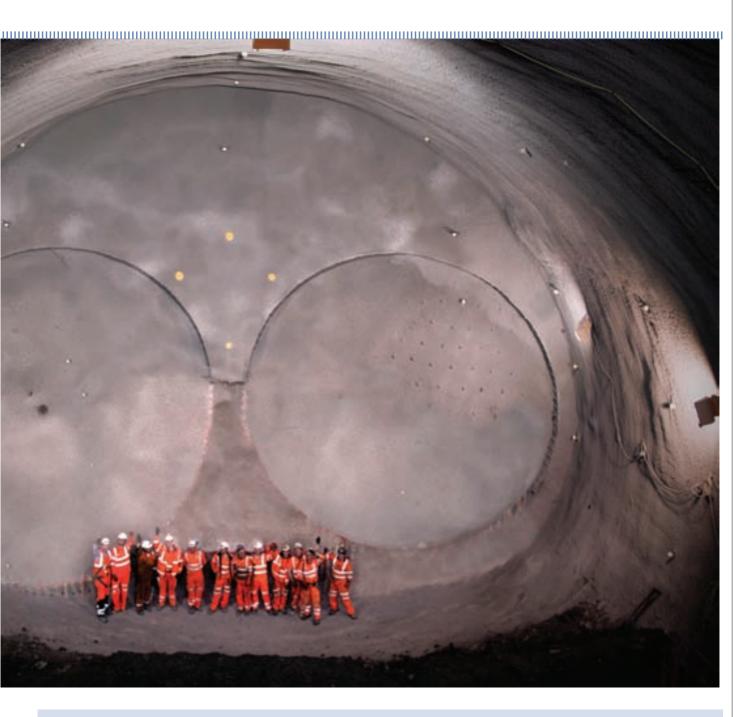


understanding of project risk. By doing so, they might be able to share their expertise on pricing risk and possibly offer more cover.

"I would like them to see what things look like from my side and better engage with the project on a broader definition of risk."

This ambition to keep learning and improve all the time is crucial to risk management at Crossrail. "My experience here is that it is not the unexpected that is always the most problematic risk, but the things that you are convinced are covered that can jump up and bite you," says Halstead.

"One of the things we seek to do is to challenge our assumptions that risks are under control." **SR** 



# A NEW FRAMEWORK

Crossrail has a special type of structure - a limited company that is run like a project - and this changes its approach to risk management.

"We will be dismantled when our job is done and this is quite an interesting proposition for a risk manager," says Halstead.

"We are a corporate entity subject to corporate governance and guidance, and we have a

board. But when it comes to the way we manage risk, we behave like a project.

"We exist within a broader context of project controls, including cost management and schedule management. Risk is quantitative. It feeds into our cost management.

"Our risk work also feeds into establishing a confidence level for delivering the project on time. All of this is common on a large engineering project but with us, the entire organisation is based on these principles."

In this atmosphere, risk management is taken seriously at every level.

"Project people are generally very receptive to risk management," says Halstead. "The risk management process is also helped by the fact we are all

working towards a common goal, whereas in other organisations, timescales and objectives may vary between departments. Here, everyone is doing the same thing to support the project.

"As a project we do not have a choice about our risks - they are what they are and we have to deal with them.

"Being publicly funded also has an effect on our appetite."

# **HUMAN CAPITAL**

# Building through the ages

Struggling to attract talented new recruits, the construction industry is being forced to adapt to young people's changing expectations. The bad news is that success is likely to be years away

successful business is driven by its workforce. However, finding the right people with the necessary talent and qualifications is proving to be a daunting challenge for many of Europe's leading construction firms.

Construction companies concede that they are struggling to attract younger employees to an industry with a growing image problem. Well-educated individuals who might once have taken work in the construction sector are eschewing it for what they consider to be more 'glamorous' and 'sophisticated' options.

This is particularly apparent on the technical side, certainly in Western Europe.

Yet, this is not an attitude found among migrant workers from the eastern side of the continent who are being recruited to fill the

To counter this, a growing number of companies are working with schools and other education establishments to deliver the message that the construction industry can provide an excellent career. They accept, however, that it might take years to turn around attitudes.

### Not as attractive as before

The reasons behind this change among young people are myriad and complex. Chris Whitehead, head of sustainability at Balfour Beatty, also recognises that the industry is not as attractive as it was. "Young people are less willing to make the sacrifices - such as driving hundreds of kilometres to get to a project. It is just another factor that makes the construction industry that bit less appealing," he says.

Part of the issue is that construction is not viewed as a particularly high-tech industry by those unfamiliar with its changing practices and companies are aware they need to address this perception quickly if they are ever to stem the talent flow that is moving capable people away from the sector at the outset.

A similar problem exists in France and Spain, where many highly educated young people are not only turning their backs on the construction industry but also their home countries. In a socalled 'brain drain', thousands are looking instead to the rapidly growing emerging economies for work.

Even when companies recruit the right people into the workforce, retaining that talent is another matter, especially when staff spy better prospects in other countries.

Anne Charon, France chief executive for Zurich Global Corporate, identifies this as a major problem. "In France the construction industry is flat at the moment and many of our biggest customers from the sector are working on growth plans outside the country - particularly in emerging markets," she says.

"So it is easy to see that the young, talented people they recruit are often more interested in going to work in the emerging markets, rather than staying in France."

Balfour Beatty's Whitehead sees the same movement of talent happening in his company. "The talent joining the industry wants to get on in more than just the UK industry - we are continually seeing talent move abroad, although they remain with the company," he says.

"The talent that is in the business is a lot more confident and keen to determine its own future than before."

## Almost alien

A generation ago, people entering the workforce had different attitudes. It was not unusual for an individual to join a major corporation with a view to staying there for their entire working life.

Nowadays, that concept is almost alien to young people as they embark on a career. Not only do most expect to move every two or three years, but a good number see no barrier to changing business sectors just as frequently. Loyalty to a company has been replaced by lovalty to themselves.

So, a company that has invested time and money into an individual might see them move to a rival business - or indeed, use their skills and acquired knowledge for something completely different.

Increasingly, companies are turning to their older workers to help maintain and motivate younger staff. With more employees than ever working for longer, companies are recognising the value of mentoring schemes, where long-serving staff share skills and expertise with newer recruits. In return, these more youthful staff can help older employees to understand new technologies better.

A different approach has been taken by Crossrail and Transport for London (TfL). In a novel scheme aimed at involving young people who might not ordinarily be offered a chance in the industry, Europe's biggest drilling project has set up a Tunnelling Academy in East London that targets local people, with help from Balfour Beatty.

TfL's head of group insurance, Nigel Blore, says the project is important for two key reasons: to teach skills and also in terms of "creating sustainability of employment". SR



# **POLITICAL RISK**

# A world of trouble

When setting up a project abroad, what are the chances of turmoil breaking out? Failing to study the political scene in advance, could mean a nasty surprise for companies

iven the key role construction plays in economies around the world, politics has always been a key risk – and understanding how governments will act (and react) has never been easy or straightforward.

However, as more and more construction firms operate in multiple markets, the risk profile has grown much more complex, especially as many markets are governed by legislative and judicial structures that may not reflect the home nation's standards.

According to John Raines – deputy director, political risk at consultancy Exclusive Analysis – two main risks should be kept in mind: input risks, such as the enforceability of contracts, with the obvious possibility of corruption; and production risk, including changes to continuing costs, regulatory costs and wages.

In order to deal with these effectively, Raines argues that contractors must ensure they have a thorough, well-developed intelligence-gathering operation, either in-house or using a third party. This means following a three-point analysis.

### Three points

First, firms need to make sure that they know their market and understand the idiosyncrasies of the particular environment in which they operate. A regional view is not enough.

Second, companies need to look at the potential for polarisation and extremism. What is the political landscape like? Firms should examine all potential eventualities and prepare for them. How popular is the current govern-

ment? What are the risks if it falls or a new government takes over?

Third, companies need to – really – know their partners. They need to understand their dependencies on others and learn about the regulatory landscape through local partners.

Beyond these concerns, more broad, geopolitical risks have the potential to affect overseas operations and suppliers. Some of these are well known, but others – while they may fall off the news agenda – should not be underestimated.

For example, Russia's 2014 annexation of Crimea severely destabilised Ukraine and raised the possibility of a war between Ukraine and Russia. China is experiencing a broad slowdown, which could have a dramatic effect on other economies and, in recent years, there has been confrontational military posturing between it and Japan.

### Evacuation

In all these areas and many others, companies need to ensure they have detailed and wellrehearsed plans in place to protect and, if necessary, evacuate their staff in-country.

Raines cites the example of one oil company that was forced to evacuate its staff from Libya as the civil war spread, despite having never considered the consequences of war before. It now has evacuation plans at all sites.

He argues that firms should always know where their staff are and construct a dynamic map of all the people in a particular area and their connections.

When entering developing countries, firms should be aware of the poor infrastructure and healthcare and plan accordingly. For example, in developing African countries, the nearest hospital could be 400km away and even there, working conditions will be generally much poorer than in the EU.

One solution is to learn from the locals. Raines encourages all firms to partner with a local business – of any type – to gain a better understanding of the risk landscape, established administrative procedures and local markets. **SR** 



# DEVELOPMENT

# Now's the time to turn green

Sustainability is a significant challenge for the construction industry. But as governments demand action and the market grows apace, the issue has become impossible to ignore



omewhere in the world, a family is stepping down off a country bus, full of hopes and dreams for a new life.

Every year, about 66 million people worldwide move into cities – which means we are building the equivalent of a New York every 100 days.

"This is a huge resource challenge for the world," says Chris Whitehead, head of sustainability and innovation at Balfour Beatty.

Construction is an enormously resource-heavy sector. "We use vast amounts of water, timber, cement and steel," says Whitehead. "It is very carbon-intensive. If you look at the carbon footprint of developed countries, such as the US, more than 50% is from construction, building use and infrastructure.

"The big challenge is how to decarbonise the sector and make it more sustainable."

The starting point for any firm is defining what sustainable means for it – the challenge is to make it meaningful and relevant. But more than that, the challenge for risk managers and others is to show that failure to get behind the sustainability agenda presents a real business risk, not only in terms of environmental degradation, but in missing out on a rapidly expanding market.

Just because the UK has yet to move decisively on green legislation, that does not mean it is not happening elsewhere in the world – and at a rapid rate. According to Whitehead, 26% of Balfour Beatty's US turnover is in green infrastructure.

"[The US] is implementing a green agenda faster that we are," he says. "Legislation already exists there in many areas, including the obligation to publish your energy use. We have shrunk away from this in the UK so far. But sustainability is in many ways already driving the market in the US."

In addition, these changes are by no means limited to the developed West, and firms looking to expand and invest in the BRICs need to be ready to talk sustainability.

"I think the issue of sustainability in construction is spreading," says Whitehead. "For example, it is already spreading into China. Before you reach a carbon pressure, you reach a pollution pressure, and the Chinese authorities are keen to improve air quality by improving construction.

"You can see similar trends emerging in Brazil and, of course, the Scandinavian countries have been steaming ahead with this for some time now." Failing to grasp the global direction of travel means missing out on new opportunities and even new markets.

"The risk is failure to address this opportunity and act on it," says Whitehead.

### **Human** capital

But sustainability is not only about improving environmental standards – the industry needs to work to manage the risk to its longevity posed by changing working practices.

"We are seeing rapid changes in the sector," says Whitehead. "Human capital is becoming more of an issue. For example, there is a strong trend towards more collaborative working – and you need people who can work in that way, otherwise you are missing out on a major share of the market. You cannot take it as a given.

"Increasingly, we are seeing a larger interface with technology, and you need people with the skills to handle that technology. We also need to help individuals manage their health and keep working longer – and that means better materials handling, otherwise you get guys in their 50s who just can't manage to cart bricks around site.

"The risk is that if you cannot handle these changes, your business is in trouble." **SR** 

There may be only two manufacturers in the world of what you need. You need to know what their capacity is. If one has problems, is there capacity available in the other? If there isn't, there will be an awful lot of delayed projects"

Nick Wildgoose, global supply chain risk product leader,

Zurich Global Corporate

# Chain reactions

ike many sectors, smart operators in construction have been taking a long, hard look at their supply chains in recent years. From commodities to specialist technical kit, construction firms rely on a huge variety of globally sourced products. A failure in the supply of something critical could cause a catastrophic delay in a project getting off the ground.

"What we found can be that both the insurance and risk market was too focused on internal supply chains and not focused on the external supply chain," says Nick Wildgoose, global supply chain risk product leader at Zurich Global Corporate. "In general, it was also too focused on physical

"One of the problems was cost pressure: they just did not have the resources to explore their exposure fully. But even where they were doing proper risk assessments, they were saying that they needed to rely on their direct/tier one suppliers to manage their own risks.

"Well, clearly, if we are talking about a critical supply chain, that is opening a firm up to all kinds of problems."

### Dangerous thoughts

"If a critical supplier fails to deliver, your customer is going to see it as your issue," says Wildgoose. "It is no good saying to your chief executive: 'Oh, I'm sorry, it was our supplier that failed. They hadn't looked far enough down their supply chain.'

"In fact it is you that haven't looked far enough down the supply chain. If a contract supplier fails because it cannot get a critical piece of equipment on to your site, it is still you, the construction firm, that fails. If it doesn't arrive, that's that."

The way out of this dangerous way of thinking is to really engage with the worst-case scenario and develop a detailed understanding of what can cause disruption in your supply chain, and exactly how - and for how long that disruption will affect your ability to deliver a project.

"One of the interesting commonalities in the sector is that, as construction moves to a more manufacturing type of approach, it is developing an exposure to similar risks to that sector," says Wildgoose. "A key issue is when dealing with large items of capital equipment, such as lift assemblies for a large office block. If you get a problem in the supply chain - if you neglect your resilience - you could be looking at a six- to 12-month delay."

Getting a grasp of your resilience means looking broadly at your suppliers and what influences their capacity to deliver. Delays can be caused by a range of factors, not least of which is the macroeconomic climate and the boom-and-bust nature of construction. "At one moment suppliers are mothballing equipment, and then at the next minute they are being asked to rapidly ramp up production," says Wildgoose. "There may be only two manufacturers in the world of what you need. You need to know what their capacity is. If one has problems, is there capacity available in the other? If there isn't, there will be an awful lot of delayed projects.

"You need to know where the failure points are and what your capacity is to respond."

But you also need to look beyond physical kit. "In some ways, it's easy for people to relate to the flow of goods and its effect on business," says Wildgoose. "But don't neglect issues like IT and telecoms outages.

"Without the information that goes with your supplies, you can find yourself with serious disruptions." SR

**NICK WILDGOOSE** Global supply chain risk product leader Zurich Global Corporate



# FROM THE GROUND UP

As an insurer, we are there when things go wrong. All too often when firms go down, the cause was a failure to appreciate their vulnerabilities, and this led us to take a different approach to supply chain risk management.

When, with the support of our customers, we looked at the supply chain risk transfer products that were available five years ago, we quickly saw that they were not always in line with the way the construction sector was moving.

In order to meet our customers' needs and work out how to put their risks on Zurich's balance sheet, we needed to really understand those risks for ourselves – and we had to do this thoroughly, from the ground up. There was no actuarial table we could go to for easy reference.

Instead, we developed with our customers a supply chain risk assessment approach based around critical

The first thing we look at is who those suppliers are and what they supply, and we try and go below tier one to look at anything that could be critical. We are concerned about everything. For example, specialist pieces of construction equipment - who makes them? Who else makes them? Where else can you get them from?

Having got some idea of value exposure, we can begin to get a grasp of the impact and see what delays can really cost – and this really focuses the customers' minds, allowing them to see exactly where it is worth investing.

We encourage a comprehensive approach. Time and time again we see customers who are doing an excellent job of their financial due diligence: they use third parties and even professional accountants. But many tend to think that's it; that's their supply chain risk management. We would say it's only a small part. You have to look deeper and broader.

What are the effects of regulatory changes? For example, the European REACH legislation led some manufacturers to pull out and stop supplying in Europe. What effect could similar changes have on you?

Are all your key suppliers in one place? What are the challenges in that area? For instance, Thailand has become an increasingly popular place to outsource manufacturing. But, in recent years, it has suffered severe flooding and now seems to be becoming increasingly unstable politically.

All of which seems complicated, but we have a number of IT tools that look at where suppliers are located and what their exposures are.

The truth is that supply chains are complex, but denial of this truth is not an option.

You have to engage with the risk, and Zurich is there to help you.

# INSURANCE MARKET TRENDS

# The insurers' challenge

By Warren Beardall, PPP insurance specialist, Aon London

he construction insurance market continues to be ultra-competitive and there is no reason to believe that this is going to change any time soon.

Large volumes of capacity are readily available for even the largest and most challenging projects and from capacity centres as far-flung as London, Singapore, New York and the Middle East.

To successfully engage with such capacity, and leverage the competitive opportunity and relative arbitrage that may exist, an insurance intermediary is needed with global reach.

This huge volume of capacity continues to represent keen pricing for construction insurances. This is good news for construction firms and those employing them, but a challenge for the insurance industry. Although the peak to trough of the insurance market cycle in construction may not be as extreme as in other areas, such as property, it is still pronounced. Moreover, making sure you are buying the right product still requires technical input from those who truly understand your business.

Clients need to thoroughly check their coverage with their broker to ensure they are



maximising what is available and that it meets their contractual and risk management requirements. Overall, however, cover forms remain traditional, and competitive pricing can be accompanied by policy wordings that introduce subtle but important improvements to underlying coverage.

Some insurers will also entertain less traditional insurance forms and more unusual products, particularly around non-damage delay-type coverage. That said, such products remain intellectually time-consuming and typically more expensive than many clients would consider economically viable. In reality, most construction firms accept this position as a business risk. They work in a risky sector and are capable of analysing and taking commercial assumptions therein. Arguably, they also have a much better understanding of their risk profile than those transferring this risk to them, or those being asked to underwrite it separately. Consequently, they know that some risks are not transferable at a viable price and look to managing them in other ways.

Being a broker in this market can be a challenge. Aon distinguishes itself by listening to

# HOW DOES DELAY-IN-START-UP INSURANCE WORK?

Delay-in-start-up (DSU) insurance is a much-misunderstood product - something that can have very real costs implications for business when things go wrong.

As Tom Wylie - head of construction at Zurich Global Corporate UK – explains: "There has been a general perception that some clarity was required around how the cover is intended to work, how policy wordings are written, and how policyholders and lenders understand the product.

"For example, there has been a misconception that DSU policies respond when there is a delay,

when in fact the policy responds only when that delay is solely attributable to damage covered by the material damage section of the policy."

As with so many insurance sectors, one of the key problems with DSU products is communication between client, broker and insurer.

"An important element of DSU insurance is establishing the cause of a delay in the event of a potential claim," says Wylie.

"In order to establish whether there was an indemnifiable loss, insurers need access to the most up-to-date construction schedule available prior to the occurrence of the delay event.

"Theoretically, this would appear to be straightforward. However, there have been examples where insurers have been unable to obtain this information for up to 18 months following the event.

"This leads to frustrations among all the stakeholders, particularly the policy beneficiary - leaving clients with the impression that the cover is of little, if any value."

To avoid these difficult situations, proactive insurers such as Zurich are introducing DSU

monitoring. "This takes the form of a clause in the policy wording that requires the policyholders to regularly provide the most up-todate version of the construction schedule in its native software format.

"This will mean that, in the event of a delay event, coverage and quantum can be established more quickly and more accurately," says Wylie.

"Additionally, when we have transparency of the schedule, we are then able to assist clients with a delay-mitigation strategy to keep the project on schedule and help alleviate the effect of the



More than any emerging risk, including cyber and supply chain – or any traditional risk, such as Nat Cat - I see the major challenge for risk

managers in multinational infrastructure companies as finding a way to manage properly the wild internationalisation of our corporations, and the rapid opening of new markets, facing different cultures and different ways of doing things.

I believe the only way to deal with this extremely complex situation is to open our minds and adapt to these new environments. We are not going to change the way the new countries and markets work merely because we are there. As a matter of urgency, risk managers should make sure that the international programmes they have in place are going to work in new territories, and it is time for us all to live in a plane again."

Daniel San Millán Del Rio, risk manager, Ferrovial

and understanding our clients' needs, but also by having the global scope to be able to act both locally and globally at the same time. This enables our clients to manage their insurance risks with the most suitable risk partners. We understand the pressures and difficulties they face and our teams are out every day talking to clients and markets. Ultimately, we consider our role to be to help clients reduce their total

cost of risk, to a level where they achieve optimal protection of their balance sheet.

Whatever the state of the insurance market, the single most important piece of advice that we offer our construction clients – be it owner or contractor - is this: make sure you think about insurance early. The best results are achieved from a collaborative and strategic market approach.

delay when it occurs."

Programme monitoring is used in tandem with another Zurich strategy, known as risk engineering.

"Our engineers make regular visits to the project site," says Wylie. "Part of this is about protecting the interests of the panel of insurers, but it is also about adding value to our clients by highlighting the benefit of our experience from visiting other projects around the globe.

"The visits focus on construction methods, quality control and assurance, health and safety and industry best practices".

The insurance market has a vested interest in getting the DSU product right.

"We see risk engineering, and, in particular, the programme monitoring. as part of this process," adds Wylie. "We believe the potential outcome is a happier customer, whose expectations are better managed - and, most importantly, if a delay event occurs, we are able to ensure that it affects the project

as little as possible.

"If a delay is attributable to an insurable risk, then we can say: 'This is the quantum of the delay, this is how long it will take to fix,' and the whole process will be less adversarial.

"With all due respect to the legal profession, let's keep the lawyers out of this!

"If we can be clear and transparent about what the product is, and how and when it will respond in the event of a claim, then that can only be of benefit to all stakeholders."



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