Managing the impact and risks on the construction industry
The coronavirus pandemic has presented the greatest global challenge in living memory and its impact on our daily life, our society and the global economy is likely to last for years to come.

Preparing effectively for the challenges to come

Across the construction industry, supply chains have already been exposed to significant risks that will need to be effectively managed, monitored and mitigated to ensure that we have a sustainable industry in the short, medium and long term. Collaboration is vital to building a detailed understanding of specific project risks and to formulating the most appropriate mitigation strategy for effective delivery.

Visualising the risk to project and programme delivery

The most effective way to consider project and programme risk is to divide it into two phases – the immediate ‘shock’ of site closures and restrictions on working, and the long-term ‘time bomb’ of delayed delivery.

The initial phase of risk is the shut-down and slow remobilisation of sites, including material and labour shortages as workers are furloughed and then slowly come back to work. Together with the impact of implementing new ways of working to accommodate social distancing guidelines, this phase is likely to cause two to three months immediate programme delays on a major project.

Many sites are re-opening progressively with reduced numbers of operatives due to social distancing measures in place for many months to come. The level of output is expected to be 20% lower than pre-covid levels for several months. This will result in further delays, extended programmes and increased costs. The effect of this will not be apparent until near the end of the project.
Critical risks to consider

New safe working practices
The health, safety and wellbeing of people working on projects must continue to be the highest priority. Ensuring that this is maintained in a new ‘normal’ operating environment that includes the risk of Covid-19 will clearly have implications on working practices.

Implementing practices to ensure that safety standards are maintained will inevitably require changes to how people access construction sites, how they use office, canteen and welfare facilities, how site based personnel at all levels communicate effectively, and the way in which operations are carried out on site.

Supply chain capacity
At the highest level, the construction sector is comprised of three parts: housing, non-housing, and repair and maintenance works. The construction supply chain that supports these parts works as a complex ecosystem, providing resources across the sector in a balanced way that adjusts to reflect peaks and troughs in industry demand.

If two parts of the sector are not operating and one is only at 50% capacity, the demand crashes and it becomes uneconomical for manufacturers and distributors to operate efficiently. This in turn causes production lines to be closed as manufacturers suspend operations and furlough their workforce, resulting in material shortages.

The speed at which each part of the construction sector is able to return to ‘normal’ operation will therefore continue to affect the pace of supply chain recovery. Adjustments will not occur simultaneously, presenting a risk that near-term shortfalls in manufacturing capacity may occur, posing a risk of price inflation.

Output and productivity
The need to comply with social distancing measures is placing significant constraints on those sites that have limited space. Contractors are already making changes to their canteen, toilet and changing facilities to maintain the two metre rule.

While we are not seeing, at the present time, any shortfalls in productivity per worker (measured by GVA per worker hour), the number of operatives on site has reduced between 20-40% to accommodate these new measures and maintain adequate welfare facilities to comply with HSE regulations.

This shortfall is expected to continue until a vaccine can be found and will result in projects being delayed for many weeks, as the number of operatives and output remains below pre-COVID-19 levels.

Programme delays
The obvious impact of the lockdown will see an immediate two- to three-month delay to project programmes, as outlined above.

However, the more complex impact to consider will be the “time bomb” delays caused by the drop in output levels, which will see many more months added to the length of project programmes.

This in turn will expose clients to potential funding and development agreement risks and the supply chain will be unable to recover the extended workforce and preliminary costs, as well as being burdened with potential non-completion damages.

Cashflow and finances
The immediate impact of the lockdown on construction was dramatic, with a 90% drop in output within a matter of days. The effect of this on cashflow throughout the supply chain is severe, and if the industry is not able to implement a progressive return to work within three months it is likely to cause many businesses to fail.

As companies and clients feel the impact of reduced cashflow, they in turn are likely to adjust their payment practices, which will then multiply the risk further down the supply chain.

The finances of companies across the sector will be put under severe pressure as cash receipts and reserves are depleted and income is significantly reduced – which will put companies with strong reserves at risk.

In addition, as risk appetites in the insurance market change, it is likely that suppliers will struggle to secure the trade credit insurance and bonding required to take on projects.

If many companies are unable to meet their financial commitments this will have a structural impact on the industry, resulting in a catastrophic loss of capability and capacity to meet the demands of our economic recovery.
How to mitigate against these challenges

The combined impact of all these issues are going to have both an immediate and a longer lasting effect on the global construction industry. There are several categories of key mitigation measures that everyone should consider introducing immediately:

**Enabling immediate delivery**

Scenario planning: Contractors must assess the impact of the closedown and reduced output levels on their projects and advise their clients accordingly.

Enabling longer working hours: Clients and contractors should work with local authorities to review planning conditions and seek changes where possible to enable sites to operate in shifts over longer working hours.

Paying for materials off-site: Clients and contractors should review the possibility of payments for off-site material to ease the impact of reduced cashflow through the supply chain.

**Protecting suppliers in the medium term**

Reaching agreement on contract conditions: Public sector clients in the UK and other countries have been instructed to support supplier cashflow. In order to prevent significant delays and capacity loss across the sector it is vital that private clients and contractors are able to compromise to share the burden and costs with their contractors and supply chains.

Adjusting payment conditions: Clients and contractors should look at relaxing payment conditions and consider fortnightly payments to ease cashflow issues.

Managing material price changes: For materials that will be sourced in the next six months, clients and consultants should consider implementing materials fluctuation adjustments to reflect the current situation.

Preliminaries cost sharing: Clients should consider sharing the costs of main contract preliminaries incurred in the delay period caused by COVID-19 to ensure the supply chain can remain resilient.

**Changing how we work in the future**

Proactively monitoring strategic supply chain finances: Starting now, clients and contractors should be proactively monitoring the financial resilience of core suppliers, particularly as the ‘timebomb’ delay hits later this year or in 2021.

Prioritising offsite manufacturing: Shifting production, wherever possible, to offsite facilities will reduce the impact of working restrictions and enable projects to be more productive.

Allowing for extension of time in contracts: Clients should consider awarding time for the delay period caused by COVID-19 and not applying damages for non-completion during this period.

Innovative approaches to procurement: Looking to the future, the industry needs to consider innovative approaches to procurement to ensure that long-term risks are managed in a transparent, balanced and efficient way.

The sector faces tremendous challenges but with the right behaviours they are not insurmountable. If clients, consultants and contractors do not come together to find a common solution to these problems, we will see many constructors and supply chain partners fail within the next six months and our industry will not have the capability to continue to deliver the programmes of work that are required to support the world’s recovery and economic growth in the future. If we are able to avoid the mistakes of the past and collaborate effectively, we will be in a better place to manage these challenges and deliver much-needed recovery.