

Supply chain resilience versus robustness



T&TInTouch knowledge share

We are reaching out to share our knowledge and advice as it relates to COVID-19 and the management of construction projects, because we believe that team collaboration will put our industry in the best position to manage the unfolding uncertainty.

We are learning, testing and sharing as we go along. We are also working with our global colleagues who have had to approach the pandemic earlier than us in Africa. Now that the lifting of restrictions is being considered, our clients and our own offices are starting to look at how they can begin or complete projects once again. What we share has been tested in our Asia, America and UK businesses and is now being applied effectively across other regions as the need arises.

Supply chain resilience versus robustness

As isolation efforts continue around the world, supply chain disturbances are impacted not only by logistics constraints, but also people constraints. With no certainty of how long restrictions may be in place, what steps should you be taking to **lower supply chain risk** on your projects?

Depending on where your project is located and the lockdown requirements in place, the impact on your supply chain will vary and may change significantly over the coming weeks and months. When we talk about supply chain resilience, we mean the ability of the supply chain to bounce back in the event of unexpected **changes**, even smaller ones in the normal business process.

However, just as important to consider is the **supply chain robustness, i.e. its ability to be able to continue to function at some level during these periods.**

Areas of risk

Four priority risk areas have been identified for immediate attention. These are:

Critical raw materials/equipment with limited global availability are affected, leading to a long period of shortage

Have you assessed the critical items you need to continue to operate? How have delivery times been affected? Can you procure materials/equipment locally, potentially at higher cost but saving time versus delayed imports from Asia/ China? How much can alternative suppliers actually provide and to what amount are they reliant on imports for their raw materials?

It may be possible to regionalise your supply chain, but it will take a while to be fully able to implement for the longer term. Now that China is returning to business, will orders arrive soon? Consider not only international transport ways, but local as well.

For example in the East Africa, ports are filling up as China containers are now starting to arrive, but either there are no truckers available to deliver them, or the receiving companies are closed and unable to accept them.

Consider also the goods being transported, as initially there will be a massive change in what is imported, so while China is delivering orders of electronics and other equipment ordered before the outbreak, there is potentially no market for these now, adding to the congestion.

We are seeing companies now engaging directly with local suppliers to understand how they could support them to increase production of materials and equipment to reduce reliance on imports. This is a very different approach to “normal” contracting and it takes good communication, trust and early engagement. Most suppliers are willing to match existing prices and will deliver earlier with more certainty.

Disrupted access to a critical route, service, terminal or distribution point with limited or no alternative

The question here is how fast and how effectively the major shipping lines can implement new routes or change trading patterns and tonnages to get your materials to you. Have you engaged with your shipping suppliers to understand alternative offerings?

The solution may be smaller, more agile freight services evaluated on a regular basis depending on what stage the transshipment ports are functioning at. Where possible these smaller shipments, whilst more expensive are much more agile and often speed can outweigh way the additional costs. Currently most shipping lines have spare capacity and therefore competitive pricing is being achieved.

Other solutions have revolved around changing the destination port to one that is more functional currently, once again this might add to freight costs but could mean getting product timeously

Commercial distress of your suppliers/contractors

Will they survive the unexpected and rapid fall in revenue? Will government support packages be enough to keep your supply chain afloat? Can you afford to lose them in the long run if they disappear completely?

We are all in this together and finding the win-win solution is essential in the short-term.

However, new ways of working are being implemented fast. Now that everyone can work from home productively, do we need so many offices and overheads in our businesses? Without the need for commuting and travel expenses can we all operate more economically?

There will eventually need to be a correction in the supply chain pricing model and companies that can optimise production and costs will benefit. We are finding most suppliers have capacity and are very willing to discuss new terms and pricing, however, we need them to survive and therefore this is the time to be transparent and work towards common goals, not take advantage of the supply chain.

Clients also need to review their procurement processes, particularly government clients who have long and rigid processes with little or no room for change. Drastic times call for drastic measures and we need to simplify these processes looking critically at guarantees, durations, advance payments, risk allocation and introduce agility into our systems.

Reduced workforce availability due to COVID-19 restrictions

While it is impossible to determine the size and scale of government-enforced lockdowns in the short term, changing shift patterns have already been instigated and we see optimisation of effort with fewer people achieving the same results.

The supply chain will need to invest in automation and increase optimisation to reduce costs. An example would be our mining industry in South Africa, where the unions have fought automation for years, but with a potentially reduced workforce, they may will not have much choice.

This could lead to a long-term reduction in SA mining opex costs, which would make products more competitive again. The challenge is how we change our focus into other manufacturing sectors and up-skill the workforce to ensure people remain employed at the same time our industry remain competitive.

Set up your response team

For some of our clients e.g. in the oil and gas industry, the global supply chain is complex and highly interconnected. With the commercial distress that contractors and suppliers are currently under, there is a significant risk to continuity of supply.

While owners may have a good handle on their tier one and two suppliers, they may not know who their tier three, four or five suppliers are. Multiple contracts and relationships mean that spend with each supplier could be unknown.

We have been advising our clients to set up response teams to develop and implement mitigations to supply chain risks. There is no 'one size fits all' answer, and the level of pain a project is under will affect the recommendations given.

Key questions we advise you to address are:

- Do you know in detail what services you are buying, who you are buying them from and under what contract?
- How agile is your procurement process?
- Do you know which parts of your supply chain are potentially affected?
- Are you tracking the status of every potentially impacted part of the supply chain?
- Have you calculated the financial and time impact of every critically affected part of your supply chain on your project?
- Can you develop options to change to a different/local supplier?

- Are you prepared for new parts of the supply chain being affected?
- Are robust reporting structures in place throughout the supply chain e.g. sub-contractors report to the main contractor who reports to the project manager who reports to the client?
- Are clear and robust communication protocols in place?
- Are agreed supply chain performance monitoring systems in place?
- Are you able to offer better commercial terms to ensure you sustain your critical suppliers?

Over-complicated processes can be detrimental to the effective management of the supply chain. Check your current procurement organisation, processes, spend patterns and performance. Using the results of the health check we can provide owners with a set of practical recommendations to maintain an efficient and sustainable supply chain.

Don't break the chain

Flexibility and consideration for all members of the supply chain are the two core elements of a robust and effective supply chain. In a time of great uncertainty, ensuring a transparent and mutually beneficial supply chain relationship is the only route for success.

1. **Build strong relationships.** The relationships between owner and suppliers/contractors are a key factor in maintaining a strong supply chain. Effective relationships require transparency on both sides and need to create a win-win outcome.
2. **Communicate clearly** about your needs and goals to your suppliers/contractors.
3. **Be flexible.** Chasing the lowest price will not build a robust supply chain; trying to squeeze immediate rate cuts from suppliers will not mitigate the risk of disruption and is more likely to result in the ceasing of their operations.
4. **Diversify your supply chain.** Keep strong relationships with several suppliers to ensure that you can maintain continuity in your supply chain.

5. **Keep good data/records.** Make sure that the numbers from which you draw your forecasts are accurate.

Clearly there are many influences that may look to break a robust supply chain, but by ensuring expectations, deliverables and relationships are understood and trusted by all – the capacity to break the chain is reduced.

Please remember that every project will be different to some extent, and the best advice we can give is to make sure the specifics are well understood.

Ask the experts

We will continue to share relevant insights around the pandemic's potential impacts on construction, specifically including: construction costs, contractual implications, labour availability and supply chain risks.

We have set up a helpdesk (T&TInTouch@turntown.com) to support our clients and industry colleagues with any issues related to the impact of current events on their projects whether that is stopping, restarting or accelerating work across Africa. Between us, we have expertise covering contracts, risk, project controls, estimating, data and digital solutions.