

# **Bullish sentiment** on recovery prospects

Project logistics work in support of the civil engineering sector is set to get a significant boost this year. Economic recovery will be stimulated by the resumption of developments delayed by Covid-19 and anticipated additional investment in infrastructure by many governments. Phil Hastings reports.



he scale of any anticipated upturn in civil engineering work looks likely to remain at least partially constrained by continuing uncertainty over how long the world will take to get Covid-19 under control and resume normal industrial activity, according to some project logistics providers.

There is also the related issue of how much finance will actually be available from cash-strapped governments and the private sector for investment in infrastructure projects.

The net result is that the current overall demand for global civil engineering project logistics services is patchy, with some industry markets and geographical areas doing better than others.

Austria-headquartered transportation

group Felbermayr has 27 operational subsidiaries providing transport/lifting technology and civil/structural engineering for infrastructure projects throughout Europe and worldwide.

### **Reluctance to invest**

Wolfgang Schellerer, the company's general manager, said: "There are some projects happening in the infrastructure sector but at the moment there is a reluctance to invest in private industry projects because people remain uncertain about the further impact of Covid-19."

Ruedi Reisdorf, ceo of Swiss global forwarder Fracht, which is involved in civil engineering projects in Asia, Australia, North and South America, and Africa, highlighted a few specific examples of the present variations in activity levels across different parts of the market.

"Sectors such as infrastructure, utilities and industrial plant are seeing more or less steady demand in all regions of the world. However, with leisure activities hit hard by Covid-19 and most existing facilities empty, now is not the right moment for new projects in that sector," he reported.

"Geographically, Africa is generally currently a bit slow when it comes to new infrastructure and other civil engineering projects, which is a surprise when you consider the predictions for growth there as recently as 18 months ago. That is because everyone is now first looking to invest 'at home' in more creditworthy industrial nations, so reducing the availability of overseas finance for projects in Africa."

www.heavyliftpfi.com May/June 2021 📆 😘





A senior executive with Omega Morgan, a North American heavy rigging and transportation provider currently engaged in several accelerated bridge construction projects, also expressed a mixture of caution and optimism.

"We are not seeing an increase in construction activity yet. We are, though, noticing an increase in requests for quotation (RFQ) and requests for proposal (RFP) from companies in the civil engineering industry which we hope will translate into work in the coming years," reported Erik Zander, the company's chief operating officer.

On another positive note, Zander also played down the suggestion that governments and the private sector might be short of finance for investment in infrastructure projects, at least as far as his company's key geographical market is concerned.

"Here in the Pacific Northwest [of North America], the funding is available – it is just a question of getting the designs completed and putting projects out to the market. Anything the US federal government brings to the table in that context will be the icing on the cake." he stated.

Generally, logistics providers servicing the worldwide civil engineering industry appear increasingly optimistic that basic infrastructure projects will, over the next few years, form a key part of the economic recovery from the impact of Covid-19 in many parts of the world.

### **Projects resuming**

The Netherlands-based global heavy lift services provider Mammoet, which is involved in many civil engineering projects worldwide – most of them related to the renewal of urban infrastructure – shared this view.

Its recent projects have included the decommissioning of the Samuel De Champlain bridge in Montreal, Canada, and the installation of new landmark bridges such as the Donaubrücke over the Danube River in Linz, Austria, and the new bowstring bridge access to Madrid Airport's T4 terminal in Valdebebas, Spain.

"The fact that we seem to be starting to see the light at the end of the Covid-19 tunnel is indeed triggering the resumption of delayed projects," commented Rafael Martinez, branch manager in Madrid – one of Mammoet's core engineering centres for civil projects.

"Moreover, it is presumed that the global impact of the pandemic in all economic sectors may induce the appearance of stimulus investment packages by



governments worldwide, which in many cases are expected to be related to infrastructure and other civil engineering projects, including structural modifications, renewals and newbuilds."

Gert Hendrickx, sales director projects for Belgium-based Sarens, expressed similar optimism. The company's activities in support of the civil engineering sector include an average of one bridge installation a week, ranging from smaller bridges weighing a few hundred tonnes to megastructures of 3,000 tonnes or more, and other infrastructure works.

"We have not really had a downturn in



There are some projects happening in the infrastructure sector but at the moment there is a reluctance to invest in private industry projects...

– Wolfgang Schellerer, Felbermayr

infrastructure-related projects globally," he reported. "What was booked and planned for execution continued, mostly as per planning, although sometimes with small delays because of Covid-related travel restrictions for our crew. Looking ahead, we are now seeing increased demand for the preparation of quotations for civil construction works, mainly in Europe and the USA."

### **Change in perspective**

Stuart James, chief commercial officer for UK heavy/abnormal load transport and logistics service provider Osprey, also shared insights about potential government-backed infrastructure investments. "Here in the UK, we believe the government's response to Covid-19, in addition to its ambitious commitment to climate change, could impact some civil engineering programmes. Rebuilding the economy and stimulating growth will require a change in perspective regarding which projects should now take priority."

In that context, he continued, access to data that identified the most-needed scenarios might help. "Understanding what needs to be built, where and why, is a science in its own right, although private and public sector finance will always be found for the right projects," he added.

Osprey's recent involvement in the civil engineering sector includes working on a wide variety of national infrastructure projects – one, for instance, involved transporting a 5,200-tonne, single-span concrete portal to take a rail line over a road.

Fracht's Reisdorf echoed positive sentiment about the likely impact of increased government investment in infrastructure. "Governments all around the

www.heavyliftpfi.com May/June 2021 📆 🗸

### **INDUSTRY REVIEWCIVIL ENGINEERING**



Governments ... will invest heavily with borrowed money to get their economies up and running again — and what better areas for that investment than infrastructure and renewable energy.

– Ruedi Reisdorf, Fracht

world will invest heavily with borrowed money to get their economies up and running again – and what better areas are there for that investment than infrastructure and renewable energy," he stated.

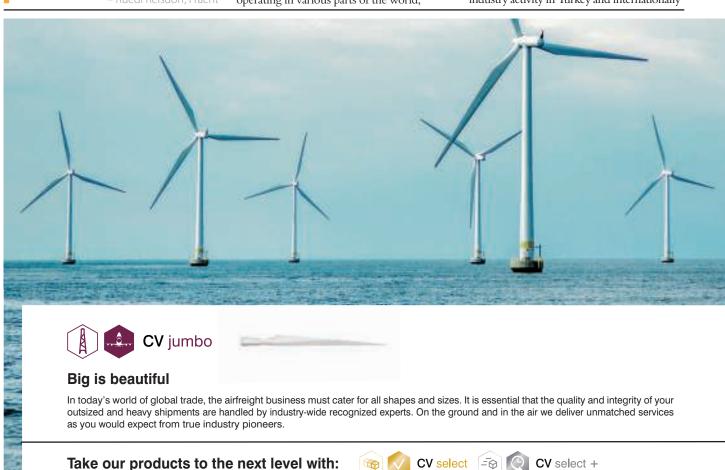
Emre Eldener, managing director of Kita Logistics, a Turkish international logistics service provider, was also bullish about the prospects ahead. "Covid-19 has slowed down levels of activity in the civil engineering sector over the last 12 months but some large infrastructure projects have continued regardless of the pandemic – for example, here in Turkey we have the Dardanelles suspension bridge [officially named the Çanakkale 1915 Bridge] in the north-west of the country which when completed will be the one of the longest suspension bridges in the world," he commented.

Kita's involvement with major infrastructure projects includes the Marmaray tunnel underneath the Bosphorus linking the European and Asian sides of Istanbul, the mobilisation of equipment for major road-building schemes across Eastern Europe/Central Asia, and supporting Turkish construction contractors operating in various parts of the world,



particularly Russia and the CIS region.

"Looking ahead, we believe there will be a more general increase in civil engineering industry activity in Turkey and internationally





during the second half of this year as the effects of Covid-19 hopefully diminish."

When it comes to identifying specific industry sectors where demand for heavy lift/forwarding services to support civil engineering projects is expected to be particularly strong over the next few years, Mammoet's Martinez suggested urban

infrastructure renewal and replacement is likely to be an "interesting" market.

"Many transport infrastructures are either reaching the end of their lifecycle or require significant upgrades or enlargements to accommodate the necessities of current population growth and increasing transport demands," he commented.

# **Crumbling infrastructure**

"That trend is already evident in the USA, for instance, where about 10-15 percent of transport infrastructure like bridges is reaching the end of its service lifespan. Former US administrations were focused on that issue and so is the current government, which has made a clear statement that fixing America's infrastructure is a priority."

In addition, continued Martinez, "we are noticing an important increase in civil engineering project demand in Central and North Europe, including Scandinavia, the UK, Germany and the Netherlands, focused on transport infrastructure".

"Another potential interesting market is that associated with new high-speed train developments taking place in several countries such as the UK and USA, for **M** HLPFI example."







**CV** power



### We have the power

Every day, high-precision engines, vehicles and helicopters are entrusted to the experienced hands of Cargolux. We have the tools and the expertise to move them with the specific care they demand. We have attention to detail. We have the power!



The perfect solution for your urgent shipments

www.cargolux.com | products@cargolux.com

www.heavyliftpfi.com May/June 2021 📆



# Cost-control pressure continues to intensify

In addition to the immediate challenges created by Covid-19, civil engineering industry suppliers, including heavy lift and project forwarding service providers, are contending with a range of other longer-term trends. Phil Hastings reports.

uppliers to the civil engineering sectors are having to negotiate a further tightening of the construction sector's already strong focus on cost control, alongside a potential Covid-19 inspired rethink of the way some multinational supply chains are structured.

The well-established trend towards modularisation and prefabrication of components continues, while the rise of smart project management, including the adoption of emerging digital technologies, is also growing in importance.

Ruedi Reisdorf, ceo of Fracht, confirmed that the pressure on civil engineering project costs is extreme. "As we have previously stated publicly, such pressure can lead to lower quality, which is very dangerous in all respects," he said.

Similarly Gert Hendrickx, sales director projects for Sarens, commented: "We are noticing that there is less attention on the technical solution and that it is all very price

Wolfgang Schellerer, general manager for



The overall supply of materials [for civil engineering projects] over the last year has been challenging. We are seeing delays in such supplies affect project schedules and costs.

– Erik Zander, Omega Morgan

Felbermayr, suggested: "There are always cost pressures and in times of lower utilisation, especially, you have to pay more attention to keeping costs under control and making the right decisions."

One specific challenge right now affecting logistics costs for civil engineering projects and many others, reported Reisdorf, is a recent "dramatic" increase in ocean freight rates for all heavy lift/breakbulk cargo, combined with a shortage of space. "A lot of budgets calculated last year will have to be redone when it comes to shipping," he

More generally, he argued that the best way to control overall logistics costs for civil engineering projects is for one player to manage the complete supply chain. "Instead of trying to get the lowest costs for each and every part of that chain, and then lose on all the interfaces, the aim should be to have a smooth 'one touch approach', with as few interfaces as possible all along the line."

Stuart James, chief commercial officer for Osprey, suggested that tighter cost control requirements present logistics providers with opportunities as well as challenges, particularly with international movements.

# **Opportunities and challenges**

"There is an enormous opportunity for upstream thinking that can deliver substantial downstream savings. When it comes to super-sized critical assets, manufacturers are focusing on producing components with the right tolerances and build quality, but their exposure to the international supply chain is minimal," he commented.

As an example of where a logistics provider can help, James pointed out that once components leave the factory, all the risks associated with marine transport come into play. Those risks have to sit with someone - at the most practical level, for example, in providing an insurance policy for the party concerned.

"The right supplier can reduce the risks associated with using third parties that are not invested in an end-client's complex and time-sensitive construction programme," claimed James.

Regarding other major trends likely to have an impact on civil engineering industry projects, logistics providers voiced differing views. For example, when asked whether there are any signs that Covid-19 is encouraging civil engineering companies to re-evaluate the structure of their international supply chains, Erik Zander, chief operating officer for Omega Morgan, commented: "Yes and no. Most US public





work jobs have a 'buy American' clause which is limiting any impact of Covid-19 in that respect."

However, he also added: "The overall supply of materials [for civil engineering projects] over the last year has been challenging. We are seeing delays in such supplies affect project schedules and costs."

Sarens' Hendrickx made a similar point: "As travel for both materials and people remains a challenge, our customers are trying to work more locally. However, as a global player present in over 65 countries worldwide, that is not making too much of a difference for us."

Rafael Martinez, branch manager in Madrid, Spain, for Mammoet, also played down the suggestion that Covid-19 is causing any significant restructuring of infrastructure/civil engineering project supply chains.

"Covid-19 seems not to have significantly disrupted the supply chain for raw goods, which are usually the basic source for the civil sector," he said.

Felbermayr's Schellerer said his company, too, had not yet seen any sign of Covid-19 causing companies in the construction/civil engineering sector to reassess the structure of their international supply chains.

He also suggested that there does not appear to be any acceleration in the use of modularisation and prefabrication of components for major projects "although if that does occur, we will be happy to provide our temporary production areas near the river ports of Linz (Austria) and Krefeld (Germany) and look for transport solutions".

### **Modularisation limits**

Fracht's Reisdorf, too, played down suggestions that civil engineering could see a significant increase in the modularisation and prefabrication of components for major projects. Specifically, he said further modularisation would be limited by the ability of existing infrastructure to handle very large pieces.

"There is already modularisation, of course, wherever that is possible and when it makes sense. However, the opportunities to modularise are limited by space considerations and transport restrictions and those restrictions are getting tougher all around the world as governments seek to keep their infrastructure intact," he argued.

Other logistics providers, though, voiced different views. Mammoet's Martinez, for example, said that although modularisation had been apparent in civil engineering projects for a number of years prior to



Covid-19, "it is likely that the consequences of the pandemic may contribute to it".

More generally, Osprey's James suggested the civil engineering sector is likely to see increased use of modularisation to help reduce the cost of moving components to project sites, which will require different logistics.

"Modularisation will certainly deliver bottom-line savings. It will also change the



Covid-19 seems not to have significantly disrupted the supply chain for raw goods, which are usually the basic source for the civil sector.

- Rafael Martinez, Mammoet

nature of the supply chain as larger, heavier and more unwieldy critical assets become the norm," he stated.

### **Demand for innovation**

"The concept of modularisation may result in fewer people onsite and more people working in controlled production environments - but it also means additional opportunities opening up in the logistics area. We are seeing a greater demand for the innovation side of our services and modularisation could be an area where there is more activity generally."

Emre Eldener, managing director of Kita Logistics, agreed there is likely to be an increase in the use of modularisation for civil engineering projects, driven in part, he suggested, by resulting improvements in the area of health and safety for the people working on them.

"The move to increase the modularisation of components for such projects is a logical approach, even though it may drive up some transport costs due to the need to move extra out-of-gauge parts. However, when it comes to health issues, cost becomes a second factor," he stated.

Omega Morgan's Zander suggested that the acceleration in the deployment of modularisation for civil engineering projects was going to happen "with or without Covid-19". "The supply chains are ready for modularisation and I believe there is the



existing concepts such as 3D CAD modelling are experiencing a significant acceleration in development and use due to the current situation of pandemic-induced constraints."

As an example, he pointed to Mammoet's current implementation of its new Move3D software – "an engineering platform that combines business intelligence with client data and our own equipment data".

"With Move3D, we can integrate in one single platform different inputs such as point clouds, satellite maps, etc, to obtain accurate visualisations. Move3D data can be exported to building information modelling tools, a 3D model-based process that is more and more often used by civil engineers these days for design, planning and

construction purposes," said Martinez.

However, Fracht's Reisdorf said that while the tools for achieving smart project management in the civil engineering sector are getting "better and better", the key to a successful logistics operation is the organisation and timing of the service provider's involvement where it is a case of "the earlier the better".

Sarens' Hendrickx also played down the impact of new digital technology for managing civil engineering project logistics.

"Obviously, we are implementing new technology in relation to project design, preparation, offer and execution but it is more a case of evolution rather than revolution," he stated.

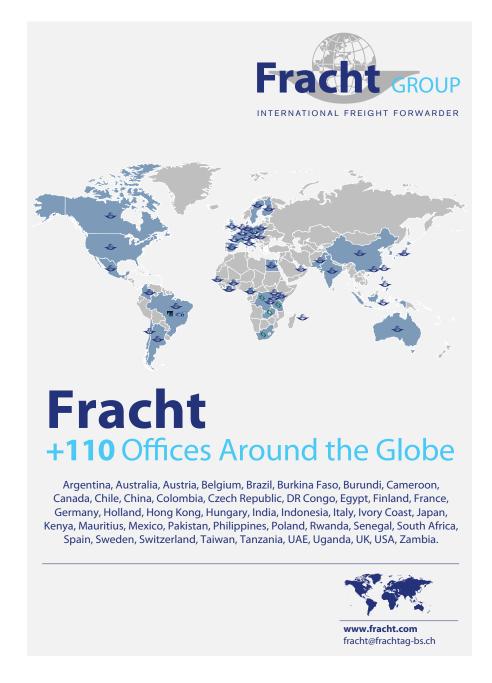
capacity available to handle an increase in such operations," he added.

Regarding other significant trends, Felbermayr's Schellerer agreed with the suggestion that the civil engineering industry's increasing deployment of smart project management, based on the adoption of emerging digital technologies, is prompting action by logistics providers.

"In fact, that trend is having a great influence on our activities in almost all the sectors we serve," he commented. "There are countless requirements for digital connections to the clients and for new digital technologies. As a result Felbermayr is making significant investments in information technology."

Mammoet's Martinez agreed with the suggestion that Covid-19 could further accelerate the use of emerging digital technologies to help manage civil engineering projects. "It is clear Covid-19 has changed our lives in many ways and the massive increase in the use of digital working environments is here to stay, as we see, for instance, with virtual meetings or cloud-based information-sharing tools," he stated.

"Besides that, some previously



www.heavyliftpfi.com May/June 2021 📆 51