### K E Y N O T E I N T E R V I E W

## The road less travelled





Nicola Palmer and Michael Allen of Arcus Infrastructure Partners explain how decarbonisation, demographic shifts and technology are creating new opportunities for transport infrastructure

## How is decarbonisation impacting investment opportunities in the road travel space?

Michael Allen: There has been a huge amount of investment in Europe's road network over the past 10 years and there is a recognition that billions more is required. However, the increased focus on decarbonisation is influencing the nature of future investment.

Governments are especially focused on heavy-goods vehicles, which represent 3 percent of road use but 25 percent of CO2 emissions.

The European Union has passed legislation to reduce heavy-goods emissions by 15 percent by 2025 and by 40 percent by 2030. One of our investee companies, Brisa,

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represents just over half of the Portuguese motorway network. It is a member of the Transportation Decarbonisation Alliance – a French-Portuguese government initiative targeting the elimination of mobility-related emissions by 2050.

Another priority is the patchwork of different rules and regulations regarding tolling across Europe. In particular, there is a policy debate around charging heavy-goods vehicles on a per-kilometre or CO2-based pricing model.

That has the potential to create a lot of opportunities in the toll collection and road infrastructure area.

# What about demographic shifts and technological advances? How are they creating road infrastructure opportunities?

MA: Greater urbanisation in Europe is increasing the burden on transport infrastructure in cities. There are also questions about the transport needs of a growing elderly population and, in certain geographies, you see a younger generation that doesn't view car ownership as desirable or necessary. All of that is impacting the infrastructure needs of the future.

In terms of technology, there is a huge amount happening. In addition to increased electric vehicle penetration and the inherent need for charging infrastructure, we believe there is a future with autonomous vehicles.

Those advances impact not only road infrastructure but ancillary infrastructure around roads, such as motorway services and car parks.

#### What changes are you seeing in the rail industry?

Nicola Palmer: The drive to reduce emissions means the EU is directing regulation to encourage a modal shift away from roads and towards both rail and maritime. The overall performance of rail in the last 10 years has been sluggish. But that isn't the full story.

There has been a structural decline in the transport of coal and iron ore as a result of decarbonisation. By contrast, other parts of the market, and in particular intermodal transport, have been growing quickly. Technology has an important role to play in driving that. Historically, there have been capacity constraints. But the development of the European Train Control System's signalling systems is enabling more rail freight on to the network.

Intermodal goods are also time-sensitive and therefore need to be pulled by locomotives that are reliable, which has really benefited one of our portfolio companies, Alpha Trains. Alpha has a far younger fleet than the majority of those in Europe, having the reliability required for intermodal freight.

Overall, we are forecasting that rail will start to erode road's modal share, particularly as European ports develop strong rail and inland waterway networks, creating real competition for road freight. Around 47 percent of goods now leave the Port of Hamburg by rail.

#### Is maritime also benefiting from these shifts?

NP: Yes, maritime is another sub-sector that is likely to be a winner as a result of decarbonisation and changing technology, taking modal share away from road. The International Maritime Organization has adopted a climate change strategy that aims to see international shipping cut emissions by at least 50 percent by 2050. In addition, new IMO regulations requires all global shipping to use low sulphur fuel by 2020. One of the implications of the regulation will be around \$15 billion of additional costs globally. But, on the positive side, it will stimulate companies to look at alternative fuels.

That shift towards alternative fuels is being encouraged by subsidy programmes and

### Brexit and the transport sector: The Arcus perspective



#### The spectre of a no-deal Brexit is looming and is making investors pause when considering transport investments in the UK. A no-deal Brexit would negatively impact GDP.

The hope, for the industry, is that parliament prevails and that, even if a Tory Brexiteer takes control of the party leadership, this option is blocked. Even if a deal is reached, however, it is likely to impact transport flow. If the UK is not part of the customs union then we would expect to see a shift from European trade towards trade with Asia and the Americas. We would also expect to see road and sea freight costs go up because of additional customs requirements.

We will probably see freight flow from continental Europe, via the UK, to Ireland being impacted as well. Around 60 percent of Ireland's import and export trade currently goes via the UK, either on truck or via UK ports. There will be changes, too, to the cabotage rules that allow European truck drivers to work in the UK. That will materially impact road transport costs. Around 65 percent of domestic goods currently go by road and labour represents around 40 to 50 percent of total costs. From a positive perspective, however, this will again encourage that modal shift from road to rail.

is likely to result in the early scrapping of dirty vessels and a complete refresh of the infrastructure around the maritime sector, particularly in Europe.

Blockchain and the internet of things, meanwhile, are also enabling traceability of goods. That allows you to reduce changeover times at intermodal facilities and improve the efficiency of both maritime and rail. In addition, we are seeing the increased automation of European ports such as Rotterdam and Hamburg. We think that will gradually spread to smaller ports and has the ability to improve efficiencies as well.

#### How is regulation impacting the transport sector beyond emissions reduction?

NP: There are a lot of positive subsidies available. There are subsidies for intermodal terminals, for example, trying to encourage a modal shift from road to rail or sea.

Regulation is also encouraging research into new technologies such as LNG, electric hybrid vessels or hydrogen. These technologies are being tested in sea ferries and the locomotive market, and manufacturers and operators are able to access European subsidies to bring the costs of those technologies down. Many countries also have subsidies for individuals buying electric vehicles, as well as offering access to free parking or the ability to avoid congestion charges.

The rail industry, meanwhile, has really been strengthened by the Fourth Railway Package. There are two main pillars to this regulation: market liberalisation and technology, both designed to allow transport to move across Europe freely. In terms of the road sector, the EU has introduced a directive relating to toll systems. That is intended to help traffic move freely without encountering multiple tolling technologies along the way.

#### What challenges do you associate with investment in the transport sector?

NP: We recognise that the vast majority of transport infrastructure revenues are either GDP- or volume-linked. We are one of the few investors in the market that has owned transport infrastructure through the economic cycle. What we see at the moment in the market are premium prices being paid for selected types of transport. I question whether the investors paying those prices recognise that transport assets require active asset management - particularly during downturns, but also in order to take advantage of economic growth.

#### To what extent do opportunities vary by geography across Europe?

NP: Opportunities do vary. If you look at the rail industry, we've seen particular growth in Germany and Central and Eastern Europe.

Those are the markets that have seen the biggest growth in intermodal. Eighty percent of all rail transport has to pass through Germany, and so the German authorities have been very supportive about investing in infrastructure, either directly or through government-owned corporates such as Deutsche Bahn or the Port of Hamburg. This then creates ancillary infrastructure investment opportunities, for example in rolling stock.

The One Belt, One Road initiative is also an important driver, trying to encourage freight travel from China all the way through to Europe. Over the past few years, freight travel time has reduced from 45 days to 16 days, which allows it to compete head on with road and sea for high-value goods.

"The drive to reduce emissions means the EU is directing regulation to encourage a modal shift away from roads and towards both rail and maritime"

NICOLA PALMER Arcus Infrastructure Partners

#### How would you describe LP appetite for the sector and is it changing?

MA: I would say transportation has been one of the more difficult sub-sectors for LPs to get exposure to.

Transport has represented a little over 20 percent of infrastructure deals over the past three years and recently that percentage has been falling. I think LPs were initially concerned that many transport assets carried volume risk or didn't have very long-term contracts and that they require a lot of active asset management.

Not many investors are resourced to undertake that. Most LPs have focused on regulated assets and utilities and, as a result, many are overexposed in that area. That means they are very much looking to increase their exposure to transportation. This is further underpinned by continued economic growth in Europe which means transport assets should provide good returns.

#### How have competitive dynamics evolved?

MA: Because of the weight of investment that has gone into the regulated sector, we are now seeing a huge wall of money trying to get into the transportation space. We see fierce competition, particularly at the larger end, from GPs, pension funds, sovereign wealth funds and strategic players. There is significant competition for smaller deals too. We have seen some very high valuations paid recently, whether that's for UK ports, airports or indeed in the road space.

However, the breadth of opportunity in the transport sector means we remain confident we can source good investment opportunities.

#### You are continually making bets on the medium-term future of the sector. But what do you think the long-term future holds for European transport?

MA: Crystal-ball gazing is always difficult. But we are cognisant of how long-term trends will impact the investments we are making, not least because at some point we will be looking to exit some of our investments and those trends may have become more apparent. If you look at the road sector, there are clear long-term trends towards shared mobility, electric vehicles and indeed fully autonomous vehicles. That offers opportunity but also, if not properly managed, a threat.

I think most commentators believe the advent of autonomous vehicles will be a net positive for road infrastructure. Brisa, for example, has run a successful trial to collect tolls from autonomous vehicles on one of our motorways. Brisa has also launched mobility-as-a-service through a car-sharing joint venture with Drive Now. And when it comes to heavy goods, I think we will see not only automated vehicles but platooning, reducing fuel consumption significantly.

There will be implications for infrastructure but, on balance, I think these developments will create interesting opportunities for the sector.