

KEYNOTE INTERVIEW

'Fibre is the fourth utility'



*Fibre-to-the-home must be redefined as a basic necessity following the coronavirus pandemic, says **Izzet Guney**, managing director at Cube Infrastructure Managers*

Q Communications technology is under immense scrutiny. How well is Europe's existing infrastructure standing up to the challenge?

Unfortunately, I don't think it is standing up all too well. With voice traffic and streaming volumes going through the roof, we have experienced uploading pressures never seen before. Historically, networks have only really cared about downloading capacity, but cloud-based working and demand for video conferencing services have turned that on its head. Symmetry of traffic has become key and only fibre-to-the-premises can provide that.

Indeed, there are geographical areas with dense, full-fibre networks where no dire problems have emerged. But other technologies such as coax and XDSL

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– where fibre only goes to the cabinet – are encountering massive disruptions because they have not been agile enough to adapt to the radical changes we have seen in traffic patterns.

Without that agility, the only solution is to turn the throttle down, which is why we have seen commissioners in Brussels begging the big streaming companies to lower their streaming quality and why politicians in France were forced to ask Disney to delay the launch of its streaming service because they knew the network couldn't handle it. If I was marking the overall network on its performance during the crisis

so far, I would give it three or four out of 10.

Q If you look back to before covid-19 revealed current weaknesses in the network, which European markets had the most interesting fibre rollout dynamics?

Geographically, we are seeing opportunities across the EU. The trick is to identify propositions where there is not only unmet demand, but where there is money to pay for it. Our analysis is, of course, driven by our ability to generate returns, and so disposable income is key.

The cost of building a network is even more critical. If we can run fibre along utility poles or along walls, then the costs will be roughly the same between countries – bar differences in civil

works and labour costs. But digging to lay fibre is dramatically more expensive. The difference in capex can be as low as €150 per home passed for above-the-ground fibre and as high as €3,000 to €4,000 per home passed for below-the-ground fibre. There is just no way we would be able to charge 20 times more in order to recoup our expenses.

So, while there are investment opportunities all over Europe, once you start peeling back the layers and analysing the business plans, it comes down to the numbers. We are looking for the most financially attractive places to build networks because that, of course, is what our investors expect of us.

Q Are the targets in place for broadband accessibility helpful? Are they achievable?

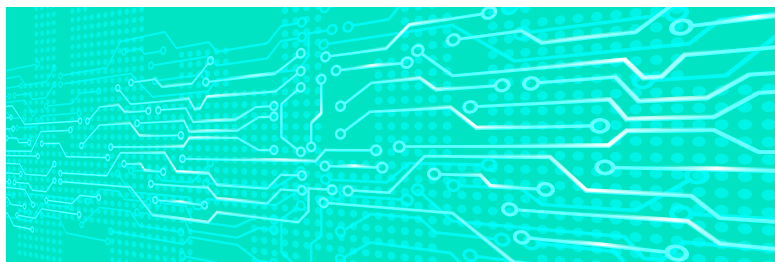
Goals are important. They provide direction and a sense of unity. Without Europe-wide goals, there wouldn't be the pressure on individual countries to pursue their broadband accessibility agendas.

There are issues, of course. What one country calls ultra-fast broadband can be very different to another country. We don't have complete homogeneity. But, hopefully, we will gravitate towards a common EU model.

Does that mean that we will have 100 percent symmetrical coverage of at least 100MB per second in the next three or four years? Everyone knows that is never going to happen. But could we see 100 percent coverage with download speeds of at least 20MB per second? That is certainly possible.

If you set the bar too high, it becomes unachievable. If you set it too low, there is too much leeway for parties to do the absolute minimum. And, ultimately, it is the end-user that will be punished.

Decades ago, there was this concept of universal service, which meant that everybody had to have a telephone line. I think, perhaps, that after the current crisis people may realise that there ought to be another universal service obligation – this time for broadband.



What impact will the advent of 5G have on network requirements?

I have never been a huge proponent of 5G – maybe because I have lived through all the 3G hype. Of course, the current situation has highlighted the need to keep people and objects connected. The trouble is that 5G is extremely expensive.

5G may have a place in the densest areas – downtown Paris or London – but it isn't going to have a role to play in rural or even semi-dense areas. So many more towers would need to be built. Fibre would then need to connect those towers to the backbone and to the cells. It would be prohibitively costly.

What I would say, however, is that the cost of rolling out 5G will push the concept of sharing even further. Ten or 15 years ago, nobody was willing to contemplate sharing telecommunications infrastructure. It was simply considered too critical for that risk to be taken. Today, however, almost all tower space is rented from independent companies.

Meanwhile, what we work on, with the CEBF, are open-access networks. That means we lay the fibre, and then anyone with access to end customers, from Vodafone to Orange or Deutsche Telekom, rents capacity from us. It makes no sense whatsoever for them to build their own networks.

The next layer of sharing will involve radio access networks built to facilitate the rollout of 5G. The crisis has revealed the need for more towers to be built, but there is absolutely no need to duplicate or triplicate. We only need one network.

Q Is the pandemic revealing need in other areas of digital infrastructure and are you expanding your investment parameters accordingly?

So far, we have only invested into pure, open-access fibre networks with the Connecting Europe Broadband Fund. But the current crisis has revealed heightened demand in two other areas – data centres and submarine cables.

It isn't that we don't have enough submarine cables but rather that they are very old. New cabling could easily increase capacity enormously. The situation we have at the moment is that submarine cables are causing bottlenecks,

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which is an engineer's worst nightmare because the only option is to throttle down.

At the same time remote working, video conferencing and cloud computing are all creating huge demand for data centres, especially decentralised ones. If there isn't sufficient capacity – or, equally, if that capacity isn't in the right locations – that also causes a bottleneck. These are two areas that we have been looking at closely for some time and where we will certainly be increasing our focus now.

Q To what extent has the crisis highlighted the positive environmental, social and governance credentials of digital infrastructure investment?

The covid-19 crisis has shown us just how important digital infrastructure is for facilitating remote working and therefore significantly decreasing travel. That is undoubtedly a positive environmental impact. Increasing connectivity also helps get more people involved in society.

When we build networks, for example, we normally provide municipalities with the ability to offer e-services in a way they have not been able to do previously. There is no additional cost to us for doing so. That is the beauty of fibre.

Q The coronavirus is revealing an increased need for digital infrastructure, but how is it impacting the day-to-day business of digital infrastructure investment?

We are seeing very minimal impact on our ability to deploy fibre across our portfolio – with the exception of some countries, like the UK, where the telcoms engineers are not permitted to enter the premises. We are doing whatever we can – on the street, digging, using poles – to find solutions within government guidelines to connect end subscribers.

“The crisis has unearthed significant inefficiencies in the system today and has revealed, therefore, the need for extensive additional investment”

That said, of course, things are taking a little longer. Sometimes municipalities have closed their doors. They may only have one person working remotely. Things that may previously have taken one week are now taking three or four.

Then you have to look at the debt financing market. Debt financing has certainly not dried up completely. We are seeing announcements from broadband entities that have managed to close bank syndicates on an almost weekly basis. That is because people have realised that this really is the fourth utility, with very little risk beyond some construction risk.

Because we focus on greenfield opportunities, however, we have no intention of seeking debt any time soon and we are confident that by the time we are ready to consider leveraging the networks themselves, this crisis will be behind us.

So, for us, thankfully, there is very little impact on day-to-day business at all.

Q How do you think policymakers will shift their behaviour as a result of the coronavirus?

I believe policymakers – if they have not already done so – will define fixed broadband as a basic necessity, in just the same way other utilities, and basic telephony, were treated in the last century. Hopefully, this means that state aid will push for robust solutions – in other words, fibre-to-the-premises – instead of being technology-neutral as it is today.

I also think we will see a shift, certainly with new housing, from fibre-to-the-premises to fibre-to-the-room. It is clear that tomorrow's connected world, including the internet-of-things, will require ubiquitous broadband capacity that only FTTR will be able to address and support.

Q So what does the long-term future hold for digital infrastructure?

The crisis has unearthed significant inefficiencies in the system today and has revealed, therefore, the need for extensive additional investment in the fibre network. The importance of the quality of that network has come to the fore.

This is the fourth utility and so it is vital that we are building the best possible networks that we can. And while fibre deployment may historically have been costly, those costs have come down dramatically.

There is no excuse not to build these open-access fibre networks. Subscribers should not be put at a disadvantage when situations like this current pandemic occur. It is vital that lessons are learned. ■

Izzet Guney is managing director at Cube Infrastructure Managers and leads the investment team of the Connecting Europe Broadband Fund (CEBF) in Luxembourg

The Connecting Europe Broadband Fund (CEBF) is dedicated to investments in greenfield new generation fibre networks. The fund has invested in three seed assets and has a target size of €500 million