

## Telecoms

# Global shortage of fibre optic cable threatens digital growth

Rising prices of critical components cast shadow over 5G rollout and development of data centres



Total cable consumption rose by 8.1% in the first half of the year compared with the same time last year, according to one estimate © Simon Dawson/Bloomberg

**Anna Gross** 5 HOURS AGO

A worldwide shortage of fibre optic cable has driven up prices and lengthened lead times, endangering companies' ambitious plans to roll out state of the art telecommunications infrastructure.

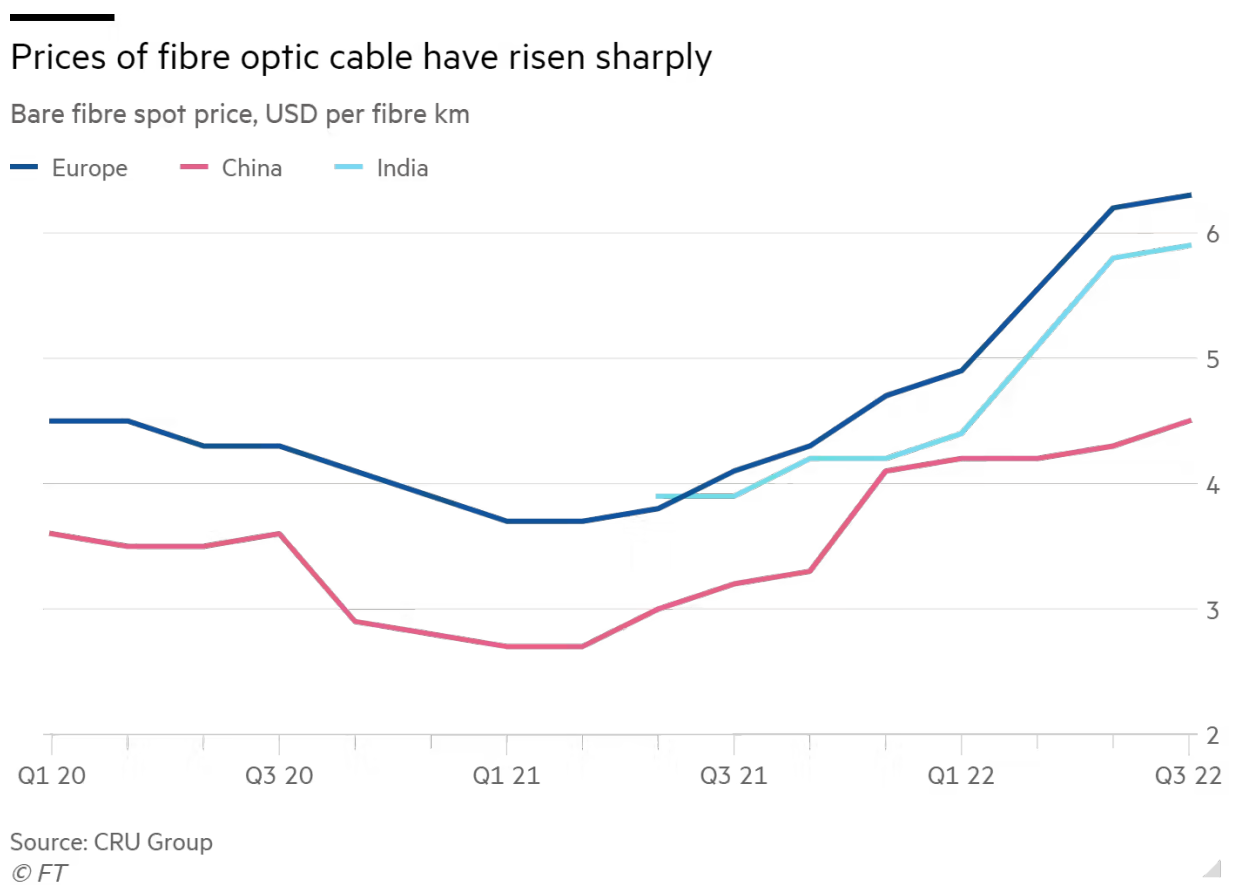
Europe, India and China are among the regions most affected by the crunch, with prices for fibre rising by up to 70 per cent from record lows in March 2021, from \$3.70 to \$6.30 per fibre km, according to Cru Group, a market intelligence firm.

Although the pandemic prompted some of the biggest tech and telecoms groups to slash their capex, there has been a surge in demand for internet and data services, leading to a shortfall in availability of the crucial but often overlooked material.

Companies such as Amazon, Google, Microsoft and Facebook owner Meta are expanding their data centre empires to meet soaring demand, including laying vast international fibre networks under the ocean. Meanwhile, governments have set ambitious targets for the rollout of superfast broadband and 5G, both of which require vast quantities of fibre optic cable to be [laid under the ground](#).

“Given that the cost of deployment has suddenly doubled, there are now questions around whether countries are going to be able to meet targets set for infrastructure build, and whether this could have an impact on global connectivity,” said Michael Finch, an analyst at Cru.

Total cable consumption increased by 8.1 per cent in the first half of the year compared with the same time last year, according to Cru estimates. China accounted for 46 per cent of the total, with North America representing the fastest growing region, at 15 per cent year on year.



Underpinning the shortage are rising prices of some of the critical components that go into fibre optic technology, in which light is carried along flexible fibres with a glass core.

There has been a shortage of helium, a crucial component in the manufacture of fibre optic glass, in part caused by plant outages in Russia and the US, which has caused prices of the element to increase by 135 per cent over the past two years. Meanwhile, prices of silicon tetrachloride, another key component in fibre production, have increased by up to 50 per cent according to Cru.

“In my professional career I’ve never seen anything like this inflationary crunch,” said

Wendell Weeks, chief executive of Corning, the biggest producer of fibre optic cable in the world, which played a significant role in inventing the technology in 1970.

Weeks added that the company was ramping up production to meet soaring demand from governments, telecoms companies and big tech groups, including building new facilities in the US and Europe.

Prices of fibre have now reached their highest level since July 2019, according to Cru, although North America has been less severely hit than Europe, China and India.

Weeks said that in the US prices had increased by only 2 per cent in 2022, and had otherwise fallen every year since 2012. “It’s going to continue to be tight for a while but we’ll get through this hyper-crunch,” he added.

Martijn Blanken, chief executive of Exa Infrastructure, an international digital infrastructure company, said fibre prices had increased by at least 20 per cent over the past six months and that “in some cases it’s so erratic you need to check it by the day”. “We add clauses with our clients so that we’re not liable for these price hikes,” he added.

This has led to significant increases in lead times for some fibre products, stretching out from 20 weeks to almost a year for many smaller customers.

“All of us are prioritising giving fastest delivery to our biggest customers,” said Ankit Agarwal, managing director of STL, one of the largest fibre suppliers in Britain.