

Novel technology to boost Internet speed

Slow Internet and 'rush hour' — the peak time when data speeds drop by up to 30% — could soon be history, thanks to scientists who have developed new hardware that consistently provides high-speed broadband connectivity.

The new technology enables dedicated data rates at more than 10,000 megabits per second (Mb/s) for a truly superfast, yet low-cost, broadband connection, researchers said.

"By 2025, average speeds over 100 times faster will be required to meet increased demands for bandwidth-hungry applications such as ultra-high definition video, online gaming, and the Internet of Things," said Sezer Erkilinc, from University College London in the U.K.

Bandwidth restrictions

"The future growth in the number of mobile devices, coupled with the promise of 5G to enable new services via smart devices, means we are likely to experience bandwidth restrictions; our new optical receiver technology will help combat this problem," said Mr. Erkilinc, lead researcher of the study published in *Nature Communications*.

Scientists, including those from the University of Cambridge in the U.K., developed a simplified receiver to be used in optical access networks: the links connecting Internet subscribers to their service providers.

"To maximise the capacity of optical fibre links, data is transmitted using different wavelengths, or colours, of light. Ideally, we'd dedicate a wavelength to each subscriber to avoid the bandwidth sharing between the users," said Polina Bayvel, from the UCL.

Though this is possible using highly sensitive hardware, they are costly.

In an apparent attempt to crack down on revenge porn, Twitter has introduced a new policy that states that no one can post or share "intimate photos

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