

## **China-Pakistan economic corridor (CPEC): a gateway to information and communication technology**

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### **Abstract**

Corridors cover a part of geographical space consisting of transport route such as roads, railways and energy projects, having bilateral rather than multilateral initiatives, focusing on strategic and geopolitical nodes. These also highlight infrastructural development in order to raise the living standards of people in both the countries. China supported Pakistan over many decades to reinforce its economy and infrastructure through aid and investment. The China-Pakistan Economic Corridor (CPEC) initiative is aimed at opening new horizons of economic and technology development in Pakistan. On the other hand, it is equally important for China, as her main strategy is to develop its western region and sustain the status of being world's second largest economy following USA and the peaceful rise of the Beijing Slogan. The proposed CPEC links the Gawadar port to China western province Xinjiang through roads, railways, oil and gas pipelines, and optical fiber link. The current study examines the fiber optic connectivity from Chinese boundary to Rawalpindi and proposes a novel technique for carrying large capacity data that provides triple play services. With the help of this technique, various wavelength data services can be extended to Pakistan, which can decrease the low bandwidth, poor connectivity and low speed problems of data transfer in Pakistan. The total length of the optical fiber approximates at 820 km and Exim Bank of China is the potential financial sponsor of the project under the joint venture of Chinese company Huawei and Special Communication Organization (SCO). The technique we propose is based on Optical Frequency Comb that generates many tones from single laser source; this way a high bandwidth can be provided for supporting terabit per second data. The study contributes towards the existing literature in a way that this technique of data transmission not only relaxes the laying of fiber optic cable but also reduces the total cost of the project. After successful completion of the project, it will surely become a game changer in the field of information and communication technology (ICT) for Pakistan.