A critical analysis of the effects of internet traffic on business models of telecom operators

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ABSTRACT

Telecommunication network operators are responsible for the heart of the digital economy because they carry internet traffic and own and maintain the global communications systems. This paper assesses the expected traffic development up to 2015, presents a framework for analysing the value position of network operators, and provides a critique of the paradox of traffic neutral business models. The paper’s overall goal is to open up a discussion on the role that regulation might have. The telecom industry is a key contributor to the overall economy of Europe through its operation of critical infrastructure, as a core of economic activity, and as a large employer. Its influence on technological innovation is central to Europe’s economic growth.

However, the changes in the internet revenue streams due to new business models are challenging the core of future development of this industry. The ways revenue is accrued on the internet is imbalanced because of the disconnect between those who generate traffic and those who carry it. This has created a problem for the ability of European telecom operators to attract infrastructure investment. At the core of the problem for furthering infrastructure investments in Europe is the changing character, as well as the growth, of network traffic.

Future demand for non-discriminatory traffic management-based offers such as e-health services, for example, hold great potential for European businesses. Economic barriers to traffic management could result in inefficient utilisation of existing infrastructure. Given the political context this also challenges the EU 2020 agenda goals of improved broadband access. That situation is unlikely to change until investors have confidence that network operators will over time become beneficiaries of traffic growth.