## Press Release



# Liberty Global's New Policy Study Broadens the Open Internet Debate

#### Driving investments, growth and quality of experience in the internet of the future

#### Denver, Colorado and Brussels, Belgium – September 18, 2014:

Liberty Global plc ("Liberty Global") (NASDAQ: LBTYA, LBTYB and LBTYK) has today released its latest Policy Series study, in cooperation with Arthur D. Little, entitled 'The Future of the Internet - Innovation and Investment in IP interconnection' at a seminar in Brussels, Belgium.

The internet has rapidly evolved from a static data platform to become a streaming video platform, and is soon expected to see its next wave of growth in machine-to-machine and any-to-any video communications. By 2030, the 'Internet of Everything' potentially adds trillions of euros in value to the public and private sectors<sup>1</sup>. This latest report in the Liberty Global Policy Series investigates the drivers of this growth and the investment incentives in the 'upstream' part of internet IP connectivity where all the autonomous networks of the world interconnect.

According to Andrea Faggiano, Head of Strategic Advisory Services for Competition & Regulation with Arthur D.Little and co-author of the study: "By 2020, the majority of applications, content and services will continue to be accessed by end-users over the current 'best effort' public internet. But the public internet also needs to evolve further, which not only requires investment in capacity but increasingly requires higher quality, security and privacy assurances to support a next generation of internet applications, for example machine-to-machine applications. By 2030, over 50 billion connected devices will generate over 50% of internet traffic."

"We all share a common interest to keep investing in the future internet," said Manuel Kohnstamm, Senior Vice President and Chief Policy Officer of Liberty Global. "While Net Neutrality mainly focuses on the 'last' mile of the network, the quality of experience for users of high-end applications also depends on investments and commercial agreements in the 'first' and 'middle' miles of the internet<sup>2</sup>."

Mr. Kohnstamm added: "We wanted to make a fact-based contribution to the debate. IP interconnection has long been a complex and very informal economy, including barter trade, handshake agreements and joint investments. The more we know about how that economy really works, the more informed the decisions are regarding the investments, competition and innovation driving Europe's economic growth."

<sup>&</sup>lt;sup>1</sup> Cisco estimates

<sup>&</sup>lt;sup>2</sup> The internet can be broken down into two parts. The first part is the internet access network (fixed or mobile), or so-called "last mile", owned or operated by ISPs over which end-users access the internet. This part is the subject of "net neutrality" discussions. The second part is the so-called "up-stream" side of the internet. This is where the internet access networks connect with (i) each other, (ii) bulk IP traffic transportation networks and undersea cables connecting continents and (iii) content & application server parks located across the globe.



#### IP interconnection remains vital, dynamic and competitive

The study shows that the internet remains vital, dynamic and competitive, driven by a sector that is in transition. Internet Service Providers (ISPs) and Content & Application Providers (CAPs) are constantly innovating the way they interconnect. Existing IP interconnection agreements such as transit and peering are seeing a significant increase in and growing imbalance of IP traffic as the result of streaming video. Most of the industry is adapting flexibly to new business models. For example, disputes concern less than 1% of all interconnection agreements. New interconnection agreements (e.g. paid peering, deep caching) are implemented to support the trend of storing popular content close to the access networks. Global CAPs invest in proprietary Content Delivery Network (CDN) infrastructures (server parks). Commercial CDN services have become affordable to small CAPs as interconnection costs are strongly falling, up to 30% per year. Combined with the very competitive market for last mile broadband internet services in Europe, this market seems well positioned for growth, investment and innovation.

The full report can be downloaded at <a href="http://www.libertyglobal.com/ir-public-policy.html">http://www.libertyglobal.com/ir-public-policy.html</a>

#### **About Liberty Global**

Liberty Global is the largest international cable company with operations in 14 countries. We connect people to the digital world and enable them to discover and experience its endless possibilities. Our market-leading triple-play services are provided through next-generation networks and innovative technology platforms that connected 24 million customers subscribing to 49 million television, broadband internet and telephony services at June 30, 2014.

Liberty Global's consumer brands include Virgin Media, UPC, Unitymedia, Kabel BW, Telenet and VTR. Our operations also include Liberty Global Business Services, our commercial division and Liberty Global Ventures, our investment fund. For more information, please visit www.libertyglobal.com or contact:

### Investor Relations: Corporate Communications: Christopher Noves +1 303 220 6693 Marcus Smith +44 20

 Christopher Noyes
 +1 303.220.6693
 Marcus Smith
 +44 20.7190.6374

 Oskar Nooij
 +1 303.220.4218
 Bert Holtkamp
 +31 20.778.9800

 John Rea
 +1 303.220.4238
 Hanne Wolf
 +1 303.220.6678

#### About Arthur D. Little

As the world's first consultancy, Arthur D. Little has been at the forefront of innovation for more than 125 years. We are acknowledged as a thought leader in linking strategy, technology and innovation. Our consultants consistently develop enduring next generation solutions to master our clients' business complexity and to deliver sustainable results suited to the economic reality of each of our clients.

Arthur D. Little has offices in the most important business cities around the world. We are proud to serve many of the Fortune 500 companies globally, in addition to other leading firms and public sector organizations. For further information please visit www.adl.com

#### **Contacts:**

Gregory Pankert, Partner, Arthur D. Little Brussels, Mobile +32.473.99.72.27, <a href="mailto:pankert.gregory@adlittle.com">pankert.gregory@adlittle.com</a> Andrea Faggiano, Head of SASCAR, Arthur D. Little Rome, Mobile +39.335.784.4995, faggiano.andrea@adlittle.com