Key Findings – The State of Broadband 2015

Broadband as a Foundation for Sustainable Development

Launch – 21 September 2015

Every year, the *ITU/UNESCO Broadband Commission for Digital Development* 'State of Broadband' report takes the pulse of the global broadband industry and explores progress in broadband connectivity.

This year's report finds mixed messages about the growth of ICTs and the global state of broadband. Although strong growth rates continue for mobile broadband and Facebook usage, and mobile cellular subscriptions exceeded 7 billion for the first time during 2015, growth in both mobile cellular subscriptions and Internet usage has slowed sharply.

The UN Broadband Commission's 2011 targets have not been achieved by the target date of 2015 and seem unlikely to be achieved before 2020. Likewise, the milestone of four billion Internet users is unlikely to be surpassed before 2020. The growth in Facebook subscribers is now outpacing growth in the Internet.

Internet growth

- **By end 2015, some 3.2 billion people will be online**, equating to over **43.4% of the total world population**, and up from 2.9 billion a year earlier (almost 40.6% of the population).
- In the **developing world**, Internet penetration will surpass 35.3% by the end of 2015; penetration will still be under 10% at 9.5% in the UN-designated **Least Developed Countries**, however.
- Even though Internet penetration is approaching saturation in the **developed world**, with **82.2%** of the population online, the global target of 60% set by the Broadband Commission in 2011, to be achieved by 2015, is unlikely to be achieved before 2021 at the earliest.
- Internet user penetration in the **developing world** is unlikely to achieve the Broadband Commission target of 50% before 2020. By the end of 2015, there will still be **57%** of the world's population – or **four billion people** – still offline.
- **Household Internet access in developed countries** is close to saturation, with more than **81.3%** of households connected. The proportion of **households in the developing world** with Internet access has increased from 31.5% at the end of 2014 to over **34.1%** a year later – still well short of the Broadband Commission target of 40% by 2015.

- **Household connectivity figures mask strong disparities** – fewer than **7% of households in LDCs** have access, while **in sub-Saharan Africa only 1 in 9 households** is connected. According to Point Topic, **Asia has the largest total number of broadband-connected homes**, with nearly as many in total as Europe and the Americas combined.
- The gender gap in Internet users is proving stubbornly persistent, with **an estimated 200 million more men online than women as recently as 2013**; one major problem is that sex-disaggregated data are not yet widely reported by national governments and statistics agencies.

Mobile growth

- The mobile industry is growing strongly, but unevenly. ITU forecasts that the milestone of seven **billion mobile cellular subscriptions will be exceeded by end 2015**, equivalent to a global penetration rate of **97 subscriptions per 100 people**.
- ITU also estimates that there will be a total of almost **3.5 billion mobile broadband subscriptions by end 2015**. Industry analysts predict 6.5 billion mobile broadband (3G/4G/5G) subscriptions by 2019, making **mobile broadband the fastest growing ICT service in history**.
- **Asia-Pacific now accounts for half of all mobile broadband subscriptions**, up from just under 45% at the end of 2014. In January 2015, China Mobile became the world's largest mobile operator by number of subscribers.
- **The rapid expansion of Asia-Pacific is squeezing other world regions in terms of their mobile broadband market share** – Europe and the Americas saw declining proportional shares of mobile broadband subscriptions from the end of 2014 to the end of 2015, despite absolute increases in subscription numbers.
- **Smartphones now dominate the mobile device market**, and will continue to do so for the foreseeable future. **Ericsson forecasts that the number of smartphones in service could exceed 'basic' phones by 2016**. While developed markets become saturated in terms of total mobile penetration, analysts still see plenty of room for growth, with only **an estimated one third of all mobile subscriptions currently associated with a smartphone**.
- In hindsight, the year 2014 is likely to prove a tipping point as the year in which growth in '3G' services began to slow, as growth in '4G' services accelerated.

Affordability

- **Broadband is becoming more affordable**: over the five years since the creation of the Broadband Commission in 2010, fixed broadband prices as a share of GNI per capita have **dropped by 65% on average worldwide**.
- By 2014, most countries in the world had reached the Commission's target of basic fixed-broadband service at less than **5% of monthly GNI per capita** – however, in many of the world's poorest countries, where broadband could potentially have the greatest benefit in terms of bridging development gaps, even basic broadband service remains prohibitively expensive. There also remain very big differences in affordability within countries – even in countries where the 5% target has been met, there are often parts of the country or communities where affordable broadband has not been achieved, especially in rural and remote areas.
- By the end of 2014, a basic fixed broadband subscription cost less than 5% of average GNI per capita in **111 countries**, of which **44 were developed nations** and **67 were developing countries** (compared with 57 developing countries at the end of 2013, and 48 developing countries at the end of 2012).

Broadband policy

- There is still some growth in the number countries with National Broadband Plans, with 148 countries having adopted a national Plan or strategy by mid-2015, and a further six countries planning to adopt a Plan. A total of 42 countries still do not have any form of Plan.
- Although there has been good growth in the number of countries with a Plan, a substantial number of Plans (many of which were introduced around 2010) are reaching the end of their term this year in 2015 (e.g. Belarus, Belgium, Croatia, Finland, Mongolia, Paraguay and Singapore). The 'succession strategy' for many of these Plans is unclear.
- Future Internet users are likely to come from less well-educated, less urban backgrounds and from a base of languages and dialects outside the handful of languages that currently dominate online services and content (including Chinese, English, Spanish, French and Russian). The large majority of languages are without a significant online presence matching their real-world speaker base. The report finds that **growth in the range of languages available for some of the main online services is not matching the growth in Internet use**. Indeed, the paucity of online representation of a greater diversity of languages is a major obstacle to increasing demand for relevant content and the take-up of broadband services.

Broadband and ICT industry

- The telecoms industry continues to grow strongly in terms of penetration and uptake. According to IDC, the sector was worth an estimated **US$1.67 trillion** at end 2013, and is **growing by 1-2% per year**, driven mainly by China and emerging markets.
- **Broadband growth is not consistent across regions or across technologies** – for example, in Europe, some incumbent telcos are seeing revenues decline, while cable operators and 'altnets' are being helped by TV revenue growth (cable) or more agile business models linked to their smaller size (altnets).
- New advances in **satellite technology** are playing a key role in helping to deliver broadband in rural and isolated areas (even in developed countries). Satellites have the advantage of huge reach over massive areas, enabling relatively cost-effective connection of many subscribers, and faster roll-out than a network of point-to-point connections. They can also help overcome problems of difficult terrain in hard-to-connect regions, such as mountainous areas.
- The 'Internet of Things' (IoT) is growing fast, with Deloitte predicting that **one billion IoT devices will be shipped in 2015**, **up 60% on 2014 figures**. ITU forecasts **25 billion networked devices by 2020** – meaning **connected devices could outnumber connected people by 6:1**.
- For every person connecting to the Internet over the next five years, ten as many times devices will connect. Indeed, some industry observers are concerned that the Internet of Things may open up a new digital divide in terms of access and use of connected devices.