

by Stephen McClelland

# News analysis

## *Commissioning a global broadband world*

Geneva - The continuation of the Broadband Commission for Digital Development - initially set up in 2010 as a one-off initiative by the ITU and UNESCO - suggests that grappling globally with the difficulties of getting broadband deployed everywhere is almost certainly more complicated than most people may think. Supply- and demand-side factors, investment, and policy are intertwined as the Commission's latest report<sup>1</sup> makes clear in arguably one of the most coherent descriptions of what needs to be done yet available.

### Define me

In fact, this report also looks at the rather more basic issues surrounding broadband, many of which have been frustratingly unquantifiable to date. Some of these issues emerged early on in Commission discussion: it was relatively clear for example that for many Commissioners (invited top level experts, governmental and intergovernmental officials, academics and other industry participants) broadband actually means different things to different people.

What, in short, is broadband and can it usefully be defined? This definition is hardly a pedantic exercise: getting broadband universally adopted

requires clear thinking and a demonstration of the available benefits. Policy and potentially, investment, considerations, generally do make distinctions between narrow- and broadband issues in many cases. But different markets make different classifications. Purely technical definitions may be numerically on point but subject to obsolescence in the face of advances. Here, the collective Commission approach has become more one of defining high speed always-on, networks that can run many voice, video and data services simultaneously.

Definition is not the only challenge. Differences between countries on the macro-, micro-, deployment, industrial structure and policy levels remain baffling, nowhere more evident than large questions of whether a single approach is even plausible. In the developed world, broadband can easily be contextualized in the space of trans-sectoral thinking, gluing many infrastructures together. Getting there may be politically difficult, but it is not technologically difficult. Developing countries may still need convincing that it could make major inroads on some of the biggest issues (universal primary-level education and healthcare being just two) outlined in UN Millennium Development Goals (MDGs).

Here, the report seems to argue that governments should be broadband-aware and experiences can and should be shared, even if pragmatic outcomes may differ: "To optimize the benefits to society, broadband

should be coordinated on a countrywide basis, promoting facilities-based competition and with policies encouraging service providers to offer access on fair market terms. Eventually, this can lead to broadband becoming a highly advanced and fundamental infrastructure for modern society."

### Quantifiable benefits

So, if broadband can do everything - everything, that is, apart from delivering world peace - just how can these benefits be measured? Can it, for example, actually create jobs, a base indicator for policymakers everywhere? The report provides overwhelming evidence of benefit. It's probably the first time any study has managed to enumerate the existence of around one hundred other studies in one place carried out over the last decade on broadband and related ICT contexts that mostly suggest the positive economic effects from deployment. Some of these are listed opposite. These stories are convincing and much needed.

### The policy conundrum

But getting to globally available broadband certainly will require a policy agenda to be in place even if few know exactly how to configure one. The report calls for a visionary approach to policymaking, but realistically, for most policymakers the tools are already recognized, if not activated or necessarily fully understood. The hope is that if deployment takes place on a wide

<sup>1</sup> *Broadband: a platform for progress* published by the Broadband Commission for Digital Development, available at <http://www.broadbandcommission.org> and <http://www.itu.int>. The lead author of this report is Paul Budde, Managing Director of the telecommunications consultancy Buddecom (<http://www.buddecom.au>).

enough scale, a tipping point will be reached that will in turn force a positive, universal deployment of networks. There's an array of issues that range from policy preferences or neutralities for particular technologies or industrial or market structures to themes of service provider competition and incentivization. Investment is of course the pressing problem and alongside this, the cost of international access. There are specific policy differences between the narrow- and broadband domains and the ever present problem of spectrum with the onset of mobile broadband.

But alongside this is the place of Internet and broadband to be regarded as some sort of universal service. Although only Finland has made access to broadband (1Mbps) a citizen entitlement, the report points out that at least 30 countries (including what may be a surprising number of developing countries) have explicitly mandated access to broadband, including Brazil, China, Ghana, Kazakhstan, Malaysia, Morocco, Nigeria, Peru, Spain, Sri Lanka, Switzerland and Uganda. Key may be two aspects: universal access policies and end-user pricing. Policymakers may be able to tackle one if not necessarily the other, at least directly. But some emphasis is laid on their inter-relationship: "Universal access policies promote the regional spread of Internet services and stimulate demand... [whilst] broadband policies use a range of regulatory and fiscal options to reduce costs and facilitate broadband network investment, which in turn facilitate better access at lower prices."

## THE BENEFITS OF A BROADBAND WORLD

A European Commission analysis estimates that broadband can create more than two million jobs in Europe by 2015, and an increase in GDP of at least EUR 636 billion.

A study in Brazil reported that broadband added up to 1.4% to the employment growth rate.

In China, every 10% increase in broadband penetration is seen as contributing an additional 2.5% to GDP growth.

In Thailand, where in 2010 only some 3% of households had broadband and 12% of individuals, it has nevertheless been forecast that if broadband is promoted, it could add 2.4% percent to the country's GDP growth rate.

A 2009 study by management consultants, Booz & Company found that "10% higher broadband penetration in a specific year is correlated with 1.5% greater labour productivity growth over the following five years." The report by Booz & Company also suggests that "countries in the top tier of broadband penetration have exhibited 2% higher GDP growth than countries in the bottom tier."

McKinsey & Company, estimates that "a 10% increase in broadband household penetration delivers a boost to a country's GDP that ranges from 0.1 percent to 1.4 percent."

A study by the World Bank [indicates broadband] provides a boost of 1.38 additional percentage points to GDP growth for every 10-percentage-point increase in broadband penetration — higher than any other telecommunication service.

A University of Florida study indicates that "an estimated increase of 1% in a US state's broadband penetration would yield an increase of approximately 300000 jobs".