BROADBAND AND SUSTAINABLE DEVELOPMENT

WHY BROADBAND SHOULD BE PRIORITIZED IN THE POST-2015 AGENDA

REPORT ON THE SPECIAL SESSION
OF THE UN BROADBAND COMMISSION
FOR DIGITAL DEVELOPMENT

AT THE ANNUAL MEETING
OF THE WORLD ECONOMIC FORUM,
DAVOS, 24 JANUARY 2014

BACKGROUND

The world has changed significantly since 2000, when the Millennium Development Goals (MDGs) were adopted. Strong economic growth in the developing world has helped lift millions out of poverty yet global population growth, modern lifestyles and consumption are stretching the limits of the planet's resources. During this time, technological advances in information and communication technologies (ICTs) have radically transformed the way people communicate and lead their lives; now ICTs play a vital, transformational role in helping to put the world on a more sustainable path.

Recent crises in the financial, global food and energy sectors have highlighted fragility in global systems, as well as weaknesses in governance and persistent inequalities among vulnerable or disadvantaged populations. In addition, constraints to development have become apparent, such as climate change, increasing environmental degradation and population growth. Together with complex societal issues (such as rising inequality, ageing, infrastructure, gender equality, childhood development and education), as well as a lack of decent jobs for youth, these challenges point to an urgent need for an integrated, sustainable post-2015 development agenda.

As well as continuing to drive progress against the MDGs to 2015 and beyond, the post-2015 sustainable development agenda needs to refocus efforts on reaching vulnerable or marginalized groups and tackling the interrelated root causes of poverty, inequality and environmental degradation. It must shift technology and behaviour towards sustainable consumption and production patterns to decouple continued growth and improved living standards from the unsustainable use of resources. Business-as-usual is simply not an option.

Innovative, scalable multi-stakeholder solutions are needed to deliver inclusive economic growth and a shift to sustainable patterns of consumption and production. The world needs to adopt a more integrated and comprehensive approach to development – and in this, ICTs and broadband can make a major contribution.

The side event explored the opportunity that broadband and ICTs provide towards achieving a sustainable development agenda beyond 2015, looking at the role of infrastructure as a platform for progress and social development. The event also presented the recommendations of the report "Transformational Solutions for 2015 and Beyond".

Summary of key points

The session brought together stakeholders from government, private sector, academia, civil society groups and media. It was evident that broadband is now clearly seen as having the potential to be a major catalyst for change, as well as a major contributor to bridging the digital divide, especially through the roll out of mobile broadband.

Common themes that emerged through the discussion included the following:

1 Public Private Partnerships, as represented by the cross-section of Broadband Commission members, are the model to emulate for effective global broadband rollout, in particular where government create policy that enables an environment suitable for attracting private-sector investment.

Broadband represents a set of transformative technologies that are increasingly seen as major drivers for sustainable development as well as citizen and gender empowerment.

Affordable access to broadband is a key challenge to ensure everyone has equal access to the opportunities and benefits of broadband connectivity.

The distinction between infrastructure and the content that crosses it is becoming increasingly blurred which is reflected in the evolving roles of telecommunications companies and the growing need for partnership and cooperation of all stakeholders working in a multi-sectoral manner.

Broadband needs to be included as a key component of the post-2015 agenda.

SESSION HIGHLIGHTS

H.E. President Kagame of Rwanda, Co-Chair of the Broadband Commission, opened the special session by emphasizing that the Commission aims "to broaden and continue the conversation on the foundation of broadband and bring it to people globally". In Rwanda, broadband is being optimized for improving education and health services with the specific goal of ensuring that broadband is affordable and accessible to as many people as possible through "companies using their resources and working closely with governments".

Professor Jeffrey Sachs, a Broadband Commissioner and moderator of the special session in Davos, posited that some of the major issues in the world today can only be solved through broadband and that we need "to assess how we can change all services delivering health and education". He noted that, in the past, no other technology has had the scale of mobile connectivity. Professor Sachs identified that the key issues of our times, including the need for renewable energy and to ensure access to education by everyone, "cannot be achieved, if broadband is not deployed globally".

Dr. Hamadoun I. Touré, Co-Vice Chair of the Broadband Commission, informed those gathered that one of the concrete objectives of the work of the Commission was to support the roll-out of national broadband plans around the world. "It is vitally important that any country that has a national broadband plan can come to the Commission and demonstrate some of the success stories, as well as what to avoid". Dr. Touré reminded everyone that we are only one year before the end of the MDGs and we still need tangible reforms.

H.E. Dr. Ali M. Abbasov, Minister for Communications and Information Technologies from the Government of Azerbaijan, and host of the special session in Davos, stated that only broadband can bring all sectors together. "Broadband is a social demand" he noted, while "more and more people want to have access to the Internet, digital content, public services or health care payments". In Azerbaijan, the government budgets approximately half a billion dollars to boost broadband access for the private sector and to boost the market beyond 2016. Regional focus is also a priority with H.E. Minister Abbasov stating that national broadband plans are not enough and it is necessary to go further and support regional broadband infrastructure.

Ericsson CEO and Broadband Commissioner, Mr Hans Vestberg, believes that, while it is amazing what has been achieved in the last twenty years when it comes to mobile and broadband in the world, the next five years are just going to be enormous. He predicted that "92% of the earth population will have mobile coverage by 2019" and estimated that there will be "around 8 billion broadband subscriptions by 2019". Such rapid growth means a three-fold increase and underlines why broadband is "a great vehicle for a lot of things that you can improve" including "the distribution of wealth and information".

Reflecting on the Broadband and Sustainable Development report ["Transformational Solutions for 2015 and Beyond"] issued by the Broadband Commission with support from Ericsson, Mr Vestberg noted five country cases – Japan, Philippines, Mexico, Rwanda and Sweden – and how their broadband plans and impact were assessed, which have in turn informed the specific measures and recommendations contained in the report. "This is a starting point for me and others when it comes to new goals to be set for 2015 and onwards. It is a good start, a good and measurable base, and a commitment that we believe should be undertaken by governments" if we are to fully leverage the available broadband technologies and the future infrastructure and technologies that will be built. However, these commitments must be cross-sectoral, as advocated by the UN.

Prof. Sachs added that "technology needs to be in the 2015 goals. When countries draft their plans, the Broadband Commission needs to make sure there is content that can come quickly" to support effective and enabling policies. Prof. Sachs believes that in addition, we need to "ensure that all universities that are online offer free higher education content. It should be the way universities are in the future. They need to be online and offer free high quality content." For this vision to be realized, broadband technologies must be deployed globally, assisted by enabling policies and the requisite infrastructure.

European Commission Vice-President and Broadband Commissioner, Ms Neelie Kroes, focused on the social

and economic development that is very often the focus of the Broadband Commission. "The goal is about offering opportunities and giving infrastructure to those who are really interested, as well as those who are not yet aware of the opportunities, nobody should be excluded." Commissioner Kroes noted that Europe is of course a connected continent, but we need to add an 's' to talk about Connected Continents" where we can collaborate in a world of full connectivity and sharing. This is an important and "challenging issue and we know we have a lot to do".

Ms Sun Yafang, Chairwoman of Huawei Technologies, took the floor noting that most of the sessions in Davos focus on young people and how to get them jobs, but that this year can also be considered as a turning point for ICTs. Looking to China, Ms Yafang noted that Chinese urban populations are comprised of 50% of people coming from rural areas in search of work. "Fifteen years ago, the government took the decision to provide coverage for all villages - it was not broadband at that time, it was narrowband - we have two and a half million villages in China, but today, 95% of the villages are covered by fixed or mobile broadband". This remarkable transformation has provided the catalyst for China to produce high-quality fifty-dollar mobile phones, which have been delivered to emerging countries and throughout Africa. This increased connectivity means greater access to opportunities for income generation.

Ms Yafang continued to inform us that "in China last year, e-business platforms provided 80 million jobs, 70% of which went to young people; almost 40% are direct jobs and 60% are services supporting this delivery". In addition, there is a program that directly links increased access to education for young people to job opportunities. In brief, in the words of Ms Yafang, China has set "high goals for the ICT value".

Moderator Professor Jeffrey Sachs, commenting on Ms Yafang's intervention, noted that millions of 50 dollar smartphones in the hands of health worker communities will transform health and this has the potential to be truly remarkable; a potential that can be delivered via effective national broadband policies and regional cooperation.

Mr Tim Noonan, representing the voice of the International Trade Union Confederation, noted that there is "a huge impact coming for the workforce and the implications will be massive". He called upon the Broadband Commission "to provide strong leadership for engagements, not only as a public and private sector process, but also for all sectors of civil society".

Mr Alan Marcus, Senior Director, Head of Information Technology and Telecommunications Industries, at the World Economic Forum, which was also a co-organizer of the session, stated that, "while many industry leaders are calling for greater access to the Internet, they are also concerned about what it does. One of the concerns is: the more connectivity, the more opportunity for bad as well." Taking note of the digital divide, Mr Marcus noted that "we need to connect the unconnected and provide them a safe environment" and realize that even though we are in a hyper-connected world, the gap between "the haves and the have-nots" is growing even faster.

Mr Jeff Jarvis, Director of the Tow-Knight Center for Entrepreneurial Journalism of New York Graduate School of Journalism, returned to the issue of the right to communicate and stated that, for him, broadband access is "about free speech" that "it is a matter of human rights to be able to communicate with the world". Speeding up the move to connect the unconnected must remain paramount, declared Mr Jarvis, adding that "I will encourage the group not only to concentrate on the technology and the opportunities, but also to maintain a systemic approach to trust and for governments to pull back", and recognize the "need to put power in the hands of people."

Broadband Commissioner and CEO of Digicel, Mr Denis O'Brien stated that "the gap between emerging markets and developing markets is getting smaller" and that "the key thing is to get spectrum, especially LTE spectrum, in emerging markets and fibre will follow". Mr O'Brien believes that the Broadband Commission needs to be even "more aggressive as a group" and "to raise the bar" and so jump higher.

Professor Jeffrey Sachs added that one way of achieving this 'raised bar' and working more forcefully as a public-private partnership group would be to "show more how content works for community health workers, kids in school, higher education, for smart infrastructure, the faster everyone is going to get it. Showing real results is paramount in this goal of pushing this [Broadband] out dramatically".

Broadband Commissioner Mr Sunil Bharti Mittal, Chairman of Bharti Enterprises and CEO of India's largest telcom operator, stated that the Broadband Commission is "one group that has made a real impact on the thought process of broadband". He noted that "there is an acknowledgement on one side by various government, various leaders around the globe, from people around the world for the need of broadband and the power broadband has to deliver value added services." Mr Bharti issued a word of warning, however, noting that "on the other side, county after country, we see the spectrum auctions going wrong, we see finance ministers trying to take as much money as possible. We need to deal with this conflict. We are squeezing our vendors, because we are drained of any extra money by the finance minister."

Mr Bharti imparted a particular message to this Commission: we need to "trust in this industry, believe in this industry, but also allow this industry to invest more on the ground, rather than fulfilling the budget deficit of our countries. We need to put a lot of money on the ground and there must be an acknowledgement about that."

The Director of the Office for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States, representing Mr Gyan Chandra Acharya, Under-Secretary-General and High Representative, noted that they represent countries where 90% of the population still have a lack of access to broadband. "I want to emphasise the importance of this year 2014 for the vulnerable countries. We all talk about the post-2015 agenda, and how that will be drafted this year, but this is also the year of the small Island developing State". He continued by stating that "the most vulnerable countries must be prioritized" and we need discuss "how to mainstream access to broadband and ICT in all the agendas related to the UN this year."

H.E. President Kagame added that while we discuss technology and infrastructure, as well as content, we must bear in mind the key issues of "access and expansion" and making sure that most global population can have access to broadband and the opportunities that it will provide. "This will help many aspects of development including governance and my hope is built on one thing: we have to make the necessary investment in this kind of technology and infrastructure."

H.E. President Kagame, emphasizing the importance of empowering communities, noted that while we have to bear in mind that connectivity comes with side-effects, we must at the same time remember that "if we give this to our people, these tools, before you realize it, they will know how to navigate around the problems and constraints." Talking to the gathered supporters and members of the Commission, His Excellency stated that "when we are building all this, we are working together, walking together, and sharing the best practices from the different corners of the world. This is the beauty of what we are doing in the context of the global development for the global society."

H.E. Mr Diego Molano, Minister of Information and Communications Technologies of the Government of Colombia stated that "the highest value of broadband lies in the content that flows through those pipes" and noted that "in Colombia, we have done a fantastic job in expanding broadband everywhere" and shared with participants the example of the potato-growers who "doubled their income in just three months using an application that we helped them to develop. The applications have to be developed by them to solve their problem, global companies are not going to solve their problem" underlining that the "applications with real value are the local ones".
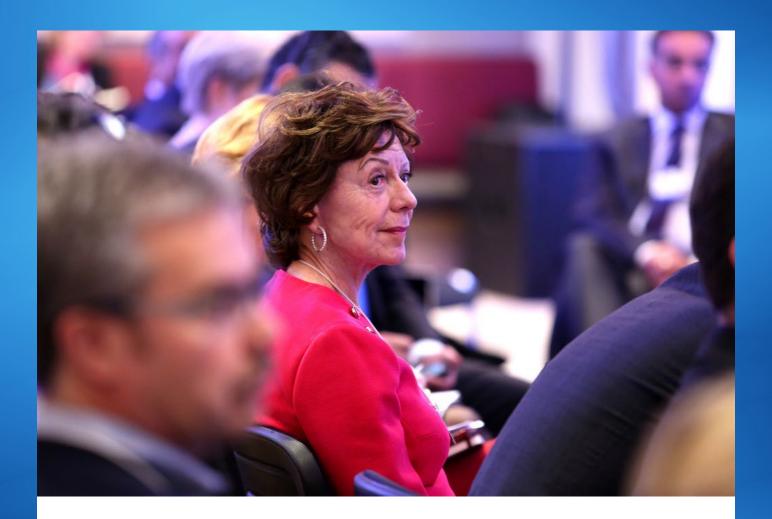
Recognizing the importance of facilitating the creation of collaborative learning communities, H.E. Minister Molano noted that "we have to build local innovative ecosystems, we have to strengthen them; the most important is talent and it is what we lack the most; we need to produce more engineers and technicians. The good ideas come from those farmers who understand the technology and will work with the engineers to implement them".

Returning to the subject of opening access to knowledge and education opportunities, Professor Jeffrey Sachs informed the audience that in MIT, (Massachusetts Institute of Technology) online engineering e-courses are reaching 100'000 students and kids in villages. So one part of the teaching is dependent on broadband, delivering content from the university to teach people.

Ms Juliana Rotich, Co-Founder and Executive Director of crowdsourcing and mapping technology company, Ushahidi, highlighted a partnership between Orange and MIT where anonymous data has been used to study bus routes and optimize them. "We can't solve social problems without leadership around open data"

she stated and went on to say that she wanted "to encourage looking at the possibilities to create an enabling environment so that the data can flow. As a citizen, I should be able to trust that the data I provide is used in the way that I prescribed. Our challenge is to provide those channels. There are many efforts to come up with innovative solutions for providing broadband but financing is very difficult to realize." To which, Professor Jeffrey Sachs added that he wanted to "push for real-time data management and quality annual data on global sustainable development, country by country."

Private equity and fund investor, Mr Khaled Naguib Sedrak, emphasized the topic of finance and investment. "Most of the plans are not designed in a way people can invest" he opined and stressed that it is "very important to give attention to cable infrastructure, submarine and satellite infrastructure connecting countries and regions. Do not only focus on infrastructure inside the countries and the last mile."

Director of the International Office of Telefónica, Mr Carlos Lopez Blanco stated that "we are more than infrastructure companies; we are the one providing Internet access to our customers and this is the most important for citizens in developing countries". Mr Lopez continued noting that "in developing countries, the development of telecom infrastructure is often better than other infrastructures and having a good Internet access will drive the success of the country. Mobile is changing everything including rules of Internet access and mobile will help developing countries to reach their need for full Internet access."

Mr Romano Righetti, Group Chief Regulatory Officer and Management Board member of Vimpelcom, stated that "to provide broadband, a new mechanism for allocating spectrum is needed" or else such investments with long payback periods can become unsustainable. He requested that "Ministers of Finance look at fiscal measures for incentivising this kind of investment. Such measures can be a trigger event for new investment cycle".

Mr Kevin Steinberg, President & Head of Client Services at Purpose, added that "there is a demand issue as well, not only a supply issue. Supplying the wiring is not enough, we have to empower the user to share stories and build the demand. Pushing is not enough, if there is not a pull." It was further noted on this point from other participants that equal focus should be given to services as to infrastructure; including day to day services, government services, basic services. As one participant noted, "utilization is key. Focusing on the services will improve utilization."

H.E. Minister Omobola Johnson, the Minister of Communications Technologies of the Government of Nigeria, stressed that "financing is critical, if we are to connect the unconnected" and continued to highlight stakeholders such as the Global Fund and "the importance of contributions not only from the ICT industries, but also the health industry and others to ensure we have the money to make the most impact".

Mr. Paul Mitchell, Corporate VP and Chairman of Microsoft, noted that "Broadband Internet is really a layered collection of ecosystems, each part of the layer and each part of the ecosystems needs to be treated holistically with the rest (e.g. the financing, education, mobile infrastructure). All of these factors are interrelated and we should not continue to treat them as isolated elements. We need one common vision between all those layers."

CONCLUSION

Dr. Hamadoun I. Touré, ITU Secretary General wrapped up the inaugural Broadband Commission session in Davos by echoing the support conveyed throughout the session and turning to his fellow-organizers, he emphasized that there is room to do this kind of session annually. "Let us try to expand and reach out to other stakeholders, let us make this world a better place."

Dr. Touré continued to summarize the session by concluding that Broadband is built on four pillars – in particular emphasizing the following:

• **an enabling environment and policy**
• **infrastructure**
• **content (social and economic etc.)**
• **services and applications.**

The four pillars "are all complementary" Dr. Touré noted "and we need to work together as we move from the information society to the knowledge society". On the issue of spectrum, a core focus of the ITU, Dr. Touré stated that "Spectrum will be always available, looking at the US and the good progress on how they harvested available spectrum, people can learn from that" and stressed the "need to reach out to other industries such as education, health, tourism and transport". He made a practical 'one dig' recommendation - "when they are building roads, and laying railway lines, we should invest in fiber at the same time".

LIST PARTICIPANTS

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9 Paul	Kagame	Rwanda
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12 Anne	Bouverot	GSMA
13 Bruno	Lanvin	INSEAD
14 Paul	Mitchell	Microsoft
15 Denis	O'Brien	Digicel
16 Jeffrey	Sachs	Earth Institute
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22 Josephine	Wood	European Commission
23 Heath	Ryan	European Commission
24 Francis	Gurry	WIPO
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The Broadband Commission for Digital Development was launched by the International Telecommunication Union (ITU) and the United Nations Education, Science and Cultural Organization (UNESCO) in response to UN Secretary-General Ban Ki-Moon's call to step up UN efforts to meet the Millennium Development Goals (MDGs). Established in May 2010, the Commission unites top industry executives with government leaders, thought leaders, policy pioneers, international agencies and organizations concerned with development.

The Broadband Commission embraces a range of different perspectives in a multi-stakeholder approach to promoting the global roll-out of broadband, as well as providing a fresh approach to UN and business engagement.

To date, the Commission has published a number of high-level policy reports, best practices and case studies.

More information about the Commission is available at
www.BroadbandCommission.org

This report aims to serve as a record for the inaugural event of the Broadband Commission at the World Economic Forum, January 2014.

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