



## Towards Broadband Access for All

### An interview with Suvi Lindén, former Minister of the Government of Finland and Special Envoy to the Broadband Commission

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In telecommunications, the Digital Dividend refers to the radio frequency spectrum that is freed up when television broadcasters convert from an analogue signal to far more efficient digital technology. Following internationally agreed band plans, governments are licensing part of this spectrum surplus to mobile operators, enabling them to deploy mobile broadband services, which will ultimately give citizens access to fourth-generation services on smartphones and other mobile devices.



**Suvi Lindén has played a significant role in Finland's transition to digital television and the subsequent allocation of Digital Dividend spectrum for mobile broadband. Ms Lindén was Finland's Minister of Culture from 1999 to 2002 and Minister of Communications from 2007 to 2011. She is a member of the National Coalition Party and was a Member of Parliament from 1995 to 2011. In Parliament, she has been Chair of the Education and Culture Committee, as well as a member of the Speaker's Council, Foreign Affairs Committee, Committee for the Future, and Transport and Communications Committee. Today, she engages with governments around the world, promoting universal access to broadband in her role as the ITU's Special Envoy to the Broadband Commission, a United Nations commission established to help meet the Millennium Development Goals.**

#### **What are the aims of the Broadband Commission?**

**Lindén:** As the 2015 evaluation point for meeting the UN Millennium Development Goals draws nearer, it is generally recognised that we still have a lot to do to attain many of the goals set in 2000. Information and communication technology (ICT) was mentioned in that document, but only in a minor way. What we appreciate today is that ICT and broadband are fundamental to reaching these goals. That's why UNESCO and the ITU established the Broadband Commission — to promote telecommunications infrastructure and broadband,

and to share examples of the economic and social boost countries get from providing broadband access to their citizens.

So much has happened since 2000. Wherever we go, people are striving to increase their knowledge of ICT and understand how best to regulate the sector. Over 100 countries have now established a national broadband strategy. The Broadband Commission has set four targets related to accessibility, affordability and getting online. Among these, universal access to broadband seems to be manageable, but affordability is and will continue to be the bigger problem. It's down to governments to figure out whether broadband services are affordable enough, and through appropriate regulation and taxation, they can make the difference.

#### **How was Finland's digital switch-over carried out?**

**Lindén:** In 2001, the first digital television transmissions were launched. Multi-stakeholder cooperation was achieved through a task force whose objective was to promote the transition to digital television, including conceptualising and implementing the practical arrangements by all operators. Its duty was to engage with certain

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segments of the population, as well as stakeholders in the transition, to organise advisory and installation services as well as follow-up surveys and studies. This required a strong commitment from broadcasters, retailers, the independent regulator, ministers, regional and municipal authorities, equipment makers, content providers and others. In the later phases, we involved volunteer organisations who wanted to help with the project.

Our goal was to manage the process as openly as possible. It is a change that affects everyone in the country, and everyone should feel they have a part to play. Every stakeholder will have some headaches along the way, but with good coordination, we can avoid mistakes while including people with different points of view.

In 2004, the government decided that the analogue switch-off would take place by the end of August 2007, for both terrestrial and cable households. In spring 2007, it was obvious that cable households would need extra time, so the analogue switch-off for cable households was delayed until February 2008.

The best strategy for the analogue switch-over depends on a country's circumstances. Many countries have decided to make the switch region by region, as the UK did by segmenting the population into smaller groups to make it more manageable, and also to test the process and address problems in a more controlled way.

#### **How did it go with the public?**

**Lindén:** To support the consumer, we put a lot of effort into continual public awareness through broadcast announcements and information centres. Because the switch-over to digital is a technical issue, communications to the public are difficult. At that time, people receiving broadcast signals were interested in having more channels, the possibility of pay TV and better picture quality. For cable subscribers, it was more difficult to point out the benefits, as they already had the choice of many channels. New features such as subtitling for the hearing impaired, voice subtitling for the visually impaired and a selection of subtitling languages attracted special groups. Today, of course, the strongest consumer message is the release of spectrum for good-quality, affordable mobile broadband.

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Even though people were aware of the switch-over well in advance, many waited until the last minute to get their set-top box. In our case, these cost €30–40 and were not subsidised by the government. It is an important consideration that requires analysis — how to guarantee fairness for all citizens. Volunteers across the country installed set-top boxes for elderly people. Inevitably there is some chaos on the night of the switch-over, but overall it went smoothly.

In retrospect, we should have found a way to certify or test set-top boxes that were brought to market, working with the private sector to avoid any technical problems. We ultimately published a list of models we were confident in, but we would have saved money and headache had we done it sooner.

#### **What is the significance of broadband for developing economies?**

**Lindén:** Many of these countries have limited fixed-line penetration, so mobile offers the possibility for large segments of these countries to join the information society for the first time, accessing all of the information on the internet, with implications for education, health and entrepreneurship, for example. Because of its impact on individuals' lives, a strong argument can be made for broadband access to be defined as a basic human right in the least developed countries and elsewhere. Especially where there is a scarcity of traditional government services, mobile phones can be a tool for delivering basic citizen services such as mIdentity or mBanking.

#### **How should governments think about mobile in the context of their broadband agenda?**

**Lindén:** Mobile broadband is a faster and cheaper way to reach rural areas where there is no fixed-line access. Governments can conduct studies to determine which frequencies are the most efficient for mobile or for broadcasting, to make the best decision. When governments have the knowledge to use their spectrum wisely, they can accelerate investment in networks.

For example, in Finland, we were slow to roll out 3G access to the countryside on the 2100MHz band, but once the 900MHz band was available, the rural roll-out was much quicker because it was cheaper for operators; in fact, it required only one-sixth

of the infrastructure cost of the 2100MHz band. Governments therefore play an important role in allocating the most cost-efficient bands for mobile, providing accessibility and also affordability for people in rural areas. Fibre is also needed to support high-speed mobile networks. Rolling out fibre in the rural areas is usually expensive, and markets will not provide it. Therefore, special strategies are needed to secure funds for fibre and even for mobile networks. The national broadband strategy should have a vision of how affordable, good-quality, high-speed broadband can be deployed country-wide using mobile networks and fibre.

### What advice do you give to administrations and regulators overseeing this complex process?

**Lindén:** If there is no harmonisation with bordering countries, negotiations should be started straight away, as this process can take years. In Finland's case, we worked in the Baltic region to harmonise the 800MHz band for mobile. In Russia, the band is used for military purposes, so obviously the negotiation was complex. But the economic value of the band was well understood, and Finland has since been able to run pilot studies near the Russian border. The spectrum will be allocated next spring and in use by mobile operators in 2014. In Finland, the digital switch-over was done in 2007, but we couldn't actually license it until six years later. So the importance of sitting down with neighbouring administrations — early on — cannot be overstated.

The big issue for political decision makers is to recognise the economic benefits that come out of mobile broadband penetration. Telecommunications ministers usually know that securing broadband frequencies is a good thing. Nowadays, there are plenty of statistics supporting the economic case for broadband, which make it far easier to convince governments that mobile broadband boosts the economy and the Digital Dividend should be allocated to mobile.

At the same time, it's important to take a sensible approach to taxing the sector or imposing high fees on networks. Broadband should be seen as an investment for securing future economic growth. If mobile broadband networks are cost-efficiently built and used for ICT services, and if governments take advantage of it, then there will be a boost for productivity. A roadmap for digital services and use of ICT in processes should be created. Government benefits through e-services, as well as the overall revenue gains from the economic value created by broadband access. More effort should be put into this analysis up front.

As governments plan their broadband roadmaps to achieve universal access, they also need to factor in digital exclusion. The issue exists everywhere — we see people who are over 35 years old who have problems using digital tools. So policymakers must not overlook the disenfranchised and older people who may not have basic skills, and create ways to educate these citizens on the use of digital tools. It is also a challenge for industry to develop more user-friendly devices.

### Should governments consider building and managing the national telecommunications infrastructure themselves?

**Lindén:** I strongly believe, and telecoms operators also take this position, that the infrastructure can be built by the private sector as long as the government creates an enabling environment. It's very important that this be done together. At the Broadband Commission, we talk about the importance of public-private partnership, meaning a common agreement on what an enabling environment is for constructing networks and extending access to everyone. No government should want to build the networks itself. Traditional infrastructure such as roads and railroads are built by the public sector, but with telecommunications infrastructure, the market should provide them. If not, then regulation is not in order.

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**On a more personal level, where does your passion for universal broadband access come from?**

**Lindén:** I have been involved with the development of the information society in Finland since 2000, when I was chair of the Board for the Development of the Information Society. At that time, my focus was more on digital content. Even then, we could see all the great opportunities for citizens that a digital world could provide. Then I had the opportunity to serve on the Future Committee and Education Committee in Parliament, and later as Minister of Communications. Equal opportunity is a very important value for me. Therefore I posed a very simple question to myself: “Can we truly develop an information society if everyone doesn’t have the ability to be part of it?” The answer should be very clear. I have always been convinced that the digital society could provide new businesses, new jobs and better-quality services. It also provides new ways to present local culture and an excellent platform for making music, art and literature more available.

I like to speak strongly about the multiplier effect created by broadband, not just the tool itself. We need to be careful not to focus only on the broadband infrastructure, when in fact the real benefits come from using the platform — and that is a very horizontal issue. Broadband is an enabler in health, education, sustainable development, environment and so much more.

ICT also changes the learning environment. We need to work out how to shape our education to bring this tool into the centre, especially when children are growing up with social media and have a far more digital mind-set. Governments that are able to bring their school system into the 21st century will be among the winners.

Another opportunity — and I have spoken extensively about this in my country — is the ability of ICT and mobile technologies to enable elderly people to live at home for longer. Many countries have a growing elderly population and fewer people to take care of them. Finland is the fastest-ageing among the OECD countries. We have spent a lot of money researching how to use mobile phones and near-field communication (NFC) technology to make it possible for elderly people to live longer at home. It can provide security and a wide range of mHealth services; there are many possibilities today and even more innovative products in development.

Of course it has been very rewarding to see how quickly mobile networks have laid the ground for real social and economic development in countries where people have gained access to mobile services for the first time. Broadband has improved people’s quality of life all over the world, and it will continue to do wonders.

**Securing the Digital Dividend for a Mobile Future**

This is one of a series of interviews conducted by the GSM Association that aims to capture the experiences, insights and advice of industry regulators, government officials and others who have spearheaded the transition from analogue to digital television broadcasting, and released part of the surplus spectrum, known as the Digital Dividend, for mobile broadband.

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