

Date  
2009-12-23

Attending to this matter  
Mats Nilsson

Ericsson European Affairs Office  
Avenue Tervueren 12, B-1040 Brussels  
Belgium  
Phone: +32 2 737 05 52 , +32 2 745 1400  
Mobile: +32 499986010  
e-mail: mats.f.nilsson@ericsson.com

## **Ericsson Position**

# **Ericsson comments on European Commission Working Document “Consultation on the Future “EU 2020” Strategy**

## 1 Background

The commission working document on EU 2020 outlines in great excellence the challenges and issues needed for Europe to fulfill the 2020 vision. Ericsson supports and appreciates the document and its findings. Particularly as it relates to the key role of the knowledge based economy, the need for broadband infrastructure and utilization of ICT technologies across economy and society to reach the necessary goals of competitiveness, growth, energy, climate and sustainable resource utilization.

The key priorities to take the vision outlined in the document towards realization as we see them from our perspective are;

- Competitiveness and growth – requires ICT embedded in many sectors and indeed providing a global leadership in these areas.
- The smart, green economy can be greatly enhanced by utilization of broadband communications; specifically mobile broadband.
- Inclusiveness, innovation and creativity can be massively enabled by (mobile) broadband coverage and a knowledge based economy
- A digital economy can be facilitated but this requires measures to ensure that the online single digital market becomes a reality throughout the EU
- 100% fixed and mobile Broadband coverage needs to be realized as soon as possible.

## 2 Competitiveness and growth – requires ICT embedded in many sectors and indeed providing a global leadership in these areas.

Many studies have demonstrated the importance of ICT for productivity and growth. Europe's productivity growth has fallen since 1995, leading to the productivity gap with the US. As shown by e.g. a Harvard University study in 2005 industries using or producing ICT have played a disproportionate role in the growth in the US since 1995.<sup>1</sup> Likewise the EU i2010 High level Group reported in 2006 that ICT contributed to about half of the European productivity gains during 1995-2005.

The capabilities of today's connected world in providing new jobs, innovation and a connected economy where creators and consumers find a direct relation is well proven. The utilization of the web and electronic communications in almost any business today as well as the rapid emergence of a web-based economy gives evidence to what the tools of ICT can do to facilitate the emerging new economy.

The capabilities of broadband networks, fixed or mobile, with connected devices ranging from mobile phones over PCs to large screen TV sets and all the application enabling technologies now available and emerging provides the user friendly bridge from technology to a broad scale of usage scenarios.

A key enabler for these values is cross sector trials where e.g. the health sector and the communication sector can match each other's requirements and capabilities to realize the values of e-health; and likewise for the energy and transport sectors.

The capabilities of today's mobile and fixed broadband networks can largely be reused as is. The economies of scale already created from commercial use clearly speak in the favor of building on the existing infrastructure and adding any specific features to support other sectors in fully utilizing the potentials of ICT.

We also envisage a further evolution from today's usage pattern and devices into a world with 50 billion connected and aggregated devices, including also low complexity devices like sensors and meters. This forms the basis for the smart society of the future, an area where Europe can, and should, take the global lead. Having the basis in the mobile networks and strong sector players in ICT, energy, transport and health any target but global leadership would be inappropriate.

Proposed targets and action plans:

- Research and innovation, including large scale trials, in a cross-sector approach facilitated through EU mechanisms (e.g. PPPs) (2010-2015 timeframe)
- Web-based health and government services throughout the EU (2010-2015 timeframe)
- E-skills, education and innovation – to be on the same level as the US by 2015
- Close the productivity gap with the US before 2020

---

<sup>1</sup> "Productivity: Information Technology and the American Growth Resurgence" Jorgenson, Ho, Stiroh

- Europe in the global lead for the smart connected society by 2015 and onwards

### 3 The smart, greener economy can be greatly enhanced by utilization of broadband communications

Today most of the climate policy focus is on the high carbon-emitting sectors, for example transportation, energy and buildings. The ICT sector is unique in that it has a relatively low carbon footprint (around 2% of total CO<sub>2</sub> emissions worldwide), but can help other sectors to significantly reduce their carbon footprint. Outside of the ICT sector, awareness of this potential is generally rather low or not utilized.

Many business models today are based on the traditional carbon intensive economy from the old industrial era. For new innovative business models to develop there might be a need for incentives from policy makers. For example, in order to realize the carbon reduction potential of the sectors outside of ICT (the “98%”), industry sectors such as ICT itself, transportation, buildings, etc need to think cross-sectorally, even if there might not exist an obvious business case for doing so today.

One key element for realizing the enabling potential of ICT is a reliable broadband infrastructure that can support innovative business models. Too often, investments to reduce CO<sub>2</sub> emissions result only in marginal improvements, or even increased emissions, due to overall unsustainable development. In contrast, low-carbon broadband technologies offer a 21st century infrastructure solution that will contribute to direct emissions reductions and underpin further reductions from other sectors. The public authorities can support the development of such an infrastructure by simplifying administrative obligations (permits, clear spectrum policies that facilitate mobile broadband communications, etc).

The authorities should encourage cross-sector partnerships with a focus on developing new and innovative services. In addition, they should also lead by example by using ICT solutions and create a level playing field by ensuring that various policies are not in conflict.

Studies show that ICT can reduce global CO<sub>2</sub> emissions by 15% by 2020. Modern solutions, ranging from education and information services, smart grids, e-health as well as intelligent transport, can give access to vital services all over the world, without sacrificing our environment.

We would recommend as a starting point that authorities commence the development of a plan for ICT assisted low carbon innovation,<sup>2</sup> which could include the following recommendations:

1. Make ICT a central part of national strategies so infrastructure investment decisions can include evaluations of energy efficiency and low emissions through the use of ICT;
2. Shift from 20th century physical infrastructure to 21st century low carbon information infrastructure by incorporating ICT as part of infrastructure investments and development of broadband enabled services:

---

<sup>2</sup> [http://www.ericsson.com/ericsson/corporate\\_responsibility/index.shtml](http://www.ericsson.com/ericsson/corporate_responsibility/index.shtml)

3. Lead by example and create a level playing field by using low carbon and energy efficiency to evaluate policy options. Policy makers can also provide positive examples of low carbon ICT use to show what can be achieved;
4. Encourage open innovation for low carbon solutions through policies that include cross sector innovations, eg. the use of ICT for health, city planning and the use of intelligent technologies to better deliver services.

ICT can also continue to play an increasingly important role in helping people adapt to climate change, for example through distribution of vital information around health and weather, and through the expansion of Early Warning Systems in case of natural disasters<sup>3</sup>.

- 4 Inclusiveness, innovation and creativity can be massively enabled by broadband coverage and a knowledge based economy

The connected society does not just add a new business dimension from competitiveness and business revenue perspective, from the already emerging social networks, knowledge buildup and cultural interactions, moving all the way to new forms of creative development. It also significantly contributes to important cultural and societal perspectives which mean that being left outside of the connected society is simply not an option for Europe and its citizens. This alone calls for the a strong ICT sector in Europe and the need to ensure that conditions such as access to spectrum and an investment friendly regime for high speed fiber-based networks are in place that stimulate investments in the necessary network and application enablers.

Proposed targets and action plans:

- Adding the necessary components for a trusted internet to form the basis for creative industries and knowledge buildup
- European players on par with today's US-based web economy by 2015

---

<sup>3</sup> <http://www.ghf-geneva.org/OurWork/PracticalAction/WeatherInfoforAll/TheInitiative/tabid/360/Default.aspx> and <http://www.ericsson.com/ericsson/press/releases/20090618-1323500.shtml>

5 A digital economy can be facilitated but this requires measures to ensure the online and on-demand single digital market becomes a reality throughout the EU

Large homogenous economies like the US, India and China have a tremendous advantage giving economies of scale for creators of content, applications and services as well as for distributors. As the reach of the internet is such that no geographical nor time barriers to the launch of a new service really exists. It is important that the Commission adopts a technology neutral stance on digital content both in terms of digital distribution networks as well as architectures (network based or device based).

Furthermore a service can be offered with quite limited entry barriers, giving opportunities for SMEs and small scale innovation in a scale that has never before been possible.

In particular the EU although being the largest of the global economies has its volume limits by e.g. 20 different languages. No single member state in the EU is large enough to balance the volumes of e.g. the US market. Therefore a single market for digital goods is an absolute requirement for the connected economy to flourish in the EU. Language and cultural differences must indeed be respected and this cultural diversity creates opportunities as well as obstacles. Therefore to carefully manage this in the policy and regulatory means of the EU's internal market goals will be key to the success of Europe in the global knowledge based economy.

It is crucial to modernize the antiquated content regulation that dates back from before the appearance of the digital media and before the Internet provided a universal tool to produce, distribute and consume digital goods.

Traditional territorial licensing also hinders new technology and service developments like follow-me services whereby the consumer can seamlessly continue to consume content across Europe without the necessity for the media service provider to clear rights for all inhabitants of the "roaming" country, since the latter cannot access the service. This is a step in territorial dimension when European consumers can continue to enjoy their "home" market media services across Europe.

Important distinction should be made between 'on-demand' and 'on-line', especially from a copyright perspective, as making content available on-demand over IPTV (Telecom, Cable or hybrid networks) is not an on-line issue where content becomes available on internet, cross-territory in an uncontrolled manner.

Harmonization of private copy exemption needs also encompass technology neutrality. The regime should be constructed independently of any physical storage media format and any solution architecture e.g. if the storage function is embedded in a consumer device or in a network. Notably, PVR and *nPVR* (*network PVR*) have the same functions and should not be discriminated against by law or special consent from rights holders. Hereby, competition between technologies is allowed and most suitable solutions will be accepted by consumers. In addition, the follow-me service of *nPVR* should also be considered.

Avoid double taxation of end-users e.g. direct licensing and levies. This adds to the legal digital cost of the service and irritates consumers

Potential vs. actual consumption is a key digital policy principle. Copyright in digital age should focus on the right to use being transferred, e.g. one-time view (scheduled/on-demand), time limited view (e.g. 24 hours) perpetual (download to own). The right to use should be decisive factor for pricing digital content and not the transmitting network, device or screen. A given consumer should not pay more than once for given content and given right to use.

Additionally the emergence of digital technology and IP based core networks over all forms of distribution of content and services already is driving convergence that removes the borders between broadcast, telco and cableco – fixed or mobile. Hence there is an urgent need to assure a level playing field between these different access networks. The different capabilities of access technologies are mainly a matter of device display capabilities and needed bandwidth to feed those displays

Targets and action plans:

- Digital Single market to be defined and enforced latest 2012
- Online content legislation updated to facilitate the digital economy by 2012

6        100% Broadband coverage needs to be realized as soon as possible.

Ever since the introduction of mobile telephony gave access to services independent of location mobility has been proven to be of very high value both for professional and private usage. European industry took the lead in mobile communication ever since the global success of GSM. The evolution from GSM to 3G (UMTS) and 4G (LTE) technologies adding also broadband capabilities in the mobile arena has over the last years surpassed even the most optimistic estimations. With IP-based connectivity reaching into much broader classes of devices and applications than we have today there is no doubt that mobile broadband will be the default connectivity for a large variety of devices and applications in the future ultimately reaching 50 billion connected devices around 2020. Mobile broadband will be the default connectivity enabler, complemented with e.g. fixed fibre-based connectivity for applications demanding very high bandwidth like multiple HDTV streams. Already today substitution of fixed DSL lines by mobile broadband e.g. based on HSPA 7.2 Mbps is happening in the market. In addition, already today 4G systems are being commercially deployed giving initially 10 times the data rates compared to today's HSPA, in the future 100 times the data rates are possible with IMT advanced technologies. Thus a tremendous global equipment market for mobile broadband is ahead of us, an area with clear European leadership that needs to be carefully nurtured in order to maintain competitiveness.

Europe has a track record of being in the global forefront for mobile communications by assigning sufficient harmonized spectrum to support efficient usage and having a proactive regulatory policy driving growth in the mobile sector. It is essential to keep up this tradition and ensure continued access to suitable spectrum resources.

Europe with below 2 % fiber penetration on average is seriously lagging behind other regions in fiber deployment, e.g. Japan, Hong Kong and Korea at 30-50%. Thus in order to fulfill the EU2020 vision a broadband strategy that puts Europe at the lead needs to be established urgently.

Proposed actions and targets:

---

- Sufficient harmonized spectrum for MBB
  - Investment friendly regime for fiber network deployment established by 2010
  - Fiber household penetration reaching 30% by 2015
  - Overall broadband penetration 100% by 2013
  -
- 

*Ericsson is a world-leading provider of telecommunications equipment and related services to mobile and fixed network operators globally. Over 1,000 networks in more than 175 countries utilize our network equipment and 40 percent of all mobile calls are made through our systems. We are one of the few companies worldwide that can offer end-to-end solutions for all major mobile communication standards.*

*Through our Sony Ericsson Mobile Communications joint venture we offer a range of mobile devices, including those supporting multimedia applications and other services allowing richer communication.*

*We invest heavily in R&D and actively promote open standards and systems. Also reflecting our ongoing commitment to technological leadership, we have one of the industry's most comprehensive intellectual property portfolios containing over 23,000 patents. Our origins date back to 1876. The parent company is Telefonaktiebolaget LM Ericsson (company registration number 556016-0680). Our headquarters are located, and the Board of Directors is seated, in Stockholm, Sweden.*