

Creating a brighter future

Response to the 'Public Consultation on the eHealth Action Plan (eHAP) 2012-2020'

25th May 2011



Fibre to the Home
Council **Europe**

www.ftthcouncil.eu

Contents

General Comments 3

Questionnaire response 8

General Comments

The FTTH Council Europe (hereinafter the FTTH Council) welcomes the opportunity to participate in this ‘Public Consultation on the eHealth Action Plan (eHAP) 2012-2020’.

The FTTH Council Europe is an industry organisation with a mission to accelerate the availability of fibre-based, ultra-high-speed access networks to consumers and businesses. The Council promotes this technology because it will deliver a flow of new services that enhances the quality of life, contributes to a better environment and increased competitiveness. The FTTH Council Europe consists of more than 130 member companies. Its members include leading telecommunications companies and many world leaders in the telecommunications industry (additional information is available at www.ftthcouncil.eu). Telecoms operators are not members of the FTTH Council and we have our own perspectives regarding the appropriate regulatory policies to accelerate NGA deployments.

The importance of FTTH in future eHealth solutions

The FTTH Council believe that the widespread deployment of FTTH will facilitate enormous benefits for the economic and social development of Europe. Many of the potential uses of FTTH such as home working and home-based eHealth applications have significant impacts with them which can be classified as positive externalities. In the case of home-working this could be relief of traffic congestion allowing other commuters to save time as well as positive environmental impacts and in the case of home-based eHealth applications decongestion of healthcare facilitates and financial savings to the State can be anticipated in addition to the direct benefits. In these circumstances, the benefits accruing to society often go far beyond the direct economic benefits identified by investors.

The challenges facing Europe and identified in the Commission’s EU2020 strategy are many but importantly include aging populations and the increased pressure on healthcare systems as well as environmental sustainability and lifting economic productivity. The FTTH Council believe that FTTH networks can help to deliver or enable a significant part of the solutions to these problems by working with service providers in the different sectors of the economy where these problems are identified.

It may be that service providers who could provide innovative healthcare services simply need much higher bandwidth in order to use simultaneously a number of applications such as high definition video, or symmetric video. Moreover, many applications right now, and more so in the future, also need the reliability of FTTH – for example connected healthcare applications, and FTTH networks are significantly more robust than existing networks. This is a very important non-speed factor if critical healthcare elements are to be put on the line will be reliability and customer trust in the networks involved.

The FTTH Council notes that this eHealth consultation seeks stakeholder input to what will ultimately be an update to the 2004 eHealth Action Plan. However the FTTH Council feels there is a concern that a central theme of that original eHealth Action Plan document, namely the importance of high speed connections, is not evident as a central theme in the current consultation. As noted in the 2004 action plan the achievement high speed internet access is a central element to ensuring that the eHealth delivers on its promise:

*'The aim of the action plan is the creation of a "European e-Health Area" and it identifies practical steps to achieve this by developing electronic systems for health records, patient identifiers and health cards, and the faster rollout of high speed internet access for health systems to allow the full potential of e-Health to be delivered.'*¹

This original perspective is supported by an established body of work² that has shown that over time, much of the benefits of ICT investments come not from the investments themselves but from firms and industries abilities to reorganised their means of production around these new technologies. The implications for healthcare systems are that the manner in which healthcare services are delivered in many areas may need to be completely rethought.

Other research shows that the economic and societal benefits of very high speed internet access (particularly high upload speeds)³ and that the availability of such connectivity changes the way consumers react to the internet. One of the biggest functional differences between FTTH and DSL options is the potential upload speeds. The many business cases put forward by different analysts rely on a variety of services which require radically different upload speeds. A key service which this two way video would require is home health-care for the elderly⁴ which could prolong the period in which older citizens could be cared for at home and leave independent lives without any loss of supervisory care. The indirect benefits in terms of relief of healthcare resources at a time of rising demand (which is likely to accelerate due to European age profiles) is clear but is unlikely to factor in private investor considerations.

This is why the FTTH Council fully endorses the introductory paragraphs of the consultation document which note that there is a need for a longer term vision for eHealth in Europe. The FTTH Council believes that any such vision needs to clearly incorporate the functionality of FTTH and recognise the indirect benefits that such networks can enable in this sector. The network targets of the Commission set out in the Digital Agenda sees a 50% subscription to networks delivering 100mbs+ implies an availability of such networks that will be close to ubiquitous. The Commission in its eHealth strategy needs to support and anticipate the availability of these networks in their forward looking policy framework. These very high speed networks can enable a set of services which are capable of completely changing certain aspects of healthcare delivery. There are many other enablers that are very correctly identified by the Commission in its consultation document and

¹ http://europa.eu/legislation_summaries/public_health/european_health_strategy/124226f_en.htm

² 'FOR A GROWING EUROPE Making the EU Economic System Deliver' Report of an Independent High-Level Study Group established on the initiative of the President of the European Commission, André Sapir *et al* July 2003.

'Catching Up or Getting Stuck? Europe's Troubles to Exploit ICT's Productivity Potential', Bart van Ark and Robert Inklaar, July 2005

³ See for example http://www.ftthcouncil.eu/documents/studies/Socio-Economics_Study.pdf

⁴ See for example http://www.ftthcouncil.eu/documents/studies/Analysis_of_Service_Portfolios.pdf

the FTTH Council endorses these measures. Increasing awareness, ensuring interoperability, creating legal certainty and R&D are all clear enablers of a future eHealth environment in Europe.

However, the FTTH Council is concerned that all of the enabling activities currently identified as priorities in this consultation document will have a relatively limited application unless and until the required and essential basic infrastructures are in place.

The need to identify and recognise indirect benefits in eHealth

The FTTH Council believes that if all those areas which can benefit directly (through services development and industry growth) as well as all the indirect (economic externalities) of such FTTH networks are systematically identified then the case for investment in these networks becomes compelling and the Digital Agenda and EU2020 targets have a possibility of being met. Right now, industry is expecting the production of broadband plans by Member States to set a path to achieve the Digital Agenda targets as called for in the Commissions Communication on broadband in September 2010. That Communication also calls for an assessment of those plans to judge whether they are credible and whether sufficient resources are being allocated.

In the current financial and economic climate, the justification for such investments which will in part need support from public finances, must compete with other possible investment areas. However, unless each area realises and highlights the benefits that such networks can deliver to their area, the funding may continue to be directed to other areas such as transport and energy networks which have traditionally absorbed far more than the approximately 4% of European Structural funds currently directed at ICT.

The FTTH Council Europe firmly believes that all sectors need to make the networks which support these innovative health services a priority. What are these innovative services and what benefits can they bring? In general we have only started to scratch the surface of what is possible but already we can see that major advances can be made in the quality of healthcare and the results achieved. Not only can better results be achieved but these improvements don't cost anymore, there are even significant savings arising from the use of these methods. To quote Commissioner Kroes⁵:

I have seen from my own visits across Europe that there are so many innovative solutions out there that can provide benefits to individuals, healthcare systems, society and the economy.

For me, it would be simply unacceptable if public policymakers did not commit to giving patients access to these solutions, even if this requires investment and structural changes to our health systems, especially as we now have so much evidence that eHealth works. Allow me to give some examples:

The world class Danish Health Data Network provides fast and efficient communication between patients, general practitioners and social care professionals. This streamlined services for patients and healthcare workers led by 2008 to cumulative savings of €1. 4 Billion.

In the UK in 2008, NHS Direct services saved 2.4 million unnecessary appointments with GPs as well as 1.2 million unnecessary ambulance journeys and visits to accident and emergency departments.

5

<http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/11/318&format=HTML&aged=0&language=EN&guiLanguage=en>

Introducing telecardiology in the Lombardy Region of Italy led to a 36% decrease in hospital readmissions and a 12% reduction of outpatient visits.

A recent study across The Netherlands, UK and Germany showed that introducing home telemonitoring systems could improve survival rates by 15%, bring a 26% reduction in hospital days per patient and make 10% overall cost savings through nurse telephone support.'

The need for a co-ordinated approach to support FTTH network deployments

The FTTH Council believes that very high speed and reliable FTTH networks can be deployed at lower cost if non-replicable infrastructure being shared as much as possible (ducts, trenches, the drop fibre including in-building wiring etc.). Much of the co-ordination work that is necessary to enable effective sharing of passive infrastructures needs to happen now, ahead of network deployment and can only be done by public sector bodies. While public bodies have a significant role to play in order to co-ordinate investors and to give a clear understanding when and where the market will rely on competing infrastructures, where it will be a single commercially deployed infrastructure and where public finance may be available, the FTTH Council believe that they are only likely to act when key beneficiaries of these networks are prepared to call for such measures.

There are two rationales supporting the need for fibre to the home (FTTH) deployments as the mass market solution in Europe. The first concerns direct demand and direct effects that having such networks would have.

A recent study by Ovum for the FTTH Council looking at the socio-economic benefits of fibre found that the provision of fibre at a municipal level is regarded as having positive benefits on health, education and other public services. These benefits range from reduced telecom costs to more efficient and new services. This is particularly true in rural areas where limited resources and distance are barriers to service quality

There is also a strong belief reported that there are a number of indirect benefits derived from fibre rollout. This is particularly true in more isolated areas where end-users face significant travel requirements and even more pronounced inability to engage with others and consume public services off-line.

In terms of usage, the study found that users largely consumed the same services and used fibre in much the same way but importantly, that users of fibre used much more of these services. For instance those tending to work from home spent over 20% more time working from home once they had upgraded to fibre. Similarly, users of education, eHealth and eGovernment all increase usage once they had migrated to fibre and it is worth noting that many of the countries cited by Commissioner Kroes as examples to be followed are in fact countries where major network upgrades are already underway or planned in the near future.

Such innovation in providing medical care does not require investments in complex customer premise equipment. High quality video-conferencing that runs on TV sets can provide an easy-to-use solution for patients who have a fibre to the home connection that offers high delivery speeds both downstream and upstream, allowing interactive services.

Indeed services over Fibre to the Home (FTTH) networks in Sweden, Portugal and the Netherlands illustrate how patients and healthcare providers easily deploy very high-speed broadband coupled with TV sets and PCs to reduce spending and improve care.

In Sweden the nurse Gudrun care channel relies on FTTH to provide patients with online video consultations over their TV sets, thereby reducing out-patient visits. At the time of the launch, the Nurse Gudrun service provided online consultations at one sixteenth of the cost of a hospital visit.

Portugal, which encouraged FTTH investment, is now able to undertake the digitalisation of its entire healthcare system to reduce costs and improve care. Portugal Telecom, for example, helped develop a system that lets doctors share diagnosis with their peers in national and international hospitals, thereby improving their decision-making process. Portugal Telecom's eHealth system has also enabled 10,000 remote consultations since its launch. Other eHealth services include developing communication networks between sufferers of rare or serious diseases, thereby reducing patients' sense of isolation.

In the Netherlands, the town of Neunen, which has one of the world's highest FTTH densities, has linked its elderly population over high-speed networks to create a video-based platform of community exchange, which reduces loneliness.

Such services are altering for the better the way communities care for the sick and elderly.

However, they are only viable because a sizeable percentage of the population – at least 20% - has access to the home fibre infrastructure that turns platforms of exchange, such as high definition video conferencing, into an affordable and secure reality.

Today governments want to reap the financial and social benefits of eHealth. Many, however, have yet to facilitate the construction of the FTTH infrastructure on which the next century of healthcare delivery will depend. The direct benefits of FTTH investments are recognised by private investors but so far public authorities have not acted decisively to capture the indirect benefits of that such networks can bring in areas such as eHealth.

While the Public Sector needs to completely rethink the organisation of healthcare service delivery organised around this new technology, it also needs to form part of a much broader plan (national plans) which needs joined up thinking across a large number of service areas.

These networks will take considerable time and resources to build while Europe's aging population need more efficient service delivery now, other, industrial policy motivations should also be considered.

If Europe's competitors in other parts of the World have fibre and Europe does not, where are eHealth solutions and applications likely to be developed if not where the supporting infrastructures are available? Where the network supporting the service delivery is available or where it is not. Once developed, those firms and research centres that lead the way are likely to maintain their lead if developments in other areas of ICT are to be our guide.

Questionnaire response

Benefits of eHealth Solutions

1. In your view, what are the main benefits you expect from the large scale deployment of eHealth solutions?

Much of the benefits of ICT investments come not from the investments themselves but from firms and industries abilities to reorganised their means of production around these new technologies. The implications for healthcare systems are that the manner in which healthcare services are delivered in many areas may need to be completely rethought.

New and innovative eHealth applications are likely to have both direct and indirect benefits associated with them. However, an essential enabler of many innovative eHealth applications is very high speed and reliable networks such as provided by FTTH.

While the direct benefits of FTTH investments are recognised by private investors, so far public authorities have not acted decisively to capture the indirect benefits of that such networks can bring in areas such as eHealth.

FTTH based eHealth innovations in providing medical care can be achieved without investments in complex customer premise equipment. High quality video-conferencing that runs on TV sets can provide an easy-to-use solution for patients who have a fibre to the home connection that offers high delivery speeds both downstream and upstream, allowing interactive services.

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Such services are altering for the better the way communities care for the sick and elderly.

However, they are only viable because a sizeable percentage of the population – at least 20% - has access to the home fibre infrastructure that turns platforms of exchange, such as high definition video conferencing, into an affordable and secure reality.

The four objectives of the Action Plan

2 Taking into consideration the background described in the introduction and existing policy developments made since 2004, do you agree with the four objectives of the Action Plan (listed below)?

Objective 1: Awareness

Answer to be ticked **Yes, Partially Agree**

Comment: The FTTH Council Europe, as set out above believes that there are other objectives that should be added. In terms of awareness, the FTTH Council believes that a holistic reorganisation of the delivery of healthcare services around the new networks and technologies needs to be undertaken so that the maximum benefits can be derived.

The target of raising awareness is twofold in the FTTH Council's view, (1) to healthcare professionals and users of eHealth services and (2) to policy makers who need to recognise the need to have widespread enabling solutions for eHealth applications in place before they are likely to be deployed.

Objective 2: address issues affecting delivery

Answer to be ticked **Yes, Partially Agree**

Comment: The FTTH Council believes that an additional objective must be that the basic FTTH infrastructures required to support eHealth services be prioritised. If objectives are divided into enabling and essential, the means of delivery of eHealth solutions are essential rather than enabling. While the Council recognise that both are required for an effective delivery of eHealth services and welcomes the Commission's initiative, the Council believes that greater attention needs to be placed ensuring that the essential elements are in place.

Objective 3: Legal Certainty

Answer to be ticked **Yes, Partially Agree**

Comment: See above

Objective 4: R&D support

Answer to be ticked **Yes, Partially Agree**

Comment: See above

Main barriers

What do you consider to be the main barriers preventing the large scale deployment of eHealth solutions?

Tick c, d, I,

Comments : The FTTH Council believes that another barrier is the absence of widely deployed FTTH networks which would be capable of delivering the kinds of innovative eHealth services that Europe needs to reduce costs and improve service delivery and sector performance. As noted above, many eHealth applications in the future will require the symmetric high speed and reliable connections that FTTH can deliver.

In your view, how should the European Commission contribute to addressing the barriers you selected above, and provide incentives to promote eHealth solutions?

Tick d,e, h and i

Comment The Commission needs to ensure that the networks that are essential to support eHealth solutions get built. The FTTH Council believes that very high speed and reliable FTTH networks can be deployed at lower cost if non-replicable infrastructure being shared as much as possible (ducts, trenches, the drop fibre including in-building wiring etc.). Much of the co-ordination work that is necessary to enable effective sharing of passive infrastructures can only be done by public sector bodies. While public bodies have a significant role to play in order to co-ordinate investors and to give a clear understanding when and where the market will rely on competing infrastructures, where it will be a single commercially deployed infrastructure and where public finance may be available, the FTTH Council believe that they are only likely to act when key beneficiaries of these networks are prepared to call for such measures.

Public bodies are only likely to act where they can see clear benefits accruing from their investments for their society.

Objective 1: Increase awareness of the benefits and opportunities of eHealth, and empower citizens, patients and healthcare professionals

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Q1. citizens and patients

Q2 healthcare professionals'

Q3. Where is co-operation most important

Ensuring that new delivery mechanisms are in place is crucial in the FTTH Council's opinion. If basic infrastructures are not in place then there is no chance that the other areas for European Co-

operation listed are likely to deliver any benefits. As a priority area, building the underlying networks must be the top priority.

Objective 2: Address issues to achieve eHealth Interoperability

Q 1 Select options a and f.

Comment: The FTTH Council believes that an additional objective must be that the basic FTTH infrastructures required to support eHealth services be prioritised. If objectives are divided into enabling and essential, the means of delivery are essential rather than enabling. While the Council recognise that both are required for an effective delivery of eHealth services and welcomes the Commission's initiative, the Council believes that greater attention needs to be placed ensuring the essential elements are in place.

The direct benefits of FTTH investments for eHealth applications are likely to be recognised by private investors but so far public authorities have not acted decisively to capture the very significant indirect benefits of that such networks can bring in areas such as eHealth. If such indirect benefits are recognised in each of the affected sectors they will make a compelling case for a more active public intervention to get these networks in place.

Objective 3: Improve legal certainty for eHealth

Q1 Select a, b and c

Objective 4: Support research and innovation in eHealth and development of a competitive European and global market

Q1 Select b,e, f

Comment

The network targets of the Commission set out in the Digital Agenda sees a 50% subscription to networks delivering 100mbs+ implies an availability of such networks that will be close to ubiquitous. The Commission in its eHealth strategy needs to support and anticipate the availability of these networks in their forward looking policy framework. These very high speed networks can enable a set of services which are capable of completely changing certain aspects of healthcare delivery.

The FTTH Council believe that FTTH testing environments ought to be available to researchers and developers in order to ensure that those developing the advanced and innovative ehealth products are able to work in an appropriate environment..

Q2 no answer.

FTTH Council Europe ASBL



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Thank you very much for your contribution.

Your response has been successfully submitted. The IPM reference number is: 631123812491214511