Fibre still growing in Europe

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Closing the gap

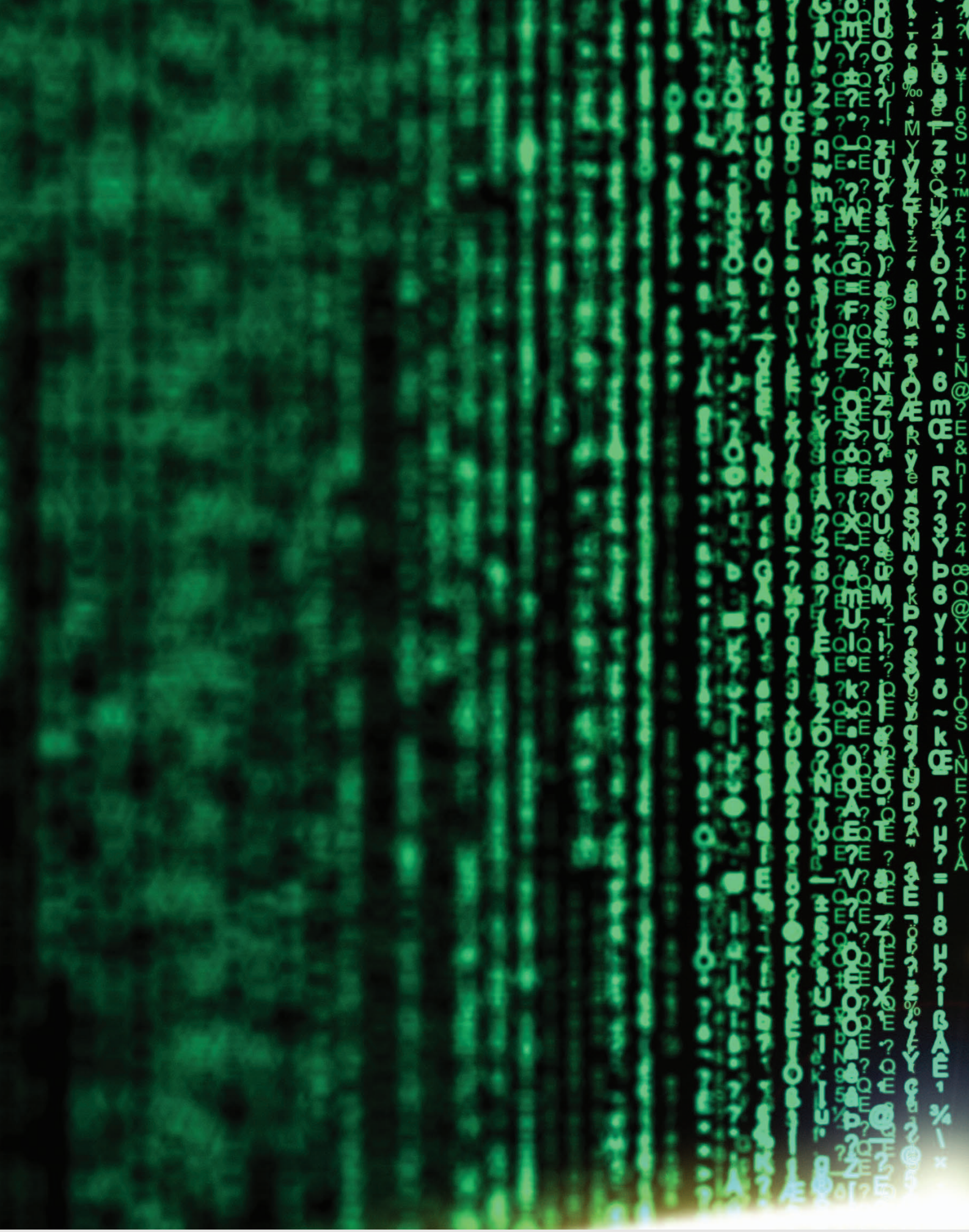
Tech talk

# Annual Report FTTH Council Europe

April 2011 – April 2012

Fibre to the Home Council Europe

www.ftthcouncil.eu



# Content


Chris Holden


Hartwig Tauber

# A word from Chris Holden
President, FTTH Council Europe

# and Hartwig Tauber
Director General, FTTH Council Europe

This Annual Report presents the results of a very successful working year 2011/2012. The FTTH Council Europe has made a huge step forward on many topics:

- The FTTH Conference in Munich was a huge success. With another 10% increase of delegates this conference was again the biggest FTTH focused conference in the world. It was impressive to see more than 3,300 attendees registering for the FTTH Conference 2012. This year we also had many more members exhibiting and very busy exhibition halls.
- The FTTH cost model has been implemented. With this bottom-up model the FTTH Council Europe is able to calculate the costs of implementing the Digital Agenda objectives based on fibre access networks and in doing so has demonstrated that build costs will be significantly lower than other external estimates.
- Several studies were conducted this year. They cover the hot topics of FTTH deployments including financing of FTTH networks, services for FTTH, regulatory environment and the European FTTH market.
- The FTTH Council Europe produced a number of clips that target end users and stakeholders. These include the very successful “FTTH – What is it?” clip as well as end user clips that show the benefit of using fibre connections.
- This year the FTTH Council Europe was able to position itself as a major and influential industry organisation towards the European Commission, BEREC, national regulators and operator associations like ETNO and ECTA. Activities included a well-attended technical workshop with the European Commission.

These impressive achievements were only possible thanks to the strong support of our members, the efficient work of the volunteers in our working committees, the outstanding commitment of Committee Chairs and Board Members and the dedication and hard work of our contracted team.

We would like to take the chance to thank you personally for your support for what we believe is the only future-proof broadband solution that truly has the power to change lives.


# FINDINGS

# Fibre still growing in Europe

**In spite of the current economic climate, FTTH adoption is still clearly growing across Europe. According to the FTTH market panorama for the full year 2011, prepared by IDATE for the FTTH Council Europe, more than 600,000 new FTTH subscribers have been added across Europe (defined as EU's 27 countries + Andorra, Croatia, Iceland, Israel, Norway, Serbia, Switzerland and Turkey) since June 2011. FTTH/B roll-out progressed at an annual rate of 41% in 2011.**

Analyst firm Heavy Reading, commissioned by the Council to prepare this year's FTTH market forecast, expects the FTTH subscriber base to grow from around 10.3 million subscribers today to 32 million in 2016 in 38 European countries including Russia. There were more than 5.1 million FTTH/B subscribers and nearly 28 million homes passed at end-2011.

However, further efforts are required to bring Europe on track to reach the Digital Agenda 2020 ultra-fast broadband targets. The market forecast indicates that traditional players like telcos and incumbents are playing a less important role in fibre roll-out than alternative operators and municipalities. In the words of Graham Finnie, chief analyst with Heavy Reading: "If incumbents were solely responsible for FTTH additions, and kept going at the same rate, it would take about 430 years to connect all the homes in Europe. I think we can all agree that's too slow."

## Making the Case

Although many operators claim there is not enough demand from end users for next generation network services, this is certainly not true with the right ARPU (Average Revenue per User), according to the latest findings of the FTTH Council Europe's Market Intelligence Committee. There is no demand issue with FTTH/B,

but it is a market that takes time to develop.

The most important factor remains making a realistic business case. For this reason, the Committee worked on developing a model and recommendations for future projects. 30 projects, spread across different areas, population densities and types of financing were selected and 13 of them evaluated extensively. In 2011, the Committee also researched key deployment drivers - which incidentally turn out to be services.

Throughout the year, several interesting discoveries were made. For example, bundling smaller projects into a single platform is recommended, making it easier to obtain equity from institutions such as the European Investment Bank. Also, we have found out that over time, growth of FTTH uptake is virtually always linear and that people are prepared to pay more for premium services, such as home monitoring and TV on demand.

*Jan Schindler, Chair of Market Intelligence Committee*

## Making Haste - Slowly

One of the main objectives of the Market Intelligence Committee this year was to better understand FTTH vs. FTTB sub-segmentation. Also, the intention was to gain far more insight into what is currently driving FTTB, which is an important part of today's total fibre market. FTTB is largely being driven by a variety of large projects, which are taking place in Eastern Europe. Furthermore, as the economic climate remains uncertain, the once-predicted fast shift to full fibre roll-out in Western European countries such as Germany and France doesn't seem to be happening. Europe appears to be at an intermediate step on the path to FTTH. However, the combination of copper and fibre is slowly moving in the direction of more fibre and reports indicate that FTTH is growing faster than in previous years.

*Tom Bervoets, Project Manager of Market Panorama and Market Forecast, Market Intelligence Committee*

## Next Top Model

There are many different ways of financing fibre roll-out, from Public Private Partnerships (PPP) to government grants, and it is important to establish whether any of these methods have a clear edge over others. The recent Financing Study by IDATE and Telecom Advisory Services concludes that there is no ideal model - the choice depends on the market characteristics. Is it a rural, urban or suburban area, for example? How much market competition is there? We have found out, however, that in some geographic areas some models are more applicable than others.

For any financial model to be successful, it is extremely important to create a very good, thorough business plan. This should cover homes passed and include realistic subscriber take up rate and information on whether an incumbent broadband network is already in place. Private investors tend to look for a fast return, guarantee and exit strategies. They are not used to long-term investments that municipalities, for example, are familiar with. Also, the private parties often borrow funds for investing from banks, which will also require some kind of certainty.

*Irma Demsar, Project Manager of Financing FTTH Networks study, Market Intelligence Committee*

## More ARPU, More Uptake

Several years ago, the FTTH Council Europe demonstrated that with Fibre to the Home, an average operator can generate 30% more ARPU than with any other technology. This year, far more extensive research was held, which also looked at the subject from the operator's point of view.

With an extremely broad sampling across Europe, Asia and the US, the ARPU figure now turns out to be even higher at 46%. That has important consequences for business and exploitation models, and financing options. A key reason for that high percentage is the fact that a FTTH customer will order more services because they will be delivered in the intended quality, whether it's fast uploads, high-definition TV or videoconferencing. In the longer term, different types of operators will all see the same kind of uptake levels. Uptake doesn't entirely depend on what the client wants, but largely on the operator's strategy. But it would appear that the claim that there's no real demand for FTTH is definitely wrong.

*Joeri Van Bogaert, Project Manager of Services Available in Europe study, Market Intelligence Committee*

# Catching up with bandwidth needs

**In recent years, the way we interact with the devices and media around us has continued to evolve rapidly. Applications used within the professional segment are also being taken up at home, for instance enhanced cloud services and videoconferencing.**

There has been a tremendous increase in usage of social media, tablets, smartphones and laptops. Also, media-rich entertainment is on the rise, with interactive games and innovations such as Apple TV and Google TV leading the way. Demand for cloud-based content management, allowing people to move their work or entertainment content between devices, or access it from different platforms, is expected to grow exponentially.

It seems reasonable to assume that soon, all media will be streamed or downloaded. The coming generation of image resolution is four times higher than today's HDTV, enabling 3DTV in full HD quality. A film in that format won't fit onto a blu-ray disk. iTunes is an incredible success, and the UltraViolet industry consortium is offering a video service along the same lines, allowing users to purchase and watch content anywhere.

In addition, healthcare applications that were once only for top facilities are being more widely distributed, as increasing numbers of practitioners and caregivers discover how they can pool expertise and monitor patients more efficiently. The demand is there, and in healthcare this demand is set to grow rapidly, given Europe's aging population, which has an increasing life expectancy and a clear desire to remain independent. But all these scenarios for the future depend on the availability of high-speed networks.

## Mining for Gold

In 2011, the Content & Applications Committee collected, analysed and consolidated the existing data already in the possession of the FTTH Council Europe and all its members.

One topic in particular seemed to require further attention: what services are really relevant for each kind of players? Utilities, telcos, alternative operators and so on all have different interests when approaching the market. They need to balance a number of different elements, like ownership of the infrastructure, brand recognition or trust. That last point is very important: do I want a third party - one that makes revenue from data mining - managing my home devices or storing my medical records?

## Leave It to the Geeks

Historically, the industry has never been extremely good at accurately predicting what applications and services will take off. Back in the ISDN era, all kinds of services were predicted, most of which never actually appeared, whilst the market took a completely different direction. And now, creative geeks are preparing things nobody can imagine today. Instead of trying to invent and anticipate services, the Content & Applications Committee believes it should document those services that are on the verge of being deployed as well as share best practices from service providers. The Committee thus issued the white paper "FTTH: Shaping the Future of a Content-based World", which was made available during the FTTH Conference 2012 as a brochure and was also included in the third edition of the FTTH Business Guide issued by the Business Committee.

Today's catalogue of services has been divided into categories and looked at from different perspectives, to find out what models work best in particular cases. Who is delivering the infrastructure for services, and who will be delivering the actual services? For example, municipalities can provide the infrastructure for some great over-the-top services developed by another party.

## There Is No Killer App

The way people interact with data and the variety of applications are the drivers for the market. There doesn't seem to be one killer application that will drive fibre, and different regions and people will have different needs. But cloud services will play a major role. The cloud takes user requirements from the enterprise or campus environment to broadband networks, allowing us to do the same things in our home as in our - gigabit connected - workplace. Cloud services require exactly those two things that characterise fibre: huge capacity and symmetry.

Users need the option to upload and download huge files or run processes, requiring very high peak bitrates. Someone might not want to stream video, for example, but download it for a variety of reasons, such as editing it, adding commentary, or using a section elsewhere. Instead of just streaming video it needs to be downloaded and uploaded instantaneously. There will still be a lot of streaming, but our networks will have to accommodate this along with ultrafast downloads. Only fibre can do that.

*Wolfgang Fischer, Chair of Content & Applications Committee*

# The real cost of fibre

**When the Digital Agenda Europe and broadband targets - 100 Mbps for 50% of all Europeans by 2020 - were announced by Neelie Kroes, the European Commission consulted the FTTH Council Europe to do some maths.**

The European Commission's previously calculated cost of rolling out fibre across Europe - 280 billion euro - should turn out to be at least a third lower. According to the FTTH Council Europe's cost methodology study, the total cost will amount to 192 billion for 100% coverage and 50% adoption. That vast difference could make fibre projects far more attractive to governments and a variety of investors.

This lower total cost has been calculated by looking at a larger range of extremely accurate data, such as census reports, for example, but also aerial photographs which help calculate exact population densities. Factoring in what's already actually been deployed, or is in the process of being deployed, brings down the cost even further. What's more, even greater savings can be realised through infrastructure sharing, which could be through existing telecommunications ducts, or in ducts owned by other parties, such as gasworks and electrical companies, or even by using aerial cables in places. This is the kind of approach Google is taking in its Kansas City Gigabit-per-second project.

This all suggests that in practical terms it won't be nearly as expensive to equip Europe with fibre and national governments won't need to put off investing in an infrastructure that is going to make a huge difference to their economies and societies. Not all countries have national broadband plans, and some existing plans may need refining, but using this new cost methodology can help create a practical, realistic scenario.

## Uncovering Business Models

The Business Committee is probably best known for its Business Guide. Many thousands of copies have been distrib-

uted and downloaded. The Guide details the business case for Fibre to the Home and lists all major elements. It is intended for anyone who considers planning, constructing or investing in a fibre access network. In the recent third edition, the Business Committee decided to focus on the financing of a FTTH network, dedicating an entire chapter of the Guide to this important area. In addition, two white papers were added as annexes to the Business Guide: "FTTH: Shaping the Future of a Content-based World" on fibre-based services and applications, issued by the Content & Applications Committee, and "Demystifying FTTH Installations", which comprises the ten most frequently asked questions on fibre deployment, issued by the Deployment & Operations Committee.

The focus of the new Business Guide is mainly on what FTTH Business is and how to finance it. The financial part has received a great deal of extra attention. Infrastructure is a long-term investment, requiring partners' backing. The Guide looks at different models: private equity, banks, the European Investment Bank, local or national governments, Public-Private Partnerships and so on. Also, there needs to be content and services, giving people reasons to actually use all the available bandwidth.

## Waiting for Regulation

An interesting finding is the fact that pension funds appear keen to invest in this business. That does make sense. Long-term thinking and investing might hold back some traditional financiers, but not pension funds. Also, it seems that across Europe there's much waiting for regulation to develop before steps are taken. While the European Commission has set clear guidelines and frameworks, it is now up to the national regulators to implement them. Once the regulatory picture is clearer, the investments should speed up. Investing in an infrastructure that can provide competitive advantages means creating assets that can sustain the economy.

If governments don't invest, now that the economy is struggling, they will be in even bigger trouble when things start to pick up again.

It also appears that cloud computing and related services will really be driving business and residential fibre. This market shows more than 50% growth, and it requires both high speed and symmetry, and that means Fibre to the Home.

## The Fibre Cookbook

Instead of trying to offer a universal solution, the Business Guide provides knowledge 'building blocks' that can be arranged into a coherent strategy and business plan. All items are applicable in any situation, all across Europe. This 'Fibre Business Cookbook' offers recipes that can be adapted according to local ingredients. Different regions will, for example, have different political conditions, legislation, markets, user requirements and infrastructure.

## Importance of Evangelising

Producing a Business Guide is important, but being visible and talking directly to interested people all across Europe is equally relevant. Last year, representatives of the Business Committee held workshops in Berlin, Geneva and Prague. These discussions with specialists from different countries can provide interesting impulses, which may then be included in the Business Guide.

*Paolo Sebben, Chair of Business Committee*

# Closing the gap

**Europe's governments and major industry organisations, such as the European Telecommunications Network Operators Association (ETNO), the European Competitive Telecommunications Association (ECTA) and the Body of European Regulators for Electronic Communications (BEREC), are increasingly partnering with the FTTH Council Europe. Its Policy & Regulation Experts Group has taken part in several EU public consultation procedures, in which stakeholders and experts are invited to provide commentary on a document or proposal.**

The focus in 2011 and 2012 is on defining how public authorities can help finance fibre development, which is particularly important for rural and semi-rural areas. Public money doesn't need to finance entire roll-outs, but can be highly useful in making a project more feasible and attractive. Such support often means regional projects can close the gap in their business case. However, putting this into regulatory terms remains a challenge.

## No Simple Solutions

The European Commission also invited the Experts Group to organise a technical workshop. Member companies explained what fibre technology is and which solu-

tions are available to 27 attendees from the DG INFSO and DG COMP of the European Commission. The Experts Group also worked on the cost project managed by the Board of Directors of the FTTH Council Europe, calculating the cost of getting fibre everywhere to realise the European Digital Agenda.

Of course, the Experts Group is still involved in discussion on ongoing topics. For example, net neutrality, where the position is that fibre has so much bandwidth that you can offer extra or premium content and services without having to limit anything else.

*Hartwig Tauber, Chair of Policy & Regulation Experts Group*

## New Fibre Financing

A study from the Policy & Regulation Experts Group asks how new ways to finance fibre networks can be found. Today, there appears to be a mismatch between telcos and their investment power and the way networks are financed. If a network is split into its three component parts, there is a passive infrastructure layer, an active layer and a service layer. Each layer requires a different investment model. For the passive layer, which is essentially the basic communications infrastructure for the next century, the return on investment takes more than ten years. For the layer above that, in which active equipment is deployed, return is some five years. For services, it is less than three years.

The passive part is by far the largest investment in the total network, representing 80% of the infrastructure. Telcos face a problem, as they have a vast copper infrastructure in place, as well as shareholders who expect a faster return than passive layer investments can provide. The study conducted by the Experts Group has examined different solutions, such as Public-Private Partnerships and municipality projects, in which there's total separation between the three different layers. The study, which was carried out by Ventura Team and Portland Advisors, proposes the idea to find a good investment model that would help incumbents and alternative operators get together and work out how to invest in a common passive infrastructure. The first idea in that area is creating joint ventures with investors, banks, municipalities and operators sharing both the investment, the risk and the proceeds.

*Florian Damas, Project Manager of New Financing Methods, Policy & Regulation Experts Group*

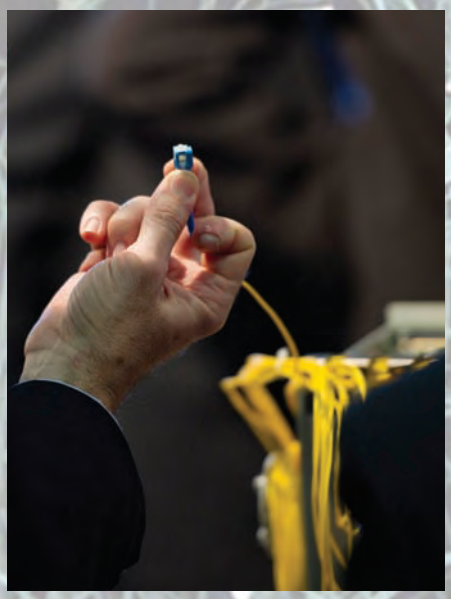
## Triggering Investment

Another debate the FTTH Council Europe has commented on is the question of copper pricing, as Commissioner Kroes stated in October 2011 that she would like to lower the prices for unbundling copper as a trigger to fibre investment. The Council's position is that, as a whole, the broadband and fibre market ecosystem is much too complicated for this to work: if you adjust one small parameter, everything can change. If we look at the two countries with the lowest copper prices in Europe, Austria and Lithuania; Lithuania is number one in our European ranking of countries with the highest percentage of FTTH/B connected households, whereas Austria isn't even in it. That's quite a strong indication that just this one parameter can't be the only thing that stimulates adoption.

One of the key factors identified as an inhibitor to building all fibre networks is regulatory uncertainty and the management of risk. In addition to the Council's response to the consultation on copper pricing mentioned above, a report has been commissioned to make recommendations on key parameters of regulatory policy that will encourage investment of next generation fibre networks.

This on-going work includes a detailed review of all existing studies. Its goal is to establish common threads and consensus, identify areas where pricing regimes are insufficient (to achieve the Digital Agenda targets) and consider alternative approaches that might mitigate or share risks. These alternative approaches, for example co-investment, will also be analysed, in order to establish their implications in relation to an assessment of fairness, reasonableness and non-discrimination.

*Chris Holden, Project Manager of Costing Methodology, Policy & Regulation Experts Group*



# Tech talk

**Fibre technology, terminology and standards are developing rapidly. Variables within existing topologies have far-reaching effects, from deployment to troubleshooting and technological support.**

Also, to forge successful partnerships and develop markets, it is vital that all stakeholders speak a common language and have access to similar methodologies and best practices. With this in mind, the FTTH Council Europe has released new editions of its FTTH Handbook and FTTH/B definitions document.

## Helping Hand

The FTTH Handbook focuses on deployment and operations and provides an impartial source of information about options for rolling out and for lighting up optical fibre, as well as for customer premises equipment. For its fifth edition the content has been adapted to a whole new range of technologies and market perspectives.

Two new chapters have been added: network planning and in-house cabling. These are hot topics. In-house cabling is a very demanding, important part of roll-out and financing. The Handbook now provides a reference model based on international standards. Network planning is also a key topic, because in fibre roll-out, it is crucial to think everything through before you act. Network planning helps find the right answers by asking the right questions. Like all other items in the publication, this is dealt with in the most impartial manner possible.

## Demystifying Fibre

The final update is a white paper about 'Demystifying FTTH Installations', on the basis of ten frequently asked questions. Also, connectors have now been listed according to international standards. The Handbook is intended to be the product and property of the entire fibre community, not just the Deployment & Operations Committee and member companies that delivered it. To be successful, it needs to be a living document, and all readers are invited to send their feedback and comments.

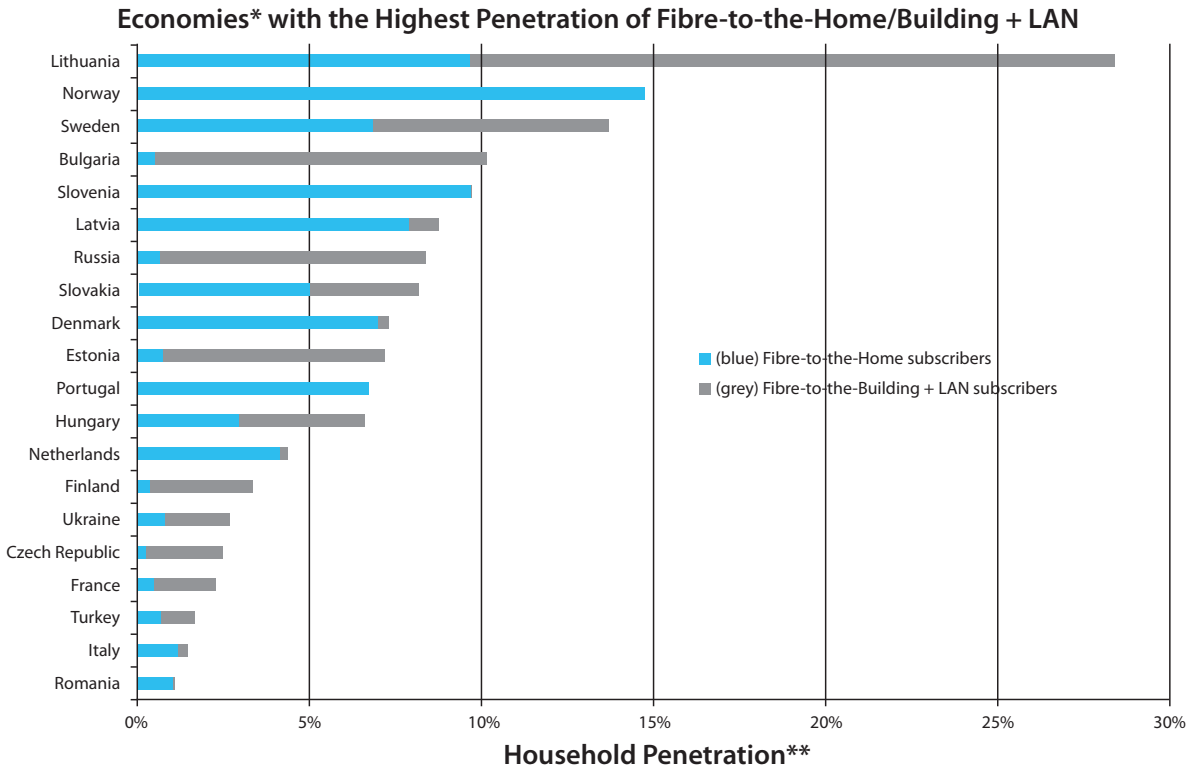
Although the world of passive infrastructure may not seem to move as quickly as that of active equipment and services, it still offers plenty of scope for confusion. The Definitions Guide, which the Committee also contributed to, precisely defines the terms used by the Global FTTH Councils in Europe, North America and Asia Pacific. It serves as a handy reference guide to anyone involved in fibre.

*Cristina Deac, Chair of Deployment & Operations Committee*

# Facts & Figures

## FTTH European ranking

The FTTH Ranking covers all countries with at least 200,000 households where the penetration of FTTH/B has reached 1% of the total number of homes. (FTTH Market Panorama)

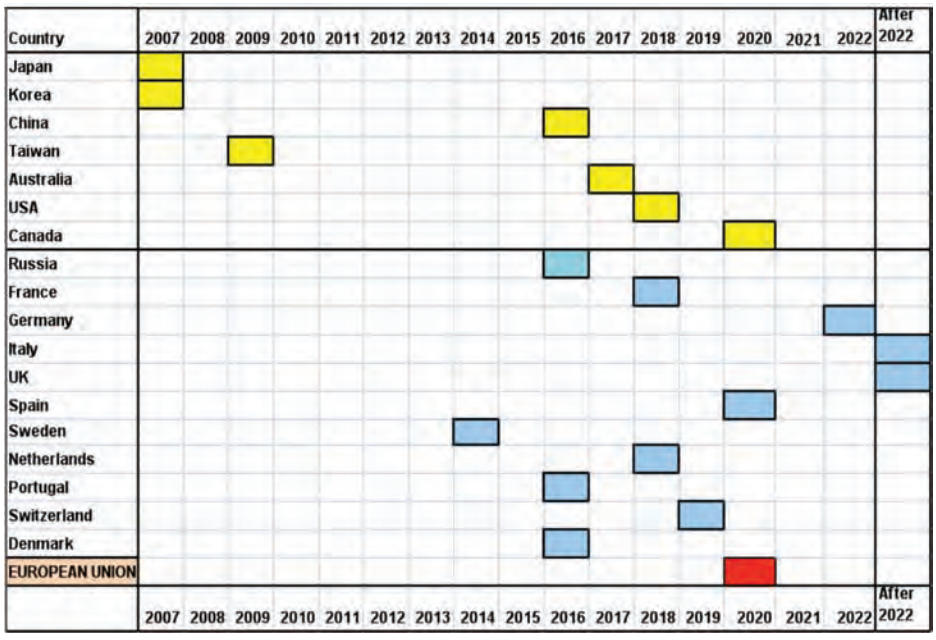



December 2011 European Ranking
Source: IDATE and FTTH Council Europe
February 2012

* Economies with at least 200,000 households
** Economies with greater than 1% household penetration

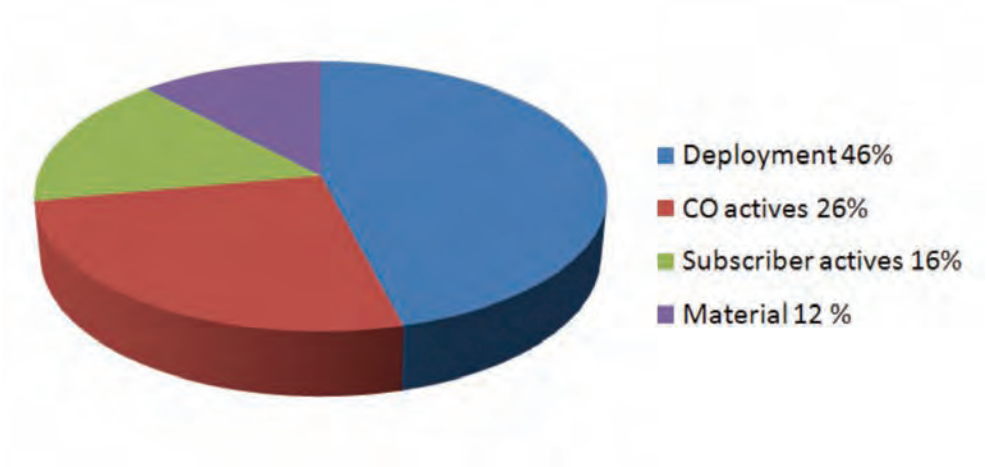
## When will you reach fibre maturity?

The graph shows, on current trends, the year in which countries will reach fibre maturity, defined as 20% of their households connected to FTTH/B.
(FTTH market forecast)



## Cost breakdown of a FTTH project

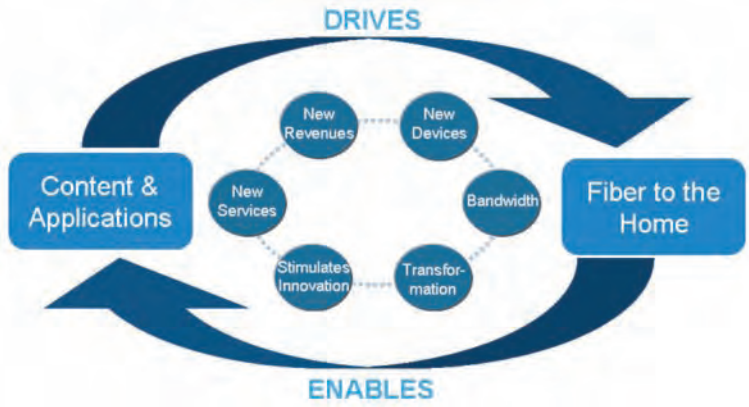
(FTTH Business Guide)




## Market drivers and enablers: The evolution of services and bandwidth is closely connected

New services create new revenue streams, encourage adoption of new devices, change end user behaviour and drive the need for increased bandwidth capacity. In return, network upgrades accommodate content and application growth, spur new services and open the door to new business opportunities.

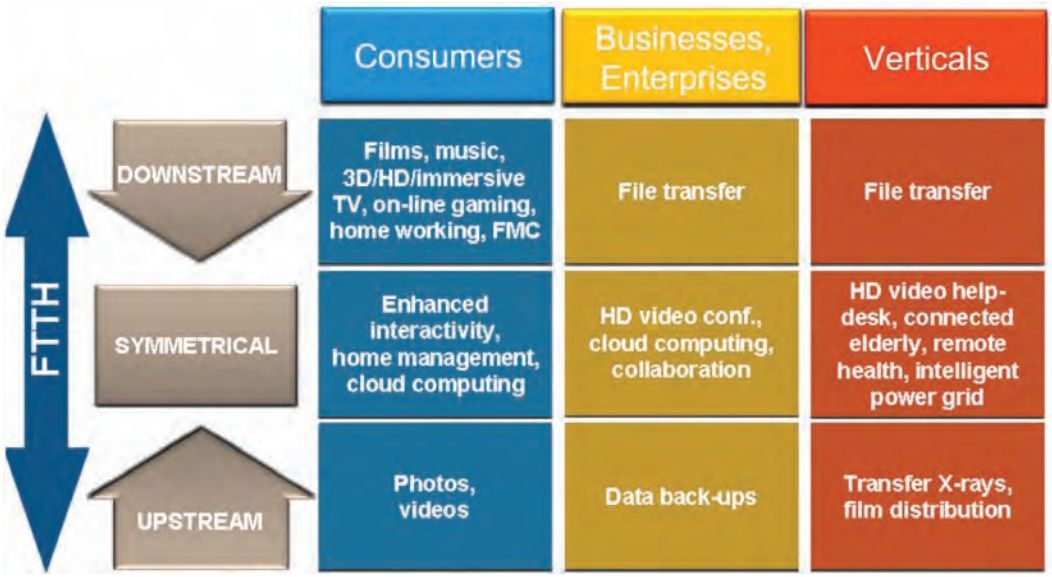
(White Paper FTTH: Shaping the Future of a Content-based World)




## Technical requirements for next generation services

Bandwidth requirements for all end user segments are set to grow rapidly, in line with the availability and adoption of new services. Cloud based applications - video streaming, large file sharing and so on - are pushing upstream and downstream boundaries. Available bandwidth is a vital network requirement for next-gen services, but not the only one. In cloud computing, where information can be stored anywhere in the world, low latency is a particularly critical requirement. Only FTTH fulfills these requirements and future-proofs operators against a cycle of network upgrades.

(White Paper FTTH: Shaping the Future of a Content-Based World)



## Dynamics of investment models and strategies

(FTTH Business Guide)

**Operators**

| Municipalities & Utility Companies | Alternative Operators | Incumbents |
|---|---|---|
| • Long term investments<br>• Regional Projects<br>• Project costs relatively small<br>• Business case based on open access in many cases<br>• Lack of experience in planning, operating and marketing telecommunication networks | • Enter a competitive market<br>• Limited cash flow<br>• Challenge of low equity<br>• Short-term planning<br>• High risk<br>• Good experience in operating and marketing telecommunication networks | • Own a telecommunication network already<br>• Limited by "shareholder value requirements"<br>• Short-term (and sometimes mid-term) planning<br>• "big and slow"<br>• Bound to national perspective |

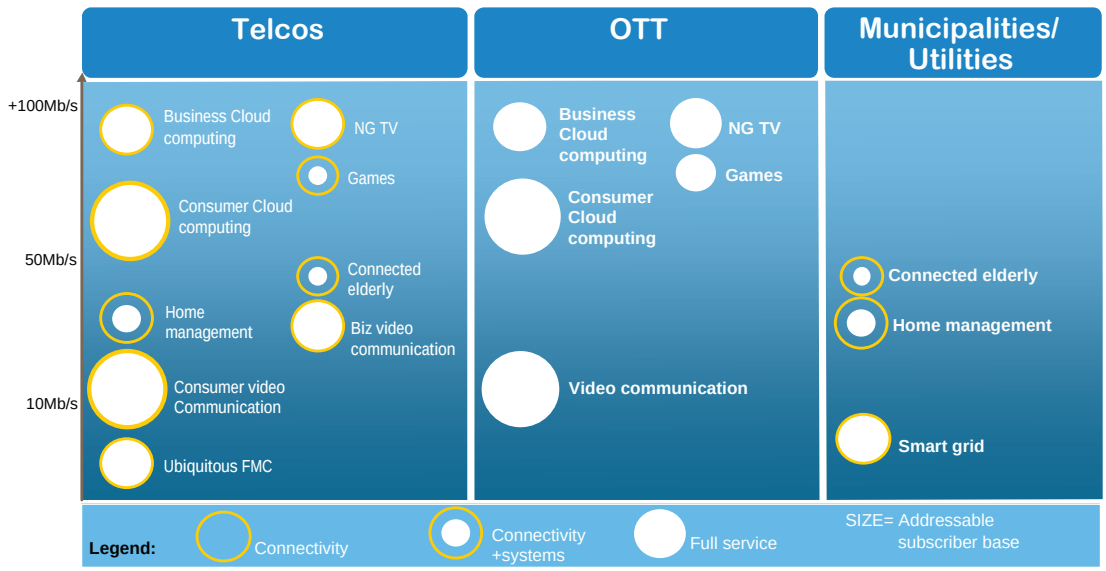
**Investors**

| Institutional Investors | Banks | Risk Capital & Business Angels | EIB |
|---|---|---|---|
| • High volume<br>• Stock exchange listed companies only (with some exceptions)<br>• Require a "professional" business case<br>• Some understanding of FTTH | • Low volume<br>• Risk averse<br>• Lack of understanding of FTTH | • Medium volume<br>• Need to be addressed directly<br>• Need for a good business story | • High volume<br>• Official role to finance infra-structure<br>• Good understanding of FTTH<br>• Slow<br>• Trigger private share |

## Next generation services value proposition

A new generation of content and applications opens opportunities for all players to engage on different levels in defining the best business model. The value proposition of different services is based on their market potential, revenue opportunity and end user requirements - security, privacy, reliance, cost vs. quality preference etc. Despite concerns over how actors will share infrastructure cost and new revenue flows, building FTTH networks is in everyone's interest. Telcos will be able to play on their strong customer relationships and branding to remain prime providers of new, differentiating products, whilst also reducing operating costs. Content, Internet and application companies will see opportunities to raise revenues and develop new services. Utilities can obtain additional revenue streams from investments that complement their prime business. And not building FTTH networks puts today's copper networks owners at risk of falling behind competing mobile and cable network operators.

(White Paper FTTH: Shaping the Future of a Content-based World)




View 2012-2015


Fibre
Home
Europe


# COMMUNICATIONS

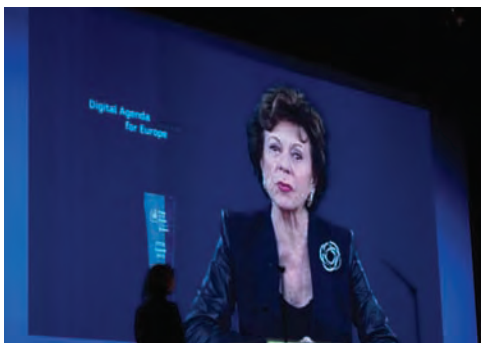
FTTH Conference 2012

# Creating a Brighter Future

14 - 16 February, Munich


**The largest FTTH event in the world!**

**More than 3,300 participants from 85 countries**




## Newly created FTTH Council Europe Awards

Individual Award was given to Neelie Kroes, European Commissioner Digital Agenda, for her long-standing, ongoing, and well-defined efforts to make FTTH a reality across Europe.

Operators Award was given to altibox, who have realised very high household penetration numbers in Norway.

*Opening speech by **Christian Ude**, Lord Mayor of Munich*

*Keynote speech by **Dr. Peter Cochrane**, futurist, entrepreneur, business and engineering advisor to international industries and governments*

New: World of Applications – demo area for hands-on experience of FTTH enabled services

More than 100 top-tier exhibitors from all over the world

FTTH Conference 2012 raises 'green donation' for German environmental organisation NABU

# FTTH Conference 2012 Testimonials

"There is no other choice. There is no other technology that can do what fibre can do."
*Peter Cochrane, futurist, entrepreneur, business and engineering advisor to international industries and governments - Keynote speaker FTTH Conference 2012*

"Even with the current euro zone crisis, there is potentially plenty of capital for FTTH over the next 8 years."
*Jacek Krauze, Financial Advisor and Corporate Financier, Portland Advisors*

"Europe's economic future requires smart, sustainable and fully interconnected transport, energy and digital networks... We believe very strongly that public intervention would help move things along."
*Anna Krzyzanowska, Head of Evaluation and Monitoring Unit, Directorate C - Policy Coordination and Strategy, DG Information Society & Media, European Commission*

"We must stop treating FTTH like telecom, but look at it as an infrastructure for society."
*Crister Mattsson, Senior Advisor, ACREO*

"If you're a community without high-speed, high-quality connectivity, you're going to have trouble attracting any new business."
*Michael Curri, Founder and CEO, Strategic Networks Group*

"I consider broadband a legal right... By 2020, all Finnish homes should have fibre connections."
*Suvi Lindén, Former Minister Communication Finland, Special Envoy ITU Broadband committee*

"Expansion of broadband can be successful if we all work together - regionally, supra-regionally, horizontally and vertically."
*Olaf Tölke, Head of Public Sector and Infrastructure Financing, Investitionsbank Schleswig- Holstein*

"When people get access to fibre, they don't just use more bandwidth - they find new ways of using it, too."
*Jacob Bolin, Project Manager, Swedish Broadband Forum*

"Old-time telecom thinking divides customers into 'home' and 'business'. But now, they require the same levels of productivity."
*Joe Savage, Managing Dirtector, Telecom Think-Tank Co.*

"FTTH is considered the best possible infrastructure for the future."
*Stefan Glusa, Executive Director, Telekommunikationsgesellschaft Südwestfalen*

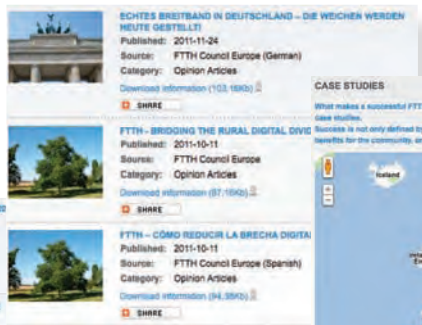
# Launch new website April 2011


## New Fibre Speed Tool – version 2011


Use the tool to compare both download and upload speeds of a range of applications travelling across the complete scale of networks available today. Feel free to download the PPTM and PDF version from www.ftthcouncil.eu and share.

## Resources

Fibre Horizons – the FTTH Council Europe monthly newsletter 4343 Subscribers



24 Case Studies from 17 countries


5 Opinion Articles *in English, French, German, Hungarian, Italian, Polish, Portuguese, Spanish*

# New: focus on video clips

End User Clips – Living with FTTH - premiered at the FTTH Conference 2012
People tell the story of how FTTH-enabled applications and services have brought multiple benefits to their work and family life.


A grandfather in Nuenen, Netherlands


A film editor in Kilafors, Sweden


A dentist in Oberhausen, Germany

## FTTH – what is it? in 11 languages

*Arabic, English, Finnish, French, German, Hungarian, Italian, Lithuanian, Polish, Spanish, Turkish*



Download all clips from www.ftthcouncil.eu and share them with the world, or view them on:

YouTube

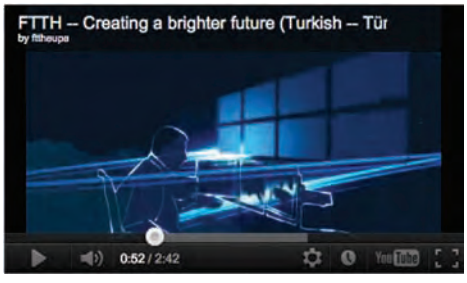
www.youtube.com/fttheupa and

Dailymotion

www.dailymotion.com/FTTHCouncilEurope

## Creating a Brighter Future in 8 languages

*English, French, German, Hungarian, Italian, Polish, Spanish, Turkish*

# FTTH Council Europe in social media

322 likes

1915 members

883 followers

# Press relations

112 interviews with media in 23 countries
3 Press conferences in Paris and Munich (2)

4 local media campaigns in Italy, Hungary, Poland and Germany

28 press releases in various languages
*English, French, German, Hungarian, Italian, Lithuanian, Norwegian, Polish, Russian, Spanish, Ukrainian*

102 press clippings in various languages including key national media
*Czech, Danish, Dutch, English, French, Hungarian, Italian, Lithuanian, Polish, Spanish*

# External events

36 speakers at external events and 19 marketing contra-agreements with external event organisers in 18 countries
*Austria, Belgium, Croatia, Czech Republic, Finland, France, Germany, Greece, Hungary, Japan, Netherlands, Poland, Russia, Spain, Sweden, Switzerland, UK, Ukraine*




# Resources and publications

## New Publications:

- Fibre Horizons – monthly newsletter
- FTTH Business Guide – Third Edition
- FTTH Handbook – Fifth Edition
- White Paper "FTTH: Shaping the Future of a Content-based World"
- White Paper "Demystifying the Deployment (and Adoption) of Fibre-To-The-Home"

## List of Studies:

- Market Panorama Europe
- Market Panorama Middle East
- Market Forecast 2011 – 2016
- Services Available in European FTTH Networks
- Financing FTTH Networks
- Impact of and scenarios of fibre stimulus packages and financing tools
- Develop a costing methodology that could be employed so as to specifically incentivise an early and accelerated migration from copper to fibre

**Wiki:** http://wiki.ftthcouncil.eu

## List of clips:

- Living with FTTH in Kilafors, Oberhausen and Nuenen
- FTTH – what is it? (in 11 languages)
- Creating a Brighter Future (in 8 languages)

Feel free to download these clips in MPEG or MP4 from www.ftthcouncil.eu and share them with the world!

**Website:** www.ftthcouncil.eu

- free downloads of Fibre Horizons newsletter, reports summaries, Business Guide, Handbook, Annual Reports, case studies, presentations, photos, clips, press releases, press clippings etc.

## Social Media:

- LinkedIn: FTTH Council Europe Groups
- Facebook: FTTH Council Europe Group
- Twitter: FTTHCouncilEU
- YouTube: www.youtube.com/fttheupa
- Dailymotion: www.dailymotion.com/FTTHCouncilEurope

# PEOPLE

# Inside the FTTH Council Europe -

## Organisational Structure

The **members** of the FTTH Council Europe are at the core of all activities.

**Membership Base**

The **Board of Directors** elects the **Chairman of the Board** who is at the same time the President of the FTTH Council Europe

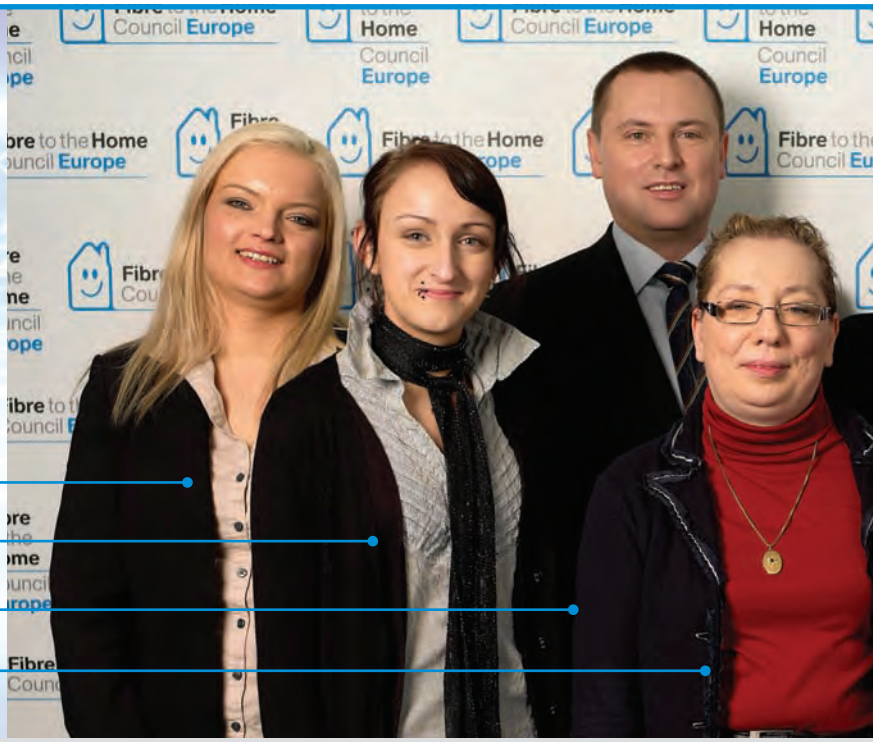
**Board of Directors – elected by members (President is Chairman of the Board)**

**Working Groups (volunteers from member companies)**

- **Business Committee**
- **Deployment & Operations Committee**
- **Content & Applications Committee**
- **Market Intelligence Committee**
- **Policy and Regulation Expert Group**

5 **Working Committees** work on different topics to support the mission of the FTTH Council Europe and to achieve the objectives of the strategy of the Council

## Team




Michaela Fischer, Project Assistant

Marion Schmied, Secretariat

Hartwig Tauber, Director General

Natascha Weinstabl, Project Manager

# – how does it work?

The members elect the 9 members of the **Board of Directors** at the spring General Assemblies

**Contracted Team managed by Director General**

The **contracted team** ensures that the activities of the FTTH Council Europe are implemented on a day-to-day basis.

- **Communications Director**
- **Communications Fellow**
- **Project Manager**
- **Secretariat**
- **Project Assistant**
- **Freelance Support: Communications Support Conference Assistant**


Lana Krestyanova, Conference Assistant

Sally Van den bemden, Communications Fellow

Nadia Babaali, Communications Director

Susan Svoboda, Communications Support

# Board of Directors


*Eric Festraets, Alcatel-Lucent, Member of the Board*

*Jouni Heinonen, Plumettaz Member of the Board*

"Last year was full of achievements: the Munich show, new case studies and an invitation by the European Commission to present the FTTH case to fulfil the Digital Agenda. Still, the European fibre to the home take up rate is clearly lagging behind. Thus, there's still loads to do. The real FTTH business is still to come and we'll have a key role to play to get it started."

*Paul Schwartz, Icotera Member of the Board*

"The FTTH Council Europe has evolved from a small group of suppliers to a significant factor in creating awareness of fibre, in building a case for deployment of fibre and in working with policy makers and regulators. Our role is to ensure that fibre is the underlying infrastructure for broadband in Europe. We are achieving goals, slowly but surely, and the future looks bright."

*Edgar Aker, Prysmian Group Member of the Board from 1 October*

"During discussions with the European Commission in 2011 it has become even more clear that FTTH is the only sustainable and future-proof solution to meet the Digital Agenda target of 100Mbps to at least 50% of all Europeans in 2020. In 2012 FTTH Council Europe is committed to help meet this target through fibre."

*Pastora Valero, Cisco Member of the Board*

"I am proud of the work done by the Council over the past year to promote FTTH in Europe, but there is no room for complacency. We want Europe to be best in class and we still have many challenges ahead of us. The job is not yet done and we should keep the pressure up!"


*Karin Ahl, Rala Infratech*
*Treasurer*
"Cooperation and transparency between us has brought us to some unexpected possibilities to be able to deliver our message about FTTH in forums that we aim for. As a member of the board I am happy to see that this is something all our members will benefit from now on and in the year to come."

*Sophie Pautonnier, Mitsubishi*
*Member of the Board*
"The success of the Munich conference showed growing interest for FTTH and recognition of the Council's contribution to accelerate FTTH deployments in Europe. Proud of this achievement, but frustrated things don't move as quickly as we'd like to. Still a lot in front of us! Let's keep our energy and optimism to reach our final goal."

*Chris Holden, Corning*
*President*
"The privilege to be part of a hardworking, enthusiastic and dedicated group of 9 people from different companies. Proving competitors can work together for a common goal. Meeting with key policy players and witnessing first-hand how the Council has become a serious force for NGA deployment ... and best of all had fun."

*Martin Hatas, Ericsson*
*Member of the Board from 1 July*
"Last year confirmed the need for ongoing work. We have way to go in reaching out to the broad public and enlighten them of the benefits and possibilities enabled by FTTH. The creation of the FTTH Council Global Alliance, MoU signed in Munich, will help us by improved co-operation and possible sharing of information and results."

*Rolf Johansson, Ericsson, Member of the Board until 30 June*

*Albert Grooten, Prysmian Group, Member of the Board until 30 September*

# Committees

## Chairs

**Paolo Sebben,**
Paolo Sebben
Consultant

**Cristina Deac**
Reichle &
De-Massari

**Wolfgang Fischer**
Cisco

### Business Committee

The Business Committee has a strong focus on the questions about the business case of fibre networks. This includes planning, financing, implementing and operating those networks. The Business Committee is responsible for the "FTTH Business Guide".

### Deployment & Operations Committee

This committee discusses all technical aspects of fibre networks. This includes the passive and active part of the network as well as deployment methods, network architectures and new fibre technologies. The Deployment & Operations Committee is responsible for the "FTTH Handbook".

### Content & Applications Committee

What new content, applications and services are enhanced or enabled by fibre networks? The Content & Applications Committee is working on projects to give an answer to this question. By doing so, it also brings together the technical side of the FTTH networks with the content and service industry.

**Jan Schindler**
Draka Communications

**Hartwig Tauber**
Director General
FTTH Council Europe

## Market Intelligence Committee

The objective of the Market Intelligence Committee is to provide information about the latest market data and market developments to the FTTH Council Europe. This includes topics like pricing of fibre networks, the use of bandwidth or the strategic service portfolio for operators. The Market Intelligence Committee is responsible for the FTTH market panorama, including the FTTH European Ranking, and the FTTH market forecast.

## Policy & Regulation Expert Group

The Policy & Regulation Expert Group has a clear focus on the regulatory and policy framework for fibre network. This includes contacts to European Commission and regulators as well as workshops and inputs for national and regional policy makers.

**MIC Project Managers:**
Tom Bervoets, Alcatel-Lucent
Market Panorama, Market Panorama ME, Market Forcast

Joeri Van Bogaert, euromicron
Services Available in European FTTH Networks

Irma Demsar, Iskratel
Financing FTTH Networks

**P&R Project Managers:**
Florian Damas, Alcatel-Lucent
Impact of and scenarios of fibre stimulus packages and financing tools

Chris Holden, Corning
Develop a costing methodology that could be employed so as to specifically incentivise an early and accelerated migration from copper to fibre

# FTTH Council Global Alliance

## FTTH Council Global Alliance – Global Power with Regional Strength!

The FTTH Council Global Alliance is a new platform for cooperation of the five global FTTH Councils. The FTTH Council North America, FTTH Council Europe, FTTH Council Asia Pacific, FTTH Council Middle East & North Africa and FTTH Council Africa have signed a Memorandum of Understanding that will intensify our global efforts to accelerate the adoption of FTTH on our planet.

It is important to understand that this FTTH Council Global Alliance is NOT a global FTTH Council organisation but a joint working group that enables all participating FTTH Councils to work together, exchange information and provide support to each other.

Each of the FTTH Councils will stay independent and will have its own specific messages and positions. This is necessary as the telecommunication markets are very different around the globe. There is one important and unifying element: We all share the common mission to accelerate the adoption of fibre to the home!

With the FTTH Council Global Alliance we will have global power with regional strength!

# List of Partners

| Organisation | Country | Since | Website |
|---|---|---|---|
| Europacable | Belgium | 2009 | www.europacable.com |
| European Telecommunications Network Operators Association (ETNO) | Belgium | 2009 | www.etno.be |
| FTTH Platform Nederland | Netherlands | 2009 | www.ftthplatform.nl |
| International Network of E-Communities (I-NEC) | Netherlands | 2009 | www.i-nec.com |
| Cercle C.R.E.D.O | France | 2010 | www.cercle-credo.com |
| Fibre Optics Valley | Sweden | 2010 | http://fiberopticvalley.com |
| Bundesverband Breitbandkommunikation (BREKO) | Germany | 2011 | www.brekoverband.de |
| OpTech-Net e.V. | Germany | 2011 | www.optech-net.de |
| SAMENA Telecommunications Council | UAE | 2011 | www.samenacouncil.org |

## See you at the next FTTH Conference in London on 19-21 February 2013

# Members

- 3M
- Acome
- Acreo
- Adtran
- Adva
- AFL Telecommunications
- Alcatel-Lucent
- Alexander Pressinger
- Alphion Corporation
- AND Solution
- Anritsu EMEA
- Apresa - PLP Spain
- Athens Information Technology
- Aurora Networks
- B3 Future Technologies
- BAM Infratechniek
- Bentley Systems Europe
- Berthold Sichert
- Bin Omran
- BKtel
- Brand-Rex
- braun teleCom
- Broadlight
- Calix
- Camozzi
- Canovate Group
- CBE
- Channell
- Cisco
- Comptoir des Signaux
- Comsof
- Corning
- CTTS Training
- Dätwyler
- DCT Delta
- Detecon International
- Diamond
- DKT
- Dr. Mohamad Amar
- Dong Yang Information and Communication
- DSM
- Dura-Line Europe
- Dynamic Design
- ECI Telecom
- Egeplast
- Elcon Systemtechnik
- EMC Electronic Media Communication
- Emtelle
- Enghouse Networks
- Ericsson
- Esri
- ETD Europe
- euromicron
- Exfo Europe
- Fiberdk
- Fibox
- FibreFab
- Filoform
- Folan
- Fraunhofer Institut
- Fujikura Europe
- gabo Systemtechnik
- GE Energy
- Geo Data
- Genexis
- Gerald Glaise
- Global Invacom
- GM Plast
- Heraeus Quarzglas
- Hellermann Tyton
- Hitachi
- Hochschule Furtwangen University
- Huawei
- Huber+Suhner
- Icotera
- Infotech Enterprises Europe
- Institut Telecom
- Instituto Politécnico de Viana do Castelo
- Inteno Broadband Technology
- IP.NetCom
- Iskratel
- JDSU
- JO Software Engineering
- Kabelovna Decin Podmokly
- Karl Bauer Consultant
- Kathrein-Werke
- Keymile
- KKE
- KeyFibre
- Langmatz
- LG-Ericsson
- Map Group (UK)
- Marais Groupe
- Mejdaf Trading Group
- Mitsubishi Electric
- MP Systems
- Mulder-Hardenberg
- NetAdmin System
- Nexans
- Nokia Siemens Networks
- NTT Electronics
- NYCE Networks
- Ocilion IPTV Technologies
- OFS
- Opterna Europe
- Optotec
- P&T Consulting
- Pacific Broadband Networks
- PacketFront
- Paolo Sebben Consultant
- Pengg Kabel
- Plumettaz
- PT Inovacao
- Praesidium
- Prysmian Group
- Radius Systems
- Rala Infratech
- Reichle & De-Massari
- Resulture
- Rittal
- Rotal Networks
- Scheu Netzplanung
- Senko
- Silec Cable
- SKM Skyline
- Spyra Primo
- SunSea Telecommunications
- Suttle
- Sterlite Optical Technologies
- Teldat
- Tele-Kabel-Ingenieurgesellschaft
- Telenco
- Teraspan Networks
- Tilgin
- Triax
- TVC UK Holding
- Twentsche Kabelfabriek
- TE Connectivity
- Vienna University of Economics and Business
- Wavin
- Webro Cables and Connectors
- WISI
- Zhone Technologies
- ZTE
- Zweicom
- ZyXel