

Creating a brighter future

Fibre to the Home: Taking your life to new horizons!

Chris Holden, President of the Board, FTTH Council Europe

Hartwig Tauber, Director General, FTTH Council Europe

Roland Montagne, Director Telecoms BU, IDATE

Peter Cochrane, Co-Founder, Cochrane Associates



FTTH Council Europe

Photo by Nicolo Baravalle



Fibre to the Home
Council **Europe**

www.ftthcouncil.eu

FTTH Council Europe

Our Vision: A sustainable future enabled by Fibre to the Home

Our Mission

- To accelerate FTTH adoption through information and promotion in order to enhance the quality of life, contribute to a better environment and increased competitiveness

Organisation

- Founded in 2004, non-profit industry organisation
- More than 150 member companies

FTTH Conference 2013

London, 19-21 February 2013



Europe in the slow lane?

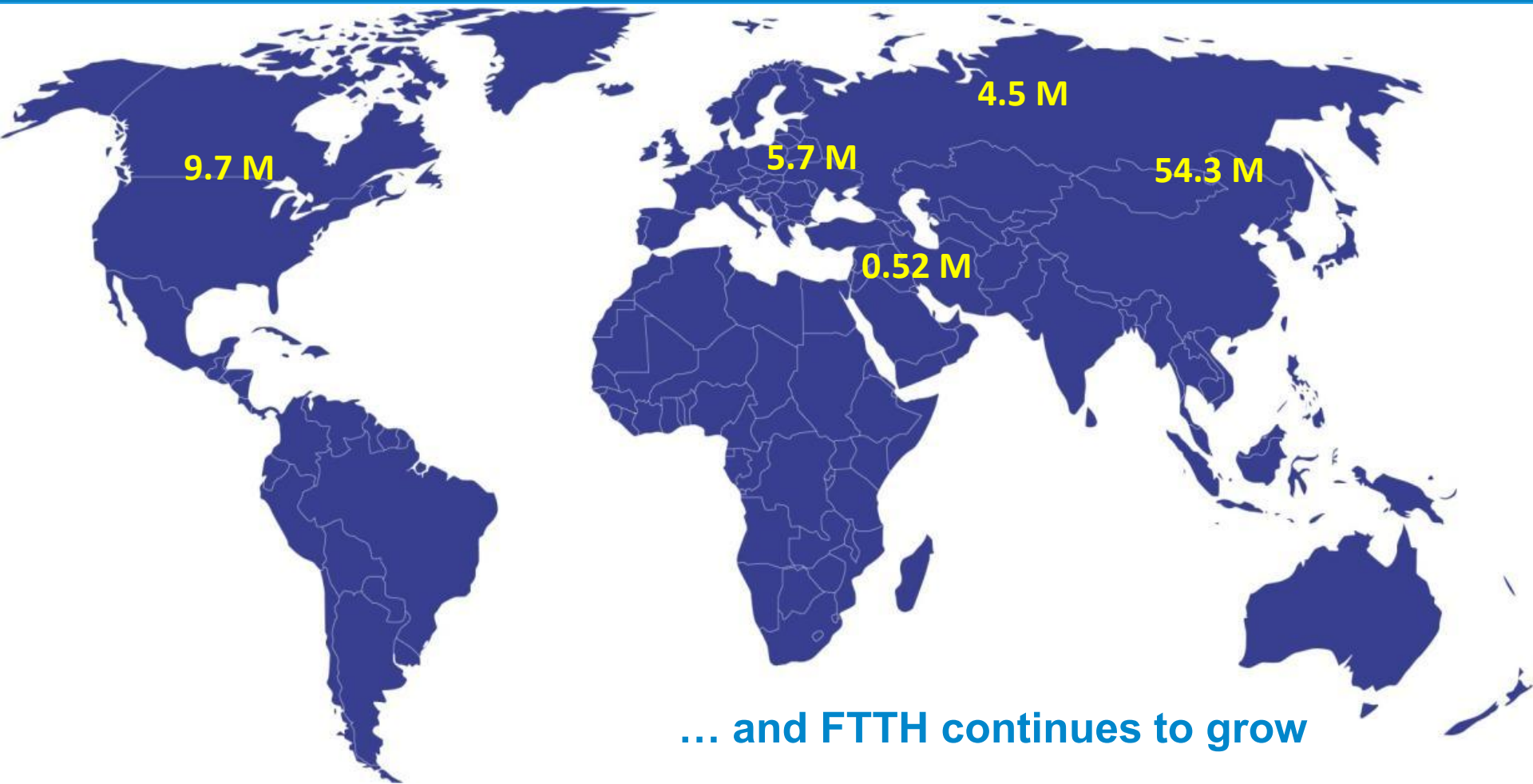
Photo by Nicolo Beavalle



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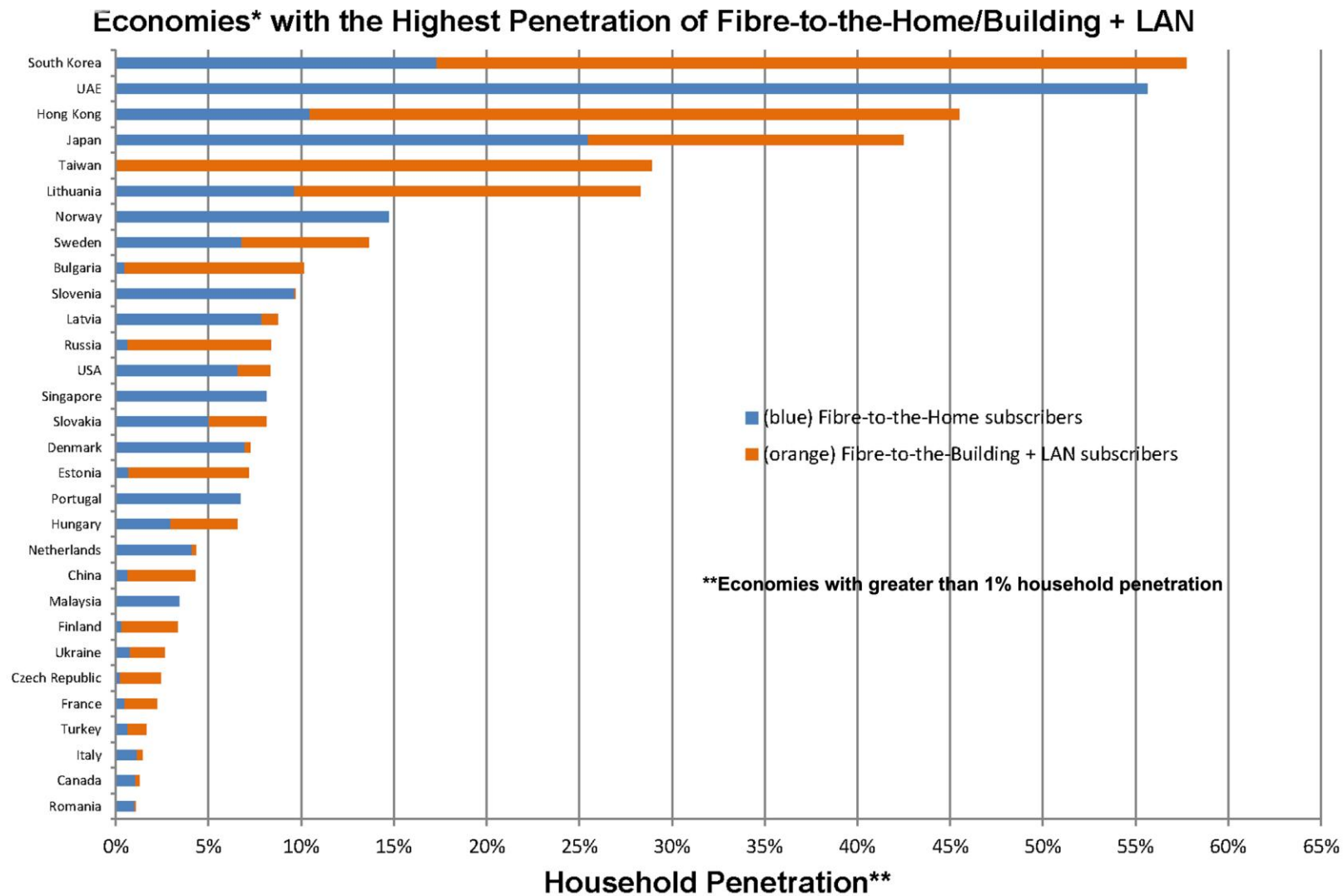
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FTTH Global panorama end-2011 – Total subscribers



... and FTTH continues to grow

FTTH Global Ranking – end 2011



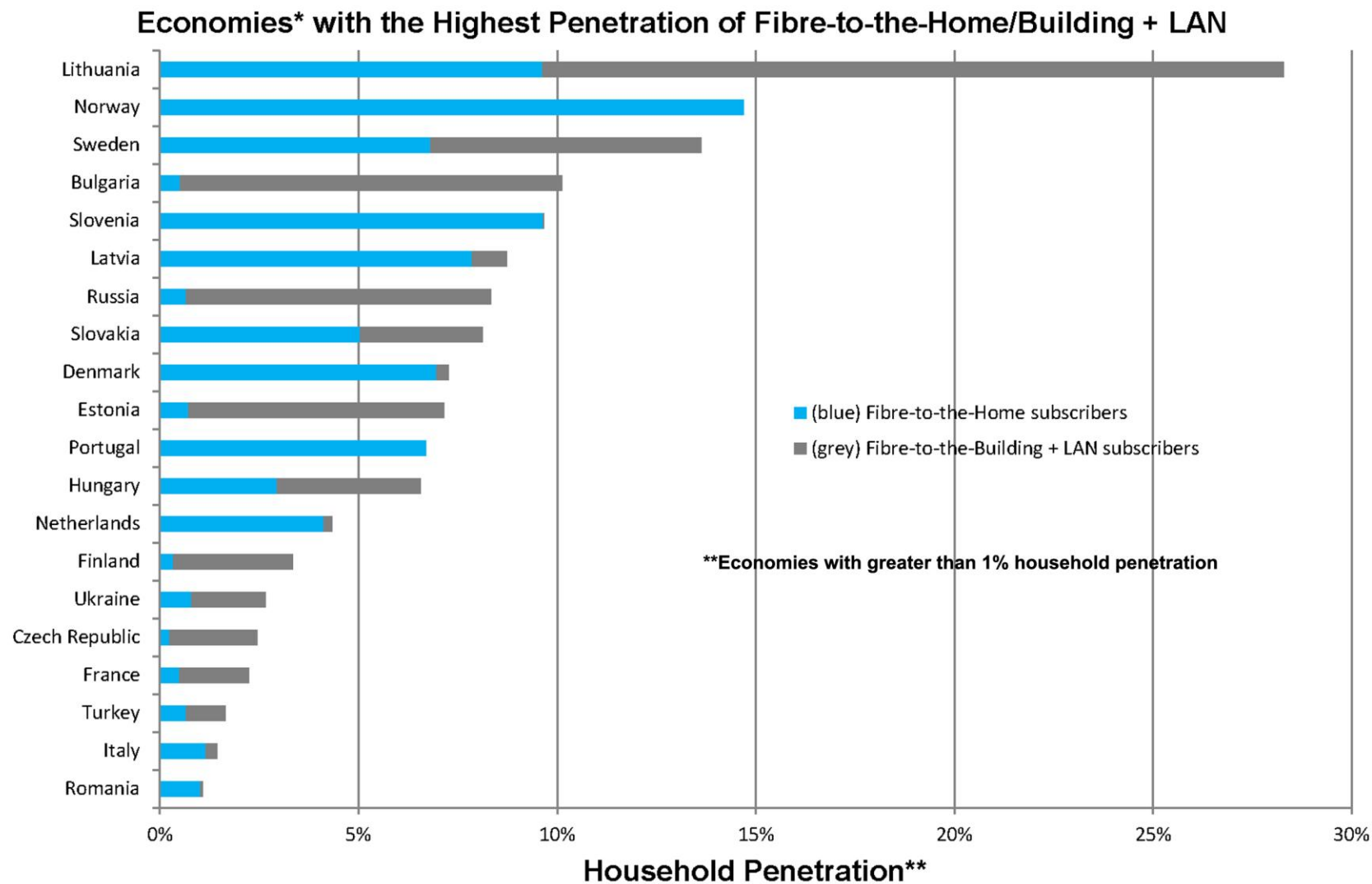
December 2011 Ranking

Source: Fibre-to-the-Home Council

February 2012

*Economies with at least
200,000 households

FTTH European Ranking – end 2011



FTTH European Ranking end-2011 - Comments

- The Ranking includes countries of more than 200,000 households where at least 1% of households are FTTH/B subscribers
- 20 countries in the European Ranking
- No new entrant
- Progression for three countries: Norway (now number 2), Latvia and Turkey (now ahead of Italy)
- Major Western Economies such as Italy and France still at the bottom of the Ranking
- Others like UK, Germany or Spain are absent

Countries included in the panorama

Austria
Belgium
Bulgaria
Cyprus
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Ireland
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Poland
Portugal
Romania
Slovakia
Slovenia
Spain
Sweden
United Kingdom

EU 27

**EU 27 +
Andorra,
Croatia,
Iceland, Israel,
Norway, Serbia,
Switzerland,
Turkey**

EU35

**EU 35 +
Belarus,
Kazakhstan,
Russia, Ukraine**

EU39

FTTH in Europe – EU35 at end 2011

➤ **5.15 million FTTH/B subscribers**

➤ **27.9 million Homes Passed⁽¹⁾**

Average take up rate : 18.4%
(20.3% in Dec 2010)

*Source: IDATE for FTTH Council Europe
Note: FTTH/FTTB definitions by the
Global FTTH Councils*

Growth rates 2011 (excluding Russia)

+28% FTTH/B Subscribers

+41% FTTH/B Homes Passed



**Players are still
focussed on
expanding their
FTTH/B coverage**

FTTH in Europe – EU27 and CIS at end 2011

EU27

➤ **4.5 million FTTH/B subscribers**

➤ **25.8 million Homes Passed⁽¹⁾**

Average take up rate : 17.5%

CIS

➤ **5.1million FTTH/B subscribers**

➤ **16.8 million Homes Passed⁽¹⁾**

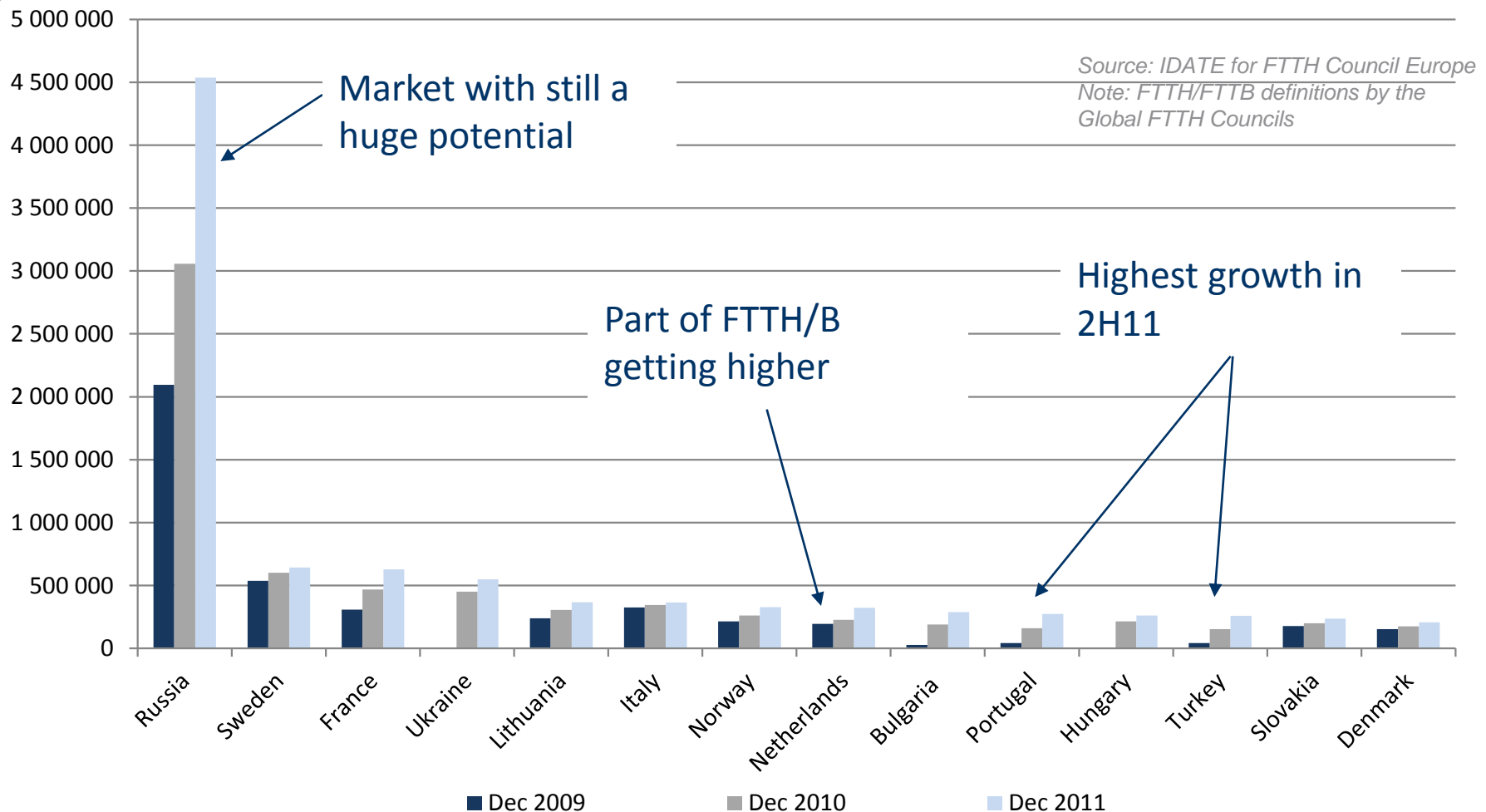
Average take up rate : 30.3%

Source: IDATE for FTTH Council Europe

*Note: FTTH/FTTB definitions by the
Global FTTH Councils*

CIS = Russia, Ukraine, Kazakhstan, Belarus

Countries with more than 200,000 subscribers



New FTTH/B Subscribers in EU39 – end 2011

Top 5 countries

► Ukraine

+100,000

► France

+73,000

► Turkey

+70,400

► Spain

+68,700

► Netherlands

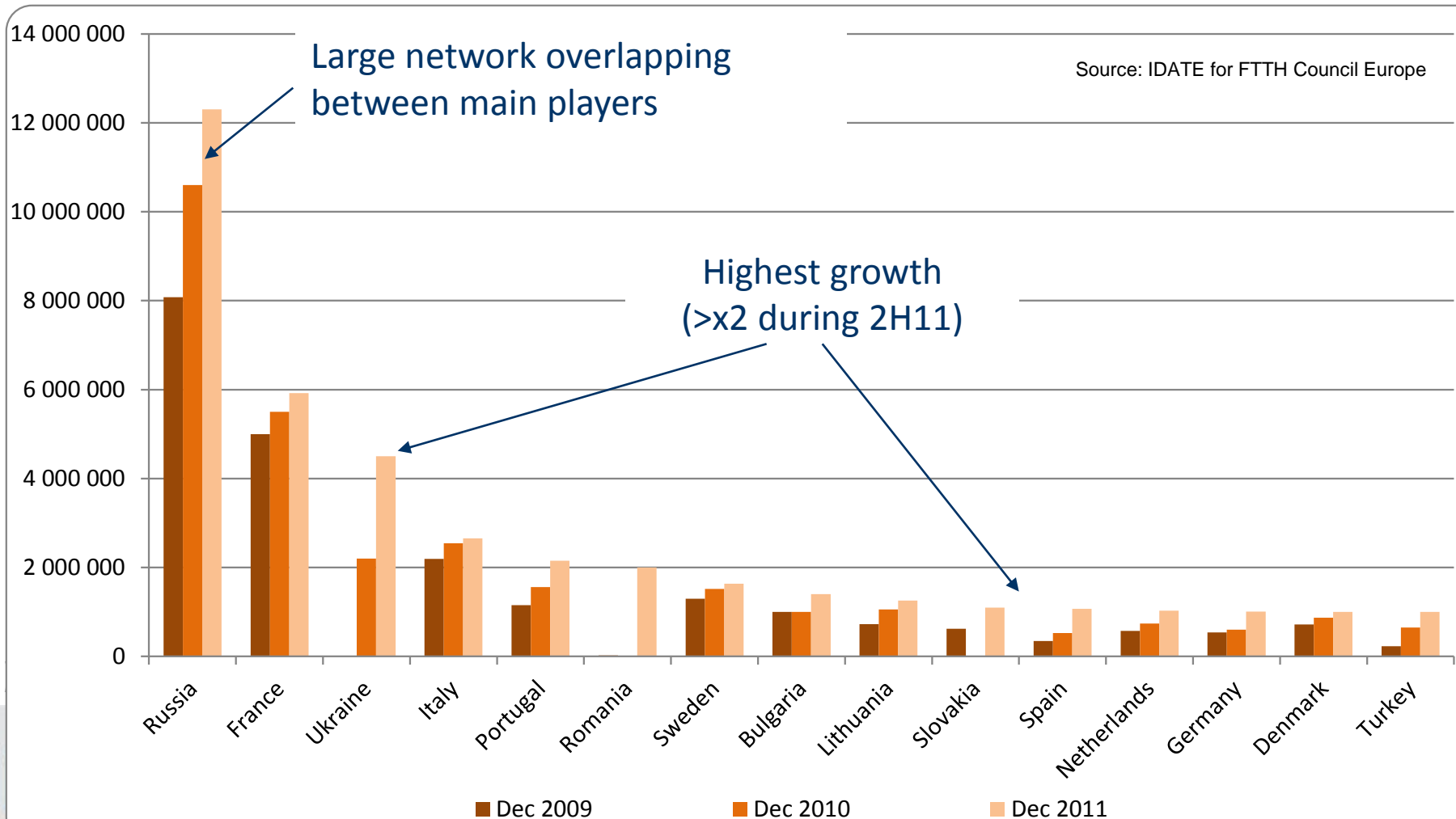
+55,000

(Russia: + 702,000)

Source: IDATE for FTTH Council Europe
Note: FTTH/FTTB definitions by the
Global FTTH Councils

FTTH homes passed in EU39 – end-2011

Countries > 1 million FTTH/B Homes Passed



FTTH/B Homes Passed trends – end 2011

- 6 countries > x2

Among which Hungary, Poland, Spain, UK

- Smallest growth in Slovenia, Italy, France, Sweden

Between 3% and 8% HP growth in 2H2011

Further rollouts planned in Italy on a national scale to be confirmed

Already good coverage in most dense areas, notably in France (FTTB)

- Noticeable growth in Netherlands, Portugal, Turkey

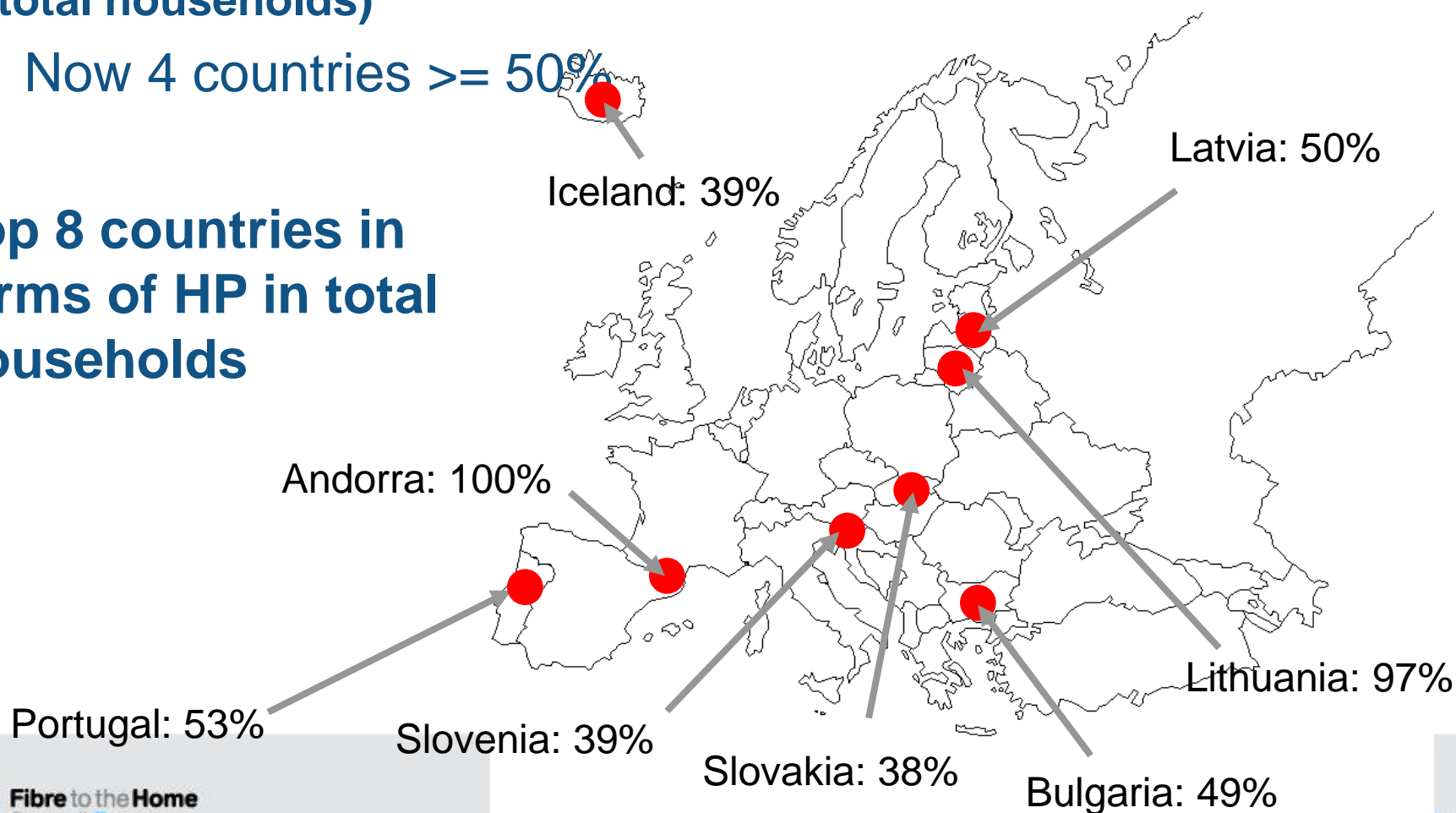
Due to renewed/intensive strategy from incumbents or alternative operators

FTTH/B Homes Passed in total Households – end 2011

Number of HP not representative of effective coverage (HP in total households)

Now 4 countries $\geq 50\%$

Top 8 countries in terms of HP in total households



FTTH/B leading countries – end 2011

► Last period of leadership for pioneer Sweden?

Sweden still heading European FTTH/B market in terms of number of subscribers, but the gap is getting very small with France and Ukraine

► High growth of Spanish market

Next step: entering the Global Ranking ?

► CIS countries: potential of the market confirmed and still very huge for Russia and Ukraine

► Apart from CIS, majority of subscribers concentrated in 8 countries

Sweden, France, Lithuania, Italy, Norway, Netherlands, Bulgaria, Portugal
> 62% of total FTTH/B subscribers in EU35

FTTH/B leading countries – end 2011

**But number of subscribers less relevant
than Take Rates ⁽¹⁾**

From the highest...

In Scandinavian countries : 60% in Norway, 39% in Sweden

In Czech Rep (42%), Hungary (39%), Russia (37%), Turkey (26%)

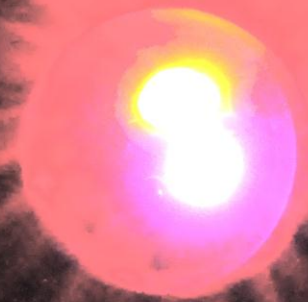
In the Baltics : 29% in Lithuania

...to the lowest

In France (<11%), Switzerland (<4%), UK (<2%)

Source: IDATE for FTTH Council Europe

(1) Number of subscribers in total Homes Passed



FTTH Panorama Methodology & Conclusions

Photo by Nicolo Baravalle



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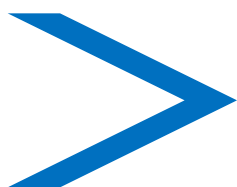
Background of the Study

- ▶ Mission on behalf of the FTTH Council Europe, 9th edition
- ▶ **Objective: to provide a complete summary of the status of FTTH/B in Europe**

39 countries analysed ([detail in annex](#))

Panorama provided **twice a year**

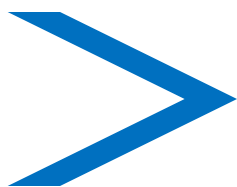
Distinction between architecture : FTTH/B vs FTTN (FTTN/C+VDSL, FTTLA, FTTx+LAN)



Characterisation of each project includes:

- Organisation initiating the project
- Key parameters & Figures
- Technical parameters
- Financing & Business model

- ▶ **Methodology used**



- Desk research
- Direct contacts with FTTH players (questionnaires, phone interviews) & IDATE's partners in several European countries
- Information exchange with FTTH Council Europe members

FTTH Definitions

INCLUDED

- **FTTH**Home – Complete Fibre Path to Home
 - in-building cables: house copper or fibre or wireless
- **FTTB**Building – Fibre to Apartment/Office Building
 - in-building cables: building copper or fibre regarded as a transitional stage to FTTH
- Both defined in global FTTH Councils, FTTH Definitions Document
www.ftthcouncil.eu/documents/studies/FTTH-Definitions-Revision_January_2009.pdf

NOT INCLUDED

- **FTTC**urb / **FTTN**ode – Fibre to Street Cabinet
 - distribution and drop cables using telco copper (DSL) or new copper
 - categorised as DSL technologies.

FTTH Projects – end 2011

► Around 260 FTTH/B projects

**33 projects
> 200k HP**



TDC
Elion
Free
NetCologne
Lattelecom
Altibox
T-Com
T2
Swisscom
.....

**17 projects
> 500k HP**



Orange
SFR
Telecom Italia
TeliaSonera Finland
TEO
KPN/Reggefiber
Telenor
.....

**10 projects
> 1M HP**



Blizoo
Portugal Telecom
Telefonica
SuperOnline
Beeline
ER Telecom
.....

*Source: IDATE for FTTH Council Europe
Note: FTTH/FTTB definitions by the
Global FTTH Councils*

FTTH Players – end 2011

► 3 main categories involved in EU35 FTTH/B deployments

Municipalities & Utilities

- More numerous
- Local deployments only



13% of total FTTH/B
Homes Passed at Dec
2011

Alternative operators / MSOs

- Most dynamic
- National or local deployments



55% of total FTTH/B
Homes Passed at Dec
2011

European incumbents

- Challenged on BB
- National deployments



33% of total FTTH/B
Homes Passed at Dec
2011

FTTH Technologies – end 2011

- In December 2011, the main architecture deployed is still FTTB
- Regarding technology, players have mainly chosen Ethernet
- MDUs are still the principal target for Fibre deployments in Europe

Main architecture deployed (homes passed segmentation)	Dec 2011	June 2011	Dec 2010
FTTH	41%	39%	37%
FTTB	59%	61%	63%

Main technology deployed (homes passed segmentation)	Dec 2011	June 2011	Dec 2010
PON	30%	29%	27%
Ethernet	70%	71%	73%

Dwellings deployed (homes passed segmentation)	Dec 2011	June 2011	Dec 2010
MDU	80%	79%	77%
SDU	20%	21%	23%

Main conclusions for FTTH

- ▶ FTTH: a new priority for operators first involved in VDSL rollouts (e.g. KPN, Swisscom,... DT tomorrow?)
- ▶ Multiplicity of players is not a insurance for market dynamism (e.g. Romania): consolidation to come?
- ▶ No new entrant in the ranking: Spain in the starting block
- ▶ Operators should be increasingly concerned with marketing their solutions

Main challenges for FTTH

- ▶ Penetration rate still very low compared to APAC and USA: what solution can be found by operators to leverage the take up rate?
- ▶ Communication about FTTH has to be adapted to touch a large public: promoting the benefits of fibre
- ▶ Objectives to be reached on national and European levels: how to work together to expand the coverage?



The background of the slide is a black canvas filled with numerous bright blue, glowing light trails. These trails are composed of many thin, overlapping lines that create a sense of motion and energy. They flow across the frame in various directions, some forming smooth, undulating waves, while others are more chaotic and tangled. The overall effect is reminiscent of fiber optic cables or data streams in motion.

What next?

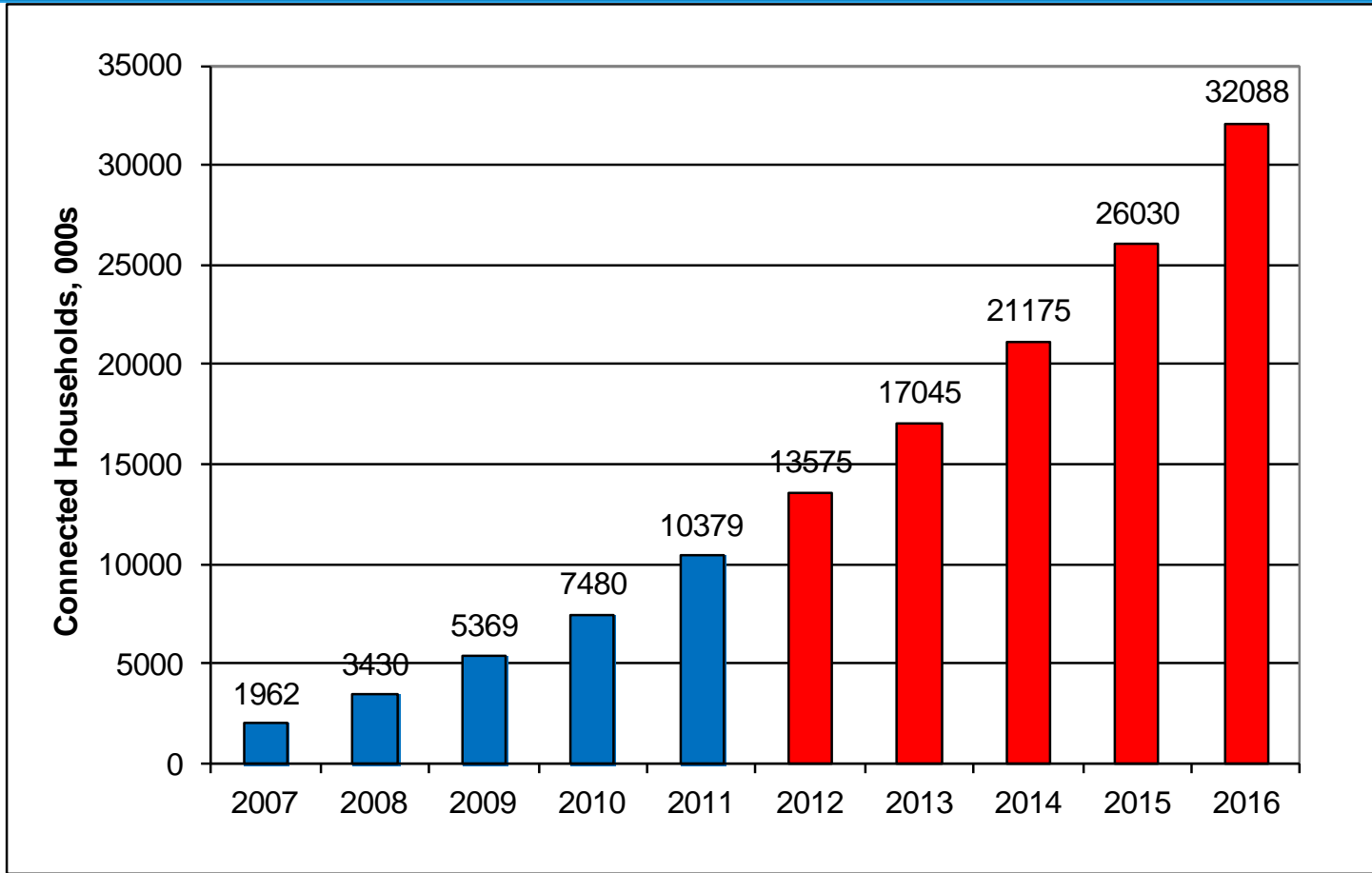
Photo by Nicolo Baravalle



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European Region FTTH Forecast

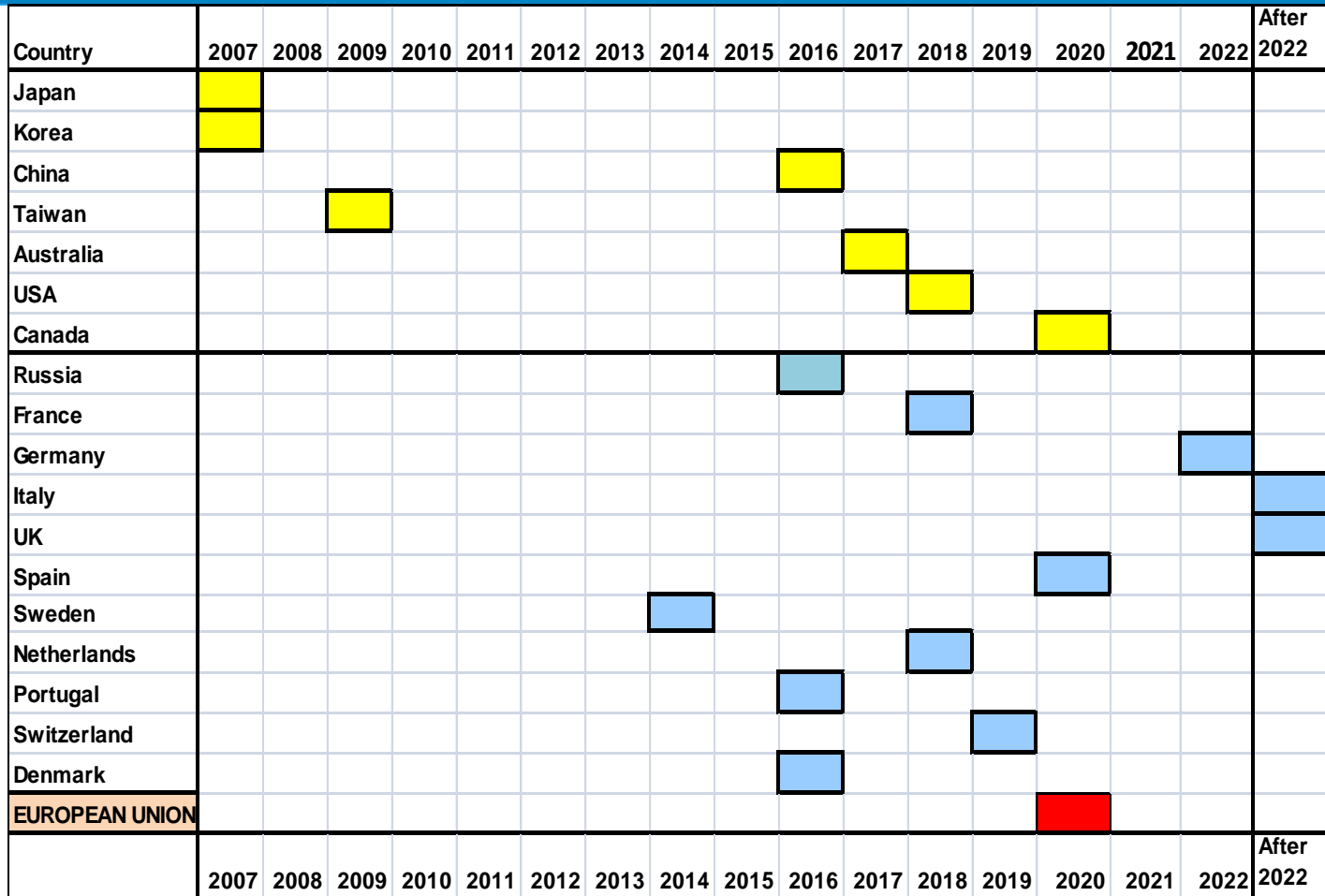


Source: Heavy Reading for FTTH Council Europe, February 2012

Note: Households connected directly to fibre (FTTH) and apartments connected via basement fibre termination (FTTB)



Europe in Context: the Race to Fibre Maturity



Source: Heavy Reading for FTTH Council Europe, February 2012

Summary

- Just over 32 million households connected to FTTH/B at end-2016 in countries covered by this forecast, representing 10.5% of all homes
- In the EU only, the total will be just over 17m, or 8.7% of all homes
- Nine of the 21 nations individually analyzed should achieve “FTTH maturity” (20% penetration) by 2016: Lithuania, Norway, Sweden, Slovak Republic, Latvia, Estonia, Denmark, Portugal and Bulgaria
- Seven of the 21 nations will still be under 10% penetration at the end of 2016: UK, Italy, Germany, Switzerland, Spain and Austria
- All players in certain Western European countries - incumbents, competitors, utilities - are far behind targets and plans
- The gap between different countries in Europe, and between EU and other regions, is still widening

European Commission Digital Agenda: 50% of European households connected to 100 Mbps by 2020

Why FTTH?

Photo by Nicolo Baravalle



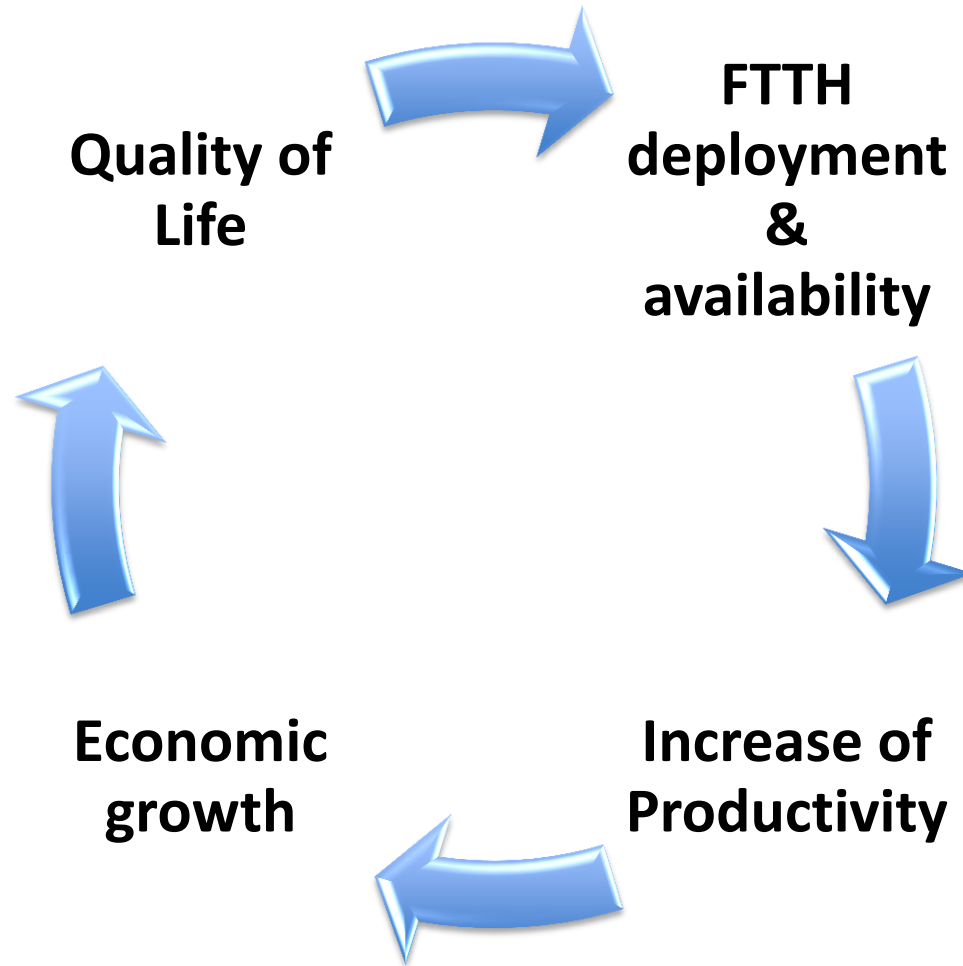
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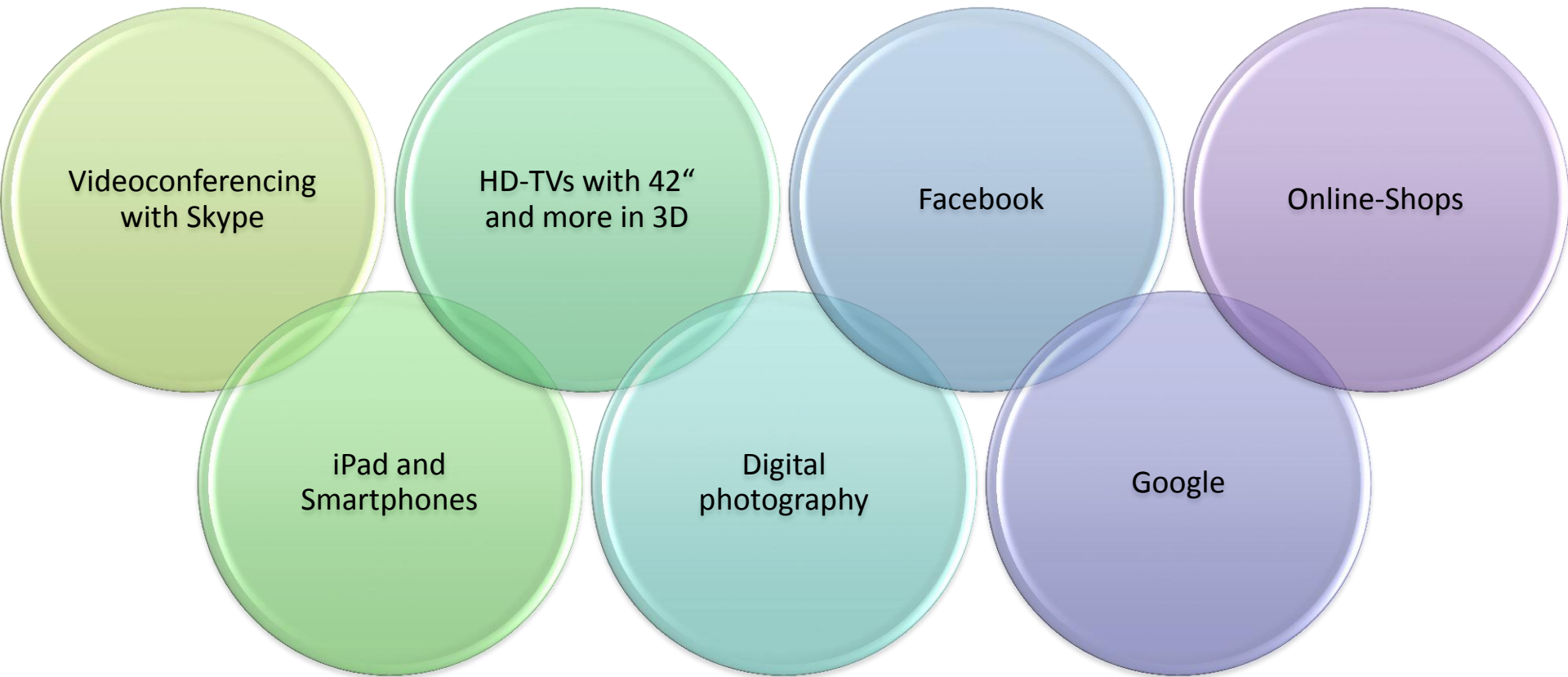
FTTH and rural areas

- FTTH in rural areas is a big chance for regional development
- It might be too expensive to get a highway or a high speed train to each village
- ...but it is affordable in Germany for instance to connect nearly every household with fibre
- A political decision: do we want prosperous regions or will the rural areas die?

FTTH – The Foundation for a successful future



What we did not know in 2000...



But we think we know what we will need in 2020 – or not?...



What about wireless and LTE?

- LTE is complementary to FTTH
- Two very different usage scenarios: LTE for mobile broadband, FTTH for fixed line access at home
- LTE will even accelerate fibre deployments as base stations need to be connected to backhaul
- LTE is NOT capable of replacing FTTH in rural areas
- Big risk: rural areas get “quick and dirty” broadband solutions with LTE and will therefore get no chance to get future proof broadband in the near or medium future



Conclusion



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Conclusion

- FTTH is the infrastructure of the 21st century
- FTTH stands for
 - Quality of life
 - Economic leadership
 - Socio-economic benefits
- ...and the basis for a competitive Europe

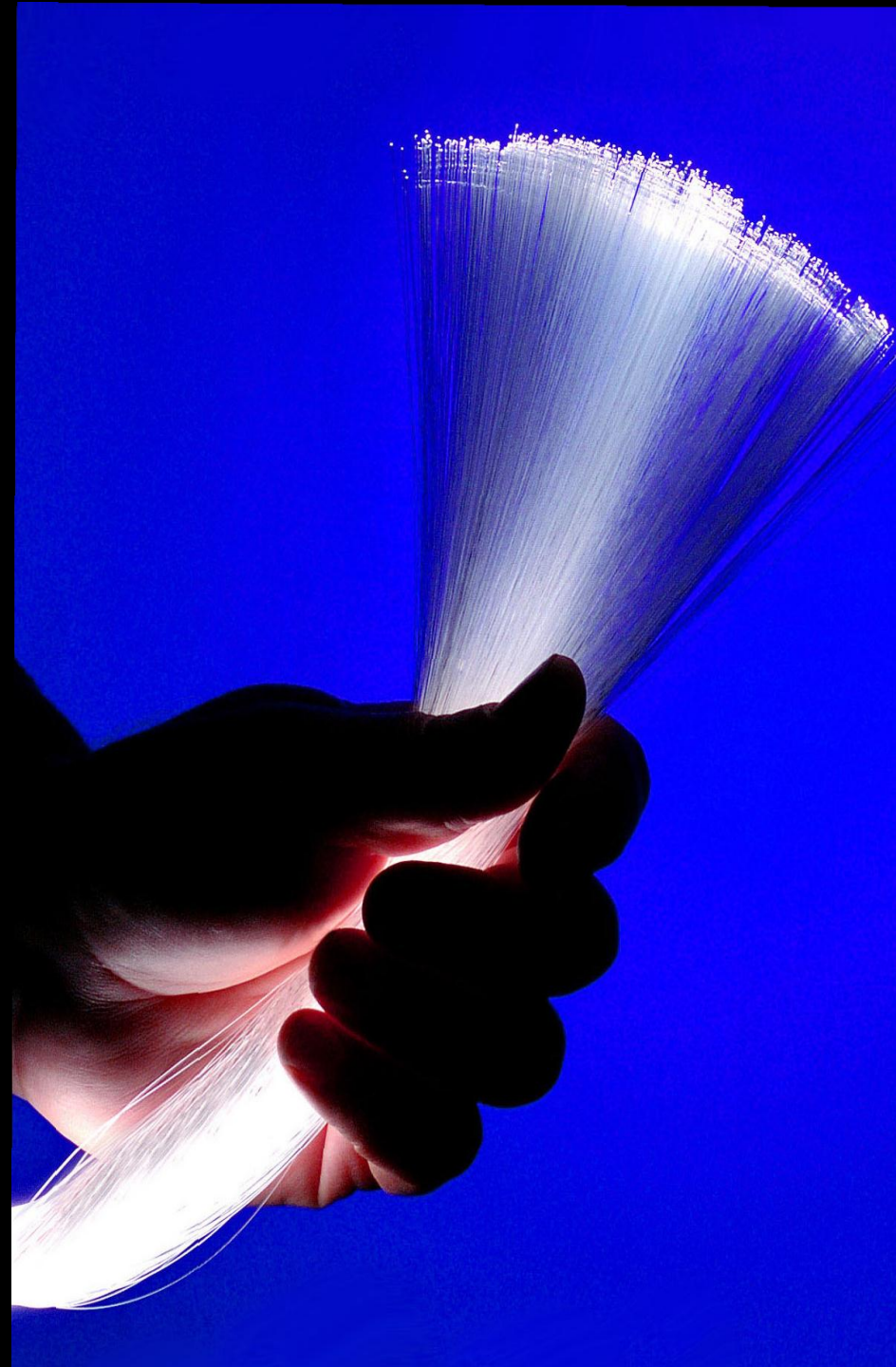
Why FTTH ?

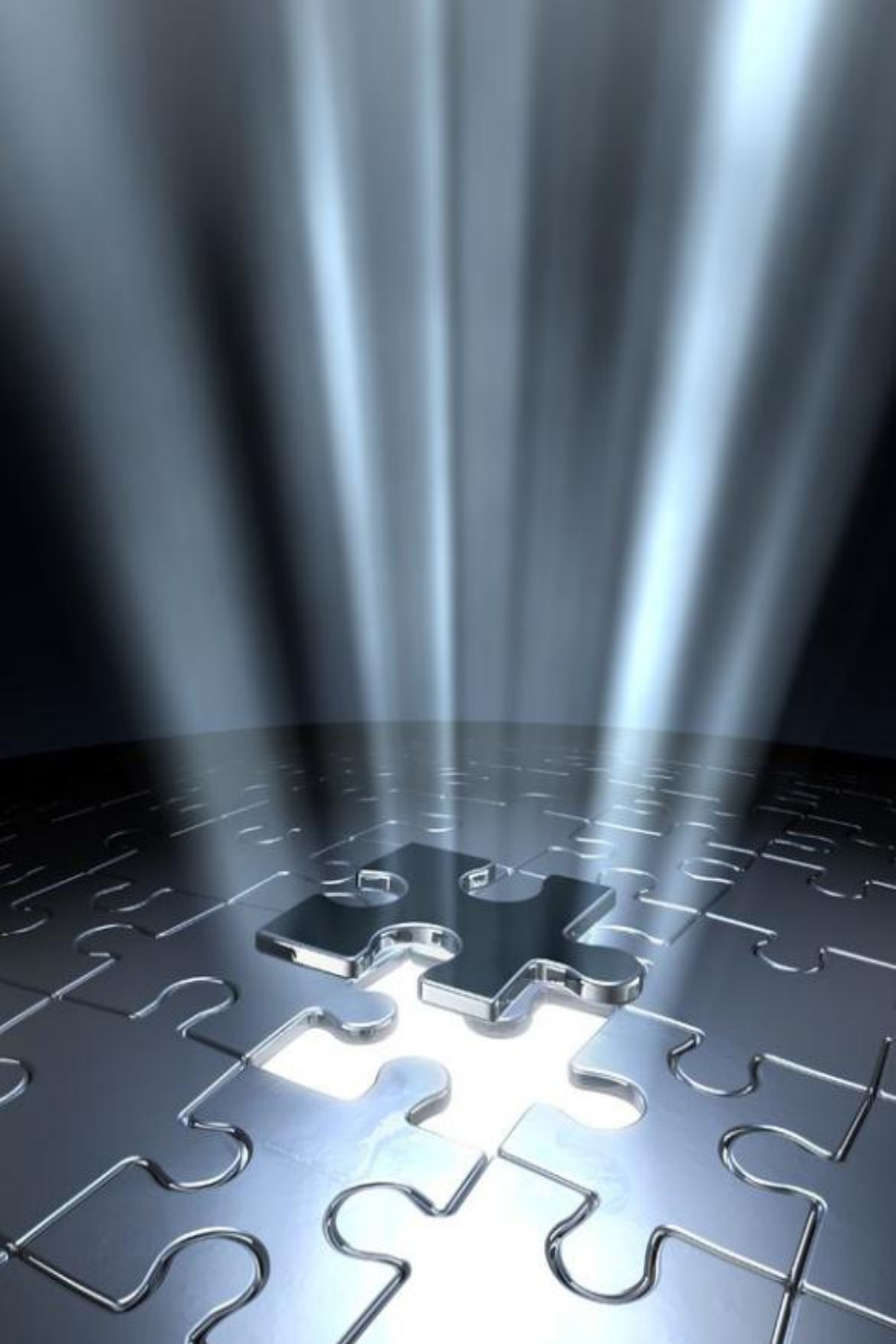
Peter Cochrane

ca-global.org

cochrane.org.uk

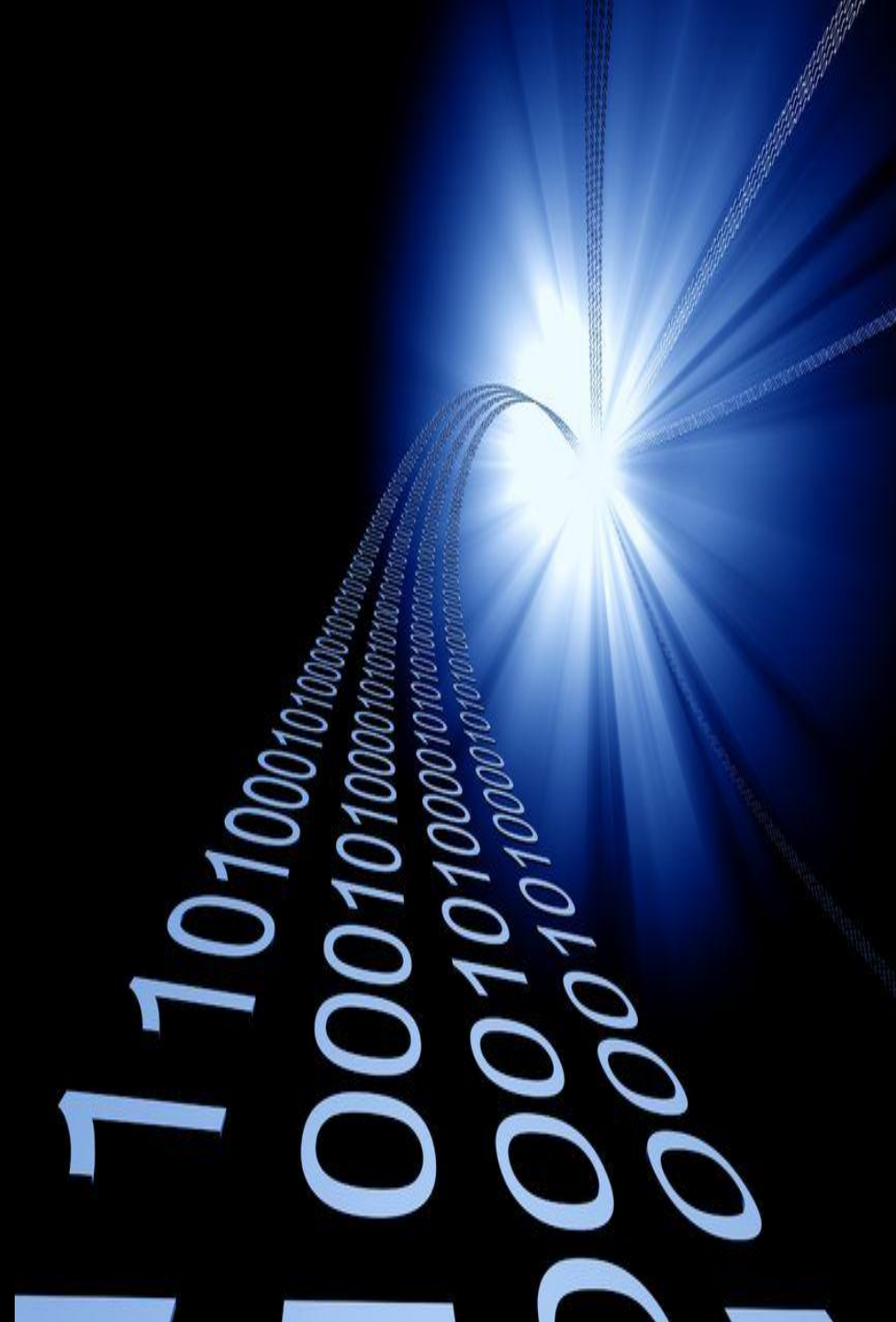
COCHRANE
a s s o c i a t e s





There is no other
choice !

No other technology
can provide the
bandwidth and utility
demanded today and
in the future...



The most cost effective solution:

- Cost of ownership
- Future proof
- Best reliability
- Best resilience
- Ultimate utility





The technologies of the past can't cut the mustard...they really can't...





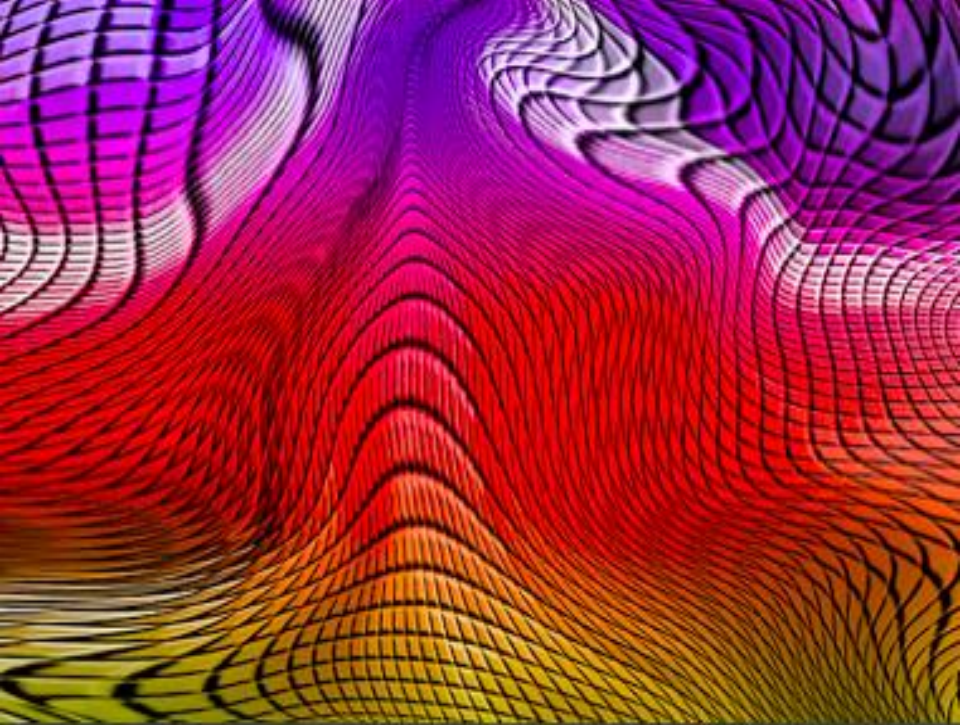
The sustainable
future is about
everything and
everyone being
wireless and on line !



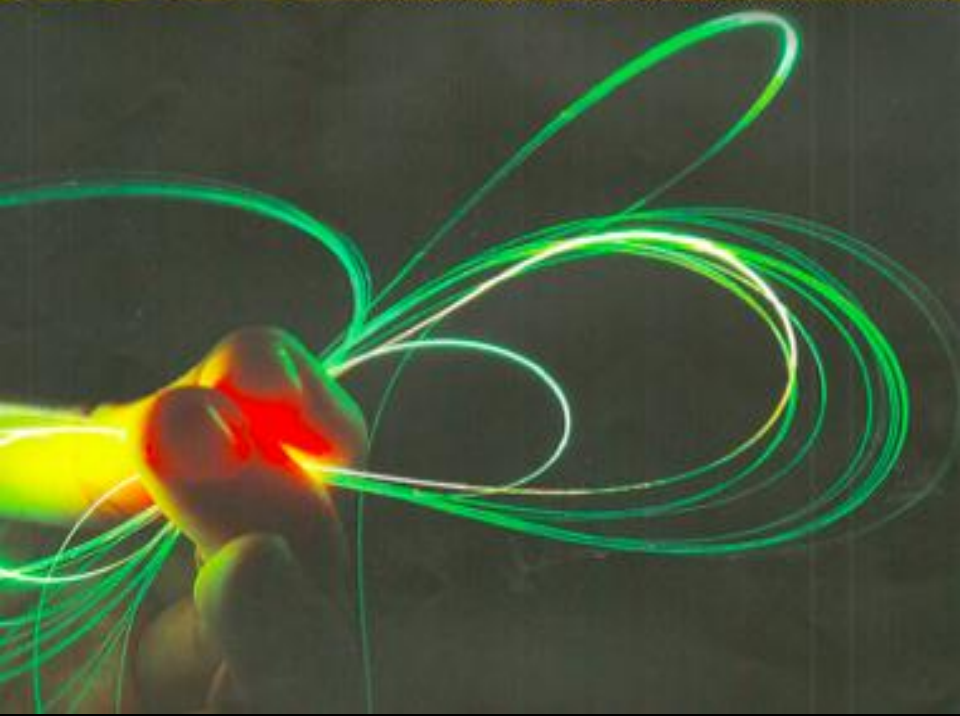
It is about connectivity,
access, data,
information, sharing,
and new modes for
industry, commerce,
education, training,
health, living...



People, vehicles,
things cluster to
sporadically demand
bandwidth, a lot of
bandwidth ...



More wireless means
more optical fibre...





Cloud computing will fail if we do not have ample bandwidth and connectivity...



Connected

Optical Fibre

OR

Disconnected

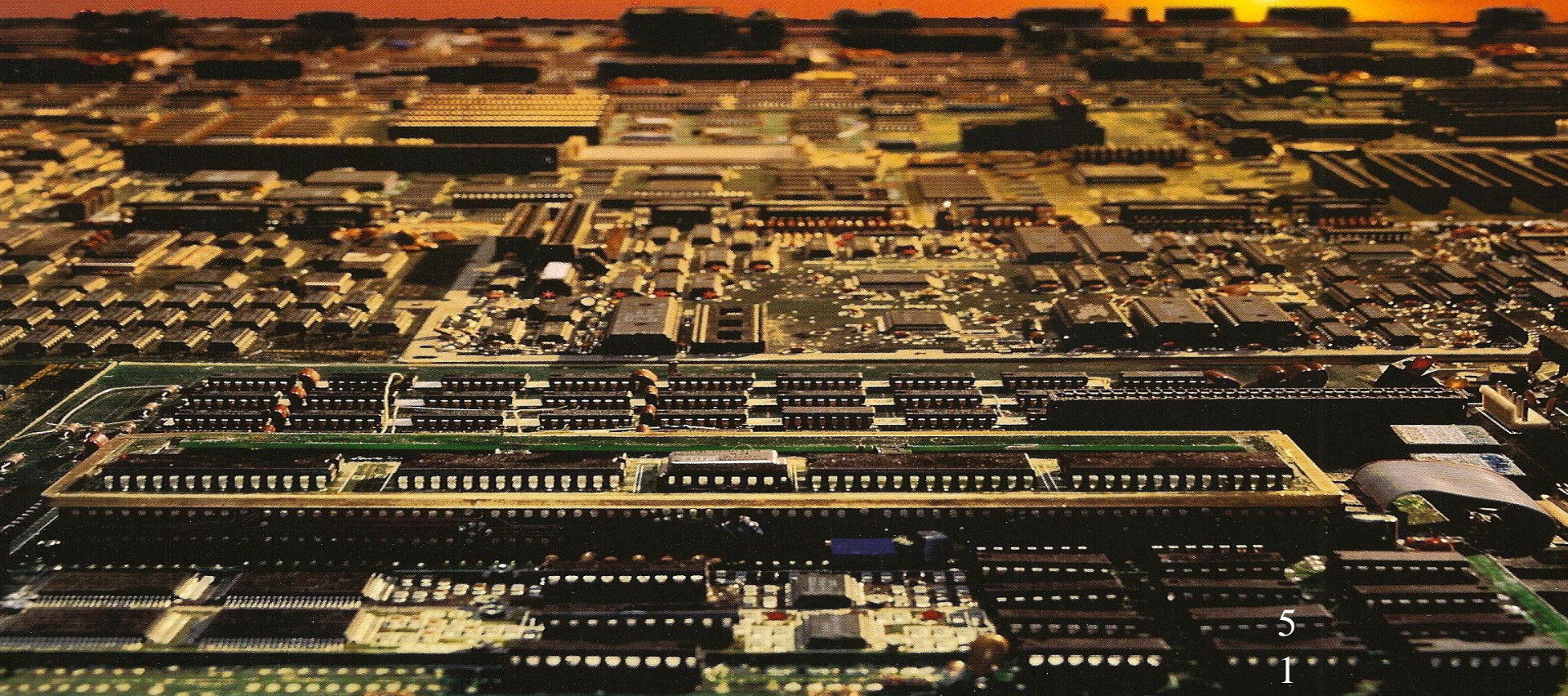
Copper

Thank You

COCHRANE
a s s o c i a t e s

ca-global.org

cochrane.org.uk



Thank you for your attention!

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