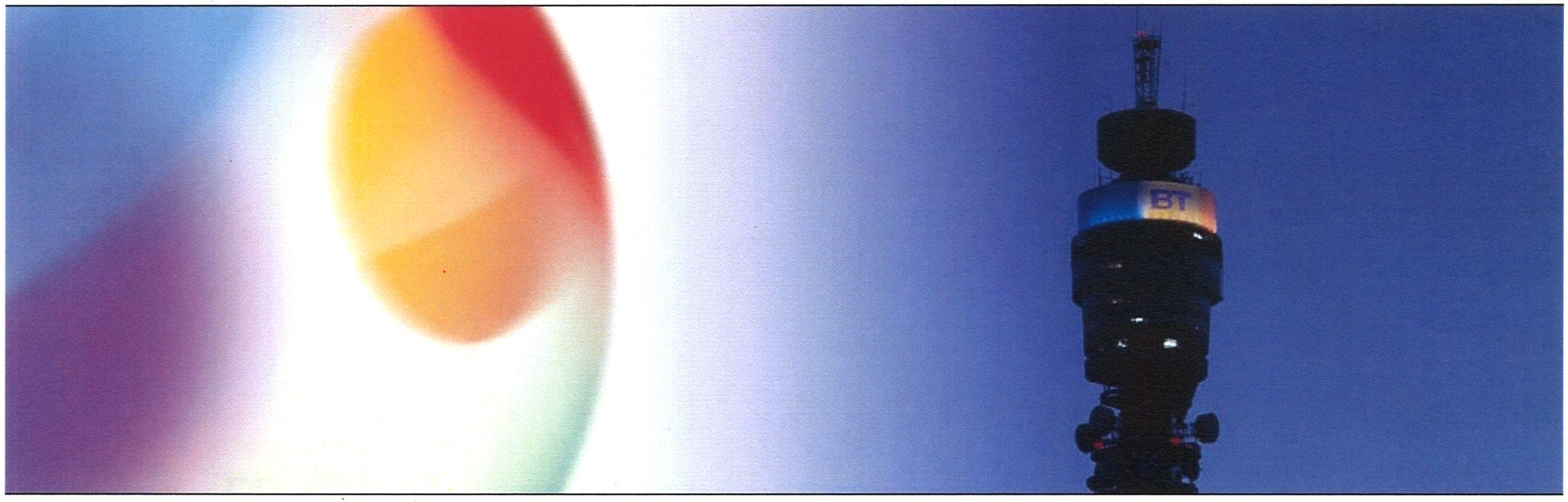


Meeting with Mr Liu Chorng-jian, National Communications Commissioner of the Republic of China

27th June 2012

Mark Shurmer, Group Director Regulatory Affairs

Agenda

- Overview of UK broadband market
- Regulation of UK telecoms and functional separation
- Regulating fibre networks
- BB speeds

Overview of UK broadband network

1) The broadband network is accessed through numerous platforms - telecommunication network, cable, wireless broadband, power line, etc - do you consider the broadband access market of the UK to be in full competition or not? How does Ofcom evaluate the cost-benefit of BT after it adopted functional separation principle?

Overview

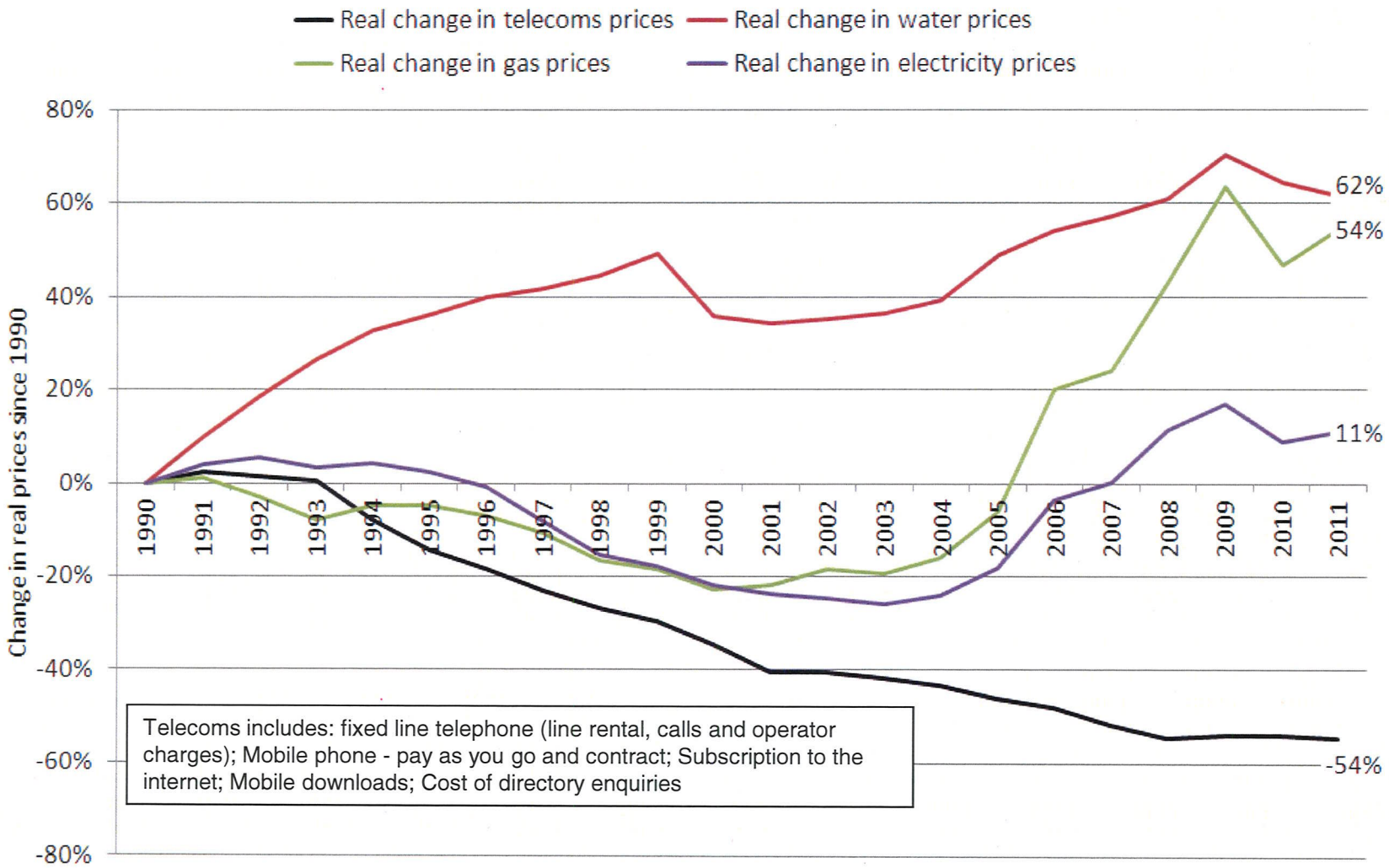
- Retail competition in the provision of communication services in the UK has delivered real benefits for consumers in terms of choice, quality and value for money, including real GDP growth for the UK economy.

- This retail competition has been underpinned by BT's commitment to providing a range of fairly-priced wholesale access products on equivalent terms.

- The UK is now one of the world's leading countries in the cost and availability of communication services that research shows is delivering significant GDP growth compared to other countries. We must build on that success to deliver the next generation of services.

Note: all the following data in this section is from independent, external sources (international organisations, national regulators, research firms and consultancies)

UK telecom prices have fallen... unlike energy and water



Source: ONS & BERR, February 2012

Broadband market statistics

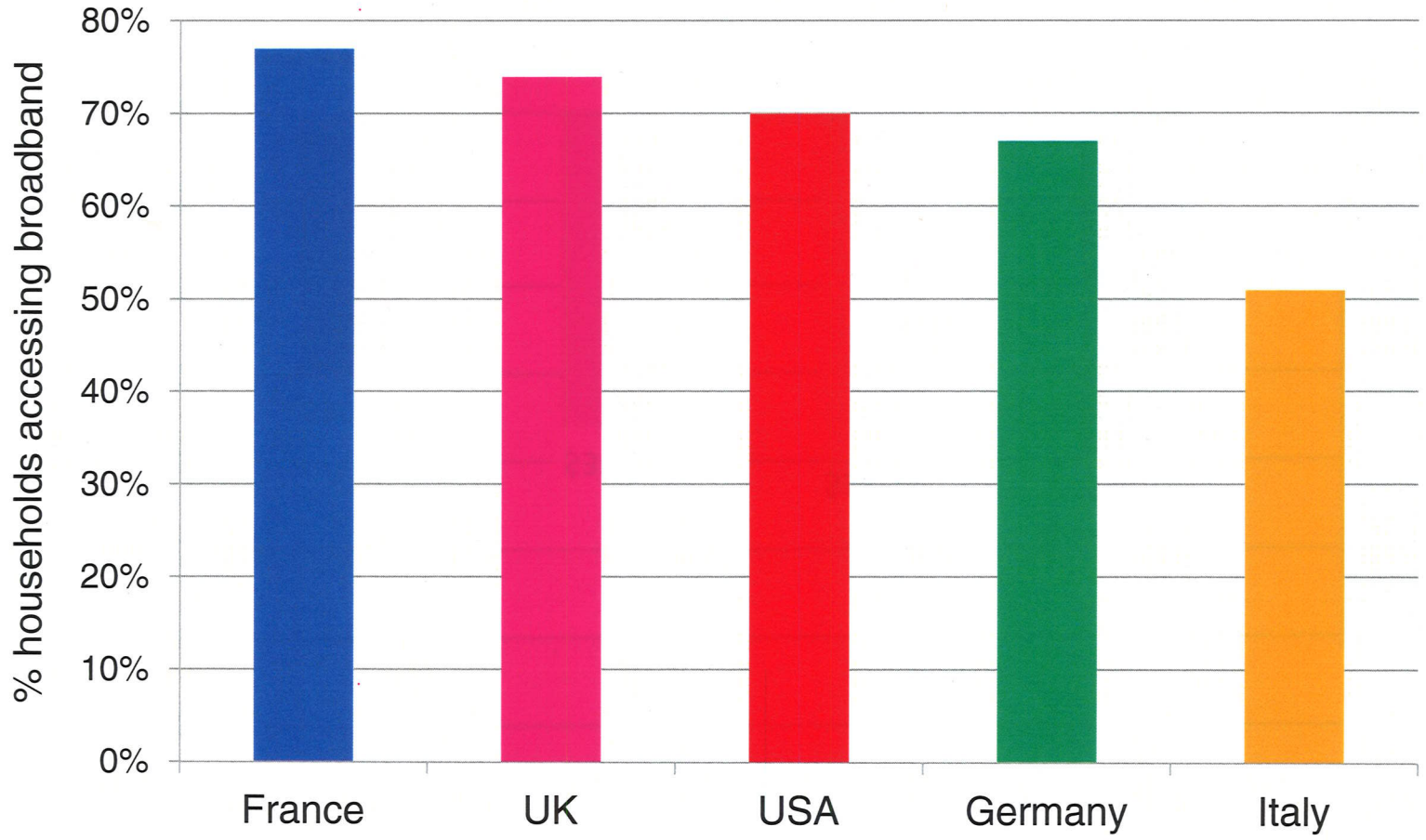
Broadband subscriber volumes

	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012
Total broadband subscribers	19,922, 639	20,160,751	20,447,900	20,739,900	21,094,600
- BT Wholesale DSL	8,111,954	8,390,761	8,510,000	8,551,000	8,543,000
- VMed DOCSIS	4,061,200	4,048,600	4,072,900	4,102,900	4,148,600
- LLU lines	7,609,485	7,581,390	7,725,000	7,946,000	8,263,000
- Other (Kingston, FWA, satellite)	140,000	140,000	140,000	140,000	140,000
BT Retail incl. B2B	5,691,101	5,831,775	5,998,000	6,144,000	6,280,000*
VMed (Cable and DSL)	4,332,600	4,314,500	4,333,600	4,351,100	4,381,600
- VMed DSL	*271,400*	*265,900*	*260,700*	*248,200*	*233,000*
TTG incl B2B	4,199,000	4,172,000	4,129,000	4,079,000**	4,066,000
BSkyB	3,161,000	3,335,000	3,485,000	3,651,000	3,863,000
Orange UK	726,000	716,000	713,000	713,000	713,000
O2/Be	669,200	652,900	625,300	620,300	617,800

28%

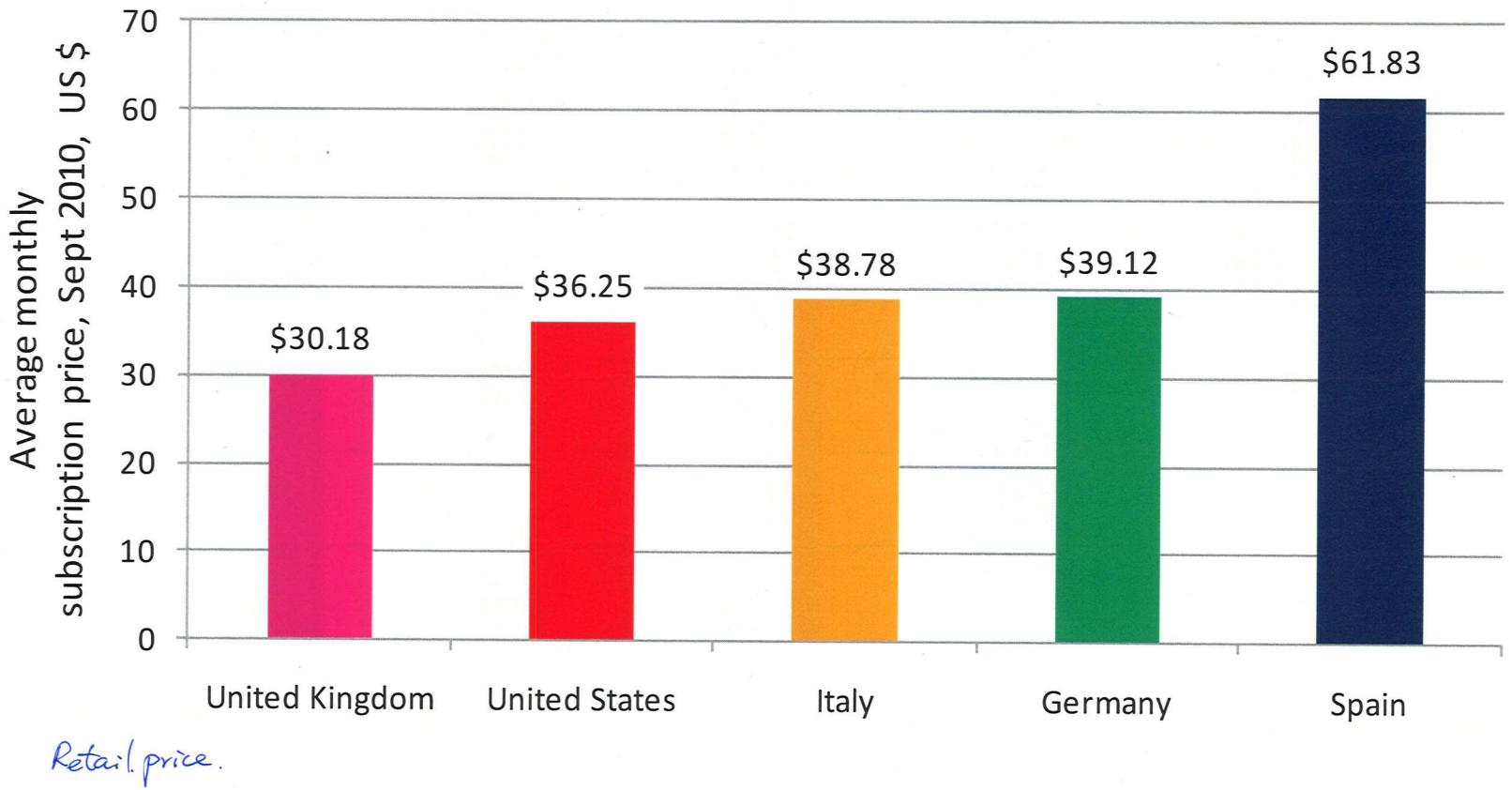
*Includes impact of acquisition of Vodafone residential fixed broadband customers, number undisclosed but estimated to be a few thousand
**Includes impact of sale of 7K Pipex Business customers
[Source: Enders Analysis based on company reports and estimates]

UK broadband penetration is among highest in major economies



Source: IDATE as reported in International Communications Market, December 2011, Ofcom

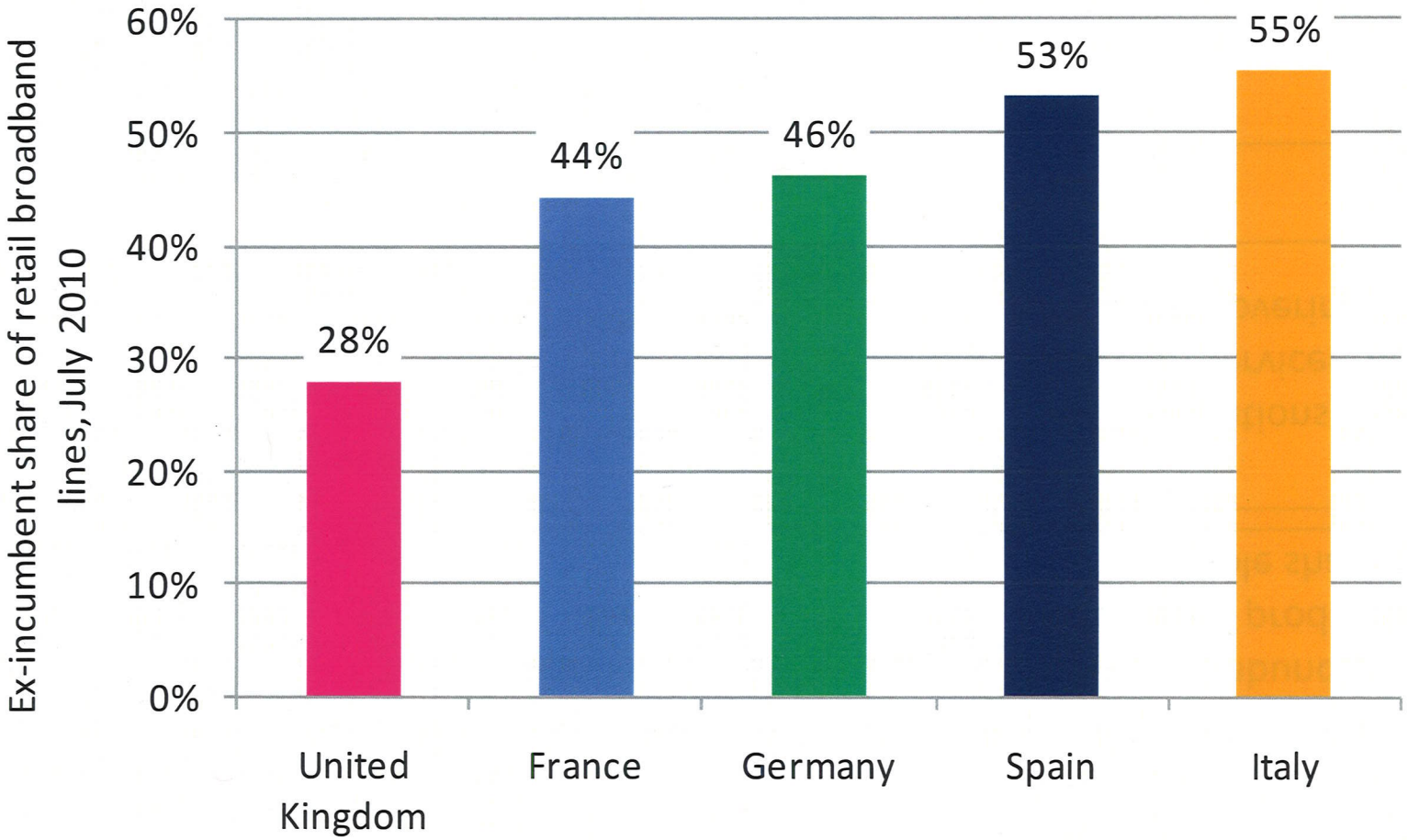
UK broadband prices are the lowest among major countries



Retail price.

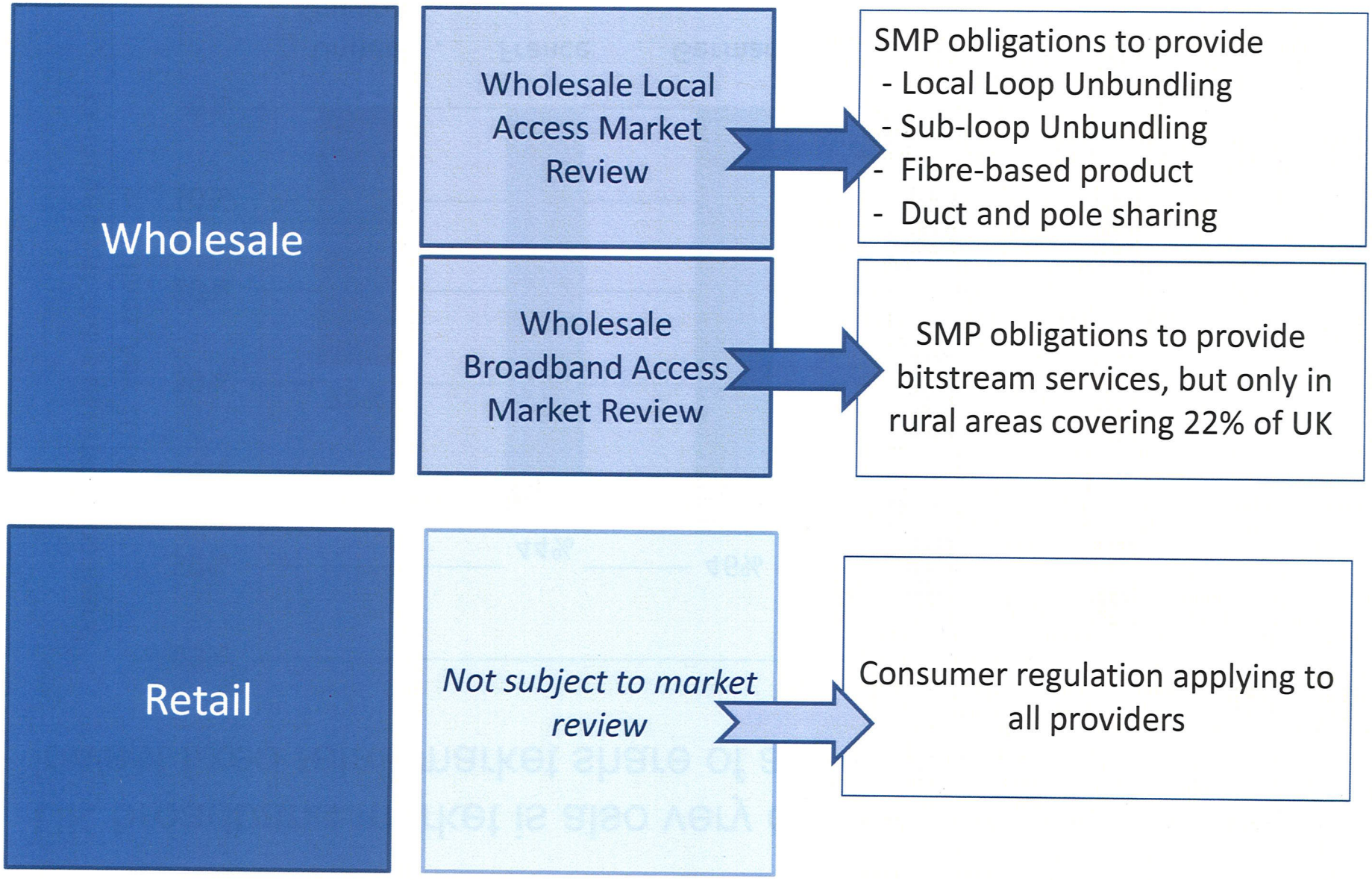
Source: OECD Broadband Portal , June 2011
No data quoted for France
Average monthly subscription price for connections between 2.5 and 15 Mbps advertised download speed

UK broadband market is also very competitive… BT has the lowest fixed retail market share of any ex-incumbent



Source: European Commission Information Society March 2011

Broadband regulation in the UK

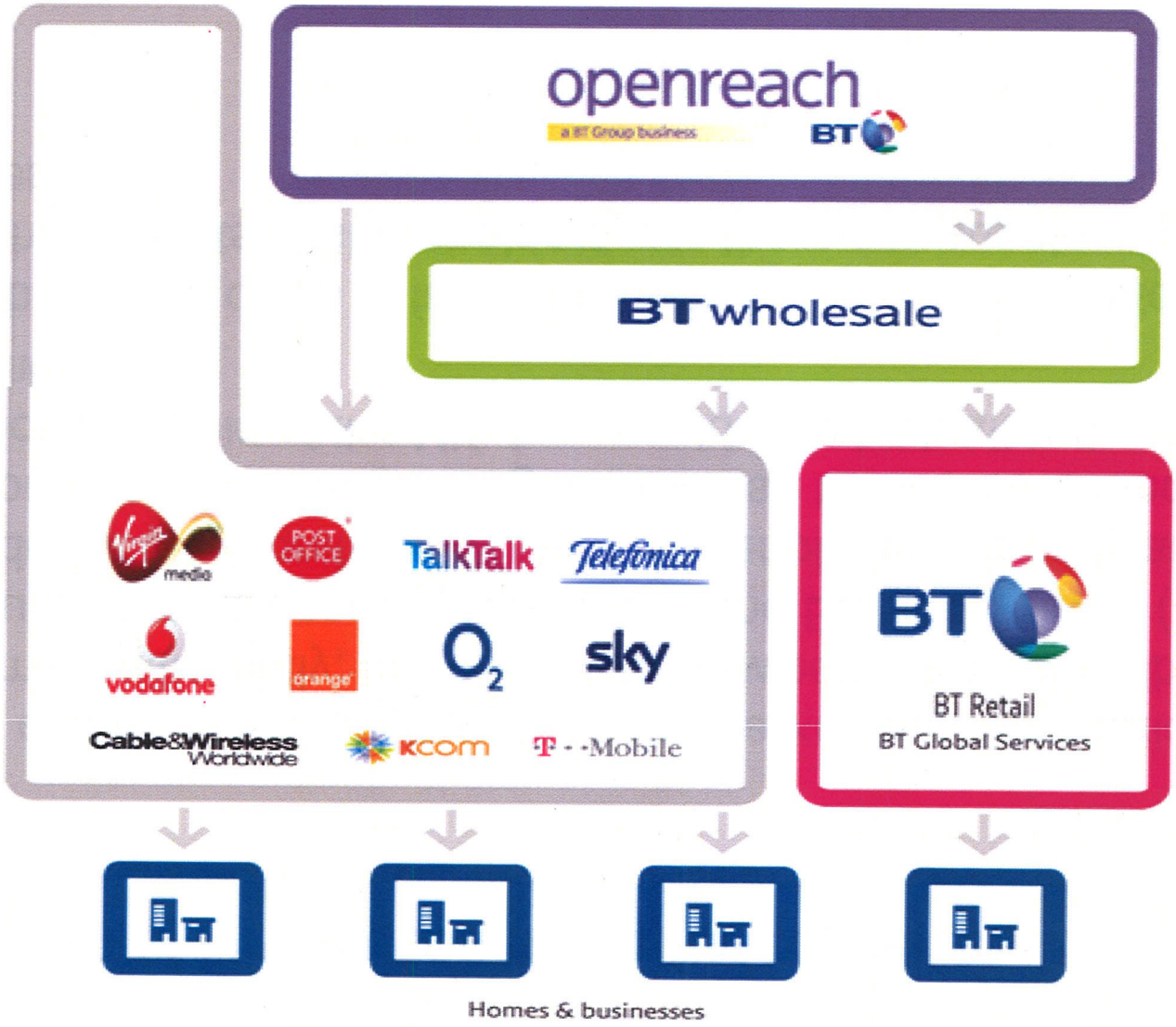


Regulation of UK telecoms and functional separation

2) Each country develops their telecom market and competition environment differently; there is a gap between the level of liberalization and regulation of telecommunications in the EU and Taiwan (such as market definition, Significant Market Power players' identity and ex ante regulation conditions, etc). If regulators wish to follow the functional separation principle of the UK, how could they look after the items or requirements?

4) Who bears the costs of functional separation? If BT should bear it and reduce the benefits of shareholders, are there any supplementary measures?

BT Organizational Structure



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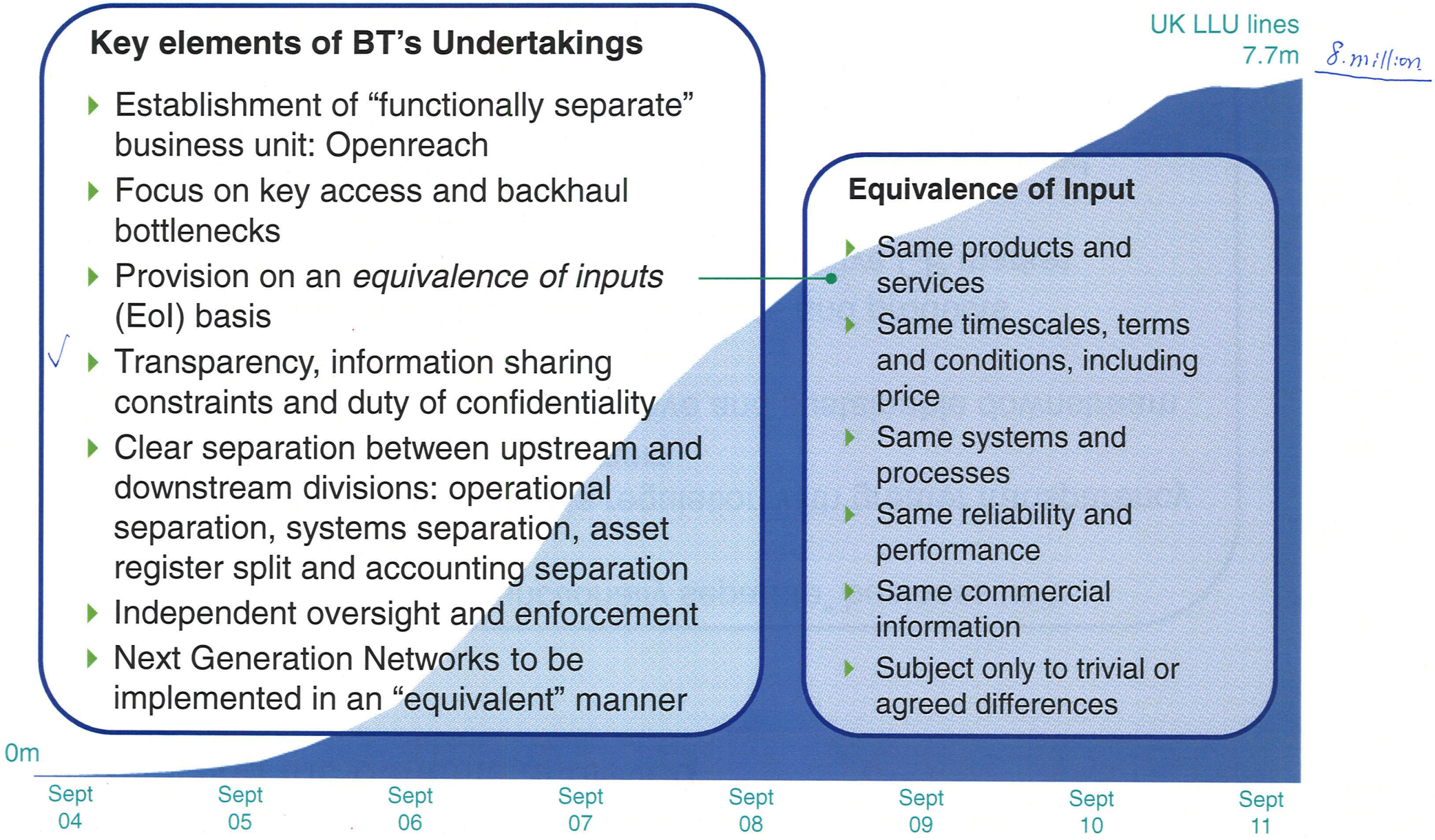
Openreach and the UK telecoms model



Reviewing the benefits achieved

- Establishment of "functionally separate" business unit: Openreach
- More effective wholesale regulation with greater transparency and confidence for customers
- Providing the basis for effective and sustainable downstream competition
  - Increased take-up of new services and products
  - Establishment of vibrant and competitive CP market
  - Greater affordability
- New product development process and industry agreed prioritisation
- Clear focus on access and backhaul network - improved service levels and reduced fault rates
- Continued investment by BT and industry

Costs of functional separation

"Estimating the costs of implementing functional separation within BT is challenging. For example, many of the IT systems changes required to implement separation have been tightly aligned to other systems changes BT was planning to make for its own commercial purposes. It is therefore difficult to isolate the costs that are specifically due to functional separation as opposed to other planned changes by BT. Whilst clearly the costs are likely to have been material, this needs to be weighed up against the dynamic benefits that increased competition has brought about."

BEREC Guidance on Functional Separation, February 2011

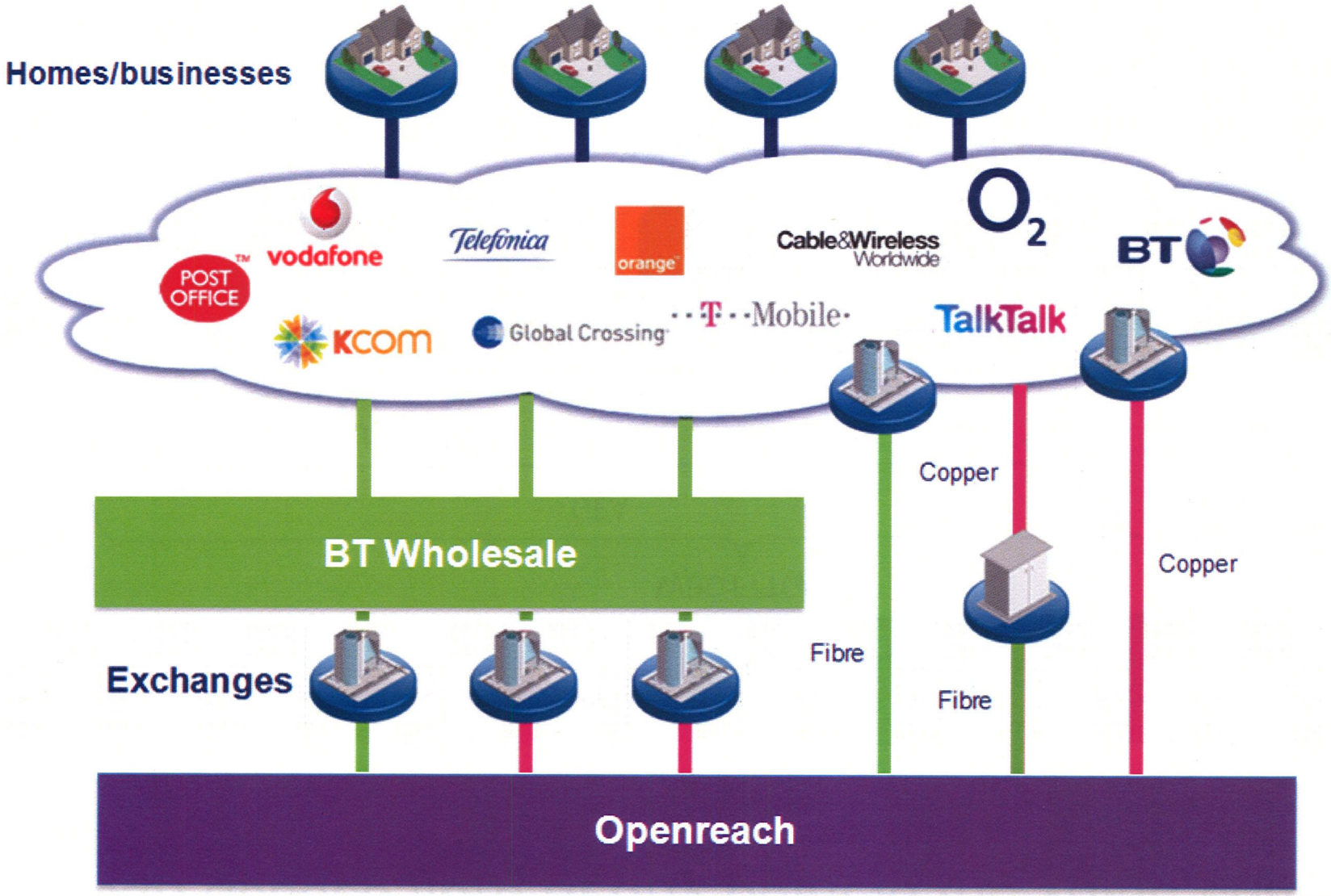
Regulating fibre networks

3) After BT adopted functional separation principle, have there been any operators that have chosen not to invest in building a fiber network because they could access the existing low-fee one? Do you think BT might not build the fiber network effectively because it would open to other operators?

5) Which is the broadband network policy of the UK, safeguarding market competition (fair competition) or encouraging investment (promote fiber network establishment), or both? In order to encourage the monopolistic or oligopolistic to provide the fiber network, should the government provide a reasonable profit guarantee?

7) Openreach has already achieved much in LLU, how does Openreach meet NGN for digital convergence?

Being “competition ready” is critical for success



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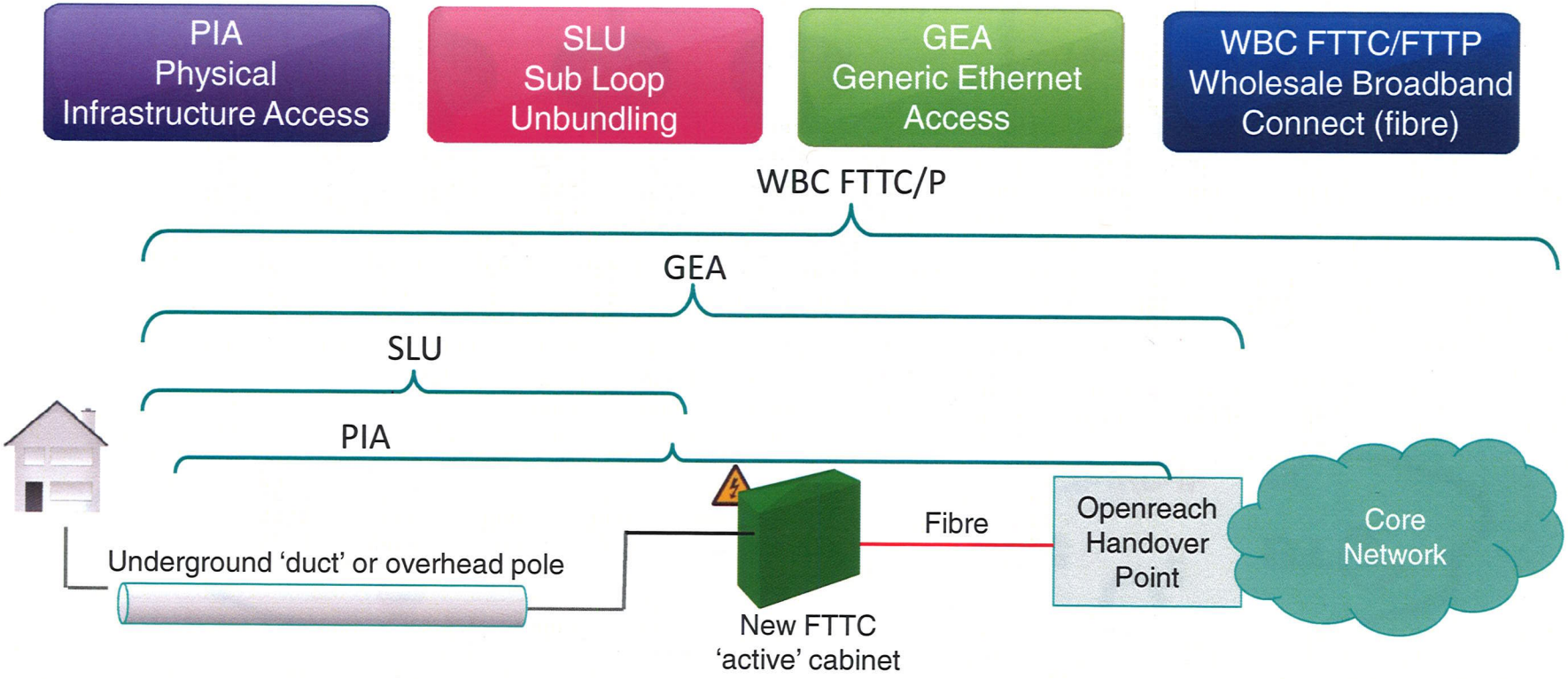
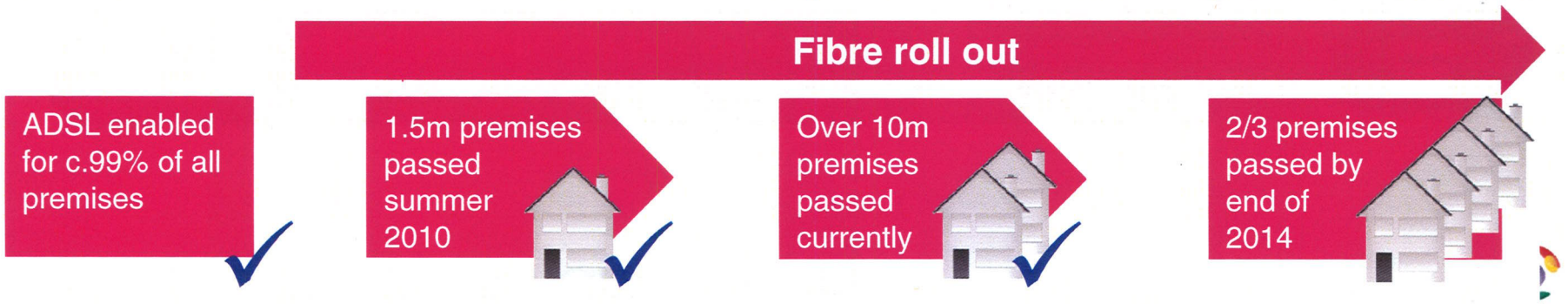
CPs can access fibre at any point in the value chain



BT's fibre broadband programme

- £2.5bn investment to roll-out fibre to two-thirds of UK premises by end of 2014
  - Completing one year early
  - Among the fastest and largest commercial roll-outs in the world
  - FTTC and FTTP
- Very positive marketing and pricing of the product at the retail level
  - Fibre broadband has the same headline price as copper broadband
- Passing more than 100,000 new premises per week, over 10M passed, 7 months ahead of schedule
- Customer base rising fast
  - More than 550,000 BT Infinity customers
- The only fibre broadband deployment that makes proactive provision to wholesale customers a central part of the approach
  - Over 60 CPs selling or trialling services

➢ No other company in the world is investing as much in fibre without public sector support or a regime that allows for far greater returns



Good news from the Government

"Our goal is simple: within this parliament we want Britain to have the best superfast broadband network in Europe" *Jeremy Hunt*

Secretary of State for Culture, Media and Sport

By 2015:

UK definitions

- Superfast broadband available to 90% of people in each local authority
- Access to at least 2Mbps for everyone in the UK

£830m public funding for superfast broadband in rural areas

- Between now and 2017
- £230m from digital switchover under spend
- £150m pa (from 2013) from BBC licence fee settlement

Four NGA pilot schemes and wave two announced

- Wave 1: Highlands and Islands, North Yorkshire, Cumbria, Herefordshire
- Wave 2: Devon & Somerset, Norfolk, Wiltshire
- August '11: Remaining funding allocated

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BB Speeds

8) Some complain about the low speeds of their ISPs and are told to contact to Openreach. How does Openreach deal with those people?

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Fact sheet:

Broadband Boost

Broadband Boost* brings together a range of engineering activities that can be carried out by Openreach engineers in order to try to improve the speed, quality and reliability of your customer's broadband service. This can include work relating to your customer's own wiring, equipment you provided them with and work on the Openreach access network itself (right back to the local exchange).

Broadband Boost offers a cost effective way to try to solve issues that your customers have with their broadband speed and reliability.

Product benefits

Save money

Just one visit from one supplier to address individual issues with slow/unreliable broadband connections.

Faster issue resolution

The right person, first time gives you the ability to fix a problem with a single visit. Engineers are also able to replace, install or configure CPE. All of which could mean fewer calls with your customers and improved satisfaction overall.

You're in control

Booking engineers by the day (5 minimum) means you can instruct them to stay for as long as it takes – allowing you to give a preferential service if desired.

Improve your ratings

Having the right person on site first time will improve customer experience and offers the potential to improve overall quality ratings/ reputation among competitors.

Tailored approach from experts

Engineers discuss the issues with your customers before carrying out work. They are also able to explain things clearly and suggest further activities that your customers can carry out to improve or maintain a good broadband connection.

Retain customers and win new business

Offering a pro-active service in areas where broadband speeds are known to be lower than desirable will help you please existing customers and could enable you to up-sell other related products. e.g. TV on demand.

Stand out from the crowd

Use Broadband Boost as part of your standard broadband offering (e.g. a free speed/quality health check) or as a value added service within a premium package.

In safe hands

Our engineers are trained on the latest techniques and have access to the most up to date testing equipment and tools for the job.

Fast and convenient

Whether a managed or an unmanaged service is chosen by the CP, engineers arrive at a time that is convenient and complete the job quickly with minimum downtime – saving you valuable time.

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Case Study: Service Based Solutions

Broadband Boost from Openreach delivers a real boost in customer satisfaction for BT Retail

What counts in the fiercely competitive broadband world is exceeding customer expectations. Openreach has proved beyond doubt that it can do exactly that on behalf of its customers (Communications Providers) and their customers (subscribers in their homes). The enabler is their newly available Broadband Boost* service, complete with systemised ordering and automated feedback features.

Broadband Boost empowers the Openreach field engineering force with the skills, tools and support they need to resolve broadband line faults in the home during a single visit, along with associated equipment and internal wiring issues.

'Bedside manner' is a key attribute here. Openreach engineers discuss the use of broadband with subscribers and take a collective decision with the customer before modifying the broadband infrastructure in any way.

The outcome – substantiated in a pilot with BT Retail in the North and South Downs, followed by a controlled national trial – was:

- Far happier subscribers, thanks to a 94% first time resolution rate (previously 45%) and the need for repeat visits reduced to less than 5% (previously 26%)
- Even faster broadband speeds. The average increase in speed per household visited by a Broadband Boost engineer was 1.74Mbit/s. Some households experienced a 4Mbit/s increase in speed. And some, who were initially receiving less than 2Mbit/s, benefited to the tune of an additional 2.75Mbit/s!
- Reduced CO_2 emissions, as most connectivity problems in and around the home were resolved on the first truck roll.

The ideal solution in a perfect world would of course be the total eradication of faults and therefore the elimination of the need for engineering visits. Unfortunately, we don't live in a perfect world. However, in a bid to further reduce the number of home visits, Openreach is taking on board engineer feedback to drive the development of even more powerful remote diagnostics and remote resolution capabilities.

In the meantime, here's some of the feedback BT Retail have had from their customers:

- "I am writing to let you know how grateful and reassured I am by your recent visit to finally restore my computer to its former state. In actual fact, it's now faster than it's ever been!"
- "I have never been totally satisfied, until my recent broadband visit by the engineer. I would like to thank him for all his work and for restoring my faith in BT."
- "...It is easy to complain in this day and age. However, I wish to register my thanks and appreciation for the work carried out at our home last week... not only was the work first class but the engineer was extremely polite and informative and is a huge credit to your customer relations efforts."
- "Certainly, none of these problems would have been sorted by any number of phone calls... This is what I would call real SERVICE and for once you have two very satisfied customers. Very many thanks."

A BT Retail spokesperson confirms: "Broadband Boost delivers a true end to end fix for our customers. Openreach engineers are empowered to resolve issues on the first visit. This is reflected in the great feedback we're getting and the improvement in first time fix that we've seen."

Commenting on their Broadband Boost service, Tim Barclay, Managing Director, Sales & Customer Experience, Openreach, says: "Our customers' customers were clearly suffering. For some, their faults were being bounced all over the place before being tackled. Our reputation was quite literally on the line, as was our pride. I'm confident that this comprehensive new service is going to make a world of difference to all concerned."

**The Broadband Boost service is being delivered by Openreach Engineering Services, under the Openreach Service Based Solutions banner.*

For more information on Service Based Solutions please visit www.openreach.co.uk or contact your Sales and Relationship Manager.

www.openreach.co.uk

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