

**9th World Telecommunication/ICT Indicators
Meeting (WTIM-11)
Mauritius, 7 - 9 December 2011**



Contribution to WTIM-11 session

**Document C/14-E
8 December 2011**

English

SOURCE: European Commission

TITLE: Measuring Broadband Performance



Measuring Broadband Performance

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Economic and Statistical Analysis
Directorate General for Information Society and Media
European Commission

Digital Agenda

1001100101011101110000100 2010-2020

for Europe



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Pillar IV: Very Fast Internet

New services such as high definition television or videoconferencing need much faster internet access than generally available in Europe. To match world leaders like South Korea and Japan, Europe needs download rates of 30 Mbps for all of its citizens and at least 50% of European households subscribing to internet connections above 100 Mbps by 2020. The Digital Agenda aims to turn this ambition into reality by stimulating investments and proposing a comprehensive radio spectrum plan.

List of actions:

[Action 42: Adopt an EU broadband communication](#)

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BROADBAND COMMISSION FOR DIGITAL DEVELOPMENT

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Ms. Neelie Kroes, European Commission, European Digital Agenda



"Broadband is revolutionising the way we live and how we do business - somehow like electricity, telephones, railways and highways changed our world. Culture, democracy, efficiency - it all improves with broadband."

Neelie Kroes was Born 1941 in Rotterdam, The Netherlands, where she also attended school and helped to build her family's transport business.

She studied economics at Erasmus University, before working there for six years as an Assistant Professor.

Her political career started on the Rotterdam Municipal Council, and in 1971 she was elected as a Member of the Dutch Parliament for the liberal VVD party. From 1982-1989 she served as Minister for Transport, Public Works and Telecommunication in the Netherlands.

After politics she was appointed President of Nyenrode University from 1991-2000, and served on various company boards, including Lucent Technologies, Volvo, P&O Nedlloyd.

Prior to serving as European Commissioner for Competition from 2004-2009, her charity work included advising the Nelson Mandela Children's Fund and World Cancer Research Fund, and she has an ongoing interest in mental health issues.

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Why

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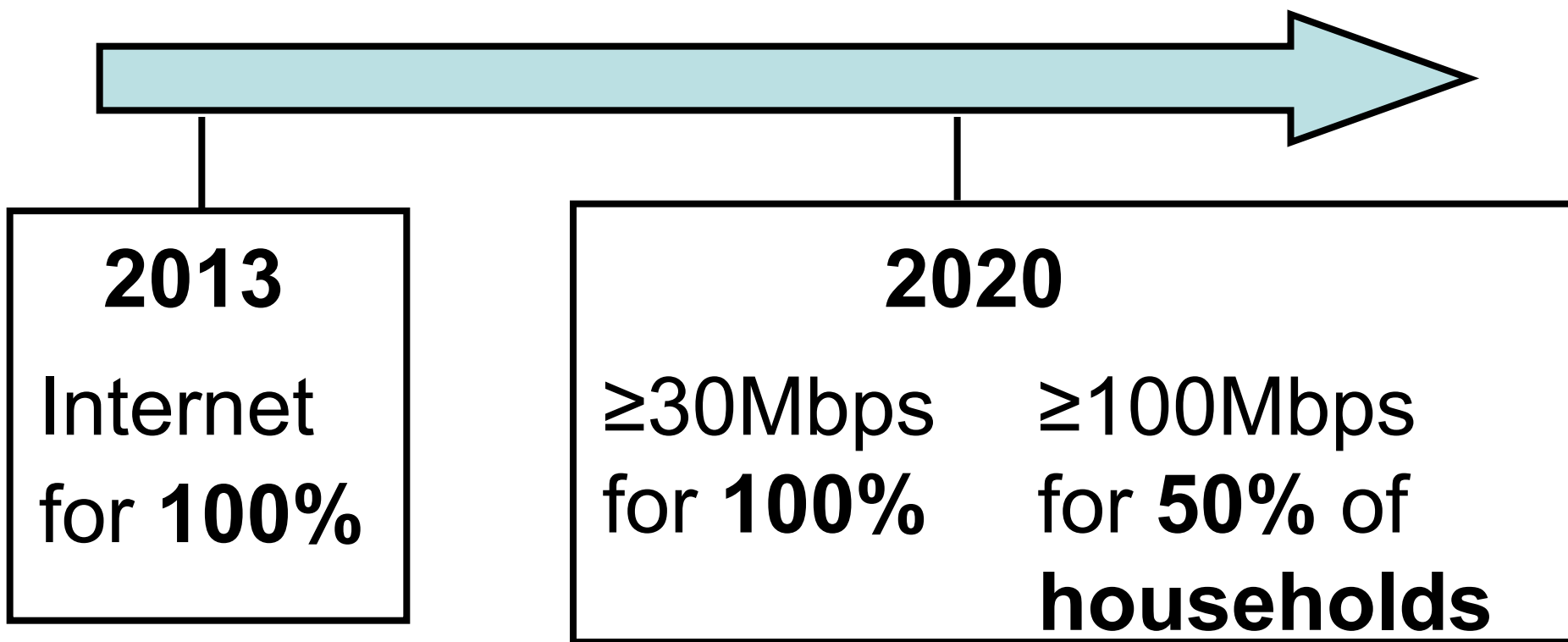


Internet

100%



DAE broadband targets





Benchmarking the broadband targets

- Broadband take-up statistics, including take-up, market shares, technologies, speeds, wholesale prices, mobile broadband (NRA data)
- Survey on broadband usage by HH and enterprises (EUROSTAT)

Studies:

1. Broadband coverage
2. Broadband retail prices
3. In depth study on the ISP market from a consumers perspective
4. Broadband quality



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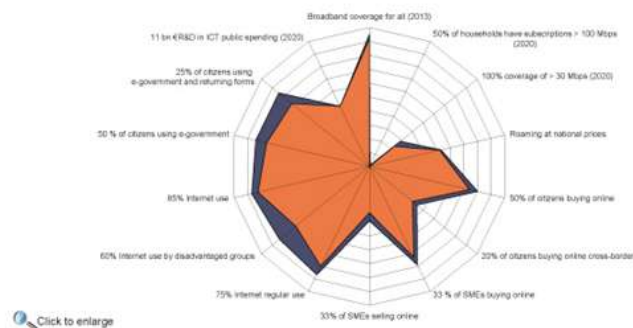
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Digital Agenda Scoreboard 2011

Digital Agenda Scoreboard 2011



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How digital is ...?

Get more information about a specific country



Progress by pillar

Find out more about a Digital Agenda pillar



Explore graphs

Compare and analyse data



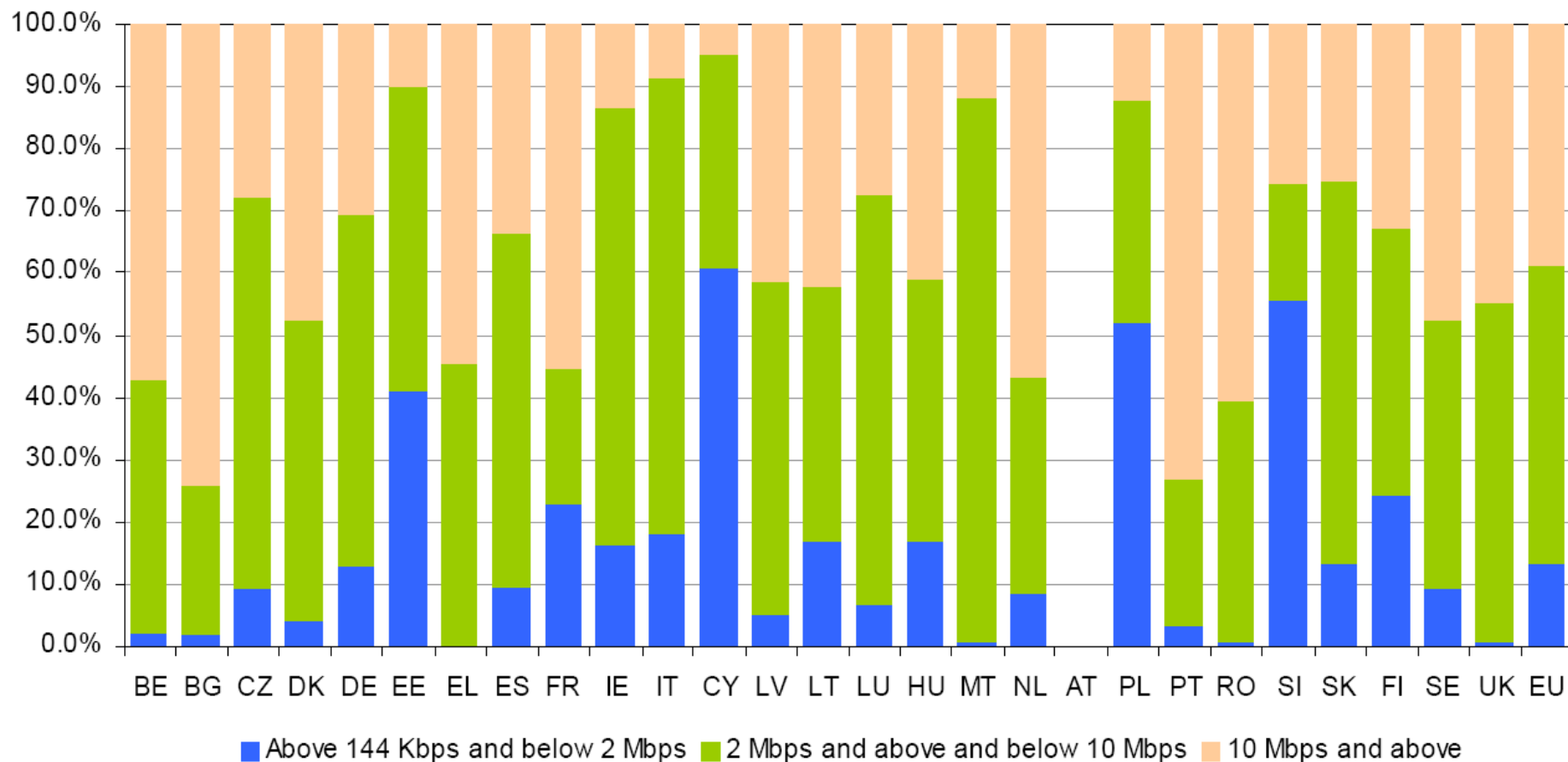
Download open data

Get all the data you need



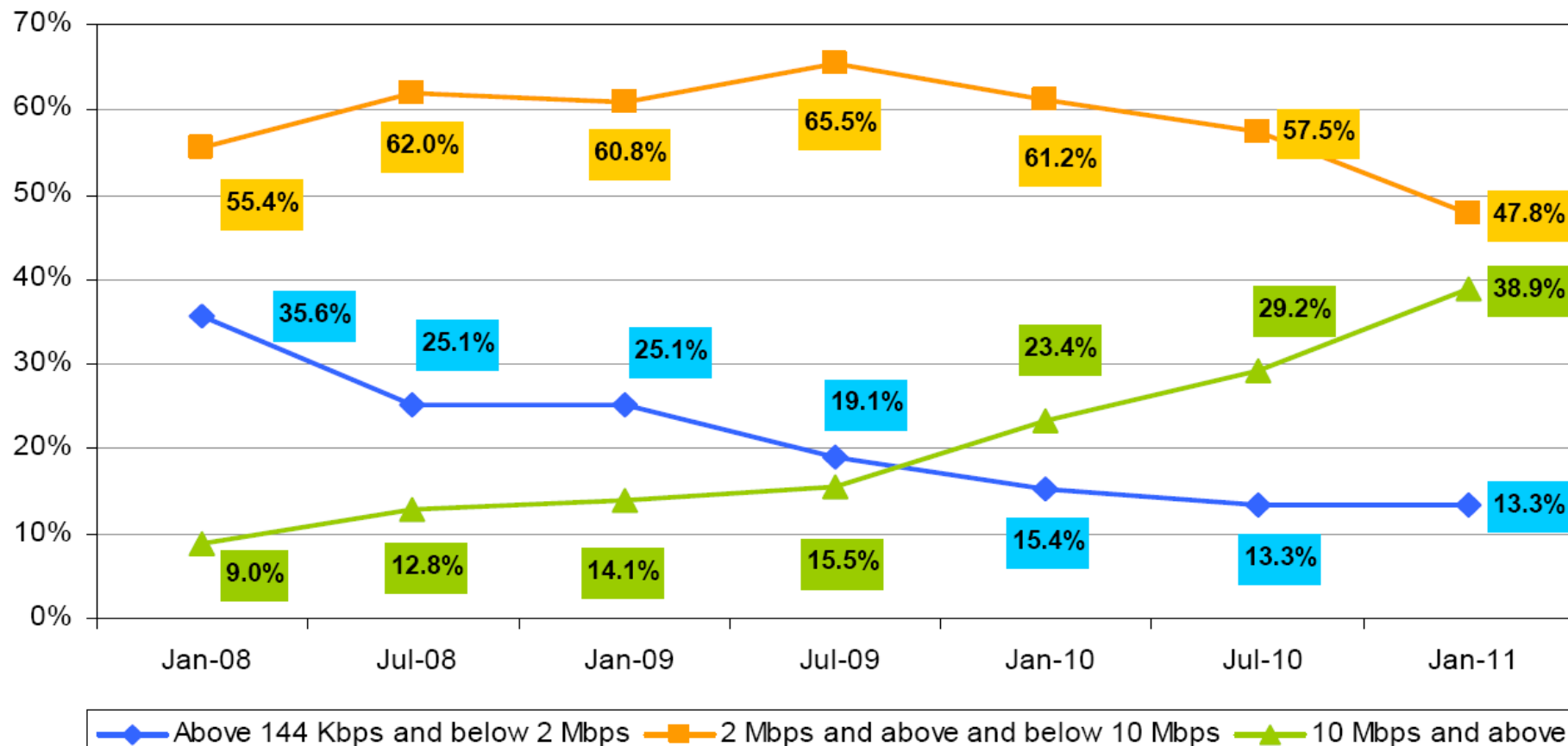


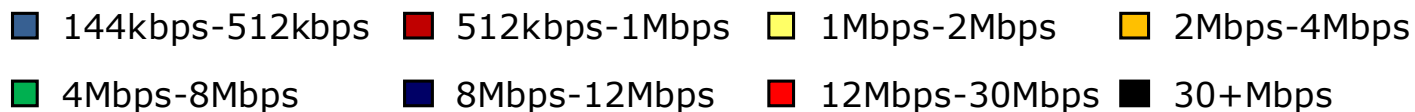
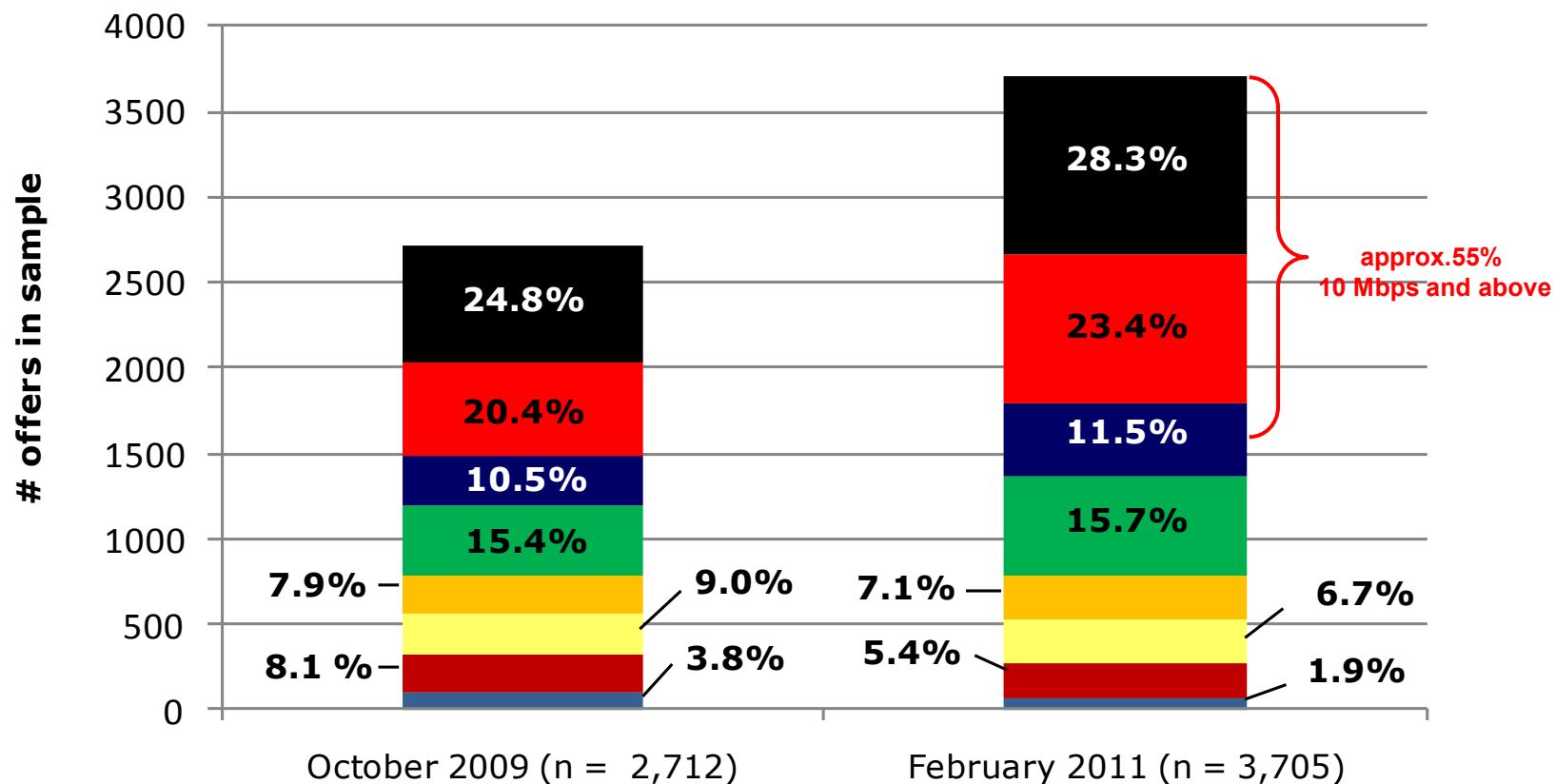
Fixed broadband lines by speed, January 2011





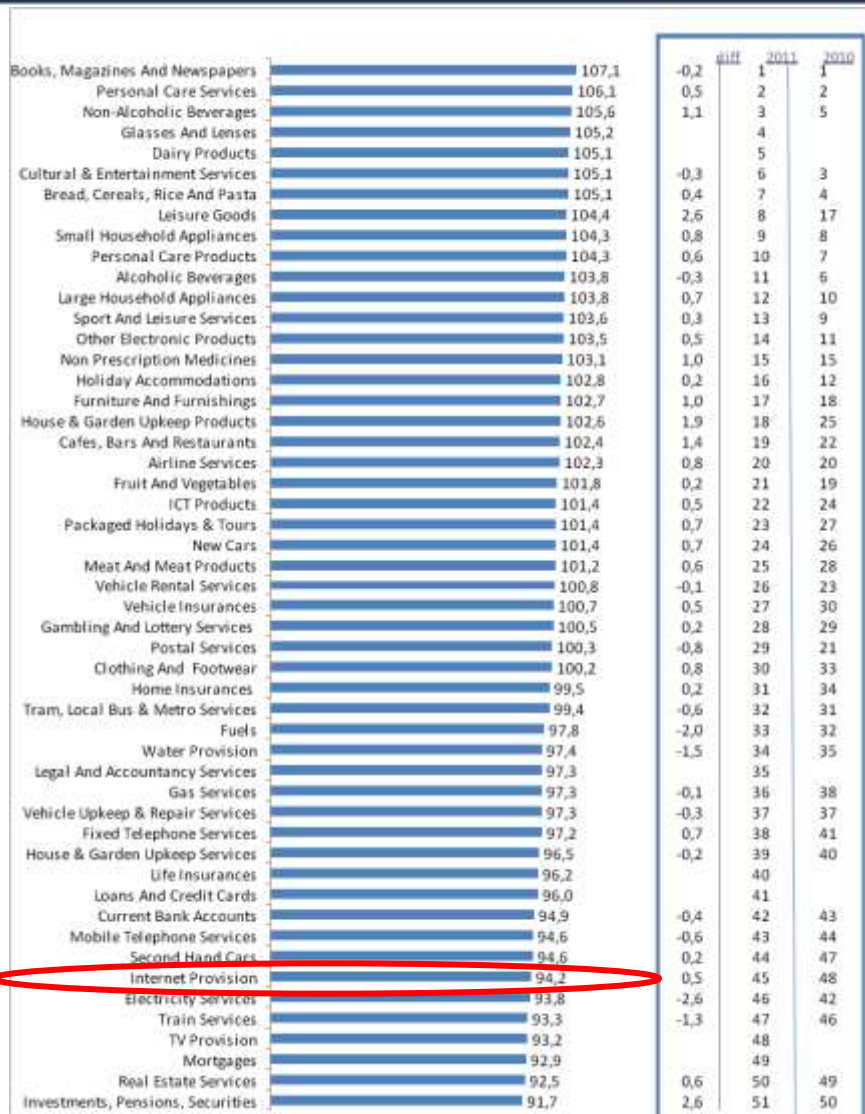
Fixed broadband lines by speed at EU level, January 2008 - January 2011







Consumer (dis)satisfaction



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Consumer Affairs

Important legal notice

English

EUROPA > European Commission > DG Health and Consumers > Consumer Affairs

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Strategy and programmes | Consumer Research | Safety | Rights | Enforcement | Redress | Consumer empowerment | Cosmetics | Medical devices

Consumer Satisfaction - Consumer Market Monitoring Survey (2010): overview of markets, the components within the markets etc (EU level)



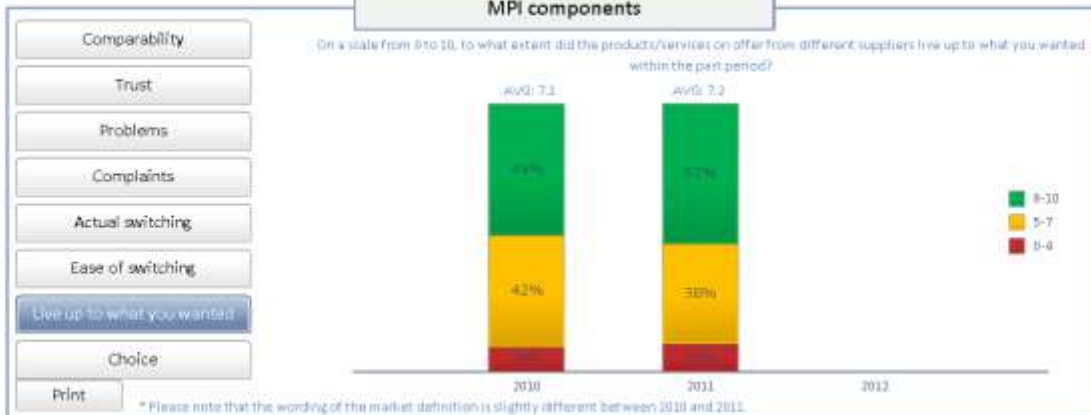
Part I

Market: Internet provision * MPI score: 2010 2011

MPI on country level



MPI components



printable version



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National consumer organisations
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140%

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Consumer Satisfaction - Consumer Market Monitoring Survey (2010): overview of markets, the components within the markets etc (EU level)



Part I

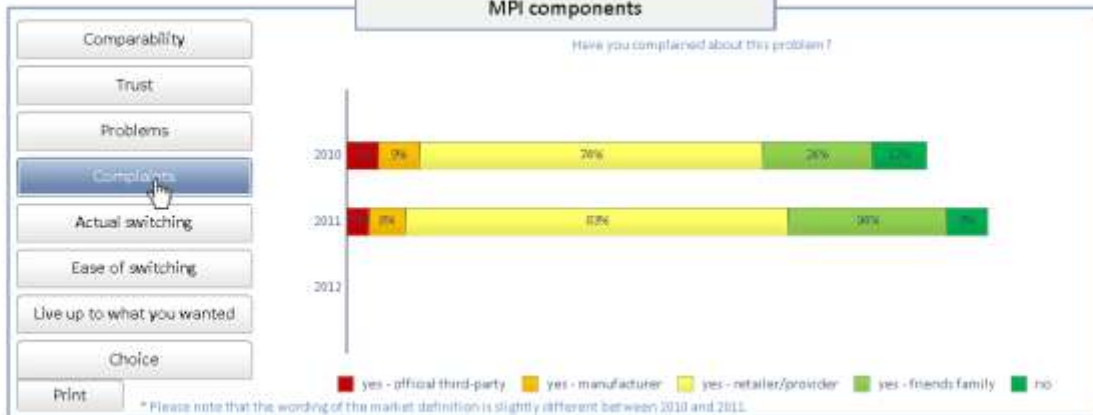
Market: Internet provision * MPI score: 2010 2011

MPI on country level



MPI components

Have you complained about this problem?



* Please note that the wording of the market definition is slightly different between 2010 and 2011.

printable version



Media

Speeches
Press releases
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Key Documents

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Reports
Eurobarometers

Quick Links

ADR
ECC-Net
Latest product warnings (RAPEX)
National consumer organisations
Tenders and grants

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Recherche

Environ 901 000 résultats (0,29 secondes)

Tout

Images

Maps

Vidéos

Actualités

Plus

Bruxelles

Changer le lieu

La Web

Pages en français

Pays : Belgique

Pages en langue étrangère traduites

Plus d'outils

Actualités - Pourquoi cette annonce ?

Promo Internet illimité - Actuellement 75€ d'avantages

[www.mobistar.be/internet-a-la-maison](#)

Si vous commandez ici en ligne.

Test de vitesse ADSL – mesurer la vitesse d'internet

[www.vitesse-adsl.be/](#)

Test de vitesse pour mesurer la **vitesse** de download et upload de ta connexion internet **adsl**.

Mesurer téléchargement adsl - Conseils importants avant de mesurer. - Tele2

Test ADSL - tester sa connexion, bande passante et débit avec le JON

[www.journalduweb.com / Hightech / Internet](#)

Test de débit ADSL et autres types de connexion "La phase de **test download**" : lors de ce **test**, l'outil mesure la **vitesse** avec laquelle vous recevez les ...

Test débit descendant et bande ... - Tester sa connexion, bande passante ...

Test ADSL - Speedtest - Test Vitesse ADSL

[www.my-speedtest.com/fr/](#)

Test ADSL - Test vitesse : Grâce à notre outil, vous pouvez faire mesurer instantanément et gratuitement la **vitesse** de votre connexion Internet ou ADSL. Speed ...

Mire ADSL

[mire.adsl.net/](#)

Votre ligne **ADSL** est opérationnelle. **Test** de connexion **ADSL** - Testez votre ligne **ADSL** pour connaître votre bande passante réelle. Adresse IP ...

Speedtest.net - The Global Broadband Speed Test

[speedtest.net / Traduire cette page](#)

Test your Internet connection bandwidth to locations around the world with this interactive broadband speed **test**.

Speedtest.net - Mobile - Speedtest.net Mini - My Results - Speed Wave

Test de débit ADSL - Testez la vitesse réelle de votre connexion

[www.testadsl.net/test-debit.html - France](#)

Ce **test** mesure votre débit réel, lequel est composé de votre débit montant (upload) et de votre débit descendant (download).

Test de bande passante

[www.zdnet.fr/services/test-bande-passante/](#)

Testez votre connexion internet en mesurant le débit de votre ligne **ADSL** (ou fibre ... différents chaque fois que je lance le **test** de **vitesse** de ma connexion ? ...

Test ADSL - testez votre vitesse de connexion

[beums.cnetfranca.fr/page/test-adsl.php](#)

Test ADSL, testez votre ligne **ADSL** et votre **vitesse** de connexion Internet.

Test de débit FibreOptiqueTest - Testez la **vitesse** de votre connexion

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SPEEDTEST.NET

LOGOUT

FR

MY RESULTS

SUPPORT

SETTINGS

SPEED WAVE



Before you begin the speed test:

Run a free scan for Windows errors on your PC

Run a free scan



PING
10 ms



DOWNLOAD SPEED
93.32 Mbps



UPLOAD SPEED
28.26 Mbps

SHARE THIS RESULT

TOO SLOW?

Try a faster
web browser.



Get Chrome

by Google



COMPARE
YOUR RESULT



CONTRIBUTE
TO NET INDEX

GET A FREE SPEEDTEST.NET ACCOUNT

Your Email Address

CREATE

Being logged in would allow you to start a Speed Wave here.
Registration is free and only requires a valid email address.

158.149.9.14
Columbus, Connecticut
★★★★★ Rate Your ISP

TEST AGAIN

NEW SERVER

Mechelen
Hosted by
Tiscali Belgium

Google

- 1 Test your connection.
- 2 Then, get a faster web browser.



SPEED WAVE

Compete with others and
gather broadband statistics.

Learn More

PINGTEST.NET

Bandwidth only tells part of the
story - test quality as well.

Test Now

MY RESULTS

Examine your past results and
see how they compare.

View Now

Welcome to Speedtest.net

Are you getting what you have paid for? By using Speedtest.net, you can consistently verify if your internet service provider is delivering the connection speed they promised.

Sign up for a [free account](#) to more easily track your Speedtest.net results from multiple computers. It will also enable you to create Speed Waves, manage your test history, label and group your connections and reserve a unique Speedtest.net nickname!

Share

Friend Us

Follow Us



Mobile

Get Speedtest.net for your mobile device



Become a Host

Host a Speedtest.net testing server in your area.



Speedtest.net Mini

Put a mini version of Speedtest.net on your site.

Internet

100%

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Luxembourg Broadband Speed Test

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**Unlimited
Cable
Internet
Call**

HALF PRICE
12 months

£3.25
Phone and Broadband

[Buy now](#)



Before you begin the speed test:
[Run a free scan for Windows errors](#)

Fleet Broad Band [www.fleetbroadband.com](#)
Marlink Provides FleetBroadband in all Remote Areas of the World!

Internet VDSL2 [www.satel.be/vdsl2](#)
Internet VDSL Hyper rapide 25 Mbps Installation & Modem WiFi Gratuits!

Belgacom Internet [www.belgacom.be](#)
Préférez un pack tout compris. A découvrir ici !

Managed Internet Access [www.managedinternet.be](#)
Interoute, Flexible Voice and Data Solutions available! Visit our site



AdChoices

Your ISP is **Commission Européenne**
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Compare broadband deals

Enter your postcode below to compare broadband packages in your area.

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Phone and Broadband

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[BREDBANDSTEST](#)[ÅTGÄRDSGUIDE](#)[MOBILVERSION](#)[STATISTIK](#)[FRÅGOR & SVAR](#)[TPTEST](#)[IPv6](#)

TA EMOT FILER: **50.27 Mbit/s** SKICKA FILER: **32.04 Mbit/s**

MÄTNINGEN ÄR KLAR

SVARSTID: 41 ms LEVERANTÖR: Commission Europeenn... MÄTSERVER: Stockholm

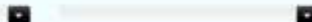
[Värdera ditt resultat](#) [Delä ditt resultat på Facebook](#) [Ladda hem resultatbild](#) [Mät igen](#)

▼ VÄRDERA - Är ditt mätresultat bra eller dåligt?

ÄR DITT MÄTRESULTAT BRA ELLER DÅLIGT?

Genom att ange typ av uppkoppling och vilken hastighet du betalar för, kan du få en utvärdering på om ditt mätresultat är bra eller dåligt.

Välj Uppkopplingstyp



Hur vet jag vilken uppkopplingstyp jag har?

► GUIDE - Förbättra din hastighet steg för steg

► JÄMFÖR - Se efter vad andra fått för resultat





Join our European campaign...
Sign up with us today to accurately measure your broadband performance.

[Sign Up](#)

[Requirements](#)

[Installation Guides](#)

[FAQs](#)

[Contact Us](#)

[SamKnows.com](#)

Select language

Measure your broadband accurately

Together, the European Commission and SamKnows aim to provide Europe with reliable and accurate statistics of broadband performance across Europe.

Volunteers will receive a purpose-built broadband measurement unit which can be plugged into the existing modem/router. This is called the SamKnows Whitebox.

If you are interested in helping us by hosting a SamKnows Whitebox, and playing a part in changing the face of the European broadband industry, then please sign up below!

It's worth taking the time to read through the requirements before proceeding.

Please note that not everyone who registers here will necessarily receive a SamKnows Whitebox - we do however thank all of you for helping to make European broadband better.

SamKnows & you:
Working together for better broadband

I want to measure Europe's broadband...

First Name

Last Name

Email Address

Postcode This should be the address of where the unit will be housed.

Select your country

Your ISP

Advertised Connection Speed To: Mbps downstream

Home network speed: Unknown

Preferred Language English

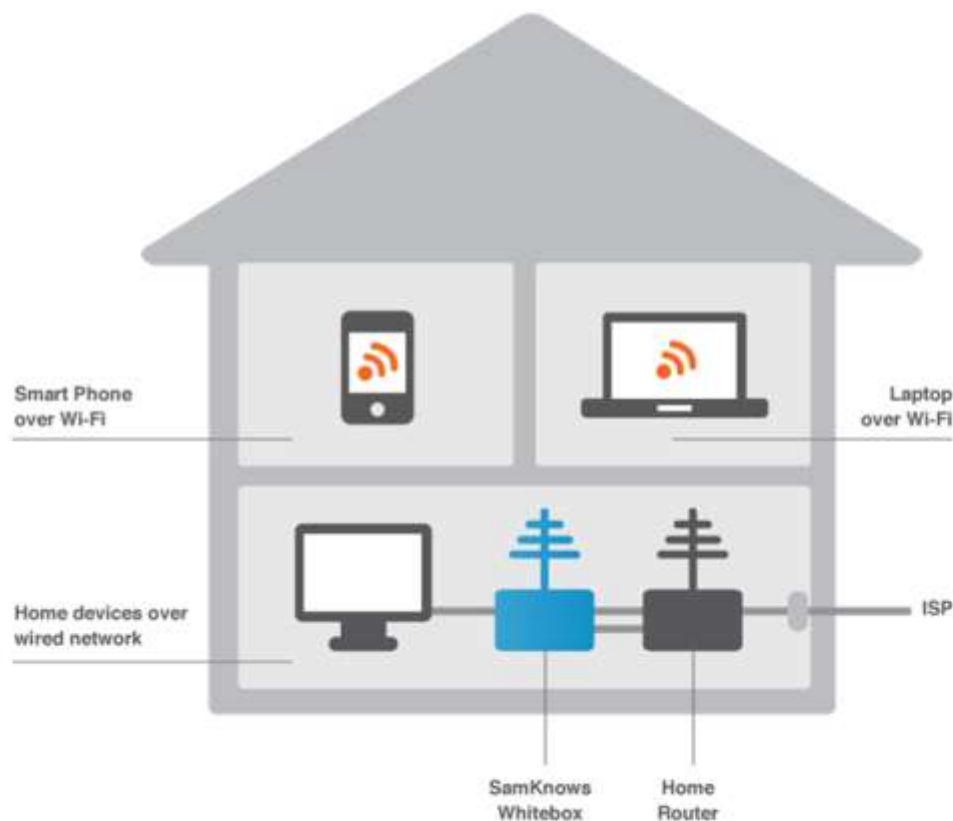
Verification ☐ I have read and understood the requirements

Sign Up now...



1. Speed tests (effective download and upload speeds)
2. Web browsing (user experience)
3. Video streaming (user experience)
4. Voice over IP (user experience)
5. Availability test (reliability of connection)
6. Latency and packet loss
7. Data usage test (network load)
8. DNS resolution

Illustration of how the Whitebox works in the home





- [Sign Up](#)
- [Requirements](#)
- [Installation Guides](#)
- [FAQs](#)
- [Contact Us](#)
- [SamKnows.com](#)



Select language

We have designed the Whitebox so that it is quick and easy to install. Take a look at the instructions and video below. Once your Whitebox is plugged in we will send you an email so you can access your broadband analytics.

Important installation instructions:

1. Remove the Whitebox and accessories from the box. The box should include:

- A. 1x TP-LINK router (model varies)
- B. 1x Ethernet cable
- C. 1-3x wireless antennas (varies with model)
- D. Power supply
- E. Instruction & information sheet

2. Attach the antennas to the back of the Whitebox.

3. Connect the Ethernet cable to the port marked "WAN" on the rear of the Whitebox.

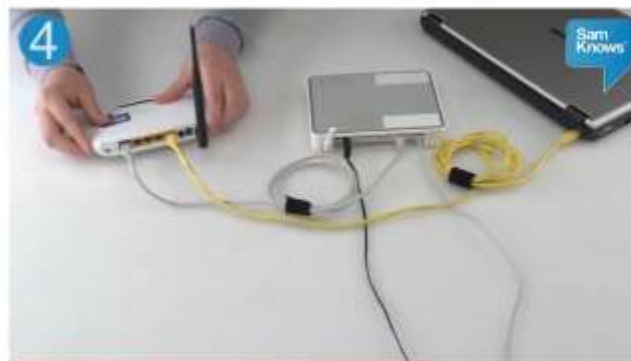
4. Connect the other end of the Ethernet cable to a spare port on your broadband router.

5. Disconnect any other wired network devices from your broadband router, and connect them to the SamKnows Whitebox instead via the ports marked 1-4.

6. Connect the power cable to the Whitebox, and insert the power plug into a power socket.

7. Observe the LEDs on the front of the Whitebox. The QoS light should flicker for 30-60 seconds, then turn solid green when the device is operating correctly.

Support will be provided in English, French and German; volunteers will be required to communicate in these languages.





Vice-President of the European Commission

Neelie Kroes

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BLOG

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How fast is your broadband? Volunteers wanted across Europe!

★★★★★

Rating: 4.4/5 (5 votes cast)

Small device... Important data

In one of my [recent posts](#) I wrote about the need for **fast broadband connections** in Europe. We need more and better broadband access to deliver the digital agenda and get every European Digital. And we need to know more about the current state of the market - so we're looking for [volunteers across Europe](#)!

Over recent years, we have made good progress in terms of broadband take-up; advertised average speeds have also gone up. But what about "real" broadband speeds? Many times I hear people say they upgraded their broadband connection to a "faster" product - but then can't notice any difference between one and another. But then, what's the point in paying a more expensive monthly fee?

The disappointment is often caused by a difference between advertised speeds, and what you actually get for your money. You've probably seen speeds of broadband products advertised as "up to" X Megabits per second. This speed is called "advertised", "nominal" or "headline" speed and it is what we see in the ads. In reality, a broadband connection can never achieve 100% of the advertised speed, because part of the bandwidth is reserved for IP addressing and routing. However, it seems that, sometimes, the effective speed is significantly lower than what we could expect.

To trust in the market, people need to be sure what they're getting. If not, if European consumers are unhappy about their broadband access, we won't succeed in building the Digital Single Market, because people won't have the confidence to sign up and pay the price for the high speed connections needed for new and innovative services.

I want us to understand this problem: I want us to collect **first hand information** from European consumers on the actual quality of their broadband access. To do that, though, first of all we will need accurate, comparable and reliable data on effective speeds at EU level.

You can help me collect this data! We are looking for volunteers across all EU27 countries plus Croatia, Iceland and Norway. If selected as part of the "representative sample", you will be sent a small device to plug into your home internet connection. This will run a series of automated tests when the line is not in use, establishing the speed and performance of your broadband connection - helping us to get the data we need to get **every European Digital**.

If you're interested in being one of this community of volunteers helping - visit the site now!

Number of views: 2646

Tags: [broadband](#), [broadband speed](#), [Digital Agenda](#), [fast broadband](#), [samknows](#)

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November 2011

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21	22	23	24	25	26	27
28	29	30				
* Oct						

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Independent regulator and competition authority for the UK communications industries.

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Home Consumers Average broadband speed is still less than half advertised speed

Average broadband speed is still less than half advertised speed

Average download speeds remain less than half of 'up to' speeds advertised by some Internet Service Providers (ISPs), particularly for broadband delivered via a phone line.

New Ofcom research shows that the average broadband speed in November/December 2010 was 6.2Mbps – less than half (45 per cent) of the average advertised broadband speed of 13.8Mbps.

The findings come as Ofcom submits its response to the current Committee for Advertising Practice (CAP) and Broadcast Committee for Advertising Practice (BCAP) consultation on broadband speeds advertising.

Ofcom is recommending that if speeds are used in broadband advertising they should be based on a Typical Speeds Range (TSR), so consumers have a clearer idea of what speeds to expect.

Ofcom also recommends that the TSR must have at least equal prominence to any maximum 'up to' speed, and that a maximum speed must be used only if it is actually achievable in practice by a material number of consumers.



The research

Next-generation superfast broadband services – available to a growing number of households – are significantly faster than current generation services.

Broadband services delivered by fibre-to-the-cabinet were measured for the first time and, along with cable services, delivered faster average speeds much closer to advertised speeds than was the case for current-generation broadband technologies.

The research looked at 11 packages provided by the seven largest ISPs in the market, representing over 90 per cent of residential broadband subscribers in the UK.

Over 1.5 million separate service performance tests were carried out in over 1,700 homes during November and December 2010.

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ParentPort: Working together for media standards

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- Enforcement Bulletins
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Chart 4: Average peak period sustained download and upload speeds as a percentage of advertised, by technology

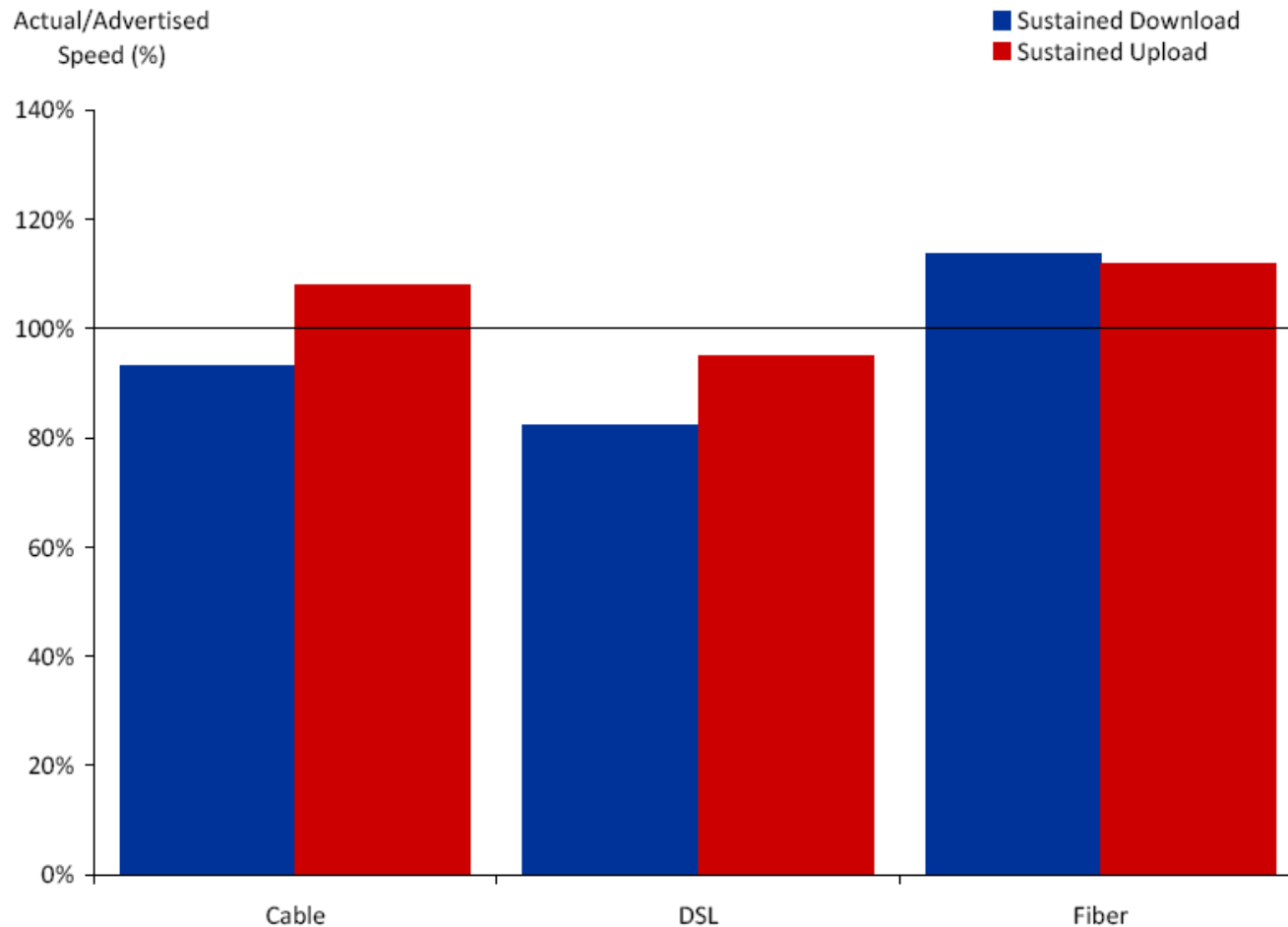
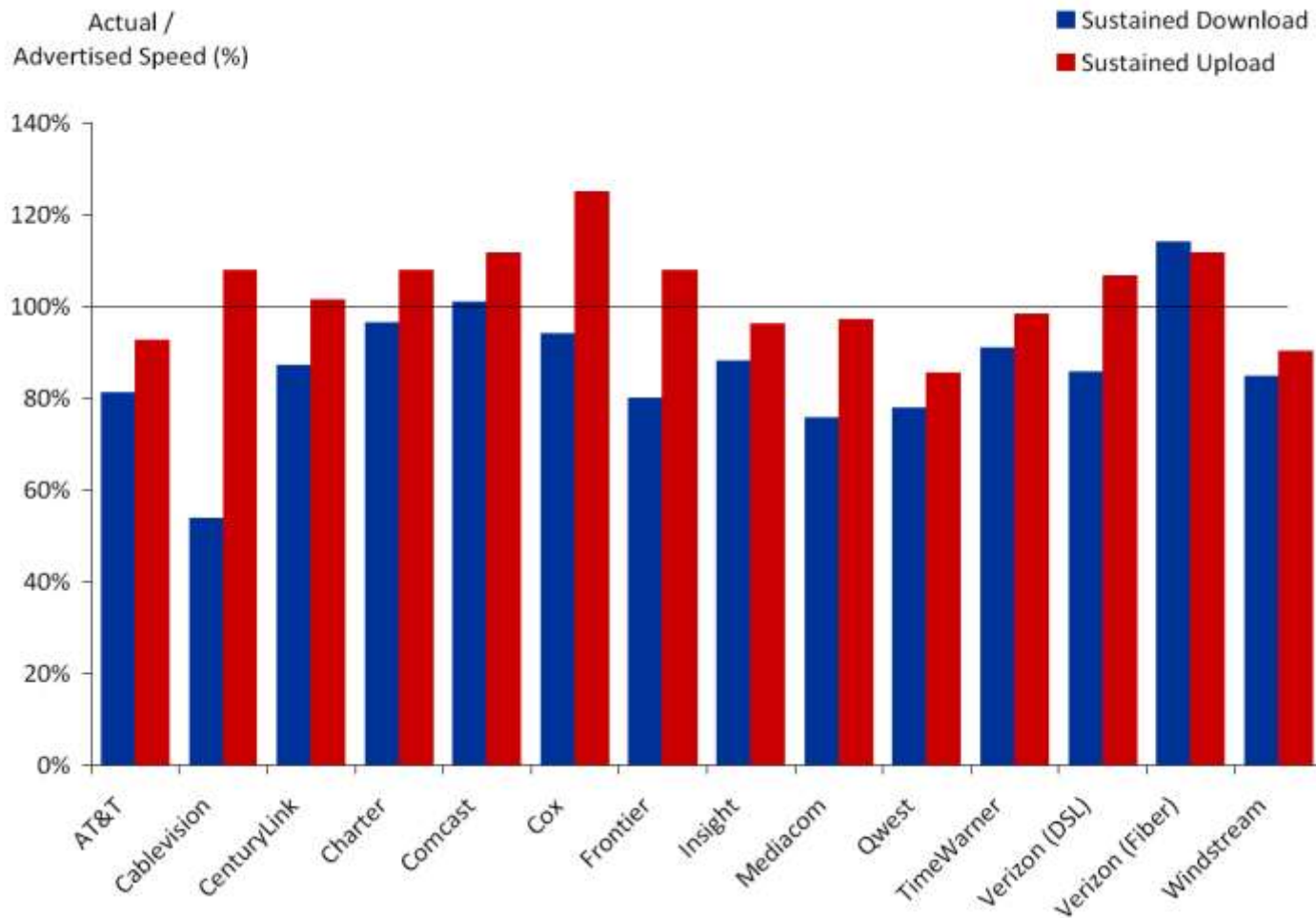




Chart 3: Average peak period sustained download and upload speeds as a percentage of advertised, by provider





Universal Service Directive (2002/22/EC*)

CHAPTER IV - END-USER INTERESTS AND RIGHTS

Article 22 Quality of service:

...national regulatory authorities are (...) able to require undertakings (...) to publish comparable, adequate and up-to-date **information for end-users on the quality** of their services

...National regulatory authorities may specify, inter alia, the **quality of service parameters** to be measured and the content, form and manner of the information to be published

...In order to prevent the degradation of service and the hindering or slowing down of traffic over networks, Member States shall ensure that **national regulatory authorities are able to set minimum quality of service requirements** on an undertaking or undertakings...

* as amended by Directive 2009/136/EC