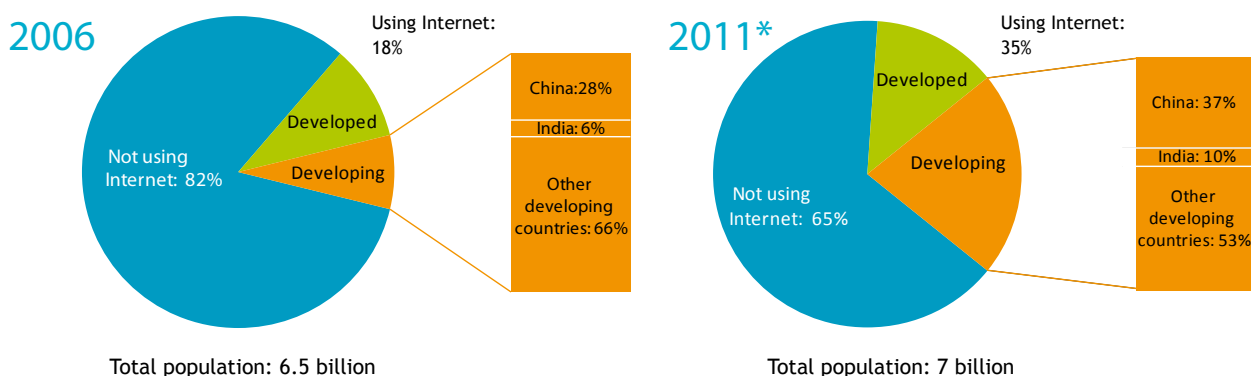


### One third of the world's population is online

45% of Internet users below the age of 25

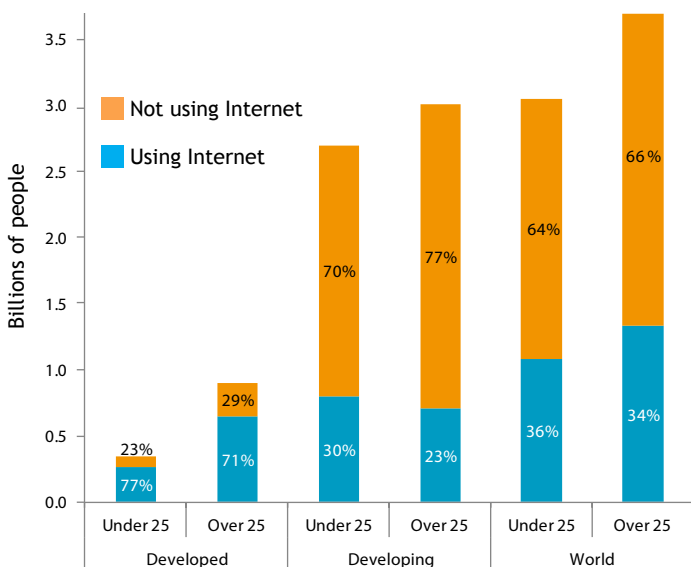
#### Share of Internet users in the total population



Note: \* Estimate  
Source: ITU World Telecommunication/ICT Indicators database

- The world is home to 7 billion people, one third of which are using the Internet. 45% of the world's Internet users are below the age of 25.
- Over the last five years, developing countries have increased their share of the world's total number of Internet users from 44% in 2006, to 62% in 2011. Today, Internet users in China represent almost 25% of the world's total Internet users and 37% of the developing countries' Internet users.

#### Internet users by age and by development level, 2011\*

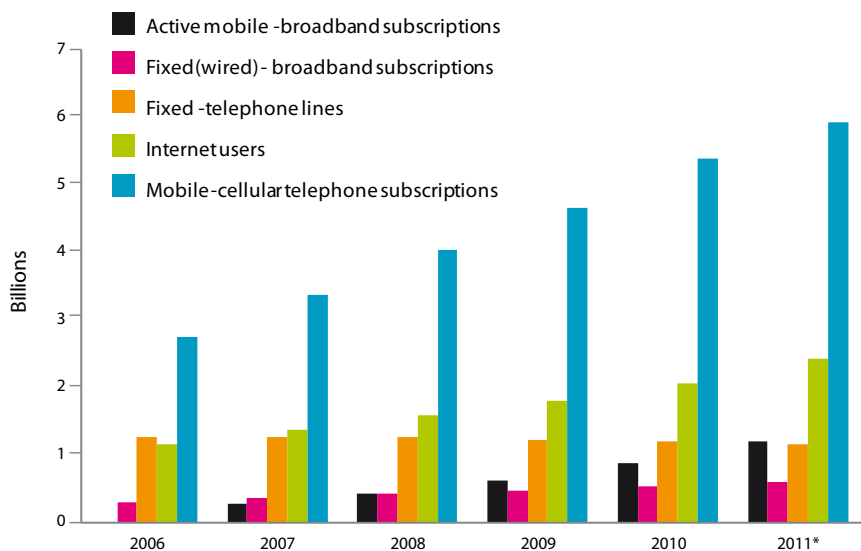


Note: \* Estimate  
Source: ITU World Telecommunication/ICT Indicators database

- Younger people tend to be more online than older people, in both developed and developing countries.
- In developing countries, 30% of those under the age of 25 use the Internet, compared to 23% of those 25 years and older.
- At the same time, 70% of the under 25-year-olds – a total of 1.9 billion – are not online yet: a huge potential if developing countries can connect schools and increase school enrolment rates.



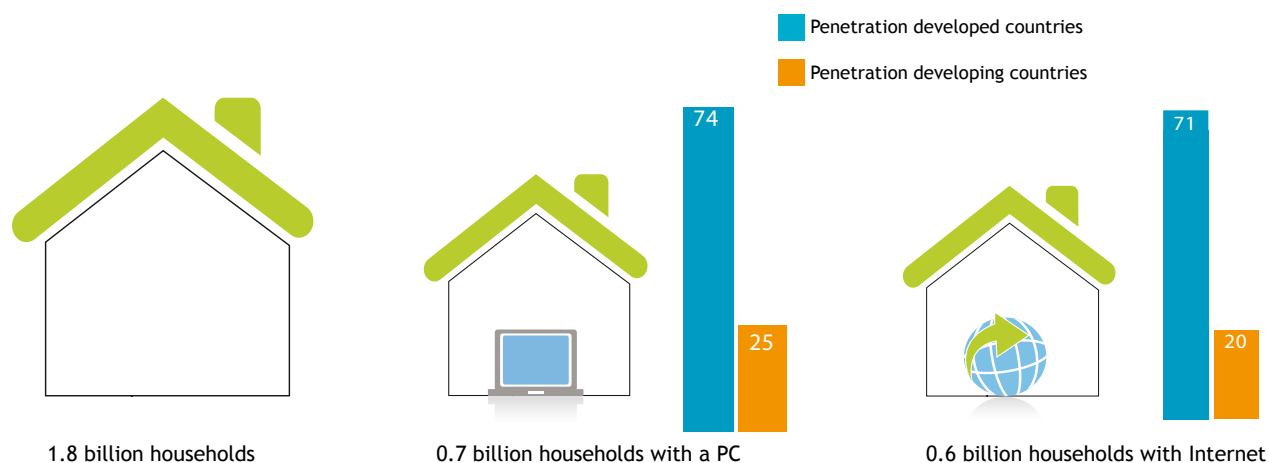
# Almost 6 billion mobile-cellular subscriptions



- With 5.9 billion mobile-cellular subscriptions, global penetration reaches 87%, and 79% in the developing world.
- Mobile-broadband subscriptions have grown 45% annually over the last four years and today there are twice as many mobile-broadband as fixed-broadband subscriptions.

Note: \* Estimate  
Source: ITU World Telecommunication/ICT Indicators database

## Home ICT access, 2011\*



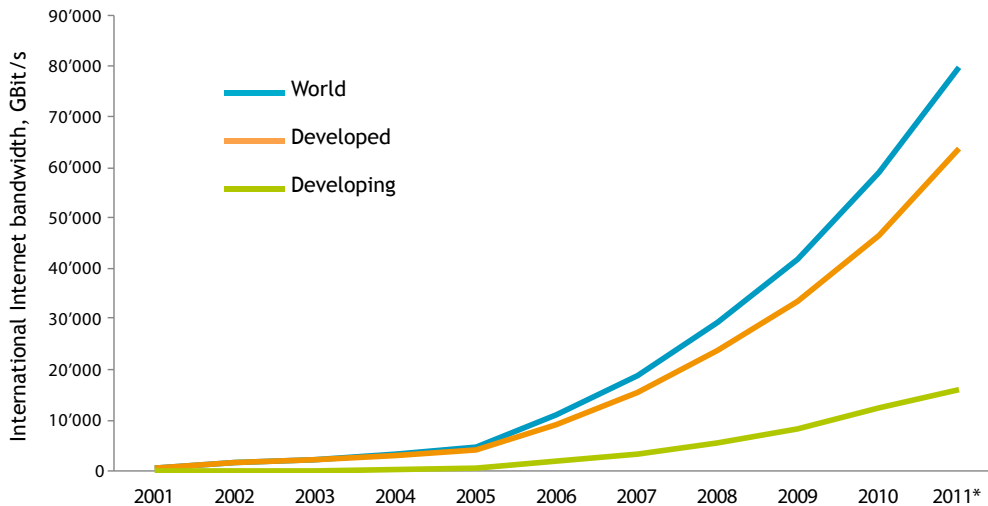
Note: \* Estimate  
Source: ITU World Telecommunication/ICT Indicators database

- Of 1.8 billion households worldwide, one third have Internet access, compared to only one fifth five years ago.
- In developing countries, 25% of homes have a computer and 20% have Internet access, compared to 20% and 13%, respectively, 3 years ago.



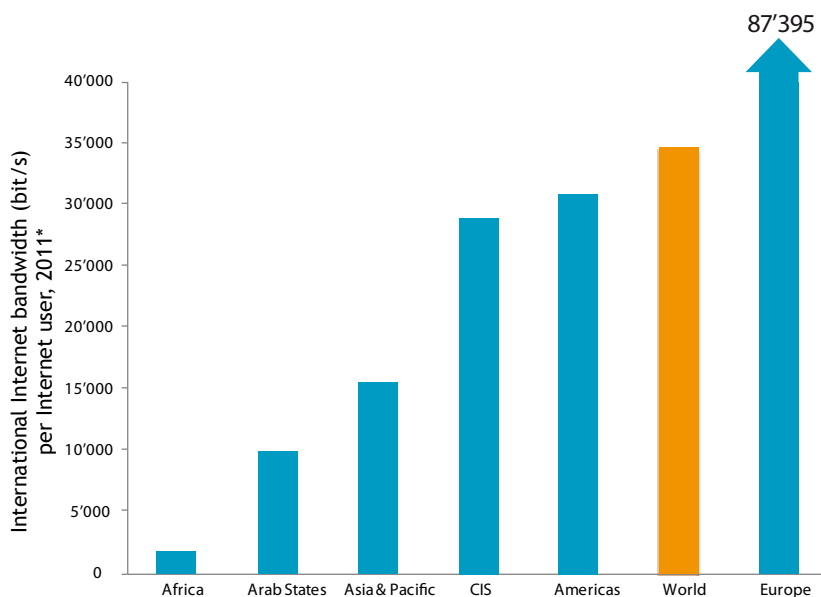
## Growth in bandwidth

facilitates broadband uptake



Note: \* Estimate  
Source: ITU World Telecommunication/ICT Indicators database

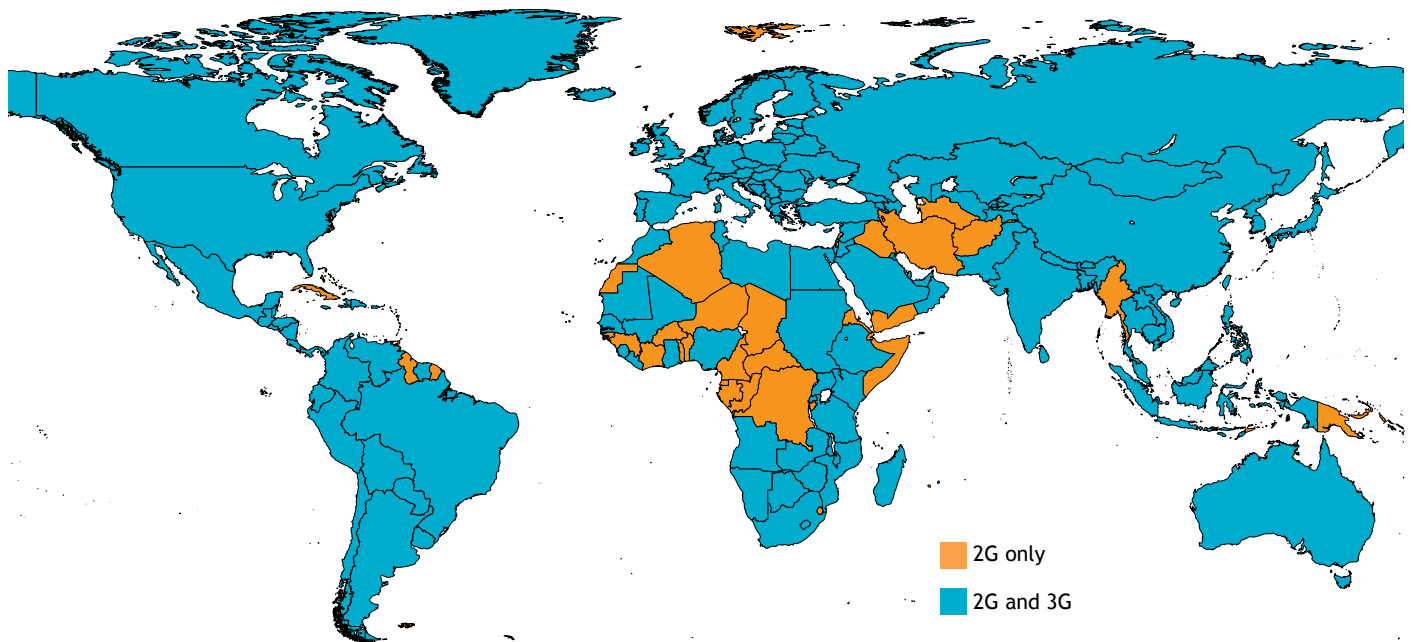
- International Internet bandwidth, a key factor for providing high-speed Internet access to a growing number of Internet users has grown exponentially over the last five years, from 11'000 Gbit/s in 2006, to close to 80'000 Gbit/s in 2011.
- Disparities between regions in terms of available Internet bandwidth per Internet user remain, with on average almost 90'000 bit/s of bandwidth per user in Europe, compared with 2'000 bit/s per user in Africa.



Note: \* Estimate  
Source: ITU World Telecommunication/ICT Indicators database

## Active mobile-broadband subscriptions reach almost 1.2 billion

Countries that offer 2G/3G services commercially, mid-2011\*



2G population coverage

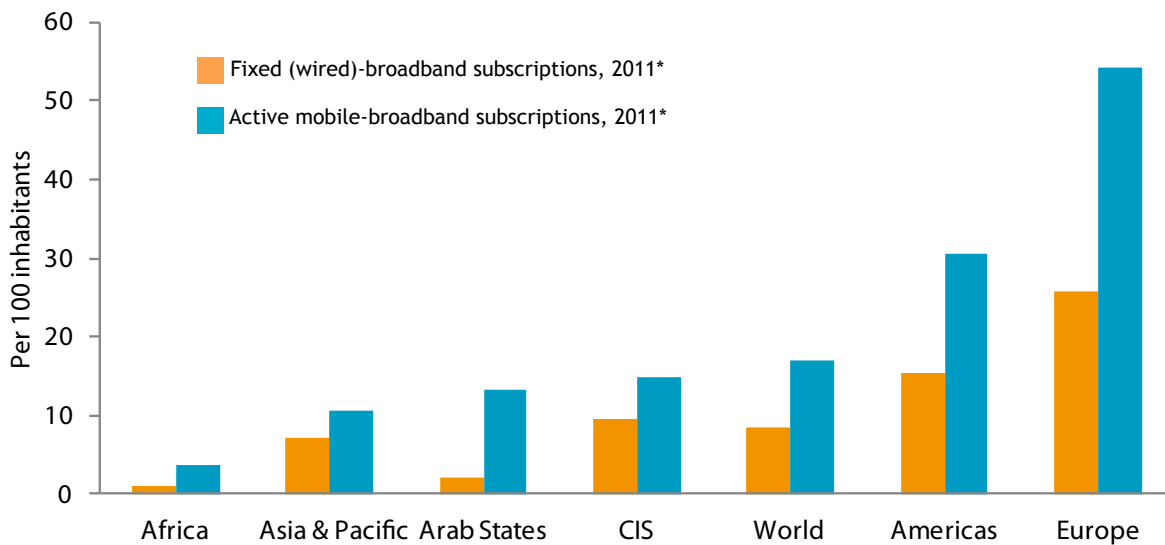


3G population coverage

Note: \* Estimate  
Source: ITU World Telecommunication/ICT Indicators database

- A total of 159 economies worldwide have launched 3G services commercially and the number of active mobile-broadband subscriptions has increased to almost 1.2 billion.
- While people in developed countries usually use mobile-broadband networks in addition to a fixed-broadband connection, mobile-broadband is often the only access method available to people in developing countries.
- The percentage of the population covered by a 2G mobile-cellular network is twice as high as the population covered by a 3G network. 3G population coverage reached 45% in 2011.

# Europe leads the broadband race



Note: \* Estimate  
Source: ITU World Telecommunication/ICT Indicators database

- Europe leads in broadband connectivity, with fixed- and mobile-broadband penetration reaching 26% and 54%, respectively.
- A number of developing countries have been able to leverage mobile-broadband technologies to overcome infrastructure barriers and provide high-speed Internet services to previously unconnected areas. In Africa, mobile-broadband penetration has reached 4%, compared with less than 1% for fixed-broadband penetration.
- The world's top broadband economies are from Europe and Asia and the Pacific. In the Republic of Korea mobile-broadband penetration exceeds 90%.

Top broadband economies, early 2011

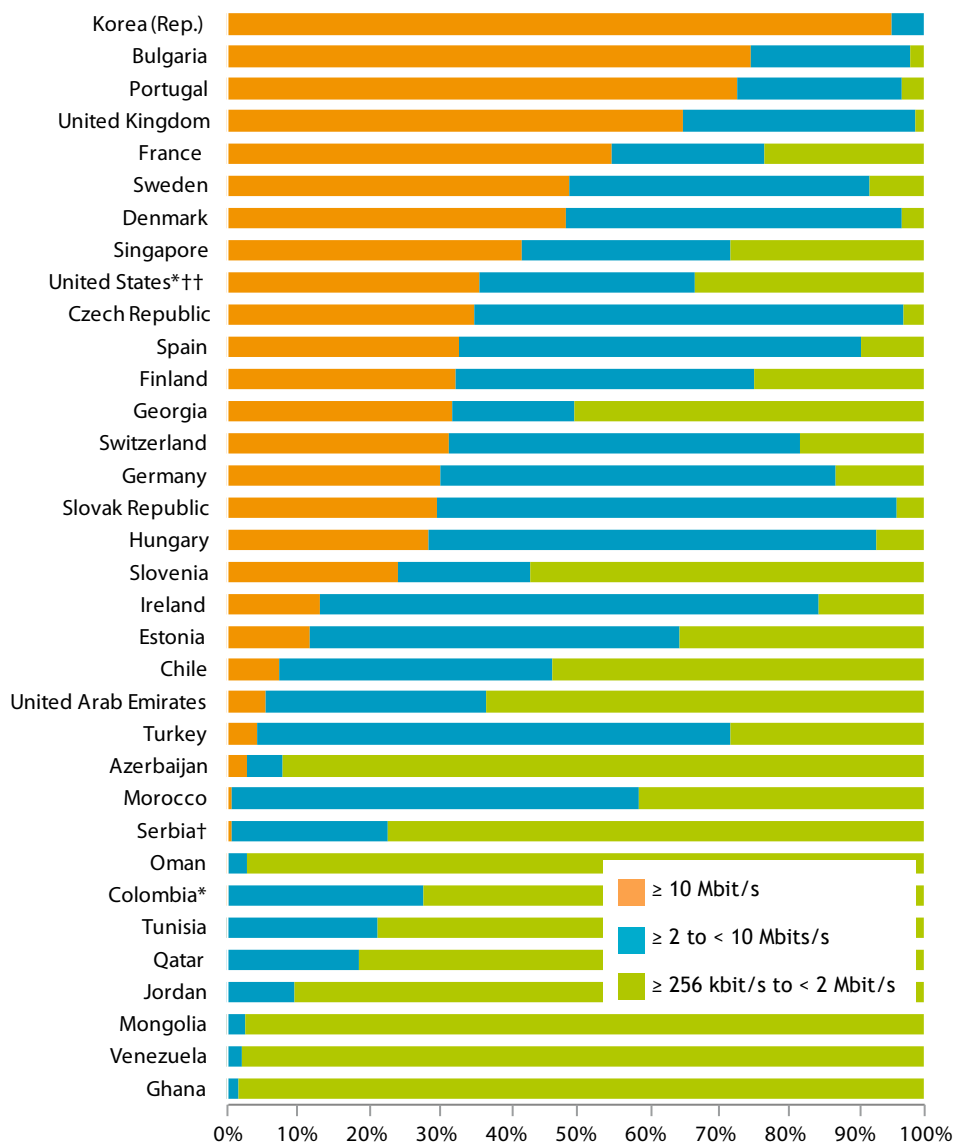
Economy	Fixed-broadband subscriptions per 100 inhabitants	Economy	Active mobile-broadband subscriptions per 100 inhabitants*
Netherlands	38.1	Korea (Rep.)	91.0
Switzerland	37.9	Japan	87.8
Denmark	37.7	Sweden	84.0
Korea (Rep.)	35.7	Australia	82.7
Norway	35.3	Finland	78.1
Iceland	34.1	Hong Kong, China	74.5
France	33.9	Portugal	72.5
Luxembourg	33.2	Luxembourg	72.1
Sweden	31.8	Singapore	69.7
Germany	31.7	Austria	67.4
United Kingdom	31.6	New Zealand	66.2
Belgium	31.5	Kuwait	63.5
Hong Kong, China	29.9	Israel	62.2
Canada	29.8	Brunei Darussalam	61.4
Finland	28.6	Cyprus	61.3
United States	27.6	Italy	59.4
Malta	27.5	United Arab Emirates	58.4
Japan	26.9	Greece	58.3
Estonia	25.1	Saudi Arabia	57.8
Singapore	24.9	Macao, China	56.1
New Zealand	24.9	United Kingdom	56.0
Slovenia	24.2	Spain	55.7
Australia	24.2	Denmark	54.7
Macao, China	24.2	United States	54.0
Austria	23.9	Ireland	47.3

Note: Excludes economies with populations below 100'000  
Source: ITU World Telecommunication/ICT Indicators database  
\* Data provided by Wireless Intelligence

# Broadband – speed matters

## Fixed-broadband subscriptions, by speed, early 2011

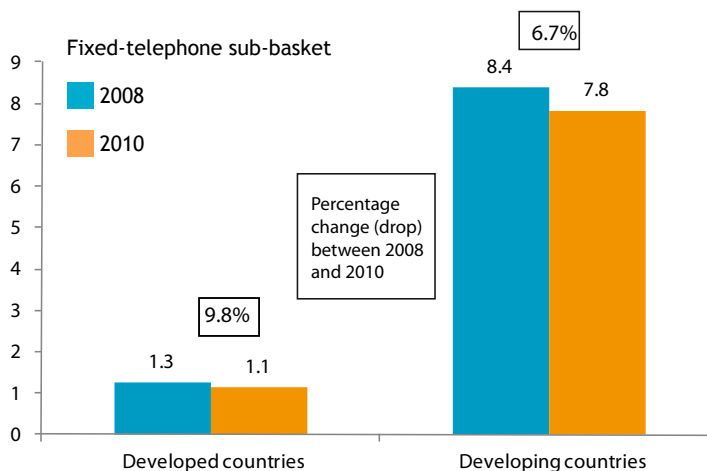
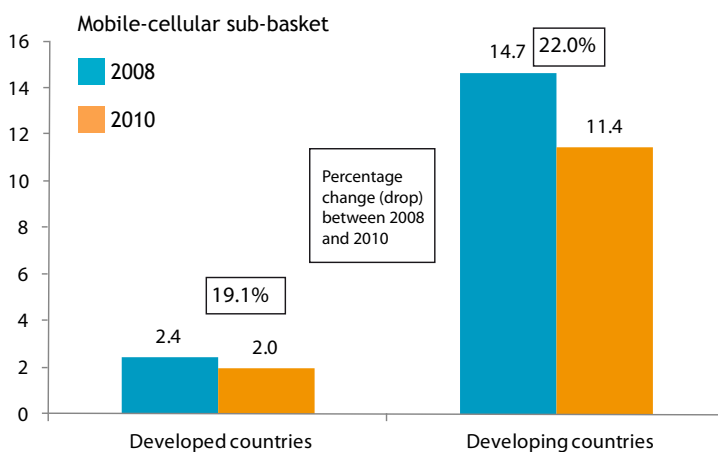
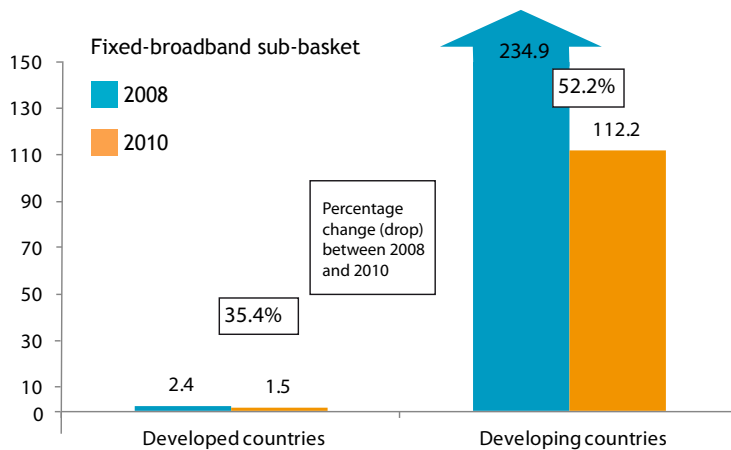
- While almost all fixed-broadband connections in the Republic of Korea provide speeds equal to, or above 10 Mbit/s, broadband users in Ghana, Mongolia, Oman and Venezuela are limited to broadband speeds below 2 Mbit/s.
- An Internet connection with a speed of 256 kbit/s limits the types of applications and services that Internet users can enjoy. Service providers for data-intensive services, such as Video-on-Demand, recommend a minimum speed of 2 Mbit/s.
- Advertised and real speeds can differ substantially. In some countries, regulatory authorities monitor the speed and quality of broadband services and oblige operators to provide accurate quality-of-service information to end users.



Note: Refers to advertised speeds. \* Data correspond to slightly different speed intervals.  
 † Breakdown by speed available only for part of the total fixed (wired)-broadband subscriptions.  
 †† June 2010 data.  
 Source: ITU World Telecommunication/ICT Indicators database

# Fixed broadband prices in developing countries

## drop by over 50% in just two years



Source: ITU Measuring the Information Society (2011)

- The ITU ICT Price Basket<sup>1</sup> shows that between 2008 and 2010 ICT services have become more affordable and relative prices came down by an average of 18%, globally.
- The steepest price drop occurred in developing countries, where fixed-broadband prices dropped by 52.2%.
- In developing countries, mobile-cellular prices, which have substantially dropped over the last decade, fell by a further 22%. The 2010 mobile-cellular sub-basket represented on average 11.4% of monthly GNI per capita, compared to 2% in developed countries.
- ICT services continue to be more affordable in high-income economies and less affordable in low-income economies. By 2010, the cost of ICT services averaged 1.5% of GNI per capita in developed countries, compared with 17% of GNI per capita in developing countries.
- In 31 countries – all of them highly industrialized economies – an entry-level broadband connection costs on average the equivalent of 1% or less of average monthly GNI per capita, while in 19 countries – most of them least developed countries – a broadband connection costs on average more than 100% of monthly GNI per capita.

1. The ITU ICT Price Basket is a composite measure based on three tariff sets – fixed-telephone, mobile-cellular and fixed-broadband Internet services – and computed as a percentage of average GNI per capita.

For more information:

ICT Data and Statistics Division  
Telecommunication Development Bureau  
International Telecommunication Union

Place des Nations  
1211 Geneva 20 - Switzerland

indicators@itu.int  
www.itu.int/ict

