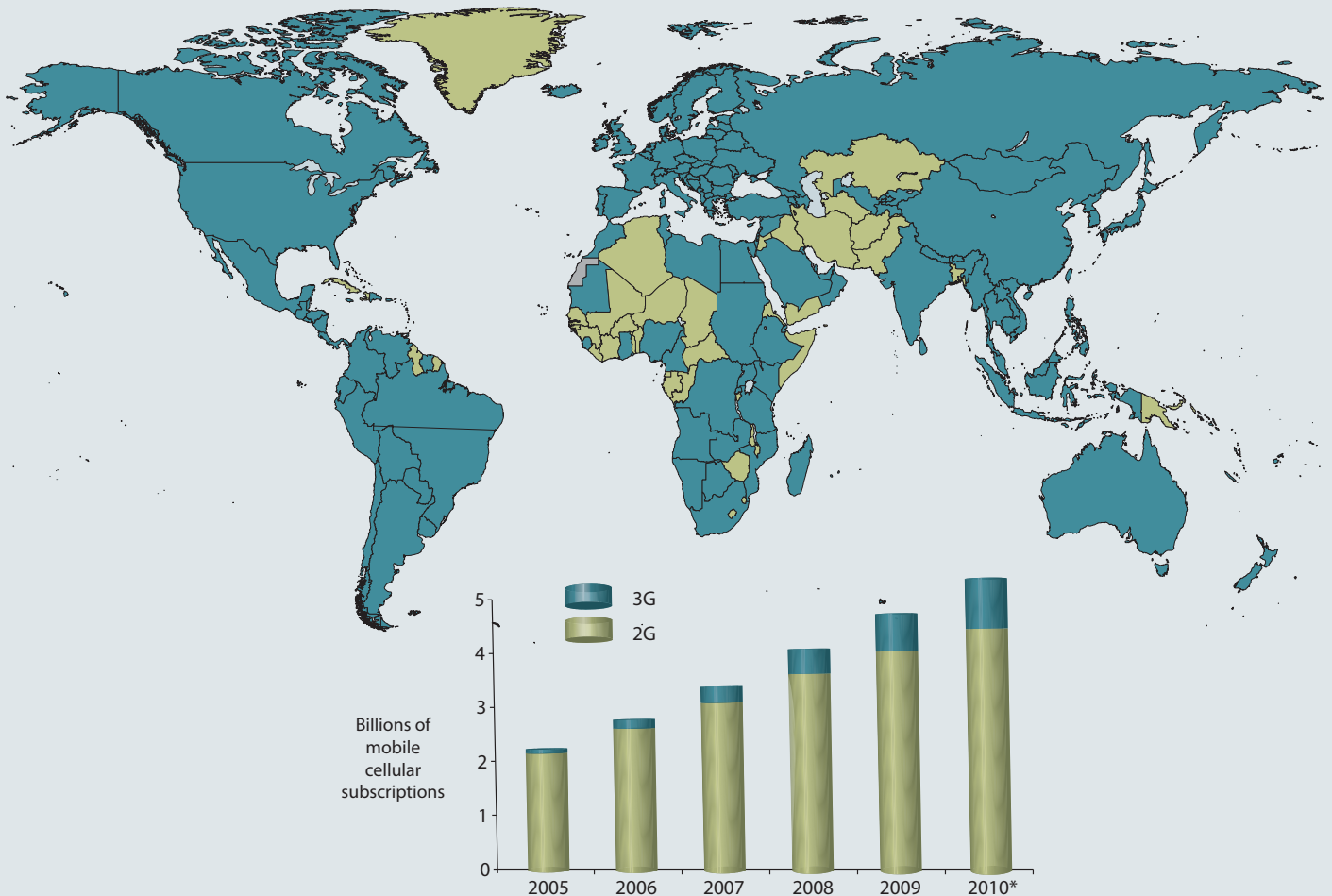


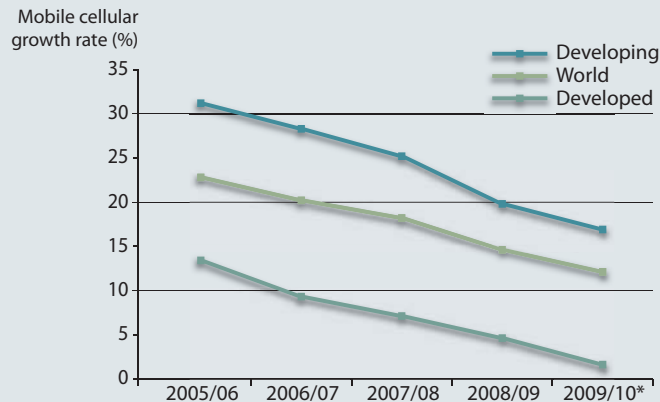
## The rise of 3G



Notes: The map shows countries that are offering 2G/3G services commercially. \*Estimate  
Source: ITU World Telecommunication/ICT Indicators database

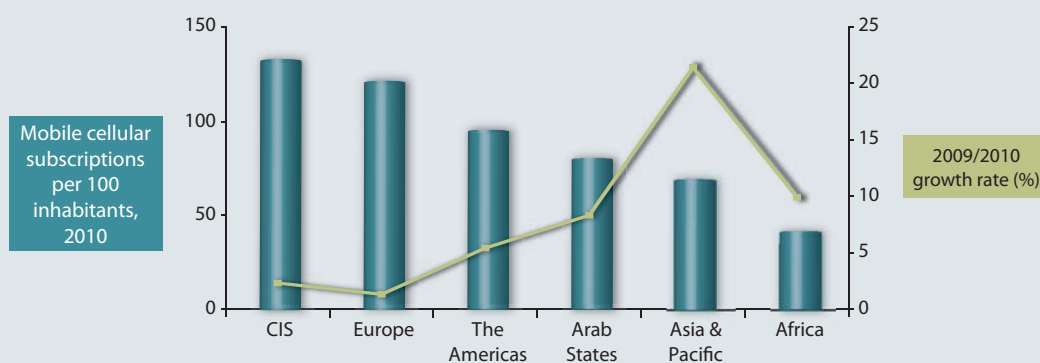
- By the end of 2010, there will be an estimated 5.3 billion mobile cellular subscriptions worldwide, including 940 million subscriptions to 3G services.
- Access to mobile networks is now available to 90% of the world population and 80% of the population living in rural areas.
- People are moving rapidly from 2G to 3G platforms, in both developed and developing countries. In 2010, 143 countries were offering 3G services commercially, compared to 95 in 2007.
- Towards 4G: a number of countries have started to offer services at even higher broadband speeds, moving to next generation wireless platforms – they include Sweden, Norway, Ukraine and the United States.

## Towards the end of double-digit mobile growth



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

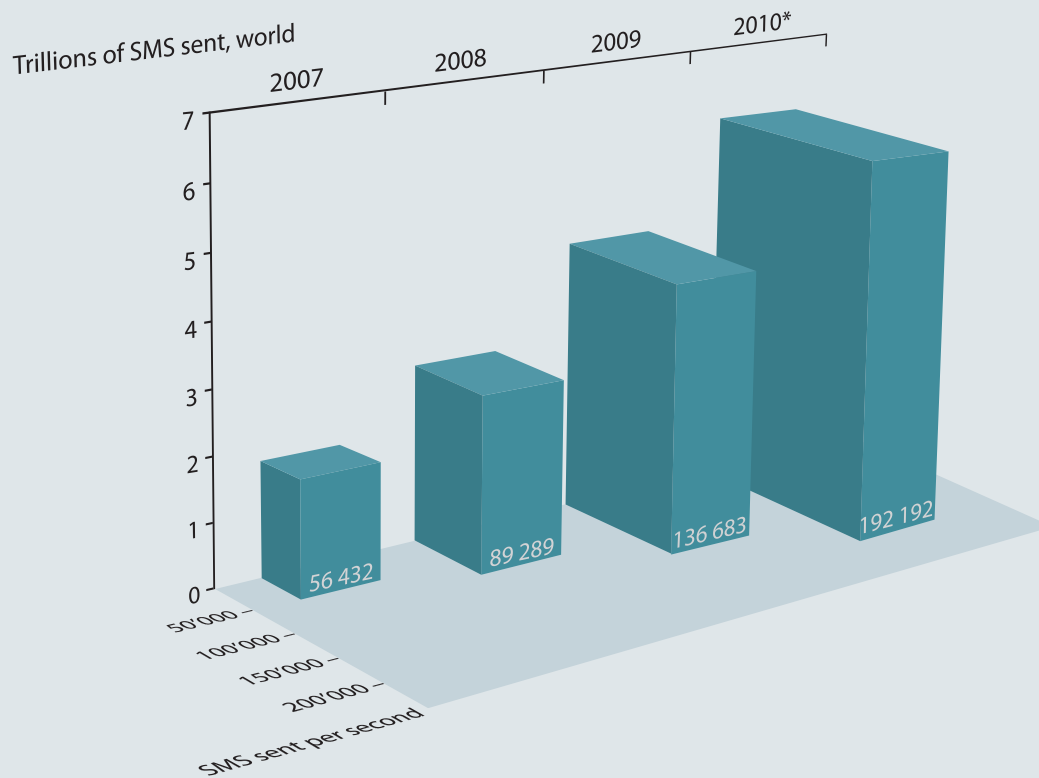
- Mobile cellular growth is slowing worldwide. In developed countries, the mobile market is reaching saturation levels with on average 116 subscriptions per 100 inhabitants at the end of 2010 and a marginal growth of 1.6% from 2009-2010.
- At the same time, the developing world is increasing its share of mobile subscriptions from 53% of total mobile subscriptions at the end of 2005 to 73% at the end of 2010.



Note: 2010 data are estimates  
Source: ITU World Telecommunication/ICT Indicators database

- In the developing world, mobile cellular penetration rates will reach 68% at the end of 2010 - mainly driven by the Asia and Pacific region. India and China alone are expected to add over 300 million mobile subscriptions in 2010.
- In the African region, penetration rates will reach an estimated 41% at the end of 2010 (compared to 76% globally) leaving a significant potential for growth.

## SMS triples in three years

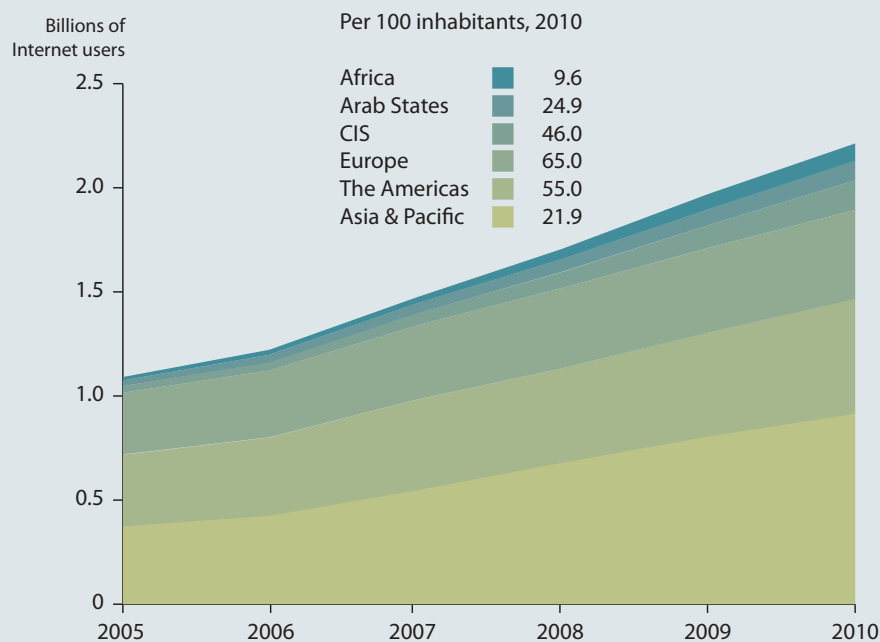


Note: \*Estimate

Source: ITU World Telecommunication/ICT Indicators database

- The total number of SMS sent globally tripled between 2007 and 2010, from an estimated 1.8 trillion to a staggering 6.1 trillion. In other words, close to 200 000 text messages are sent every second.
- Assuming an average cost of USD 0.07 per SMS, in 2010 SMS traffic is generating an estimated USD 812 000 every minute (or around USD 14 000 every second).
- In 2009, SMS revenue accounted for 12% of China's largest mobile operator's total revenue.
- The Philippines and the United States combined accounted for 35% of all SMS sent in 2009.

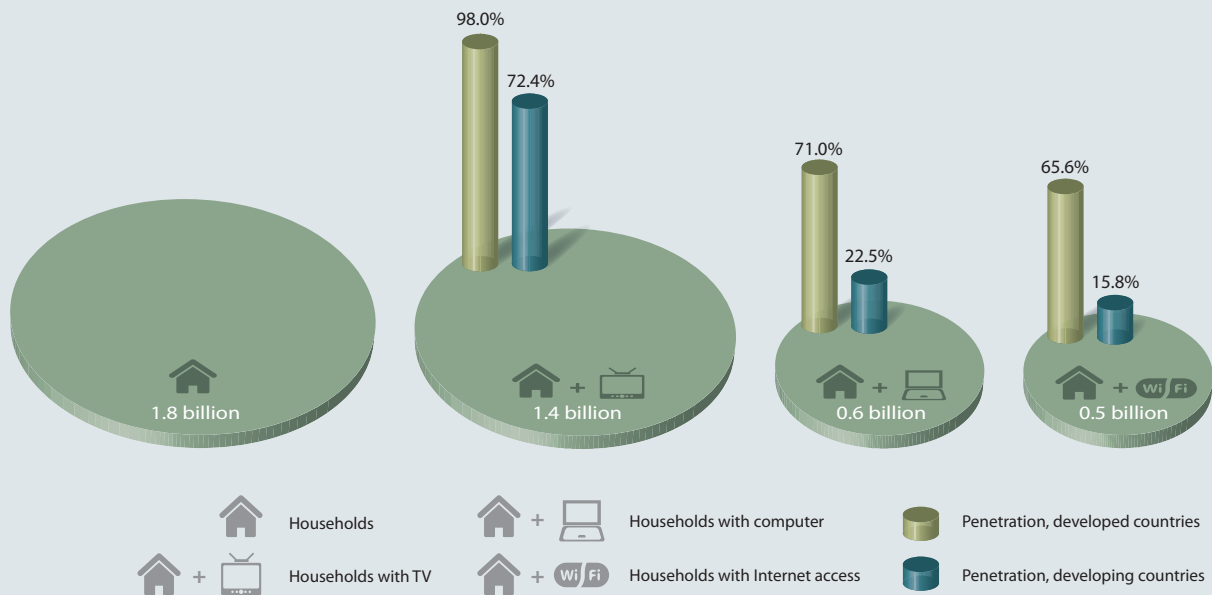
## Two billion people on the Internet... ... but too few in Africa



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

- The number of Internet users has doubled between 2005 and 2010.
- In 2010, the number of Internet users will surpass the two billion mark, of which 1.2 billion will be in developing countries.
- A number of countries, including Estonia, Finland and Spain have declared access to the Internet as a legal right for citizens.
- With more than 420 million Internet users, China is the largest Internet market in the world.
- While 71% of the population in developed countries are online, only 21% of the population in developing countries are online. By the end of 2010, Internet user penetration in Africa will reach 9.6%, far behind both the world average (30%) and the developing country average (21%).

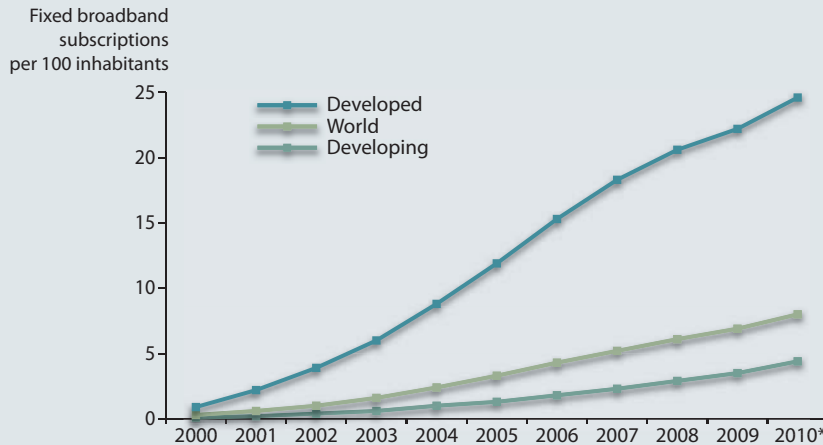
## Connecting homes



Note: Data refer to 2010 and are estimates  
 Source: ITU World Telecommunication/ICT Indicators database

- While in developing countries 72.4% of households have a TV, only 22.5% have a computer and only 15.8% have Internet access (compared to 98%, 71% and 65.6% respectively in developed countries).
- At the end of 2010, half a billion households worldwide (or 29.5%) will have access to the Internet.
- In some countries, including the Republic of Korea, Netherlands and Sweden, more than 80% of households have Internet access, almost all of them through a broadband connection.
- The number of people having access to the Internet at home has increased from 1.4 billion in 2009 to almost 1.6 billion in 2010.

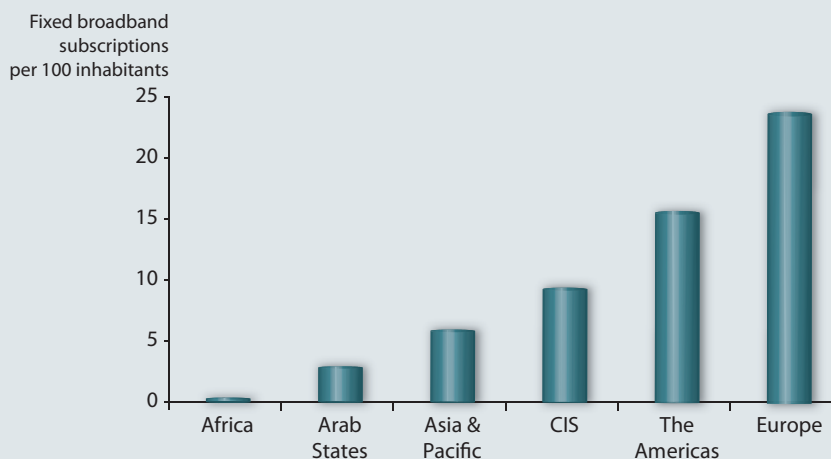
## The continuing broadband divide



Note: \*Estimate

Source: ITU World Telecommunication/ICT Indicators database

- There has been strong growth in fixed (wired) broadband subscriptions, in both developed and developing countries: at the end of 2010, fixed (wired) broadband subscriptions will reach an estimated 555 million globally (or 8% penetration), up from 471 million (or 6.9% penetration) a year earlier.
- Despite these promising trends, penetration levels in developing countries remain low: 4.4 subscriptions per 100 people compared to 24.6 in developed countries.



Note: Data refer to 2010 and are estimates

Source: ITU World Telecommunication/ICT Indicators database

- The developing world's share of fixed (wired) broadband subscriptions is growing steadily: by the end of 2010, the developing world will account for an estimated 45% of global subscriptions (up from 42% five years earlier).
- Africa still lags behind when it comes to fixed (wired) broadband. Although subscriptions are increasing, a penetration rate of less than 1% illustrates the challenges that persist in increasing access to high-speed, high-capacity Internet access in the region.

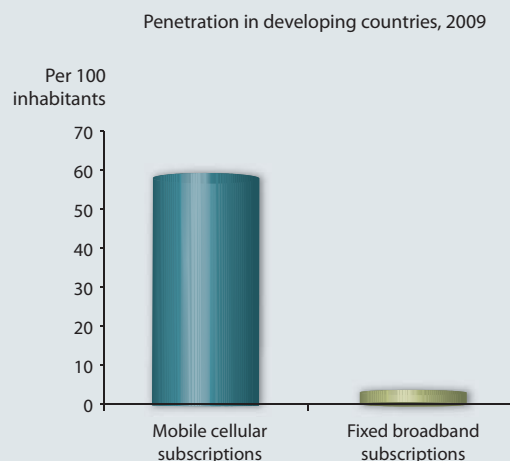
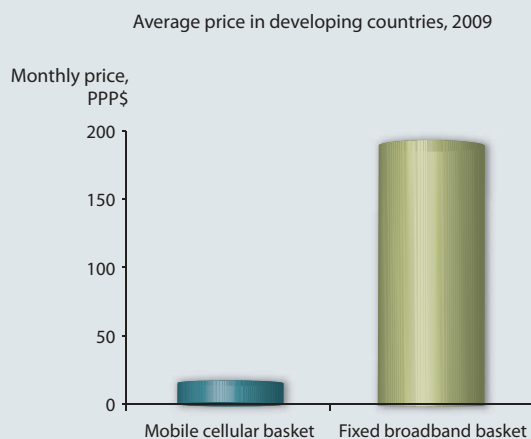
## Broadband speed and affordability

Time needed to download online content at different connection speeds

Connection speed		256kbps	2Mbps	10Mbps	100Mbps
Content					
Google home page	(160 KB)	00:00:05	00:00:01*	00:00:00*	00:00:00*
Music track	(5MB)	00:02:36	00:00:20	00:00:04	00:00:00*
Video clip	(20MB)	00:10:25	00:01:20	00:00:16	00:00:02*
CD / low quality movie	(700MB)	06:04:35	00:46:40	00:09:20	00:00:56
DVD / high quality movie	(4GB)	34:43:20	04:26:40	00:53:20	00:05:20

Source: ITU calculation.  
Note: \* Rounded values.

- With the rapidly increasing high-bandwidth content and applications on the Internet, there is a growing demand for higher-speed connections. For example, at the minimum broadband speed of 256 kbps, downloading a high-quality movie takes almost 1½ days - compared to 5 minutes at a connection speed of 100 Mbps.



Source: Measuring the Information Society Report 2010, ITU

- Fixed (wired) broadband prices dropped by 42% between 2008 and 2009 but there are huge differences among countries when it comes to the affordability of broadband: in 2009, an entry-level fixed (wired) broadband connection cost on average 190 PPP\$ per month in developing countries, compared to only 28 PPP\$ per month in developed countries. This has significant implications for the uptake of ICT services, which is much higher for lower-cost mobile cellular compared to higher-priced fixed broadband.

## For more information:

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