



# ICT FACTS AND FIGURES 2017

"This year marks the 25th anniversary of the ITU Telecommunication Development Sector. Over the past two and a half decades, ITU has contributed to the unprecedented development of ICTs worldwide and the wider transformation they have brought to society. Our new data show that young people are at the forefront of today's digital economy with 70 per cent of the world's youth being online. Today's ICT development is driven by the spread of mobile-broadband services. The growth of mobile broadband has largely outpaced that of fixed broadband, while mobile-broadband prices have dropped by 50 per cent on average over the last three years. These factors have resulted in about half of the world's population getting online and broadband services being available at much higher speeds.

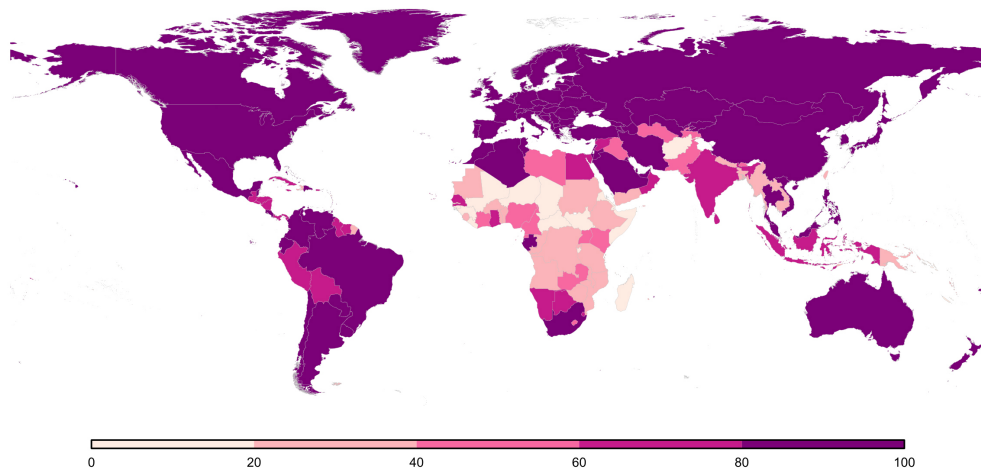


**Brahima Sanou**,  
*Director of the ITU  
Telecommunication  
Development Bureau*

As ICTs continue to be a key enabler of economic and social development, ITU has a pivotal role in the global efforts to bridge the digital divide and in fostering an inclusive digital economy. I am confident that the discussions at the World Telecommunication Development Conference 2017, to be held in Buenos Aires, Argentina from 9 to 20 October 2017, under the theme of "ICT for Sustainable Development Goals", will contribute to the mapping of results-oriented strategies aimed at hastening the pace of countries towards the timely attainment of the SDGs and their related targets."

## 70% OF THE WORLD'S YOUTH ARE ONLINE

### Proportion of youth (15-24) using the Internet, 2017\*



Source: ITU.  
Note: \* Estimates.

In 104 countries, more than 80% of the youth population are online.

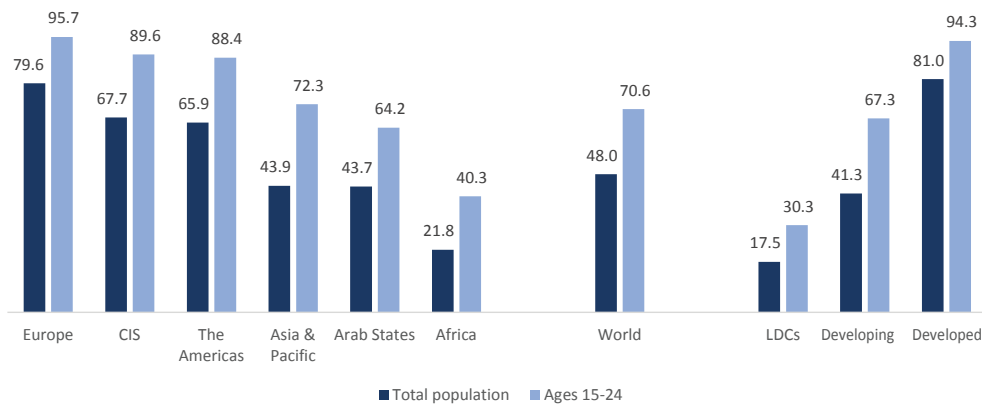
In developed countries, 94% of young people aged 15-24 use the Internet compared with 67% in developing countries and only 30% in Least Developed Countries (LDCs).

Out of the 830 million young people who are online, 320 million (39%) are in China and India.

Nearly 9 out of 10 young individuals not using the Internet live in Africa or Asia and the Pacific.

# YOUTH ARE AT THE FOREFRONT OF INTERNET ADOPTION

## Proportion of individuals using the Internet, by age, 2017\*



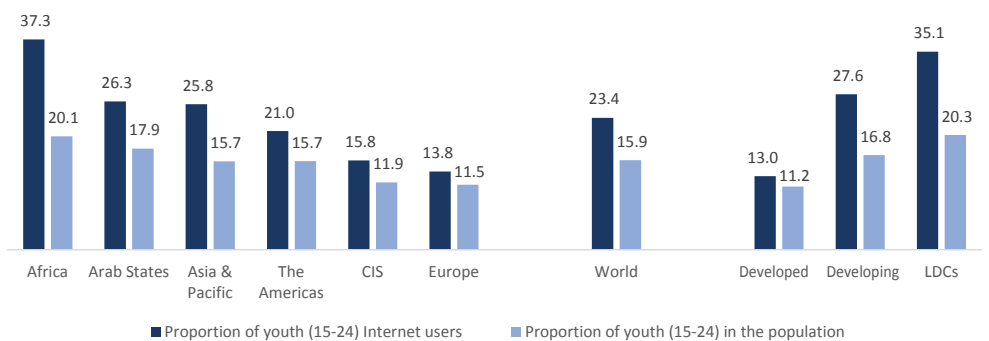
The proportion of young people aged 15-24 using the Internet (71%) is significantly higher than the proportion of the total population using the Internet (48%).

Source: ITU. Note: \* Estimates. CIS refers to the Commonwealth of Independent States. Proportions in this chart refer to the number of people using the Internet, as a percentage of the total population, and the number of people aged 15-24 using the Internet, as a percentage of the total population aged 15-24, respectively.

## Proportion of youth (15-24) Internet users and youth in the population, 2017\*

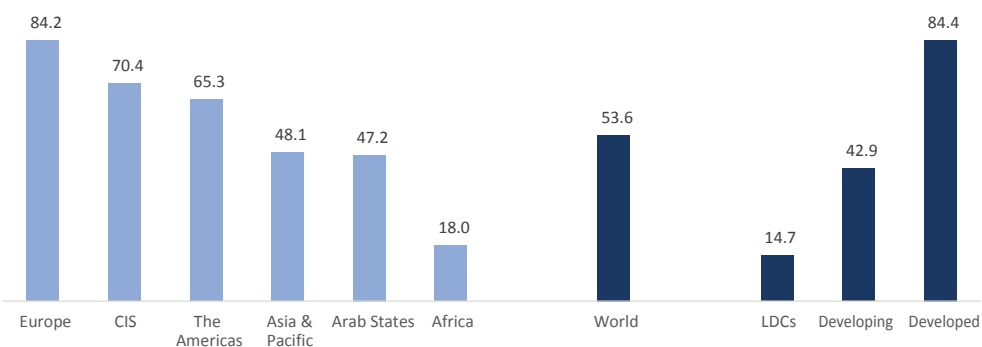
Young people represent almost one-fourth of the total number of individuals using the Internet worldwide.

In LDCs, 35% of the individuals using the Internet are young people aged 15-24, compared with 13% in developed countries and 23% globally.



Source: ITU. Note: \* Estimates. CIS refers to the Commonwealth of Independent States. Proportions in this chart refer to the number of people aged 15-24 using the Internet, as a percentage of the total population using the Internet, and the number of people aged 15-24, as a percentage of the total population, respectively.

## Proportion of households with Internet access, 2017\*



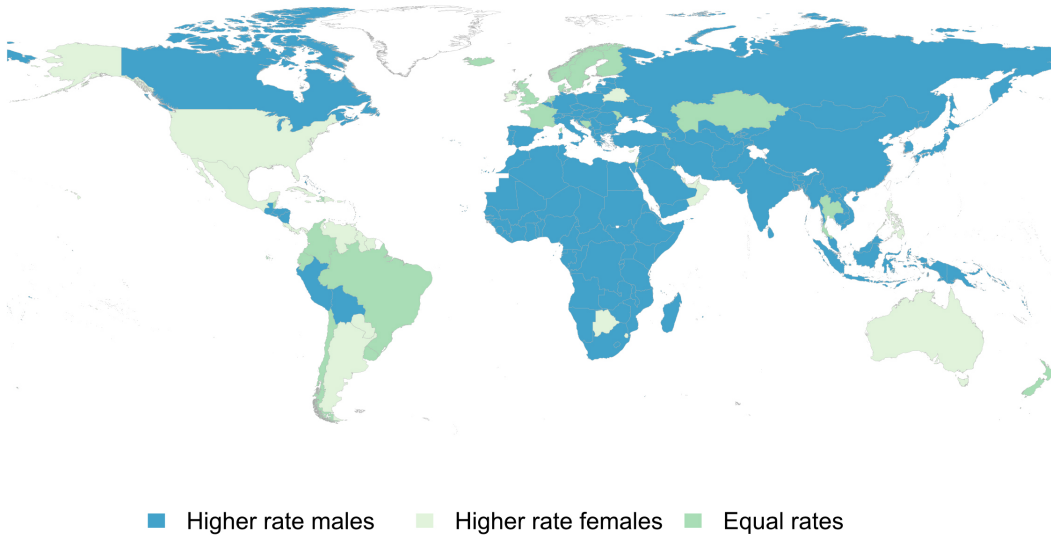
In developed countries, the proportion of households with Internet access at home is twice as high as in developing countries.

Only 15% of households in LDCs have Internet access at home. In these countries, many Internet users are accessing the Internet from work, schools and universities or from other shared public connections outside the home.

Source: ITU. Note: \* Estimates. CIS refers to the Commonwealth of Independent States.

# THE DIGITAL GENDER GAP PERSISTS

## Proportion of individuals using the Internet, by gender, 2017\*



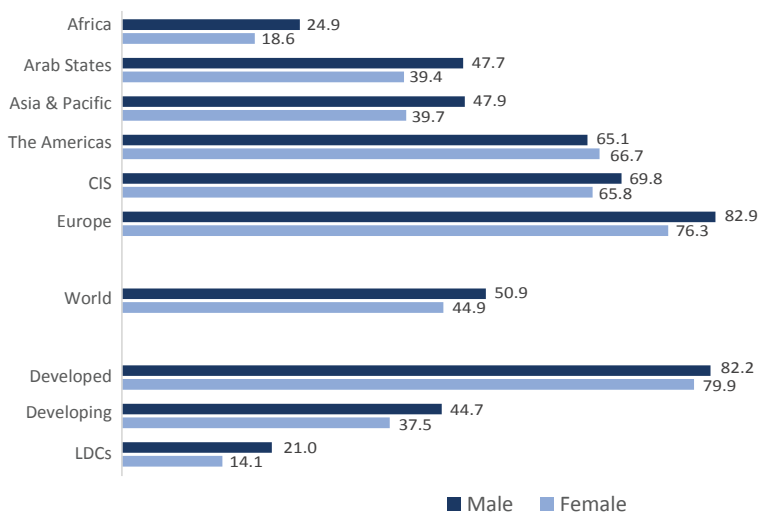
The proportion of men using the Internet is higher than the proportion of women using the Internet in two-thirds of countries worldwide.

There is a strong link between gender parity in the enrollment ratio in tertiary education and gender parity in Internet use.

The only region where a higher percentage of women than men are using the Internet is the Americas, where countries also score highly on gender parity in tertiary education.

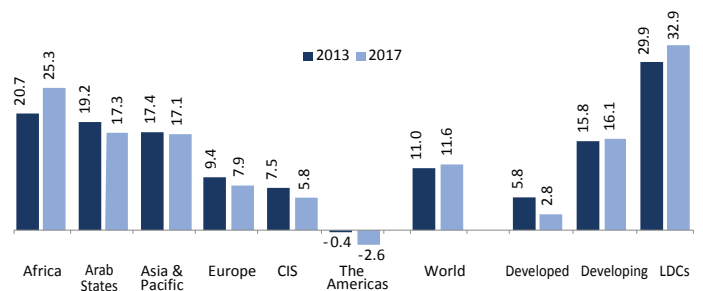
Source: ITU.  
Note: \* Estimates. Proportions in this chart refer to the number of women/men using the Internet, as a percentage of the respective total female/male population.

## Internet penetration rate for men and women, 2017\*



Source: ITU.  
Note: \* Estimates. Penetration rates in this chart refer to the number of women/men using the Internet, as a percentage of the respective total female/male population. CIS refers to the Commonwealth of Independent States.

## Internet user gender gap (%), 2013 and 2017\*



Source: ITU.  
Note: \* Estimates. The gender gap represents the difference between the Internet user penetration rates for males and females relative to the Internet user penetration rate for males, expressed as a percentage. CIS refers to the Commonwealth of Independent States.

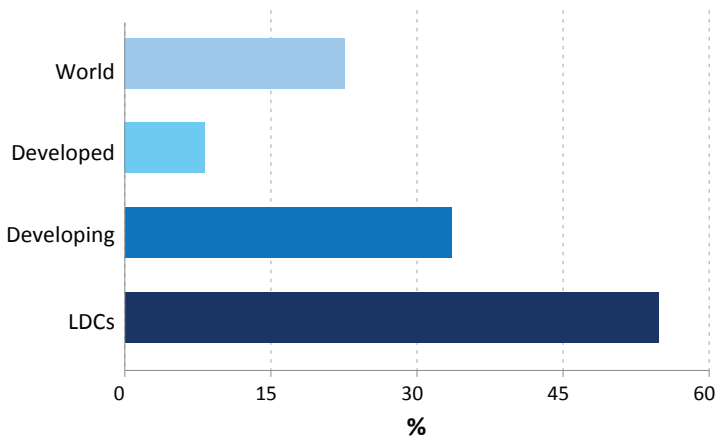
The proportion of women using the Internet is 12% lower than the proportion of men using the Internet worldwide.

While the gender gap has narrowed in most regions since 2013, it has widened in Africa. In Africa, the proportion of women using the Internet is 25% lower than the proportion of men using the Internet.

In LDCs, only one out of seven women is using the Internet compared with one out of five men.

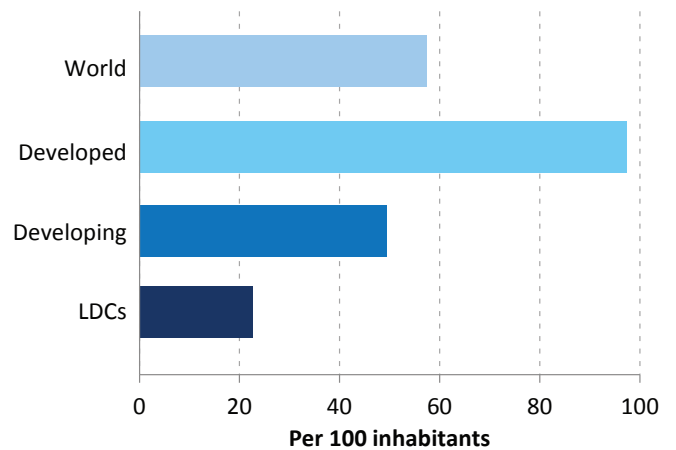
# BROADBAND IS INCREASINGLY MOBILE

**Growth of mobile-broadband subscriptions, CAGR, 2012-2017\***



Source: ITU.  
Note: \*Estimates. CAGR refers to the compound annual growth rate.

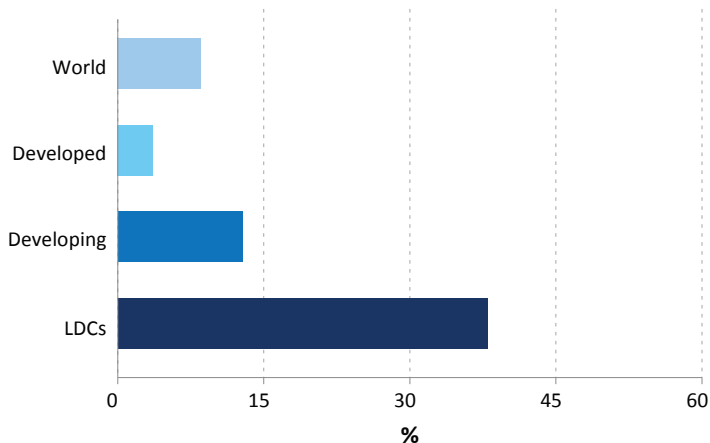
**Mobile-broadband subscriptions, 2017\***



Mobile-broadband subscriptions have grown more than 20% annually in the last five years and are expected to reach 4.3 billion globally by end 2017.

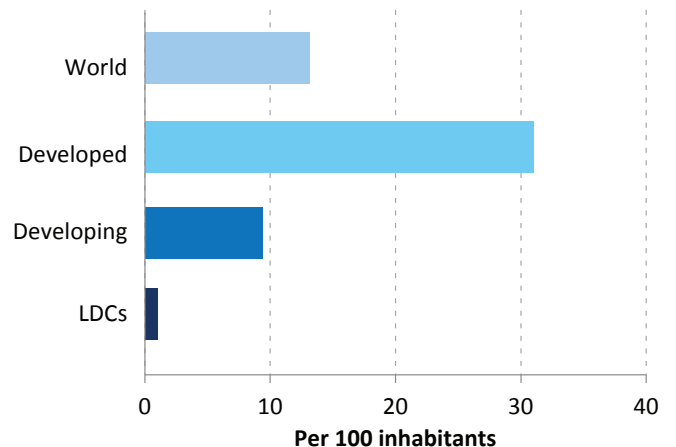
Despite the high growth rates in developing countries and in LDCs, there are twice as many mobile-broadband subscriptions per 100 inhabitants in developed countries as in developing countries, and four times as many in developed countries as in LDCs.

**Growth of fixed-broadband subscriptions, CAGR, 2012-2017\***



Source: ITU.  
Note: \*Estimates. CAGR refers to the compound annual growth rate.

**Fixed-broadband subscriptions, 2017\***



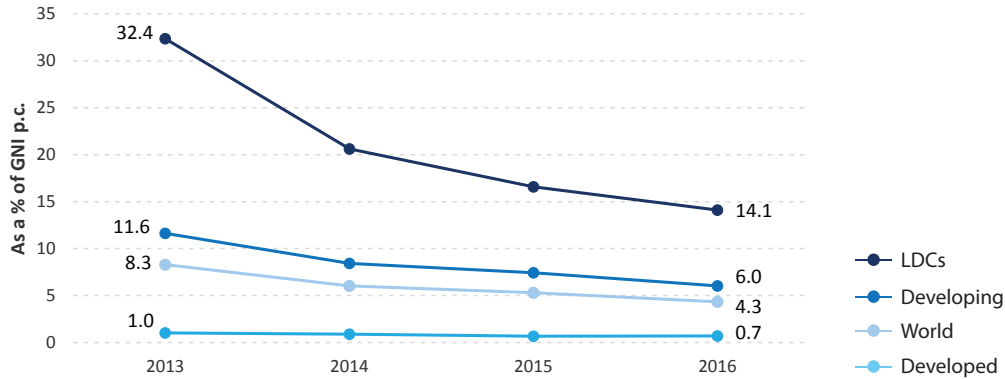
The global number of fixed-broadband subscriptions has increased by 9% annually in the last five years and 330 million new fixed-broadband subscriptions have been added.

Higher growth will be needed to bridge the divide between developed and developing countries: there are 31 fixed broadband subscriptions per 100 inhabitants in developed countries against 9 in developing countries.

Fixed-broadband uptake remains very limited in LDCs, with only one subscription per 100 inhabitants.

# MOBILE BROADBAND IS MORE AFFORDABLE THAN FIXED BROADBAND

## Mobile broadband prices as a percentage of GNI per capita, 2016

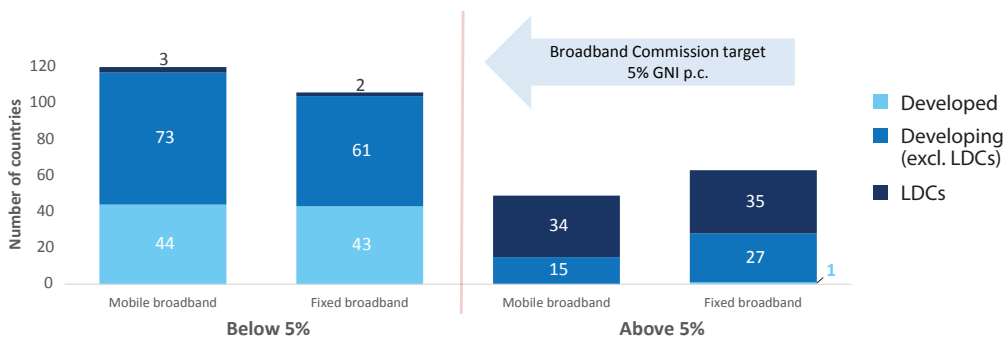


Mobile-broadband prices as a percentage of GNI per capita halved between 2013 and 2016 worldwide.

The steepest decrease occurred in LDCs, where prices fell from 32.4 to 14.1% of GNI p.c.

Source: ITU.  
Note: Based on simple averages including data for 136 countries. Prices are based on entry-level computer-based mobile-broadband plans with a minimum data allowance of 1 GB per month.

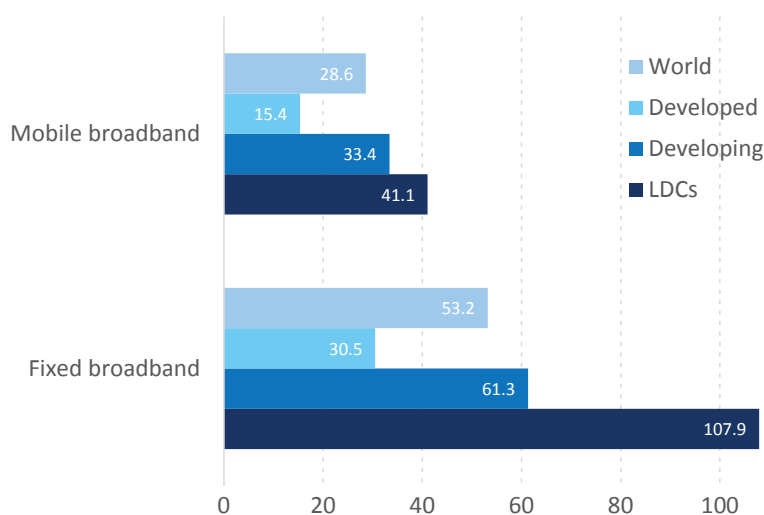
## Broadband prices as a percentage of GNI per capita, 2016



Mobile broadband is more affordable than fixed-broadband services in most developing countries. However, mobile-broadband prices represent more than 5% of GNI per capita in most LDCs and are therefore unaffordable for the large majority of the population.

Source: ITU.  
Note: Based on data available for 169 countries. Prices are based on entry-level plans with a minimum data allowance of 1 GB per month.

## Broadband prices in PPP\$, 2016

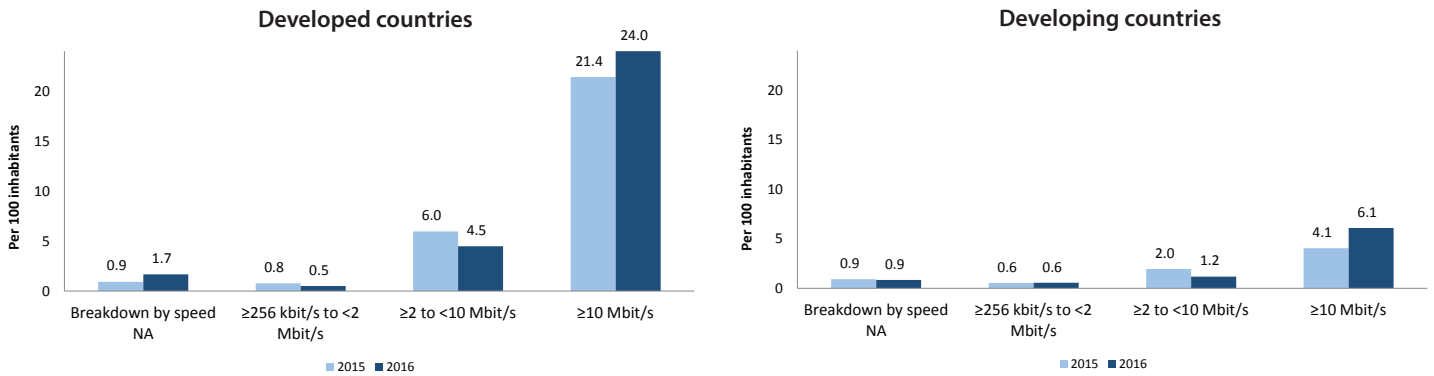


In LDCs, on average, an entry-level fixed-broadband subscription is 2.6 times more expensive than an entry-level mobile-broadband subscription.

Source: ITU.  
Note: Based on simple averages including data for 167 countries. Prices are based on entry-level plans with a minimum data allowance of 1 GB per month. PPP\$ refers to prices in international dollars, calculated using purchasing power parity (PPP) conversion factors instead of market exchange rates.

# FIBRE DEPLOYMENT IS INCREASING FIXED BROADBAND SPEEDS IN DEVELOPING COUNTRIES

## Fixed-broadband subscriptions per 100 inhabitants, by speed

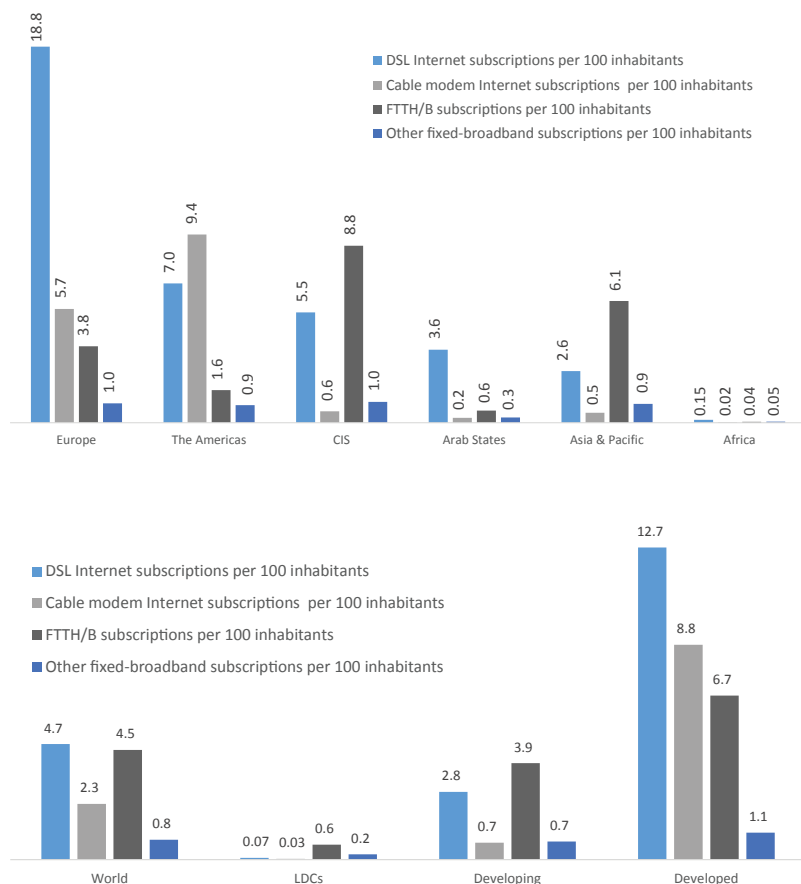


Source: ITU.

Despite the worldwide increase in high-speed fixed-broadband subscriptions, there remains a lack of high-speed connections in the developing world, with a penetration rate of 6% (1.6% excluding China) compared with 24% in developed countries.

Most of the increase in high-speed fixed-broadband subscriptions in developing countries can be attributed to China, which accounts for 80% of all fixed-broadband subscriptions at 10 Mbit/s or above in developing countries.

## Fixed-broadband subscriptions per 100 inhabitants, by technology, 2016



Developing countries and LDCs are deploying fibre infrastructure directly, leapfrogging cable and DSL.

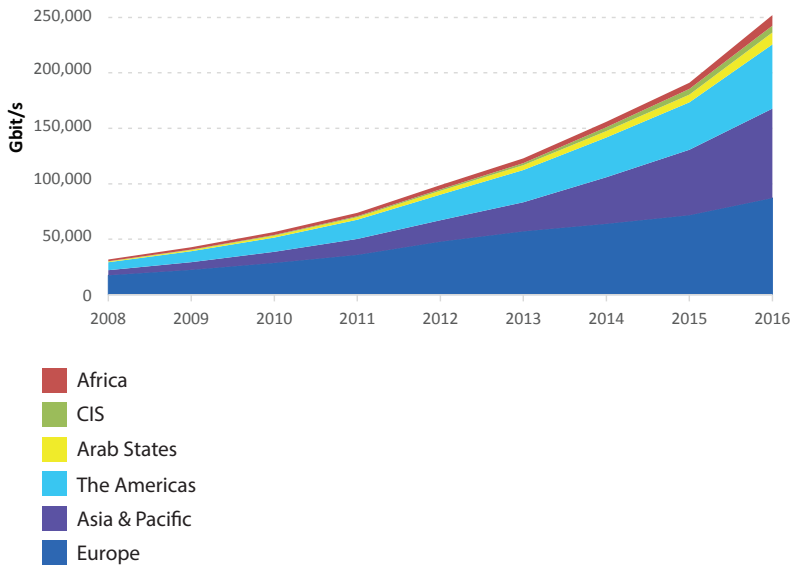
However, the proportion of fibre broadband subscriptions per 100 inhabitants in developed countries is twice as high as in developing countries, and ten times higher than in LDCs.

The share of fibre in total fixed-broadband subscriptions is highest in the CIS and Asia and the Pacific.

Source: ITU.  
Note: Data refer to early 2016. CIS refers to the Commonwealth of Independent States.

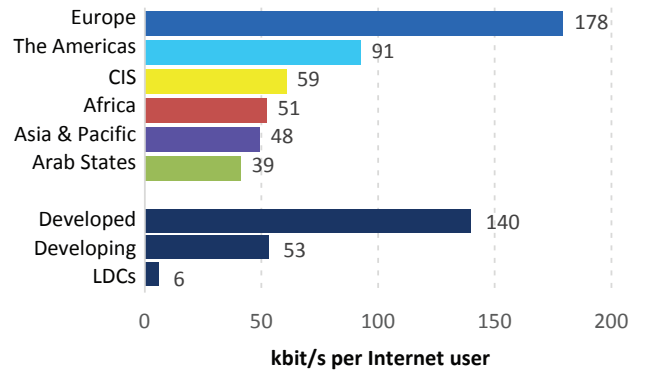
# INTERNATIONAL BANDWIDTH UP TELECOMMUNICATION REVENUES DOWN

**International Internet bandwidth in Gbit/s, per region, 2008-2016**



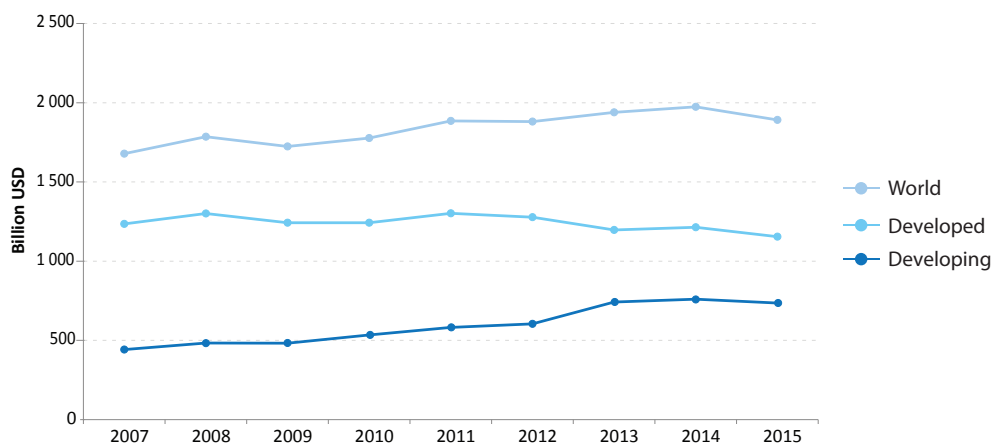
Source: ITU.  
Note: CIS refers to the Commonwealth of Independent States.

**International Internet bandwidth per Internet user in kbit/s, 2016**



International Internet bandwidth grew worldwide by 32% between 2015 and 2016. Africa experienced an increase of 72% during this period, the highest of all regions.

**Telecommunication revenues, world and by level of development**



Source: ITU.

Global telecommunication revenues declined by 4% between 2014 and 2015, falling back to USD 1.9 trillion.

Developing countries saw a compound annual growth rate in telecommunication revenue of 6.6% in the period 2007-2015, whereas developed countries experienced a contraction of -0.8% during the same period.

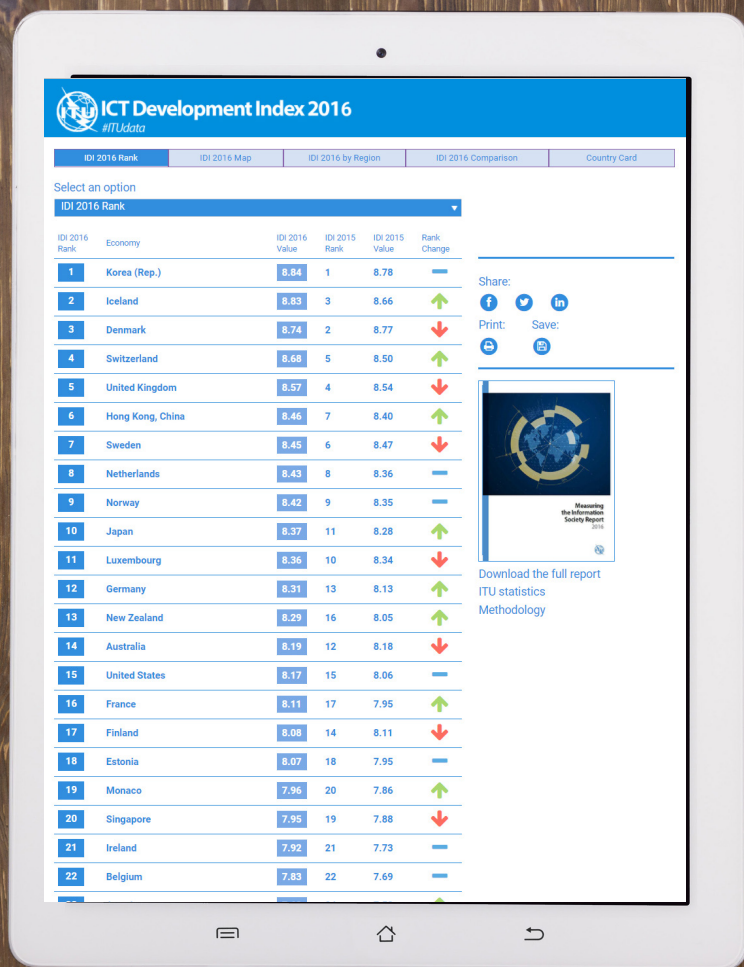
Developing countries are home to 83% of the global population but generate only 39% of the world's telecommunication revenues.



# ITU DATA VISUALISATION TOOL

- Results of the ICT Development Index, ITU's key benchmarking tool
- Key ICT indicators
- Global, regional and national comparisons

[www.itu.int/IDI2016](http://www.itu.int/IDI2016)



ITU 15th World Telecommunication/ICT Indicators Symposium (WTIS),  
14-16 November 2017, Tunisia  
[www.itu.int/en/ITU-D/Statistics/Pages/events/wtis2017/default.aspx](http://www.itu.int/en/ITU-D/Statistics/Pages/events/wtis2017/default.aspx)

ITU Measuring the Information Society Report 2016  
[www.itu.int/en/ITU-D/Statistics/Pages/publications/mis2016.aspx](http://www.itu.int/en/ITU-D/Statistics/Pages/publications/mis2016.aspx)

ITU Yearbook of Statistics 2016  
[www.itu.int/en/ITU-D/Statistics/Pages/publications/yb2016.aspx](http://www.itu.int/en/ITU-D/Statistics/Pages/publications/yb2016.aspx)

ITU World Telecommunication/ICT Indicators Database  
[www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx](http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx)

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