



ITU Asia-Pacific Regional Workshop on ICT Indicators
Ha Noi, Viet Nam
2-4 October 2019

**Fixed-broadband, mobile-broadband and bundled
telecommunication services indicators**

ICT Data and Statistics Division
Telecommunication Development Bureau
International Telecommunication Union

- **Fixed-broadband subscriptions by speed**
(as % of total broadband subscriptions):
 - **256 kbit/s to 2 Mbit/s**
 - **2 to 10 Mbit/s**
 - **Equal to or above 10 Mbit/s**
- Source: WTI

Definition of broadband

- For statistical purposes: *Minimum download speed of **256 kbit/s***



Importance of **breakdown by speed**



Breakdown by technology gives additional information on infrastructure

Classification of broadband subscriptions

Fixed broadband

- (1) xDSL
- (2) Cable modem
- (3) FTTH/FTTB
- (4) Other fixed wired -----
- (5) Satellite broadband
- (6) Fixed wireless broadband

Fixed
wired



Fixed
wireless

Active mobile broadband

- (1) Data and voice
- (2) Data only



Fixed-broadband subscriptions

Fixed-broadband subscriptions refers to fixed subscriptions to high-speed access to the public Internet (a TCP/IP connection), at downstream speeds equal to, or greater than, **256 kbit/s**. This includes **cable modem, DSL, fibre-to-the-home/building, other fixed (wired)-broadband subscriptions, satellite broadband** and **terrestrial fixed wireless broadband**.

This total is measured irrespective of the method of payment. It **excludes** subscriptions that have access to data communications (including the Internet) **via mobile-cellular networks**. It should **include fixed WiMAX** and any other **fixed wireless technologies**. It includes both residential subscriptions and subscriptions for organizations.

Fixed-broadband subscriptions by speed tiers



Main features:

- advertised ≥ 256 kbit/s

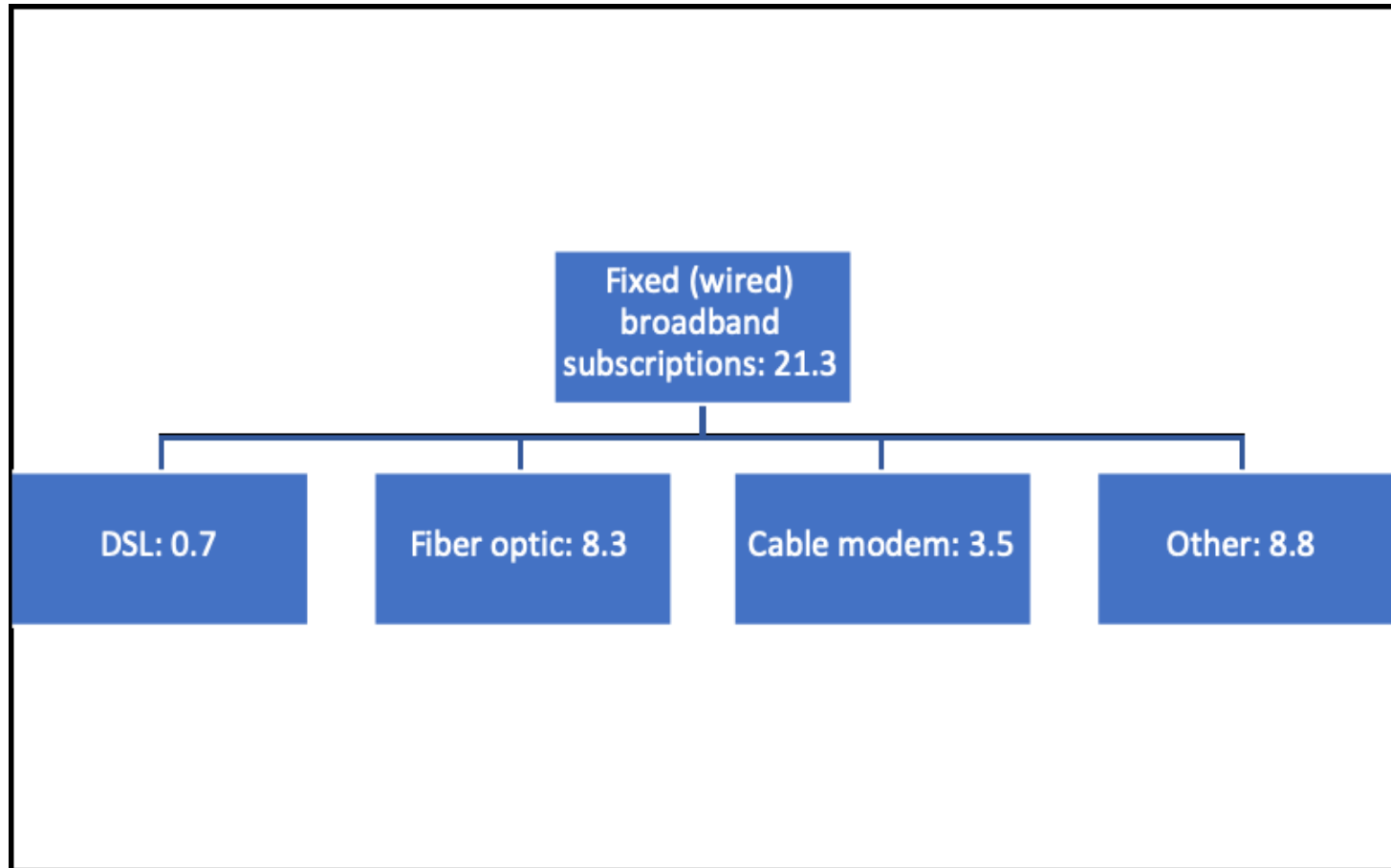


Breakdowns:

- by speed
 - **256 kbit/s – < 2 Mbit/s**
 - **2 – <10 Mbit/s**
 - **≥ 10 Mbit/s**

- by tech
 - DSL
 - cable
 - FTTH/B
 - Satellite/fixed wireless/other

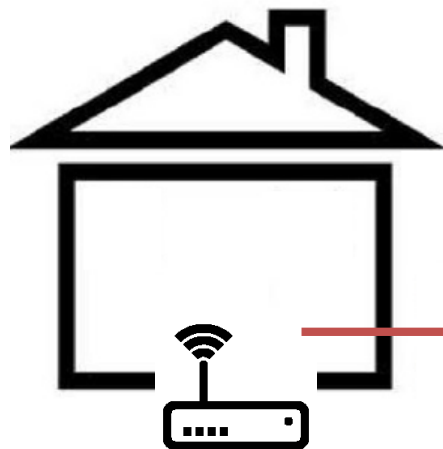
Fixed-broadband subscriptions (millions), 2018



Clarifications on WiFi networks

- The 2016 EGTI meeting clarified the following use cases of WiFi networks (3):

1) **WiFi used on top of other fixed-broadband subscriptions to distribute the signal at home**



These connections are already counted as “**Fixed broadband subscriptions**” and should not be reported separately

fixed broadband connection
(ADSL, cable, fiber, etc.)

Clarifications on WiFi networks

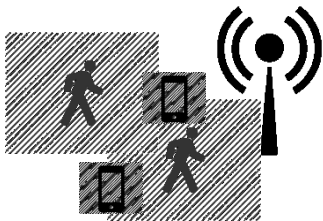


2) **WiFi used as a last mile technology** and associated with a specific monthly fixed-broadband contract



these connections should be reported as “**Fixed wireless broadband subscriptions**”

3) **WiFi hotspots** (public, private, free, paid)



Individual country experiences, but in most cases out of the scope of regulators’ data collections.
Will not be reflected in ITU supply-side indicators



New speed tiers to be collected from 2018 onwards on fixed broadband subscriptions (not in IDI) – to be included in Long Questionnaire

- in the 2017 EGTI meeting the need for enlarging the high-speed BB subscriptions was discussed and adopted new intervals for higher speeds
- the new speed tiers are **compatible** with previous (3) tier-classification
- in 2016 and based on data collected by ITU, **64%** of all fixed BB active connections had a (nominal, download) speed of 10 Mbps or higher

- Currently ITU collects three speed intervals
 - (1)** => 256 Kbps and < 2 Mbps,
 - (2)** => 2 Mbps and < 10 Mbps, and
 - (3)** => 10 Mbps

- Advances in fixed networks and speeds need to be measured by increasing the high speed intervals (> 10 Mbps) adding:
 - (4)** => 10 Mbps and < 30 Mbps
 - (5)** => 30 Mbps and < 100 Mbps
 - (6)** => 100 Mbps



New speed tiers for fixed BB subscriptions:

(1) => 256 Kbps and < 2 Mbps,

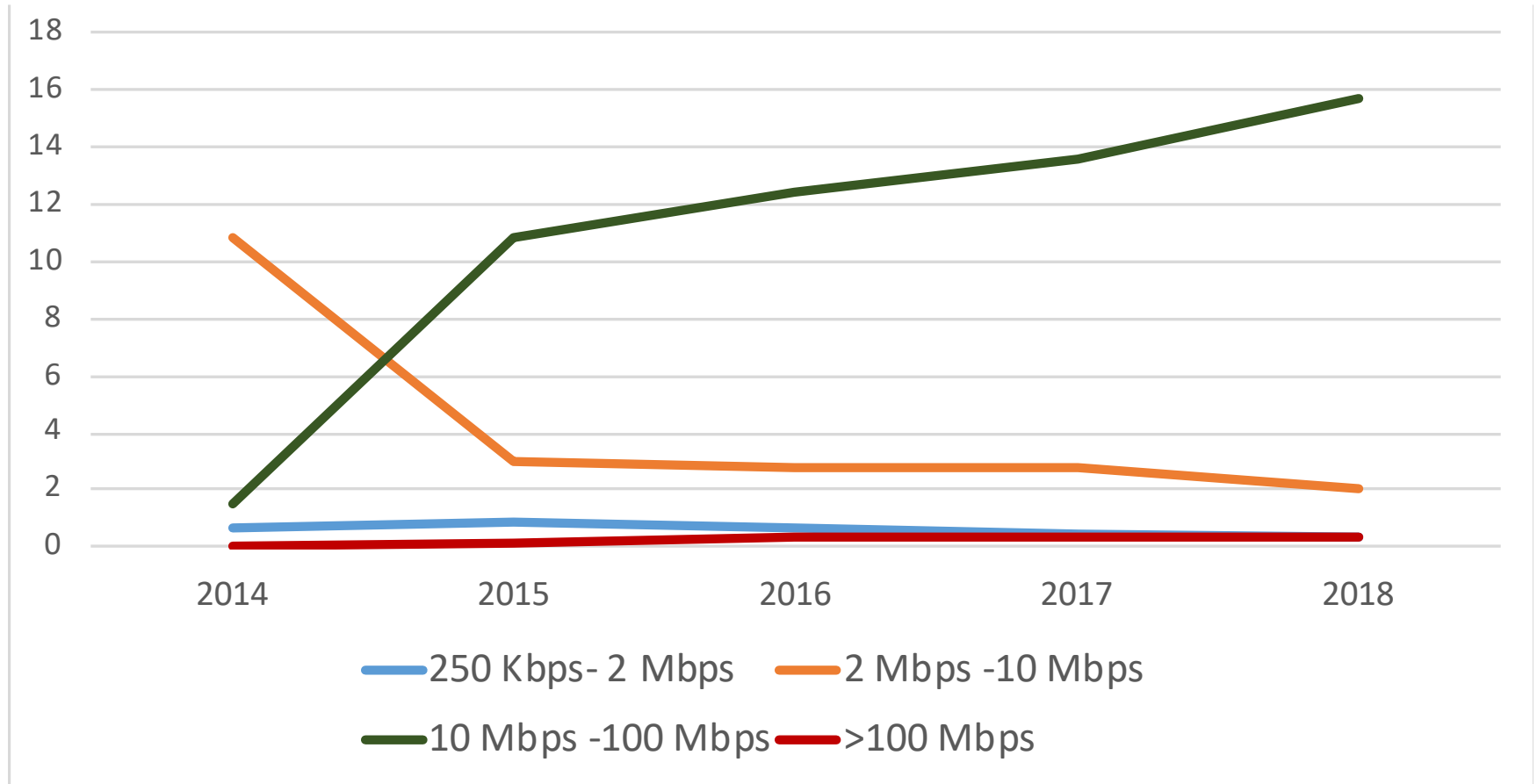
(2) => 2 Mbps and < 10 Mb

(3) => 10 Mbps and < 30 Mbps

(5) => 30 Mbps and < 100 Mbps

(6) => 100 Mbps

Fixed broadband subscriptions by advertised download speed (millions), Mexico





- **Active mobile-broadband subscriptions per 100 inhabitants**
- Source: WTI



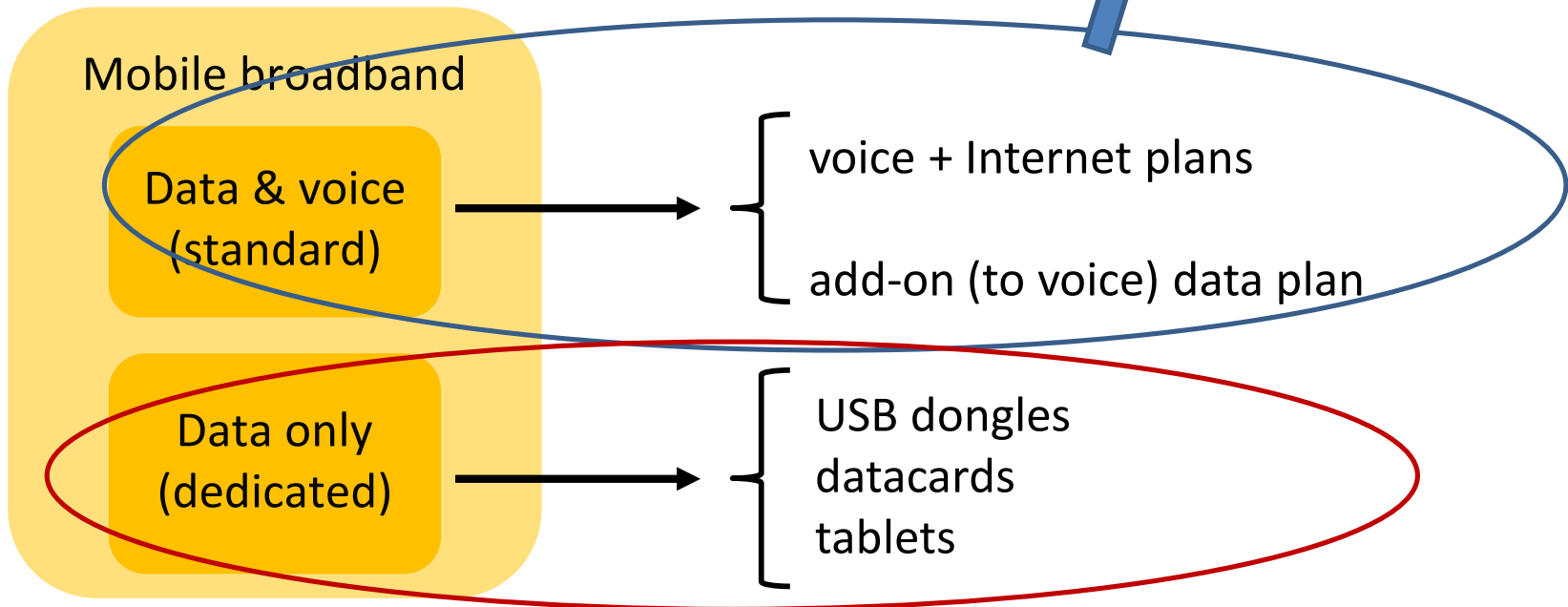
Active mobile broadband subscriptions

Active mobile-broadband subscriptions refers to the sum of **active handset-based** and **computer-based** (USB/dongles) mobile-broadband subscriptions to the public Internet.

It covers actual subscribers, not potential subscribers, even though the latter may have broadband-enabled handsets. Subscriptions must include a recurring subscription fee or pass a usage requirement – **users must have accessed the Internet in the last three months.**

It includes subscriptions to mobile-broadband networks that provide download speeds of at least 256 kbit/s (e.g. WCDMA, HSPA, CDMA2000 1x EV-DO, WiMAX IEEE 802.16e and LTE), and excludes subscriptions that only have access to GPRS, EDGE and CDMA 1xRTT.

active handset-based



Computer -based

Active mobile-broadband subscriptions



active handset-based

Data & voice (standard)

**Data and voice mobile-broadband
subscriptions (i271mb_active)**

computer -based

Data- only (dedicated)

**Data-only mobile-broadband
subscriptions (i271md)**


Active mobile-broadband subscriptions

Main features:

- advertised ≥ 256 kbit/s



 GPRS and EDGE **excluded**

- **active** 
 1. Monthly fee paid for Internet access

OR

 2. Accessed the Internet in the previous three months
- **allows access to the open Internet**



Mobile broadband subcategories

i271mb_active - Data and voice mobile-broadband subscriptions (i271mw = i271mb_active+ i271md)

Data and voice mobile-broadband subscriptions refers to subscriptions to mobile-broadband services that allow access to the open Internet via HTTP and **in which data services are contracted together with voice services** (mobile voice and data plans) **or as an add-on package to a voice plan**. These are typically smartphone-based subscriptions with voice and data services used in the same terminal. Data and voice mobile-broadband subscriptions with specific recurring subscription fees for Internet access are included regardless of actual use. Prepaid and pay-per-use data and voice mobile-broadband subscriptions should only be counted if they have been used to access the **Internet in the last three months**. M2M subscriptions should be excluded.



Mobile broadband subcategories

i271md - Data-only mobile-broadband subscriptions **(i271mw = i271mb_active+ i271md)**

Data-only mobile-broadband subscriptions refers to subscriptions to mobile broadband services that allow access to the open Internet via HTTP and that **do not include voice services**, i.e. subscriptions that **offer mobile broadband as a standalone service**, such as mobile-broadband subscriptions for datacards, USB modem/dongle and tablets. Data-only mobile-broadband subscriptions with recurring subscription fees are included regardless of actual use. Prepaid and pay-per-use data-only mobile-broadband subscriptions should only be counted if they have been used to access the Internet in the last three months. M2M subscriptions should be excluded. It excludes data subscriptions that are contracted together with mobile voice services.

Examples of activity criteria

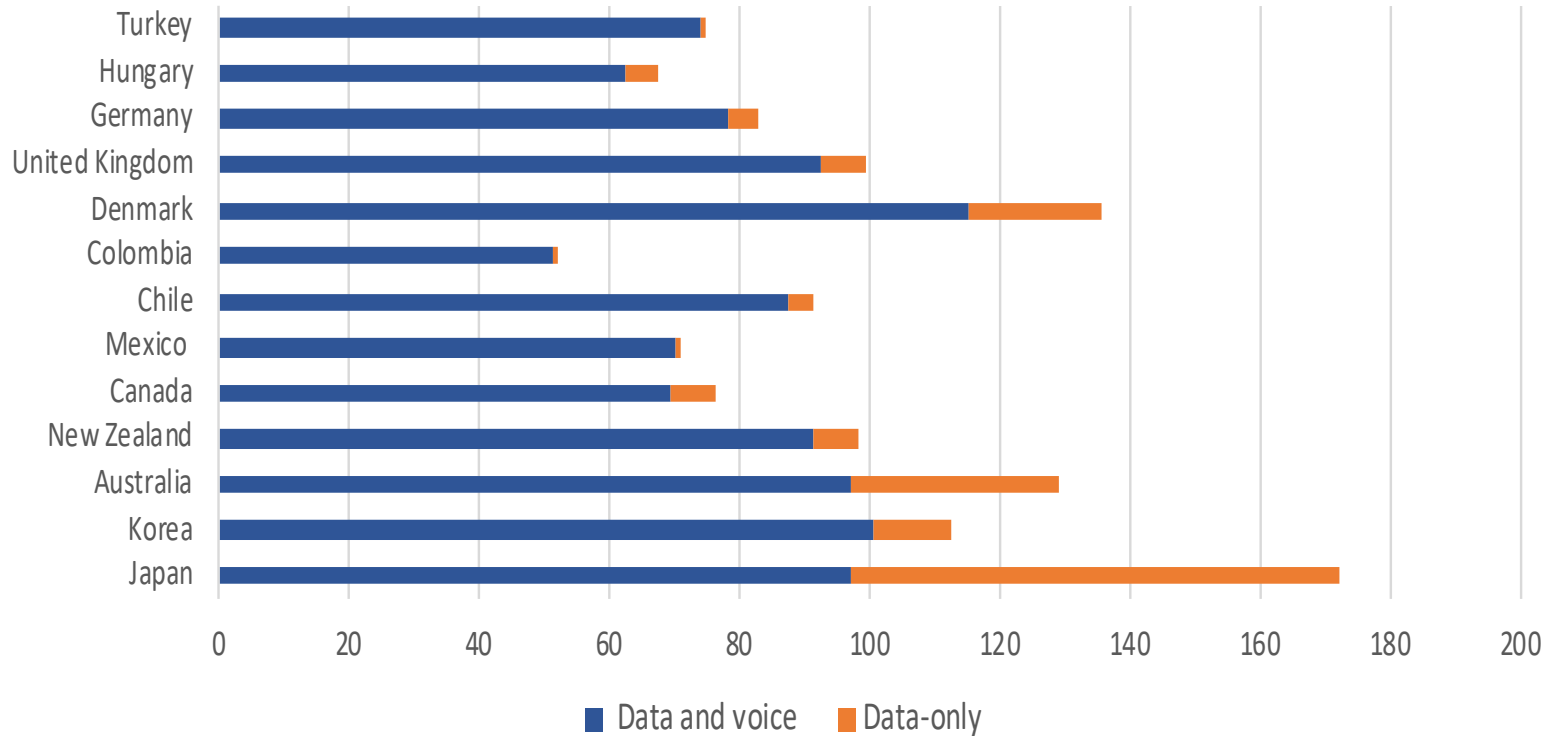
	Type of plan	Voice	Data	How counted
1	Standalone voice	Standard voice subscription	Pay as you go	If Internet used in the last 3 months, Standard
2	3G modem	No	Monthly subscription	Dedicated
3	Bundled voice and data	X minutes included	Y MB included	If Internet used in the last 3 months, Standard
4	Bundled voice and data	X minutes included	Unlimited	If Internet used in the last 3 months, Standard
5	Standalone voice plan + data add-on	Standard voice subscription	Data paid separately (Y MB/month)	Dedicated

Examples of activity criteria

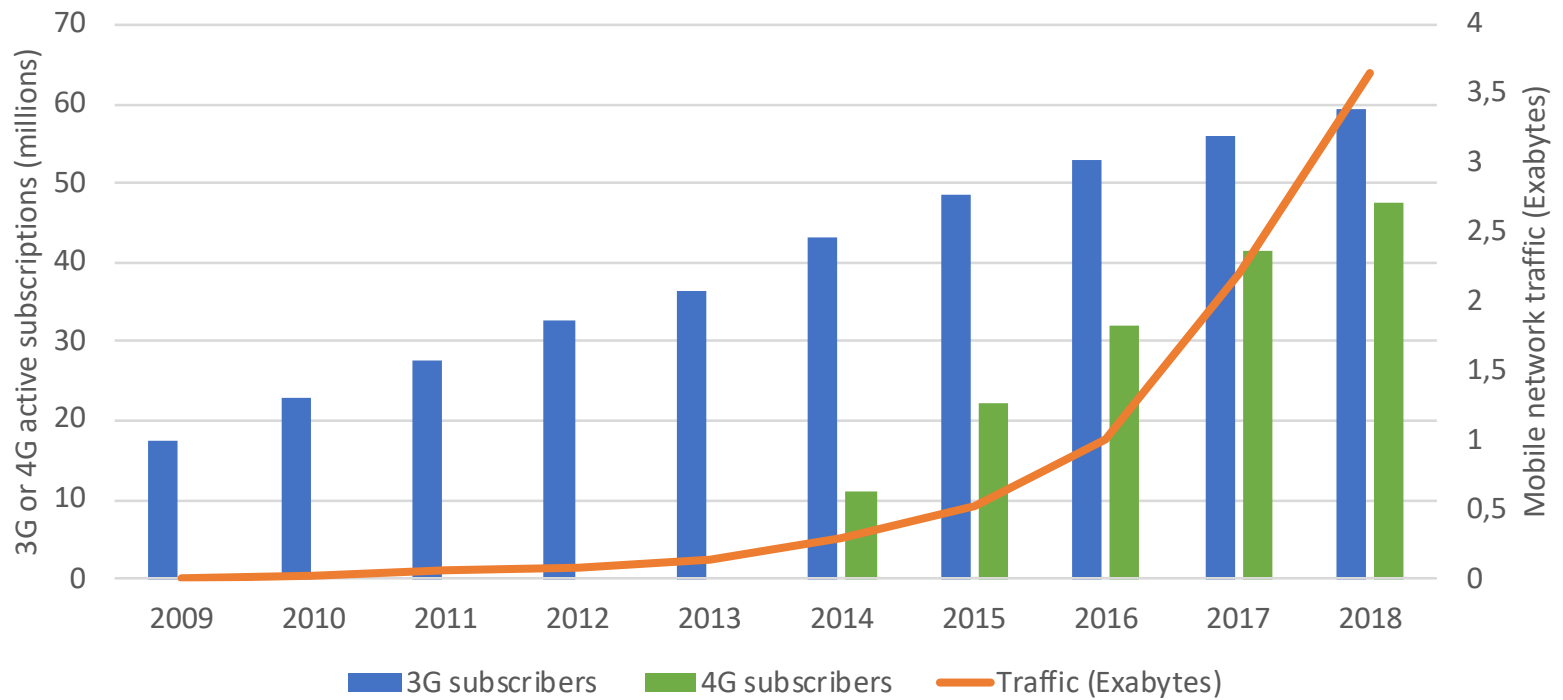
	Type of plan	Voice	Data	How counted
6	3G modem	No	Prepaid	If Internet used in the last 3 months, Dedicated
7	Voice plan + data credits	Standard voice subscription	Pay per use once credits are filled	If Internet used in the last 3 months, Standard

Data and voice; and data-only subscriptions (per 100 inhabitants), selected OECD members, 2018


Data and voice- and data- only subscriptions in selected OECD countries (/ 100 inhabitants), 2018, Source: OECD



3G and 4G/LTE active subscriptions (millions) and mobile traffic (Exabytes) in France, Source: Arcep



SDG indicator

SDG Goal	SDG Target	ICT indicator
 <p>Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development</p>	<p>Target 17.6: Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovations, and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, particularly at the United Nations level, and through a global technology facilitation mechanism</p>	<p>Fixed Internet broadband subscriptions broken down by speed (ITU)</p>

SDG indicator

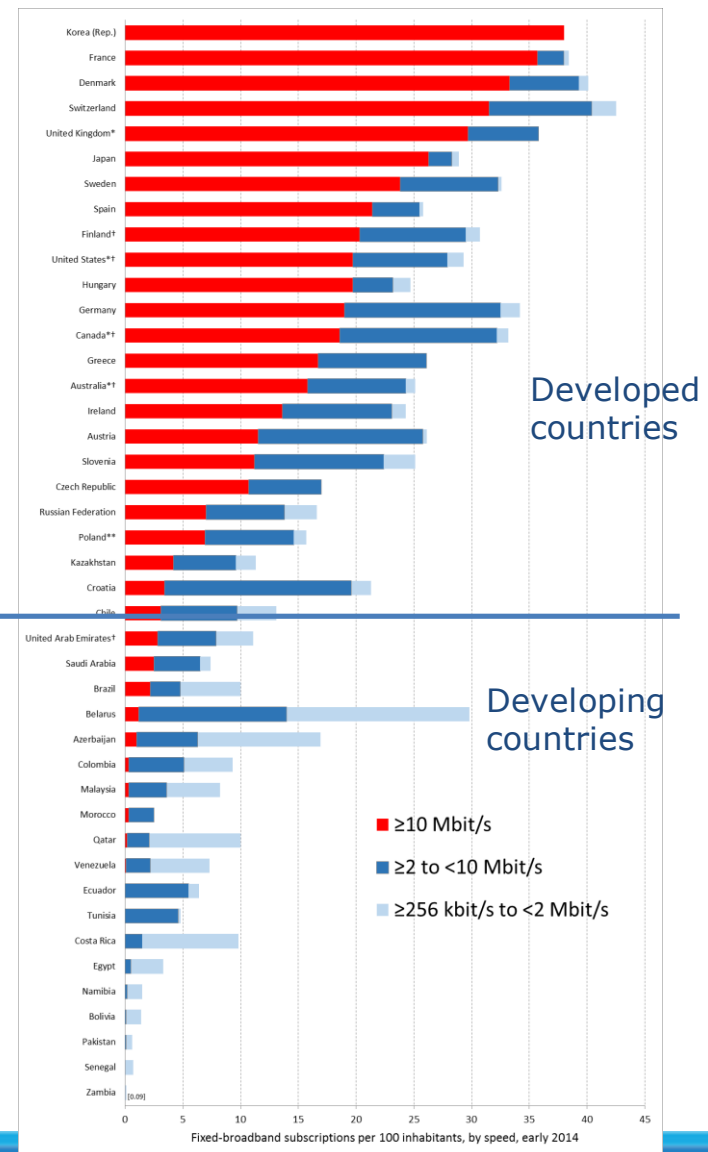


Broadband Internet by speed

Target 17.6 (access to technology)

Significant broadband speed divide between developed and developing countries.

Quality and speed of Internet access is essential to guarantee high development impact.



ITU indicators on bundles

New indicators, collected from 2016:

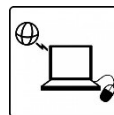


1. Subscriptions to fixed-broadband and fixed-telephone bundles (**double play**)



Subscriptions that include additional telecommunication services – such as triple play subscriptions including fixed telephony, fixed broadband and pay TV – should be excluded

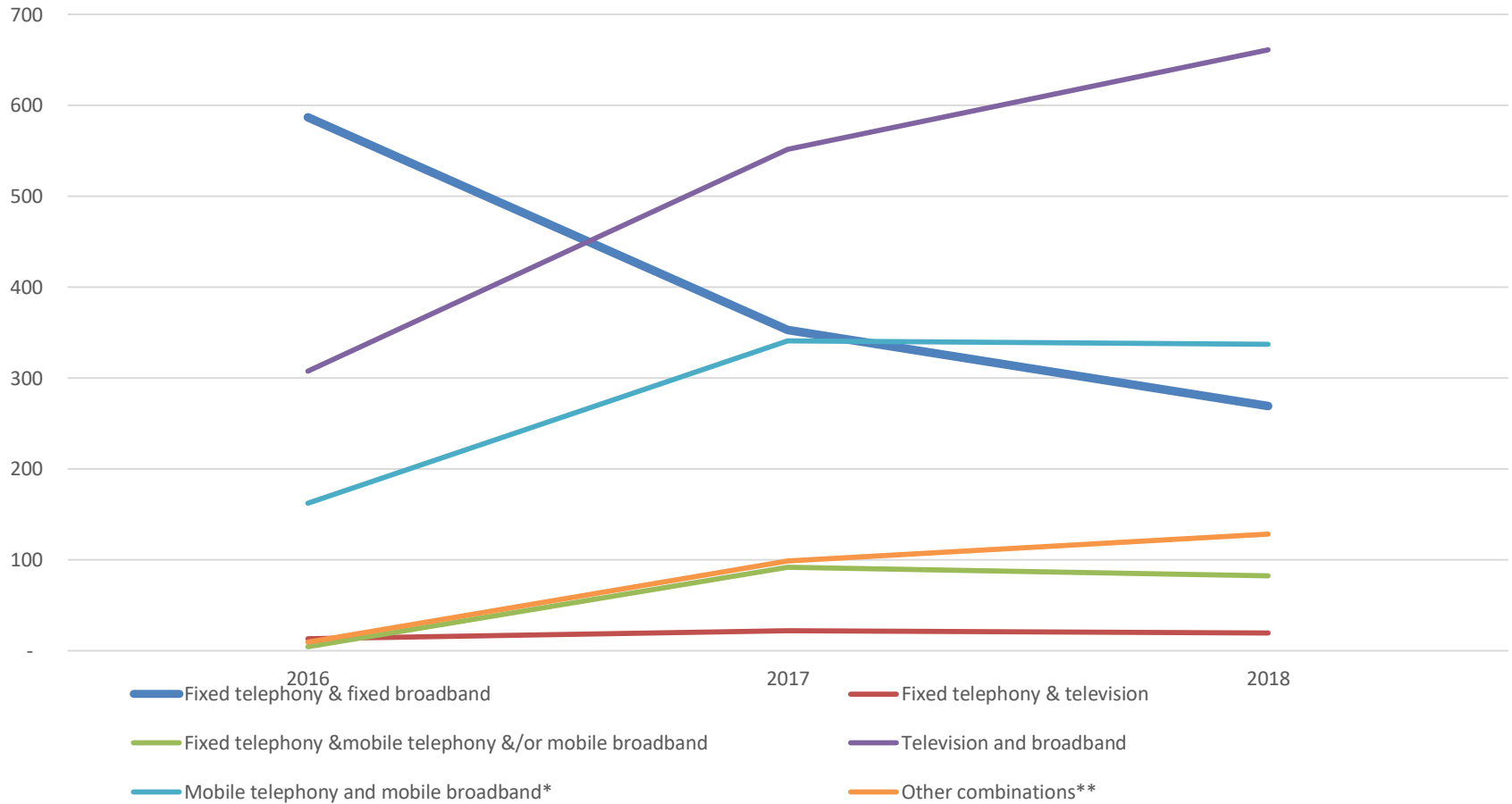
2. Subscriptions to fixed-broadband, fixed-telephone and pay-TV bundles (**triple play**)



Definition of bundle

- A bundle is a prepaid or postpaid subscription meeting all of the following criteria:
 1. A commercial offer that includes two or more of the following services: fixed telephone, mobile voice, fixed broadband, mobile broadband, pay TV
 2. marketed as a single offer, with a single invoice and with a single price for the set of services included in the bundle
 3. subscribed under conditions that cannot be obtained by adding single play offers together

Double play subscriptions (000s), Sweden



Thank you



For more information

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