

Fixed (wired) and Mobile Broadband Internet

Mobile technology and services continue to be the main driver of the information society. World subscriptions to Internet broadband services (see Fig.1) are expected to reach 2.8 billion, of which 700 million (25%) for fixed wired, and 2.1 billion (75%) for mobile broadband, by end 2013, according to ITU (International Telecommunications Union).

Ubiquitous mobile broadband

It is likely that mobile broadband services will soon become as ubiquitous as mobile cellular telephony. According to areppim's forecasts, by 2020 there will be 7.3 billion mobile broadband subscriptions, following the trail of mobile cellular devices subscriptions.


Mobile broadband networks are allowing more people to benefit from a larger array of Internet applications and services. While both fixed and mobile broadband speeds continue to increase, the price of services is falling and ICTs (Information communications and technology) are becoming more affordable, thanks to steadily falling prices : in the space of four years, fixed broadband prices have dropped by 82%.

The broadband divide

The fixed broadband divide between developed and developing regions remains deep. According to the latest ITU estimates, by

end 2013 fixed broadband penetration will reach almost 10% globally, 27% in developed countries and around 6% in developing countries. The reason for the gap is the still unaffordable price of the fixed broadband services for most people in developing countries — on average 30% of GNI (gross national income) per capita.

Wireless Internet access : the opportunity for developing regions

In developed countries, mobile broadband is often a complement to, rather than a substitute for fixed broadband access. The picture is altogether a distinct one in the developing world, where 53% of the population live in rural areas. Given the very limited fixed networks available there, it is simply impossible to connect all these people to high-speed Internet. Wireless Internet access — either through the mobile broadband network or via fixed wireless or satellite — is often the only alternative to fixed Internet access. The continuous increase in wireless broadband deployment and services, coupled with falling prices, are expected to improve Internet access in households in developing regions over the next few years. 

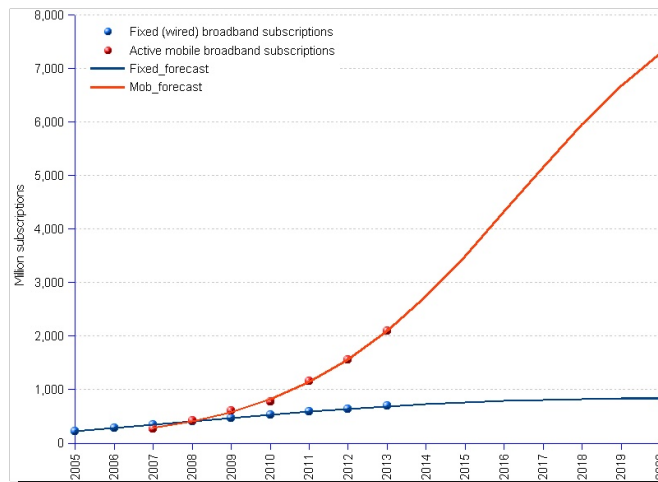


Fig.1 : Actual and projected subscriptions to fixed (wired) and mobile broadband.

Mobile substitution to fixed (wired) broadband

Although mobile cellular phone penetration is slowing down, reaching 96% of the world population and 79.5% of saturation by end 2013, broadband services provided by cellular phones continue to grow on average by around 41% annually between 2007 and 2013 (see Fig. 2). Fixed broadband uptake is also growing, but at a slower pace, around 15.5% annually since 2005.

As is the case of mobile devices, mobile broadband is mercilessly dethroning fixed broadband. In 2008 the two technologies shared the broadband market with equal shares. However, from 2008 to 2013, while the fixed broadband market share shrunk at the annual average of 13%, the mobile's grew at 8%, thus creating a rapidly enlarging chasm between the two. In areppim's forecast, by 2020 mobile broadband will own 90% of the market, leaving 10% for the fixed broadband. ◻

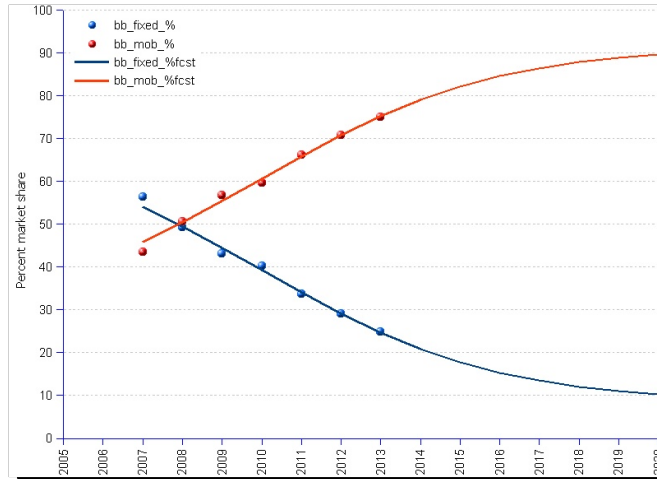


Fig. 2 : Mobile substitution to fixed (wired) broadband.

References :

ITU Measuring the Information Society (MIS) report, 5th edition, ITU, Geneva, Switzerland, October 2013.

ICT Statistics Home Page, ITU, <http://www.itu.int/en/ITU-D/Statistics/Pages/default.aspx>

Logistic forecast function : http://stats.areppim.com/glossaire/scurve_def.htm

Substitution forecast function : http://stats.areppim.com/glossaire/substitution_def.htm

Sources :

http://stats.areppim.com/stats/stats_broadbandxforecasts.htm

Broadband Subscriptions Worldwide				
Date	Fixed (wired) broadband		Active mobile broadband	
	Million subscriptions	Forecast ¹	Million subscriptions	Forecast ¹
2005	220	228.3	n/a	
2006	284	281.6	n/a	
2007	346	340.9	268	287.9
2008	411	404	422	410.5
2009	468	468.4	615	582
2010	527	531.4	778	818.4
2011	588	590.5	1155	1138
2012	638	643.6	1556	1559.1
2013	696	689.7	2096	2095.2
2014		728.5		2748.8
2015		760.2		3504.9
2016		785.7		4328.2
2017		805.7		5167.7
2018		821.3		5968.2
2019		833.3		6684.2
2020		842.4		7288.9
Annual average growth rate	15.50%	9.10%	40.90%	28.20%

¹ Forecast by the logistic function method.

Broadband : fixed and mobile Percent market shares ¹				
Date	Fixed (wired) broadband		Active mobile broadband	
	Actual %	Forecast %	Actual %	Forecast %
2005	100	100		
2006	100	100		
2007	56.4	54.2	43.6	45.8
2008	49.3	49.6	50.7	50.4
2009	43.2	44.6	56.8	55.4
2010	40.4	39.4	59.6	60.6
2011	33.7	34.2	66.3	65.8
2012	29.1	29.2	70.9	70.8
2013	24.9	24.8	75.1	75.2
2014		20.9		79.1
2015		17.8		82.2
2016		15.4		84.6
2017		13.5		86.5
2018		12.1		87.9
2019		11.1		88.9
2020		10.4		89.6
Annual average growth rate	-12.70%	-11.90%	9.50%	5.30%

¹ Technology substitution forecast method