Note 89 September 2013

Infrastructure Policy Unit

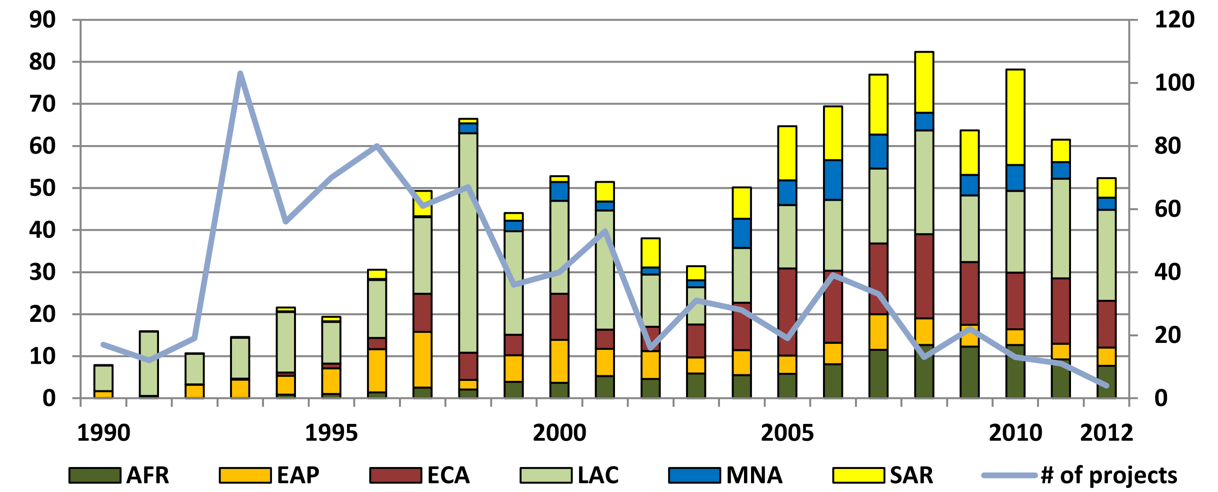
2012 PPI Data Update: Telecom Sector

Global telecom investments 15 percent down compared to 2011 levels

In 2012, only four new telecommunications projects with private participation reached financial or contractual closure.[1]This is the lowest number of new projects closing since 1990. After a peak around the Millennium, the number of new projects closing has diminished over the years which reflects the saturation rate of global telecom markets: most countries have multiple active providers. Few countries are left with only one active operator, such as Ethiopia and Eritrea. The new 2012 projects were all greenfield mobile access telecom projects. They closed in the Islamic Republic of Iran, the Democratic Republic of Congo, Somalia and Uganda.

Existing telecom projects (which financially closed between 1990 and 2011) received additional investments of US$52.4 billion in 2012. This amount was comparable to the early 2000s, but below the levels observed in the second half of that decade, when investments were well above $60 billion (and topped at $82.4 billion in 2008).[2] The total amount of investment commitments was 15 percent lower than the level reported in 2011, $61.5 billion. The compound annual growth rate in the telecom sector was 3.25 percent (for 2002-2012).

Figure 1: Private investment in telecom, by region



Source: World Bank and PPIAF, PPI Project Database. * Adjusted by US CPI

This note was written by Robbert van Eerd, consultant to the Infrastructure Policy Unit (TWISI), Transport, Water and ICT Department, Sustainable Development Network, World Bank.

[1] The PPI Database currently uses the FY12 World Bank country classification, released in July 2012. High-income economies are excluded from the database. The latest country to reach high-income status is St. Kitts and Nevis, which is thus no longer included in this annual update. Investment data are in 2012 US dollars using the US CPI to adjust to 2012 values.

[2] Data on telecommunication projects with private participation include primarily medium-size and large projects in low and middle income countries as reported by the media and other public sources. More information is available at http://ppi.worldbank.org/.

Segment Overview

In 2012, 60 percent of investments went to stand-alone **mobile** operators, slightly higher than the previous year's 58 percent. **Multi-service** providers attracted another 30 percent of all investments, comparable to the 30-40 percent that MSP attracted over the last ten years. **Fixed line** operators attracted the remainder of investments, or 10 percent of the total. **Long distance lines**, which had attracted 1-2 percent of all investments in the last 10 years, did not record any investments in 2012, although some long-distance services have been included under the multi-service provider category.

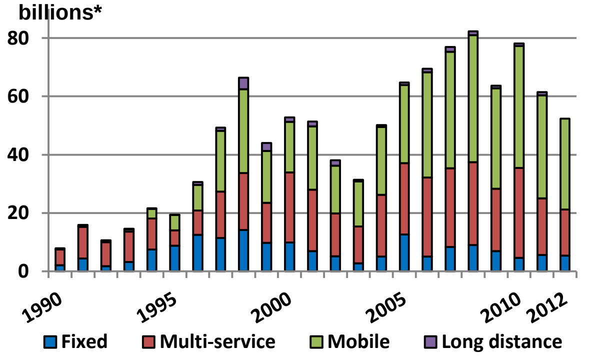


Figure 3: Investment in telecom projects by segment, 1990-2012

Source: World Bank and PPIAF, PPI Project Database. * Adjusted by US CPI

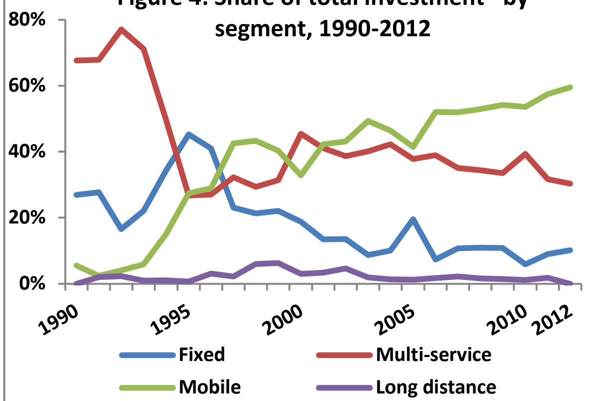


Figure 4: Share of total investment* by segment, 1990-2012

Source: World Bank and PPIAF, PPI Project Database. * Adjusted by US CPI

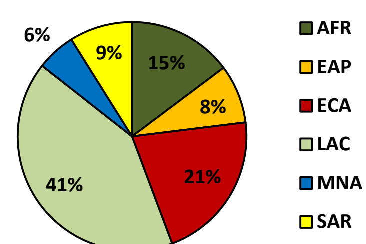
The breakdown by segments reflected a broader trend over the last two decades: more and more funds are devoted to **mobile access**, which received the highest share of total investments since 1990. In the last seven years, more than half of the investments in telecom have been going to mobile access. Investments in **multi-service provider** projects peaked in the early 1990s, drawing 50-78 percent of investments. After 2000, when multi-service providers attracted 51 percent of investments, the share of this segment has been diminishing steadily to 30 percent in 2012, exposing a clear downward trend. Investments in **fixed-line access** have been small compared to investments in mobile or multi-service access; after 1998, the fixed-access segment consecutively attracted a smaller share of the total investments in telecom projects with private participation than those two segments. Investments projects exclusively devoted to **long-distance**, finally, only represent a marginal percentage of the total share of investments.

Regional Overview

In **Africa (AFR)**, $7.7 billion was invested in projects that closed by 2012. This amount was 16 percent lower than the $9 billion invested in 2011. Nigeria took in the bulk of investments ($2.2 billion); South Africa came in second ($1.6 billion). Other countries with significant investments in the telecom sector were Tanzania ($542 million), Kenya ($414 million), the DRC ($390 million), Sudan ($343 million), and Senegal, Cameroon, Cote d'Ivoire, and Ghana (>$200 million).Comparable to last year, about 85 percent of capital as invested in mobile access projects.

Figure 5: Investments by region (2012)

Total: $52.4 billion



* Adjusted by US CPI

Source: World Bank and PPIAF, PPI Project Database.

There were three greenfield merchant projects that closed in Africa: Africell in the DRC, Smile Telecoms in Uganda, and Haatif Telecom in Somalia.*They were all mobile access. This was the lowest number of new projects since the early 1990s, although last year's number was skewed as few new projects joined as spin-offs from the Sudan companies, upon the creation of South Sudan as a separate state. For new projects, see also the table 1 on pages 5 and 6.

In **East Asia and the Pacific (EAP)**, there was no report of new projects in the telecom sector. Total investment in the sector, in existing projects, was $4.3 billion in 2012. This was a 3-year high, and 16 percent higher than the investment levels in 2011. EAP was the only region that saw a jump in investments, going against the overall global trend. Indonesia attracted 29 percent of investments in EAP, Thailand 27 percent, the Philippines 26 percent, and Malaysia 18 percent. Other countries' shares were marginal compared to the 'big 4'. Almost 48 percent of investments went to mobile access projects, while the remainder of projects was categorized as multi-service providers. No new telecom projects reached financial closure in 2011.

Europe and Central Asia (ECA) projects reaching closure before 2012 accounted for US$11.1 billion of investments, which was a 29 percent drop compared to 2011. The amount of investment commitments in the region was the lowest since 2003. About two thirds of all investments occurred in mobile access projects. The Russian Federation received the largest amount of investments: more than $6.1 billion. Turkey was the second largest market in the region, attracting $2.3 billion. Romania attracted $851 million, and countries like Kazakhstan, Ukraine, Bulgaria, and Belarus attracted amounts roughly in between $460 (Kazakhstan) and $140 million (Belarus).

In **Latin America and the Caribbean (LAC)**, projects received an additional $21.6 billion of investments, with which the region took in more than 40 percent of global investments in the telecom sector. Although the amount of investments committed was 9 percent lower than the previous year, it was in line with the average of the last five years. Mobile access projects attracted just under half of all investments in the telecom sector. The largest market in this region was Brazil, which attracted 55 percent of all investments or $11.8 billion. Mexico came in second, receiving $3.6 billion. Argentina took in more than $2 billion, Colombia $1.5 billion, and Venezuela, Peru, and Costa Rica $600, $580, and $418 respectively. All other nations combined, which included countries like Ecuador, Chile, El Salvador, the Dominican Republic, Guatemala, Uruguay, Paraguay, Panama, Nicaragua, Jamaica, and Honduras, received a total of $1 billion combined.

Middle East and North Africa (MNA) had one project reach financial or contractual closure in 2012: Rightel, the first 3G operator in Iran, was added as the third operator in the country. Rightel, operated by Tamin Telecom, added its first subscribers in Q1 of 2012, and boasted over 700,000 users by the end of the year. The MENA region as a whole reported investments of $2.9 billion in 2012 for projects previously implemented, which represented a considerable drop of 27 percent in real terms (2012 dollars) compared to the amount of investments committed in 2011. Investments in telecom in MENA are much below their peak in 2006, when the region attracted $9.47 billion of investments. More than 65 percent of investments went to mobile access projects, while the remainder was invested in multi-service provider projects.

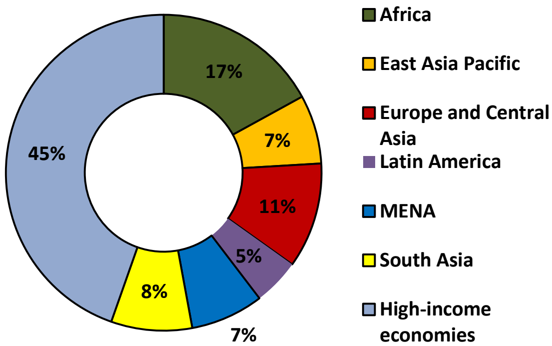
Egypt and Morocco vied for the title 'largest market in MENA': both received 29 percent of investments in this region, which was a little over $800 million each. Iraq, Iran and Tunisia completed the top-5, and received amounts ranging from $377 to $222. Smaller investments occurred in Syria, Jordan, Algeria, West Bank and Gaza.

South Asia (SAR) attracted $4.7 billion of investments in 2012, 12 percent lower than the total amount in 2011. In 2010, investments had been much higher than the last two years, but that was the result of India's auction of 3G licenses, which in itself had brought in almost $12 billion that year. Nonetheless, the 2012 was the year with the lowest investments in nearly a decade. Almost half of all capital was invested in mobile service projects, the other half with multi-service providers. India attracted four out of every five dollars invested in the region, comparable to last year's share. Bangladesh was the second market ($412 million). Pakistan ranked third with $314 million. Smaller amounts were invested in Sri Lanka, Afghanistan, and the Maldives. There were no new telecom projects that closed in South Asia in 2011.

Sponsors Overview

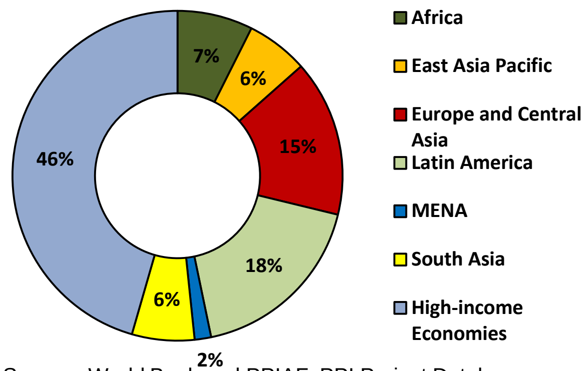
As figure 6 and figure 7 below show, most sponsors of telecom projects in 2012 originated from high-income economies: the United States, European countries such as the United Kingdom, Spain, and the Netherlands, or developed Asian countries such as South Korea, Japan, and Singapore[3]. Sponsors from developed nations were also implicated in almost half of all dollars invested in the sector globally. Other large regions where sponsors of telecom projects originated, were Latin America, Europe/Central Asia, and, to a lesser extent, South Asia. The largest amounts of investment commitments beyond sponsors from developed countries were from sponsors in Latin America, while Europe/Central Asia ranked second. Latin American sponsors were involved in only five percent of projects in 2012, but 18 percent of the amounts invested: sponsors in which Latin American companies invest are relatively large compared to the investments by sponsors of other regions.

Figure 6: Sponsors by region, number of projects in 2012



Source: World Bank and PPIAF, PPI Project Database.

Figure 7: Sponsors by region, investment commitments in 2012



Source: World Bank and PPIAF, PPI Project Database.

[3] Some projects are sponsored by more than one sponsor. Example: Vodacom DR Congo is a joint-venture between Congolese Wireless Network (49 percent) of DRC and Vodacom (51 percent) of Tanzania. In terms of sponsor involvement, this project counts one time as a Tanzanian project and one time as a DRC project. The investment amount is allotted to both countries one time as well.

Table 1: Most Active Sponsors in Telecom in 2012 (A-Z)

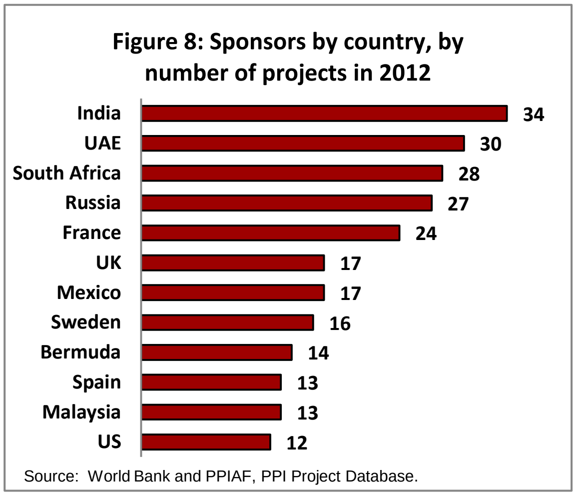
Abu Dhabi Group	UAE	5	0
America Movil	Mexico	15	7917.8
Bharti Airtel	India	20	2078.6
Digicel	Bermuda	14	15.3
Emirates Telecommunications Corporation	UAE	13	1816.3
France Telecom	France	22	2242.62
Libya Africa Portfolio for Investments	Libya	5	0.4
Millicom International	Luxembourg	8	544.8
MTN Group	South Africa	21	3012.8
Qatar Telecom	Qatar	5	731.2
Singapore Telecom	Singapore	5	893
Telefonica SA	Spain	13	5426.7
Telenor	Norway	8	3340.8
TeliaSonera	Sweden	12	2372.18
Vimpel Communications	Russia	11	596.9
Vodafone	United Kingdom	9	2644.3
Zain	Kuwait	5	388

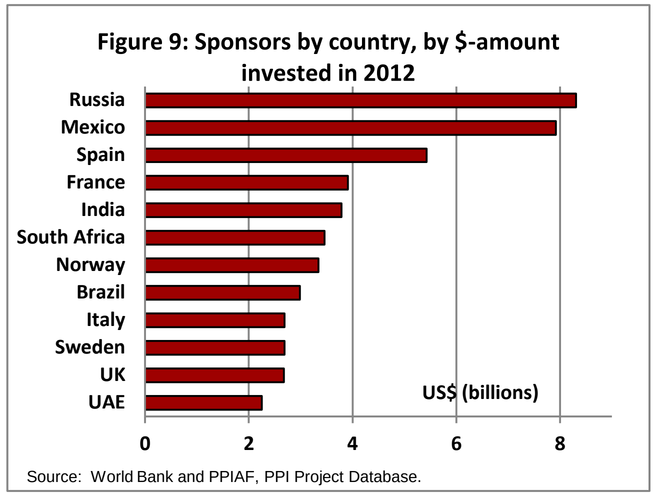
As table 1 on page shows, several large global firms dominated investments in the telecom sector. France Telecom of France, MTN Group of South Africa, Bharti Airtel of India, Telefonica of Spain and Mexico's America Movil were the leading companies in terms of investments and number of projects in 2012.

The bar charts, figure 8 and 9 on the next page, display from which countries these investments originated: the first figure shows the top-12 countries of sponsor origin (number of projects), while the second graph shows the top-12 countries of sponsor origin with the largest investments in raw dollars. Interestingly, most projects were sponsored by companies from the global South: India, UAE, South Africa, and Russia. France and the UK only came fifth and sixth respectively.

The largest investments in telecom project were made by companies from Russia, Mexico and Spain. Various Russian sponsors invested over $8 billion, a Mexican sponsor, America Movil, $7.9 billion, and Spanish company Telefonica $5.4 billion. French sponsors invested $3.9 billion, $2.2 billion of which came from France Telecom. India's Bharti Airtel invested $2.1 billion, out of a total $3.8 billion for all Indian sponsors. MTN Group was responsible for most of the investments originating from South Africa: $3 billion out of $3.5 billion for South Africa altogether.

Telenor of Norway was responsible for all Norwegian investments; the company invested $3.3 billion in the global telecom sector by itself. One Brazilian company,Telemar Participacoes, invested $3 billion in the Telemar Norte Leste: there was $720.8 million in payments to the government, while the remainder went to the network facilities.Telecom Italia invested $2.7 billion in projects in Argentina (2), Paraguay and Brazil; it was the only Italian sponsor. Swedish companies invested $2.7 billion, split between TeliaSonera ($2.4 billion) and Tele2 ($317 million). A number of British sponsors invested telecom in 2012. The bulk of investments came from Vodafone ($2.6 billion), while smaller companies were involved in the margin. Sponsors from the UAE were involved in projects for $2.2 billion in total. The majority of investments were in projects sponsored by Emirates Telecommunications Corporation ($1.8 billion), and Mubadala Development Company co-sponsored a $417 million together with Emirates Telecommunications Corporation (Etisalat) in the EMTS project in Nigeria.





Featured project

Rightel (Tamin Telecom) – Islamic Republic of Iran – merchant greenfield, mobile access services

In 2012, a third operator entered Iran's telecom market. Rightel started adding its first subscribers in Q1 2012. By the end of the year, the company boasted 702,500 users already. Rightel was part of the domestic company Tamin Telecom, which had previously held then lost the third mobile phone license in Iran. It had originally bid in a consortium with Etisalat, but the second time the license was regained while Tamin Telecom was still looking for an outside partner. Rightel was the first 3G operator in Iran. Rightel had a 2-year monopoly on 3G services, which was responsible for the explosive growth at the start.

The contract was granted by the national government, under a competitive bidding process. No additional information was available as to the bidding criteria, or the license fee paid to the government.

Table 1 – New telecom projects with private participation reaching financial or contractual closure in 2012 by region (total of 4 projects)

Country/ Region	Project name	Segment	PPI Type (Subtype)	Capacity (Number of Connections)	Investment Commitment (US$ millions)	Sponsor
Iran, Islamic Rep. (MNA)	Rightel	Mobile access	Greenfield (merchant)	703,000	370	Others (100 percent / ..)
Congo, Dem. Rep. (AFR)	Africell	Mobile access	Greenfield (merchant)	765,000	N/A	Lintel (100 percent / Lebanon)
Somalia (AFR)	Haatif Telecom Somalia	Mobile access	Greenfield (merchant)	110,000	N/A	Haatif Telecom (100 percent / Somalia)
Uganda (AFR)	Smile Telecoms	Mobile access	Greenfield (merchant)	2,000	N/A	Smile Communications (SAF) (100 percent / Uganda)

Note: N/A means not available/applicable. Investment commitments include payments to the government and investment in physical assets.