The World Bank Group

Public-Private Infrastructure Advisory Facility

PRIVATE PARTICIPATION IN INFRASTRUCTURE DATABASE

PPI data update note 77

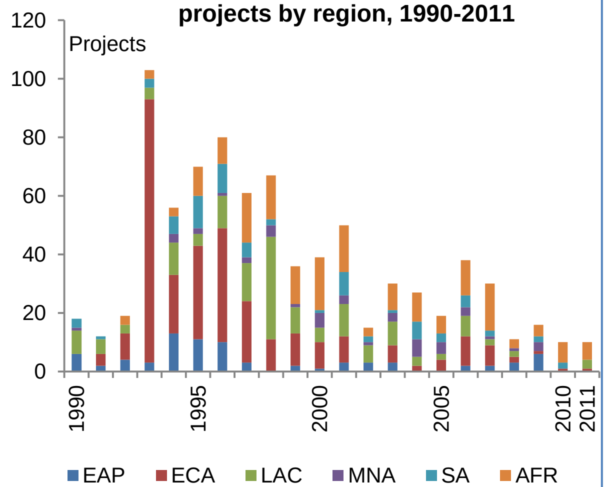
September 2012

Private activity in telecommunications twenty percent down in 2011

In 2011, ten new telecom projects with private participation reached financial or contractual closure.[1] Five projects closed in South Sudan, the world's newest nation as of July 9, 2011. The other projects were implemented in Ukraine, Brazil, Costa Rica (2), and Malawi. New investments for these ten projects totaled US$2.8 billion.[2] Existing projects (implemented in the 1990-2010 period) received additional funding in 2011, totaling roughly US$55.2 billion. The total investment commitments in telecommunications, consisting of investments in new projects and additional investments in previously closed projects, amounted to US$58 billion.

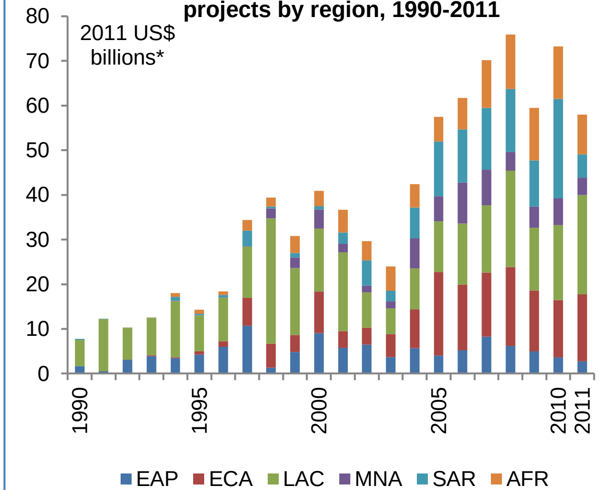
In 2011, total investment levels in telecommunications were 20% lower than in 2010, remaining far below the pre-financial crisis peak of 2007-2008. Ten new projects closed (five, disregarding South Sudan), which was lower than any year since 1990. This figure suggested that activity in most countries focused on network expansion of existing operators rather than on increasing the number of operators. The telecommunications sector of most countries has already transformed from a market with only one telecom provider (whether state-owned or not) to a market with several market players vying for clients.

Figure 1: Number of new telecom projects by region, 1990-2011



Source: World Bank and PPIAF, PPI Project Database

Figure 2: Investments in telecom projects by region, 1990-2011



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

This note was written by Robbert van Eerd, consultant to the PPI database, Finance, Economics, and Urban Development Department, Sustainable Development Network, World Bank Group.

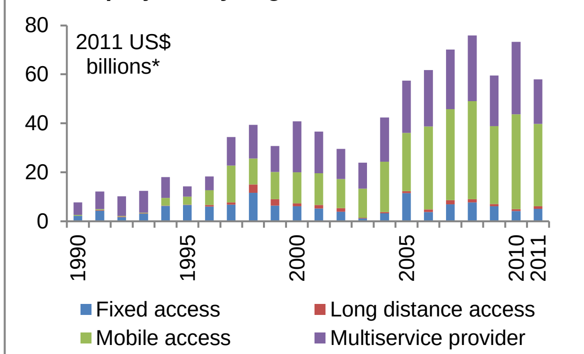
[1] The PPI Database currently uses the FY11 World Bank country classification, released in July 2011. High-income economies are excluded from the database. Investment data are in 2011 US dollars using the US CPI to adjust to 2011 values.

[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 analysis

In 2011, 58% of investments went to stand-alone **mobile** operators, up from 52% in 2010. **Multi-service** pro-providers attracted 31% of all investments, which was down from 40% in 2010. The remainder of capital invested was split between **fixed line** operators (9%) and **long-distance** lines (2%).

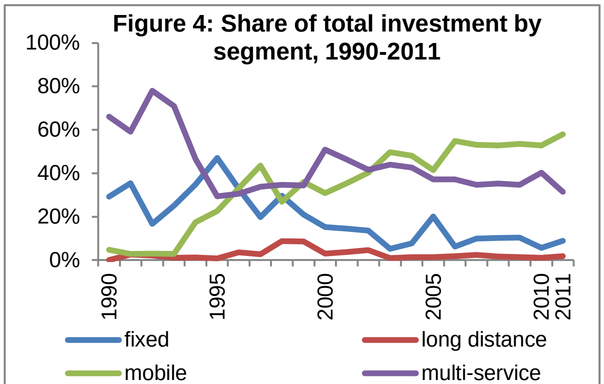
Figure 3: Investment in telecom projects by segment, 1990-2011



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 six years, more than half of the investments in telecommunications have been going to mobile access. Investments in **multi-service provider** projects peaked in the early 1990s, drawing 50-78% of investments. After 2000, when multi-service providers attracted 51% of investments, the share of this segment has been diminishing steadily to 31% in 2011, 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 telecommunications projects with private participation than those two segments. Investments in **long-distance** lines, finally, only represented a small percentage of the total share of investments.

Figure 4: Share of total investment by segment, 1990-2011

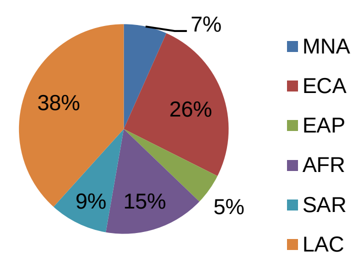


Source: World Bank and PPIAF, PPI Project Database

Telecommunications – A Regional Breakdown

Africa (AFR) US$9 billion was invested in projects that closed by 2011. This was a four-year low, and 20% lower than 2010. Approximately 85% of capital was invested into mobile access projects. The largest amounts of money were invested in South Africa (US$1.7 billion) and Nigeria (US$1.5 billion). Other key destination countries for investment were Kenya and Tanzania (>US$500 million), DRC and Tanzania (>US$400 million), and Côte Ivoire, Ghana, and Sudan (>US$ 300 million). The region did see a record number (6) of new projects: one new merchant fixed and mobile provider in Malawi (Celcom Ltd.), and five mobile access merchant projects in South Sudan. The latter were operations spun off by large companies that had been servicing the entire Sudan (MTN, Sudani, Zain). *For new projects, see also the table 1 on pages 5 and 6.

Figure 5: Investments by region (2011)
Total: $58 billion



Source: World Bank and PPIAF, PPI Project Database

In **East Asia and the Pacific (EAP)** existing projects attracted new investments totaling US$2.8 billion, which represented a drop of 25% in real terms (2011 dollars) compared to 2010. The investments were almost equally split between mobile access projects and multi-service provider projects. Indonesia and Malaysia attracted about 30% of the investments, the Philippines 25%, and Thailand the remaining 15%, which was in line with the pattern of previous years. No new telecommunications projects reached financial closure in 2011.

Europe and Central Asia (ECA) projects reaching closure before 2011 accounted for US$13.6 billion of investments, which represented a 7% increase compared to the four-year low of 2010. The amount was the highest in three years but lower than the all-time peak of 2008. ECA was one of only two regions which saw investments increasing in 2011, the other one being LAC. Almost two-thirds of the capital was invested into mobile access projects. With US$7.4billion of investments, Russia attracted the biggest share of investments in this region. Over US$3 billion was invested in Turkey, traditionally the second market in this region. Companies invested almost one billion dollars in Kazakhstan, and smaller amounts in other countries. One new project reached financial closure in this region: Ukraine reported a partial divestiture (Ukrtelecom), which brought about investments of US$1.3 billion.

In **Latin America and the Caribbean (LAC)** projects signed before 2011 received an additional US$21.2 billion of investments. Contrary to the trend in most regions, this was a considerable increase compared to 2010: 27%. Mobile access projects accounted for 40% of all capital invested. Brazilian projects attracted over 50% of capital, with Mexico coming in second. Colombia showed strong growth in investments for the third year in a row, and attracted more than US$2 billion in 2011. This was the largest amount on record for this country but slightly under Argentina's, the third investment destination in the region. In addition, two new merchant mobile providers became active in Costa Rica, although the investment commitments were limited to US$170 million. Brazil, the region's largest market, saw a new operator being added as well. Sprint (USA) was to build-own-and transfer a mobile access network (brand name Nextel), while the company committed to invest US$844.2 million.

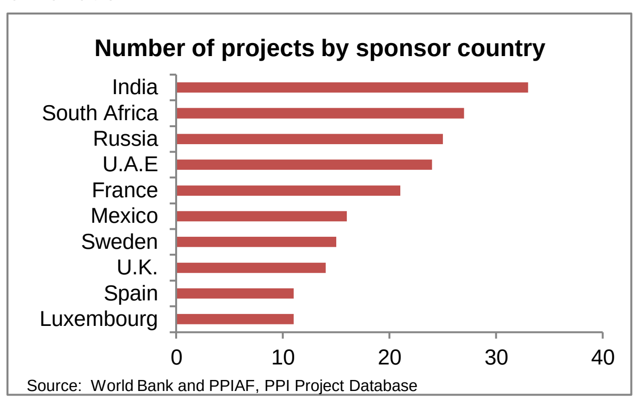
Middle East and North Africa (MNA) did not have any new projects reaching financial or contractual closure in 2011. The region reported investments of US$3.9 billion in 2011 for projects previously implemented, which represented a considerable drop of 36% in real terms (2011 dollars) compared to the amount invested in 2010 for those projects. Almost 70% of investments went to mobile access projects, while the remaining 30% were invested in multi-service provider projects. Projects in Egypt attracted 25% of investments, Moroccan projects another 20%, while projects in Iran, Iraq, Yemen, Algeria, and others had a smaller share of the capital invested in telecom projects in this region.

South Asia (SA) attracted US$5.2 billion worth of investment in 2011, or less than 72% of the total in 2010. A partial explanation is given by the huge peak in investments following India's auctioning of 3G licenses in 2010, which in itself raised almost US$12 billion that year. Nonetheless, the investment amount in 2011 was the lowest in seven years. Roughly two-thirds of the capital invested was put into mobile access projects, the rest in multi-service provider projects. India attracted 80% of the capital invested, which made it the largest market by far. Bangladesh received 9%, Pakistan 7%. There were no new telecom projects closing in South Asia in 2011.

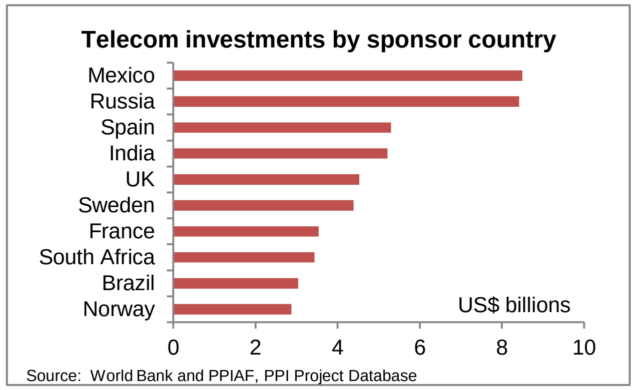
Information on Sponsors

Several large global firms dominated investments in the telecommunications sector. The bar charts on the next page display from which countries these investments originated: first, the top-10 countries of sponsor origin in terms of the number of projects sponsored, while the second graph shows the top-10 countries of sponsor origin with the largest investments. There is a large regional variation:

- In **Europe and Central Asia**, for example, four out of ten projects were sponsored by companies from Sweden and the Russian Federation. Investments by Russian sponsors (55% of the investment amount in ECA) came from a wide range of local investor companies, although M&A-activity hinted strongly at consolidation of operations. Most Swedish investments (29% of total ECA investments) came from one company: TelioSonera. This company invested almost US$400 million in seven post-Soviet republics;



- In **Africa**, there were several leading countries: South African sponsors (17% of projects), Indian sponsors (14%), U.A.E. (12%), and France (9%). Large telecommunications companies active in Africa were South Africa's MTN (responsible for 21% of investments in the region in 2011), U.K.'s Vodafone (15%), Bharti Airtel of India (13%), France Télécom (11%), and Emirates (U.A.E., 5%);
- In **Latin America and the Caribbean**, most projects are enacted by sponsors from Mexico and Spain (roughly one in three and one in four projects respectively). Mexico's América Móvil alone sponsored fifteen different projects in fifteen different countries, investing US$8.5 billion. Spain's Telefónica invested over US$5 billion in eleven different countries in this region.
- In **the Middle East and North Africa**, French sponsors and South African sponsors were represented the most. France Télécom did about 20% of total investments, worth US$816 million, while South Africa's MTN represented another 16%, or $631 million;
- **South Asia**'s telecom investments were led by Indian investors, who were responsible for 38% of the projects and 76% of total capital investmented (close to US$4 billion out of a total of US$5.2 billion). The Indian investors included large brand names such as Essar Group, Bharti Airtel, and Reliance. US$1.7 billion of investments was associated with UK's Vodafone was, or about 33% of investments in South Asia;
- There was no particular sponsor dominating in **East Asia and the Pacific**. Investments mostly came from the larger economies in the region such as Malaysia, Thailand, Singapore, and the Philippines.



Special feature: Nextel Telecomunicações Ltda.

Nextel Telecomunicações Ltda was awarded a 15-year authorization to provide cellular phone services through the H-band in December 2010. Nextel won twelve out of sixty areas that the regulatory agency Anatel established for bidding (municipalities in several Brazilian states, as well as the right to operate in the states of São Paulo, Brasília, and Rio de Janeiro).

The bidding criterion was the highest payment made to the government and Nextel's offer was US$844.2 million (BRL1420 million). Besides Nextel, eight other companies took part in the competitive bidding process: 14 Brasil Telecom Celular S/A, TNL PCS S.A., Americel S.A., Claro S.A., CTBC Celular S.A., TIM Celular S.A., Vivo Participações S.A. and Vivo S.A.

The contract was signed with Anatel in May 2011. Nextel, a subsidiary of NII Holdings Inc. (Sprint) had been operating in Brazil since 1997, but the company was only authorized to provide radio based services to corporate clients. Nextel was able to grow its subscriber base from 1.3 million users by the end of 2007, to 2.5 million by the end of 2009 and 4.1 million at the end of 2011. Acquiring a 3G license allowed the company to double its potential for growth. Nextel was expected to launch wireless high speed services by the end of 2012.

Table 1 – New telecom projects with private participation reaching financial or contractual closure in 2011 by region

Africa (Sub-Saharan)						
Country	**Project name**	**Project status**	**Segment**	**PPI Type (subtype)**	**Investment commitment (US$ million)**	**Sponsor**
Malawi	Celcom Limited	Construction	Fixed and mobile access	Greenfield (merchant)	370	Celcom Limited (100% / South Africa)
South Sudan	Gemtel (GreenN)	Operational	Mobile access	Greenfield (merchant)	N/A	Libya Africa Portfolio for Investments (LAP) (100% / Libya)
South Sudan	MTN South Sudan	Operational	Mobile access	Greenfield (merchant)	N/A	MTN Group (100% / South Africa)
South Sudan	Sudani South Sudan	Operational	Mobile access	Greenfield (merchant)	N/A	Sudatel Group (100% / Sudan)
South Sudan	Vivacell (Network of the World)	Operational	Mobile access	Greenfield (merchant)	N/A	Fattouch Group (75% / Lebanon)
South Sudan	Zain South Sudan	Operational	Mobile access	Greenfield (merchant)	60	Zain (100% / Kuwait)

Europe and Central Asia						
Country	**Project name**	**Project status**	**Segment**	**PPI Type (subtype)**	**Investment commitment (US$ million)**	**Sponsor**
Ukraine	Ukrtelecom	Operational	Fixed and mobile access	Partial Divestiture	1,320	EPIC Invest (93% / Austria)

Latin America and the Caribbean						
Country	**Project name**	**Project status**	**Segment**	**PPI Type (subtype)**	**Investment commitment (US$ million)**	**Sponsor**
Brazil	Nextel	Operational	Mobile access	Greenfield (build-own-transfer)	844.2	Sprint (100% / United States)
Costa Rica	Claro Costa Rica	Construction	Mobile access	Greenfield (merchant)	75	América Móvil (100% / Mexico)
Costa Rica	Telefónica Costa Rica	Construction	Mobile access	Greenfield (merchant)	95	Telefónica SA (100% / Spain)

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