2014 Telecom Sector Update

- Private Participation in Infrastructure (PPI)[1] in telecom decreased 6% from US$60.4 billion in 2013 to US$56.6 billion in 2014
- Of the US$56.6 billion, US$54.7 billion was additional capital expenditure and US$1.9 billion were in new[2] projects (5)
- Sub-Saharan Africa had its lowest investment since 2002; Europe and Central Asia has its lowest since 2003

This note is a product of the Public-Private Partnership Group of the World Bank, and the Private Participation in Infrastructure Database (PPI Database), written by Henry Kasper and edited by Jenny J. Chao.

1 TELECOM SECTOR OVERVIEW

Total investment[3] in telecom projects in developing countries in 2014 was US$56.6 billion, down 6% from 2013 (US$60.4 billion). This decline represents a continuation of fewer new projects and falling investment in telecom over the past five years. The five new projects that closed is the second fewest ever in a single investment year since 1990, suggesting that activity in most countries focused on network expansion. The US$56.6 billion in commitments is also the lowest since 2004, with several possible reasons for the decline. In somewhat more established markets, such as Brazil, smartphone adoption continues to grow at a slower rate, indicating market saturation.[4] In developing markets, such as Africa, higher taxes for consumers and falling revenues per subscriber is resulting in lower capital expenditures by service providers.[5] More information can be found in the regional overview section below.

Leading the decline in commitments was South Asia, falling from US$8.8 billion in 2013 to US$5.4 billion in 2014. The 39% year-over-year decline was largely due to lower investment in India, which fell from US$7.5 billion in 2013 to just US$3.6 billion in 2014. Fewer licenses in India resulted in overall lower investment.

Also falling were Europe and Central Asia (ECA) from US$13.0 billion to US$10.0 billion and Sub-Saharan Africa (AFR) from US$6.0 billion to US$5.1 billion. Conversely, gains were seen in East Asia and Pacific (US$6.2 billion to US$7.4 billion), Latin America and the Caribbean (LAC)(US$23.2 billion to US$24.5 billion) and Middle East and North Africa (MNA)(US$3.2 billion to US$4.2 billion). However, gains in these regions were not enough to offset falling investment in SAR, ECA and AFR (Figure 1).

Among all regions, the total number of active telecom projects was 380—375 of which were additional capital expenditures. The number of expansions by region are as follows: over one-third was in AFR (145);

[1] Private Participation in Infrastructure (PPI) as defined by the Private Participation in Infrastructure Database http://ppi.worldbank.org/resources/ppi_methodology.aspx

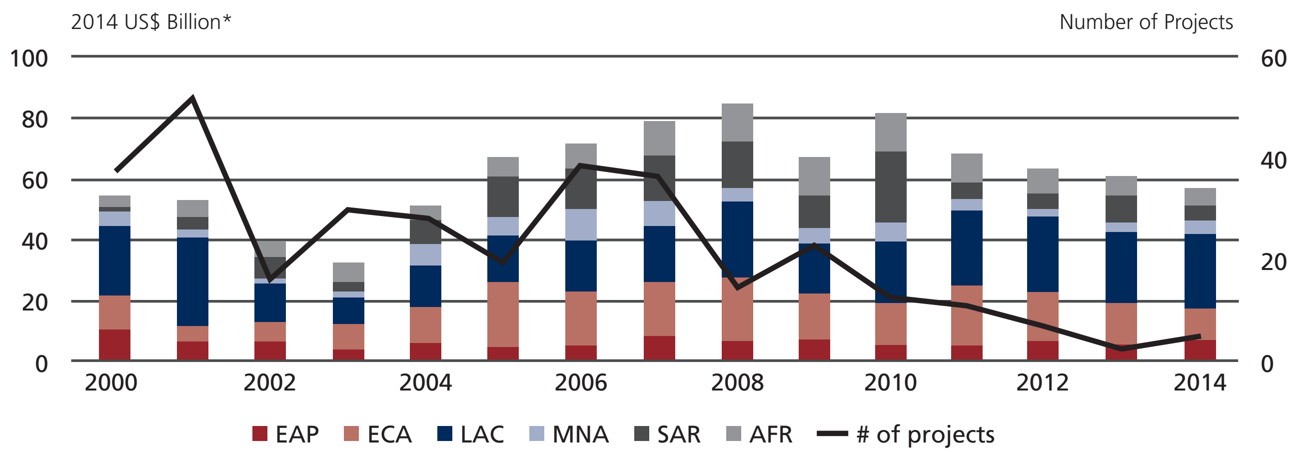
[2] "New" projects refers to new market entrants in a country, excluding additional capital expenditures.

[3] "Investment" refers to investment commitments at the time of financial closure or in the case of brownfield concessions, contract signing.

[4] GSMA Intelligence, 2015. Global cellular market trends and insight, December 2014.

[5] GSMA Intelligence, 2015. Smartphones in emerging markets, December 2014.

FIGURE 1: TOTAL INVESTMENT IN TELECOM BY REGION, 2000–2014



followed by ECA (65); LAC (55); EAP (46); SAR (38) and MNA (31). The 380 projects that closed is the fewest since 2004, when 369 deals reached financial closure. Contributing most to this drop were ECA and LAC. For example, ECA's 65 projects in 2014 is 35% lower than their 10-year average of 100 projects per year. In addition, their 65 telecom deals were the fewest since 1999 when only 61 were awarded. LAC's 55 projects is also 28% lower than their 10-year average of 76 projects per year, and is the fewest expansions since 1997. More importantly, the numbers are trending down in both regions, implying market saturation.

TABLE 1: TOTAL INVESTMENT IN TELECOM IN TOP 5 COUNTRIES (US$ MILLION)

	Number of Active Projects	Average Investment	Total Investment	% Total Investment
Brazil	5	$2,472	$12,362	22%
Russian Federation	4	$1,374	$5,495	10%
India	10	$362	$3,617	6%
Mexico	6	$592	$3,550	6%
Argentina	6	$460	$2,761	5%
All Other Countries	349	$78	$28,856	51%
Total	**380**	**$149**	**$56,641**	**100%**

2 SEGMENT OVERVIEW

Investment in telecom in developing countries was US$56.6 billion in 2014. Of this amount, US$54.7 billion was capacity expansion and US$1.9 billion was new investment.

Fixed access. Although a small amount of the total, US$6.4 billion was committed to fixed assets, which also includes long distance. The US$6.4 billion is only slightly lower than the 2013 level of US$6.6 billion, and represents 11% of total investment in telecom in 2014.

Multi-service provider. At US$12.9 billion, the multi-service provider segment was 32% below the level achieved in 2013—US$18.8 billion. Nonetheless, the US$12.9 billion made up 23% of total telecom investment in 2014.

Mobile access. The largest segment, mobile access, was a bright spot in 2014. Approximately US$37.4 billion was committed to the segment, an increase of 7% from 2013 (US$35.0 billion). These commitments are the highest in three years and represent 66% of global telecom investment in 2014.

3 REGIONAL OVERVIEW

The top region by investment volume was LAC (Table 2). The driving factor behind Latin America and the Caribbean in 2014 was Brazil, which captured over half of regional investment (US$12.4 billion of US$24.5 billion). Among the six regions, only LAC and EAP experienced investment gains from its five-year average. This resulted in total PPI in telecom falling 17% below its five-year average of US$68.0 billion (Table 2).

TABLE 2: TOTAL INVESTMENT IN TELECOM BY REGION, 2014 (US$ BILLION)

	# of Projects	Total Investment	% of Total	% Change from 5-year Average
LAC	55	$24.5	43%	+13%
ECA	65	$10.0	18%	-36%
EAP	46	$7.4	13%	+23%
SAR	38	$5.4	10%	-50%
AFR	145	$5.1	9%	-46%
MNA	31	$4.2	7%	-2%
Total	**380**	**$56.6**	**100%**	**-17%**

Latin America and the Caribbean. Latin America and the Caribbean had US$24.5 billion in telecom commitments. In addition to leading all regions and capturing 43% of the global total, this amount is also 13% above LAC's five-year average of US$21.8 billion. Interestingly, this high level of investment took place as the number of active projects in the region continue to decline. The 55 active telecom deals in LAC in 2014 was the fewest in the last 18 years (since 1997).

TABLE 3: TOTAL INVESTMENT IN TELECOM IN LAC, TOP 5 COUNTRIES, 2014 (US$ BILLION)

	Total Investment	% of LAC	% of Global Total	% Change from 5-year Average
Brazil	$12,362	50%	22%	+12%
Mexico	$3,550	14%	6%	-3%
Argentina	$2,761	11%	5%	+33%
Colombia	$1,904	8%	3%	+11%
Peru	$1,112	5%	2%	+40%
All Other in LAC	$2,860	12%	5%	+17%
Total	**$24,549**	**100%**	**43%**	+13%

Europe and Central Asia. Europe and Central Asia was the second largest destination for telecom investment, attracting US$10.0 billion in 65 active projects. ECA's share of global investment was 18%, which is a continuation of ECA's declining share of the global total over the last five years. Since peaking in 2011 with a 29% share, ECA's share continues to fall, declining to 26% in 2012 and 22% in 2013. Russia led the year-over-year decline, falling from US$8.1 billion in 2013 to US$5.5 billion in 2014. In contrast, Bulgaria saw healthy year-over-year gains, increasing from US$231 million to US$359 million in 2014.

TABLE 4: TOTAL INVESTMENT IN TELECOM IN ECA, TOP 5 COUNTRIES, 2014 (US$ BILLION)				
	Total Investment	% of ECA	% of Global Total	% Change from 5-year Average
Russian Federation	$5,495	55%	10%	-33%
Turkey	$1,879	19%	3%	-35%
Kazakhstan	$615	6%	1%	-19%
Romania	$518	5%	1%	-39%
Bulgaria	$359	4%	1%	+18%
All Other in ECA	$1,101	11%	2%	-58%
Total	**$9,967**	**100%**	**18%**	-36%

East Asia and Pacific. East Asia and Pacific had 46 active projects totaling US$7.4 billion, increasing 20% year-over-year. The US$7.4 billion is also 23% above EAP's five-year average (2009-2013) of US$6.0 billion. Interestingly, if you remove Myanmar's two new projects from the mix, EAP's telecom investment would actually fall 2% below its five-year average. Not surprisingly, EAP's share of the global total was 13% in 2014—slightly higher than the 10% achieved in 2013. Telenor Myanmar and Ooredoo Myanmar were noteworthy investments for a combined US$1.5 billion that boosted the region's totals. Excluding Myanmar, only four other countries had telecom investment. The largest project was Indonesia's US$1.1 billion partial divestiture of PT Telekomunikasi Selular.

TABLE 5: TOTAL INVESTMENT IN TELECOM IN EAP, TOP 5 COUNTRIES, 2014 (US$ BILLION)				
	Total Investment	% of EAP	% of Global Total	% Change from 5-year Average
Indonesia	$2,051	28%	4%	-19%
Thailand	$2,016	27%	4%	+118%
Myanmar	$1,500	20%	3%	NA[6]
Philippines	$1,032	14%	2%	-24%
Malaysia	$799	11%	1%	-19%
All Other in EAP	$11	<1%	<1%	-95%
Total	**$7,409**	**100%**	**13%**	+23%

South Asia. In South Asia, 38 expansion projects totaling US$5.4 billion reached financial closure. The 38 projects were the second fewest among all regions, and SAR also holds the dubious distinction of having the lowest investment total (-50%) relative to its five-year average. Still, the 38 telecom projects was close to SAR's ten-year average of 43 projects per year, suggesting that network expansions are becoming smaller in size. Nonetheless, a pair of billion dollar deals took place in India: Vodafone Essar (US$1.3 billion) and Bharti Airtel Limited (US$1.1 billion). The two greenfield merchant expansions in India comprised nearly half of the region's totals.

[6] Myanmar received no telecom investment from 2009 to 2013 based on WB's PPI database criteria.

TABLE 6: TOTAL INVESTMENT IN TELECOM IN SAR, TOP 5 COUNTRIES, 2014 (US$ BILLION)				
	Total Investment	% of SAR	% of Global Total	% Change from 5-year Average
India	$3,617	67%	6%	-61%
Pakistan	$948	18%	2%	+61%
Bangladesh	$657	12%	1%	+27%
Sri Lanka	$137	3%	<1%	-45%
Maldives	$11	<1%	<1%	-10%
All Other in SAR	$0	0%	0%	0[7]
Total	**$5,370**	**100%**	**10%**	-50%

Sub-Saharan Africa. Sub-Saharan Africa had 145 telecom deals close in 2014. Of these projects, three were new and 142 were additional capital expenditures, totaling US$5.1 billion. The US$5.1 billion is the lowest level of investment since 2002, and marks the sixth consecutive year of declining investment in AFR. Similar to South Asia, Sub-Saharan Africa is also trending toward smaller deals as the number of projects remains consistent with the five- and 10-year averages but investment continues to fall. One possible explanation is falling average revenues per user (ARPU) among network providers. As telecom companies increasingly expand into more rural areas, average ARPU's have been falling for the past five years and are expected to fall further as companies attempt to gain incremental subscribers. This is often a significant challenge for operators in terms of the need to generate adequate return on investments when deciding on network expansion, especially in the more remote and rural areas.

Further contributing to AFR's falling investment is the relatively heavy taxation of mobile services. Ghana, Kenya and Chad, for example, each have a mobile service tax burden of over 25% of revenues. Over the past five years, 15 African countries have imposed an additional mobile-specific tax, which is creating affordability barriers for many consumers.

TABLE 7: TOTAL INVESTMENT IN TELECOM IN AFR, TOP 5 COUNTRIES, 2014 (US$ BILLION)				
	Total Investment	% of AFR	% of Global Total	% Change from 5-year Average
Nigeria	$1,357	27%	2%	-46%
South Africa	$1,240	24%	2%	-37%
Cameroon	$467	9%	1%	+99%
Kenya	$417	8%	1%	-5%
Sudan	$301	6%	1%	-20%
All Other in AFR	$1,329	26%	2%	-67%
Total	**$5,111**	**100%**	**9%**	-46%

Middle East and North Africa. With US$4.2 billion in commitments, MNA achieved its highest investment in telecom since 2010. With eight expansion projects ranging between US$300-400 million, no single deal stood out.

[7] Excluding India, Pakistan, Bangladesh, Sri Lanka and Maldives, South Asia's five-year average telecom investment from 2009-2013 is US$50.4 million.

TABLE 8: TOTAL INVESTMENT IN TELECOM IN MNA, TOP 5 COUNTRIES, 2014 (US$ BILLION)				
	Total Investment	% of MNA	% of Global Total	% Change from 5-year Average
Egypt, Arab Rep.	$1,066	25%	2%	-22%
Morocco	$881	21%	2%	+22%
Iraq	$758	18%	1%	+54%
Algeria	$742	18%	1%	+128%
Jordan	$329	8%	1%	+55%
All Other in MNA	$458	10%	<1%	-62%
Total	**$4,235**	**100%**	**7%**	-2%

4 NEW PROJECTS

Five new projects reached financial closure in 2014. Although the five is two more than 2013's total of three, it remains far below the five, 10- and 20-year averages of 11, 19 and 35 projects, respectively. Of the five new projects, two were in Myanmar and one each in Uganda, Tanzania and Cameroon. See further details below.

Telenor Myanmar. At US$1.0 billion, Telenor Myanmar was the largest new deal in 2014. The 15-year paid spectrum license was granted by Myanmar's Federal Government to Norway's Telenor Group, which committed US$500 million toward the project. Payment is scheduled to be 50% in 2014, 25% in 2015 and 25% in 2016.

Ooredoo Myanmar. The second largest new project was also in Myanmar—the US$500 million Ooredoo Myanmar. Ooredoo paid US$500 million to the government for the license and has pledged a total of US$15 billion to help develop Myanmar's telecom sector. Ooredoo is targeting a rapid roll-out of its network and expects to cover the vast majority of the population with LTE-ready infrastructure within five years.

Viettel Cameroon. Vietnamese telecommunications group Viettel won Cameroon's third mobile telephone license deal in 2014. Viettel Cameroon committed US$394 million toward the rollout of a network that was to provide 81% coverage in Cameroon. Although the project was to commence operations in early 2014, the launch was postponed to September, 2014, due to construction and weather-related problems.

Smart Telecom Tanzania. Smart Telecom—owned by Industrial Promotion Services (IPS), announced the launch of a mobile network operating subsidiary in Tanzania. The launch coincides with the introduction of a sister company, also called Smart Telecom, in neighboring Uganda, which was revealed in March, 2014. Smart Telecom has earmarked investment of US$300 million across three East African markets—Tanzania, Uganda and Burundi—offering mobile voice and internet services.

Smart Telecom Uganda. Smart Telecom originally launched services in Uganda and then revealed additional market potential across East Africa as a whole. As a result, the company earmarked US$300 million in telecom investment in Uganda, Tanzania and Burundi.

About the Private Participation in Infrastructure Projects Database:

The Private Participation in Infrastructure Database is a product of the World Bank's Public-Private Partnerships Group. Its purpose is to identify and disseminate information on private participation in infrastructure projects in low- and middle-income countries. The database highlights the contractual arrangements used to attract private investment, the sources and destination of investment flows, and information on the main investors. The site currently provides information on more than 6,000 infrastructure projects dating from 1984 to 2014 and is updated with last year's data six months after year-end (July 2015). It contains over 30 fields per project record, including country, financial closure year, infrastructure services provided, type of private participation, technology, capacity, project location, contract duration, private sponsors, and development bank support. This project represents the best efforts of a research team to compile publicly available information on those projects, and should not be seen as a fully comprehensive resource. Some projects—particularly those involving local and small-scale operators—tend to be omitted because they are usually not reported by major news sources, databases, government websites, and other sources used by the PPI Projects database staff. For more information, please visit: http://ppi.worldbank.org/.

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