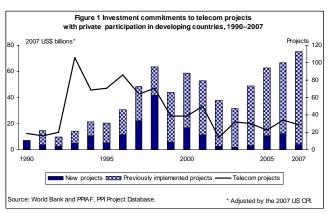
PPI data update note 12

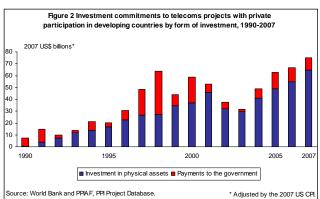
October 2008

Investment commitments to telecommunications reached a new peak in 2007

Investment commitments to telecommunications projects with private participation in low- and middle-income countries amounted to US\$75 billion in 2007, according to just-released data from the Private Participation in Infrastructure Project Database. ¹ That marked a new peak for the 1990–2007 period.

The high level of investment commitments (hereafter, *investment*) was driven by projects implemented in previous years. Projects that reached financial closure between 1990 and 2006 attracted US\$70.5 billion, while new projects accounted for US\$4.5 billion (figure 1).² Investment in physical assets (that is, network expansion) grew by 18% to US\$64.9 billion, reaching a new peak for the third consecutive year (figure 2). Payments to the government (such as spectrum or concession fees and divestiture revenues) amounted to US\$10 billion, or 13% of annual investment.





In 2007, 29 telecommunications projects with private participation reached financial or contractual closure in 28 low- and middle-income countries. Of these projects, 23 were greenfield merchant projects, involving investment of US\$3.1 billion, and 6 were divestitures, with US\$1.4 billion. Previously implemented greenfield projects accounted for another US\$46.9 billion, and previously divested companies for US\$23.6 billion.

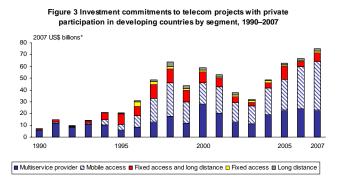
Stand-alone mobile operators accounted for most of the investment growth. Investment in this segment rose by 15% in real terms in 2007 to US\$41.4 billion, its highest level ever and 55% of annual

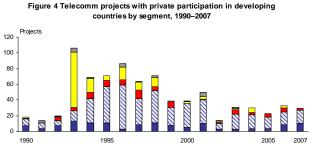
This note was produced by Ada Karina Izaguirre, infrastructure specialist, and Edouard Perard, consultant, Finance, Economics, and Urban Development Department, Sustainable Development Network, World Bank.

¹ Telecommunications includes projects that provide basic telephone services (fixed access and long distance) or mobile access using their own physical infrastructure. Not included are voice over Internet protocol (VoIP) services or operators providing services with leased infrastructure.

² Data on telecommunications contracts include primarily medium-size and large projects as reported by the media and other public sources. Small-scale projects are generally not included because of a lack of public information. Additional annual investment in some previously implemented projects may have been omitted for the same reason. Barbados, the Czech Republic, Estonia, and Trinidad and Tobago became high-income countries according to the 2007 World Bank country classification (released in July 2007) and are therefore excluded from the PPI Project Database beginning with the 2007 update.

investment in the sector (figure 3). Multiservice providers, the second largest segment with 31% of sector investment, maintained investment at around US\$23 billion for the third consecutive year. These two segments also accounted for most of the new projects (figure 4). This concentration of activity in the two segments was observed across developing regions.





Source: World Bank and PPIAF, PPI Project Database.

* Adjusted by the 2007 US CPI.

Source: World Bank and PPIAF, PPI Projects database.

Activity by region. Investment has become less concentrated by country in recent years. In 2007 the top 5 recipient countries (India, Brazil, the Russian Federation, Iraq, and Poland) accounted for 36% of total investment, while the top 10 (with Indonesia, Mexico, Nigeria, the Arab Republic of Egypt, and Pakistan added to the list) attracted 56%. These concentrations are a few percentage points lower than those in 2006, when the top 5 accounted for 44% of investment and the top 10 for 58%. And they are significantly lower than those in 2002–05, when the top 5 accounted for more than 50% of investment and the top 10 for between 60% and 70%.

In *East Asia* previously implemented projects attracted investment of US\$6.8 billion, and two new projects US\$696 million, for a total of US\$7.5 billion. The Philippines sold a 6.4% stake in Philippine Long Distance Telephone Company, the largest telecommunications company in the country. The government's stake in the company came about as a result of a Philippine Supreme Court decision concluding that the shares were ill-gotten assets of former President Ferdinand Marcos. The region's other project was a new mobile license in Papua New Guinea (table 1).

In Europe and Central Asia investment in previously implemented projects amounted to US\$21.2 billion. In addition, eight countries implemented eight new projects with investment of US\$622 million, bringing the total to US\$21.8 billion. Albania sold 76% of Albtelecom, the state-owned incumbent operator providing fixed, mobile, and long-distance services, to a consortium led by Turk Telekom. Six other countries granted mobile licenses to new operators—Georgia, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Serbia (in Kosovo), and the Slovak Republic. Romania issued a multiservice license to a new operator.

In Latin America and the Caribbean previously implemented projects attracted investment of US\$15.5 billion, while two new mobile licenses amounted to US\$140 million. Digicel Group (Bermuda) was awarded the two mobile licenses: one in Honduras and the other in Suriname.

In the *Middle East and North Africa* investment in previously implemented projects amounted to US\$7 billion, while a new mobile operator in Iraq, Korek Telecom, acquired a 15-year national license for US\$1.25 billion. Iraq accounted for almost 60% of investment in the region, primarily because of investment in new licenses. Besides Korek Telecom, two existing mobile operators (Asia Cell and Zain) acquired additional mobile licenses for US\$1.25 billion each.

In *South Asia* previously implemented projects attracted investment of US\$12.3 billion. Mobile and multiservice operators accounted for US\$11.5 billion of that investment. India attracted 62% of regional investment, including investment in new projects. Two new projects were implemented in the region. Bangladesh awarded a national public switched telephone network (PSTN) license to National TeleCom (NTC) for US\$1.7 million, and Sri Lanka awarded a mobile license to Indian operator Bharti Airtel for US\$4 million.

In *Sub-Saharan Africa* investment in previously implemented projects amounted to US\$7.6 billion. In addition, 13 countries implemented 14 new projects that involved investment of US\$1.8 billion, bringing the total to US\$9.4 billion. Of these new projects, 4 were divestitures. Gabon sold 51% of Gabon Telecom, the incumbent national operator, to Maroc Telecom. Ghana divested 75% of the multiservice operator Westel, which had become fully state owned in 2005 when the U.S. ACG Telesystems sold its stake in the company to Ghana National Petroleum Corporation after disputes over sector regulations and company management. Kenya sold a 51% stake in Telkom Kenya, the incumbent fixed-line operator, to France Telecom for US\$390 million. Rwanda divested 80% of Rwandatel, the national mobile and fixed-line operator, to Libya Africa Portfolio for Investments.

The other 10 new projects were greenfield merchant projects for mobile service or multiservice operations. These brought a fifth mobile operator in Benin (Globacom Benin), a second mobile operator in the Central African Republic (Orange Centrafrique), a new mobile operator in Guinea (Orange Guinea), a mobile license in Guinea-Bissau (Orange Bissau), a second mobile license in Namibia (Powercom), a multiservice operator in Niger (Orange Niger), a multiservice operator and another mobile one in Nigeria (Emerging Markets Telecommunications Services and Alheri Engineering), a multiservice operator in Senegal (Sudatel Senegal), and another in Uganda (Warid Telecom Uganda).

Potential new projects. Besides the 29 new projects reaching financial or contractual closure in 2007, at least 17 others were awarded but did not reach closure before the end of the year. Thirteen of these are new mobile operators: two in Poland, one in Tajikistan, two in the Dominican Republic, one in Guatemala, one in West Bank and Gaza, two in Afghanistan, one in Sri Lanka, one in Benin, two in Burundi. In addition, Argentina and Uganda each awarded multiservice licenses to two new operators. And Brazil awarded 3G licenses to three existing operators.

Canceled and distressed projects. Four telecommunications projects were canceled or became distressed in 2007, bringing the total number to 42. These 42 contracts represent 5% of all telecommunications projects and 4% of investment commitments during 1990–2007.

Two of the projects were canceled, one in República Bolivariana de Venezuela and the other in Rwanda. The Venezuelan government nationalized the incumbent telecommunications operator Compania Anonima Nacional de Telefonos de Venezuela. The company had been divested in phases during the 1990s: a 40% stake was sold to a consortium led by the U.S. GTE Corp in 1991, and subsequent shares were sold on the local stock exchange and the New York Stock Exchange in 1996–97. The Rwandese government bought back Rwandatel, the national mobile and fixed-line operator, from the U.S. Terracom Communications, which had acquired 99% of the company in 2005. A few months later the government divested Rwandatel for second time.

The two projects that became distressed are in Bolivia and Pakistan. The Bolivian government began the legal process to nationalize Entel Bolivia, the incumbent long-distance and mobile operator, which had been divested in 1995. The Pakistan government requested termination of the mobile license of Pakcom, which had started operating in 1990, because of disagreements over license fee payments.

Concluded projects. No telecommunications projects were concluded in 2007.

Table 1 Telecom projects reaching financial or contractual closure in 2007

Note: .. = not available.

Ea	East Asia and Pacific								
_	Country	Project name	Project status	Segment	Type of private participation	Private equity (%)	Investment commitment (US\$ millions)	Capacity size and type	Main sponsors
1	Papua New Guinea	Digicel Papua New Guinea	Construction	Mobile access	Greenfield project	100	150		Digicel (100%, Bermuda)
2	Philippines	Philippine Long Distance Telephone Company	Operational	Fixed access, mobile access, and long distance	Divestiture	100	546		

Eu	rope and Ce	entral Asia							
	Country	Project name	Project status	Segment	Type of private participation	Private equity (%)	Investment commitment (US\$ millions)	Capacity size and type	Main sponsors
1	Albania	Albtelecom	Operational	Fixed and mobile access	Divestiture	76	161	250,000 connections	Calik Holding (%, Turkey), Turk Telekom (%, Turkey)
2	Georgia	GeoComInvest	Operational	Mobile access	Greenfield project	100	10.2		GeoComInvest (100%, Georgia)
3	Macedonia, FYR	VIP Macedonia	Operational	Mobile access	Greenfield project	100	71	141,000 connections	Telekom Austria Group (100%, Austria)
4	Moldova	Eventis Mobile	Operational	Mobile access	Greenfield project	100	43	100,000 connections	Eventis Telecom Holding (100%, Cyprus)
5	Montenegro	Mtel	Operational	Mobile access	Greenfield project	100	21.5	260,000 connections	Telekom Srbija (51%, Serbia)
6	Romania	RCS & RDS	Operational	Fixed and mobile access	Greenfield project	100	35	200,000 connections	RCS & RDS (100%, Romania)
7	Serbia	Second mobile license in Kosovo	Construction	Mobile access	Greenfield project	100	275		Telekom Slovenije (%, Slovenia), IPCO International Ltd. (%, Singapore)
8	Slovak Republic	Telefonica O2	Operational	Mobile access	Greenfield project	100	5.7	565,000 connections	Telefonica SA (100%, Spain)

La	Latin America and the Caribbean								
	Country	Project name	Project status	Segment	Type of private participation	Private equity (%)	Investment commitment (US\$ millions)	Capacity size and type	Main sponsors
1	Honduras	Digicel Honduras	Construction	Mobile access	Greenfield project	100	80.1		Digicel (100%, Bermuda)
2	Suriname	Digicel Suriname	Operational	Mobile access	Greenfield project	100	60		Digicel (100%, Bermuda)

Mi	Middle East and North Africa								
	Country	Project name	Project status	Segment	Type of private participation	Private equity (%)	Investment commitment (US\$ millions)	Capacity size and type	Main sponsors
1	Iraq	Korek Telecom	Operational	Mobile access	Greenfield project	100	1,250	600,000 connections	Others (100%,)

So	uth Asia								
	Country	Project name	Project status	Segment	Type of private participation	Private equity (%)	Investment commitment (US\$ millions)	Capacity size and type	Main sponsors
1	Bangladesh	National TeleCom Ltd.	Operational	Fixed access and long distance	Greenfield project	100	1.7	17,000 connections	Others (100%,)
2	Sri Lanka	Bharti Airtel Sri Lanka	Construction	Mobile access	Greenfield project	100	4		Bharti Enterprises (45%, India), Singapore Telecom (16%, Singapore)

Su	b-Saharan	Africa							
	Country	Project name	Project status	Segment	Type of private participation	Private equity (%)	Investment commitment (US\$ millions)	Capacity size and type	Main sponsors
1	Benin	Globacom Benin	Construction	Mobile access	Greenfield project	100	69		Globacom (100%, Nigeria)
2	Central African Republic	Orange Centrafrique	Operational	Mobile access	Greenfield project	100	12	33,000 connections	France Telecom (100%, France)

3	Gabon	Gabon Telecom	Operational	Fixed access, mobile access, and long distance	Divestiture	51	93.4	410,000 connections	Maroc Telecom (51%, Morocco)
4	Ghana	Westel	Operational	Fixed access, mobile access, and long distance	Divestiture	75	120		Zain (75%, Kuwait)
5	Guinea	Orange Guinea	Operational	Mobile access	Greenfield project	100	0	185,000 connections	Sonatel (100%, Senegal)
6	Guinea- Bissau	Orange Bissau	Operational	Mobile access	Greenfield project	100	26.5	36,000 connections	Sonatel (100%, Senegal)
7	Kenya	Telkom Kenya	Operational	Fixed access and long distance	Divestiture	51	390	280,000 connections	France Telecom (40%, France)
8	Namibia	Powercom (Pty) Limited	Operational	Mobile access	Greenfield project	100	8.5		Nampower (37%, Namibia), Telecom Management Partner AS (39%, Norway)
9	Niger	Orange Niger	Construction	Fixed access, mobile access, and long distance	Greenfield project	100	72		France Telecom (80%, France)
10	Nigeria	Alheri Engineering Limited	Construction	Mobile access	Greenfield project	100	150		Dangote Group (100%, Nigeria)
11	Nigeria	Emerging Markets Telecommunications Services (EMTS)	Construction	Fixed access, mobile access, and long distance	Greenfield project	100	400		Emirates Telecommunications Corporation (Etisalat) (40%, United Arab Emirates), Mubadala Development Company (60%, United Arab Emirates)
12	Rwanda	Rwandatel, Second Divestiture	Operational	Fixed access, mobile access, and long distance	Divestiture	80	100		Libya Africa Portfolio for Investments (LAP) (80%, Libya)
13	Senegal	Sudatel Senegal	Construction	Fixed access, mobile access, and long distance	Greenfield project	100	200		Sudatel Group (100%, Sudan)
14	Uganda	Warid Telecom Uganda Limited	Construction	Fixed access, mobile access, and long distance	Greenfield project	100	200		Abu Dhabi Group (100%, United Arab Emirates)