PPI data update note 30 **December 2009**

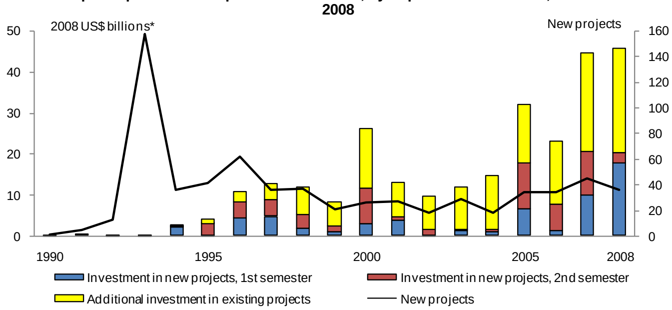
Investment commitments remain at peak level in Europe and Central Asia while the number of new projects declines

Private activity in infrastructure in Europe and Central Asia showed mixed results in 2008, according to just-released data from the Private Participation in Infrastructure Project Database. Annual investment commitments to infrastructure projects with private participation reached a new peak thanks to additional investment in existing telecommunications operators and new energy projects implemented in the first half of the year. Investment in new projects slowed sharply in the second half of the year with the full onset of the financial crisis. This slowdown led to a decline in the number of projects for the entire year. The region accounted for 30% of the year's total investment commitments in developing countries, the largest share among developing regions.

In 2008, 36 infrastructure projects with private participation reached financial or contractual closure in 11 low- or middle-income countries in the region.[1] These involve investment commitments (hereafter, *investment*) of US$20.3 billion. Infrastructure projects implemented in previous years had additional commitments of US$25.7 billion, bringing total investment in 2008 to US$45.9 billion. That represented an increase of 3% from the level reported in 2007 and a new peak for the region (figure 1).[2] Investment in projects implemented in previous years accounted for the increase, growing by 6% from the level in 2007. By contrast, investment in new projects fell by 1%.

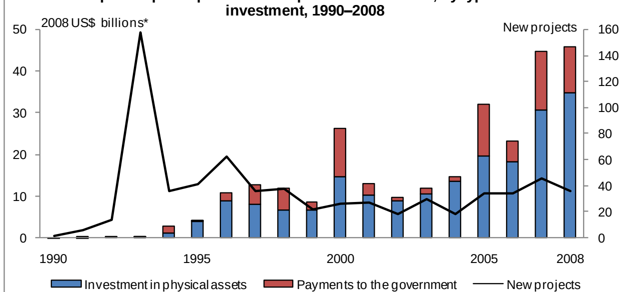
When investment is classified by type, investment in physical assets explains the growth in total investment. Such investment amounted to US$34.9 billion in 2008, up 14% from that reported in 2007 (figure 2). By contrast, payments to governments (such as concession or lease fees and divestiture revenues) declined by 21%, to US$11 billion.

Figure 1 Investment commitments to infrastructure projects with private participation in Europe and Central Asia, by implementation status, 1990–2008



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

Figure 2 Investment commitments to infrastructure projects with private participation in Europe and Central Asia, by type of investment, 1990–2008



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

New projects and associated investment were more concentrated in the first half of the year in 2008 than in previous years. In that period 27 of the 36 new projects reached closure. These involve

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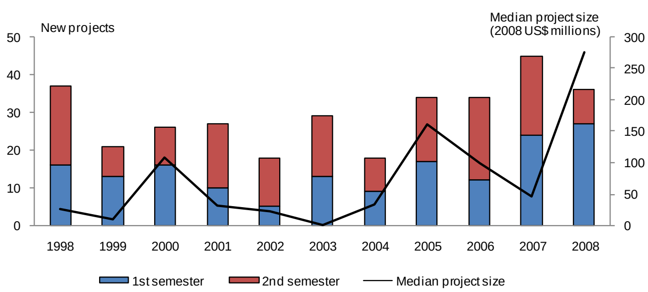
[1] The data on infrastructure projects with private participation include primarily medium-size and large projects as reported by the media and other public sources. Small-scale projects are generally not included because of lack of public information. Additional investment in some projects may have been omitted for the same reason. In this region Hungary and the Slovak Republic became high-income economies according to the 2008 World Bank country classification (released in July 2008) and are therefore excluded from the 2008 update of the PPI Project Database.

[2] Investment data are reported in 2008 U.S. dollars, using the U.S. consumer price index and 2008 as the base year. Data at http://ppi.worldbank.org/ are reported in millions of current U.S. dollars unless otherwise indicated.

investment of US$17.9 billion, 88% of the total for new projects. Investment in the first semester of 2008 was 80% higher than in the same period of 2007—and higher than in any other first semester in 1990–2008. That suggested a continuation of the investment growth for new projects seen since the second semester of 2006 (see figure 1). But activity dropped off sharply in the second semester of 2008. Investment amounted to just US$2.4 billion, down 77% from the same period of 2007. The drop in the second half of 2008 can be explained at least in part by the end of the privatization of Russian RAO UES's generating companies (see section on activity by sector) and the more difficult investment environment that came with the full onset of the global financial crisis. Preliminary data on new projects in the first semester of 2009 suggest a recovery from the level reported in the second half of 2008, with investment reaching US$10.2 billion, driven by the implementation of large generation projects.[3] Similar analysis is not possible for existing projects because the data do not allow the separation by semester of additional investment.

The number of projects reaching financial or contractual closure declined by 20% in 2008 compared with 2007 (figure 3). The closure of larger projects explains why investment declined proportionally less than the number of new projects. The median project size in 2008 (US$276 million) was four times that in 2007. Investment in large projects (US$1 billion or more) declined by 3% to US$14 billion in 2008, while investment in smaller projects remained around US$6 billion. Large projects accounted for a large share of the investment of the past two years in the region (figure 4).

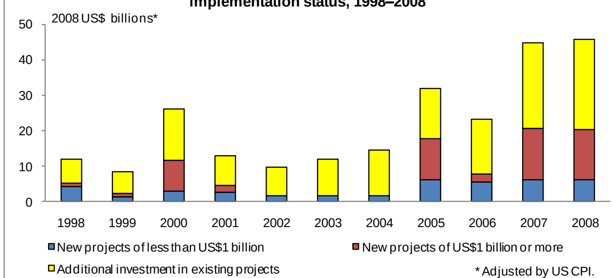
Figure 3 New infrastructure projects with private participation and median project size in Europe and Central Asia, by semester, 1998–2008



Source: World Bank and PPIAF, PPI Project Database.

* Adjusted by US CPI.

Figure 4 Investment commitments to infrastructure projects with private participation in Europe and Central Asia, by project size and implementation status, 1998–2008



* Adjusted by US CPI.

Note: Includes investment in projects reaching financial closure in 1990-2008.

Source: World Bank and PPIAF, PPI Project Database.

As in previous years, divestitures and greenfield projects were the most common types of private participation in 2008.[4] Investment in divestitures amounted to US$22.5 billion, 49% of the regional total in 2008. Although that level represented a drop of 11% from 2007, investment in divestitures remained strong—at the second highest level in 1990–2008. Activity in the first half of the year—when 16 of the 21 divestitures took place—explains the high level reached in 2008 (figure 5). By contrast, activity in the second half of the year declined sharply, at least in part because of the end of the privatization of Russian RAO UES's generating companies. Investment in previously divested projects also showed a decline, though a much less pronounced one.

Investment in greenfield projects amounted to US$20.6 billion, 45% of the regional total in 2008. That amount represented a 27% increase from 2007 and was the highest level in 1990–2008. Existing projects accounted for most of that growth as well as for most of the investment in greenfield projects. But new greenfield projects, most of which reached closure in the first half of the year, also contributed to the investment growth. The 11 new greenfield projects reaching closure in 2008 involve investment

[3] "Assessment of the Impact of the Crisis on New PPI Projects: Update 4," PPI data update note 24 (October 2009).

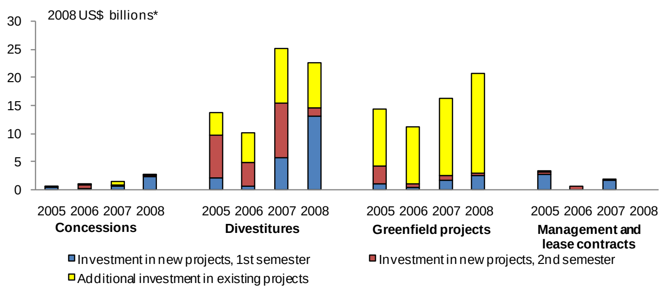
[4] This note uses the term *greenfield project* as defined in the PPI Project Database methodology. The definition includes the following schemes: build, lease, and transfer (BLT); build, operate, and transfer (BOT); build, own, and operate (BOO); merchant; and rental.

of US$2.9 billion, 13% more than for such projects in 2007. The new projects were seven build-own-operate (BOO) contracts, two build-operate-transfer (BOT) contracts, and two merchant projects.

The other new projects in the region were four concessions—two build-rehabilitate-operate-transfer (BROT) contracts and two rehabilitate-lease-transfer (RLT) contracts.[5] No new management or lease contracts were recorded in the region in 2008.

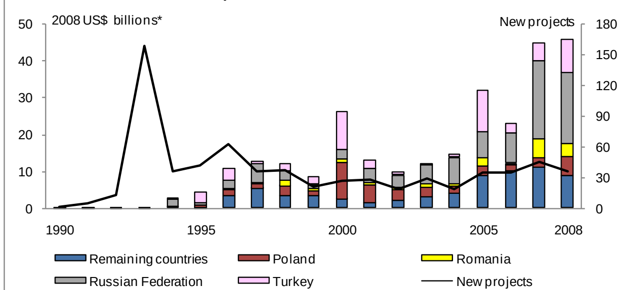
Investment was driven by the Russian Federation, which accounted for 42% of the regional total in 2008 (figure 6). Other countries with large shares were Turkey (20%) and Poland (11%). The rest (27%) was spread among eight countries. Russia also had the largest number of new projects, with 10 of the 36, followed by Poland (7) and Turkey (6).

Figure 5 Investment commitments to infrastructure projects with private participation in Europe and Central Asia, by type of PPI and implementation status, 2005–08



Note: Includes investment in projects reaching financial closure in 1990 - 2008.
Source: World Bank and PPIAF, PPI Project Database.
*Adjusted by US CPI.

Figure 6 Investment commitments to infrastructure projects with private participation in main recipients and rest of countries in Europe and Centra Asia, 1990–2008



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

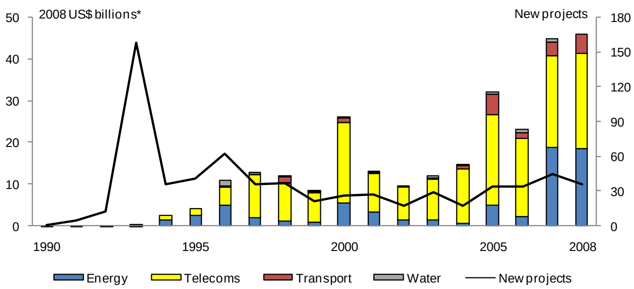
Activity by sector. Investment in 2008 was concentrated in telecommunications (50%) and energy (40%). In telecommunications, investment grew by 4% to US$22.8 billion, the highest level in 1990–2008 (figure 7). Network expansion by existing telecommunications operators drove that growth (figure 8). In energy, investment remained in the peak range of US$18–19 billion for the second consecutive year. In transport, investment increased by 43% to US$4.6 billion, the second highest level for the region in 1990–2008. For the first year since 1997, no new water and sewerage project was implemented in the region.

In *energy* seven countries implemented a total of 26 projects (table 1). New energy projects and associated investment were concentrated in the first half of the year, when 21 projects reached closure. These projects involve investment of US$15.1 billion, the highest level of any first semester in 1990–2008. By contrast, investment in the five new projects in the second semester amounted to just US$1.2 billion.

Russia led regional activity by divesting nine electricity generation companies with total installed capacity of 41,734 megawatts (MW), through transactions involving investment of US$11.4 billion. These divestitures were part of the restructuring of the Russian electricity sector, which included the spinoff of RAO UES, an electricity holding company, into several vertically disintegrated companies and the divestiture of 6 wholesale generation companies (OGKs) and 14 territorial generation companies (TGKs).

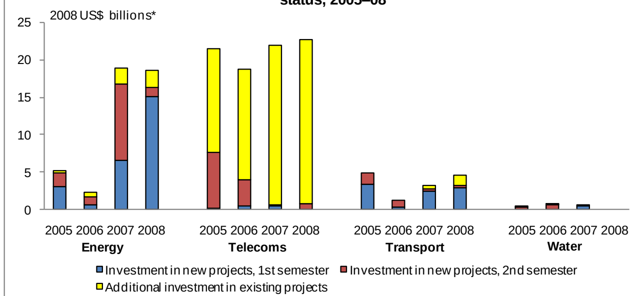
[5] This note uses the term *concession* as defined in the PPI Project Database methodology. The definition includes contracts under which a private entity takes over the management of a state-owned enterprise or asset for a given period during which it also assumes significant investment risk. The following schemes are considered concessions: build, rehabilitate, operate, and transfer (BROT); rehabilitate, lease or rent, and transfer (RLT); and rehabilitate, operate, and transfer (ROT).

Figure 7 Investment commitments to infrastructure projects with private participation in Europe and Central Asia, by sector, 1990–2008



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

Figure 8 Investment commitments to infrastructure projects with private participation in Europe and Central Asia, by sector and implementation status, 2005–08



Note: Includes investment in projects reaching financial closure in 1990 - 2008. *Adjusted by US CPI.
Source: World Bank and PPIAF, PPI Project Database.

In Bulgaria, American AES Corporation secured financing for the US$370 million, 156-MW St. Nikolas wind farm. In Croatia, German Wallenborn Projektentwicklung implemented the US$85 million, 42-MW Senj wind farm project. Georgia fully divested its regional gas distribution network, with 30,000 connections, to State Oil Company of Azerbaijan Republic. Through an initial public offering, Poland sold a 23% stake of ENEA, the fourth largest integrated electricity utility in the country, for US$738 million. In addition, Poland implemented five wind generation projects on a BOO basis, involving total capacity of 152 MW and investment of US$500 million.

Romania finalized the sale of Electrica Muntenia Sud, which serves 1.1 million customers in the Bucharest area, to Italian Enel. The US$1.2 billion transaction, for which the process started in 2005, consisted of selling the equivalent of a 50% stake in the company for US$581 million and the subscription of a capital increase for US$625 million, after which Enel owned a 64% stake. Romania also divested three packages of micro-hydropower plants for US$54 million. In Turkey four greenfield projects for electricity generation reached financial closure, representing investment of US$1.9 billion and total installed capacity of 2,140 MW. The largest project consists of 10 hydropower plants with total capacity of 980 MW and a 920-MW natural-gas-fired thermal plant. The project was developed by a joint venture between Austrian Verbund and Turkish Sabanci Holding.

In *telecommunications,* investment in previously implemented projects amounted to US$22 billion in 2008. Investment in one new project added US$800 million, for a total of US$22.8 billion. Russia accounted for 35%, and Turkey for 18%, of the regional investment in previously implemented projects. Belarus implemented the only new telecommunications project in the region. In July 2008 its government sold 80% of BeST, a state-owned mobile operator, to Turkish Turkcell for US$300 million. As part of the transaction, Turkcell committed to investing at least US$500 million in network expansion. With 187,000 subscribers in 2008, BeST was the third largest mobile operator in Belarus.

In *transport* eight countries signed nine contracts, five of them divestitures. Armenia signed a 30-year BROT concession for Armenia Railway with Russian Railways, with investment of US$575 million. Belarus divested 90% of the railway operator Belterminal to the Cypriot RPG Industry for US$4 million. Georgia sold 100% of Poti Sea Port Development to RAK Investment Authority of the United Arab Emirates and secured investment in the port of US$345 million. The former Yugoslav Republic of Macedonia signed a US$295 million concession for Skopje and Ohrid Airports with Turkish TAV Airports Holding. Poland divested part of Bydgoszcz Airport and secured investment in the facility of US$39 million. The Russian Federation divested 98% of Rosterminalugol, a port terminal for coal, for US$24 million. Turkey led regional investment in transport with two airport concessions: one for Antalya Gazipasa Airport (US$500 million) and the other for Istanbul's Sabiha Gokcen International Airport (US$1.3 billion). Uzbekistan divested part of railway operator Yolref Trans for US$25 million.

In *water*, as noted, no new projects reached closure in the region in 2008.

Potential new projects. In addition to the 36 new projects reaching financial or contractual closure in 2008, at least 41 other projects were awarded but had not reached closure by the end of the year. In energy there were 27 potential projects (21 for electricity generation, 5 for electricity distribution, and 1 for natural gas distribution). In telecommunications Turkey awarded three 3G licenses. In transport there were 11 potential projects: 5 for roads, 4 for seaports, and 1 each for an airport and a railway.

Canceled and distressed projects. No infrastructure project was canceled or became distressed in 2008, leaving the total number of infrastructure projects canceled or distressed in the region by 2008 at 21. These projects represent 3.1% of all projects and 1.6% of investment in the region in 1990–2008.

Concluded projects. Two projects concluded in 2008. In Russia, RAO EES Rossii, the holding company for national and regional electricity utilities, was dissolved on July 1, 2008, as part of the power sector restructuring. The shares of RAO EES Rossii, which had been partially divested in the early 1990s through the voucher privatization program and initial public offerings, were distributed among the spinoff companies. In Albania the water utility management contract for four towns (Durres, Fier, Lezhe, and Saranda) concluded in August.

Table 1 Infrastructure projects with private participation reaching financial or contractual closure in Europe and Central Asia in 2008

Note: .. = not available; n.a. = not applicable.

Energy

	Country	Project name	Project status	Sub-sector	Type of PPI	Private equity (%)	Investment commitment (US$ millions)	Capacity size and type	Contract period (years)	Main sponsors
1	Bulgaria	AES St. Nikolas Wind Farm near Kavarna	Construction	Electricity	Greenfield project (BOO)	100	370	156 MW	12	AES Corporation (89%, United States)
2	Croatia	Senj Wind Farm Project	Construction	Electricity	Greenfield project (BOO)	100	85	42 MW	..	Wallenborn Projektentwicklung GmbH & Co. KG (.., Germany)
3	Georgia	Regional Gas Distribution Companies Privatization	Operational	Natural gas	Divestiture (full)	100	50	30,000 connections	..	State Oil Company of Azerbaijan Republic (SOCAR) (100%, Azerbaijan)
4	Poland	Dobrzyn Wind Farm	Construction	Electricity	Greenfield project (BOO)	100	151.8	34 MW	12	Scan Energy A/S (100%, Denmark)
5	Poland	ENEA SA	Operational	Electricity	Divestiture (partial)	23	738	2,880 MW	..	Vattenfall (19%, Sweden)
6	Poland	Goldap Wind Farm	Construction	Electricity	Greenfield project (BOO)	100	119	48 MW	..	Scan Energy A/S (100%, Denmark)
7	Poland	Inowroclaw Wind Farm	Construction	Electricity	Greenfield project (BOO)	100	141	32 MW	12	Scan Energy A/S (100%, Denmark)
8	Poland	Mogilno Wind Farm	Construction	Electricity	Greenfield project (BOO)	100	74	34 MW	..	Scan Energy A/S (100%, Denmark)
9	Poland	Walcz City Wind Farm	Construction	Electricity	Greenfield project (BOO)	100	13.6	4.5 MW	..	RP Global Holdings (100%, Spain)
10	Romania	Electrica Muntenia Sud	Operational	Electricity	Divestiture (partial)	64	1,201	1,100,000 connections	..	Enel SpA (65%, Italy)
11	Romania	Micro Hydropower (17-plant package)	Operational	Electricity	Divestiture (full)	100	44.1	10.58 MW	..	Wienstrom GmbH (100%, Austria)
12	Romania	Micro Hydropower (7-plant package)	Operational	Electricity	Divestiture (full)	100	7.5	2.4 MW	..	Romenergo (100%, Romania)
13	Romania	Micro Hydropower (9-plant package)	Operational	Electricity	Divestiture (full)	100	2.9	3.4 MW	..	Wienstrom GmbH (100%, Austria)

14	Russian Federation	Territorial Generating Company TGK-10	Operational	Electricity	Divestiture (partial)	93	2,900	15,800 MW	..	Fortum Corporation (93%, Finland)
15	Russian Federation	Territorial Generating Company 14 (TGK-14)	Operational	Electricity	Divestiture (partial)	24	257	663 MW	..	ESN Group (24%, Russian Federation)
16	Russian Federation	Territorial Generating Company 4 (TGK-4)	Operational	Electricity	Divestiture (partial)	89	1,880	3,300 MW	..	ONEXIM Group (50%, Russian Federation)
17	Russian Federation	Territorial Generating Company TGK-6	Operational	Electricity	Divestiture (partial)	84	1,060	3,140 MW	..	Integrated Energy Systems Holding (IES) (60%, Russian Federation), Prosperity Capital Management (24%, Russian Federation)
18	Russian Federation	Territorial Generating Company TGK-13 (Yeniseiskaya)	Operational	Electricity	Divestiture (partial)	65	469	2,518 MW	..	Siberian Coal Energy Company (SUEK) (65%, Russian Federation)
19	Russian Federation	Territorial Generating Company TGK-2	Operational	Electricity	Divestiture (partial)	99	672	2,583 MW	..	Syntez Group (51%, Russian Federation)
20	Russian Federation	Territorial Generating Company TGK-7 (Vologda TGK)	Operational	Electricity	Divestiture (partial)	55	1,150	6,880 MW	..	Integrated Energy Systems Holding (IES) (55%, Russian Federation)
21	Russian Federation	Territorial Generating Company TGK-8	Operational	Electricity	Divestiture (partial)	76	1,650	3,600 MW	..	EnergoStrategy (16%, Russian Federation), PromRegionHolding (17%, Russian Federation)
22	Russian Federation	Territorial Generating Company TGK-9	Operational	Electricity	Divestiture (full)	100	1,327	3,280 MW	..	Integrated Energy Systems Holding (IES) (75%, Russian Federation), others (25%, ..)
23	Turkey	Catalca Wind Farm	Operational	Electricity	Greenfield project (BOT)	100	100	60 MW	10	Sanko Holding (100%, Turkey)
24	Turkey	Dares Datça Wind Farm	Operational	Electricity	Greenfield project (BOT)	100	65	30 MW	..	Demirer Holding (100%, Turkey)
25	Turkey	Enerjisa 10 Hydro Plants and 920-MW Bandirma Gas-Fired Facility	Construction	Electricity	Greenfield project (merchant)	100	1,539	1,900 MW	..	Verbund (50%, Austria), Sabanci Holding (50%, Turkey)
26	Turkey	Erzurum and Nevsehir Hydroelectric Plants Project	Construction	Electricity	Greenfield project (merchant)	100	230	150 MW	35	Soyak Holding (100%, Turkey)

Telecommunications

	Country	Project name	Project status	Segment	Type of PPI	Private equity (%)	Investment commitment (US$ millions)	Capacity size and type	Main sponsors
1	Belarus	BeST	Operational	Mobile access	Divestiture (partial)	80	800	250,000 connections	Turkcell (80%, Turkey)

Transport

	Country	Project name	Project status	Sub-sector	Type of PPI	Private equity (%)	Investment commitment (US$ millions)	Type of government support	Capacity size and type	Main sponsors
1	Armenia	Armenia Railway Concession	Operational	Railways	Concession (BROT)	100	575	Variable government payments	805 km	Russian Railways (RZD) (100%, Russian Federation)
2	Belarus	Belterminal	Operational	Railways	Divestiture (partial)	90	4	n.a.	..	RPG Industry (90%, Cyprus)
3	Georgia	Poti Sea Port Development	Construction	Seaports	Divestiture (full)	100	345	n.a.	8,000 throughput (thousands)	RAK Investment Authority (100%, United Arab Emirates)
4	Macedonia, FYR	Skopje and Ohrid Airports Concession	Operational	Airports	Concession (RLT)	100	295	n.a	2 runways	TAV Airports Holding Co. (100%, Turkey)
5	Poland	Bydgoszcz Airport	Operational	Airports	Divestiture (partial)	49	39	n.a.	1 runway	AI Airports International (49%, Austria)
6	Russian Federation	Rosterminalugol Terminal Operator	Operational	Seaports	Divestiture (partial)	98	24	n.a.	10,000 throughput (thousands)	Kuzbassrazrezugol Coal Company (98%, Russian Federation)
7	Turkey	Antalya Gazipasa Airport	Construction	Airports	Concession (RLT)	100	500	n.a.	1 runway	TAV Airports Holding Co. (100%, Turkey)
8	Turkey	Istanbul Sabiha Gokcen International Airport Expansion	Construction	Airports	Concession (BROT)	100	1,343	n.a.	2 runways	Malaysia Airports Holding Berhad (20%, Malaysia), GMR Group (40%, India), Limak Holding (40%, Turkey)

9	Uzbekistan	Uzbek Yolref Trans Railway Operator	Operational	Railways	Divestiture (partial)	47	25	n.a.	..	Shinhan Bank (16%, Korea, Rep.), Eurasia Investment Holdings (16%, Korea, Rep.), Shindong Enercom (16%, Korea, Rep.)