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CASE STUDIES ON LEVERAGING PRIVATE INVESTMENT FOR INFRASTRUCTURE

Overview, TOR, and Project Proposals

Advisory Group on Investment and Development
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This document is submitted for DISCUSSION under Item 4 of the Draft Annotated Agenda for AGID [COM/DAF/INV/DCD/DAC/A(2014)1]. Participants will be invited to comment on the findings of the paper as well as provide suggestions on the project proposals for the case studies.

The paper is one of the outputs of the Development Assistance Committee's Programme of Work and Budget 5.1.3.3.2 on Aid for Infrastructure Investment.

It provides an analysis of developing country infrastructure projects with private sector participation, based on data obtained from the World Bank's Private Participation in Infrastructure (PPI) database, as well as options and TOR for case studies.

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EXECUTIVE SUMMARY

The Aid for Infrastructure Investment work stream of the Development Assistance Committee (DAC) is currently exploring ways for donors to collectively more and better leverage private investment for infrastructure. Part of this work will consist of carrying out case studies on developing country infrastructure with private participation to draw lessons-learned on the role of development partners in leveraging private investment. This paper provides an overview of infrastructure projects with private investment in infrastructure based on data extracted from the Private Participation in Infrastructure (PPI) Database of the World Bank. It also includes the Terms of Reference and project proposals for case studies to be carried out per region.

The data analysis by number of infrastructure projects with private participation shows that two thirds of projects are supported by multilateral development banks (MDBs) only. The rest of the projects is split equally between joint multilateral and bilateral support on the one hand and bilateral support only on the other. In terms of income levels, there is little support to projects in low-income countries, but the support is more or less equally divided between lower middle income countries (LMICs) and upper middle income countries (UMICs). Regarding regional distribution, while overall support to Asia is relatively large due to inter-regional South-South co-operation, support by traditional multilateral and bilateral development partners is relatively balanced among Asia, Latin America, Europe & Central Asia and Africa.

The top 10 recipient countries are LMICs and UMICs but are regionally spread. However, in the top three countries—India, Brazil and Turkey—a significant number of projects are financed by domestic lenders (financial intermediaries and state-owned banks) without support by development partners. This points to the need to better assess the additionality of multilateral and bilateral development partners in leveraging other sources of finance for infrastructure in these countries.

Support provided by development partners is predominantly directed towards the energy sector, especially renewables, and is concentrated in greenfield projects. As for the private sector, sponsors that provide equity finance and participate in the management of the project are mainly companies from the United States of America, India, Spain, Turkey and the People's Republic of China.

The Terms of Reference of the case studies include carrying out research and analysis of (1) the project selection and preparation stage, (2) procurement and financial close and (3) lessons-learned, particularly focusing on the role of development partners. To this effect, several projects with private participation and development partner support are proposed per region along with the timeline for the process.

CASE STUDIES ON LEVERAGING PRIVATE INVESTMENT FOR INFRASTRUCTURE: OVERVIEW, TERMS OF REFERENCE, AND PROJECT PROPOSALS

I. Introduction

1. As part of the deliverables for the Development Assistance Committee (DAC)'s Aid for Infrastructure Investment work stream[i], case studies on developing country infrastructure with private investment will be carried out[ii]. The aim is to draw lessons-learned from examining the role of development partners—particularly DAC Members—in leveraging private investment for infrastructure. Together with the other activity in the work stream to take stock of DAC members and multilateral development banks (MDBs) in supporting private investment for infrastructure[iii], the case studies will contribute to developing guidance for the DAC to become more effective in using official support as a catalyst for other sources of development finance.

2. In this work stream, infrastructure denotes the four sectors of water & sanitation; transport & storage; energy; and information & communication technology. It does not include infrastructure such as hospitals, schools, and government buildings, nor the extractive industry which does not generally deliver a public service. In order to determine the range of infrastructure projects with private investment, the World Bank's Private Participation in Infrastructure (PPI) Database was used (See Annex I). This database, while not exhaustive, is one of the more comprehensive sources available for data on infrastructure projects with private investment in developing countries.

3. The PPI database records 1,834 infrastructure projects that reached financial closure and were not cancelled or distressed between 2008 and 2012. For the purpose of carrying out the case studies, 221 of these projects that had official support from at least one bilateral or multilateral agency were extracted—the remaining 90% were projects that only received support from host government or state-owned banks, such as the Brazilian Development Bank (BNDES). Support from bilateral agencies includes that of development finance institutions (DFIs), export credit agencies (ECAs), development co-operation agencies of DAC Member countries, as well as developing country public entities providing South-South co-operation.

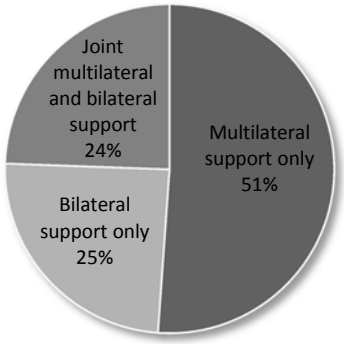
4. These projects are examined for two purposes: first to provide an overview of the distribution of infrastructure projects, such as the types of development partners, the region and income level of the host countries, sectors and so on. Here, while the database indicates that official support ranges from guarantees, loans and equity participation, data is sometimes incomplete—particularly on instruments and amounts provided by bilateral development partners—and imprecise (e.g. regarding sovereign or non-sovereign, concessional or non-concessional, etc.). Therefore, the analysis in this paper is based on the number of projects as opposed to the amount of official support or total project costs. However, since the above mentioned stocktaking study of development partners' support for private investment in infrastructure[iv] analyses the amount of official support, examining the number of projects in this paper enables the identification of matching findings between the two studies.

5. The second purpose of analysing the PPI database is to enable the selection of a few optional projects per region in carrying out case studies based on certain criteria. The overview, which also provides the background for selecting the optional projects, is described below.

II. Geographical and Sectoral Distribution of Infrastructure Projects

6. In examining the distribution of projects with private investment supported by multilateral and/or bilateral development partners, data shows that **roughly half are projects with MDB support only**.[v] The rest of projects are equally split between projects supported by bilateral agencies only and those that are supported jointly by multilaterals and bilaterals. (See Figure 1). However, bilateral support may be underestimated as some important DFIs from countries such as Spain, Norway, and Sweden are missing in the database (See Table 1).

Figure 1. Distribution of support to private investment for infrastructure between multilateral and bilateral development partners



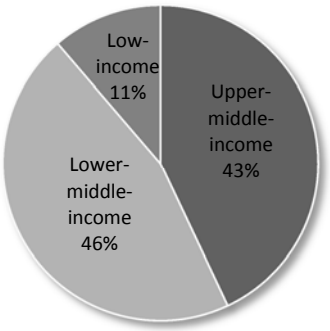
Source: PPI Database

Table 1. Development partners covered in the PPI Database

Multilateral Development Banks	Bilateral development partners	
	DAC Members	**Non-DAC Members (*Inter alia*)**
World Bank Group Asian Development Bank (AsDB) African Development Bank (AfDB) Inter-American Development Bank (IADB) Islamic Development Bank (IDB) European Bank for Reconstruction and Development (EBRD) European Investment Bank (EIB)	**Development Finance Institutions (DFIs)** Belgian Investment Company for Developing Countries (BIO) The Netherlands Development Finance Company (FMO) Kreditanstalt für Wiederaufbau (KfW) Finnish Fund for Industrial Cooperation (FINNFUND) Overseas Private Investment Corporation (OPIC) **Aid Agencies** Agence Française de Développement (AFD) Danish International Development Agency (DANIDA) Japan International Cooperation Agency (JICA) **Export Credit Agencies (ECAs)** EKF Denmark Austrian Export Credit Agency (OeKB) US EXIM Czech Export Bank Japan Bank for International Cooperation (JBIC) Korea Exim Bank (KEXIM)	Development Bank of Southern Africa (DBSA), State Bank of India, China Development Bank, the EXIM Bank of China, the Vietnam Development Bank, and the EXIM Bank of Malaysia.

7. In examining where the projects are located according to host country income levels[vi], **the vast majority of the supported projects are located in either lower or upper middle-income countries,** with similar proportions (See Figure 2). **Only 11% of the support is directed towards infrastructure projects with private investment in the LICs.** Here, breakdown among development partners shows that bilaterals tend to support the LICs more than the multilaterals.[vii] The last two points corroborate the analysis carried out in the above mentioned study on stocktaking development partners' support for private investment for infrastructure[viii].

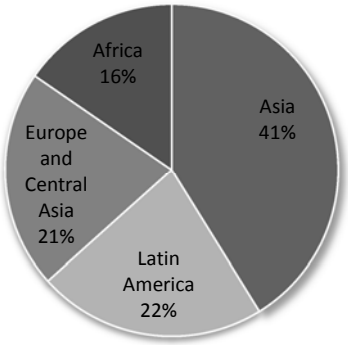
Figure 2. Distribution of development partner support to private investment in infrastructure by country income classification



Source: PPI Database

8. Regarding regional distribution, **Asia is the largest region of support** at 41% (see Figure 3), due to significant South-South inter-regional co-operation, such as: India to Nepal and Bangladesh; the People's Republic of China (PRC) to Cambodia, the Philippines and Vietnam; Malaysia to Cambodia; and Vietnam to Laos—a feature which is less salient in other regions. However, when excluding South-South co-operation, **the regional distribution of support by DAC members and MDBs is relatively balanced.** This regional balance also corroborates the study on development partners' support for private investment for infrastructure[ix].

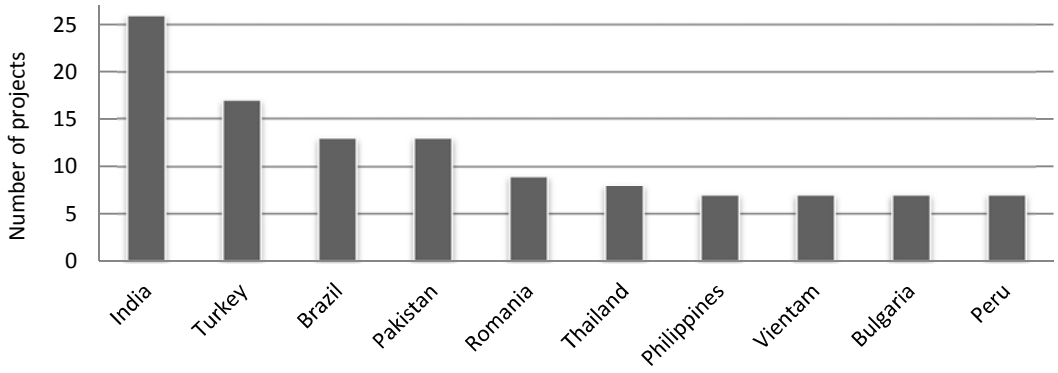
Figure 3. Regional distribution of development partners support to private investment in infrastructure



Source: PPI Database

9. In terms of specific countries, **the top recipients are mostly large emerging countries** (See Figure 4)**,** with more than a quarter of the infrastructure projects with private investment supported by bilateral development partners and/or MDBs being in **the top three countries—India, Turkey, and Brazil**. [x] The top recipient countries also corroborate the study on development partners' support for private investment for infrastructure[xi].

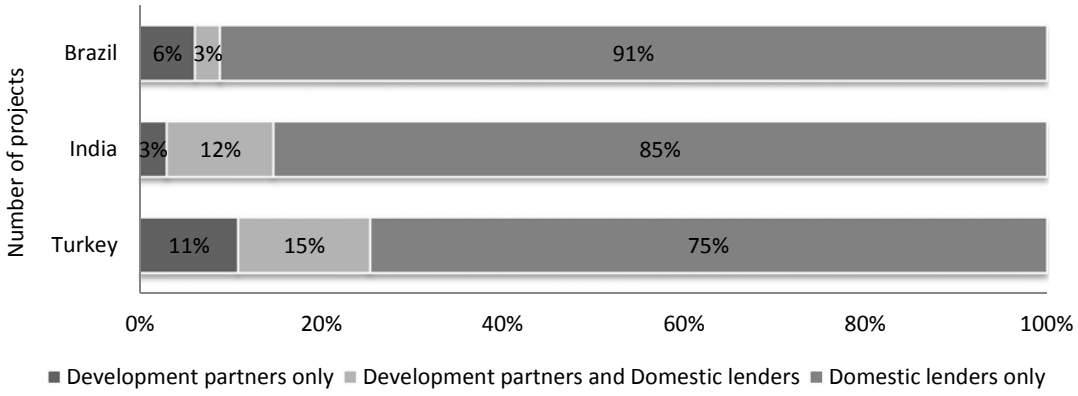
Figure 4. Top recipient countries of development partners support to private investment in infrastructure



Source: PPI Database

10. Here, it is important to note that in these three countries, domestic lenders, such as commercial banks and state-owned banks (SOBs) play a far more significant role in financing private investment for infrastructure (See Figure 5)[xii] than multilateral and bilateral development partners. For example, in India, the Bank of India, the State Bank of India, and the Punjab National Bank actively finance private investment in infrastructure, usually partnering with large Indian commercial banks. In Brazil, BNDES finances a significant number of investments in infrastructure projects[xiii] and in Turkey, domestic commercial banks finance a large majority of infrastructure projects. **The active domestic financial market may raise the question of additionality of development partners in supporting infrastructure in these top recipient countries[xiv].**

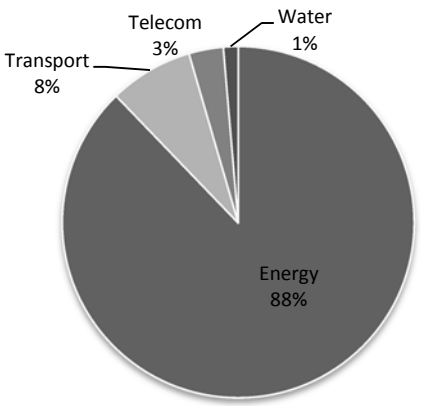
Figure 5. Distribution of the financing of all infrastructure projects between development partners and domestic lenders in India, Brazil and Turkey (2008-2012)



Source: PPI Database

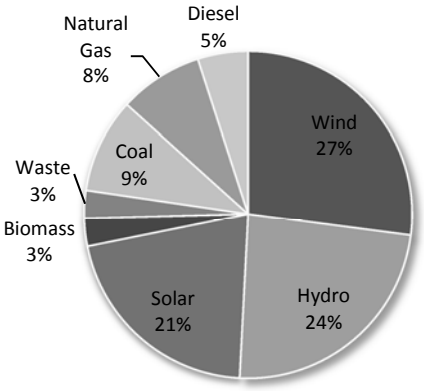
11. As for the sectoral distribution, **official support to infrastructure with private investment is highly concentrated in the energy sector** (See Figure 6), which corroborates the findings of the above mentioned study on development partners' support for private investment for infrastructure[xv]. The tendency is more pronounced with bilateral development partners, as practically all their support is directed towards the energy sector. Transport is less significant, while ICT and water receive less than 5% of total support in number of projects. Within the energy sector, electricity generation using renewable technology, such as wind, hydro, solar and biomass, makes up almost 80% of the projects; the rest are mainly electricity generation projects based on fossil fuels (See Figure 7). While renewable energy can have a positive impact on climate change, studies indicate that long-term contracts such as Public-private partnerships (PPPs) might be unsuitable for sectors in which changes in new technology and prices can occur rapidly[xvi].

Figure 6. Sectoral distribution of development partners support to private investment in infrastructure



Source: PPI Database

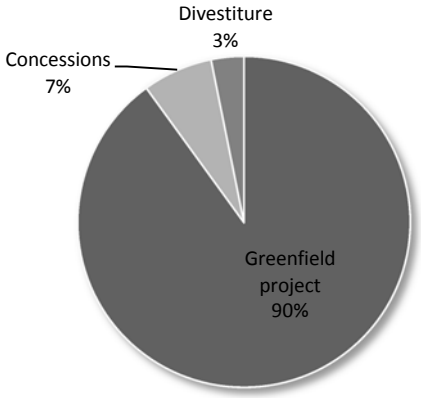
Figure 7. Development partners support to private investment in the energy sector by type of technology



Source: PPI Database[xvii]

12. Projects are predominantly greenfield projects (See Figure 8), meaning that they are new facilities built and operated by a private entity or a public-private joint venture. Depending on the contractual arrangement (See Annex II for classification of private participation in infrastructure), the ownership of the facility may or may not return to the public sector at the end of the contract period. In contrast, little support is directed towards projects that involve concessions, divestitures, and management & lease contracts which are mostly used for existing facilities.

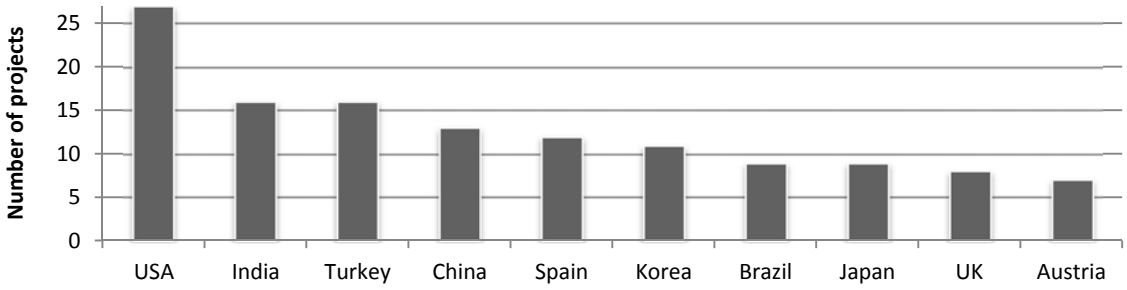
Figure 8. Distribution of Development partners support by type of Private Participation



Source: PPI Database

13. Private sponsors of infrastructure projects include the construction contractors, operating contractors, and possibly third-party financial investors[xviii]. They provide equity participation to the project, take an active role in managing the contract, and expect to receive profit from the ownership and/or the management of the asset[xix]. Data shows that **private sponsors are companies from both OECD countries and large emerging economies,** such as the USA, India, Turkey, PRC, Spain, Korea, Brazil, Japan, the United Kingdom and Austria (See Figure 9).

Figure 9. Country of origin of top private sponsors that provide equity participation to infrastructure projects involving private investment and development partner support



Source: PPI Database

14. Commercial banks are different from private sponsors. They provide debt finance to the project but do not have ownership of the asset and do not take an active role in managing the project[xx]. In contrast with the data on private sponsors, the PPI Database does not provide extensive details on commercial banks presumably due to commercial confidentiality. Therefore, it is not possible to analyse the distribution of the country of origin of commercial banks.

III. Proposals for Case Studies

15. With the above overview regarding the distribution of infrastructure projects with private participation and official support, a few case studies will be carried out to better understand the role of development partners in leveraging private investment. Particular attention will be given to DAC Members, as little has been documented on their collective role in this respect, as opposed to the MDBs[xxi]. Each case study will document the chronology of the project from preparation to financial closure, focusing on the actions of development partners and financial instruments used at each stage according to the following Terms of Reference[xxii]:

1 – Project selection and preparation

- How was the project initiated? Was it part of a national or regional priority plan?
- How were development partners involved in project preparation[xxiii]? How was it financed?
- What were the expectations and concerns of private investors, and how did the host government and development partners address them?

2 – Procurement and financial closure

- What factors led to the successful financial closure or, conversely, delays?
- What was the role of multilateral and bilateral development partners in reaching financial closure?
- Which financial instruments were used by whom to leverage private investment?
    - Grants (direct, performance-based)
    - Interest-rate subsidies
    - Loans (senior, subordinated, direct, syndicated)
    - Equity
    - Guarantees (commercial, political, partial)
    - Insurance
    - Derivative financial instruments (currency swaps, interest-rate swaps)

- What was the key enabling environment that facilitated private investment?

3 – Lessons Learned

- What were the lessons learned that could be used to enhance effectiveness of support by development partners in leveraging private investment for infrastructure?

16. The research will be carried out as follows:

- Desk review of project documents and other sources;
- Consultations with the host government, bilateral and multilateral development partners (DFIs, aid agencies, and export credit agencies), and private investors and financiers; and
- Documentation and synthesis of lessons learned.

17. A few suitable projects have been pre-selected according to the following criteria based on the PPI database and other sources (See Annex III for the list of pre-selected projects by region in Africa, Europe & Central Asia, other Asia, and Latin America):

- Significant private investment has been made;
- The project has reached financial closure and has not been cancelled or under distress;
- Several DAC Members and MDBs are co-financiers;
- Availability of information and likelihood of co-operation from host government, development partners, private sector, and others in carrying out the case studies; and
- Diversity in country income levels, sub regions, sectors and types of private sector participation.

18. In 2014, the work schedule will be divided into the three following stages:

- Carry out an in-depth case study on a few pre-selected projects in Africa or Asia first, since collaboration with the AfDB and World Bank has started. Intermediate steps will involve:
    - Consultation with DAC Members at the DAC and Investment Committee's Advisory Group on Investment and Development (AGID) meeting (March 2014)
    - Desk review, consultation with key stakeholders and report writing (March-June 2014)
    - Issue draft report on Africa case study for comments (summer 2014)
    - Discuss findings at the AGID meeting of (October 2014)
- Carry-out other case studies on projects in Europe & Central Asia, Asia, or Latin America depending on resources available (summer-November 2014).
- Prepare guidance for the DAC in leveraging private investment for infrastructure by consolidating findings from the case studies and the stocktaking of activities by DAC Members and MDBs in supporting private investment for infrastructure (starting November 2014).

19. Possible outputs for this work stream in the DAC's Programme of Work and Budget 2015-16 will be proposed in due course as the case studies and donor profile work progresses.

ANNEX I.
THE PPI DATABASE METHODOLOGY[xxiv]

The PPI Database provides data and information on private investment in infrastructure in developing countries, such as public investment, private investment and development partner support for projects that reached financial or contractual closure in four sectors (energy, telecommunications, transport and water).

Projects - In order to be included in the database, projects have to meet the following criteria:

(1) *Be an infrastructure project*. The project must provide a public service in one of the four sectors above. The database excludes sectors such as airlines and gas production;

(2) *Include a private participation in the provision of services or private ownership of the infrastructure*: the public and the private sector share responsibilities in financing, investing and operating an asset. The database classifies the different types of Private participation (See Annex II);

(3) *Serve the public*. A significant share of the services has to be directed to the public; projects built to provide services to a small number of clients on an exclusive basis are not recorded;

(4) Be one single infrastructure project;

(5) Have reached financial closure after 1983;

(6) *Be at least of minimum size*. Total investment commitments should be at least for US$1 million, unless it is a divestiture, lease contract, or management contract. For greenfield projects and management and lease contracts, private ownership should constitute at least a minimum level of 25%.

Sources – The database is updated every year through a review of publicly available sources. These sources include : Factiva, specialised publications (Project Finance International, reports of rating agencies, Global Power reports, Energy in East Europe, Power in Asia, Power in Latin America, Power in Asia, country reports of US EIA, Global Water Intelligence, MIGA's FDI, Privatization barometer, African forum for utility regulation and energy regulators regional associations), private sponsor websites or public agencies granting the PPI contracts, multilateral agency websites including press releases and annual reports. It does not provide a precise list of every infrastructure project with private participation, especially as far as small-scale providers are concerned.

ANNEX II.
PPI TYPES AND SUBTYPES ACCORDING TO THE PPI DATABASE[xxv]

Type	Description	Selected responsibilities/ risks born by the operator	Sub-type of PPI	Characteristics
Greenfield	A private entity or a public-private joint venture builds and operates a new facility for the period specified in the project contract. The facility may return to the public sector at the end of the concession period.	*Responsibilities*: Employing staff, operating and maintaining the utility, financing and managing investment *Risks:* Operating, commercial and investment-related risks	Build, lease, and transfer (BLT)	The private sponsor builds a new facility largely at its own risk, transfers ownership to the government, leases the facility from the government and operates it at its own risk up to the expiry of the lease.
				The government owns the facility once it has been built and usually provides revenue guarantees or minimum traffic revenue guarantees to the private sponsor.
			Build, operate, and transfer (BOT)	The private sponsor builds a new facility at its own risk, operates the facility at its own risk, and then transfers the facility to the government at the end of the contract period. The private sponsor may or may not have the ownership of the assets during the contract period.
				The government may or may not own the asset during the contract period but does own it at the end of the contract period. It usually provides revenue guarantees or minimum traffic revenue guarantees to the private sponsor.
			Build, own, and operate (BOO)	A private sponsor builds a new facility at its own risk, then owns and operates the facility at its own risk. Ownership remains with the private sponsor.
				The government does not own the asset and usually provides revenue guarantees or minimum traffic revenue guarantees.
			Merchant	A private sponsor builds a new facility in a liberalized market. The private developer assumes construction, operating, and market risk for the project.
				The government provides no revenue guarantees.
			Rental	A private sponsor places a new facility at its own risk, owns and operates the facility at its own risk during the contract period.
				The government usually provides revenue guarantees through short term purchase agreements such as power purchase agreement.

Concessions	A private entity takes over the management of a state-owned enterprise for a given period during which it also assumes significant investment risk.	*Responsibilities*: Employing staff, operating and maintaining the utility, financing and managing investment *Risks:* Operating, commercial and investment-related risks	Rehabilitate, operate, and transfer (ROT)	A private sponsor rehabilitates an existing facility, then operates and maintains the facility at its own risk for the contract period.
			Rehabilitate, lease or rent, and transfer (RLT)	A private sponsor rehabilitates an existing facility at its own risk, leases or rents the facility from the government owner, then operates and maintains the facility at its own risk for the contract period.
				The ownership remains with the government during and after the contract period.
			Build, rehabilitate, operate, and transfer (BROT)	A private developer builds an add-on to an existing facility or completes a partially built facility and rehabilitates existing assets, then operates and maintains the facility at its own risk for the contract period.
Management and Lease Contracts	A private entity takes over the management of a state-owned enterprise for a fixed period while ownership and investment decisions remain with the state.	*Responsibilities*: Providing management services to the utility (management contract); Employing staff and operating and maintaining the utility (lease contract) *Risks*: Amount of performance bonus (management contract); operating and commercial risks (lease contract)	Management contract	The government pays a private operator to manage the facility.
				The ownership, investment decisions and operational risk remain with the government.
			Lease contract	The private operator takes on the operational risk.
				The government leases the assets to a private operator for a fee.
Divestitures	A private entity buys an equity stake in a state-owned enterprise through an asset sale, public offering, or mass privatization program.	*Responsibilities*: Employing staff, operating and maintaining the utility, financing and managing investment *Risks*: Operating, commercial and investment-related risks	Full	The government transfers 100% of the equity in the state-owned company to private entities
				The ownership is fully and permanently transferred to the private partner.
			Partial	The government transfers part of the equity in the state-owned company to private entities.
				The ownership is mixed; only a minority stake in state-owned company is divested.

ANNEX III.
LIST OF PRE-SELECTED PROJECTS FOR CASE STUDIES BY REGION[xxvi]

A. Pre-selected projects in Africa

N°	Country	Income Group	Project Name	Primary Sector	Technology	DAC Development Partners	MDBs	Private sponsors	Private Banks	Type Of PPI	Subtype Of PPI
1	Morocco	Lower Middle Income Countries and Territories	Ouarzazate solar power plant (Phase I)	Energy	Solar (CSP)	EIB (Loan/ EURO 100 Million) Neighbourhood Investment Facility (EU) (Grant/ EURO 30.15 million) Kfw (Loan/ EURO 100 Million) AFD (Loan/ EURO 100 Million)	AFDB (Loan/ EURO 168 Million); World Bank (Loan/ EURO 140.25 Million); Clean Technology Fund (Loan/ EURO 138 Million)	Acwa Power International (95% / Saudi Arabia), Aries Ingenieria y Sistemas (Spain), TSK (Spain)		Greenfield project	Build, Own, Operate, Transfer (BOOT)
2	Senegal	Least Developed Countries	Dakar-Diamniadio toll highway	Transport	Roads	AFD (Loan/ $ 80 Million)	AFDB (ADF) (Loan/ $ 70 Million) PPIAF (Grant/ $ 250 200) IDA (Loan/ $ 80 Million)	Eiffage Group (France/ 100%)		Concession	Build, rehabilitate, operate, and transfer
3	Rwanda	Least Developed Countries	KivuWatt	Energy	Natural Gas	FMO BIO	AFDB (Loan / $25 Million); MIGA (Guarantee / $96 Million)	ContourGlobal (100% / United States)		Greenfield project	Build, own, and operate
4	Tunisia	Upper Middle Income Countries and Territories	Enfidha and Monastir Airport	Transport	Airports	EIB (Loan/ 70 Million) Proparco (Loan/ 30 Million)	IFC (Loan/ $ 199 Million; Syndication/ $ 375 Million; Equity/ $38.9 Million); AFDB (Loan/ $92 Million); OFID (Loan/ $ 28 Million)	TAV Airports Holding Co. (Turkey)	ABN; Société Générale; Standard Bank	Concession	BOT

N°	Country	Income Group	Project Name	Primary Sector	Technology	DAC Development Partners	MDBs	Private sponsors	Private Banks	Type Of PPI	Subtype Of PPI
5	Zambia	Least Developed Countries	TATA Itezhi-Tezhi HPP	Energy	Hydro, Large (>50MW)	FMO EIB (Equity / $18 Million)	AFDB (Loan / $45 Million)	Tata Enterprises (50% / India); Zambia Electric Supply Corporation (ZESCO) (50% / Zambia)		Greenfield project	Build, operate, and transfer
6	Senegal	Least Developed Countries	Dakar Container Terminal	Transport	Port	FMO (Syndicated loan within AFDB loan/ EURO 27,5 Million/ 2009)	AFDB (Loan/ EURO 47,5 Million) The Emerging Africa Infrastructure Fund (Syndicated loan within AFDB loan/ EURO)	DP World (United Arab Emirates/ 100%)	Standard Chartered Bank	Concession	Build, rehabilitate, operate, and transfer

B. Pre-selected projects in Asia

N°	Country	Income Group	Project Name	Primary Sector	Technology	DAC Development Partners	MDBs	Private Sponsors	Private Banks	Type Of PPI	Subtype Of PPI
1	Lao PDR	Lower middle income	Nam Theun II Hydropower Project	Energy	Hydro, Large (>50MW)	Agence Francaise de Developpement (AFD) EIB (Loan / $55 Million / 2005)	IDA (Loan/ $20 Million; Guarantee / $42 Million) MIGA(Guarantee/ $91 Million) ADB (Loan / $70 Million; Guarantee / $50 Million) Other (Loan / $131 Million)	Italian-Thai Development Public Company (15% / Thailand) Electricite de France (35% / France)	Bangkok Bank (Thailand), Bank of Ayudhya (Thailand), Kasikornbank (Thailand), Siam Commercial Bank (Thailand) Siam City Bank (Thailand),	Greenfield project	Build, operate, and transfer
2	Pakistan	Lower middle income	New Bong Escape Hydropower Project	Energy	Hydro, Large (>50MW)	Agence Francaise de Developpement (AFD)	IFC (Loan / $35 Million) IDB (Loan / $38 Million) ADB (Loan / $38 Million)	Coate & Co Limited (17% / Pakistan) Hub Power Company Limited (HUBCO) (75% / Pakistan)	Habib Bank (Pakistan)	Greenfield project	Build, operate, and transfer

N°	Country	Income Group	Project Name	Primary Sector	Technology	DAC Development Partners	MDBs	Private Sponsors	Private Banks	Type Of PPI	Subtype Of PPI
3	Philippines	Lower middle income	Cebu Coal-fired Power Plant	Energy	Coal	Export-Import Bank of Korea (Kexim)	ADB (Loan / $120 Million)	Korea Electric Power Company (KEPCO) (60% / Korea, Rep.) Salcon Bhd (40% / Malaysia)	Sumitomo (Japan) ING (Netherlands) Credit Agricole (France)	Greenfield project	Build, own, and operate
4	Pakistan	Lower middle income	UCH-II Power (Private) Limited	Energy	Natural Gas	Export-Import Bank of Korea (Kexim)	IFC (Loan / $100 Million) ADB (Loan / $100 Million)	International Power (100% / United Kingdom)		Greenfield project	Build, own, and operate

C. Pre-selected projects in Latin America

N°	Country	Income Group	Project Name	Primary Sector	Technology	DAC Development Partners	MDBs	Private Sponsors	Private Banks	Type Of PPI	Subtype Of PPI
1	Panama	Upper middle income	Pando and Monte Lirio Hydropower Project	Energy	Hydro, Large (>50MW)	KfW	IFC (Loan / $25 Million; Loan / $15 Million) IADB (Loan / $40 Million) CAF (Loan / $25 Million)	Inveravante Inversiones Universales, S.L (51% / Spain) Fundacion Fernando Eleta Almaran (Grupo Eleta) (49% / Panama)	Dresdner Kleinwort (Now Commerzbank; UK/ Germany)	Greenfield project	Build, operate, and transfer
2	Nicaragua	Lower middle income	Eolico Amayo Wind Farm (Phase II)	Energy	Wind, Onshore	FMO BIO EKF Denmark	BCIE (Loan / $42 Million)	Ashmore Energy International (AEI) (62% / United States)		Greenfield project	Build, own, and operate
3	Guatemala	Lower middle income	Amatitlan Geothermal Facility	Energy	Geothermal	FMO CDC	IFC (Loan / $.. Million)	Ormat Turbines Ltd (100% / Israel)		Greenfield project	Build, own, and operate
4	Jamaica	Upper middle income	West Kingston Power Project (JEPIII)	Energy	Natural Gas	FMO KfW	CAF (Syndication / $77 Million) IFC (Loan / $22 Million)	Conduit Capital Partners LLC (100% / United States)	Scotia Capital (USA) FirstCaribbean (CIBC) (Barbados) CIFI (Regional)	Greenfield project	Build, own, and operate

D. Pre-selected projects in Europe and Central Asia

N°	Country	Income Group	Project Name	Primary Sector	Technology	DAC Development Partners	Multi Lateral Support	Sponsors	Private Banks	Type Of PPI	Subtype Of PPI
1	Georgia	Lower middle income	Tbilisi International Airport	Transport	N/A		IFC (Loan / $27 Million) EBRD (Loan / $26 Million)	Urban (30% / Turkey) TAV Airports Holding Co. (30% / Turkey)		Concession	Build, rehabilitate, operate, and transfer
2	Romania	Upper middle income	Brazi Power Plant	Energy	Natural Gas		EIB (Loan / $278 Million) EBRD ((Loan / $278 Million)	OMV (51% / Austria)		Greenfield project	Merchant
3	Bulgaria	Upper middle income	Maritza East I Power Plant Project	Energy	Coal		EBRD (Syndication / $287 Million; Loan / $144 Million) MIGA (Guarantee / $118 Million)	AES Corporation (100% / United States)	Banco Santander (Spain)	Greenfield project	Build, own, and operate
4	Georgia	Lower middle income	Anadolu Paravani HPP	Energy	Hydro, Large (>50MW)		IFC (Loan / $41 Million; Syndication / $23 Million) EBRD (Equity / $5 Million; Loan / $52 Million)	Anadolu Endustri Holding A.S. (AEH) (100% / Turkey)	Other Commercial Bank	Greenfield project	Build, own, and operate

NOTES

i Program of Work and Budget 5.1.3.3.2

ii See for example, Report on the Infrastructure Session of the AGID Meeting of 18 October 2013 [COM/DAF/INV/DCD/DAC/M(2013)3/ADD

iii OECD, Official Support for Private Investment in Developing Country Infrastructure [DCD/WKP(2014)2]

iv Ibid.

v See OECD, op.cit. [DCD/WKP(2014)2], p.12 for similar results regarding the prominent role of multilateral donors

vi The PPI Database classifies countries on income level according to the World Bank country classification, which is slightly different from the OECD classification.

vii See also Donor Profiles on Support to Private Investment for Infrastructure op. cit., p.15

viii OECD, Official Support for Private Investment in Developing Country Infrastructure [DCD/WKP(2014)2], p. 19

ix OECD, Official Support for Private Investment in Developing Country Infrastructure [DCD/WKP(2014)2], p. 19

x While Romania, Bulgaria and the Russian Federation are not ODA recipient countries according to the DAC classification, since EBRD and the World Bank Group provided support to private investment in infrastructure in these countries, they are included in this analysis.

xi OECD, Official Support for Private Investment in Developing Country Infrastructure [DCD/WKP(2014)2], p. 20

xii See also FARQUHARSON E. et al (2011), How to engage with the Private Sector in Public-Private Partnerships in Emerging Markets, The International Bank for Reconstruction and Development/ The World Bank, Washington DC, p. 66

xiii As for China, the PPI Database provides less information, but recorded projects indicate a significant involvement of state-owned banks and Chinese commercial banks in financing domestic private investment in infrastructure as well.

xiv As for south-south co-operation, while data shows involvement of Indian SOBs in supporting private investment in infrastructure in other developing countries, little information is provided in the data base on Turkey and Brazil regarding this issue.

xv OECD, Official Support for Private Investment in Developing Country Infrastructure [DCD/WKP(2014)2], p. 21

xvi Araújo, S. and D. Sutherland (2010), "Public-Private Partnerships and Investment in Infrastructure", OECD Economics Department Working Papers, No. 803, OECD Publishing, p. 10, http://dx.doi.org/10.1787/5km7jf6q8f0t-en

xvii Number of energy projects that received multilateral and/ or bilateral support, excluding projects in which the technology was described as not applicable (N/A).

xviii See FARQUHARSON E. et al (2011), op. cit., pp. 53-60

xix In the PPI Database, Sponsors are private entities that have an equity participation of at least 15 percent in the project in the year of data update. A foreign state-owned enterprise is considered a private entity. If no single sponsor has equity participation of at least 15 percent, the database identifies the sponsor as "Others".

xx The PPI Database provides extensive information on private sponsors. Conversely, it displays little information on lenders, especially commercial banks: the names of commercial banks that provided debt to the project and the breakdowns of amounts are usually not available.

xxi Publications include, for instance, documents released PPIAF Library (http://www.ppiaf.org/node/607) and AfDB case studies (E. Mutambatsere et al., "What Role for Multilateral Development Banks in Project Finance? Some Thoughts from the Rift Valley Railways in Kenya and Uganda", Journal of Infrastructure Development 2013 5: 1)

xxii As the main focus is on the way the financial package was put together, social and environmental impacts of infrastructure projects will not directly be addressed. Issues related to contract management after financial close will not directly be covered either.

xxiii The G20 under the Australian presidency is in the process of assessing the effectiveness of Project Preparation Facilities in Asia, which may include case studies. Duplication of work will be avoided and synergies where possible will be sought.

xxiv PPI Glossary and PPI Expanded Methodology. A full description of the PPI Database Methodology is available at: http://ppi.worldbank.org/resources/ppi_methodology.aspx

xxv Sources: PPI Glossary and PPI Expanded Methodology

xxvi Sources : PPI Database ; additional sources for Morocco (AfDB: http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Morocco%20-%20%20AR%20Ouarzazate%20Project%20I%20(2).pdf; World Bank: http://www.worldbank.org/projects/P122028/ma-ouarzazate-concentrated-solar-power?lang=en); additional sources for Senegal (World Bank http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2009/03/11/000013944_20090316184229/Rendered/PDF/Integrated0Saf1et010Appraisal0Stage.pdf; AfDB (http://www.afdb.org/en/news-and-events/article/container-terminal-in-the-port-of-dakar-9672)