



PRIVATE SECTOR DEVELOPMENT

Handbook



Public-Private Partnerships in the Middle East and North Africa

A Handbook for Policy Makers



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FOREWORD

The infrastructure shortage in developing countries is a major obstacle to improved living standards, enterprise development, and the goals of the United Nations Millennium Declaration. This is especially the case in the Middle East and North Africa (MENA), where infrastructure demand had long been rising due to population growth, rapid urbanisation, and economic expansion, and was further amplified as historic MENA-region transitions pressured governments to increase living standards and improve the business environment. In many countries, the high levels of investment required for infrastructure cannot be financed by the public purse alone, and private investment is therefore an option that governments cannot afford to ignore. Private investment goes beyond mere additional capital to mobilise private sector technological expertise and managerial skills in the public interest.

Still, a number of failed public-private partnerships in the infrastructure sector attest to the challenges facing policy makers. Infrastructure investment involves contracts that are by nature complex and of long duration, and that must ensure financial sustainability while meeting user needs and social objectives. The challenges are more acute when foreign investors are involved, as is often the case where the infrastructure project exceeds a certain size. In addition, private infrastructure investment has become increasingly scarce, due to the global economic crisis, commercial bank deleveraging, perceived increased political risk in some countries, and tightened bank prudential regulations.

This handbook aims to identify barriers to the successful tendering and completion of Public-Private Partnership (PPP) infrastructure projects in the MENA region, particularly in Egypt, Jordan, Morocco and Tunisia. It is intended to assist government officials, civil service staff and policy makers by providing knowledge and direction to move projects from a conceptual stage to tender and investment (by the private sector or international financial institutions). PPP projects cover a wide range of models of private participation from limited management contracts to full public divestiture. For the purposes of this Handbook, a broad definition of PPP will be adopted that that considers any long-term contractual relationship between a state or state-owned entity (SOE) and a private-sector entity whereby the latter delivers and finances public services using a capital asset, sharing the associated risks, to be a PPP (OECD, 2012, *Recommendations of the Council on Principles for Public Governance of Public-Private Partnerships*).

There are limits to the usefulness of any handbook in a field as complex as PPP project development, where the scope of projects and the range of sectors vary tremendously. It has therefore been drafted with a focus on two sectors: renewable energy and transportation. This document does provide detailed technical advice on infrastructure investment, contract formulation or regulation. Nor does it advocate the privatisation or private management of publicly owned infrastructure. The choice between public and private provision of infrastructure should be guided by an assessment of value-for-money and what best serves the public interest. This handbook will discuss this decision, but is more properly intended to come into play after such a determination has been made in favour of private procurement. What this handbook will do is sensitise policy makers to the challenges of PPPs and better-equip them to take advantage of the opportunity PPP represent.

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EXECUTIVE SUMMARY

Infrastructure is a key component of the business environment, enables trade and commerce and generates employment. It is estimated that the Middle East and North Africa (MENA) region will need between USD 75 and USD 100 billion of investment per year over the next 20 years to meet its needs (World Bank, 2012). Despite this, private investment in MENA-region infrastructure has decreased for a number of reasons, including global economic conditions, tightened banking prudential requirements and regional political uncertainty. Since public finances remain strained in many MENA countries, rising infrastructure needs will require the mobilisation of private investment. Recourse to Public-Private Partnerships (PPP) can help meet these challenges while simultaneously improving expertise and capacity in critical sectors such as transport and renewable energy among others.

This handbook provides an overview of key obstacles and policy issues facing the development of PPPs across the MENA region, with a particular focus on the transport and renewable energy sectors in Egypt, Jordan, Morocco and Tunisia (the Focus Countries). It aims to assist senior officials and decision makers in advancing projects from a conceptual stage to that of viable transactions suitable for private-sector and/or international financial institution (IFI) investment. It is the result of research and consultations led by the Investment Security in the Mediterranean Support Programme, an initiative implemented by the OECD with the support of the European Union. Based on an assessment of the current environment, and the numerous OECD publications relating to PPPs and international good practices, the handbook contains recommendations to address some of the obstacles to successful PPP programmes. Key recommendations include:

- Need to reinforce leadership and professional expertise: The most critical issue facing PPP development in the MENA-region is the need for increased government capacity. Capacity building is required on a number of levels. At the most senior official and political level, the need may be more attitudinal than technical. As high-level support is essential, the benefits and proper motivations for procuring by PPP must be understood and any negative attitudes about the participation of the private sector in the provision of public infrastructure or services should be addressed. For working-level officials and public servants at the line ministry or implementing agency dealing with the private-sector counterparty, training needs are both attitudinal and technical.

Steps to address capacity include not only the creation of PPP central units and satellite units, but also ensuring that they are adequately staffed, resourced and empowered to make decisions. Other options can be contemplated to provide assistance for individual transactions, such as the hiring of external advisors, but this should be in the context of creating long-term institutional capacity.

High-level political support can be reinforced by the adoption of national infrastructure strategies and policies that take an integrated approach across sectors and that identify PPPs as a procurement option.

- Ensure regulatory transparency and predictability: To inspire confidence in the longevity and continuity of the PPP policy regime, MENA governments need to guarantee minimum levels of legal security, implement predictable regulations and define strategic goals. A credible, transparent bidding process will be crucial in attracting high-quality bidders and maximising value for money for governments. Inter-ministerial coordination and commitment, and

minimising political influence in the selection and development of projects through a solid PPP policy and legal framework, will also help to maximise investor appetite.

- Focus on project selection and preparation: Greater investment in project selection and preparation is needed to develop bankable PPP deals. Governments should concentrate on those projects most likely to succeed in order to build capacity and expertise and to demonstrate a track record of successful projects. It is suggested that MENA governments initially focus on less complex, replicable PPP deals moving on to more complicated projects after having had the benefit of closing a number of transactions. Risk allocation also needs to reflect the expectations of PPP developers and investors and the risks that the market will realistically be willing and able to bear.

There are very concrete steps that can be taken to improve project selection and preparation including; the creating of one-stop shops for permits and licenses required for PPPs or empowering tendering authorities to obtain those permits and licenses that can realistically be obtained without a final design or finished project; emphasising required functional outputs and not technical specifications in tenders; and, ensuring that project locations are chosen on the basis of demonstrated demand or need and not on political motivations.

- Energy subsidies reform is needed to encourage PPPs in the transport and renewable sectors: The prevalence of non-renewable energy subsidies is often a constraint to the development of renewable energy infrastructure projects, and transport PPPs may also be vulnerable to the market distortions they cause. Where heavily subsidised fuels are a major input cost for competing forms or energy or modes of transport, it may be difficult for a PPP to compete. Reforming long-standing and politically popular subsidies may be very difficult but governments should understand that transport and renewable energy PPPs may not be feasible without it.
- De-risk projects: The MENA region is in competition with other areas for private sector investment and is often seen as higher risk than some other regions. Governments should therefore take those steps that they are able to reduce risks faced by private investors. This could include: addressing foreign exchange risk by funding in local currency or by providing revenue to the project company in hard currency, providing an exchange rate guarantee or otherwise working to provide a currency hedge; in projects with traffic/volume risk, retaining this risk or devising a mechanism to share it with the private sector; and, aligning incentives of incumbent operators and state-owned-enterprises to level the playing field and ensure cooperation with the PPP where necessary.

In the course of the OECD's preparation of this handbook, it has become apparent that some government officials hold to certain myths and misunderstandings regarding PPPs. PPPs are not a perfect solution to all infrastructure challenges faced by MENA countries and they involve costs and risks for government. However, when properly understood and implemented, PPPs can play an important role in providing the infrastructure required to enable economic development and improve the living standards of MENA citizens.

ABBREVIATIONS & ACRONYMS

ADWEA	Abu Dhabi Water and Electricity Authority (United Arab Emirates)
AfDB	African Development Bank
AFD	Agence Française de Développement (France)
AFFI	Arab Financing Facility for Infrastructure
BOO	Build-Own-Operate
BOT	Build-Operate-Transfer
BOOT	Build-Own-Operate-Transfer
BOTT	Build-Own-Train-Transfer
CDM	Clean Development Mechanism
CSP	Concentrated Solar Power
CTF	Clean Technology Fund (World Bank)
DII	Desertec Industrial Initiative
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EE	Energy Efficiency
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EPC	Engineering, Procurement and Construction
EPC	Executive Privatisation Commission (Jordan)
ERC	Electricity Regulation Commission (Jordan)
EU	European Union
FDI	Foreign Direct Investment
FIT	Feed-in Tariff
GCC	Gulf Cooperation Council

GDP	Gross Domestic Product
IFC	International Finance Corporation (World Bank Group)
IFI	International Financial Institution
IMF	International Monetary Fund
IPP	Independent Power Producer
IRENA	International Renewable Energy Agency
IDB	Islamic Development Bank
ISMED	Investment Security in the Mediterranean
IWPP	Independent Water and Power Producer
JLGC	Jordan Loan Guarantee Corporation
KfW	Kreditanstalt für Wiederaufbau (Germany)
MASEN	Moroccan Agency for Solar Energy (Morocco)
MEMR	Ministry of Energy and Mineral Resources (Jordan)
MENA	Middle East and North Africa
MIGA	Multilateral Investment Guarantee Agency (World Bank Group)
MSP	Mediterranean Solar Plan
MW	Megawatt
NEPCO	National Electric Power Company (Jordan)
NIF	Neighbourhood Investment Facility
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
O&M	Operation and Maintenance
OPIC	Overseas Private Investment Corporation (USA)
PFI	Private Finance Initiative
PPA	Power Purchase Agreement
PPI	Private Participation in Infrastructure

PPIAF	Public-Private Infrastructure Advisory Facility
PPP	Public-Private Partnership
PPPCU	Public-Private Partnership Central Unit
PSC	Public Sector Comparator
PV	Photovoltaics
RE	Renewable Energy
RMI	Risk Mitigation Instrument
SPV	Special Purpose Vehicle
SWH	Solar Water Heating
UAE	United Arab Emirates
UfM	Union for the Mediterranean
USAID	United States Agency for International Development
USC	Unité de Suivi des Concessions (Tunisia)
VAT	Value-Added Tax

Currency:

EGP	Egyptian Pound
EUR	Euro
GBP	United Kingdom Pound
JOD	Jordanian Dollar
MAD	Moroccan Dirham
TND	Tunisian Dinar
USD	United States Dollar

GLOSSARY

Public-Private Partnership (PPP)	A long-term contractual relationship between a state or state owned entity (SOE) and a private-sector entity whereby the latter delivers and funds public services using a capital asset, sharing the associated risks with the state or SOE. There are a number of types of PPP characterised by the level of risk and responsibility transferred to the private sector which may typically include the design, construction, operation, maintenance and financing of the asset or service.
Private Sector Participation (PSP)	Broadly defined to include financial and non-financial forms of participation that involve managing infrastructure services. Covers projects ranging from relatively simple service and management contracts through to full or partial public divestiture of the asset.
Service contract	The private party performs specific, time-bound tasks, such as supplying inputs, taking care of planning studies, computing and payroll services, public relations, maintaining assets etc., usually in exchange for a fixed fee.
Management contract	A private firm is appointed to provide managerial services, often for a fixed fee. The contract typically requires the private party to manage a utility and provide services to the public for a given period of time. The remuneration of the private operator may be fixed at the outset, in which case the commercial risks of the operation are borne entirely by the public sector, or it may be linked to the performance of the utility, in which case the private operator bears some commercial risk.
Lease	<p>Written agreement under which a property owner (state) allows a tenant (private sector operator) to use the property for a specified period of time in return for a specified rent. The private-sector operator is responsible for providing the contracted service at its own risk, including operating and maintaining the infrastructure for a given period of time.</p> <p>The operator is not responsible, however, for financing investment such as the replacement of major assets or expansions. If user payments cover more than the operator's remuneration, the operator is generally obligated to return the difference to the public authorities.</p>
Affermage	Affermage only differs from a lease in terms of revenue for the private sector. In both cases, the private operator collects the tariffs and pays fees to the state. But while the fee is fixed in the first case, it is proportional to the volume of output sold in the second case.
Concession	An agreement to operate a facility or provide a service on an exclusive basis for a given contractual term. The private sector may be responsible for asset replacement and network expansion. Revenue received by the private sector operator will be based on user charges.
BOT	Build-Own-Transfer contracts often correspond to Greenfield concessions. The private sector will build and retain ownership of an asset for a fixed-term. May involve take or pay provisions, i.e. revenue guarantees, that subject governments to contingent liabilities. On expiration of a BOT, ownership of the asset is returned to the public sector.
BOO	Build-Own-Operate contracts are similar to BOTs except that they do not involve transfer of the assets to the public sector after a pre-determined period of time.

BOOT	Build-Own-Operate-Transfer schemes imply that the private sector obtain the capital needed for construction and operation of the infrastructure for an agreed period of time (anywhere between 15 and 30 years), and then transfers ownership back to the government.
BOTT	Build-Operate-Train-Transfer schemes are another variation of BOT whereby the private operator commits to train the public sector to allow a smoother transfer of the asset back to the public sector at the end of the contractual term.
Divestiture	Transfer of the ownership of existing assets and responsibility for future upkeep and expansion to the private sector.
Joint venture	Company that joins two or more parties – private or/and public.
Stakeholders	Persons or groups who are directly or indirectly affected by a given policy area, as well as those who may have interests in it and/or have the ability to influence its outcome (are in their sphere of influence), either positively or negatively – and want to engage in the decision-making process. They may include civil society organisations and groups with special interests including locally affected communities or individuals and their formal and informal representatives, national or local government authorities, elected representatives, regulators, agencies, end users, the academic community, utilities and other businesses and non-state actors / non-governmental organisations.
MENA	Countries participating in the MENA-OECD Investment Programme include Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestinian Authority, Qatar, Saudi Arabia, Tunisia, United Arab Emirates and Yemen.
Infrastructure	Permanent assets that a society needs for the orderly operation of its economy. It includes roads, bridges and highways, power plants and grids, communication systems, ports, railways, transit and airports, housing, water and sewers. A sub-sector, social infrastructure, includes those assets which provide social services, notably schools, healthcare facilities, universities, prisons and court houses. The infrastructure sector as a whole strengthens and drives the economy, creates jobs and acts as a key enabler for future economic development and raising living standards.
Guarantees	In order to support a private partner, the government may wish to guarantee its debt. Guarantees are regarded as contingent liabilities recorded off the balance sheet until the guarantee is eventually called.
Value for money	What government judges to be an optimal combination of quantity, quality, features and price (i.e. cost), calculated over the whole of a project's life cycle. Value for money must be the primary objective in PPP design. A PPP project yields higher value for money compared to traditional procurement or government in-house production if it provides better features, higher quality or lower whole-of-life cost. Higher value for money is mainly obtained through risk transfer, competition and the use of private sector management skills and innovation.
Risk sharing	Risk sharing plays a fundamental role in whether or not a PPP will yield value for money. As risk is an important part of the incentive mechanism for the private partner to be as efficient as possible, risk sharing is a key feature for a successful PPP. In general, risk must be carried by the party best suited to carry it, i.e. the party that can carry the risk at least cost. Thus, efficiency improves through adequate risk sharing. The way risk is shared between the government and the private partner is also the key feature when classifying a project as a PPP or as traditional procurement.

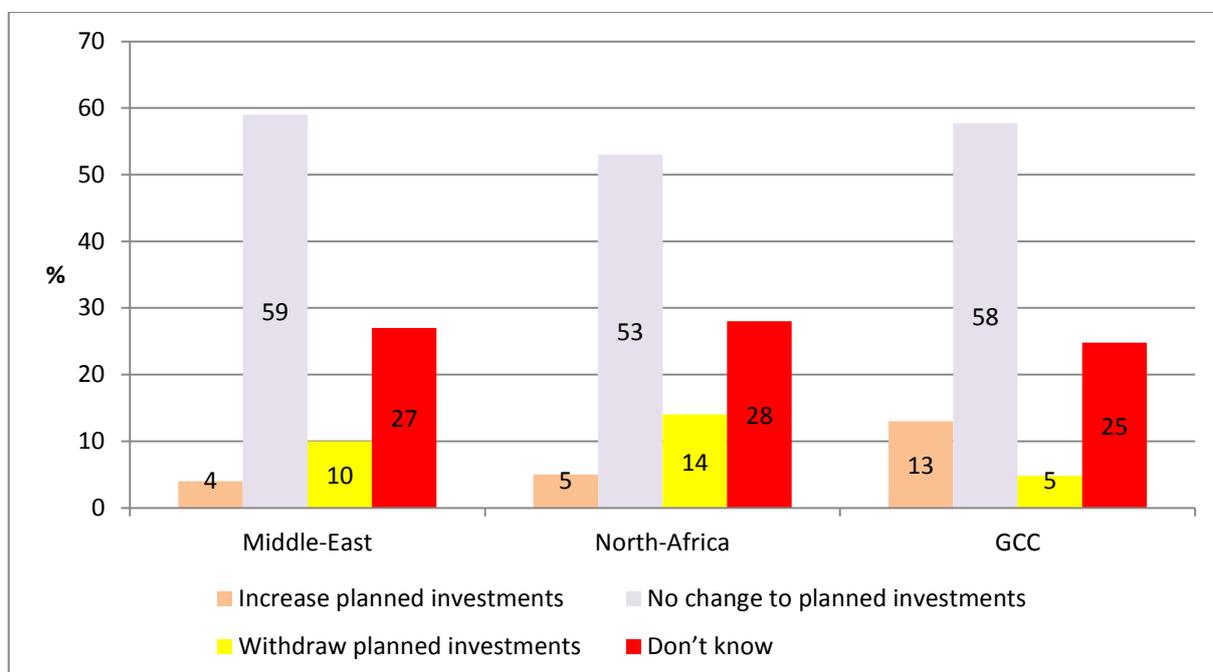
INTRODUCTION

1. Infrastructure is a key element of the business environment and a generator of employment. However, increasing demand for infrastructure in the Middle East and North Africa (MENA) region is being met by declining private investment in major projects due to global economic conditions, banking prudential requirements and regional political uncertainty.
2. Estimates of infrastructure funding needs in the MENA region vary widely. According to the Arab Financing Facility for Infrastructure (AFFI), a joint venture of the World Bank, the International Finance Corporation (IFC) and the Islamic Development Bank (IsDB), the Arab world needs to invest between \$75 billion and \$100 billion a year in infrastructure to sustain the growth rates achieved in recent years, boost economic competitiveness and foster job creation. According to the World Bank¹, MENA region infrastructure needs through 2020 are estimated at about USD 106 billion per year or 6.9% of the annual regional GDP. Investment and rehabilitation needs are likely to be particularly high in the energy and transport sectors – and this type of infrastructure has especially strong employment generation effects. Overall, there is potential to generate around 2 million direct jobs throughout the MENA region and 2.5 million direct, indirect and induced infrastructure-related jobs by meeting estimated annual investment needs.
3. Persisting political and economic uncertainty due to the war in Syria (especially for Jordan and Lebanon), increased sectarian violence (for example, in Iraq, Lebanon and Libya), and general security concerns and political polarisation (such as in Egypt), affect foreign direct investment (FDI) flows into MENA economies. The region has been adversely affected by deteriorating trade, tourism, real estate, finance, and banking prospects and has seen FDI decline by 15% to an estimated USD 17 billion in 2013. However, recent history shows that a quick and strong rebound in FDI is possible. After plummeting in 2011 from an earlier peak in 2008, flows into the MENA region rebounded by 43% in 2012 to reach USD 19 billion, reflecting underlying investor durability even in the face of political risk. The rebound was particularly strong in Egypt, which had been adversely affected by a deteriorating economy, an uncertain political outlook, and significant downside risks. FDI flows there reached nearly USD 3 billion in 2012, having registered net divestments the previous year.
4. Political uncertainty has also taken a toll on private investment in infrastructure. To restore investors' confidence, the governments of Egypt, Jordan, Morocco and Tunisia have implemented economic and institutional reforms. One of their key challenges looking ahead will be to strengthen the legal environment for investment, in particular infrastructure investment.
5. Although they acknowledge the tremendous growth potential of the region, private operators usually consider the investment situation on the ground in MENA as being, "highly complex". The economic and political situation has led most investors to adopt a "wait and see" approach (MIGA 2013). Even though some progress is being made in some countries, high social and political instability is still weakening investor sentiment. The holding pattern adopted by investors contributes

1 . World Bank (2012), *Infrastructure and Employment Creation in the Middle East and North Africa*, Caroline Freund and Elena Ianchovichina, Quick Notes Series Number 54.

to the current deterioration in the economic situation and in the quality of public sector services and infrastructure.

Figure 1. Impact of political and social instability on investment plans in the MENA region (2013)



Source: Multilateral Investment Guarantee Agency (MIGA) (2013), *World Investment and Political Risk*.

6. The “high risk” perception of the MENA region is not just the result of the financial crisis and the recent political upheaval in the region, but also the combined effect of several pre-existing elements:

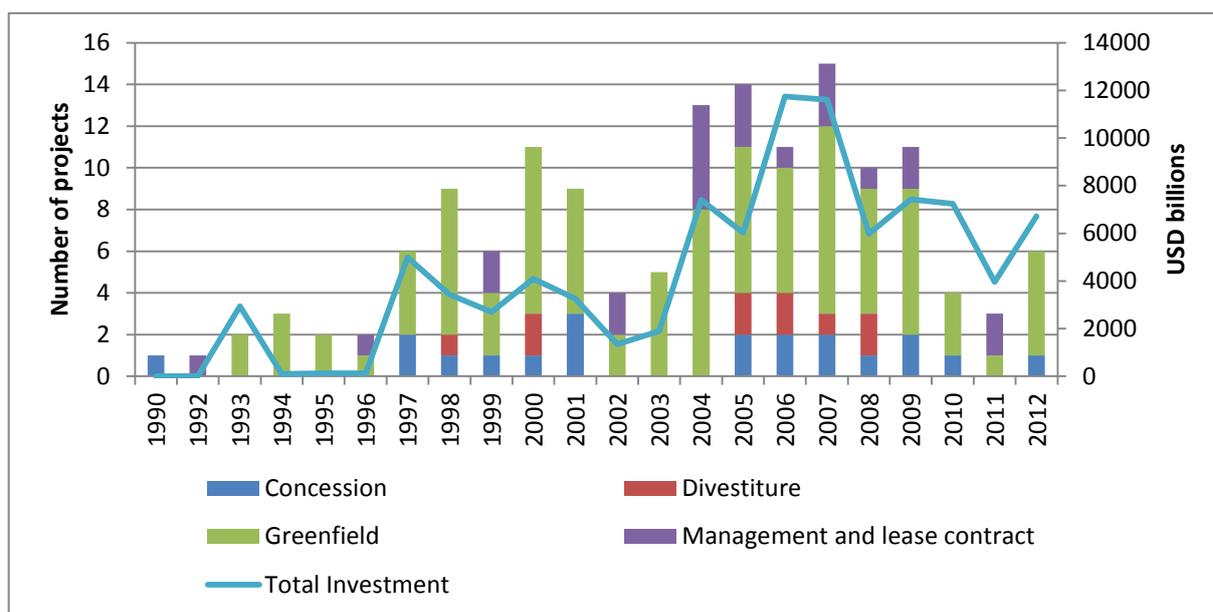
- Lingering negative perceptions of the business and general investment climate, both overall and on a country level. For several years some MENA countries have ranked poorly in business environment comparators such as the World Bank Doing Business report. This negative perception is partly the result of inadequate infrastructure, but also of an inefficient regulatory framework and uneven compliance with contractual obligations by governments and public entities. This has been compounded by a number of investor - state investment disputes in certain countries, as evidenced by the number of arbitration cases before the International Centre for the Settlement of Investment Disputes (ICSID). A good portion of these disputes have been in the infrastructure sector.
- The lack of regional cooperation, coordination and integration, together with the disparate nature of MENA economies. The MENA region is often considered one of the most economically heterogeneous in the world. This makes it difficult to find regional answers to issues which have a direct impact on infrastructure investment and financing, such as the lack of developed capital markets and frequent exchange rate variations. It also impedes the development of interconnections in sectors as energy and transport.

7. For infrastructure projects, these regional factors converge with the complexity of financing long-term infrastructure investments and several recurrent challenges in project finance, such as:

- High upfront development and financing costs;
- Slow delivery;
- Identification of appropriate project finance and public-private partnership techniques;
- Obstacles to refinancing project debt;
- Ensuring efficient risk allocation among project participants; and
- Public officials ill-equipped to select and develop bankable infrastructure projects.

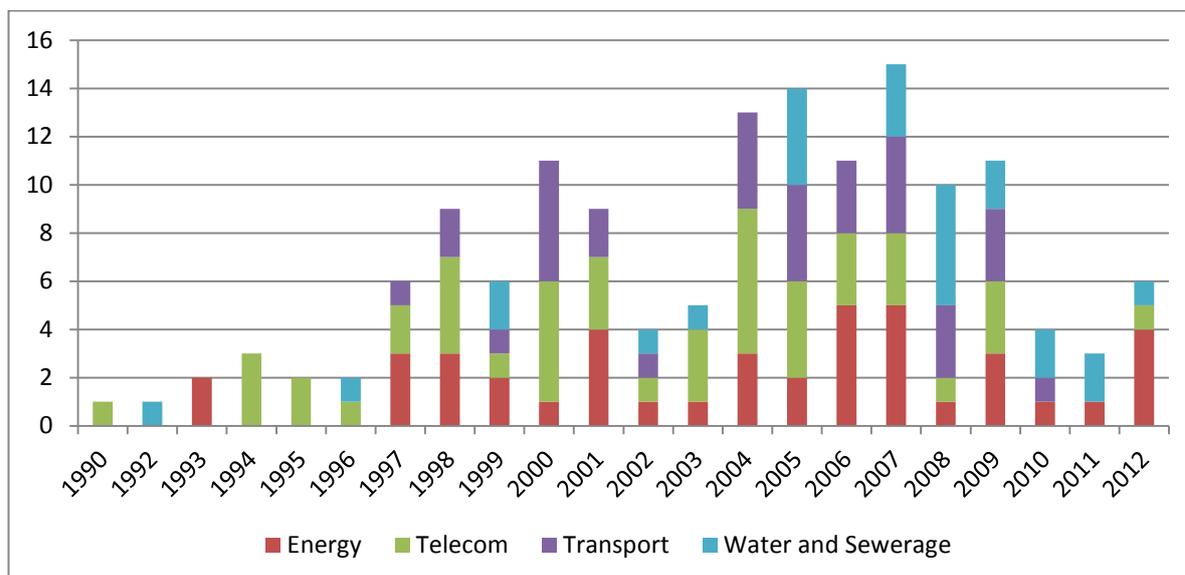
Figure 2. When region-specific factors are combined with the inherent challenges of infrastructure, attracting investment to the region can be more difficult than in other regions and will often involve higher costs and lower returns. However, data from the Public-Private Infrastructure Advisory Facility (PPIAF) shows a nascent recovery trend for infrastructure PPP in the MENA region. This trend remains to be confirmed.

Figure 3. Infrastructure projects in the MENA region, by type of projects (1990-2012)



Source: OECD, based on PPIAF PPI database, last updated May 2014.

Figure 3. Private infrastructure projects in the MENA region, by sector (1990-2012)



Source: PPIAF database, December 2013

8. Heightened perceived risk in the MENA region is not the only explanation for decreased private sector capital availability, including from commercial banks. Deleveraging by Euro area banks, not only in response to market pressures but also to prepare for tighter Basel III capital requirements over the 2013-2019 period, has also played a role in increasing the cost of capital available for infrastructure projects and in raising the quality standards applied in project selection. In the wake of the global financial crisis, traditional sources of finance for large-scale, long-term projects have been declining and the gap between infrastructure funding and infrastructure demand has widened. Although international capital markets have been recovering since 2009, private funding for infrastructure projects has become more selective and focused on higher quality projects.

9. The number of banks active in MENA project finance and infrastructure deals has declined markedly in recent years. Collins and Godfrey have estimated that before the global financial crisis, there were at least 40 regional and international banks that regularly participated in project finance and infrastructure deals in the MENA region² and that this number has probably declined by more than half. Much of the decrease is due to international banks withdrawing from the market or scaling back their involvement in regional deals. The banks that remain generally have much reduced funding, and in some cases reduced technical capacity, especially for complex transactions in markets where perceived risk is high. In this context of scarce bank liquidity, and growing country risks, traditional lenders have limited appetite and capacity to lend long-term on an unsecured basis, and the absence, underdevelopment or limited availability of appropriate risk mitigation tools, together with a lack of refinancing and credit enhancement mechanisms, has made some project structures unattractive. This can make infrastructure projects in MENA more difficult to structure than in other regions, often with higher costs and lower returns.

2. Collins N. and Godfrey M. (2013), *The Middle East and North Africa: How the MENA region is meeting the funding challenge*. Latham & Watkins LLP.

10. Scarcer resources mean that MENA governments have to carefully select projects in the context of a well understood and appropriate legal, regulatory and financial environment. According to the European Investment Bank³, a key advantage of well-structured project financed PPPs, as opposed to traditional procurement methods, is the project discipline created in terms of due diligence and thorough planning. Although most MENA countries already have had some success with PPPs and/or are preparing to introduce structural reforms necessary for them to work, there are numerous prerequisites for a successful PPP programme, including institutional and legal frameworks, capacity and high-level political commitment. The pages that follow will consider some of these conditions.

3 . European Investment Bank (2011), *Study on PPP Legal and Financial Frameworks in the Mediterranean Partner Countries*, Facility for Euro-Mediterranean Investment and Partnership (FEMIP) Trust Fund.

CHAPTER 1: PPP FUNDAMENTALS

This chapter:

- *Reviews the definition of a Public-Private Partnership and provides a description of the broad continuum of private sector involvement in infrastructure (management & lease contract, concession, BOO-BOT-BOOT, full Design-Build-Finance-Operate-Maintain “PFI”) that may be considered PPPs.*
- *Describes the main features of a PPP and differentiates between a concession-based PPP and an availability-based PPP.*
- *Examines the main misunderstandings regarding the use of PPPs vs traditional public procurement methods.*
- *Reviews appropriate reasons for a government to engage in PPPs and in appropriate reasons.*
- *Lays out the basic requirements for a successful PPP programme.*

After reviewing this chapter, policy-makers will:

- *Have a better understanding of the benefits of PPPs and the different types of PPPs ;*
- *Be more aware of the responsibilities, costs and risks retained by governments in PPPs ;*
- *Be better able to identify projects that may be successful if developed by PPP ;*
- *Be more knowledgeable of the requirements for a successful PPP programme including: rule of law/dispute resolution, high-level political commitment, government capacity and legal frameworks.*

Defining Public-Private Partnerships

12. Public-Private Partnership (PPP) is a concept that has become widely used despite the absence of a clear definition. Most people think of PPPs as an arrangement whereby services or infrastructure traditionally provided exclusively by the public sector are provided by the private sector under a contractual arrangement. A review of the literature reveals numerous variations on this theme. For instance, the OECD defines a PPP as:

... an agreement between government and one or more private sector partners (which may include the operators and the financiers) according to which the private partners deliver the service in such a manner that the service delivery objectives of the government are aligned with the profit objectives of the private partners and where the effectiveness of the alignment depends on a sufficient transfer of risk to the private partners (OECD, 2008).

13. Within this relationship, the government specifies the quality and quantity of the service it requires from the private partner(s). The private partner may be tasked with the design, construction, financing, operation and management of a capital asset to deliver a service to the government or directly to end users. Furthermore, the private partner will receive either a stream of payments from the government or user charges levied directly on the end users, or a combination of both. Any payments from the government may depend on the private partner's compliance with government specifications for quality and quantity (OECD, 2011).

Box 1. Different country definitions of public-private partnerships

There is no widely recognised definition of PPPs and related accounting framework. Eurostat, IASB, IMF, IFRS and others work with different definitions. As illustrated below there is variation between countries.

Korea defines a public-private partnership project as a project to build and operate infrastructure such as road, port, railway, school and environmental facilities – which have traditionally been constructed and run by government funding – with private capital, thus tapping the creativity and efficiency of private sector.

South Africa defines a public-private partnership as a commercial transaction between a government institution and a private partner in which the private party either performs an institutional function on behalf of the institution for a specified or indefinite period, or acquires the use of state property for its own commercial purposes for a specified or indefinite period. The private party receives a benefit for performing the function or by utilising state property, either by way of compensation from a revenue fund, charges or fees collected by the private party from users or customers of a service provided to them, or a combination of such compensation and such charges or fees.

The **United Kingdom** defines a public-private partnership as "...arrangements typified by joint working between the public and private sectors. In their broadest sense, they can cover all types of collaboration across the private-public sector interface involving collaborative working together and risk sharing to deliver policies, services and infrastructure." (HMT, Infrastructure Procurement: Delivering Long-Term Value, March 2008). The most common type of PPP in the United Kingdom is the Private Finance Initiative. A Private Finance Initiative is an arrangement whereby the public sector contracts to purchase services, usually derived from an investment in assets, from the private sector on a long-term basis, often between 15 to 30 years.

The **State of Victoria (Australia)** defines a public-private partnership as relating to the provision of infrastructure and any related ancillary service which involve private investment or financing, with a present value of payments for a service to be made by the government (and/or by consumers) of more than AUD 10 million during the period of a partnership that do not relate to the general procurement of services.

Source: OECD (2012), Principles for Public Governance of Public-Private Partnerships.

Box 2. Other definitions of public-private partnerships

In this book, the **OECD** defines a public-private partnership as an agreement between the government and one or more private partners (which may include the operators and the financiers) according to which the private partners deliver the service in such a manner that the service delivery objectives of the government are aligned with the profit objectives of the private partners and where the effectiveness of the alignment depends on a sufficient transfer of risk to the private partners.

According to the **International Monetary Fund** (IMF, 2006:1 and 2004:4), public-private partnerships (PPPs) refer to arrangements where the private sector supplies infrastructure assets and services that traditionally have been provided by the government. In addition to private execution and financing of public investment, PPPs have two other important characteristics: there is an emphasis on service provision, as well as investment, by the private sector; and significant risk is transferred from the government to the private sector. PPPs are involved in a wide range of social and economic infrastructure projects, but they are mainly used to build and operate hospitals, schools, prisons, roads, bridges and tunnels, light rail networks, air traffic control systems, and water and sanitation plants.

For the **European Commission** (EC, 2004), the term “public-private partnership” is not defined at Community level. In general, the term refers to forms of co-operation between public authorities and the world of business which aim to ensure the funding, construction, renovation, management and maintenance of an infrastructure of the provision of a service.

Standard and Poor’s definition of a PPP is any medium- to long-term relationship between the public and private sectors, involving the sharing of risks and rewards of multisector skills, expertise and finance to deliver desired policy outcomes (Standard and Poor’s, 2005).

For the **European Investment Bank** (EIB, 2004:2), “public-private partnership” is a generic term for the relationships formed between the private sector and public bodies often with the aim of introducing private sector resources and/or expertise in order to help provide and deliver public sector assets and services. The term PPP is thus used to describe a wide variety of working arrangements from loose, informal and strategic partnerships, to design-build-finance-and-operate (DBFO) type service contracts and formal joint venture companies.

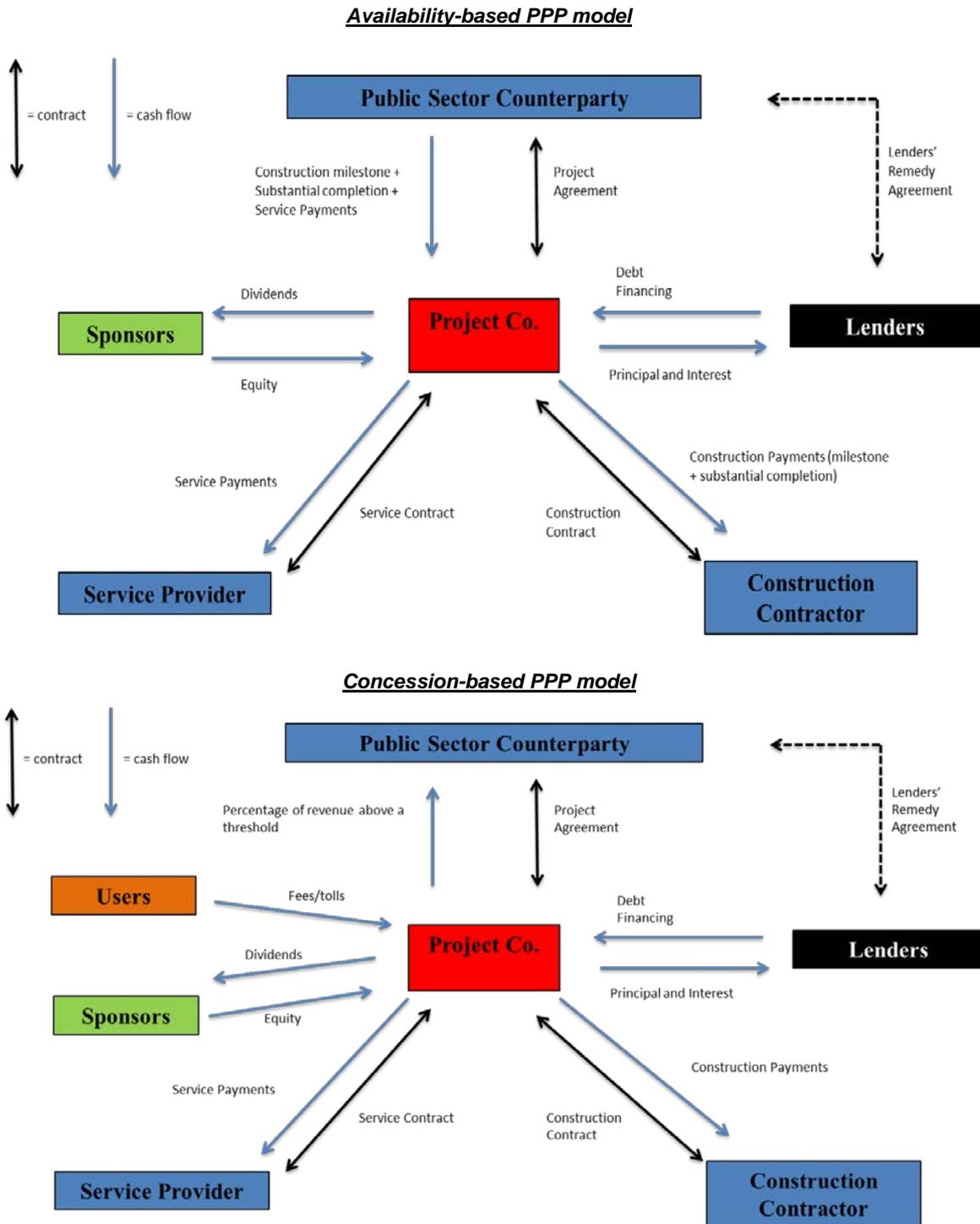
Source: OECD (2008), Public-Private Partnerships: In Pursuit of Risk Sharing and Value for Money.

14. Part of the difficulty when defining PPPs is the broad spectrum of arrangements that can rightly be considered PPPs. There is a continuum of service delivery options available to governments, from pure public delivery to full privatisation. These include relatively simple management contracts where the private sector manages and operates a pre-existing asset, concession agreements under which the government grants rights to a private-sector entity to operate, or build and operate, a facility for a fixed period of time, and Private-Finance Initiative (PFI) type arrangements that see the private sector design, build, finance, maintain and operate a facility for a fixed-term covering usually 25 to 30 years. All of the possible arrangements between pure public delivery and full privatisation can rightly be thought of as PPPs.

15. Among the various arrangements that can be considered PPPs, it is useful to make a fundamental distinction between user-pay concession-based PPP projects and availability-based PPPs. The most important difference between the two is the source of the private counterparty's revenue. In the concession format, revenue mainly comes from direct payments from service users, for example tolls on a toll-road. The concession-holder therefore assumes volume or traffic risk. Under an availability type of PPP, the private party's revenue consists mainly of payments made by the public authority to the private party; conceptually the services are not sold to the public but instead sold to the government. These payments are sometimes referred to as availability payments in that the government pays the private party on the basis of the service or infrastructure being available for use

by the public, regardless of actual usage levels. However, payments may vary depending on compliance with contractual terms (OECD, 2010).

Figure 4. Typical PPP Transaction Structures



Source: OECD (2014)

16. This publication is intended to assist MENA-region governments in getting infrastructure built once a decision has been made to procure a project by way of PPP. For this reason it will adopt a broad definition of PPP that considers any long-term contractual relationship between a state or state owned entity (SOE) and a private-sector entity whereby the latter delivers and finances public services using a capital asset, sharing the associated risks, to be a PPP (OECD, 2012, *Recommendations of the Council on Principles for Public Governance of Public-Private Partnerships*). Long-term service arrangements that do not include private financing but which in other elements approximate the dynamics of a PPP in that there is a risk transfer with regard to the provision of services will also be considered.

17. In environments where public finances are under pressure, PPPs are often looked to as a panacea for public infrastructure funding. However, PPPs are not a cure for all public financial ills and just as there are good reasons to procure by way of PPPs in appropriate circumstances, there are also inappropriate circumstances in which to procure by PPP. Projects attempted in these inappropriate circumstances are less likely to be successful.

Why procure via PPP: Appropriate reasons to procure by PPP

PPP can provide value for money

18. PPPs are just one of a number of options available to governments seeking to build infrastructure or to provide a service. They are usually juxtaposed with traditional public sector procurement where the public sector may contract for the construction of an asset, with the relationship with the private sector builder or contractor ending after construction and the government then operating and maintaining the facility and or providing the service. PPPs are not an end in and of themselves and should be seen in the context of a continuum of delivery options for infrastructure or services. The decision to invest should be based on a whole of government perspective and be separate from how to procure and finance the project (OECD 2012: *Recommendation of the Council on Principles for Public Governance of Public-Private Partnerships*).

19. It is only after a decision has been made that an infrastructure asset or service is necessary or desirable in light of government's strategic objectives and fiscal capacities that a decision can be made as to the most appropriate method of procurement. Value for money can be defined as what a government judges to be an optimal combination of quantity, quality, features and price (i.e. cost), expected (and sometimes, but not always, calculated) over the whole of the project's lifetime. The value-for-money concept attempts to encapsulate the interests of citizens, both as taxpayers and recipients of public services. PPPs and traditional infrastructure procurement are merely two modes to deliver value for money with the choice between them depending on which delivers the most value for money (OECD, 2011).

20. Detractors of PPPs question how a PPP can deliver value for money given the profit motive of the private sector participant. In theory, government and the private sector should be able to build the same asset or provide the same service for roughly the same cost. When the profit margin, absent in the publicly-procured project is added to this cost, the PPP should be more expensive. Critics also point out that in the case of debt-funded projects, governments can usually issue debt at lower interest rates than private-sector developers⁴. However, an OECD literature review that compared the ex-post

4 . Hall D. (2008), *Critique of PPPs*, Public Services International Research Unit, The University of Greenwich; Hodge G. and Greve C. (2005), *The Challenge of Public-Private Partnerships: Learning from International Experience*, Cheltenham UK: Edward Elgar Publishing Limited

performance of PPPs that had successfully reached completion and traditional infrastructure procurement on actual cost and time required to launch operations found that PPPs outperform traditional procurement in terms of both cost and time overruns, with outperformance on cost being the most significant (OECD, 2011).

21. Some of the factors that allow PPPs to create greater value for money than public procurement are considered below. These factors may also be considered to be among the appropriate reasons to procure by PPP.

Box 3. Assessing value for money in proposed PPP projects

Prior to undertaking a public-private partnership, a government should explore whether or not a PPP will deliver better value for money compared to traditional public procurement. Generally speaking, four methods may be used to assess the relative value for money of the different delivery models:

- a complete cost-benefit analysis of all alternative provision methods available to both the government and the private sector – this method is the most complex among the four presented here;
- calculation of a public-sector comparator before the bidding process to assess whether or not public-private partnerships in general offer better value for money (e.g. South Africa);
- calculation of a public-sector comparator after the bidding process to assess whether or not a particular public-private partnership bid offers better value for money; and
- the use of a competitive bidding process alone without a comparison between public and private provision methods (e.g. France).

In Australia, Partnerships Victoria uses a public-sector comparator to compare the net present cost of bids for the public-private partnership project against the most efficient form of delivery according to the output specification (a so-called reference project). The comparator takes into account the risks that are transferable to a probable private party, and those risks that will be retained by the government. Thus, the public-sector comparator serves as a hypothetical risk-adjusted cost of public delivery of the output specification of a Partnerships Victoria project. The methodology for preparing the public-sector comparator is published by Partnerships Victoria.

Some have contested the robustness of the public-sector comparator, claiming that it is constantly manipulated in favour of public-private partnerships. The United Kingdom, for example, has replaced the public-sector comparator to incorporate quantitative and qualitative factors in a value-for-money assessment. Quantitative factors include a reference project, and value-for-money and affordability benchmarks. Qualitative factors include project visibility, desirability and achievability.

*Source: OECD (2010), *Dedicated Public-Private Partnership Units: A Survey of Institutional and Governance Structure*, OECD Publishing, Paris, 2010.*

PPPs allow private sector innovation and expertise to cut costs and improve public service delivery

22. The successful bidders on large-scale infrastructure projects are often consortia consisting of several large multinational companies with in-depth experience in building and operating the type of infrastructure asset in question. This experience means that considerable expertise has been gained over decades of working on numerous similar projects, expertise that can help create better solutions to meet functional needs. The government agency, board or ministry responsible for a hospital infrastructure project may not have built a new facility in decades, whereas the bidders seeking to build the project under a PPP arrangement will likely have built many similar facilities. The government, and by extension taxpayers and users of the facility, benefit from this experience if the infrastructure is procured by PPP.

Linking construction and operation incentivises better design and construction

23. In a typical publicly financed procurement there is private sector involvement to build a new or refurbish an existing facility. Once construction is completed, except for warranties under the construction contract or statutory warranties, the relationship of the builder and the public authority ends. The private-sector contractor therefore has limited interest in the quality of construction or long-term operating and maintenance costs of the facility.

24. Combining the design, construction and long-term operation and maintenance of infrastructure into one contract with a private sector entity creates incentives to design and build an asset with low life-cycle maintenance and operating costs. Informed by their experience in building, operating and maintaining similar projects, developers seek to build infrastructure that is cheaper and easier to operate and maintain over the full term of a contract that may last 25-30 years. These lower operating and maintenance costs are reflected in the bid price and thereby passed along to the public authority and by extension to tax payers.

PPPs allocate risks to the parties best able to control/mitigate risk

25. One main PPP benefit is the transfer of certain risks to the private sector counterparty. Fixed-price, fixed-date construction contracts mean that the public authority should not face the risk of over-budget construction costs or the financial costs of delays⁵. Many PPPs will also contain liquidated damages clauses whereby the private party will pay pre-determined damages to the public authority if the infrastructure is not available for use as of the contracted date. These damages are often substantial and may accrue on a daily basis creating a meaningful incentive to complete the facility on time.

26. All contractual relationships are essentially a method to assign risks between contracting parties. A core principle for a successful PPP is that each risk should be allocated to the party that is best able to manage or mitigate that risk - the party that has the greatest influence over the probability that the event occurs, or if the risk event does occur, has the ability to mitigate its impact at lowest cost (OECD, 2008).

27. Risks can be thought of as either endogenous (internal) risks or exogenous (external) risks. Endogenous risks can be controlled unlike exogenous risks, so it is the allocation of endogenous risks that should be the focus in PPPs. Problems can arise should a government require that the private partner carry some exogenous risk. Given that the risk is exogenous, the government will not be getting better risk management from the private partner than it would by carrying the risk itself and the private partner will require a premium for facing these risks that it cannot control (OECD, 2008).

28. Some risk allocations seem obvious: for example, the allocation of construction risk to the developer, as it is the developer that will actually engage in construction: and the allocation of change-in-law risk to the government as any change in law will most likely be initiated by the government. However, other risk allocations are less obvious. Some of these issues will be further considered below.

5 . It must be noted that re-negotiations to increase project timelines and budget are not uncommon in PPPs. OECD research suggests that re-negotiations may occur in up to 30% of contracts rising to approximately 54% in the transport sector. This emphasises the requirement for flexibility in contracts to accommodate changed and unforeseen circumstances and the need for the public sector to have the capacity to re-negotiate on an equal footing with the private party. Source: OECD (forthcoming), *Fostering Investment in Infrastructure. Lessons Learned from OECD Investment Policy Reviews*.

PPPs allow government to concentrate on its role as service provider, as opposed to developer

29. All governments have limited resources, not only financially but also in terms of human resources, political capital and the ability to manage multiple competing priorities. Developing infrastructure is a complex and lengthy process that places demands on these resources. Procuring by PPP relieves government of some of the burden of acting as developer and allows a greater focus on core roles and responsibilities. For instance, PPPs allow governments to focus on the provision of health care or education, not the construction of hospitals and schools.

Summing up Value for Money

30. Some criticisms of PPPs are undoubtedly true. Interest costs faced by the private sector are higher than those faced by the public sector; PPPs involve the necessity of profit, and arranging and structuring the transactions is complex and costly. However, when managed prudently and with a supportive legal and institution framework, PPPs have been shown to be potentially cost effective and to create value for money for governments and citizens. This requires that savings from developer expertise, from combining responsibility for designing, building, operating and maintenance and from an optimal (least-cost) risk allocation exceed the additional costs of investors' return on equity (profit), a higher cost of capital and transaction costs.

Box 4. Value for Money and the public sector comparator

Governments should assess whether or not a project represents value for money. Indeed, the drive to use PPPs is increasingly premised on the pursuit of value for money (OECD, 2008). Value for money is a relative measure or concept. The starting point for such a calculation is the public sector comparator. A public sector comparator compares the net present cost of bids for the PPP project against the most efficient form of delivery according to a traditionally procured public-sector reference project. The comparator takes into account both the risks that are transferable to a probable private party and those risks that will be retained by government. Thus, the public sector comparator serves as a hypothetical risk-adjusted cost of public delivery of the project. However, ensuring the robustness of a public sector comparator can be difficult and it may be open to manipulation with the purpose of either strengthening or weakening the case for public-private partnerships (e.g. much depends on the discount rate chosen or on the value attributed to a risk transferred).

In addition to the quantitative aspects typically included in a hard public sector comparator, value for money includes qualitative aspects and typically involves an element of judgement on the part of government. Value for money can be defined as what government judges to be an optimal combination of quantity, quality, features and price (i.e. cost), expected (sometimes, but not always, calculated) over the whole of the project's lifetime. What makes value for money hard to assess at the beginning of a project is that it ultimately depends on a combination of factors working together such as risk transfer, output-based specifications, performance measurement and incentives, competition in and for the market, private sector management expertise and the benefits for end users and society as a whole.

Source: OECD (2012), Recommendation of the Council on Principles for Public Governance of Public-Private Partnerships

Misunderstandings about PPP: Inappropriate reasons to tender via PPP

31. OECD consultations and experience suggests that many governments, not only those in the MENA region, sometimes see PPPs as a magic solution allowing infrastructure to be built without cost or risk to the government and with minimal preparation. These perceptions are false, as almost all PPPs create liabilities for future taxpayers (OECD/International Transport Forum, 2013) and are onerous to prepare, but unfortunately they often drive decisions to procure via PPP.

PPPs are a substitute for public investment/resources

32. Governments sometimes consider PPPs as an alternative to public procurement due to a lack of public sector funds or fiscal capacity. This demonstrates a lack of understanding of PPP transactions. The state is purchasing an asset or providing a service and this will entail costs for the state. PPPs do not provide “free” infrastructure as the nature of the private-sector means it cannot construct and operate facilities without being adequately compensated for the costs and risks involved.

33. Under an availability-type PPP, the private-sector party's main source of revenue is availability payments paid by the public authority. These payments can be thought of as consisting of three components, a component for operating costs, for life-cycle maintenance costs and for the cost of building and financing the infrastructure (capital costs). By amortising capital costs over the entire duration of the project agreement, the state is relieved from the burden of financing construction in one or a small number of large payments over the construction period, but it pays the capital cost of the asset nonetheless. Under both a PPP and public procurement scenario the state pays operating and maintenance costs. In availability PPPs it is obvious that the state incurs costs and is paying for the asset over the life of the PPP agreement. The rationale for procuring via PPP is not to avoid these costs but rather to lower them a by achieving optimal value for money.

34. Concession-type arrangements bring other considerations. While governments may not be contractually liable for a stream of future cash flows as under an availability arrangement, they will still incur costs. First, project preparation costs: all PPPs are complex arrangements and preparing the tender and negotiating the contract requires substantial capacity and resources that governments facing spending constraints may not have. Pure concession arrangements by definition push all volume or traffic risk to the private party, so volume levels must be very well-quantified and there must be a high-level of confidence in future volume projections for a concession to be attractive to the private sector. In MENA countries, it is unlikely that private investors or their lenders will be willing to face volume or traffic risk without some form of minimum revenue guarantee from the government⁶. Any such guarantee creates additional liabilities and costs for the state.

35. Procuring via a concession or toll-based arrangement shifts the responsibility for paying for the infrastructure from the government to users and is therefore easily conceptualised as reducing government expenditure. However, by conceding the right to collect tolls or user fees, the government loses revenue that it would have collected if the project had been financed by traditional public procurement (OECD/International Transport Forum 2013). This opportunity cost, while not usually included in government accounts, remains a cost. There is also a high risk of public backlash against tolls due to insufficient communication with the broader public from the start of the project design.

36. Given that a PPP implies reduced government capital expenditure, at least in the short-term, its short-term effect is to reduce total government expenditure and improve the fiscal balance. In the long-term, the future stream of fees and payments to the private partner must also be taken into consideration. When that is done, the PPP may not be cheaper in present value terms when compared to public procurement. Whether it will be cheaper will depend on the cost of capital and on the relative levels of efficiency achieved (see the value for money discussion above). Thus, if the efficiency gains are such that government derives more value for money through the PPP than through traditional public procurement, the net present value of future revenue and expenditure streams might improve, thereby rendering the PPP project more affordable. Therefore, it can be argued that a PPP is relatively more affordable than public procurement if it delivers more value for money. However, in

6 . The apportioning of traffic or volume risk is a key issue that will be further discussed in Chapter 4.

either case, absolute affordability depends on whether or not the total expenditure can be accommodated within government budget constraints.

37. The perception that PPPs can be without cost is perhaps due to the treatment that PPPs have sometimes been given in national accounts. The question of whether a project is "on the books" (in the national accounts), or "off the books" is a question of accounting treatment determined by the apportioning of risk and the nature of future explicit or contingent obligations for which the government is or may be liable. Some governments have believed, wrongly, that if a project is off the books, it becomes more affordable. The "off the books" characteristic of PPPs has been especially appealing for countries with self-imposed fiscal rules or budgetary limits that can create incentives to delay expenditures instead of financing them up front (OECD, 2008). A government under pressure to reduce its deficit or debt in the short term may therefore prefer PPPs over public financing, even if the PPP costs more in the long run. This bias creates a risk of accumulating financial commitments that prove unaffordable (OECD/International Transport Forum, 2013).

38. The PPP concept was developed and has been most successful in OECD countries. One of the key attractions of PPPs for private sector developers and investors in these jurisdictions is that the cash flows to be earned by the project company (in an availability-based transaction), and which can be earmarked for repayment of investors in priority, are a long-term contractual obligation of the state. This issue is of such importance that investors and/or their creditors will usually seek legal comfort that the obligations of the public counterparty are obligations of the state either due to the status of the public counterparty at law or by way of an explicit guarantee. The desire of governments to deny their responsibility for payment obligations, or have them treated as "off the books" is diametrically opposed to one of the primary reasons that private developers and investors find PPPs attractive.

39. Many jurisdictions with strong fiscal profiles, for example the Australian State of Victoria and the Canadian Province of Alberta, engage in PPPs. These governments currently hold some of the highest credit ratings obtainable, have significant fiscal capacity for additional debt and enjoy attractive funding costs. They engage in PPPs not because they cannot afford to fund infrastructure on a public basis, but rather because procurement by PPP creates value for money for their taxpayers and citizens.

PPP is a revenue generator for government or its agencies

40. Governments, their agencies and departments sometimes opt for a PPP project in hopes of generating net revenue for the state. It is difficult to see how this could be the case under either an availability-based scenario or a user-payment concession scenario. It is obvious that an availability-based PPP will not generate net revenue for the state and will to the contrary entail a commitment of expenditure over a number of years. Under a concession user-pay PPP, any revenue that is collected by the concessionaire is revenue that could have been collected by the state if the project was conducted by public procurement minus the increased debt-service costs and return on equity associated with private-sector participation. Under this analysis, concession-based PPPs that are viewed as revenue positive by governments are actually revenue negative.

41. It should be no great surprise that PPPs are a cost to governments and should not be viewed as a revenue source. Building infrastructure or providing a service costs money and entails risk. To the extent that private sector actors incur these costs or take these risks, they will expect to be compensated. PPPs are more properly seen as only one of many options to provide national infrastructure or services. It is only logical that providing a service or facility that did not previously exist, or providing a service or facility superior to that which existed previously, will imply a cost for the state.

PPP as a tool to stimulate economic activity in under-developed regions and beyond

42. Government's sometimes attempt to use PPPs to stimulate the economy in less developed or rural areas. This is often politically motivated and the number of jobs to be created may be cited among the benefits of the project. However, PPPs do not work as engines to spur economic growth. Rather, they should respond to established need, or imminent growth (*A Roadmap for Funding Infrastructure*, OECD/ITF 2012). This is especially true when the private-sector party's revenues are a function of user fees in a concession-type PPP. Demand must be well-quantified and predictable in order for a private party to consider facing traffic or volume risk in a concession PPP. This may not be possible in cases where the PPP is motivated by a desire to stimulate economic activity in a less-developed area. Even if private parties are interested, the economics of these projects will be challenging as the lower levels of expected traffic/use and/or lack of demand information will be factored into a higher bid price.

43. As an alternative to a concession agreement, a government could choose to build infrastructure in a less developed area through an availability-based PPP. In theory, an availability-based PPP could be located anywhere as lack of demand will not impact the private partner's economics given that revenue will come from the state regardless of traffic or volume levels. However, this begs the question of why a government would build an asset and commit to pay for it over the long-term when demand is not certain.

44. All too often political motivations and interference drive the choice of location. Location should be chosen based on the business case and economics of a particular site supported by rigorous quantitative studies conducted prior to tendering. This is especially true for concession-based PPPs. Selecting a site on any basis other than economic justification lowers the probability of project success. If a site is selected on a non-economic basis, the government should acknowledge that this will entail a cost and provide a mechanism to mitigate the increase in risk, for example, cross-subsidisation by other facilities or minimum payment guarantees.

45. It is true that PPPs can promote economic development to the extent that they provide infrastructure or services that facilitate trade and commerce. This is one of the primary reasons governments build infrastructure. It is also true that a number of short-term construction jobs and a lesser number of long-term operational and maintenance jobs may result from a project. But this has nothing to do with PPP procurement and would be equally true of infrastructure procured through more traditional public means. In fact, given that value for money due to greater efficiency is a key justification for PPPs, it is arguable that public-procurement would likely result in more jobs being created.

PPPs remove all risk for the state

46. In the course of ISMED Programme work, government officials have sometimes stated that they wish to pursue PPPs so that the state can avoid all risk by transferring risk entirely to the private sector. When combined with notions discussed above that a concession arrangement is cost free and will provide net revenue, PPPs can be seen as very attractive. But just as the idea that PPPs are cost-free is false, so is the idea that all risk can be transferred.

47. One benefit of PPPs is allowing a state to transfer certain risks to the private party. But not all risks can or should be transferred. As previously discussed, risks should be assigned to the entity best able to control or mitigate them, meaning the party for which it costs the least to prevent the risk or deal with the consequence (OECD, 2012). Therefore, the risks that should be transferred to the private partner are those risks that are endogenous to the private partner, those that they can control.

Examples are construction risk and the risk associated with coordinating a number of building trades and subcontractors. Almost all PPPs transfer these risks to the private partner.

48. It makes no sense for the government to attempt to make the private partner responsible for risks that are exogenous to the private partner and endogenous to the government. Examples include change of law and obtaining certain permits and authorisations from government entities. As these risks are beyond the control of the private partner, but firmly within the control of the public partner, it is unlikely that the private partner will agree to take them. If it does, it will price its bid to reflect its lack of control over their occurrence. Ultimately, it will be less costly for the state to retain the risk and avoid paying that premium.

49. Risks that are exogenous to both parties are the most difficult to allocate. Examples include *force majeure* and to some degree geological or archaeological risks. As these risks are beyond the control of either party, the question becomes which party can mitigate their occurrence at lowest cost. This is almost always the government with its taxing power, lower funding costs and (usually) control over a currency and not a project company that has been capitalised and constituted to the minimum extent necessary to carry out the project. Allocating these risks to the private party will once again simply result in more expensive bids and/or few bidders.

50. As previously mentioned the allocation of volume or traffic risk is particularly difficult as it is not always within the control of either the private sector or public sector. Volume will be affected by the quality of private operator services and by pricing or tariff levels, which may or may not be set by the private operator. On the other hand, the government may have many levers at its disposal to influence demand, including building alternatives to the asset in question and a multitude of fiscal and economic policy actions. There are also numerous factors beyond the control of government or the private sector that may play a part, such as global economic conditions and the weather. Given this uncertainty the private sector party will usually be unwilling to take traffic risk unless it can be assessed and estimated with a high level of confidence. Where the private sector does take this risk the bid will be priced accordingly.

Requirements for a successful PPP Programme

Rule of law/dispute resolution

51. PPPs are at their most basic a contractual arrangement between a public authority or state-owned entity and a private party. As such, they are built upon contract law. Therefore, the rule of law and the protection of property rights and contractual rights are a key requirement if a PPP is to be successful (OECD, 2012). Private-sector participants should be confident that they contract as equal parties with the state under law and are not subject to arbitrary changes in the terms of the project agreement or other contractual arrangements or the abrogation of property rights. Private-sector participants and investors will look with caution at any previous violations of such rights in the jurisdiction.

52. This is not to say that disputes will not occur. Disputes are inevitable over the life of a complex 25-30 year contract as unforeseen circumstances will almost certainly arise. This is true not only in MENA but in all jurisdictions. A good contractual relationship is characterised not by the absence of disputes but rather by the manner in which disputes are resolved. Clear, predictable and transparent rules for dispute resolution should be in place to resolve disagreements between the public and private parties (OECD, 2012). One goal of an effective dispute resolution process should be to ensure that construction or the provision of services continues despite any dispute. The dispute

resolution process should run in parallel to the ongoing fulfilment of the parties' obligations under the contract.

53. A dispute resolution procedure typically consists of a series of escalating steps whereby a dispute is raised through the respective hierarchies of both the private and public sector counterparties with an objective of resolving the issue at the lowest level possible. This means that there should be managers at the public counterparty that are well-informed as to the details of the transaction and that are empowered to settle disputes. There may also be a committee of representatives nominated by both the public and private partners to consider and adjudicate disputes. If a dispute cannot be settled in this manner it may become subject to binding arbitration or the national court system. Foreign investors will take some comfort from the host jurisdiction being a signatory to the Washington Convention and associated recourse to the International Centre for the Settlement of Investment Disputes (ICSID), ultimately allowing the matter to be settled in a third-party forum, outside of a national justice system. Each of the four ISMED Focus Countries are signatories to the convention.

Box 5. The International Centre for Settlement of Investment Disputes (ICSID)

ICSID is an autonomous international arbitration institution established under the 1965 Convention on the Settlement of Investment Disputes between States and Nationals of Other States (the ICSID or the Washington Convention) with over one hundred and forty member States. It is a member of the World Bank Group and has its headquarters in Washington D.C., United States.

The primary purpose of ICSID is to provide institutional and procedural support for conciliation and arbitration of international investment disputes.

The Convention sought to remove impediments to the free international flow of private investment posed by non-commercial risks and the absence of specialized international methods for investment dispute settlement. ICSID was created by the Convention as an impartial international forum providing facilities for the resolution of legal disputes between eligible parties, through conciliation or arbitration procedures.

Recourse to ICSID arbitration is subject to the fulfilment of several conditions¹. The legal dispute must directly arise out of an investment between the Contracting State and a national from another Contracting State. In addition, consent to ICSID arbitration – which is the cornerstone of ICSID jurisdiction – must have been given in writing. Sources of this consent can be found in a contract, the national legislation (e.g. the investment law), or more commonly in bilateral investment treaties (BITs) or multilateral agreements. The State offer to recourse to ICSDI arbitration may be accepted by the investor by submitting the dispute to ICSID.

Source: www.icsid.worldbank.org

1. As provided in article 25(1) of the ICSID Convention.

Capacity of governments

54. PPPs are complex contractual and financial arrangements and it is unlikely that government participants will have the necessary skills and knowledge to structure the transaction and manage the contract over its life. This is not a criticism of public servant skills but a recognition that the skills required for PPPs are different from those traditionally found in the public service. It is extremely difficult for a government department to switch virtually overnight from the status quo (acquiring

assets through traditional procurement) to managing a network of different agencies involved in the building and design of a project over a long period of time – the characteristic features of PPPs⁷.

55. There is a need to further develop the PPP capacities and skills of governments and the creation of dedicated PPP central units has been a key method used in OECD countries. The roles of these units may include providing policy guidance, playing a "gate-keeper" function in deciding whether or not a project should move forward, technical support to procuring departments and agencies during project identification, evaluation and procurement, capacity building (including training public sector officials) and promoting PPPs in the public and private sector (OECD, 2010).

56. A successful dedicated PPP unit requires expert staff including sector-specific technical skills and expertise in economics and finance, regulation, procurement, communications and training. To attract and retain these skills, including from the private sector, dedicated units have to offer attractive packages to both permanent staff and short-term consultants. In some cases, rigid public sector salary systems may make this difficult (OECD, 2010). In addition to having the right skill set, it is essential that any PPP central unit be empowered to make decisions and have the confidence of the highest levels of government. This suggests that the leadership of the unit should be sufficiently senior and credible.

57. PPP central units may be very helpful in evaluating and procuring a project (especially in finalising legal and financial terms) but they cannot be a long-term substitute for capacity in the procuring department or agency which is the public counterpart to the project agreement. Over the life of the agreement (up to 30 years) the procuring department or agency must have sufficient technical knowledge and experience to understand the transaction, and manage the contractual relationship. For this reason it is equally important to create capacity in the form of a satellite PPP unit in the procuring department or agency and possibly at a regional and local government level as well.

58. The use of external advisors has also proven vital in a number of successful projects including the Queen Alia Airport project in Amman Jordan (see Annex 1). Even with a capable PPP central unit engaging advisory services may be justified by the additional expertise, experience and focus they can bring to the government side of a transaction. Advisors also work best with a PPP central unit as the unit should contain a level of expertise and experience beyond that of the procuring department or agency and will not require the same level of guidance and support.

59. Creating capacity and a central unit within government also has less tangible but equally important benefits signalling to the private sector that government is committed to PPPs over the long-term and that there will be skilled counterparts on the government side of the transaction.

High-level political commitment

60. Procuring by PPP as opposed to traditional procurement is fundamentally a political decision made at the highest levels of government. Procuring by PPP will often be entirely new to the officials implementing the decision, and the process will often be difficult. It is essential not only that those at the political level be committed to PPP procurement, but also that they are seen to be committed. Challenges will inevitably arise during the process that will require decisions and actions by government officials who should know that they are supported by their superiors. Only if the political level is aware of and accepts the costs and benefits of using PPPs can the issues around them be tackled and balanced appropriately with stability and predictability (OECD, 2012).

7. United Nations (2008), *Guidebook on Promoting Good Governance in Public-Private Partnerships*.

61. High level political commitment is also essential to mobilise the resources and capacities need for a successful PPP project. It is not enough to simply create PPP central units and satellite units or hire advisors, these efforts must be resourced adequately. This may be difficult to justify for one project but easier to rationalise where there is a high-level understanding and commitment to PPPs as a method of procurement.

62. In order for the political level to lend its full-fledged support to PPPs it must first understand the benefits and myths of PPP procurement. In other words, PPPs should be pursued for the right reason, to create value for money, and not as a second-best substitute for public procurement. The signals sent by high-level commitment or the lack of such a commitment are read by both government officials and the private sector. Government officials will react to such motivations by taking the project less seriously while private sector developers and investors will be less willing to participate in the project.

63. Political actors are sensitive to the views of their citizens to (varying degrees). It is therefore easier for politicians to be committed to projects that are perceived by the population as providing a tangible benefit to their lives. These projects will also be less vulnerable to political changes. This is an aspect of project selection that must be considered in addition to value for money and the business case. The project must plainly meet a social and economic need, and its delivery must be recognised as important by most shades of political opinions (United Nations, 2008).

64. An element of demonstrating that a project meets a social and economic need that is often overlooked is broad public consultation. Just as officials may have misunderstandings about private participation, the public may fear that services will become unobtainable or unaffordable. Such opposition can be very detrimental to a project especially if government actors change. Public consultations to create "buy-in" among those the project will serve are essential to create a supportive and resilient political landscape and to ensure that projects are in the best interests of citizens. Consultations should not be *ad hoc*, but rather a required element of the legal framework that take place on a structured and recurring basis. Failing to engage in broad public consultations is a risk that is often underestimated.

Institutional Structures and Legal/Regulatory Framework

65. The policy framework is critical for public-private partnerships even if much of the analysis tends to focus on the economics, risks and financial implications of PPPs. Pre-existing procurement and investment legislation and sector-specific legislation is often inadequate for public-private partnerships. At all stages of the PPP process, there must be a clear and transparent legal framework that both the public and private parties trust. Clarity in the regulatory framework will also help minimise the risk of corruption and prevent unethical behaviour. Where possible, contracts can be standardised to improve clarity and reduce transaction costs. In addition, since PPP contracts are long-term commitments and as demand for public services may change, clear rules for renegotiation must be clear and applicable to all parties (OECD, 2008).

66. Ready access to information at all stages of PPP procurement assists both the public and private partners and improves transparency, accountability and project management. For the public, transparency helps ensure that a project tender is fair and that the planned costs are open to public scrutiny. For private firms, access to PPP data, particularly from past tenders and from ongoing project evaluations, will provide a better chance for robust project development and competitive modelling. Transparency also has the potential to reduce opportunities for corruption (OECD, 2008).

67. Because public-private partnerships are contractual arrangements, compliance and enforcement issues are just as relevant as for any other type of contract. Successful PPPs require that the PPP contract align the objectives of the government and the private sector. Ensuring that the PPP contract is as comprehensive as possible can be an additional form of risk mitigation, but it is impossible and impractical to cover all contingencies, especially for long-term projects that run over 25 to 30 years. Therefore, a robust legal framework and dispute resolution mechanism is essential (OECD, 2008).

68. The ideal regulatory framework would ensure that all partners are accountable without over-regulating them. It would also protect the interests of all stakeholders and still create a favourable investment incentive. The use of regulatory powers requires that governments also pay attention to the setting of incentives that will elicit the desired behaviour from all parties (OECD, 2008).

69. Private investment will be facilitated if unnecessary red tape is removed and delays to approval processes are reduced. An effective regulatory framework implies careful evaluation of new regulations and systematic review of existing regulations to ensure that they are up to date, cost effective and consistent and deliver the intended policy objectives. This may require coordination of approval processes in specific circumstances to remove regulatory obstacles to PPP delivery, i.e. coordinating and streamlining multiple layers of regulation that may affect projects (on either one or multiple levels of government) (OECD, 2012). A one-stop-shop solution for PPPs, where all permits, licences and permissions necessary for the project can be obtained through one agency or office, is an example of such coordination. This could be provided at a PPP central unit or by the tendering authority, especially if the authority anticipates participating in a number of PPPs.

CHAPTER 2: PPP LEGAL FRAMEWORKS IN FOCUS COUNTRIES

This chapter provides an overview of the existing PPP legal and policy frameworks in Egypt, Jordan, Morocco and Tunisia as of October 1, 2014. It indicates that many changes and transitions are taking place as governments improve the institutional framework for PPP.

Main findings for each of the focus countries include:

- *Jordan: Has a good track record of successful infrastructure projects which have largely been procured under the existing Privatisation Law. A PPP law which will become the exclusive legal regime for PPPs is working its way through the ratification process and will bring greater clarity to the legal framework.*
- *Morocco: Has a tradition of public involvement in infrastructure through concession arrangements. A PPP central unit was created in 2011 and has cooperated closely with a number of IFIs on major projects. The central unit was also largely responsible for a new PPP law that was adopted by the House of Representatives in February 2014.*
- *Tunisia: There are a number of legislative texts and bodies involved with PPPs in Tunisia. A draft PPP law of 2013, yet to be implemented, would bring greater clarity to the framework and would formalise the role of a PPP central unit.*
- *Egypt: Has enacted specific PPP legislation and has created an active PPP central unit. However, there remains scope for concessions under a number of sector-specific laws.*

After reviewing this chapter, policy-makers will:

- *Be aware of the environment for PPPs in other countries and will be able to benchmark their own PPP framework and practices.*
- *Be familiar with a number of measures taken by governments to strengthen PPP frameworks in the MENA region.*

70. Sound legal and regulatory frameworks and clear policy are prerequisites for a successful PPP programme. Although the MENA region suffers from high risk perceptions and low investor appetite, exacerbated by recent security problems and political uncertainty, the four focus countries have recognised the importance of private sector participation in infrastructure development. They have also liberalised their infrastructure markets by the relaxing of restrictive regulatory measures, and have modernised, or are in the process of modernising their PPP legal and regulatory framework.

Country Focus: Jordan

71. Jordan has a good track record of successful projects in key infrastructure sectors. A number of large PPPs were successfully signed over the past five years. Examples include the Queen Alia International Airport Expansion Project⁸, Assamra Water Treatment Plant, Amman East Power Plant, and the Medical and Industrial Hazardous Waste Treatment Plant. However, Jordan initiated a number of PPPs which were later withdrawn mainly due to limited project preparation.

72. Jordan has a Privatization Law that is intended for the development of private sector participation in public services and infrastructure, and not specifically for PPP. In light of significant infrastructure needs and the move towards enhanced private sector participation in long-term partnerships, Jordan officially launched its PPP Programme on 23 June 2008. The Executive Privatisation Commission (EPC), a governmental authority established under the Privatisation Law, has been tasked with drafting a new PPP law and the development and implementation of a PPP programme as a continuation of its Privatization Programme.

Current PPP legal framework

73. Privatisation Law No. 25 of 2000, and Regulation No.80 of 2008 implementing the Privatisation Transaction are currently the main texts governing PPPs; they allow for all types of private sector participation in several sectors, other than mining, under various contractual structures, including BOT, BOO and BOOT.

74. New PPP legislation was recently approved by the Senate's Financial and Economic Committee and will be submitted to the Lower House of Parliament, then ratified by royal decree. It will become the exclusive legal regime for the procurement of PPPs in Jordan covering all economic infrastructure sectors – water, energy, transport, and information technology and concession, lease and management contracts. The draft PPP Law includes the following key provisions: (a) unified tender procedures applicable to PPPs to ensure a consistent approach across sectors and ministries; (b) develop an institutional framework by creating a PPP Commission to support line ministries during the procurement stage; (c) set out objectives for PPP development – including improvement of public infrastructure; mobilisation of private finance; and recognition of risk allocation between state and private sector; and (d) make provision for terms that are required in PPP contracts. The law will apply to all sectors except national defence, police and justice, core areas of health care and other identified activities. Jordan is expected to clarify its framework by explicitly excluding the application of the Privatisation Law and Privatisation Regulations to PPPs.

8. See Annex 1.

Current institutional and policy framework

75. The PPP institutional framework in Jordan is in transition, and there are still a number of specialist bodies with a strong role in the PPP process. The law gave the Executive Privatisation Commission (EPC) a leading role in the PPP programme in 2006 - to design the national policy for PPPs, including developing a draft PPP Law. EPC is a public body with financial and administrative independence, but reporting directly to the Prime Minister. It is not affiliated to any particular ministry and its budget is approved by the Privatisation Council and by the Council of Ministers. EPC responsibilities have been further expanded to include becoming a centre for PPP expertise and knowledge, and providing clear follow-up on PPP procedures. It has also become the point of contact for international organisations and other stakeholders in coordinating and facilitating the PPP process.

76. The Privatisation Council is a high-level body chaired by the Prime Minister, set up initially as part of the general privatisation initiative. It has an advisory role and also approves proposals for PPP projects. Its membership comprises the Minister of Finance, the Minister of Industry and Trade, the Minister of Planning, the Minister of Justice, the Governor of the Central Bank, the Chairman of the EPC, the minister relevant to the project, and four experienced specialists appointed by the Council of Ministers.

77. The PPP Committee was established in September 2008 pursuant to a Council of Ministers decision. Its role is to identify projects suitable for PPPs and to supervise feasibility studies. However, it has had limited involvement in PPP projects to date.

78. The draft PPP Law prepared by EPC proposes the creation of two new organisations: the PPP Commission and the PPP Council replacing the commissions that are currently responsible for PPP. The government has not yet endorsed any particular institutional framework but the roles and responsibilities of both new organisations to be created by the PPP Law should be clarified shortly. Better coordination among relevant government agencies to make large infrastructure projects successful in Jordan seems essential, as it has been reported that investors have to deal with an excessive number of government agencies in a dispersed decision-making process. Jordan might consider accelerating and streamlining the drafting of the new PPP law and the implementation of a functional PPP unit to ensure better coordination among government agencies involved in projects.

Country Focus: Morocco

79. Morocco has a longstanding tradition of concession projects, and state interest in the private management of public services in areas such as urban transport, water supply, electricity, sanitation and waste collection can be seen in the number of projects successfully completed. PPPs entered a new era in the 1990s with the first North African BOT power plant project at Jorf Lasfar, which achieved financial closing in 1997. During the same period, management of drinking water and electricity distribution, as well as sewage treatment for the Greater Casablanca area was delegated to a private company. This was followed by similar concessions in Rabat, Tangiers, and Tetouan along with various others, such as the El Guerdane irrigation project. All in all, about 50 PPP projects are said to have been awarded in Morocco, or are currently in operation. However, this track record relates to concession-based projects under concession laws and the effects and benefits of a well-designed PPP initiative remain to be seen.

Current PPP legal framework

80. Law 54-05 of 16 March 2006 on delegated management of public services governs the contracts signed by public institutions and local governments or their consortia, specifying the forms

and procedures for awarding concessions and fixing the rights and obligations of the concessionaire over the long term. The main sectors under the concession regime are: power generation, drinking water distribution, irrigation and sanitation, and the motorways network. At the regional level, concessions have been introduced for waste collection, urban transport, and public lighting. The legal framework seeks to ensure equitable risk sharing and give visibility and security to national and foreign investors interested in delegated management of public services and facilities. It is intended to signal Morocco's economic openness and its willingness to respect transparency in awarding delegated management contracts. However, the scope of the Law is restrictive and does not apply to concessions by central government authorities and state-owned enterprises. The promulgation of a new PPP-specific law (Law 86-12 of December 2012) might further benefit PPP development but this remains pending.

81. The final text of Law 86-12, the new PPP Law, was adopted by the House of Representatives on 12 February 2014. It draws heavily on French law and outlines the principles governing the award of PPP contracts and their content. It will allow the use of PPPs in sectors where it is not appropriate to allocate operating risks to the private party including non-commercial sectors of a social infrastructure nature such as hospitals. The law will enter into force on the effective date of its implementing regulations⁹.

Current institutional and policy framework

82. The PPP Central Unit was established in September 2011 within the Ministry of Economy and Finance and has cooperated closely with a number of international institutions such as the European Investment Bank and the International Finance Corporation. This unit was notably in charge of the drafting and scoping of the new PPP law. It may also play a significant role in the development of PPP pilot projects.

83. In Morocco, the decision-making process for major infrastructure projects involves many parts of central government and can also be initiated at the municipal level. Projects are likely to involve a wide range of stakeholders, including decision-making committees across ministries for centrally procured projects. Although there is a desire and impetus at the local level to develop PPP projects, there are some concerns as to whether municipalities have sufficient legal powers to award contracts. Legal reforms to remove this ambiguity will enhance investor confidence and the scope of local authorities to develop projects in line with local needs.

84. Although the Moroccan government seems keen to develop PPPs in different sectors and is adopting institutional reforms to facilitate this, a clear and specific PPP policy remains to be defined.

Country Focus: Tunisia

85. A concessions law, enacted in 2008 based on Tunisia's history of concession projects, consolidated provisions that were previously dispersed across general administrative law. The concessions law aimed to promote investment by providing greater clarity and stability under the general framework than the numerous sectorial laws that existed previously. However, political and social instability since 2011 has put a damper on investor appetite for long-term agreements with the government of Tunisia.

9. Gide Loyrette Nouel, July 2014, Newsletter. Available at: www.gide.com/sites/default/files/gide_france_northafrica_ohada_newsletter_no1_en_jul2014.pdf.

Current PPP legal framework

86. In Tunisia, PPPs are governed by a number of legislative texts. In November 2013, two decrees (Decree N° 2013-4630 and 2013-4631), creating a concessions monitoring unit and providing more detailed guidance on the preparation and roll-out of concession procurement procedures, brought greater clarity and transparency to the overall regime of Concession Law No. 2008-23. The Decrees govern procurement of all PPP concession projects in Tunisia, except where there is a sector specific law, as in the case of energy, sanitation, telecommunications and the digital economy. It aims to improve procedural transparency, and to promote equality among applicants, neutrality in the selection process, and competition in the granting of concessions. However, no concession agreements were implemented under the 2008 Concession Law prior to 2010-2011 or subsequently.

87. This framework is due to be further expanded with legislation specific to PPPs: a draft PPP law is under consideration at the National Constitutive Assembly. Provided that existing sector-specific laws (for ports, energy or telecommunications, for instance) are aligned with this new framework, it will help make infrastructure investment opportunities more attractive for the private sector and ensure smoother implementation.

Current institutional and policy framework¹⁰

88. The institutional framework for concessions and PPPs in Tunisia is currently laid out under the November 2013 Decree on Concessions (n° 2013-4631 of 18 November). The main body mandated to coordinate, provide advice on and monitor PPPs and concessions is the Unité de suivi des concessions (or concessions tracking unit, USC). Established under the Prime Minister's Office (PMO), it replaced an ad-hoc committee on concessions that existed within the PMO since 2008. The USC is responsible for providing support to public entities throughout the procurement process, including the preparation of guidelines and model specifications, capacity building, and encouraging concession projects in Tunisia's regions. The USC is seen as the predecessor of the National PPP Unit, which is provided for in the draft PPP law of 2013 which has yet to be implemented.

89. The USC (and the future PPP Unit) is supported by an interdepartmental committee with six members appointed every three years by the head of government. Members include representatives of the Ministries of Economy and Finance, Public Works, and Planning and Development and the committee is chaired by the director of USC. It is responsible for reviewing all PPP and concessions projects, and supporting the USC is all aspects of upstream project preparation (from calls to tender through to contract negotiations with the selected bidder).

90. The Ministry of Economy and Finance also houses a body tasked with PPPs, the *Direction générale des partenariats public-privé* (DGPPP) whose main role is to monitor the fiscal and financial risks of public spending on PPP projects. The DGPGP has also contributed to developing the draft legislation on PPPs, and will remain involved in the preparation and negotiation of PPP projects once the new PPP regime is in place. The *Direction générale d'audit et de suivi des grands projets* (DGASGP), also within the Ministry of Economy and Finance, is responsible for the audit and

10. The OECD, in co-operation with the USC and the African Development Bank, has been engaged with the Government of Tunisia as it reforms its institutional framework for PPPs. As part of the *Operationalising PPPs in Tunisia* project, funded by the Deauville Partnership Transition Fund, the OECD expects to publish reports in the second quarter of 2015 that examine the legal, institutional and budgetary frameworks for PPPs in the country.

monitoring of large projects, and accordingly has broad powers regarding the procurement and monitoring of major infrastructure projects.

91. It is important to note that the concessions and PPP regime in Tunisia is separate from the public procurement regime (*régime des marchés publics*), which is governed by the 2014 Decree on Public Procurement (n° 2014-1039 of 13 March 2014). Accordingly, public procurement that does not involve concessions or PPPs is managed by a separate set of institutions.

Country Focus: Egypt

92. Egypt has enacted specific PPP legislation providing clear and significant legal investment protection, in line with internationally recognised standards, and has established a central PPP unit.

93. Egypt has a long-standing tradition of concessions, starting with the Suez Canal in the 19th century, which was further developed through the country's concession legislation of 1947 (Law No. 129 of 1947; revised in 1958) that still exists today. By derogation to the 1947 concession law, sector-specific laws were enacted in the late 1990s for electricity, airports, specialised ports, and the railway and roads sectors, allowing more flexibility in the drafting of related concession agreements. In light of a growing government interest in pursuing infrastructure PPPs, the traditional concessions model was abandoned in recent years in favour of a PPP policy. A PPP programme was initiated in 2006, and called for comprehensive legislation to govern and regulate different PPP schemes. A PPP law was enacted in 2010.

94. The 2010 PPP law has yet to significantly increase PPP investment. Instability since 2011 has delayed projects, but there is currently a renewed emphasis on the role of PPPs, confirmed by the Minister of Finance in March 2014. The PPP Central Unit role in preparing a portfolio of new projects, and conducting pre-feasibility studies for projects which will be brought to the PPP Supreme Committee for approval, has also recently been confirmed.

Current legal framework

95. Law No. 67 of 2010 regulating Partnership with the Private Sector in Infrastructure Projects, Services and Public Utilities is the basis of the PPP legal framework. This PPP Law is a comprehensive and reasonably workable legal framework for PPPs, but the same cannot be said for the granting of concessions in general; these can still be undertaken under numerous pieces of older legislation. The PPP Law only applies to projects procured on a PPP basis with a minimum investment value of EGP 100 million (slightly above €12 million). There are no legal restrictions on the sectors eligible for PPP: projects can be concluded in commercial sectors, such as energy, transport, water, and oil and gas, and for non-commercial government services such as schools, hospitals and housing. If any of the criteria for dealing with a project under the PPP Law are not met, the relevant sector-specific law applies. Although the 2010 law provides sound legal investment protection provisions and asserts the government's firm commitment to moving forward with its PPP agenda, it appears to have not yet obtained many results and several regulatory loopholes remain. The law may overlap with other procurement or sector-specific laws (e.g. the Tenders and Bids Law of 1998), and several public authorities other than the ones it identifies may request oversight on projects or procure under different regimes. The legislative framework for PPPs therefore remains to be streamlined.

Current institutional and policy framework

96. A PPP Central Unit was established by the Ministry of Finance in 2006 as the main entity responsible for the initiation and implementation of PPP projects in Egypt. The Unit drafted the PPP law and initiated PPP projects in parallel. The 2010 PPP Law made the establishment of the PPP

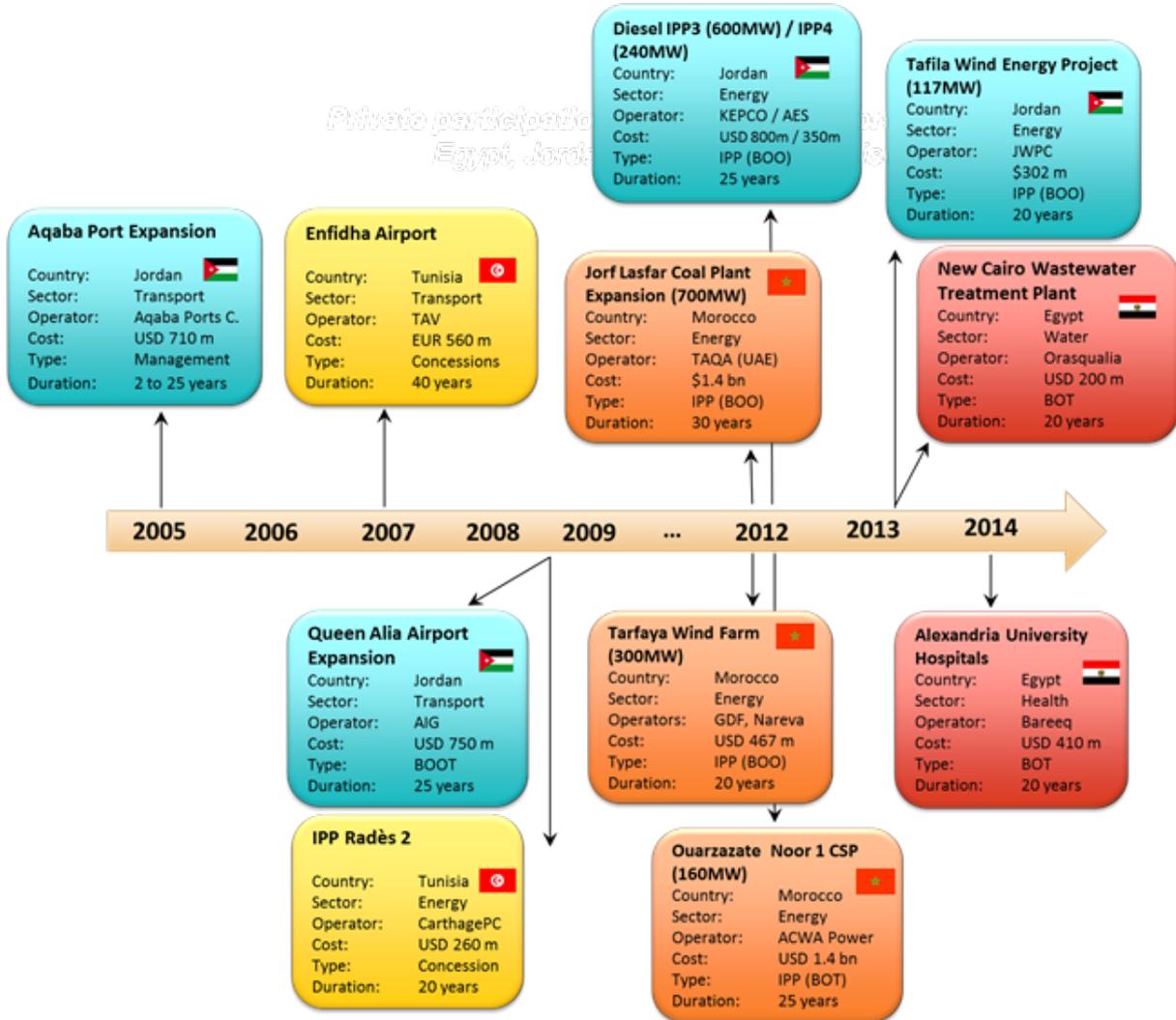
Central Unit official. It provides that the Minister of Finance stipulates the structure of the unit, while the Executive Regulations of the Law determine the administrative and financial framework for operations. This includes the Unit's relationship with other public organisations, its operational system and employee remuneration. In practice, the Unit is increasingly involved in the negotiation and execution levels of PPP bids and contracts. The law also provides that PPP "satellite units" are to be established, whenever necessary, within the different administrative authorities.

97. The law provides that a Supreme Committee for Public Private Partnership Affairs shall be formed and chaired by the Prime Minister. The PPP Supreme Committee is notably responsible for setting an integrated national PPP policy, endorsing use of the PPP structure for administrative authority projects, monitoring the financial resources allocation to meet obligations resulting from PPP contracts, issuing rules and general criteria for PPPs, and endorsing standard PPP contracts for use in different sectors.

98. The PPP Central Unit is to provide technical, financial and legal expertise to the PPP Supreme Committee as well as to the PPP satellite units. It is responsible for setting and following up on procedures for the tendering and conclusion of PPP contracts, as well as their execution. In addition, the Unit is responsible for preparing and publishing studies, information and statistics in relation to PPP projects, both locally and internationally, and for the selection of advisers for the tendering and contracting of PPP projects. The consent of the PPP Unit is necessary for the development and granting of PPP projects in Egypt, and the Supreme Committee for PPP Affairs must approve PPP tenders.

99. Further policy work is still needed on promoting and implementing a long-term PPP programme, raising awareness, and training public servants, especially in line ministries. Allocating further resources to the PPP Central Unit would reduce delays in project approval and execution.

Figure 5. Successful PPP projects in focus countries (2005 to today)



Source: OECD (2014)

CHAPTER 3: BARRIERS APPLICABLE TO PPP PROJECTS IN THE MENA

This chapter examines the main barriers and obstacles to the implementation of infrastructure projects through Public-Private Partnerships (PPPs) throughout the Middle East and North Africa – across all sectors. Extensive consultations with international financial institutions involved in the region, together with private sector operators and financiers, have led to the identification of common issues in the design, use and implementation of PPP projects.

Barriers identified and steps to address them include:

- *Political/Legal: Counterparty risk remains a dominant issue for investors. Measures to address these concerns include sovereign guarantees, political risk insurance and a clear legal and regulatory framework including robust dispute resolution provisions.*
- *Financial: The reluctance of many commercial banks to lend beyond a project's construction period creates refinancing risk which is difficult to address. Foreign exchange risk is a challenge that can be mitigated by funding the project in local currency, by paying project company revenue in hard currency and by hedge contracts.*
- *Capacity: Government experience and expertise in PPP projects is sometimes lacking. The creation of well-resourced and empowered PPP central units and satellite PPP units in tendering authorities is essential in this regard.*
- *Tender/contract-level risks: Governments should prepare carefully for PPPs including completing demand and feasibility studies and obtaining permits and approvals where possible. The tendency to produce very detailed tender document should be resisted, functional output requirements are preferable and allow the benefit of private-sector innovation.*

After reviewing this chapter, policy-makers will:

- *Have a better understanding of the issues and challenges facing investors considering participating in MENA-region PPP projects.*
- *Be better able to draft PPP tenders to benefit from the private sector's ability to innovate and therefore provide value for money.*
- *Be better able to draft PPP tenders that allocate risks in a manner more likely to be attractive to private investors.*

100. The OECD has engaged in intensive consultations with international financial institutions involved with PPPs and other forms of project finance in the MENA region. The knowledge gained from these consultations has been combined with OECD experience in Jordan, Egypt, Tunisia and Morocco, and broader OECD expertise to identify barriers facing PPP development in the region. Certain themes have emerged as inhibiting PPP projects specifically, and private infrastructure investment generally, in the MENA region. These themes are reviewed below.

Political/legal issues

101. Counterparty risk is a dominant issue for potential private-sector investors. The private sector's counterparty in a PPP is a public authority, agency or ministry. Regardless of the nature of the public sector signatory to the project agreement, the ultimate public counterparty is simply the state. It is very likely that private-sector investors and/or their creditors will want comfort and assurance that all obligations of the contracting authority for the duration of the contract are obligations that bind the sovereign and are enforceable against the sovereign. This is true not only in MENA, but in PPP projects worldwide. The enforceability of project agreement obligations against the state can be evidenced in two ways, through an examination of the status at law of the contracting authority or by way of an explicit sovereign guarantee. Governments are often reluctant to provide a sovereign guarantee due to their desire to avoid contingent liabilities, but failure to provide one may sabotage attempts to attract private investment and will result in higher bid prices, jeopardising value for money.

102. Even when a sovereign guarantee is provided or investors are otherwise satisfied that the public counterparty's obligations are obligations of and enforceable against the state, counterparty risk will remain high and may deter some developers and investors. Due to often unstable political environments and profound fiscal challenges, most MENA governments hold non-investment grade credit ratings, meaning that any obligations of the state will also be considered non-investment grade from a credit perspective. For many institutional investors and commercial banks, this will disqualify the project from consideration. Political risk insurance, if available, usually covers 90% of an investment and is applicable in certain circumstances enumerated in the insurance contract. Such policies do not replace the credit risk of the public counterparty with that of the political risk insurance provider – they may provide comfort to investors, especially equity investors, but they are less likely to satisfy potential creditors. However, these policies have an additional benefit: the insurance provider may be able to intervene to address problems before they worsen and lead to an insurance claim.

103. Political instability has characterised much of the MENA region since 2010 with some countries seeing a number of changes in government and constitutional rearrangements. Apart from the reality and perceptions of heightened political risk, transitional governments feature numerous personnel changes at senior political and official levels. This has resulted in delayed decision making and lower investor confidence, since decisions may be overturned by subsequent ministers or governments. Continuity is important in PPPs; transactions are complicated and as a project evolves challenges will inevitably arise that require a state decision. It is essential that someone with deep knowledge of the transaction is available and empowered to make these decisions, otherwise substantial delays may occur.

104. It has also been reported that some MENA governments and government officials are suspicious of the private sector and uneasy with private-sector participation in the provision of public services. These views are fuelled by the sometimes corrupt practices of previous governments, and by the fact that many regional economies were, until very recently command economies over which the state still maintains a high level of control. This state-centric mind-set still permeates much of the

bureaucracy and the political level. Since high-level political support and capacity at the official level is absolutely vital to advance PPP projects, these attitudes are not helpful.

105. Since PPP arrangements are contractual, transparency and the rule of law are paramount. Dispute resolution should be transparent, third-party, timely and enforceable. Reducing the legal risks for contracting parties increases the attraction of PPPs for investors and therefore limits the risk premium they request. The manner in which the law is applied and interpreted, and above all, the practices of the public bodies involved in PPP projects, will play a large role in determining the success of a PPP programme. The additional cost linked to financing can become even more significant when the legal and regulatory framework is not designed to strengthen investors' legal position. Lack of confidence in the legal framework and the rule of law will also be reflected in fewer offers being submitted, reducing competition and value for money, or no bids at all (OECD, 2010).

106. Improper criteria in project location choice have been involved in a number of failed projects studied by the ISMED programme. In one example, the proposed location for a concession-based PPP was determined on the basis of the authority owning the land in question and a political desire to promote regional development. There was no evidence of demand for the service to be provided at the selected location, and consultations with potential users confirmed that it would be very low. In another case, a MENA government ignored an IFI recommendation on location that had been based on studies of demand and feasibility, and selected a site based on political considerations. Both projects failed to attract any qualified bidders. Location should depend on the business case and economics of a particular site, supported by rigorous quantitative studies conducted prior to tendering. This is especially true for concession-based PPPs.

107. A clear legal and regulatory framework for PPPs has not been created in all MENA countries. Of the four ISMED focus countries, Jordan, Egypt, Tunisia and Morocco, only Egypt has passed a PPP Law and created a permanent PPP central unit at the Ministry of Finance¹¹. This reduces certainty of process, decreases investor confidence and may result in confusion on the part of government officials as to their responsibilities and roles. It will also mean that transactions are not conducted in a systematic manner that allows capacity building and a learning process. Rather, each transaction will be conducted on a more ad-hoc basis, increasing costs, decreasing value for money, and lowering developer and investor confidence in the process.

Financial issues

108. PPP projects are capital intensive, tend to be long-term (20-30 years), and are generally perceived as risky, especially during the construction phase. These challenges and the realities of the MENA-region, mean that private-sector infrastructure financing can be difficult to secure. For any given project, private investment generally comes from two sources, foreign or domestic. The barriers to both foreign and domestic investment in MENA-region PPPs are considered below.

Foreign Investors

109. Commercial banks have traditionally been the source of finance for PPPs, especially in Europe, but also in the MENA region. Increases in prudential requirements in the wake of the financial crisis, most notably BASEL III, have seen tighter capital and risk weighting requirements imposed on financial institutions. This has reduced the enthusiasm of banks to lend to infrastructure projects,

11. Morocco and Jordan are in the process of passing PPP laws, but as of the date of publication these have yet to come in to force.

especially in regions seen as risky, such as MENA, where such loans would attract a higher risk weighting and therefore require greater capital reserves. However, some banks will still be willing to lend to these projects, if for no other reason than to maintain their relationships with clients that may wish to participate. These banks will be very reluctant to lend past the construction phase, which, depending on project complexity, will typically take 2-3 years and mostly less than five years. Bank loans will need to be refinanced or “taken out” at end of the construction period. The need for refinancing or construction loan take-out is currently a significant barrier to private sector investment in MENA region infrastructure.

110. In OECD countries, PPP cash-flows are seen as well suited to long-term institutional investor needs, as they are long-term, matching the liabilities of insurance and pension plans, and are often direct obligations of a highly-rated government. Institutional investors that are required by regulatory oversight or their governing documents to make only high credit quality investments have increasingly participated in PPP infrastructure, as both equity and debt investors. Such investors will not be willing to invest, or will be prohibited from investing, in higher credit risk investments such as MENA region infrastructure.

111. The public counterparty in a PPP will typically desire to pay its obligations in local currency, since its revenue is most likely denominated in local currency and it ultimately controls the local currency. This can create a problem for foreign investors, as revenue from the project will be in local currency while debt service and other expenses will likely be incurred in foreign currency. In other words, the developer and/or investors will face foreign exchange (forex) risk¹². Foreign exchange risk is usually hedged through a derivative contract, a swap, a future or a forward contract. These contracts are widely available in the over the counter market for frequently traded liquid currencies, but are much less likely to be available for MENA-region currencies. If such a product can be found, it may be prohibitively expensive, increasing financing costs and jeopardising value for money. Bespoke hedging options may be available, but again these will tend to be expensive.¹³ For a foreign developer or investor, it is far preferable that the government take foreign exchange risk.

112. Finally, regarding equity investors especially, the return demanded may be too high to justify procurement by PPP. For example, the return on equity received on PPPs in OECD member states is typically 11%-13%. In light of the increased risks, (real and perceived) of doing business in many MENA countries, equity investors will typically require a 20%-25% return, which may make value for money for the state questionable.¹⁴

Domestic Investors

113. Relying on domestic private investors to fund PPP infrastructure projects avoids many of the issues raised by foreign investment and is therefore preferable in some ways. However, there is often limited domestic funding available, and the avoidance of foreign investment may be difficult, as the contractors and consortia with the necessary skills will often be multinational firms that will both invest equity and bring their pre-existing banking and financing arrangements to the project. In

12. Note the foreign exchange risks considered herein are those arising from exchange rate volatility only. Risks related to controls over conversion of local currency or restrictions on the ability to transfer funds out of the jurisdiction can be mitigated through political risk insurance and are not considered above.

13. See the June 2013 ISMED Newsletter at: http://www.oecd.org/mena/investment/Issue1_June2013.pdf

14. Return on equity figures are based on ISMED Programme staff member experience and OECD consultations.

countries where there is some private domestic investment capacity, there may need to be a review of domestic sector prudential requirements, especially in the banking sector, as these may restrict the ability to participate in infrastructure PPPs.

114. Domestic financial institutions and institutional investors in the MENA region tend to be highly exposed to sovereign debt, be it out of conservatism, prudential requirements, or a necessity to fund the state's large fiscal deficits. Whatever the motivation, this exposure may reduce their appetite to make infrastructure investments, as this is also ultimately an exposure to the state.

Capacity

115. Capacity has been continually raised as an issue in ISMED Programme consultations. PPP transactions are complex, and government officials usually lack the experience and expertise to properly engage with private-sector counterparties.

116. There are currently very few projects in the region that feature private-sector participation and fewer still that can be considered to be PPPs. The small number of successful transactions results in a circular problem: governments do not have a track record and have not built capacity in closing transactions, and are therefore less able to attract investment and complete transactions. A history of successful projects is one of the most important predictors of future successful projects.

117. The creation of a PPP central unit is an important step in building this needed capacity. Of the four ISMED focus countries, only Egypt has created a dedicated PPP Central Unit at the Ministry of Finance. In Tunisia, both the Prime Minister's Office and the Ministry of Finance currently have PPP Units and it is not clear if this situation will be permanent. Morocco and Jordan currently lack central PPP units. The Egyptian PPP Central Unit is under-resourced and understaffed in light of the significant need to renew the country's infrastructure and the government's ambitious plans to do so by using PPPs.

118. Capacity building cannot be limited to the formation of a PPP central unit. Line ministries, agencies and authorities must also have an understanding of PPPs if they are to work successfully with a PPP central unit. While a central unit may be vital to the successful tendering and closing of the transaction, it is the line ministry or procuring authority that must administer the project for the duration of the project agreement. This will require a core of expertise in PPPs at the procuring authority and an in-depth knowledge of the project agreement, making the creation of a satellite PPP unit at the authority or ministry essential. Line ministries and agencies sometimes resist working with PPP central units, as they prefer to contract under more familiar public procurement procedures and may see the central unit as a threat to their authority. Training will be required in these cases so that all government participants understand the functioning and benefits of PPPs and play their crucial role in project success.

Tender/Contractual level

Preparation and permitting risk

119. Due to the misunderstanding that PPPs bring a free asset and do not require much effort or commitment by the state, governments have sometimes gone to tender without demand and feasibility studies and without obtaining basic information that is essential in formulating bids, for example on geographic, geological, hydrological and meteorological factors. When this point was raised by the OECD with one MENA region government official, the response was that the private sector would do all the work to determine if a project was viable or if there were problems with the proposed location. This is not economically efficient, as it forces bidders to replicate the same evaluation work, and the

increased costs will simply be passed on to the government as more expensive bids. And since these costs must be incurred by bidders with no guarantee of being awarded the contract, they may deter bidders, lessen competition and impact value for money. In addition, by leaving bidders to determine demand levels and feasibility, there is an increased risk of "optimism bias" – the natural tendency for any analyst with an interest in the success of a project to focus on optimistic rather than pessimistic outcomes (OECD/International Transport Forum, 2013¹⁵). While this may result in a lower bid price in the short-term, the project will almost invariably become troubled and require renegotiation, thereby increasing costs and impacting value for money. Any initial cost savings from leaving the preparatory work to the private sector will be illusory.

120. Many MENA countries have highly centralized and bureaucratic government structures. Projects will often require the approval and/or participation of numerous government departments and agencies that may not be aware of it or share its goals, so the required permits and approvals are not always readily forthcoming. This is a particular issue for foreign companies and investors, who may be unfamiliar with navigating the region's often complex political and bureaucratic environment. There are two potential solutions: 1) the creation of a "one-stop-shop" providing all required approvals, permits and licences in one office or agency, or 2) the tendering authority obtains approvals, permits and licences on behalf of the developer.¹⁶ This is about which party takes the risks involved in obtaining these approvals, and clearly, the tendering authority, which is part of the government, is in the best position to coordinate with other agencies of the same government.

121. The two issues above, responsibility for preparatory work and responsibility for obtaining permits and approvals, are examples of governments making it unnecessarily difficult, risky and expensive for bidders to participate in the PPP procurement process. Given the multitude of investment opportunities in a globalised world and the well-known challenges facing the MENA region, governments should seek ways to make bidding more attractive and avoid creating additional barriers. This will maximise competition, the probability of project success, and value for money.

Functional Outputs vs. Input Specifications

122. Governments inexperienced in PPP procurement will often write very complex tender documents containing detailed technical specifications. This risks losing one of the main benefits of PPPs – the ability of the private sector to apply its innovation, experience and expertise to lower costs while providing the service desired. PPPs can achieve major cost savings – up to 33% in some cases – through a radical project redesign and changes in construction techniques, if the private party is free from detailed technical specifications. By specifying outputs (quality of infrastructure and availability) rather than inputs, PPPs also assign construction and design risks to the SPV rather than the public party (OECD/International Transport Forum, 2013). Tender documents should focus on functional outcomes, not technical requirements.

15. Kahneman D. and A. Tversky A. (1979), "*Intuitive Prediction: Biases and Corrective Procedures*", in: S. Makridakis and S.C. Wheelwright (Eds.), *Studies in the Management Sciences: Forecasting*, 12, Amsterdam.

16. It is suggested that the tendering authority obtain approvals, permits and licences to the extent possible. It will not be possible for the tendering authority to obtain all of them, including, for example, building permits that may require a detailed final design.

PPP RISK MATRIX: BARRIERS TO PPP INVESTMENT IN FOCUS COUNTRIES

123. The OECD has engaged in a country-by-country review of the main risks and barriers identified in PPP projects over the last decade in Egypt, Jordan, Tunisia and Morocco. The results highlight that, contrary to some perceptions, political risk is not the greatest barrier to PPP investment, but rather legal, institutional and operational issues dominate barriers identified.

Methodology

124. The OECD identified key infrastructure projects in each of the four focus countries that involved private sector participation in the last decade (starting in 2005). For each project, the main risks and barriers faced were identified through OECD assessment missions in the applicable country, consultations with IFIs involved, and desk research. Seventeen types of risks and barriers were identified and grouped into four categories, political, financial, legal and institutional (including government capacity), and operational risks.

125. For each of the 69 projects examined¹⁷, barriers encountered were grouped into one of each of the 17 individual risk categories. This has allowed the OECD to develop a snapshot of the most frequent and relevant barriers and obstacles encountered that inhibit private sector participation in infrastructure in the four countries. There is a degree of subjectivity involved in the assessment of the relevance of the barrier and a government's ability to mitigate the risk and it should be noted that the OECD is not attempting to provide a quantitative assessment of risk. What follows is intended to highlight the relative frequency and importance of risks and barriers faced by private sector infrastructure investors in the four countries of focus.

Analysis of Results

126. In each of the focus countries, legal and institutional risks are the most frequent barriers identified. Together with operational risk, legal and institutional barriers make up the majority of obstacles encountered, with a low of 52% in Egypt, 64% in Jordan, 65% in Tunisia and a high of 71% in Morocco. This is consistent with the major findings of the handbook but runs contrary to the view sometimes expressed that political risk is the most important factor inhibiting investment in the region. Political risk is cited as a barrier in a low of 11% of projects in Morocco, rising to 16% in Jordan, 24% in Egypt and 25% in Tunisia, the percentages for the latter two reflecting political events since 2011.

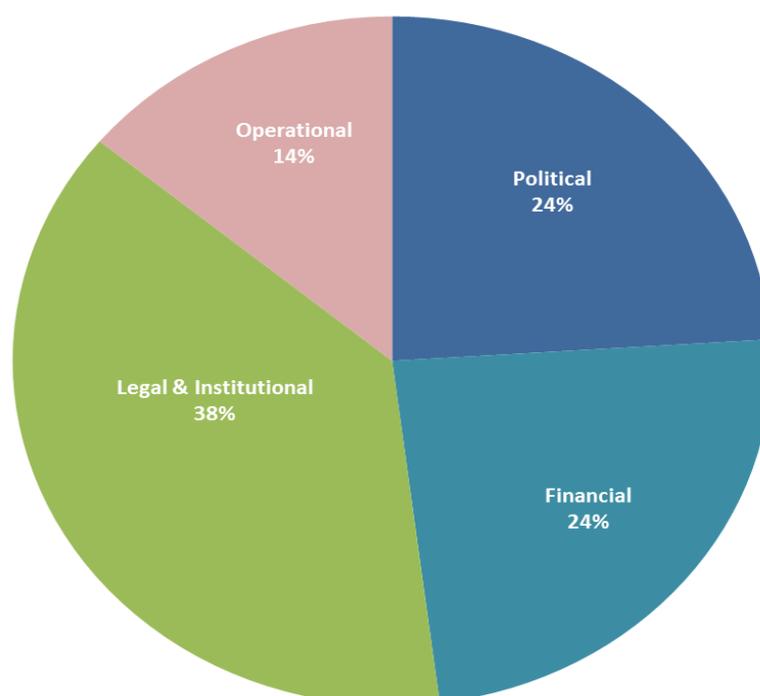
127. These results should be seen in a positive light. Political risk, real or perceived, cannot be changed quickly. However, the tools to address legal and institutional barriers to investment are within the hands of government and can be addressed much more readily than perceptions of political risk. What these results suggest, is that governments can have a real impact on private sector investment in infrastructure by focusing on reforms in areas such as project scoping and preparation, capacity, interagency cooperation and legal and institutional frameworks. Not coincidentally, the proposals for reform contained in this publication mirror these priorities.

17. See Annex 2.

Egypt: Barriers to Private Participation in Infrastructure

EGYPT					
Risk categories	Barriers to Private Infrastructure Investment	Frequency (number) (%)		Relevance*	Ability to mitigate*
Political	Political & Civil Disturbance	10	20%	High	Low
	Corruption & Lack of transparency	1	2%		
	Public Perception & Social Opposition	1	2%		
	Change of Law & Breach of Contract	na	na		
Financial	Concessional Funding (lack of private funding)	4	8%	Medium	Medium Low
	Transfer of Funds	na	na		
	Foreign Exchange (inc. devaluation risk)	3	6%		
	Counterparty Risk (lack of sovereign guarantee)	5	10%		
Legal & Institutional	Project Scoping (incl. contract design & risk allocation)	7	14%	Medium	Medium High
	Government Capacity	3	6%		
	Interagency Coordination	4	8%		
	Bidding Process	na	na		
	Legal Framework (incl. permits & licensing)	5	10%		
Operational	Land Availability and Ownership	4	8%	Low	High
	Choice of Location	1	2%		
	Construction Risks	1	2%		
	Social & Environmental Risks	2	4%		

Egypt: Barriers by frequency of occurrence

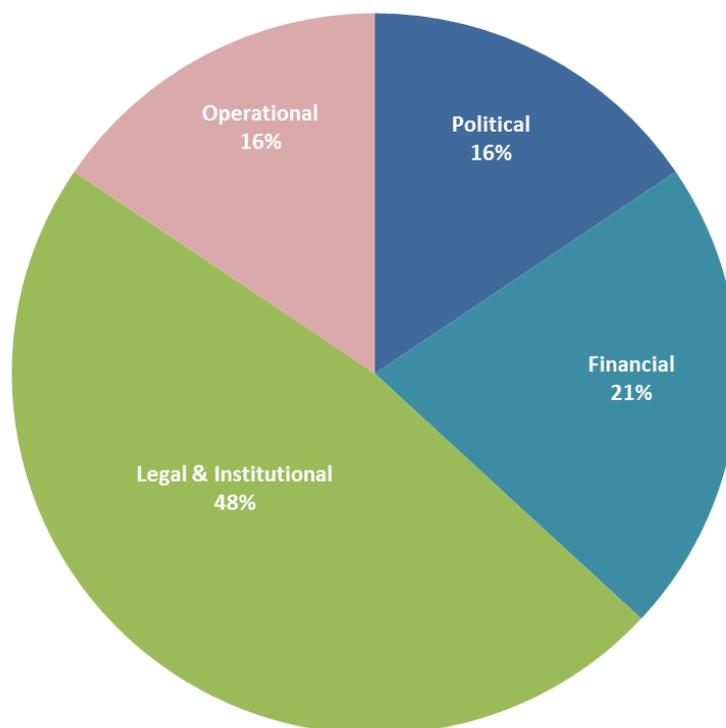


Source: OECD (2014)

Jordan: Barriers to Private Participation in Infrastructure

JORDAN					
Risk categories	Barriers to Private Infrastructure Investment	Frequency		Relevance*	Ability to mitigate*
		(number)	(%)		
Political	Political & Civil Disturbance	na	na	Medium High	Low
	Corruption & Lack of transparency	na	na		
	Public Perception & Social Opposition	3	16%		
	Change of Law & Breach of Contract	na	na		
Financial	Concessional Funding (lack of private funding)	2	11%	Medium High	Medium Low
	Transfer of Funds	na	na		
	Foreign Exchange (inc. devaluation risk)	na	na		
	Counterparty Risk (lack of sovereign guarantee)	2	11%		
Legal & Institutional	Project Scoping (incl. contract design & risk allocation)	2	11%	Medium Low	Medium High
	Government Capacity	2	11%		
	Interagency Coordination	na	na		
	Bidding Process	2	11%		
	Legal Framework (incl. permits & licensing)	3	16%		
Operational	Land Availability and Ownership	1	5%	High	High
	Choice of Location	na	na		
	Construction Risks	na	na		
	Social & Environmental Risks	2	11%		

Jordan: Barriers by frequency of occurrence

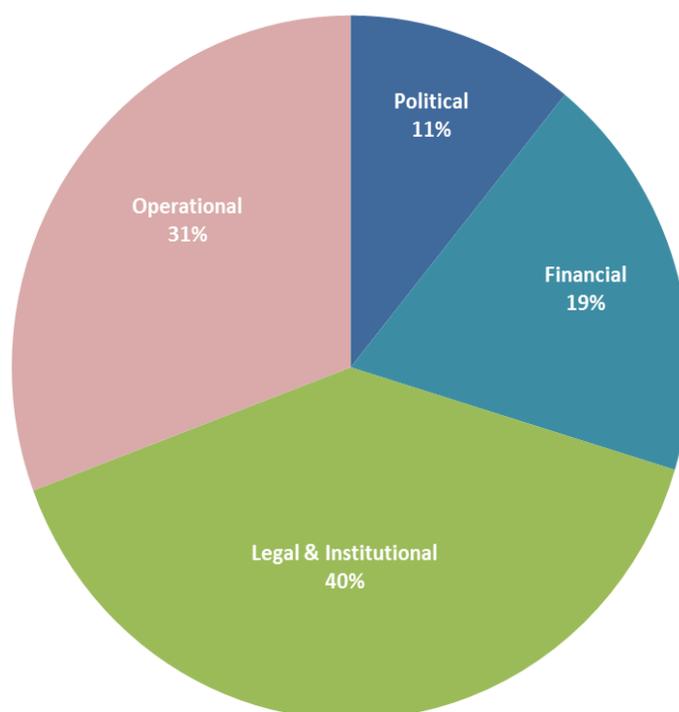


Source: OECD (2014)

Morocco: Barriers to Private Participation in Infrastructure

MOROCCO					
Risk categories	Barriers to Private Infrastructure Investment	Frequency (number) (%)		Relevance*	Ability to mitigate*
Political	Political & Civil Disturbance	na	na	Medium Low	Low
	Corruption & Lack of transparency	na	na		
	Public Perception & Social Opposition	4	11%		
	Change of Law & Breach of Contract	na	na		
Financial	Concessional Funding (lack of private funding)	7	19%	Medium High	Medium Low
	Transfer of Funds	na	na		
	Foreign Exchange (inc. devaluation risk)	na	na		
	Counterparty Risk (lack of sovereign guarantee)	na	na		
Legal & Institutional	Project Scoping (incl. contract design & risk allocation)	2	6%	Medium High	Medium High
	Government Capacity	5	14%		
	Interagency Coordination	2	6%		
	Bidding Process	1	3%		
	Legal Framework (incl. permits & licensing)	4	11%		
Operational	Land Availability and Ownership	6	17%	Medium Low	High
	Choice of Location	na	na		
	Construction Risks	1	3%		
	Social & Environmental Risks	4	11%		

Morocco: Barriers by frequency of occurrence

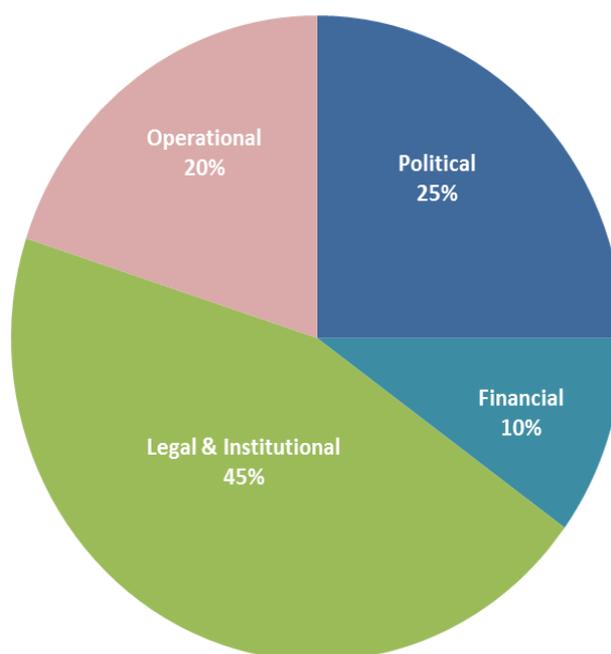


Source: OECD (2014)

Tunisia: Barriers to Private Participation in Infrastructure

TUNISIA					
Risk categories	Barriers to Private Infrastructure Investment	Frequency (number) (%)		Relevance*	Ability to mitigate*
Political	Political & Civil Disturbance	2	10%	High	Low
	Corruption & Lack of transparency	3	15%		
	Public Perception & Social Opposition	na	na		
	Change of Law & Breach of Contract	na	na		
Financial	Concessional Funding (lack of private funding)	2	10%	Medium - High	Medium Low
	Transfer of Funds	na	na		
	Foreign Exchange (inc. devaluation risk)	na	na		
	Counterparty Risk (lack of sovereign guarantee)	na	na		
Legal & Institutional	Project Scoping (incl. contract design & risk allocation)	3	15%	Medium - High	Medium High
	Government Capacity	1	5%		
	Interagency Coordination	2	10%		
	Bidding Process	na	na		
Operational	Legal Framework (incl. permits & licensing)	3	15%	Medium - Low	High
	Land Availability and Ownership	2	10%		
	Choice of Location	2	10%		
	Construction Risks	na	na		
	Social & Environmental Risks	na	na		

Tunisia: Barriers by frequency of occurrence



Source: OECD (2014)

CHAPTER 4: PPP PROJECTS IN THE TRANSPORTATION & LOGISTICS SECTOR

Transportation and logistics rank high on the development agenda of most MENA governments, as a catalyst for growth and socioeconomic integration. This chapter focuses on PPP projects in the transportation and logistics sectors throughout the MENA region, with particular emphasis on Egypt, Jordan, Morocco and Tunisia. Key barriers are identified and potential policy responses to these barriers proposed. A number of barriers are common with other sectors, while others are more specific to transport.

Findings include:

- *Type of project: Certain characteristics may increase the probability that a transportation infrastructure project will be successful. These include standardised construction requirements and services and a small number of sophisticated users.*
- *Traffic risk is vital: Investors are reluctant to face traffic/demand risk. This is true not only in MENA but in OECD countries as well. Governments can address this issue by compensating developers on the basis of the availability of infrastructure or can devise mechanisms to share traffic risk.*
- *Fuel Subsidies: Transport PPPs may be susceptible to distortions caused by fuel subsidies. Reforms to these subsidies may be necessary for successful transport PPPs.*
- *Location: Location is vital in a transport PPP project, especially if concession-based. Location should be based purely on traffic/volume flows and not political considerations.*

After reviewing this chapter policy makers will:

- *Have a better understanding of the type of transportation PPP projects that are more likely to be successful.*
- *Have a better understanding of the vital issue of traffic/demand risk and how this could be addressed.*
- *Have a better understanding of how energy policies may impact PPPs.*

Regional Market

128. The transportation sector refers to land transport (roads and rail), air transport (airports, navigational facilities) and marine transport (inland waterways and associated ports, coastal ports and navigational facilities). The logistics sector refers to activities associated with the storage, movement and distribution of goods and commodities.

129. Transportation and logistics can be seen as existing along a continuum with some projects, air navigation facilities for instance, clearly falling into the transportation sector while projects such as logistics zones are more properly described as belonging to the logistics sector. However, there is a degree of overlap with projects such as freight storage and distribution facilities and ports having characteristics of both a transport and a logistics nature. For this reason, transportation and logistics will be considered together.

130. The transportation and logistics sectors are central to MENA governments' development agenda, as they are conducive to accelerating economic expansion through export-led growth and regional integration, creating jobs and reducing poverty and exclusion. It is estimated that within infrastructure services, the transport and communication sectors are the biggest employers, representing jointly about 7% of the total employment – with wide variations across countries, while energy and water sectors account for approximately 1%¹⁸.

131. With some notable exceptions such as Yemen and Djibouti, transport systems throughout the MENA region are relatively well-developed (World Bank, 2010). Most countries have extensive road networks, with high capacity in some areas. They also have important facilities for air and sea transport, and, in several instances, a sizable rail network: in Algeria, Morocco, Tunisia and Egypt, for instance, the railway plays a significant role in passenger and freight transport.

132. However, transport infrastructure quality is often inadequate to support growing economies. Inadequate design of road networks, poor quality of public transport, weak institutional and legal frameworks, unsatisfactory enforcement of traffic regulations and shortcomings in information and education contribute to poor performance in both urban and rural transport infrastructure. There are serious capacity gaps and multiple constraints to regional transport. Furthermore, congestion is a growing and serious problem in most large urban areas.

133. Throughout the MENA region, infrastructure investment and rehabilitation needs are likely to be especially high in the transportation sector, particularly roads. This sector alone is estimated to account for about 43% of total infrastructure needs in MENA, followed by energy, information and communication technology, and water and sanitation¹⁹. Some of the priority areas of focus include:

- **Urban transport:** The MENA region is far more urbanised than East Asia or South Asia, with around 60% of its population living in cities²⁰. This involves deep socioeconomic transformations in most cities, and rapid growth in urban transport demand and in motorisation. Yet the development of (public) transport systems is lagging, and excessive

18. Estache, Antonio, Elena Ianchovichina, Robert Bacon, and Ilhem Salamon (2013), *Infrastructure and Employment Creation in the Middle East and North Africa*. Washington, DC: World Bank.

19. Ibid.

20. Eight of the region's cities have more than 3 million inhabitants.

reliance on private automobiles leads to record-high traffic congestion, reduced mobility, and deteriorating air quality, while affecting cities' competitiveness and economic growth.

- **Rural access:** For most MENA countries, especially those with a large rural population such as Morocco, Egypt, and Yemen²¹, all-weather access in rural areas is limited by poor road networks and the inadequacy of basic transport services. Expanding rural access to transport is critical for accessing markets, health centres and schools, and other social and administrative services.
- **Intermodal connectivity:** Intermodal freight transport involves the transportation of freight in an intermodal container or vehicle, using multiple modes of transportation (rail, ship, and truck), without any handling of the freight itself when changing modes. The method reduces cargo handling, thus improving security, reducing damage and loss, and allowing freight to be transported faster. Reduced costs over road trucking are the key benefit, as well as reduced greenhouse gas emissions. This may be offset by greater speed for road transport over shorter distances.

134. In order to meet growing transport needs in a fiscally constrained environment, the private sector has an important role to play. Traditionally, transport infrastructure and service provision in the MENA region has been dominated by the public sector. Throughout the 1990s, most MENA countries set out to encourage private participation in infrastructure development. These efforts should be sustained and expanded through adequate policy and regulatory frameworks. While institutions in charge of transportation and logistics are generally in place, there remains a gap in policy formulation and management capacity. Regulatory and financial systems also need development.

135. Transportation and logistics are pivotal in fostering regional trade integration. Poorly performing transport infrastructure and services in the MENA region have adversely affected trade flows through high costs, delays and uncertainty. Over the past decade, the MENA region has lost global market share in many exports sectors, and non-oil exports represent just one percent of world trade, which is the lowest share of any developing region (World Bank, 2010). To address this, governments need to improve geographic coverage, intermodal connectivity, quality and capacity to accommodate traffic flows.

136. Transportation can also make a stronger contribution to socioeconomic development by improving the access of the urban and rural population, especially the poorest, to public services and economic activities. Special attention should go to areas such as road safety, women's empowerment and accessibility for persons with reduced mobility.

137. Finally, climate change mitigation is of particular importance in the MENA region. Although MENA GHG emissions are less than 6% of the world total for the transport sector, some countries (mainly oil producers) are among the highest emitters in the world per capita²². Thus governments will need to adapt the transport sector to climate change, and promote alternative modes (e.g. Nile river transport in Egypt). In Morocco, for example, natural disasters have damaged transport infrastructure

21. With only 22% of the rural population living within 2 km of an all-weather road, access in Yemen is equal to some of the poorest countries of the world (World Bank, 2010).

22. Of all the regions of the world, MENA has the highest GHG transport emissions per unit of GDP, about 150 tons CO₂ per USD million of GDP, roughly the same as North America (World Bank, 2010).

and disrupted services, inflicting serious costs on the economy. Floods have also been made worse by design flaws in transport infrastructure.

Country Focus

Please note that the following Country Focus sections remain to be validated by the respective governments. Please note as well that project pipeline information represents projects and potential projects identified by government authorities.

*Egypt*²³

Background

With the exception of airport infrastructure, upgraded to support the development of tourism, Egyptian transport infrastructure has suffered from lack of maintenance and investment. However, since 2007, increased funding has been allocated to roads and railways, and PPPs are now being used to finance the development of transport infrastructure.

With a population of more than 80 million and a backlog of un-awarded projects approaching USD 150 billion, the Egyptian infrastructure market has considerable potential. To begin address this backlog the country needs to increase investor confidence and tap private, multilateral and bilateral sources of funding.

Planned major projects include:

- the further development of Cairo's metro system,
- the modernisation and expansion of the country's rail network and,
- the proposal to expand and develop the Suez Canal as well as the land around the waterway through two megaprojects: the Suez Canal Development Project, aimed to developed a Master Plan for a logistics hub on 76,000 square km of land along a 160 km corridor, including further expansion of capacity at East Port Said, the creation of a technology investment zone on the canal's east bank and an extension of the industrial zone along the west bank of the waterway from Suez City; USD 8.5bn project to construct a 34 km waterway parallel to the existing canal to allow more ships to pass through, reducing waiting times and increasing revenues from the canal.

Policy Framework

- A liberalised, well-functioning air transport sector

Airport infrastructure offers state-of-the-art facilities. Cairo International is becoming a regional hub directly linked to 91 domestic and international destinations served by 65 airlines. Egypt is a signatory to the Open Skies Agreement, which considerably liberalised international air travel. Air freight rates are competitive.

- Dense networks and low costs in road and rail

Egypt's road and rail networks are relatively dense: its rural accessibility index is above the MENA average. The rail network serves most large urban areas and is dense in populated area of Egypt. Road tolls and railway fares are very low compared to the MENA region and other countries. Egypt's 40% modal share of railway passenger transport is among the highest in the world.

23 . Sources: OECD (2010), *Business Climate Development Strategy of Egypt*; MEED (2014), *HSBC Middle East Infrastructure Guide*.

Challenges

- High levels of current investment

Investment in roads is currently adequate, representing 0.7% of GDP. The figure is higher than in some comparable countries (e.g. Belarus, Ecuador and Ukraine which range from 0.16% to 0.5%), but lower than in Morocco with 1.24%. Railways have seen investment in signalling systems and rolling stock.

- A decentralised, partially reformed road and highway sector and railway reform in progress

Road authorities have been decentralised, with public-private consultations being held in advance of reforms. A highway agency (GARBLT) is responsible for supervising all planning, construction, operating, maintenance, and safety works for main roads and bridges in the Egyptian intercity network. Railway reform has been undertaken, with internal restructuring of Egyptian National Railways (ENR) preparing the ground for future corporatisation.

- Port infrastructure is competitive and the private sector is driving investment in new capacity

Egyptian freight rates are highly competitive for Mediterranean container traffic. Efforts have been made to simplify port procedures and one-stop shops have been introduced. Egypt has been successful in attracting private investment in new port terminals through PPP schemes.. There has been partial unbundling of regulatory and operating activities, with some port services being opened up to the private sector.

The Ministry of Transportation is studying establishing four new ports as part of river transport development plans.

- Safety is a major concern in road, rail and maritime transport

Egyptian roads are very dangerous: 156 fatalities per 100 000 vehicles, compared to the OECD average of 15. This poor record is due primarily to the non-enforcement of existing road safety regulations. The rail network also has safety problems, as evidenced by major accidents in 2002, 2006 and 2009, in spite of ongoing investment in rail signalling and a twinning project with French railways to improve safety. Ferry accidents also occur all too often, the latest being in December 2009 on the River Nile.

- The infrastructure is in disrepair due to inadequate financing

Road maintenance has long been neglected. The road maintenance budget is currently approximately 0.15% of GDP, compared to 0.24% in Morocco, Ecuador's 0.23%, and 0.45% for Ukraine. In addition, the highway authority (GARBLT) monitors the quality of maintenance work inadequately, according to industry experts. The railway tracks are in a poor state, and rolling stock has only been partly upgraded. Even after recent increases, investment levels in the rail network remain modest: EUR 350 million per year in contrast to Morocco which spends EUR 400 million per annum on its conventional rail network and another EUR 400 million annually on its high-speed train system.

- Congestion is an increasing problem due to the lack of an intermodal transport scheme

Congestion is an increasing problem, especially in Greater Cairo where commutes of 60 to 90 minutes force companies to allow work from home. The situation is bound to worsen with increasing car ownership in a country where the population density of the most heavily inhabited areas is 1 500 inhabitants/km². Even though Cairo boasts the continent's only metro, public transport is not sufficiently co-ordinated or convenient to be attractive. For freight, there is not yet an integrated scheme that would encourage intermodal rail-road-river transport. Roads account for 97% of freight traffic, while rail carries just 3% and barge traffic on the River Nile amounts to less than 1%.

- Regulatory reform is still at an early stage

Although there are port and highway regulatory agencies in place, they are not

Project Pipeline

independent. The blurring of lines between the government's roles as policy maker, regulator, and shareholder in operating companies is not conducive to good governance or to private sector participation. For example, GARBLT is both the highway regulator and the holding company of the four largest road and bridge construction companies. Similarly, the state acts simultaneously as landlord, regulator, and operator in most ports. Currently, EU-funded technical assistance programmes for the reform of Egypt's Transport Sector are ongoing, as is the case for the River Transport Authority (RTA)¹.

- Suez Canal Development Project, including Second Waterway
- Cairo Airport City, including upgrading existing passenger terminal and building new departure hall and airside pier
- Heliopolis / New Cairo Metro extension (phases 3 and 4 of Line 3 and Line 4)
- Rod El Farag Axis Highway
- Nile River Ports Project
- Nile River Bus Project
- Ain Shams/10th of Ramadan Railway
- Shubra/Banha Highway
- Safaga Industrial Port

1. OECD (forthcoming), *Egypt Assessment Report; Promoting Nile River Transport*. Issues Paper, ISMED Support Programme.

Background

Jordan is located in a strategically important location between Europe, the Arab countries and Asia. The resilience of Jordan's economy is underpinned by broad-based growth. The medium-term economic outlook looks positive, including a rapid private sector credit growth.

Jordan's real GDP (at market exchange rates) and population have been growing rapidly in recent years. Population in 2013 was estimated to be 6.459 million people, up from 6.3 million in 2012. The urban population represents 83% of the total population. GDP per capita in 2012 was USD 4,900 (current USD at market exchange rates) and income inequality is relatively low by international standards. Jordan's growth in GDP is expected to continue, with the IMF expecting real GDP growth of 4.5% per year to 2019. However, the economy faces a number of risks, in particular spill overs from conflict in neighbouring countries as well as the prospect of high energy costs (IMF, 2014a). There are also pressures from unemployment, which has been persistently high (more than 12%) for the last decade, and government debt, which has almost tripled in absolute value since 2003.

Road density is quite high compared to other countries in the region, 141 vehicles per Km compared to 37 in Egypt, 38 in Morocco and 68 in Tunisia. The railway network is small at 294 Km (compared with 5,195 for Egypt, 2,109 in Morocco and 1,119 in Tunisia). The transport sector contributes 12% to Jordan's GDP (Ministry of Transport, 2011), and is growing at a rate of 6% a year. Investment in the road sub-sector alone is expected to reach more than USD 1.8 billion over a 25 year period (Jordan Investment Board, 2012).

Private sector participation is quite developed in the sector, mainly in the form of concessions for large-scale projects. Moreover, according to the World Bank PPI Database, the transport sector accounts for the second largest share (24%) of all private investment in Jordan's infrastructure sectors.

The government launched a National Strategy Plan for 2012-14, which sets a number of goals and outlines some priority projects, such as:

- establishing the Jordan railway corporation;
- developing the terminals at the Iraq-Jordan border; and
- seeking bilateral agreements to liberalise air travel.

The government also plans to develop a long-term national sector strategy covering the period up to 2030 (Ministry of Transport, 2011).

Policy Framework

The government has put in place a number of sectoral policies and an overall economic development programme that specify investment needs and strategies for infrastructure development. The 2011-2013 Executive Development Programme, for instance, indicates that JOD 3.4 billion (about USD 4.8 billion) is needed for infrastructure upgrades over three years. This is equivalent to 55% of the projected expenditure for all sectors in Jordan.

Jordan's legal investment regime is governed by a series of laws and regulations:

- the interim Investment Law No. 68 of 2003, which contains general provisions for treatment and protection of investment and describes procedures to benefit from incentives and obtain licenses;
- the provisions on sectors, incentives and exemptions of the Investment Promotion Law No. 16 of 1995;
- Regulation No. 54 of 2000 which lists the sectors restricted to foreign investment;
- interim Law No. 67 of 2003 which deals with the organisation of the Jordan

24 . Source: OECD (2013), *Jordan: Investment Policy Review*.



Challenges

Investment Board.

Consequently, Jordan presents a rather complex legal investment regime, with a corpus of laws not all easily accessible, some being temporary and overlapping. The regime suffers from deficiencies in terms of legal coherence, transparency and predictability for investors and does not help governmental efforts to enhance investor confidence.

The authorities are aware that the legal and institutional investment framework needs to be clarified, unified and improved. Non-Jordanian investors benefit from the same treatment as Jordanian investors, subject to exceptions. For registration purposes, non-Jordanian investments must have at least JOD 50,000 of capital (equivalent to about USD 70,000). Statutory restrictions apply in a large number of sectors and their scope and application in practice are not always clear.

- Current Regional Unrest

Ongoing unrest in neighbouring countries may heighten investor risk perceptions thereby inhibiting investment or resulting in higher required rates of return with a subsequent impact on value for money.

- Limited access to Finance

Local financial markets are not well developed and domestic commercial banks are often not interested in long-term infrastructure finance. This results in a dependency on foreign investors and IFIs to fund infrastructure development..

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Project Pipeline

- Queen Alia Airport Expansion¹
- Aqaba Port Expansion
- Amman-Zarqa Bus Rapid Transit (BRT)
- Jordan National Railway Project (JNRP)
- Jordan Road Master Plan

1. See Annex 1 (Case studies).

Morocco²⁵

<i>Background</i>	<p>Morocco's growing urban population, about 17.7 million (about 55% of the total population) in 2011 and projected to grow to 27 million in 2025 (70% of the population) creates transport infrastructure challenges. At the same time, the spatial structure of the cities is changing significantly. Many economic activities are being relocated outside the city centres, and with demand for lower density residential areas, and the greater autonomy of younger households, Moroccan cities are spreading rapidly.</p>
<i>Policy Framework</i>	<p>The Moroccan government has initiated a series of reforms to improve the regulatory framework for transport infrastructure development. In addition to macro-economic policies encouraging investment and reducing risk in transport infrastructure, other sector specific amendments were introduced:</p> <ul style="list-style-type: none">• Amendments to the "Charte Communale" allowing local governments to set up urban transportation planning and management Agencies• Establishment of a National Commission for Urban Transport by the Ministry of Interior• Law 54.05 providing a legal framework for concession contracts.
<i>Challenges</i>	<ul style="list-style-type: none">• Inadequate supply of public transport• Institutional weaknesses such as the limited capacity of central and local governments• Human resource shortages• Lack of environmental and social sustainability• Insufficient attention to social issues such as accessibility
<i>Project Pipeline</i>	<ul style="list-style-type: none">• Tanger-Med 2• Tanger-Marrakech train line• Casa Port Expansion (Terminal 4)• Road Modernisation Programme

25 . Source: World Bank (2011), *Program Document on Morocco's Urban Transport Sector*. Report No. 58010-MA.

Background

Thanks to an increase in investments and several years of sectorial reforms, Tunisia has relatively good infrastructure and transport services, among the best in the region. But in order to spur economic growth and meet international standards, the transport system still needs to be upgraded.

Transport chains underlying internal and external trade display additional costs attributable to lack of competition and delays. Currently, there is an extensive 20,000 km paved roads network and 360 km of freeways, 2167 Km of railways, seven commercial ports (in Tunis) with a capacity of 7600 ships/year (30 million tons of merchandise) and 9 international airports.

Policy Framework

Tunisia's Economic and Social Development Strategy (2012-2016) places great emphasis on infrastructure investment in the hinterland. The strategy calls for integrated development programmes for 100 priority délégations at the regional level and 100 urban zones and a multiyear investment programme to speed infrastructure development in these regions. It will focus on developing networks, in particular a motorways network, a high-speed telecommunications network and a network of gas pipelines linking all interior regions to the rest of the country.

Air freight and passenger transport services have been open to private initiative since 1996, but foreign investment in the sector is still limited to 49% of capital. Under the 2008 law on concessions, regulating private sector participation in public infrastructure and equipment projects, the legitimate rights of the concessionaire are guaranteed, including the right to deduct the value of buildings constructed before they revert to the public agencies and the right to claim damages for unjustified cancellation of the contract or failure to observe the required legal procedures and time limits. This regime also recognises the right of the concessionaire to exert ongoing supervision over operation of the public service, to be involved in setting prices to the consumer, and to review the contract clauses whenever the economic situation so demands.

Institutional and regulatory reforms are underway to establish a solid and sustainable framework for PPPs. Thus, the General Directorate of PPPs was created in October 2011 as part of the re-organisation of the Ministry of Finance. This new structure is tasked with:

- (i) modernising and adapting national regulations and supervising reforms in this area, planning for long-term needs and developing PPP models, particularly with international co-operation; and
- (ii) organising relations between operators and local governments on the basis of clear and strict rules, while seeing that competition requirements are respected.

On 23 May 2011, the transition government revised the legal framework for public procurement and issued a new decree to promote equal opportunities and access to public procurement to all businesses and increase the transparency of the system.

Transport infrastructure is regulated by a number of laws:

- Road infrastructure is regulated by the Decrees 87-654 and 87-655 and 17-720 for the construction of highways, the Decree 99-2318 regulates railways and the construction and operation of airports is regulated by the Civil Aeronautic Code enacted by law 2004-54 and 2005-84.
- Decree 2008-2965 of 8 September 2008 established a specialized institution serving as the Central PPP Unit, the Concession Follow-up Unit.

26 . Source: OECD (2012), *Tunisia: Investment Policy Review*.

Challenges

The process of planning and evaluating investment projects in Tunisia is well-coordinated, but accelerating infrastructure development through private investment requires institutional changes and targeted capacity building in the public sector.

The responsibilities of key players in the PPP and concession landscape will need to be clarified once the draft PPP regime is enacted, and a "pipeline" of potential PPP projects (which is better integrated in national plans and budget programmes) will need to be elaborated. In addition the government will need to clearly communicate the expected private sector role in infrastructure, perhaps through a PPP Policy, so as to increase investor confidence and raise awareness of existing investment opportunities.

On the legal front, the legislative framework for private participation in infrastructure remains rather, but there is strong potential for greater clarity and for better guarding against the risks presented by concessions and PPPs. Indeed, following multiple revisions between 2002 and 2012 (at the risk of somewhat blurring the legal landscape for investors), the legal regime for concessions has been significantly clarified and condensed within the Decree n° 2013-4631 of 18 November 2013. This decree makes significant progress in many areas, including upstream project preparation and risk evaluation. The draft PPP law of 2013 and its two accompanying decrees are moreover very consistent with the provisions of Decree n° 2013-4631, which sets the basis for a smooth transition once the PPP law has been enacted.

Nevertheless possible areas for improvement include: better integrating the principle of Value-for-Money within the legal framework for PPPs and concessions; clarifying the distinction (if one must be made) between PPPs and concessions, as well as versus public procurement more broadly; developing standard guidelines and implementation manuals for use by contracting authorities; and greater emphasis on participation of SMEs in infrastructure project bids (whether by PPP, concession, or other forms of public procurement).

Other pending issues include:

- Macroeconomic challenges, including high deficit levels and unemployment rates
- Insufficient institutional capacity
- Regional disparities in infrastructure development
- Access to finance (relatively inefficient financial system)
- Monopoly in maritime passenger lines
- Overlapping of regulatory and operational functions of "L'Office de la Marine Marchande et des Ports" in maritime transportation and "L'Office des Aeroports et de L'Aviation Civile" in air transportation
- Decline in national savings and downgrade of sovereign debt rating
- Governance and corruption issues
- Requirement for foreign investors to obtain prior authorization if their equity holding would exceed 50% of the capital of companies in a relatively high number of sectors (land, air, maritime and pipeline transport are among the sectors subject to approval by the investment commission when foreign participation exceeds 50%)
- High levels of deficit
- Enfidha-Monastir Airport¹
- Enfidha Deep Water Port
- Greater Tunis Ring Road
- Radès Logistics Zone

Project Pipeline

1. See Annex 1 (Case studies).

Identification of Barriers

138. OECD analysis and consultations have identified a number of barriers that operate to inhibit the development of transport infrastructure projects in the MENA region. While many of the more general barriers described in Chapter 3 are relevant to transport projects, the issues described below are more specific to the transport and logistics sector.

Resistance of Incumbent Operators

139. MENA-region economies have been characterised by high levels of state control, centralisation and planning. State entities or state owned entities may be involved in many sectors of the economy with existing transportation and logistics services being provided in this manner. Incumbent operators regardless of their ownership that see a PPP as potential competition may take steps to try to delay or block the project. This is particularly problematic where incumbent operators are state or state-owned entities and well-placed to exert influence.

140. If the cooperation of a state or state owned entity is required for a new PPP to be successful, then incentives must be aligned. For instance, increased costs incurred by an incumbent state-owned operator that is required either practically or legally to use the services of a new PPP will create resistance. This is why a whole of government integrated transportation and logistics strategy as discussed below is important.

Distortive Energy Subsidies

141. High and unsustainable levels of fuel and energy subsidies are a persistent fiscal challenge in the MENA region. For instance fuel subsidies accounted for approximately 20% of government expenditure in Egypt before reductions announced in July 2014 (OECD, *Business Climate Review of Egypt*, 2014). In addition to the fiscal and environmental costs of these policies, they are also highly distortive of transportation economics and may skew intermodal comparisons in favour of more fuel intensive modes. Reforming these subsidies is very politically sensitive.

Allocation of Traffic or Volume Risk

142. Perhaps the most important issue in transportation PPP projects is the allocation of traffic risk. OECD consultations suggest that developers and investors will be reluctant to accept full responsibility for traffic risk. Traffic risk is very difficult to quantify and predict and research suggests that over estimates are common and often lead to renegotiated contracts (*Better Regulation of Public-Private Partnerships for Transport Infrastructure*, OECD/International Transport Forum 2013). Potential political interference in tariff levels also creates risks. These factors mean that allocating traffic/demand risk to the private sector will discourage bidders and/or will lead to more expensive bids jeopardising value for money.

Need for Integrated Transport and Logistics Strategies

143. In contrast to some social infrastructure that may be built by PPPs, for instance hospitals and schools that may be considered a stand-alone asset, transportation and logistics infrastructure is more properly seen as a component of an overall transportation system. Therefore, they should be planned to integrate with other aspects of the national transportation system. For example, a road or port PPP built to accommodate a certain volume of traffic will never see that volume if there are bottlenecks and lower levels of capacity in other parts of the system that feed into the new PPP. This will be especially salient if the developer is expected to face traffic risk. The lack of an overall integrated national

transportation plan or strategy will be problematic at best for transportation and logistics PPPs and may be fatal.

Policy Proposals

144. Some of the policy recommendations below will echo those made more broadly elsewhere in this publication or in relation to renewable energy projects. These include issues around capacity and the engagement of advisors. However, certain recommendations, for instance those related to traffic risk and the type of transportation and logistics infrastructure, are more sector-specific.

Focus on Capacity, Consider Advisors

145. The most frequently-mentioned and heavily stressed recommendation made during ISMED consultations is the need for increased experience and expertise on the part of MENA region governments. There are a number of dimensions to this need and capacity building is required on a number of levels. At the most senior official and political level the need may be more attitudinal than technical. As high-level support is essential, the benefits and proper motivations for procuring by PPP must be understood and any negative attitudes about the participation of the private sector in the provision of public infrastructure or services should be addressed. At the working level, those officials and public servants at the line ministry or agency implementing the project and working with the private-sector counterparty, training needs are both attitudinal and more technical. These officials must understand how the transaction will be structured, how the various contracts will interact and the respective rights and responsibilities of the public and private counterparties. Individuals benefitting from this training or otherwise holding this knowledge should be formed into a satellite PPP unit. In addition to acquiring the necessary skills for entering and closing the transaction, the satellite unit must also be skilled in contract administration and management for the duration of the contract.

146. The creation of a PPP central unit is also essential. The central unit is not a substitute for capacity in the contracting ministry or agency but is properly seen as a type of internal transaction advisor assisting in the structuring and closing of the project. However, a central unit, while skilled in matters of project finance will not be knowledgeable of the needs and realities of the contracting authority and will not be able to manage the project over its lifecycle. It is for this reason that a satellite unit must be formed to work with and complement the central unit.

147. ISMED consultations suggest that the hiring of external transaction advisors may be desirable to maximise the probability of a project being successful. Transaction advisors are not a substitute for a PPP central unit but rather work best when teamed with a central unit. Where PPP central units exist, they are generally under-resourced and given the limited PPP track-record of closing projects may be lacking experience, especially in the specific type of project being proposed. Central units may also be involved with multiple projects simultaneously dividing attention and resources. External transaction advisors can focus on one project and can bring relevant experience specific to the project. However, the use of advisors does not create institutional capacity and memory and efforts should be made to ensure that any use of advisors helps build the capacity of the officials for the long-term benefit of the government.

Type of Project/Project Selection

148. In light of the demonstrated challenges of PPP procurement and the often limited resources and capacities of MENA-region governments, it makes sense to concentrate efforts on those projects that are most likely to succeed. ISMED consultations have identified certain characteristics that increase the chances that a project in the transport and logistics sector will attract investors and will

reach financial close. These characteristics include standardised construction requirements and operational services, limited traffic risk and a small number of sophisticated users. In the view of the ISMED Programme, governments should concentrate on those projects most likely to be successful in order to build capacity and expertise and to demonstrate a track record of successful projects.

149. Airports and deep sea ports have been singled out as perhaps the projects that are currently most amenable to PPP procurement. These facilities are somewhat standardized with construction techniques and functional requirements similar to those built elsewhere meaning that developers and operators with relevant experience are easily found. Government often owns the land on which the project is to be built, and in cases where it does not, the area of land required to be obtained is limited. The customers of such facilities usually consist of a small number of sophisticated and creditworthy operators. Services can be priced in hard currency helping address foreign exchange risk. Customers will also likely be mostly foreign and therefore less capable of exerting political influence to lower fees or oppose fee increases.

150. Roads on the other hand occupy the opposite end of the spectrum from airports. Roads feature large numbers of operators often with a limited ability to pay and who may be able to exert significant political influence over fees. Road construction techniques are fairly standardised, but the project will be subject to local conditions and the need to obtain a large area of land as a right of way, which may again entail political pressures. Traffic is also sensitive to macroeconomic conditions and changes in government policies with regard to licencing, taxation and especially fuel subsidies. Roads are important for development and may rightly be a government priority, but MENA governments should carefully consider all aspects of procuring road infrastructure, especially on a concession-PPP basis.

151. Rail, light rail and logistic zones projects can be considered as falling in the middle of spectrum between airports/deep sea ports and roads as they display characteristics of each. Logistics zones for instance may feature a small number of international operators or a larger number of local customers. However, they can be built on a relatively small parcel of government-owned land (if supported by traffic and volume demand at the location) and do not feature technically-challenging construction requirements or techniques. Rail projects may have a small number of clients but will face significant capital costs and may face right of way issues. Light rail projects add to these complications by adding a large number of often poor users.

Traffic (Volume/Revenue) Risk

152. The most important single issue identified in the transport and logistics sector is volume/traffic risk. ISMED consultations indicate that it will be necessary for the public sector to face or otherwise mitigate traffic risk in order for such projects to have a chance of being successful. ISMED Programme experience suggests that this barrier is not unique to the MENA-region and that the private sector is reluctant to take traffic/volume risk in OECD countries with well-established PPP programmes. There are a number of alternatives available that are effective to relieve the private partner of traffic/volume risk. The most obvious is for the public counterparty to compensate the private counterpart on the basis of availability, the facility or infrastructure asset being available for use, with traffic having no impact on the revenue received by the project company from the state. In a concession-type PPP it may be necessary to share the risk between public and private sector with a certain minimum payment from the state being guaranteed to the private party regardless of traffic or volume levels. The minimum payment could be sized to cover the project company's debt service costs in an effort to provide comfort to the project company's creditors. Pure concessions with the private party facing traffic/volume risk are unlikely to attract sufficient investor interest to provide value for

money, and if they do manage to get built, they are much more likely to be subject to subsequent renegotiation.

153. Notwithstanding the above, some types of project bear lower revenue risks than others. At one extreme, the risk is relatively low for new capacity in a currently congested network and for which there are no direct alternatives. At the other extreme, traffic can be very uncertain on infrastructure in networks with little congestion and ample alternatives. Alternatives that must be analysed include not only other roadways, bridges etc., but also include other modes of transport. In general projects subject to lower demand risk are more suited to PPP finance (*Better Regulation of Public-Private Partnerships for Transport Infrastructure*, OECD/International Transport Forum 2013).

Permits and Licences

154. To the extent practical (for instance building plans may be required to obtain building permits), all permits and approvals should be obtained by the tendering authority prior to tendering the project. There are a number of potential approaches to this issue. The tendering authority could simply obtain all required licences and approvals. This is likely to be time-consuming. A one-stop shop for licences and approvals required for PPP projects could be created allowing the tendering authority to obtain the necessary approvals on an expedited basis. The applicable PPP law could also address the issue and deem that all permits have been provided upon the entering of the contract. Whatever the approach, bidders will be more willing to engage when they are confident that all required licences and approvals will be available in a timely manner and that they will not be subject to multiple layers of bureaucracy and the associated potential delays and complications.

Address Distortive Subsidies

155. Transport PPP may be susceptible to the distortions caused by fuel subsidies. Many MENA countries continue to heavily subsidise motive fuels, diesel and gasoline. Where these fuels form a major input cost for competing forms or modes of transport, it may be difficult for a PPP to compete. For example, a rail transport project may not be viable in the face of a trucking sector that benefits from heavily subsidised diesel. Such subsidies are also problematic from an environmental and fiscal policy perspective. Reforming long-standing and politically popular fuel subsidies may be very difficult but governments should understand that transport sector PPPs may not be feasible in the absence of such reform.

Focus on Functional Requirements

156. Tender document should state the functional output requirements and avoid specifying construction techniques or detailed technical specifications. For instance, a port facility should not be required to be of a certain size but rather required to be capable of handling a given volume of freight or containers etc. in a given period of time. Bid proponents should be free to propose and design whatever solution they think best meets the functional requirements. This will maximize opportunities for private sector innovation, competition and value for money.

Choice of Location

157. Immunizing location selection decisions from political interference is especially important in transport and logistic PPPs. As traffic and volume flows are such a vital factor, these projects should be built where existing traffic and volume suggest they will be successful, not where they might be politically popular or expedient. This is even more so the case in concession-based PPP projects. The economics of the selection should be supported by a detailed feasibility study.

Address Incumbent Operators

158. To the extent possible the PPP process should be insulated from state-owned incumbent operators. Authorities, agencies and departments that will see the PPP as competition should not be tasked with acting as the procuring agency for the PPP. It may be necessary to create a new authority to procure the PPP. This may not eliminate all potential interference but it will help ensure that the procuring agency is fully committed to the PPP.

CHAPTER 5: PPP PROJECTS IN THE RENEWABLE ENERGY SECTOR

This chapter provides an overview of key policy issues regarding the deployment of PPPs in the renewable energy sector across the MENA region, focusing on Egypt, Jordan, Morocco and Tunisia.

Key findings include:

- *The MENA region boasts some of the world's best resource endowment for the development of renewable energy, in particular for wind and solar power.*
- *Enhanced risk perceptions of the MENA region combine with non-region specific renewable energy risks to inhibit development.*
- *The reform of economically-distorting energy policies, including structural separation of incumbent operators and fossil fuel subsidies, would facilitate private sector investment.*
- *The stability of the tariff regime is essential to build investor confidence.*

After reviewing this chapter policy makers will:

- *Be more aware of the challenges facing renewable energy development.*
- *Better understand the need for a clear and consistent policy framework for renewable energy and the need for reform of the overall energy sector.*

Regional Market

158. Renewable energies (RE) contribute a rapidly growing share of the world's energy supply. They encompass all sustainable sources of energy that are captured from natural processes (e.g. solar radiation, wind, water, photosynthesis and geothermal heat flows) without depleting mineral reserves or requiring major land-use engineering. RE are an alternative to conventional fossil and nuclear energy sources.

159. Renewable energies are grouped into five categories, each involving specific technologies:

- Solar (photovoltaic [PV] or concentrated solar power [CSP]) ;
- Wind (offshore or onshore) ;
- Hydroelectricity (small-scale hydro and tidal/ocean) ;
- Biomass (plant-based materials, animal waste and their derivatives) ;
- Geothermal.

Table 1. Global renewable energy potential

Resource	Technical potential	Energy conversion options
Direct solar	Virtually unlimited, in relation to energy demand.	Photovoltaic Solar thermal power generation Solar water heaters (SWH)
Wind	Very large (especially off-shore resources) in relation to electricity demand.	Large scale power generation Small-scale power generation; pumps
Wave	Not fully assessed but large	Numerous designs
Tidal	Not fully assessed but large	Barrage Tidal stream
Geothermal	Several orders larger than the amount currently used. As with other technologies, use depends on costs not the quantity of resource technically available, which is huge.	Hot dry rock, hydrothermal, geopressed, magma (only hydrothermal currently available)
Biomass	Potential varies greatly between countries, but can complement agriculture and protect watersheds and biodiversity.	Combustion, gasification, pyrolysis, digestion, for biofuels, heat and electricity

Source: Imperial College Centre for Energy Policy and Technology (2002)

160. Renewables are not only an increasingly cost-competitive alternative to conventional energy resources, such as fossil fuels, but are also seen as a tool to address many pressing societal and environmental challenges. The positive externalities associated with renewable energy include:

- Enhancing domestic energy security through unlimited resource supply;
- Mitigating greenhouse gas emissions and climate change;
- Reducing the health and environmental impacts associated with fossil and nuclear energy;
- Fostering technological leadership and innovation;
- Contributing to inclusive economic growth through technology and skills transfers, job creation, territorial development, etc. For example, it is estimated that solar PV plants use on average seven times more labour than coal-fired plants while wind farms use 1.83 times more labour than natural gas-fuelled plants.

161. Since 2010, global investments in RE projects have exceeded investments in fossil fuel-fired plants for the first time, with wind and solar energy growing the fastest. The RE market has globally been characterised by:

- **Continued, significant decline in the costs of technologies.** Although still high relative to fossil fuels, the costs of wind power generation have fallen 400% since the mid-1980s and the average leveled cost of generating 1 MWh of electricity from photovoltaic panels was one third lower in 2012 than in 2011²⁷. This trend is linked to the maturing of technologies, with potential for further cost reductions through innovation and batch production, bringing RE projects closer to competitiveness;
- **A major geographic shift in RE investments,** from OECD countries to developing economies, which now account for two-thirds of growth. Total RE investments in developed economies in 2012 were down 29% at USD 132 billion, while those in developing economies were up 19% at USD 112 billion, the highest level ever.

162. The Middle East and North Africa, home to half of the world's proven crude oil and a third of its natural gas reserves, boasts some of the world's lowest domestic prices for energy and electricity. This has resulted in alternative energy sources being overlooked for decades.

163. The MENA renewables market remains underdeveloped with the RE share in the region's total energy mix at around 4% (OECD, 2013) despite the highest solar and wind energy potentials in the world. The region has made some tentative advances, but progress overall has been disappointing. RE investments in the region totalled USD 2.9 billion in 2012, only 2.1% of the world total. This figure was up 40% from 2011 and 650% from 2004²⁸.

164. Still, the MENA region is slowly emerging as a potentially vibrant market for renewable energy deployment due to:

- **Resource endowments.** The MENA region offers some of the world's best conditions for developing solar and wind energy: abundant sunshine, low precipitation, large unused areas of flat land accessible by road, and available power transmission infrastructure;

27. Sustainable Energy Finance Initiative (SEFI) (2013), *Scoping Study on Financial Risk Management Instruments for Renewable Energy Projects*, United Nations Environment Programme (UNEP).

28. IRENA (2013), *MENA Renewables Status Report*.

- **Potential market size.** Rapidly-rising domestic energy demand, above the world average²⁹, caused by population growth, urbanisation and economic expansion (demand side), oil export strategies and improved trade balance for oil-importing countries in a context of high oil prices (supply side), technology and infrastructure opportunities;
- **Favourable economics.** Given its unrivalled climatic advantages and high level of reliance on oil for power generation, MENA countries may not require the type of subsidies needed in other markets in order to spur market uptake for RE.

165. Other key factors driving regional interest in renewables include: energy security enhancement and water scarcity issues; economic and industrial diversification, new value-chain and employment activities, and technology leadership; and improved environmental footprints. In addition, heightened perception of policy risk in the European market in 2010-2011, due to adverse retroactive policy revision³⁰, led to stronger interest in MENA region opportunities.

166. The region, which needs an estimated USD 30 billion in annual new investment to meet energy needs³¹, has witnessed heightened investor interest in RE, illustrated by the entrance of large global energy players into the solar market. Important initiatives have made progress in Morocco and the United Arab Emirates³², where investment reached respectively USD 1.1 billion and USD 0.8 billion in 2011.

Market Characteristics

167. Renewable energy is considered a “frontier” technology sector with its own specific risks.

168. Market failure is common as the information required for developers and investors to assess a project’s viability is often unavailable or inadequate. This often results in the risks of a proposed RE project being overstated. Barriers to private sector investment in the RE sector include:

- **Lack of profitability** due to novelty of technology, limited operational history and track record, high upfront costs, small returns and difficulties accessing finance ;
- **Political/legal risks** due to unpredictable policy regimes and economically-distorting support mechanisms (e.g. competition from subsidised fossil fuels) ;

29. Energy demand in the MENA region will be rising at around 3% annually between 2010 and 2030, with electricity demand growing at a rate of 6% annually over the same period.

30. Across Europe, adverse retroactive changes to RE subsidy programmes have included cuts in solar feed-in tariffs for new projects ranging from 15% in Germany to 70% in the UK. In 2010, Spain and the Czech Republic planned cuts of up to 45% to feed-in tariffs for existing solar projects. Source: The Economist Intelligence Unit (2013), *Managing the risk in renewable energy*.

31. Electricity demand in the Southern Mediterranean will increase by a factor of 3 in the next 20 years: additional capacity of 200 GW is needed until 2030 to satisfy rising demand. Source: Mabey Nick et al. (2013), *Underpinning the MENA Democratic Transition, Delivering Climate, Energy and Resource Security*, Third Generation Environmentalism Ltd.

32. In early 2013, the world’s largest CSP plant to date was commissioned in the desert of Abu Dhabi (100 MW). The country boasts 10 MW of cumulative solar PV capacity and continues to develop its solar capacity (both PV and CSP).

- **Technology risks** resulting in uncertain and/or volatile output (e.g. weather volume-related risks).

169. Grid parity is at hand: rapidly declining technology costs are slowly making solar power an economically viable alternative to oil-fired turbines and off-grid diesel engine generators. In addition, given volatile oil prices, the opportunity costs of consuming oil domestically at subsidised prices for power production compared with the potential revenue from exporting it, can make the economics of replacing domestic consumption with alternative energy sources more attractive.

170. Despite this, RE project development continues to rely on public and soft financing, which plays a central role in reducing the risks of entering specific markets. Private investment in RE is hampered by a sub-optimal energy mix in MENA economies and the absence of cost-reflective energy and electricity tariffs. This is mainly due to low domestic energy pricing, massive consumption subsidies for conventional fossil fuels, and weak support policies for RE deployment.

171. In addition to the financing gap, pending issues in MENA are: access to market; alignment or embedding RE within utility or energy policy; government strategies on both technology development and deployment; and medium-term visibility on transmission and interconnection planning.

Policy Framework

172. A variety of RE-specific investment incentives have been put in place in different jurisdictions, with mixed results. They can be grouped in three broad categories:

- Regulatory incentives: policies (general or sector-specific) intended to improve the business environment (general or sector-specific), market liberalisation, and regulatory exemptions ;
- Financial incentives: capital subsidies, soft loans, loan guarantees, premium and grants ; and,
- Tax incentives: tax exemptions on import levies, sales tax, value-added-tax, etc.

173. In the MENA region, target-setting and policy deployment is now a widespread phenomenon. As of May 2014, all MENA countries have renewable energy targets, and most have targets specified by technology that would result, if realised, in 107 GW of installed capacity throughout the region by 2030. More than half the policy targets are for shares of electricity production, typically 10-20%, ranging from 2% in 2020 in Qatar to 40% of electricity generation in Algeria by 2030³³.

33. IRENA (2013), *MENA Renewables Status Report*.

Table 2. Renewable energy targets in selected MENA countries (as of 2014)

Country	Percentage of installed capacity
Morocco	42
Saudi Arabia	27
Egypt	20
Tunisia	20
Algeria	15
Jordan	10
Libya	10
Oman	7
Abu Dhabi (UAE)	7
Kuwait	5
Qatar	2
Iraq	2 (2016)
Bahrain	5 (2030)
Dubai (UAE)	1

Source: MEED Insight (2014)

174. The majority of targets and policies place a focus on solar PV, CSP and solar water heating (SWH), reflecting the abundance of solar energy resources in the region and the decreasing technology costs. Wind is the second most popular technology choice.

175. Yet across the region, the state of preparedness of policy frameworks for renewable energy varies considerably: despite nascent policy developments, a majority of MENA governments lack the legislative infrastructure and promotion tools required to help achieve those targets. For instance, feed-in tariffs (also called premium payments), advanced renewable tariffs and minimum price standards, which offer long-term contracts to RE producers typically based on the cost of generation of each technology, are a common policy type in the electricity sector worldwide. They have been adopted in seven MENA countries and are under consideration or development in others. Seven countries have net metering in place (Egypt, Jordan, Tunisia), and 11 MENA countries have some form of RE fiscal incentive, including capital subsidies and tax or production credits or reductions.

Table 3. Incentives regimes for renewable energy in selected MENA countries (as of 2014)

Country	RE targets	RE strategy	Regulatory policies							Fiscal incentives & public financing				
			Feed-in Tariffs / premium payment	Electricity utility quota obligation / RPS	Net metering	Tradable REC	Tendering	Heat obligation / mandate	Biofuels obligation / mandate	Capital subsidy or rebate	Investment or production tax credits	Reduction in sales, energy, CO2, VAT, or other taxes	Energy production payment	Public investment, loans or grants
Algeria	x	x	x					x				x		
Egypt	x	x			x			x		x		x		
Jordan	x	x	x		x			x				x		x
Libya	x											x		
Morocco	x	x						x						x
Palestine	x	x	x		x							x		
Tunisia	x	x			x					x		x		x
UAE	x	x	x	x				x	x	x			x	x

Source: REN21 Secretariat (2013), MENA Renewables Status Report, Abu Dhabi International Renewable Energy Conference (ADIREC), Paris.

176. Yet the most common public policy tool used by national governments to promote renewable electricity remains public competitive bidding for fixed quantities of RE and public financing, including grants and subsidies. At least 15 MENA countries have direct or indirect public funding or public competitive bidding processes in place. From 2012 to early 2013, several countries started public competitive bidding processes³⁴.

177. A number of countries have also established special renewable energy funds to finance investments directly, provide low-interest loans or facilitate markets in other ways (e.g. through research, education, standards). The Masdar Initiative (UAE), a privately-structured, government-backed entity that channels public funds into RE projects worldwide and within the country, began commercial operation of the 100 MW Shams 1 CSP plant in 2013, and is in the planning stages for both the 100 MW Noor 1 PV plant and the 30 MW Sir Bani Yas wind farm. The Abu Dhabi Fund for Development has also set aside (in addition to a range of grant-funded RE projects around the world) USD 350 million in soft loans for RE projects in developing countries that are members of IRENA.

Regional Initiatives

178. The MENA region has been characterised by a dynamic and fast-changing set of policies, targets and institutions. The expanding range of regional cooperation activities is described in the following table.

34. See Annex 1 (Morocco: The Ouarzazate “Noor 1” CSP Project).

Table 4. Regional cooperation activities dedicated to renewable energy projects

<p><i>International Renewable Energy Agency (IRENA)</i></p>	<ul style="list-style-type: none"> • Intergovernmental organisation headquartered in Abu Dhabi (UAE) founded in 2009 • 160 member countries dedicated to promoting adoption and sustainable use of renewable energy
<p><i>Mediterranean Solar Plan (MSP)</i></p>	<ul style="list-style-type: none"> • Launched in 2008 by the Union for the Mediterranean (UfM), together with the 43 member states, the European Union, the League of Arab States and other stakeholders • Aims to establish an enabling policy framework for the large-scale regional deployment of RE and EE technologies • Two objectives for 2020: develop an additional 20 GW of renewable energy production capacity and achieve significant energy savings throughout the region • MSP Project Preparation Facility: funded by the EU Neighbourhood Facility (NIF) for feasibility studies for RE projects (EUR 50,000 to 500,000)
<p><i>Arab Strategy for the development of renewable energy uses (2010-2030)</i></p>	<ul style="list-style-type: none"> • Dedicated framework for joint Arab action at the 3rd Arab Economic and Social Development Summit, held in Riyadh (Saudi Arabia) in January 2013 • Approved by the League of Arab States (LAS), headquartered in Cairo (Egypt)
<p><i>Regional Centre for Renewable Energies and Energy Efficiency (RCREE)</i></p>	<ul style="list-style-type: none"> • Regional organisation based in Cairo (Egypt) with contributions from member states, and government grants from Germany, Denmark and Egypt • Aims to enable and increase the adoption of clean energy practices in the Arab region, via: policy dialogue, strategies, technologies and capacity development
<p><i>MENA Renewable Energy Conference (MENAREC)</i></p>	<ul style="list-style-type: none"> • Organised since 2004 by a MENA country in partnership with the German Federal Ministry for Environment, Nature Protection and Nuclear Safety (BMU) and GIZ • Dedicated framework to promote and strengthen partnerships on RE development and linkages with Europe
<p><i>Mediterranean Renewable Energy Centre (MEDREC)</i></p>	<ul style="list-style-type: none"> • Regional centre launched by the Italian Ministry of Environment and Territory, based in Tunis (Tunisia) • Involves international and governmental institutions of Algeria, Egypt, Libya, Morocco, and Tunisia
<p><i>Desertec Industrial Initiative (Dii)³⁵</i></p>	<ul style="list-style-type: none"> • Joint venture established by a number of private sector actors, mainly European companies and North African agencies

35. In July 2013, the Desertec Foundation announced it was terminating its membership in Dii.

Renewable Energy Solutions for the Mediterranean (RES4MED)

Mediterranean Grid (MedGrid) & Mediterranean Ring (MedRing)

Masdar Initiative

King Abdullah City for Atomic and Renewable Energy (KA-CARE)

- Promotes the creation of markets for solar and wind energy to export power from the Sahara Desert to Europe via transmission links under the Mediterranean
- Non-profit association set up in 2012 by CESI, Edison, Enel Green Power, Gestore Servizi Energetici (GSE), PricewaterhouseCoopers (PwC) and Politecnico di Milano.
- Focus on research related to distributed generation, village power, energy-from-waste and smart cities.
- Aim to develop the necessary grid infrastructure (high-voltage, direct current) and provide interconnection of electric power transmission grids in order to foster large-scale RE deployment
- Clean energy development and investment cluster located in Abu Dhabi (UAE)
- Includes: first carbon-neutral city; 100MW Noor photovoltaic project
- Established in 2010 to spearhead Saudi Arabia's alternative energy plans
- White paper (February 2013) set out the procurement strategy, with 23.9 GW of renewable energy to be installed by 2020 by private developers

Country Focus

Please note that the following Country Focus sections remain to be validated by the respective governments. Please note as well that project pipeline information represents projects and potential projects identified by government authorities.

*Egypt*³⁶

<i>Background</i>	Egypt remains a relatively new market for renewable energy with significant potential and ambitious targets.
<i>Policy Framework</i>	The legal framework in place is fairly recent: National Renewable Energy Strategy (2008). The Egyptian Solar Plan, approved in July 2012, set a target for 2,800 MW of CSP and 700 MW of solar PV by 2027
<i>Target Setting</i>	Egypt is seeking to derive 20% of its energy from renewable sources by 2020: <ul style="list-style-type: none">• 12% from wind (equivalent to 7200 MW)• 6% from hydro• 2% from solar PV Electricity sector reform, a modern grid infrastructure, proposed feed in tariffs (FiTs) and a dedicated fund would lay the foundation for further growth in the RE sector. Several studies are being conducted on connecting Egypt to the European grid.
<i>Project Pipeline</i>	<ul style="list-style-type: none">• Kureimat Solar Thermal Hybrid Project• Kom Ombo CSP Project• West Nile River Wind

36 . Source: GIZ (2014), *Legal Frameworks for Renewable Energy. Policy Analysis for 15 Developing and Emerging Countries.*

Jordan³⁷

<i>Background</i>	<p>Rapid energy demand growth (7% in 2011), limited domestic resources and regional instability, including instances of sabotage from neighbouring Egypt, have spurred the need for energy self-sufficiency in Jordan.</p> <p>The Government of Jordan took concrete steps to reduce dependence on energy imports and increase the share of RE in the overall energy mix from 2% to 10% by 2020. The Kingdom is also undergoing a major subsidy reform, through a three-stage removal of fossil fuel subsidies initiated in 2008. This is expected to boost clean energy generation by removing price distortions for conventional fuels, and is accompanied by a set of compensatory measures that help cushion consumers from rising living costs.</p>
<i>Policy Framework</i>	<p>Jordan boasts some of the most complete legislation in the MENA region for renewable energy.</p> <ul style="list-style-type: none">• <i>National Energy Strategy</i> (2007-2020) ;• <i>Renewable Energy and Energy Efficiency Law</i> (2012), with specific regulations establishing conditions for investment, construction and connection to the grid:<ul style="list-style-type: none">– Direct proposals mechanism, allowing private investors to propose RE projects– National Electric Power Company (NEPCO) entitled to purchase output and fund grid connection for larger projects– Codes for energy efficiency, green building, tax incentives are under discussion <p>Jordan's institutional set-up is also relatively advanced:</p> <ul style="list-style-type: none">• <i>National Energy Research Centre</i> (NERC, 1998);• <i>Renewable Energy Department</i> at the Ministry of Energy and Mineral Resources (MEMR);• <i>Jordan Renewable Energy and Energy Efficiency Fund</i> (JREEEF), set up under MEMR with funding from national and international institutions (including GCC)³, to facilitate investment through grants, or subsidies on commercial loans and guarantees.
<i>Target Setting</i>	<ul style="list-style-type: none">• 7% of RE in the primary energy mix by 2015 % and 10% by 2020 through 600-1,200 MW from wind energy; 300-600 MW from solar energy; 30-50 MW from waste-to-energy.• Improve total energy efficiency by 20% by 2020 through demand-side management.
<i>Project Pipeline</i>	<p>Jordan's RE market includes a number of high-profile RE projects, mainly solar and wind.</p> <ul style="list-style-type: none">• 117 MW Tafilah Wind Project• 100 MW Shams Ma'an Solar PV Project• 100 MW JOAN 1 CSP Project <p>In 2011, the Government invited companies to submit proposals for RE generation projects to meet the target of 1.8 GW by 2020. This first Expression of Interest received wind, PV and CSP project proposals from 65 private companies. By the end of 2013, 29 contracts were signed, including the first Jordanian PPA, followed by 12 more.</p>

37 . Source: OECD (forthcoming), *Assessment Report - Jordan: Optimising the Incentives Framework for Renewable Power Infrastructure*, ISMED Support Programme.

Morocco³⁸

<i>Background</i>	<p>Morocco is one of the largest energy importer in the region: 95% of energy needs are met through imports (over 25% of total imports in 2012), resulting in a growing trade deficit.</p> <p>There is a strong commitment to renewable energy as a substitute to expensive energy imports.</p> <p>Morocco is considered the largest potential markets for RE in the region thanks to excellent solar resources throughout the country and wind resources along Atlantic coast. There is potential to export RE to Southern Europe.</p>
<i>Policy Framework</i>	<p>There is strong political direction and a legal framework in place</p> <ul style="list-style-type: none">• National Plan for the Development of Solar Thermal Energy (2001)• National Plan for the Development of Renewable Energies and Energy Efficiency (2006)• Solar PV Programme (2007)• National Renewable Energy and Energy Efficiency Plan (2008)• Renewable Energy Development Law (13.09): no set limit on amount of power generation capacity, flexibility as to final use of output (can be used locally or exported) <p>Establishment of public agencies</p> <ul style="list-style-type: none">• National Agency for the Development of Renewable Energy and Energy Efficiency• MASEN, Moroccan Agency for Solar Energy (2010)
<i>Target Setting</i>	<p>42% of energy generation mix by 2020, including 14% solar, 14% wind and 14% hydro</p> <ul style="list-style-type: none">• 400 MW of small hydro capacity (2015)• 2000 MW of solar capacity (2020) - across 5 sites, for an anticipated \$9 billion• 2000 MW of wind capacity (2020) - only 291MW operational as of 2012
<i>Project Pipeline</i>	<ul style="list-style-type: none">• 160 MW Ouarzazate Noor 1 CSP Project (Phase 1)• 300 MW Tarfaya Wind Project <p>In 2012, a consortium led by ACWA Power International (Saudi Arabia) won the tender organised by the Moroccan Agency for Solar Energy (MASEN) to build and operate a 160 MW CSP plant in Ouarzazate. The agency is now soliciting bids for the development of a 300 MW solar facility.</p> <p>As for wind projects, the National Office of Electricity and Water (ONEE) is evaluating bidders for a massive 850MW wind complex (BOOT) that will comprise five wind farms in the Sahara.</p>

38 . Source: GIZ (2014), *Legal Frameworks for Renewable Energy. Policy Analysis for 15 Developing and Emerging Countries*.

Tunisia³⁹

Background

Renewable energy plays a small role in Tunisia's total energy supply. Apart from centralised electricity generation from hydropower, the use of renewable energy to produce electricity is at an early stage.

Yet the Government of Tunisia has ambitious goals for the renewable energy sector. Direct financial incentives and tax incentives (including exoneration from customs duties) are the cornerstone of the incentives framework. Investment and expansion are required to develop the grid to meet solar and wind targets. Interconnections with Algeria, Libya and European countries are currently being planned.

Access to finance is a major barrier. Tunisia is undergoing major subsidy reform, and direct and indirect energy subsidies grew to TD 5.3 billion in 2012 (ANME).

Policy Framework

Legal framework in place

- Law No. 2004-72 on the rational use of energy (2004) defines the sensible use of energy as a national priority and states three principal goals: energy savings, promotion of renewable energy and substitution of forms of energy previously used
- Law 2005-82 and Decree 2005-2234 on Energy (2005)
 - National Agency for Energy Management (*Agence Nationale pour la Maîtrise de l'Énergie* - ANME) and National Fund for Energy Management (*Fonds National pour la Maîtrise de l'Énergie* - FNME): set up to finance RE and EE projects
 - PROSOL Programme: incentives for residential solar water heaters
- National Energy Efficiency and Renewable Energy Programme (2008-2011)
- Law 2009-7 on Energy Efficiency and Renewable Energy (2009): excess electricity can be sold to STEG (net-metering policy for small-scale grid connected renewable energy projects which allows feeding excess electricity to the grid)
- Tunisian Solar Plan (*Plan Solaire Tunisien 2010-2016*)

Target Setting

- 4% of electricity generation (2011), 11% (2016), 25% (2030)
 - 330 MW of wind capacity
 - 15 MW of solar PV capacity (2011)
 - 1000 MW of RE capacity (2016)
 - 4700 MW of RE capacity (2030)

Project Pipeline

Regarding grid-connected power plants, the focus lies on wind energy, although use of solar energy for thermal purposes is gaining importance. In 2011, 62 MW of hydropower and 53 MW of wind power were installed. Regarding off-grid use of renewable energies, 11,000 decentralised PV systems have been installed for rural electrification.

- TuNur Solar Power Project

39. Source: GIZ (2014), *Legal Frameworks for Renewable Energy. Policy Analysis for 15 Developing and Emerging Countries*.

Identification of Barriers

179. Renewable energy projects bear a wider range of risks than conventional power projects. From an investment perspective, the smaller scale of RE projects coupled with high upfront costs, lack of historical track record and weather-related performance data result in special risks that need to be managed, mitigated and/or removed.

180. Three main risk areas deserve special attention.

Political, policy and regulatory risks

181. Policy and regulatory risks derive from adverse and/or retroactive changes in legal and regulatory regimes affecting a project's financial viability. RE project development tends to be governed by specific policy regimes and economically-distorting support mechanisms that try to level the playing field with fossil fuels. Uncertainty about how policy decisions will affect RE projects and their cash flows therefore present a great challenge for developers seeking financing, and is a powerful deterrent to investors and lenders. This is particularly the case if a given support regime is essential to project viability. In Europe, for instance, subsidies to solar power projects account for up to 85% of initial revenue, meaning that a measure of regulatory risk hangs above most RE projects⁴⁰.

182. Additional policy-related risks involved in the renewable energy sector are: lack of energy development strategies; tariff and non-tariff trade barriers to RE technologies; lack of political commitment and prevailing fossil fuel subsidies; legal and ownership rights; currency risk (OECD, 2014). High exposure to policy risk is made all the more acute by the lengthy investment horizon of RE infrastructure projects.

183. Paradoxically, a contributor to heightened political and regulatory risk is the dramatic fall in hardware costs – the cost of solar panels have fallen by 60% since 2008 as a consequence of strong competition and excess capacity among hardware manufacturers. This makes a given project cheaper, but has led to surging investments in RE solar projects overall, which in turn has over-burdened government RE support schemes (Bloomberg New Energy Finance, 2009).

184. Public budget constraints are also undermining the sustainability of financial support for RE investments, with reductions to RE subsidies changing the commercial equation for many projects. Spain, an early-mover in the field, introduced cuts to feed-in tariffs for existing solar projects of up to 45%, causing investment in RE projects to drop by more than one-half to USD 4.6 billion in 2010 (Bloomberg New Energy Finance, 2009).

Physical and technological risks

185. Physical and technological risks derive from the physical characteristics of RE assets, related to the intermittency of natural resources (e.g. variations in wind levels and solar radiations) and from novel RE technologies.

186. While conventional fossil fuel energy projects generally employ mature technologies that have been proven over years of successful commercial application, RE projects employ recent and evolving technologies that do not have established track records and lack actuarial data. The risk of

40. Standard & Poor's (July 2011), *Why Regulatory Risk Hinders Renewable Energy Projects in Europe*.

technological obsolescence is penalized by risk-adverse financiers. Only a few individual technologies such as onshore wind power⁴¹ and solar PV⁴² benefit from relatively well-defined risks and adequate operational history.

187. In particular, risk related to volatile output, such as weather-related volume risk, may result in revenue falling consistently below projections. Wind volumes can deviate by 25% from normal values in any given year, whilst solar radiation levels typically deviate by no more than 4% from normal levels (Economist Intelligence Unit, 2011). Consequently, output may fall dramatically short of estimated levels, due to inadequate weather projections and increasingly unpredictable weather patterns caused by climate change.

Market risks

188. Renewable energy projects are typically capital-intensive and involve high leverage ratios, with up to 70-80% of the project being financed through debt. Financial risks derive from the capital structure of the project and its ability to generate cash flows sufficient to fund planned investment, operations and maintenance expenditures, service debt, and provide reasonable returns to the sponsor.

189. Several factors make access to finance a particular challenge for RE projects:

- **Small size and returns.** RE projects tend to be significantly smaller in terms of physical size and financial returns than conventional power plants, and are subject to high administrative costs associated with risk assessments, loan processing and insurance for such projects;
- **Time profile of risk.** RE project costs are 90% up-front. Although the energy source is generally free, there can be a long and expensive phase of construction and installation that delays revenue streams relative to fossil fuel powered plants;
- **Lack of actuarial data:** The lack of reliable historical weather information makes it difficult to construct financial models. There is often no information available, and any information that is available will usually be from a near-by weather reporting station that may not be an appropriate proxy for the project site;
- **High transaction costs:** RE projects involving newer technologies and less experienced sponsors are generally more time-intensive and difficult to execute than conventional energy projects. Additional costs arise from initiating and completing transactions, such as finding partners, negotiating, consulting with lawyers and experts, monitoring agreements, and evaluating opportunity costs.

190. As risk perceptions increase, lenders require that equity play a larger role in the project's financing structure. In order to protect revenue streams, project lenders may also demand greater guarantees against the risks of new and developing technologies, as well as performance guarantees in

41 . Wind power is harnessed by rotor blades and converted into electricity: resource risk includes long-term wind power reliability, while technology and operational risks include wind turbine breakdown by failure of a control unit or electrical parts, as well as pitch control.

42 . PV panels are made of semi-conductor material that, when exposed to sunlight, generates electricity: practically no resource risks are associated, as there is substantial data on solar isolation in various parts of the world and the technology has matured over time.

order to reduce the gap between expected and actual output – involving complex contractual obligations and climate data calculations for which data are not always available.

Risk Perceptions

191. Risk perceptions affecting RE projects are heightened by the existence of information asymmetries as well as by unfavourable market conditions, e.g. business climate and political uncertainty become particularly acute when it comes to national commitments to “green” growth.

Information Asymmetries

192. Information asymmetries refer to the unequal and/or insufficient access to information regarding a given transaction, where one party has more or better information than the other. There are significant market failures in the RE market, and, in particular, significant levels of information asymmetry between RE project developers and potential financiers. The reasons for information asymmetries in RE development include:

- The innovative nature of RE technologies and lack of operational history/reliable performance data. There is a lack of actuarial information for the renewable energy sector (e.g. loss history) that is necessary for accurate resource assessment and risk evaluation ;
- Multi-year investment horizons, coupled with high upfront costs and long payback periods ;
- Reliance on (unstable) public resources and subsidies to make investment financially viable.

193. As many RE projects tend to be small-scale, undercapitalized projects developed by little-known sponsors, the information required by lenders and underwriters to assess a project’s viability is often missing or expensive to provide (involving high transaction costs). Risks are thus difficult to quantify and financial conditions for investment become more restrictive (credit requirements, contract terms and conditions, structure and documentation).

Market Conditions

194. In addition to the immaturity of RE technologies and markets, RE-specific risks have been exacerbated by a context of strong macroeconomic imbalances, and by political uncertainty concerning government commitments to the “green growth” agenda and related subsidies as national budgets tighten. In the MENA region, political and social unrest, added to economic uncertainty, provides little comfort to private sector operators.

Policy Proposals

195. Investments in renewable energy infrastructure will need to be scaled up significantly in the MENA region to support the broader development, economic and climate agenda. Given strains on public finances, engaging the private sector is essential.

196. The task of encouraging private investment in such a frontier sector, faced with unfavourable regional risk perceptions, is daunting. As seen previously, investment in renewable energy is further hampered by market and government failures, including fossil-fuel subsidies, the lack of supportive policies and outstanding barriers to international trade and investment (OECD, 2014).

197. As detailed in the OECD *Policy Guidance for Investment in Clean Energy Infrastructure*, governments have a key role in strengthening the enabling environment for infrastructure investment by designing and implementing clear and predictable domestic policy frameworks. Based on the extensive consultations and findings derived from the ISMED Support Programme, key policy recommendations applicable to the renewable energy sector in the MENA region are set forth below.

Box 6. The OECD Policy Guidance for Investment in Clean Energy Infrastructure

The OECD *Policy Guidance for Investment in Clean Energy Infrastructure* (OECD, 2014) is a non-prescriptive tool to help policy makers identify ways to mobilise private investment in clean energy infrastructure. It raises key issues for policy makers to consider, including in the areas of:

- **Investment policy:** applying investment policy principles such as non-discrimination of international versus domestic investment, investor protection and intellectual property protection, contract enforcement and transparency;
- **Investment promotion and facilitation:** improving coherence of the broad system of investment incentives and disincentives, e.g. by setting long-term goals, setting well-targeted and time limited incentives (e.g. feed-in tariffs), and facilitating the licensing of renewable energy projects;
- **Energy market design and competition policy:** levelling the playing field between independent power producers (IPPs) and state-owned enterprises (SOEs) and between national and foreign actors to tackle market rigidities that favour fossil fuel incumbency in the electricity sector;
- **Financial market policy:** strengthening domestic financial markets and providing specific financial tools and instruments to facilitate access to long-term finance;
- **Governance of energy market institutions:** enhancing co-ordination between different levels of governance (e.g. to align national and sub-national policies), ensuring the independence of the electricity market regulator, and co-ordinating the planning and deployment of the electricity grid with that of clean energy generation; and
- **Other policies and cross-cutting issues:** regional co-operation; making and implementing the choice between public and private provision of clean energy infrastructure; and ensuring that clean energy policies are compatible with World Trade Organization (WTO) rules.

The *Policy Guidance* benefited from substantial contributions by the World Bank and the United Nations Development Programme (UNDP) and was annexed to the Communiqué of G20 Finance Ministers and Central Bank Governors at their meeting in October 2013.

The OECD is to apply the *Policy Guidance* to specific country contexts, in partnership with interested countries and international organisations, to help governments assess and reform their domestic policy framework for clean energy investment. One of the main outcomes of this project will be publication of *Clean Energy Investment Policy Reviews*, including a road map of actionable reforms for participating countries.

Source : OECD (2014), *Policy Guidance for Investment in Clean Energy Infrastructure : Expanding Access to Clean Energy for*

Defining a consistent policy framework for renewable energies

198. Domestic and international investment in renewable energy is constrained by market and government failures (OECD, 2014). Rather than fostering RE investments on a project-by-project basis, MENA governments need to devise and implement consistent incentives frameworks for investment in renewable energy, across RE technologies, comprising standardised support measures such as feed-in tariffs and tax incentives.

199. In order to be effective, RE support mechanisms should aim at correcting market failures and avoid adding further market distortions. Cash-flow incentives, designed to spur project profitability and cash-flow during the project lifecycle (e.g. net metering and feed-in tariffs), should be favoured.

- *Providing investors with well-designed, well-targeted and time-limited incentives.* Those incentives comprise regulatory, financial and fiscal incentives, augmented by competitive bidding and transparent tariff criteria;
- *Defining who is responsible for delivering the targets, and what tools are at the disposal of those institutions.* This includes facilitating the business licensing process for renewable energy projects and ensuring transparency and time-compliance;
- *Ensuring that renewable energy policies are aligned and co-ordinated with broader national policies.* This requires clarifying strategic goals, and ensuring that policy frameworks are coherent with the broader national infrastructure, energy, environment and climate strategy framework, and designed accordingly.

Box 7. The OECD Checklist for Foreign Direct Investment Incentive Policies

The OECD *Checklist for Foreign Direct Investment Incentive Policies* aims to provide policy-makers with a tool against which to assess the usefulness and relevance of FDI incentive policies. The Checklist lists the following types of unintended wastefulness resulting from investment incentives:

- Ineffectiveness ;
- Inefficiencies ;
- opportunity costs ;
- deadweight loss ;
- triggering competition and adverse selection.

Source : www.oecd.org/corporate/mne/oecdinvestmentpolicytools.htm

200. To ensure investor confidence in policy regime continuity, governments need to guarantee minimum levels of legal security. The need for stable and predictable policy frameworks goes beyond strategic goal-setting and includes:

- *Designing and implementing clear and predictable regulations:* national energy strategies with robust and credible long-term objectives and renewable energy targets, transparent tariff-setting and standard off-take agreements;
- *Ensuring close monitoring of existing support policies by independent energy regulators.*

Engaging structural reform of domestic energy markets

201. A second key element to be addressed in the wider MENA region is the need for structural reform of domestic energy markets and pricing mechanisms. The presence of conflicting policies that support fossil-fuel consumption, through government subsidies, makes it particularly difficult for renewable technologies to compete, drains immense financial resources from the state and weakens the perception of a country's clean energy commitments.

202. Shifting investment incentives away from conventional energy towards renewable energy has become a priority. Recent advances in certain RE technologies mean that grid parity⁴³ is becoming a reality in a growing number of jurisdictions. However, in order to level the playing field with conventional power, it is essential to engage in a comprehensive overhaul of the energy market, including phasing out fossil-fuel subsidies and better pricing carbon emissions.

- *Overhauling domestic energy subsidy systems and removing inefficient fossil-fuel subsidies.* The prevalence of energy subsidies in the MENA region, especially in oil-exporting countries, is often cited a major constraint to renewable energy development. Reducing energy subsidies is politically sensitive and requires a pragmatic approach, which could include minimising possible adverse effects on the poorest segments of the population by increasing spending on education, health, and social safety nets as compensation for potentially higher energy prices (IMF, 2014)⁴⁴.
- *Pricing carbon emissions.* While the economics of RE can be improved by factoring in opportunity costs, the exact determination of those costs in specific MENA cases is less obvious in the absence of cost-reflective energy and electricity tariffs⁴⁵. Governments need to ensure that the price of carbon emissions is set in a transparent, credible and predictable manner, and consider introducing a market mechanism (tax or cap-and-trade systems) to better price carbon and level the playing field with renewable energies.
- *Promoting the structural separation of the power sector to create a level playing field between independent power producers (IPPs) and state-owned incumbent operators.* Renewable energy infrastructure investments usually take place in a situation of imperfect competition where a state-owned enterprise (SOE) is the incumbent. Policy-makers need to ensure that the adequate regulatory provisions are in place to guarantee independent power provision, and that actors are encouraged to engage not only in power generation, but also in transmission and distribution (OECD, 2014). Competition authorities and energy regulators

43 . Grid parity is achieved when the cost of producing RE is equal to or less than the cost of buying from the grid.

44 . Sdravovich, Carlo et al. (2014), *Subsidy Reform in the Middle East and North Africa: A Summary of Recent Progress and Challenges Ahead*, IMF Middle East and Central Asia Department, July 2014.

45 . End-user prices for electricity often do not reflect the real cost of generation due to energy subsidies: in Morocco for example, the electricity price is as low as 10 cents/KWh.

also need to possess the appropriate resources and independence to effectively enforce regulation.

Scaling up grid infrastructure

203. Another focal point consists in grid infrastructure: both grid access for private developers and interconnections between MENA countries are key to defining the potential for significant market growth in the medium-to-long term.

204. The regional grid infrastructure is largely owned by public utilities, which facilitates potential interconnections. A number of ongoing actions are dedicated to extending internal grid capacity as well as interconnections, both within the region and between the region and Southern European countries (through Spain and Italy)⁴⁶.

- *Designing a long-term grid infrastructure development strategy, focusing on grid access and enhanced grid capacity.* This involves electricity network planning and deployment, requiring government efforts to map domestic energy resources and co-ordinate deployment of the electricity grid with that of renewable energy generation – encompassing differences in size and scale of RE generation projects. This also requires capacity of the grid to balance the intermittent generation for certain renewable energy sources (e.g. wind, solar, etc.).
- *Dedicating adequate financial resources to scaling up MENA-wide grid infrastructure.* This will require considerable physical investments in the near future, but is necessary to provide a reliable supply of power and integrate an increasing share of power from renewables.

Table 5. Grid ownership and interconnections in selected MENA countries

Country	Transmission Operator	Interconnections with
<i>Algeria</i>	SONELGAZ	<ul style="list-style-type: none"> • Tunisia (300 MW capacity, new line in 2012 complements 4 lines and doubles capacity) • Morocco (800 MW capacity) • Spain and Italy (feasibility study stage)
<i>Egypt</i>	Egyptian Electricity Transmission Company (EETC)	<ul style="list-style-type: none"> • Jordan (550 MW capacity, plan to double) • Palestine (17 MW, planned 15-200 MW) • Saudi Arabia (3000 MW HVDC link planned)
<i>Jordan</i>	National Electricity Power Company (NEPCO)	<ul style="list-style-type: none"> • Syria • Palestinian Authority
<i>Lebanon</i>	Électricité du Liban (EDL)	<ul style="list-style-type: none"> • Syria
<i>Libya</i>	General Electricity Company of Libya (GECOL)	<ul style="list-style-type: none"> • Egypt (180 MW capacity, 400 MW planned)
<i>Morocco</i>	Office National d'Électricité (ONE)	<ul style="list-style-type: none"> • Spain (1400 MW capacity, plan to add third AC cable undersea in 2020) • Tunisia (via Algeria) • Algeria (800 MW capacity)
<i>Tunisia</i>	Société Tunisienne d'Électricité et du Gaz (STEG)	<ul style="list-style-type: none"> • Morocco

46. Recent initiatives include the multi-billion dollar Gulf Cooperation Council power grid project, which created an integrated electricity network between Saudi Arabia, Qatar, Bahrain, Kuwait, Oman and the UAE. The Seven Countries Interconnection Project (SCIP), launched in the early 1990s, aims to interconnect the grids of Libya, Egypt, Jordan, Syria, Iraq, Turkey and Lebanon.

		<ul style="list-style-type: none"> • Algeria (300 MW) • Libya (disconnected) • Italy: plan for 1000 MW of HVDC, linked to decision on 1200 MW plant in Tunisia
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Source: REN21 Secretariat (2013), MENA Renewables Status Report, Abu Dhabi International Renewable Energy Conference (ADIREC), Paris.

Addressing common investment issues

205. Enabling the infrastructure investment environment involves all fields of investment policy, and applying principles such as non-discrimination, investor protection and transparency. The energy sector being generally more restricted to foreign direct investment (FDI) than others, particular emphasis should be given to the extent of foreign ownership restrictions in clean energy (OECD, 2014). In particular, questions to consider include: *non-discriminatory treatment of international renewable energy investment, intellectual property protection and adequate property registration systems, and contract enforcement*. In addition, the site-specific nature of renewable energy resources calls for substantial efforts aimed at securing stable and reliable access to land.

206. Other common investment issues are particularly acute in the renewable energy sector: local content requirements, land ownership and leasing laws, company ownership rules, labour force regulations, and tax systems (e.g. customs duties for import of RE technologies).

- *Requirements for local content and transparency can increase costs and delay projects.* Local content provisions in PPP tenders and contracts and transparent procurement processes are important issues. Governments often try to use PPPs to build a local industry or to provide local employment. This can have a negative impact on the financial aspects of the transaction and the quality of labour and material inputs.
- *Land ownership and leasing laws:* real estate laws can impact project viability, particularly restrictions on foreign ownership.
- *Company ownership rules:* requirement to involve local partners through joint ventures or government participation.
- *Labour force:* requirement to hire and train local labour where qualified local staff is missing.
- *Other cross-cutting issues:* licensing, permitting, tax, customs duties, currency transfer.

Foster regional cooperation and policy dialogue

207. Leading MENA countries can provide valuable experience that will help spur RE development at a larger regional scale, via the provision of commercially-relevant information on individual country policy and regulatory regimes, plans for regional cooperation, knowledge of large-scale RE deployment in EU grid systems, and dialogue between public and private financiers on the availability and design of public finance products.

208. Continuous monitoring of renewable energy incentive efficiency is required by public authorities, including via public-private policy dialogue. Within the MENA-OECD Investment Programme, the MENA-OECD Force on Energy and Infrastructure provides such a forum and could

serve as a regional platform to reduce information asymmetries, uncertainties and risks when implementing incentives.

Box 8. Fostering regional cooperation and policy dialogue in the renewable energy sector

Since 2012, the OECD has partnered with the 15 Member States of the Southern African Development Community (SADC) in elaborating a Regional Investment Policy Framework, based on key elements of the OECD's Policy Framework for Investment (PFI). The SADC Regional Investment Policy Framework seeks to provide practical policy options and guidance in four inter-related policy areas: investor protection, restrictions on Foreign Direct Investment, tax incentives for investment, and infrastructure investment.

The latter pillar, on which the OECD actively collaborates with the SADC PPP Network, should facilitate implementation of successful infrastructure projects both within countries and across borders. For instance the regional projects comprised within the SADC Regional Infrastructure Development Master Plan (RIDMP) involve multiple SADC governments and would very much benefit from infrastructure policy frameworks that are more coordinated and coherent across neighbouring countries. This type of regional cooperation would be beneficial in the MENA region.

ANNEX 1: CASE STUDIES

Box 9. Egypt: The New Cairo Wastewater PPP

The New Cairo Wastewater Treatment Project, the first project finance operation to be launched under the new PPP Programme in Egypt, consisted of a land-mark concession for the design, financing construction, operation and maintenance of a new wastewater treatment facility worth USD 482 million.

Project Rationale

Since 2006, Egypt's water sector has been identified as a priority by the Egyptian Government. Inadequate water sanitation infrastructure, limited service provision and rapid population growth led the Government to consider new approaches for financing and managing water supply and sanitation services that would involve greater accountability for performance, improved operational efficiency, and a reduced fiscal burden.

The project aims to improve sanitation services and accommodate projected population growth in New Cairo, a satellite city created in 2001 to alleviate overcrowding in central Cairo, and where the population of 550,000 is expected to increase to approximately 3 million by 2029.

The project is also intended to promote PPP as a model for future cost-effective, environmentally safe water and wastewater treatment projects in Egypt.

Project Characteristics

- Description: PPP concession agreement under which the private partner shall design, finance, construct, operate, and maintain a new wastewater treatment plant with an initial capacity of 250,000 m³ per day. The final capacity will be 500,000 m³ per day.
- Timeline:
 - Concession awarded in June 2009
 - Financial closure in February 2010
 - Construction started in February 2010, initially expected to be completed in March 2012 and operational in June 2012
 - The project was cancelled in May 2012 in the aftermath of the political events.
- Advisor:
 - The International Finance Corporation (“IFC”) was asked by the Egyptian Government to help develop and implement a model PPP that could be replicated in other infrastructure projects, and was appointed as lead advisor for the transaction and international competitive tender.
 - PPIAF had also been requested to prepare a capacity assessment, conceptual framework and transaction model for the project in 2006.

Contract Scheme

- 20-year BOT concession contract worth USD 482 million, covering engineering, procurement and construction, as well as operation and maintenance.
- Contractor:
 - New Urban Communities Authority (NUCA), under the supervision of the Ministry of Finance (PPP Central Unit) and the Lead Advisor (IFC)
 - Orasqualia: a 50/50 joint venture between Aqualia and Orascom Construction Industries (OCI)
- Tender procedure:
 - The international competitive tender process included an initial prequalification of prospective bidders based on financial and technical criteria. Seven bidders were prequalified out of the 10 applications received.
 - The project attracted five bids from consortia comprised of local, regional, and international firms.
 - The bidding was organised in two steps: a technical bid, evaluated on a “pass/fail” basis, and a commercial bid, limited to bidders of which the technical offers had been accepted.
 - The selection criteria consisted in the net present value of the overall sewage treatment charge throughout the concession period.

Financing Scheme

- Mobilisation of USD 150-200 million (EGP 800 million).
- The Government to pay a sewage treatment charge to the private partner, including a fixed portion to cover the investor’s fixed costs (e.g. debt servicing and return on equity) and a variable portion based on the actual volume of treated sewage, to cover the investor’s variable costs.
- Electricity costs to be paid by the New Urban Communities Authority (NUCA) (off-taker) as a pass-through item. Accordingly, bidders were requested to quote their projected electricity consumption level.
- Ministry of Finance to guarantee the credit of the New Urban Communities Authority.
- European Bank for Reconstruction and Development to acquire a share of Orascom/AqualiT.

Obstacles and Lessons learned

Operations were delayed due to political instability. The contractors selected in 2009 did not predict the social uncertainty, political unrest and economic crash following the 2011 uprisings. Orasqualia managed, however, to continue construction through three successive governments.

Sources: International Financial Corporation, World Bank Group (2013), Infrastructure stories of impact: New Cairo Wastewater Treatment Plant is Egypt’s First Public-Private Partnership ; Public-Private Infrastructure Advisory Facility (2013), Impact Stories: PPIAF Support Ground-breaking Public-Private Partnerships in the Wastewater Sector in Egypt ; International Financial Corporation, World Bank Group (2010), Public-Private Partnership Stories, Egypt: New Cairo Water.

Box 10. Jordan: The Queen Alia Airport Expansion PPP

The new terminal building at Amman's Queen Alia International Airport (QAIA) in Jordan is a prime example of a successful PPP, with a 25-year concession supported by funds from the governments of Canada, France, Japan, Kuwait, the Netherlands, and the United States, the Islamic Development Bank and USAID. The project includes the rehabilitation of existing facilities, the construction of a new terminal, as well as the operation of the airport. With a yearly capacity of 12 million passengers and its expected generation of more than 20,000 direct and indirect job opportunities and USD 1 billion in foreign direct investments, the new terminal has been classified by IFC as one of the 40 best PPP projects in emerging markets.

Project Rationale

Jordan aims to develop the country's only international airport into a gateway to Africa, Asia, and Europe. Queen Alia Airport, located 32 km south of Amman, is Jordan's principal airport since it was built in 1983, accounting for 97% of the country's air traffic, and is an increasingly popular transit point for tourists, business travellers, and international air freight. The airport was unable to meet sustained growth of 7% per year in passenger traffic over the last decade, reaching 3.5 million visitors in 2006 – a figure expected to rise to 12.8 million by 2030.

In a bid to meet increasing demand for capacity and to position QAIA as a regional financial, trade, and transport hub, the Government of Jordan sought private sector participation to rehabilitate and increase the capacity of the airport through a user-fee PPP concession. The project involves upgrading and operating the existing terminal, building and constructing a new 900,000 square foot adjacent terminal building.

The QAIA expansion project, which was part of a broader strategy to liberalise air transport policies, restructure civil aviation, improve competitiveness and eliminate budgetary support to the airport, is already serving as a model for launching a full-scale PPP programme in infrastructure.

Project Characteristics

- Consortium: Airport International Group, comprising:
 - Abu Dhabi Investment Corporation (UAE): 40 %
 - Noor Financial Investment Company (Kuwait): 25 %
 - Joannou & Paraskevaides Overseas (UK and Cyprus) – J&P Avax subsidiary (Greece): 10%
 - Aéroport de Paris Management of France (France) : 5%
- Lead advisor: International Finance Corporation
- Timeline:
 - Agreement signed on May 2007 with financial close on December 2007.
 - Stage 1 completed in June 2013 with new terminal opened for traffic in late March 2013
 - Stage 2 (expansion) in 2014-2016 to increase airport capacity

Contract Scheme

- Description: Concession agreement to upgrade, expand, rehabilitate, operate, and maintain QAIA
- Duration: 25 years
- Bidding process: Through an international bidding process, six consortia representing more than 25 international investors were qualified. Financial bids were evaluated based on the payment of annual concession fees as a percentage of gross revenues to the government, the private partner being entitled to

the remaining share of the airport gross revenue in exchange for assuming construction, operation, and demand risks. The concession was awarded to the Airport International Group with a bid offering a concession fee of more than 54% of gross revenues for the term of the agreement.

Financing Scheme

- The project was funded by equity of the sponsors, a syndicated loan extended by European commercial banks and direct loans from IFC and Islamic Development Bank. The obligor of the loan is the special purpose vehicle (SPV) with no third-party guarantee provided.
- Capital value: USD 675 million, including combination of USD 370m debt and USD 305m equity.
- Financiers: Islamic Development Bank: USD 100 million lease; International Finance Corporation (IFC): USD 280 million financing package consisting of the following:
 - The “A loan” of USD 70 million provided through a 17-year senior loan ;
 - The “B loan” of USD 160 million provided under a 16-year syndication formed by Calyon, Natixis and Europe Arab Bank. A swap was provided to minimize the interest rate risk of the transaction.
 - The “C quasi-equity loan” of USD 40 million under a 18-year subordinated loan with a 15-year grace period to match concession cash flows ; and
 - A stand-by facility of USD 10 million to be disbursed in the event that cash flows generated are insufficient to complete the financing of the terminal during the construction phase.

Obstacles and Lessons learned

The project presented several challenges due to legislative changes, high up-front capital costs, and long payback periods that were required for a project of this size. Commercial banks were not willing to provide long-term financing for a project without political risk mitigation. Furthermore, the iconic design had to be brought back into line with the economics of the project, with scope for future expansion, and disturbance to operations also had to be minimized during construction phase. Despite the 25-years duration of the concession agreement, the loans terms are of approximately 15 years, leading to further refinancing risks for the SPV.

As for lessons learned, the consortium of sponsors that formed the SPV - including major construction companies and *Aéroport de Paris*, an experienced airport operator - had significant financial and technical capacities. In an effective bid evaluation process, the technical competence, strength and experience matter as much as the price offered. The winning consortium combined a strong lead investor, an experienced airport operator, and regional and international construction experts. There was also a commitment for appropriate management resources during the operation stage.

IFIs also play a major role as advisers for the development of large, complex PPP projects, especially in ensuring effective bid evaluation and bid management. The IFC advisory team, for instance, commissioned traffic reports from independent advisers to confirm traffic volume and revenue forecasts, and assess the bankability of the design and legal framework. IFC also helped in holding a fair and transparent bidding process that attracted leading airport operators and construction companies. Development finance institutions, participating as financiers and guarantors, also contribute to enhancing project credibility for providers of long-term finance, investors and contractors. Of the project’s cost of USD 675 million, IFC committed USD 120 million and helped mobilise USD 160 million in funds from regional and international commercial banks.

Sources: PPIAF, The International Bank for Reconstruction and Development / The World Bank (2011), How to engage with the Private Sector in Public-Private Partnerships in Emerging Markets; International Finance Corporation; World Bank (2009), Public-Private Partnership Stories, Jordan: Queen Alia International Airport.

Box 11. Morocco: The Ouarzazate "Noor 1" CSP Project

The Ouarzazate Concentrated Solar Power (CSP) project, also referred to as "Noor" (i.e. "light" in Arabic), is one of the projects identified and designed within the *MENA CSP Scale-Up Initiative*, a regional programme financed by the Clean Technology Fund and led by the World Bank and the African Development Bank, with plans to install 1.2 GW across Algeria, Egypt, Jordan, Morocco and Tunisia.

The project is being developed through PPP, with competitively-selected partners, by a Special Purpose Vehicle: a consortium of private developers and the newly-created Moroccan Agency for Solar Energy (MASEN). Phase 1 of the 500 MW Power Plant Project (160 MW) will make the Ouarzazate CSP Project the largest solar independent power producer (IPP) in the world.

Project Rationale

Concentrated Solar Power has enormous unexploited potential in the region as a reliable source of renewable energy. However, despite its relatively long track record, CSP technology remains in its early stages of development and is still not commercially viable. In Morocco, where heavy fossil-fuel subsidies distort energy prices, the resulting competitiveness gap between CSP and less expensive carbon-intensive energy alternatives is particularly evident.

The Government of Morocco, together with a group of multilateral development banks and private-sector sponsors, is developing the 160 MW Ouarzazate CSP Project, labelled "Noor 1". Located 200 km south of Marrakesh, the plant should come on line by 2015 and help Morocco avoid 240,000 tons of CO₂ emissions a year, the equivalent of removing 80,000 cars from the road annually.

The project has two over-arching objectives:

- Installing CSP at a scale that successfully demonstrates the storage technology component, and generates cost reductions and associated economic benefits (local manufacturing, energy security and a shift away from fossil fuels) ;
- Testing a business model, via the PPP formula, that could increase private-sector backing and increase availability of capital and know-how to support the development of a CSP portfolio.

Project Characteristics

The first Ouarzazate solar plant will have a capacity of 125 to 160 MW and will use the most mature CSP technology currently available: parabolic trough, with three hours of molten salt thermal energy storage capacity. Construction of the plant is underway, and commercial operation expected in the second half of 2015.

Key stakeholders include:

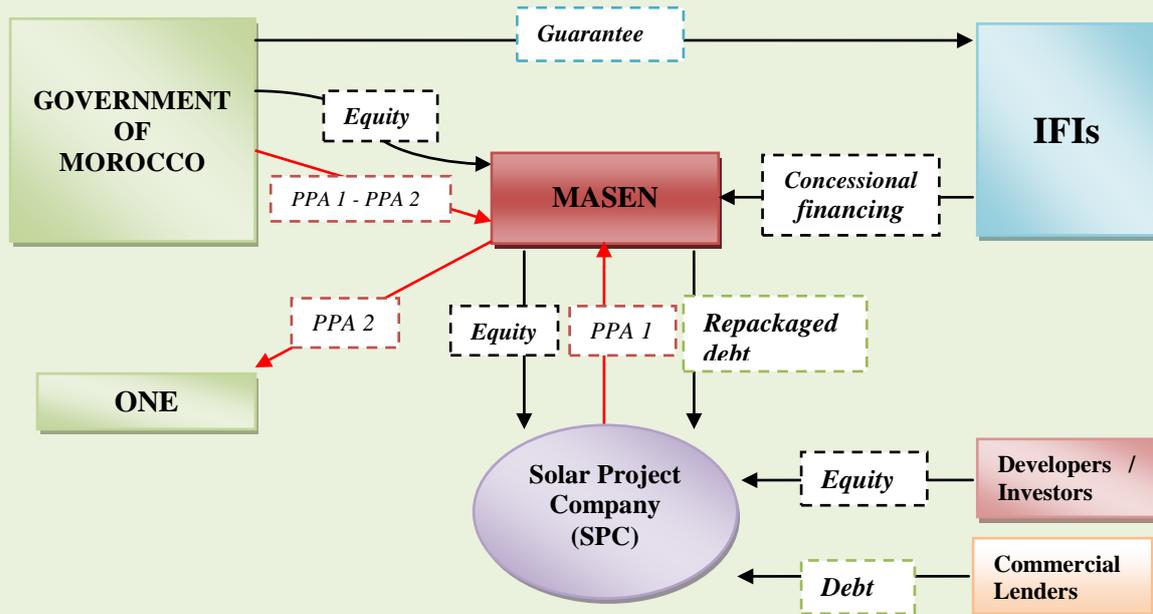
- The Government of Morocco and the Moroccan Agency for Solar Energy (MASEN), which are expected to contribute USD 883 million over the life of the plant (mostly in the form of operational subsidies) ;
- International financial institutions and other donors which have committed in excess of USD 1 billion for the construction of the facility ;
- A consortium of private developers, which will contribute USD 190 million of equity capital and expertise for an estimated 14% after-tax rate of return. ACWA Power International (95% Saudi Arabia), Aries Ingenieria y Sistemas (Spain), TSK (Spain).

Contract Scheme

- Greenfield project, Build-Own-Operate-Transfer (BOOT).
- Duration: 25 years PPA.

- Contractual arrangements
 - EPC Contractor: Acciona, Sener and TSK (Spain).
 - Off-taker: Office National d'Electricité (ONE).
 - Tariff Rate (PPA): 1.62 dirhams per kWh.

Figure 6. Noor 1: Institutional and Financing Framework



Financing Scheme

The project was made possible through a substantial subsidy from the Government of Morocco, in the form of a power purchase agreement covering the expected 25-year lifetime of the project.

- Project Cost: USD 1.438 billion.
- Government of Morocco committed to subsidise MASEN for the annual difference between the cost of CSP power (price MASEN will pay to private developer under the PPA) and the national electricity price (price ONE will pay to MASEN), and issued sovereign guarantees to the lenders.
- International financial institutions.

Table 6. Noor 1: Multilateral Lenders

Multilateral Donor	Amount	Maturity (years)	Fixed interest rate	Grace period (years)
World Bank	USD 200 million	30	< 4%	5
CTF (World Bank)	USD 197 million	40	0.25%	10
AfDB	EUR 200 million	20	4%	5
EIB (EU)	EUR 250 million	23	4%	3
AFD (France)	EUR 100 million	17	4%	3
KfW (Germany)	EUR 100 million	15	2.5%	3
NIF (EU)	EUR 30 million	x	x	x

Source: World Bank

Table 7. Financing Options for the Ouarzazate CSP plant

Debt Funding	Leverage	Tenor	Debt all-in rate	Resulting tariff (US cents/kWh)
Likely funding from commercial sources	75/25	20 years	7.50%	24.5
Optimistic commercial debt funding case	75/25	20 years	5.50%	21.5
IFI funding (including CTF)	80/20	25 years	3.50%	18.9

Source: World Bank

Obstacles and Lessons learned

With its successful financial closure, the project, the first publicly-supported CSP project and among the cheapest to be financed, has proven that a large-scale infrastructure project could be financed within the planned budget in an emerging economy. The project remains an example of successful PPP in the renewable energy sector. Among the highlights of this project:

- **Strong public support**, via a favourable regulatory and policy framework, a specialized entity tasked with developing CSP projects and Government's financial support to implement the ambitious Moroccan Solar Plan;
- **Significant financial and technical contributions** from IFIs: early concessional finance, driving down capital costs by 25-30%, as well as institutional and specialised technical support ;
- **Strong engagement and coordination of donors**: early agreements between donors and MASEN gave a clear indication of project terms and costs, transparency and competition among private investors resulting in satisfactory rates of return (bids were in line or below projected levels) ;
- **A carefully designed PPP model**, allowing for optimal alignment of risk between public and private players: the private developer bears construction and operational risk while the Government of Morocco will bear electricity market risk (revenue risk), MASEN acting as both equity investor and power purchaser (off-taker).

Nonetheless, there is room for improvement:

- **Inadequate institutional structures**, insufficient coherence and cooperation between Ministries, strategic guidance: in the quality of the bidding process: MASEN found out late that it would need to take a stake itself to offset some operational costs that the winning bidder did not want to bear ;
- **Insufficient information** made available to investors, lack of experience in the administration and lack of financial incentives: the plant is still to begin operating and test its commercial and economic development objectives.

Finally, to become commercially viable and achieve grid parity, the project needs to build on potential economies of scale through regional CSP scale-up and decreasing technology costs:

- **Scaling up the CSP portfolio in Morocco** and the MENA region; only a critical mass of publicly supported CSP projects will help drive faster technology cost reductions, combined with the gradual removal of fossil-fuel subsidies ;
- **Exports to European markets**: given that MENA domestic grid prices are significantly lower than current CSP generation costs, there is a huge potential that requires several preconditions (brokering bilateral and multilateral agreements, removal of subsidies, physical investments in interconnection systems and testing effective demand from EU member states...) and presents a trade-off for Morocco between financial viability on one hand, and domestic energy and environmental effects on the other.

Source: Climate Policy Initiative (CPI) (2013), "San Giorgio Group Case Study: Ouarzazate I CSP".

Box 12. Tunisia: The Enfidha-Monastir Airport Project

The Enfidha-Monastir Airport project involves constructing a new airport under a BOT concession for the decongestion of the existing Tunis and Monastir airports, with a capacity of 5 million passengers/year.

Project Characteristics

Tunisia's existing airports are either already saturated (Monastir handled 4.2 million passengers for a nominal capacity of 3.5 million) or nearing saturation (Tunis Carthage airport). Due to growing tourism, negotiations on an open skies agreement with Europe and major planned tourism and industrial developments, the upgrade and expansion of Tunisia's airport infrastructure was a key priority of the Tunisian Government.

In 2007, the Government of Tunisia awarded two 40-year concessions (including a two-year construction period):

- A concession to build, finance and operate a new international terminal at Enfidha for an initial capacity of 7 million passengers (Enfidha is located in Central Eastern Tunisia, 45 km from Monastir airport) ;
- A concession to upgrade and operate the existing Monastir international airport (4.2 million passengers in 2006).

This approximately EUR 560 million (USED 840 million) project was to be among the largest private sector investments in Tunisia and the first private sector airport concession in the Maghreb region.

- Timeline

- 1998: initial project launched.
- 2001: feasibility study finalised.
- April 2004: first tender fails due to disagreement between the Government and private operators on terms and conditions of construction. Project reshaped and simplified.
- 2007: new tender, awarded to TAV (Turkey).
- December 2009: operational after record 823 days.

Project Rationale

A new airport was built at Enfidha as the Monastir airport cannot be expanded due to geographical and environmental constraints. Both airports will serve the major tourism areas of Monastir, Sousse and Hammamet, located on the Mediterranean coast.

The Enfidha Airport will primarily operate charter traffic, serving a large number of tourism complexes that stretch along the coast. The project is expected to create about 2200 direct jobs during the construction phase and 1200 direct jobs during operations. A further 10,000 direct jobs are expected to be created in the local private sector. The project will also generate revenue for the Government and, by supporting tourism, act as a major source of foreign exchange.

The project is economically and financially viable, and environmentally sound. It will have a major impact, not only on the infrastructure sector but also on tourism and associated industries, and it will help boost Tunisia's GDP and global competitiveness.

Target 2.800 new jobs created and 2.1 million passengers expected in 2011.

Objectives:

- Relieve congestion at the Monastir Airport (target market: 8.5 million passengers per year)
- Develop tourism in Tunisia in the coastal Sahel and Cap Bon areas (via charter flights)
- Foster commercial and industrial activity around the Enfidha site, based on a multimodal transport network

Contract Scheme

- Concession (Build-Operate-Transfer)
- Contractor : Office de l'Aviation Civile et des Aéroports (OACA), under the supervision of the Ministry of Transport
- The private sponsor and major shareholder (99.99%) of TAV Tunisia S.A. is TAV Airport Holdings (TAV Airports), a Turkish company headquartered in Istanbul and specialising in airport operation and management.

Financing Scheme

- Total project cost is estimated at EUR 560 million, to be financed through a 30% equity contribution from the sponsor and 70% via debt.
- Multilateral lenders
 - IFC (EUR 199 million loan) ;
 - African Development Bank (EUR 70 million loan) ;
 - EIB (EUR 70 million) ;
 - Proparco (EUR 30 million) ;
 - OPEC Fund for International Development (EUR 20 million).
- Private commercial banks: ABN ; Société Générale ; Standard Bank.

Obstacles and Lessons learned

The Enfidha airport project was the first transportation concession in Tunisia and the first airport concession in the Maghreb region. It can serve as a role model for airport PPPs in the North Africa region.

Lessons learned related to:

- Failure of the first bid due to sub-optimal project scoping (technical specifications, size and volumes) ;
- Insufficient funding capacity: commercial banks unable to fund due to financial crisis ;

Extension of the airport is planned for 2020-22 with a second terminal.

Source: OECD (2010), Progress in Public Management in the Middle East and North Africa: Case Studies on Policy Reform.

ANNEX 2: HIGH-PROFILE PPP PROJECTS IN FOCUS COUNTRIES

Transportation & Logistics

Project	Sponsors	Costs	Status	Comments
Nile River Ports Project <ul style="list-style-type: none"> Pilot river ports in Upper Egypt (Qena, Sohag, Assuit, Meet Ghamr) 	•		• Under Consideration	<ul style="list-style-type: none"> Unsuccessful BOT tender of Qena Port Project in 2009-2010 Increase transport of cargo through river and rail, reduce pressure on land transport and reduce government spending on fuel subsidies and road maintenance / safety Capacity within RTA: market analysis, choice of location, licensing / permits.
Nile River Bus Project			Under Consideration	<ul style="list-style-type: none"> 15 existing river stations 16 commercial stations from Helwan to Al Kanater (Cairo) Technical assistance by EBRD
Ain Shams/10th of Ramadan Railway		EGP 4.5 billion	Under Consideration	<ul style="list-style-type: none"> Passenger and Freight Link from Ain Shams (Cairo Suburb) to 10th of Ramadan Industrial City, passing by Belbes City. Total length of 72 km, with 17 stations.
Heliopolis / New Cairo Metro			Under Consideration	Redevelopment of Heliopolis / New Cairo Metro from Heliopolis to 10th District (Nasr City), and establishment of new Metro line to connect Nasr City and American University (New Cairo)
Shubra/Banha Highway		EGP 2 billion	Under	<ul style="list-style-type: none"> National Bank of Egypt

<p>Safaga Industrial Port Development Project</p>			<p>Consideration</p> <ul style="list-style-type: none"> • Pre-feasibility studies 02/2013 • Tendering Q4/2013 • Contract signature Q1/2015 	
<p>Suez Canal Corridor Development Plan</p> <ul style="list-style-type: none"> • East Port Said / Ain Sukhna • Second Canal Waterway 		<p>14 projects worth USD 8 billion in total.</p>	<p>Under Consideration</p>	<ul style="list-style-type: none"> • Major link between Nile Valley and Red Sea • Allow export of liquid phosphoric acid (8 platforms), import/export of grains, livestock, maintenance dock • 50 MW Safaga CSP plant and solar-powered desalination plant (40,000 m³/day water) • Arab Financing Facility for Infrastructure (AFFI) • Megaproject aiming to transform the 160 km-long Suez Corridor into an integrated investment zone and lift its economic contribution to GDP to 10% in 10 years • Revitalise East Port Said and Ain Sukhna industrial ports, designed as hubs for container transhipment • Build second vehicle tunnel under Canal to connect Sinai Peninsula, expand roll-on / roll-off, multiple-use and bulk liquid terminals
<p>Queen Alia Airport Expansion</p>	<ul style="list-style-type: none"> • Airport International Group (AIG) 	<p>USD 750 million</p>	<p>Operational</p> <ul style="list-style-type: none"> • Project agreement (May 2007) • Stage 1 completed in June 2013 with new terminal opened for traffic 	<ul style="list-style-type: none"> • Rehabilitate and operate existing passenger terminals and related airside facilities • Construct and operate new passenger terminal with a capacity of 12 million per year • First successful airport PPP project and largest private sector investment to date in Jordan

Aqaba Port Expansion	Aqaba Ports Corporation (APC)	USD 710 million	Operational	<ul style="list-style-type: none"> • Stage 2 (expansion) over period 2014-2016 to increase capacity • Duration: 25 years • Government to accrue concession fees and benefit from fiscal savings by no longer having to subsidise airport operations • IFC loan (USD 120m) • IDB loan (USD100m) • Commercial banks (USD 160m): Natixis, Calyon, Europe Arab Bank • 2003 crisis stoppage of the Port of Aqaba due to congestion, delays and waiting time • Aqaba Special Economic Zone (2004): Aqaba Development Corporation (ADC) • 2-year management contract • 25-year agreement to manage, operate, and expand the Port
Amman Zarqa Bus Rapid Transit (BRT)	Jordanian-Kuwaiti Company	USD 333 million	On Hold	<ul style="list-style-type: none"> • Transfer of port ownership to ADC (200 Law on Privatization) • Tender (March 2004) • July 2006: joint venture agreement (July 2006) • Initial project : Light Rail System (LRS), using 26 km of existing Hejaz Railway tracks • Tendered 3 times without success • 2006 tender: Kuwaiti-led consortium unable to secure financing by 2009 • September 2009 IFC appointed to review • Project put on hold and redesigned as Bus Rapid Transit (BRT): 25-year concession
Jordan National Railway Project (JNRP)				<ul style="list-style-type: none"> • Construction expected: 2011–2013 • Feasibility studies (2012) • Cargo-based rail network of 950 km, integrated into regional network (incl. Iraq, Syria, and GCC) • Jordan's key cities (Amman, industrial cities of Mafraq and Zarqa),

<p>Jordan Road Master Plan</p>		<p>EUR 450 million</p>		<p>Port of Aqaba and Shidiya phosphate mine</p> <ul style="list-style-type: none"> Assistance from EIB FEMIP Trust Fund-sponsored Highway Master Plan Study (EUR 2.1 m) EIB and World Bank to co-finance priority component (USD 150M)
<p>Aménagement de la Vallée du Bouregreg (Rabat - Salé)</p>	<ul style="list-style-type: none"> Al Maabar International Investment (UAE) 	<p>EUR 530 million</p>	<p>Under Tendering</p>	<ul style="list-style-type: none"> Agence pour l'Aménagement de la Vallée du Bouregreg Phase 1 (2006-2012) Séquence 1 Bab Al Bahr: programme immobilier mixte (résidences, marina, cité des arts, Rotana Palace) ; Séquence 2 Amwaj / Al Saha Al Kabira sur 120 ha dont 57% résidentiel et un complexe culturel Phase 2 (2013-2017) : Séquence 3 Qasbat Abi Raqraq et Séquence 4 Sahrij El Oued : rocade reliant l'aéroport de Salé et Rabat, axe routier 9km entre Oujla et autoroute, viabilisation du foncier, pont Moulay Youssef Séquence 5 : Al Manzah Al Kabir, Masharif Hssein
<p>Tanger-Marrakech Railway Project</p>	<ul style="list-style-type: none"> Systra (France): civil engineering work Consortium to design track between Kenitra and Tangiers (Systra Maroc and local consulting firms). Alstom (France) to supply trains (March 2010) 	<p>EUR 438.2 million</p> <ul style="list-style-type: none"> High-speed line: USD 2.5 billion 	<p>Under Tendering</p> <ul style="list-style-type: none"> Tender (January 2013) Operational in 2016. 	<ul style="list-style-type: none"> Increase capacity of the Tangier-Marrakech railway line: high-speed rail network that will link all of the country's major cities by 2030 AfDB loan of EUR 300m (2010) Other donors : AfD, Saudi Fund for Development, KFAD, Hassan II Fund, Arab Fund for Development

Casablanca Port Expansion Project (Terminal 4 Est)		USD 179 million	Under Consideration	<ul style="list-style-type: none"> Marsa Maroc (ex-Office d'Exploitation des Ports)
Road Modernisation Programme		DH 31,66 billion (USD 2 billion)	Under Consideration	<ul style="list-style-type: none"> Autoroutes du Maroc (ADM)
Enfidha-Monastir Airport	TAV Airports Holding (Turkey)	EUR 560 million	Operational <ul style="list-style-type: none"> Developed as two concession (1998) Feasibility (2001) New tender (2007) Construction achieved after record 823 days 	<ul style="list-style-type: none"> New airport under BOT concession, with capacity of 5 million passengers / year First tender failed in 2004: dispute over contract terms and conditions Project redefined in 2005 Commercial banks unable to fund due to financial crisis Concessional funding from IFC (EUR 199m), AfDB (EUR 70m), EIB (EUR 70m), OFID (EUR 20m) and AFD/Proparco (EUR 30m) Duration: 40 years Expansion (2020-22): second terminal
Enfidha Deep Sea Water Port	<ul style="list-style-type: none"> SNC Lavalin (Canada) Al Mal Investment Company KSC (Koweit), Hutchison Port Holding 	EUR 1386 million <ul style="list-style-type: none"> Phase I : EUR 624m Phase II : EUR 262m Phase III : EUR 512m 	On Hold <ul style="list-style-type: none"> Feasibility (2004-07) Tender (2008) 	<ul style="list-style-type: none"> Contract scheme: BOT 2008 tender: no offer deemed admissible Project put on hold
Road Modernisation Programme (incl. Greater Tunis Ring Road)		TD 3500 million <ul style="list-style-type: none"> Projet routier: TD 954m Routes régionales: TD 330m Rocarde Extérieure du Grand Tunis : TD 400 m 	Under Consideration <ul style="list-style-type: none"> September 2010 : AfDB loan (EUR 236m) Tenders for contracting of civil works (2011) Feasibility 	<ul style="list-style-type: none"> Renforcement réseau des routes classées (560 km) Aménagement de 606 km de routes classées Construction de 22 ouvrages d'art (12 ponts, y compris liaison fixe entre l'île de Djerba et la terre ferme) « Voiries structurantes » Feasibility funded by FEMIP grant (EUR 2.2m)

Radès Logistics Zone

Logistics Zones

- Enfidha (500 ha to 2000 ha)
- Djebel Oust (50 ha, 214 ha)
- Sfax (128 ha)
- Zarzis (202 ha)
- Tozeur (100 ha)
- Gafsa (89 ha)
- Jendouba (54 ha)
- Zone de libre-échange de Ben Gerdan

Source: OECD (2014)

	(2012)		<ul style="list-style-type: none">• Public consultations (October 2012)
<ul style="list-style-type: none">• Composante 1 : EUR 104m (aménagement et équipement)• Composante 2 : EUR 35m	Under Consideration	<ul style="list-style-type: none">• Feasibility (2007, World Bank)• Expected construction 2012-15	<ul style="list-style-type: none">• Failed first tender (BOT)• 3 premières sous-composantes à la charge de l'Etat (coût estimatif de TD 50m)• 4^{ème} sous-composante à la charge d'un investisseur privé
<ul style="list-style-type: none">• Enfidha : TD 100 m• Zarzis: TD 17 m• Djebel Ouest: USD 500 m• Ben Gerdan : USD 40 m	Under Consideration		<ul style="list-style-type: none">• Secteur d'opérations: sièges sociaux, offices• Zone de traitement en parallèle et de laminage• Zone de conservation• Zone de transit, assemblage et ventilation• Magasins et entrepôts, bâtiments et ateliers technique

Renewable energy

Project	Sponsors	Costs	Status	Comments
Solid Waste-to-Energy Recycling Project <ul style="list-style-type: none"> • 1 advanced waste-sorting line • 2 waste-to-energy units (Helwan) 		USD 200 million	Under Consideration	<ul style="list-style-type: none"> • Egyptian Environmental Affairs Agency (EEAA) • First experience of waste-to-energy in Egypt • 2,400 tons of daily household waste (70% of waste from Helwan) • Obstacles: land acquisition, social / informal sector “zabaleen” involved in door-to-door collection • Policy framework and capacity: new agency for solid waste management, governorates to manage tendering process
100 MW Kom Ombo CSP Project		EUR 330 million	Under Consideration	<ul style="list-style-type: none"> • MENA CSP Scale-Up Initiative • Clean Technology Fund (World Bank): USD 750 million in concessional funding • World Bank • Clean technology fund (CTF) through the African Development Bank • EU Donors • AFD • EIB • KfW
200 MW West Nile River Wind Farm			Under Consideration	<ul style="list-style-type: none"> • IBRD • CTF • European Donors led by the EIB but also AFD and KfW
117 MW Tafila Wind Energy Project	<ul style="list-style-type: none"> • EPGE • InfraMed Infrastructure • Masdar Power 	USD 302 million	Under Construction	<ul style="list-style-type: none"> • Largest RE project in Jordan • EIB and IFC approved \$117 million and \$75 million loan (April 2013) • EFK, OFID, FMO and Capital Bank of Jordan providing debt financing.

100 MW Shams Ma'an Solar PV Project	<ul style="list-style-type: none"> • Kowar Energy • First Solar • Solar Ventures 	USD 300 million	<p>Under Construction</p> <ul style="list-style-type: none"> • Feasibility study (2011) • PPA signed in Sept 2012 	<ul style="list-style-type: none"> • Most advanced RE project, developed in the Ma'an Development Area industrial park. • Electricity price: USD 0.169/kWh vs. USD 0.24/KWh for fossil fuel-generated electricity
100 MW JOAN 1 CSP Project	<ul style="list-style-type: none"> • Badr Investments • Chescor Capital • Maisam Architects, Parsons Brinckerhoff 	USD 425 million	On Hold	<ul style="list-style-type: none"> • Due to start in 2011 • Expected to be operational by 2013
90 MW Fujeij Wind Farm	<ul style="list-style-type: none"> • Korea Electric Power Corp (KEPCO) 	USD 187 million	<p>Under Tendering</p> <ul style="list-style-type: none"> • Feasibility study (2006) • Financing scheme (2008) • 2009: 4 preselected bidders • Operational in 2015 	<ul style="list-style-type: none"> • Phase 2: Project expanded to 250 MW • Contract scheme: 20 year contract and PPA with NEPCO • World Bank grant of USD 6 million
30 – 40 MW Al-Kamshah Wind Farm	Greek-Jordanian consortium	USD 45 - 60 million	<p>On Hold</p> <ul style="list-style-type: none"> • Feasibility study (2007) • Selection of bidders (March 2009) • PPA breakdown (2009) • New tender for 1,800 MW of RE plants (May 2011) 	<ul style="list-style-type: none"> • IFC Debt financing • North of Amman • Ministry of Energy and Mineral Resources: dispute with selected consortium over electricity price after Government's removal of energy subsidies
160 MW Ouarzazate CSP Project ("Noor 1")	<ul style="list-style-type: none"> • ACWA Power 	USD 300 million	Operational second half of 2015	<ul style="list-style-type: none"> • First 25-year PPA in Nov 2012 • Final capacity of 500MW,

<p>300 MW Tarfaya Wind Farm Project</p>	<ul style="list-style-type: none"> GDF Suez (France / UK) Nareva Holding (Morocco) 	<p>USD 610 million</p>	<p>Under Construction</p>	<p>largest CSP worldwide</p> <ul style="list-style-type: none"> Debt financing from World Bank, AfDB, EIB, AFD and KfW Construction commenced in June 2013
<p>300 MW Tétouan Wind Farm Project</p> <ul style="list-style-type: none"> Expansion of 50 MW Koudia al-Baida Wind Farm 	<ul style="list-style-type: none"> Theolia (France, 80%) ONEE (Morocco, 20%) 	<ul style="list-style-type: none"> EUR 6.6 million 	<p>Under Tendering</p> <ul style="list-style-type: none"> Bids from 5 groups (2012) Won by Theolia (2008) Theolia to develop 300MW windfarm (2011) Start of Phase 1 (2012) 	<ul style="list-style-type: none"> Replacement of current turbines (repowering) Phase 2: 200MW additional capacity
<p>150 MW Taza Windfarm</p>	<ul style="list-style-type: none"> Alstom (France) 	<p>EUR 704 million</p>	<p>Operational</p> <ul style="list-style-type: none"> Tender (2009) Bidders selected (2012): Mitsui and EDF Operational (July 2014) 	<ul style="list-style-type: none"> East of Fès (Northern)
<p>1000 MW Moroccan Wind Programme (incl. Taza)</p> <ul style="list-style-type: none"> 100 MW Tangiers (North) 150 MW Midelt (Centre) 200 MW Jbel Lahdid (Essaouira) 300 MW Tiskrad (Laayoune) 100 MW Boujdour (Boujdour) 	<p>6 pre-qualified:</p> <ul style="list-style-type: none"> EDF, Alstom (France)/Mitsui (Japan) Nareva (Morocco) / Taqa (UAE) / Enel (Italy) / Siemens (Germany) International Power (UK) / Vestas (Denmark) Acwa (Saudi 	<p>USD 1.7 billion</p>	<p>Under Tendering</p> <ul style="list-style-type: none"> Final tender (Feb 2014) Extension of deadline Expected delivery before 2020 	<p>Energy Development Fund with donations from</p> <ul style="list-style-type: none"> Saudi Arabia and UAE Hassan II Fund for Social and Economic Development

	<ul style="list-style-type: none"> • Arabia) / Gamesa (Spain) • General Electric (US) • Acciona (Spain) / Al-Ajial (Morocco) 			
<p>350 MW “STEP” Abdelmoumen</p> <ul style="list-style-type: none"> • Stations de Transfert d'Energie par Pompage (STEP) 		DH 2.300 million	Under Tendering	<ul style="list-style-type: none"> • Pumped power transfer station, located 70km North of Agadir • 460 MW STEP Afourer - BeniMellal (2004, Alstom) • Grants from EIB (EUR 150 million) and AfDB (DH 3.84 billion) • Project delayed for 4 years (2008)
<p>170 MW M'Dez El Menzel Hydro Power Plant</p> <ul style="list-style-type: none"> • 125MW El-Menzel plant • 45MW M'Dez plant • Centrepiece of High Dam Sebou (capacity 700m m3) • Remote-control from Casablanca National Dispatching Centre 		DH 2100 million	Under Tendering	<ul style="list-style-type: none"> • Hydropower complex comprising two waterfalls, M'Dez and El Menzel • Haut Sebou Development Programme (2010-2014): provide protection for downstream areas, improve water control for irrigation and electricity generation, match peak hour power supply with demand • Grants from EIB (EUR 150 million) and AfDB (DH 3.84 billion) • Clean Technology Fund (World Bank)
<p>2000 MW Solar Park Project (« Atlas »)</p> <ul style="list-style-type: none"> • 8 centrales PV • Laâyoune (500 MW) • Boujdour (100 MW) • Aïn Beni Mathar (380 MW) 			Under Consideration	<ul style="list-style-type: none"> • Moroccan Agency for Solar Energy (MASEN) • Plants to be located in Western Sahara (disputed territory)
<p>TuNur Solar Power CSP Project</p> <ul style="list-style-type: none"> • CSP plants with a capacity of up to 2 GW (Kebili) • 2 GW high voltage 	<ul style="list-style-type: none"> • TOP Group and Glory Clean Energy (Tunisia, 50%) • Nur Energie 	EUR 10 billion	Under Consideration	<ul style="list-style-type: none"> • First utility-scale solar export project between Tunisia and Europe • Approved by the Desertec Foundation in January 2012

<p>direct current (HVDC) on-land and submarine cable to Italy</p> <ul style="list-style-type: none"> • Sale of electricity to European markets 	(UK, 50%)			
<p>Plan Solaire Tunisien</p> <ul style="list-style-type: none"> • Centrale CSP 75MW • Centrale CSP combinée 40MW (gaz et solaire) d'El Borma • "Soleil de Nefta" : électrification de l'oasis de Nefta • Unité de fabrication de panneaux PV (14MW annuel) 		USD 4,5 billion	Under Consideration	<ul style="list-style-type: none"> • EUR 1.7 million grant from FASEP (Fonds d'étude et d'aide au Secteur Privé, France)
<p>Wind Energy Project</p> <ul style="list-style-type: none"> • Centrale éolienne de Thela (Kasserine) 		EUR 80 million	Under Consideration	

Source: OECD (2014) based on Clean Energy Eversheds (2013), *Developing renewable energy projects: A guide to achieving success in the Middle East*.

ANNEX 3: PPP TYPES AND SUB-TYPES ACCORDING TO THE PPIAF DATABASE

The Private Participation in Infrastructure (PPI) Projects Database is a joint product of the Infrastructure Policy Unit of the World Bank’s Sustainable Development Network, and the Public-Private Infrastructure Advisory Facility (PPIAF).

Type	Description	Selected responsibilities & Risks born by operator	Sub-type	Characteristics
Greenfield	A private entity or a public-private joint venture builds and operate 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.	<p><i>Responsibilities:</i> Employing staff, operating and maintaining the utility, financing and managing investment.</p> <p><i>Risks:</i> Operating, commercial and investment-related risks.</p>	Build, lease and transfer (BLT)	<p>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.</p> <p>The government owns the facility once it has been built and usually provides revenue guarantees or minimum traffic revenue guarantees to the private sponsor.</p>
			Build, operate and transfer (BOT)	<p>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.</p> <p>The government may or may not own the asset during the contract period but does not own it at the end of the contract period. It usually provides revenue guarantees or minimum traffic revenue guarantees to the private sponsor.</p>
			Build, own and operate (BOO)	<p>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.</p> <p>The government does not own the asset and usually provides revenue guarantees or minimum traffic revenue guarantees.</p>
			Merchant	<p>A private sponsor builds a new facility in a liberalised market. The private developer assumes construction, operating, and market risk for the project.</p> <p>The government provides no revenue guarantees.</p>

			Rental	<p>A private sponsor places a new facility at its own risk, owns and operates the facility at its own risk during the contract period.</p> <p>The government usually provides revenue guarantees through short-term purchase agreements such as power purchase agreement.</p>
Concessions	<p>A private entity takes over the management of a state-owned enterprise for a given period during which it also assumes significant investment risk.</p>	<p><i>Responsibilities:</i></p> <p>Employing staff, operating and maintaining the utility, financing and managing investment.</p> <p><i>Risks:</i></p> <p>Operating, commercial and investment-related risks.</p>	Rehabilitate, operate and transfer (ROT)	<p>A private sponsor rehabilitates an existing facility, then operates and maintains the facility at its own risk for the contract period.</p>
			Rehabilitate, lease or rent, and transfer (RLT)	<p>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.</p> <p>The ownership remains with the government during and after the contract period.</p>
			Build, rehabilitate, operate and transfer (BROT)	<p>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.</p>
Management & Lease contracts	<p>A private entity takes over the management of a state-owned enterprise for a fixed period while ownership and investment decisions remain within the state.</p>	<p><i>Responsibilities:</i></p> <p>Providing management services to the utility ((management contract); Employing staff and operating and maintaining the utility (lease contract).</p> <p><i>Risks:</i></p> <p>Amount of performance bonus (management contract); operating and commercial risks (lease contract).</p>	Management contract	<p>The government pays a private operator to manage the facility.</p> <p>The ownership, investment decisions and operational risk remain with the government.</p> <p>The private operator takes on the operational risk.</p>
			Lease contract	<p>The government leases the assets to a private operator for a fee.</p>
Divestitures	<p>A private entity buys an equity stake in a state-owned enterprise through an asset sale, public offering, or mass privatisation programme.</p>	<p><i>Responsibilities:</i></p> <p>Employing staff, operating and maintaining the utility, financing and managing investment.</p> <p><i>Risks:</i></p> <p>Operating, commercial and investment-related risks.</p>	Full	<p>The government transfers 100% of the equity in the state-owned company to private entities.</p> <p>The ownership is fully and permanently transferred to the private partner.</p>
			Partial	<p>The government transfers part of the equity in the state-owned company to private entities.</p> <p>The ownership is mixed; only a minority stake in state-owned company is divested.</p>

OECD GUIDANCE

- OECD Policy Guidance for Investment in Clean Energy Infrastructure (2014)
- OECD Principles for Public Governance of Public-Private Partnerships (2012)
- OECD Declaration on International Investment and Multilateral Enterprises (2011)
- OECD Checklist for Public Action for Private Sector Participation in Water Infrastructure (2009)
- OECD Engaging the Private Sector in Support of a Low-Carbon Future (2008)
- OECD Principles for Private Sector Participation in Infrastructure (2007)
- OECD Policy Framework for Investment (2006)
- OECD Guidelines on Corporate Governance of State-Owned Enterprises (2005)
- OECD Checklist for Foreign Direct Investment Incentive Policies (2003)

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- OECD Investment Policy Review of Egypt (2007), Morocco (2010), Tunisia (2012) and Jordan (2013)
- OECD Business Climate Reviews
 - Morocco (2011), Stratégie de Développement du Climat des Affaires
 - Egypt (2010), Business Climate Development Strategy
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This handbook provides an overview of key obstacles and policy issues facing the development of Public-Private Partnerships across the Middle East and North Africa region, with a particular focus on the transport and renewable energy sectors in Egypt, Jordan, Morocco and Tunisia. It is aimed at senior officials and decision-makers in the region and intends to assist them in moving projects forward from a conceptual stage to viable transactions suitable for private-sector and/or international financial institution (IFI) investment. It is the result of research and consultations led by the ISMED Support Programme throughout 2014. Building on OECD instruments and good practices related to PPPs and infrastructure investment, as well as on extensive consultations with partner IFIs and local stakeholders, the Handbook contains recommendations to address some of the obstacles identified as inhibiting the successful completion of PPP programmes.

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