



Training Workshop for Ministry of Electricity Private Sector Participation



USAID-Funded Economic Governance II Project

Presented To: Ministry of Electricity

Date: 13th to 16th November 2005

Authors



This document was prepared by:

Richard Kupisz
Electricity Sector Lead
BearingPoint
Baghdad
Iraq
Tel: +1.703.994.4674
GSM: +964.(0)790.191.9596
E-mail: richard.kupisz@ipaenergy.co.uk

This document is protected under the copyright laws of the United States and other countries: it has been prepared by BearingPoint, Inc. ("BearingPoint") Technical Advisors and/or contractors working directly for BearingPoint under the auspices of the U.S. Agency for International Development ("USAID") contract number 267-C-00-04-00405-00. This document and all accompanying pages are strictly for the use of USAID in support of their own consideration regarding the subject matter contained herein. Except where explicitly stated otherwise, the following information was prepared on the basis of data that is publicly available or was provided by USAID: it has not been independently verified or otherwise examined to determine its accuracy, completeness or financial feasibility (where applicable). Neither BearingPoint, USAID nor any person acting on behalf of either assumes any liabilities, expenses (including attorney's fees and legal expenses) fines, penalties, taxes or damages (collectively "liabilities"), resulting from the use of any information contained in this document.

© 2005 BearingPoint, Inc. All rights reserved.





Day 1: Why does Iraq need PSP?

Contents



- Objectives for the Workshop
- What is PSP?
- Objectives for PSP – Why do it?
- Benefits of PSP
- Preconditions for Success

Objectives for the Workshop



This Workshop will:

- Explain why Iraq needs private investment in electricity
- Provide an understanding of different types of PSP and when they can be used
- Show how other countries in the region are doing it
- Explain briefly how to run a competitive tender

What is PSP?



There are many possibilities:

- A private investor builds a new generator (Independent Power Producer – IPP)
- A private investor buys assets or shares from the Government
- A private contractor takes over management and operation of Government assets
- Government purchases a service (eg auditing, IT support, transport, security) from a private provider

The Ministry is doing some of these already

What do they have in common? The private sector is responsible for activities that were previously provided by the Government

What is PSP?



PSP is not always privatisation...

	PSP	Privatisation
Build-Own-Operate (BOO) for a new generator	YES ✓	NO ✘
Sale of an existing generator	YES ✓	YES ✓
Contract for security services	YES ✓	NO ✘
Management contract for billing and collections	YES ✓	NO ✘
Long term concession for a Distribution company	YES ✓	YES ✓

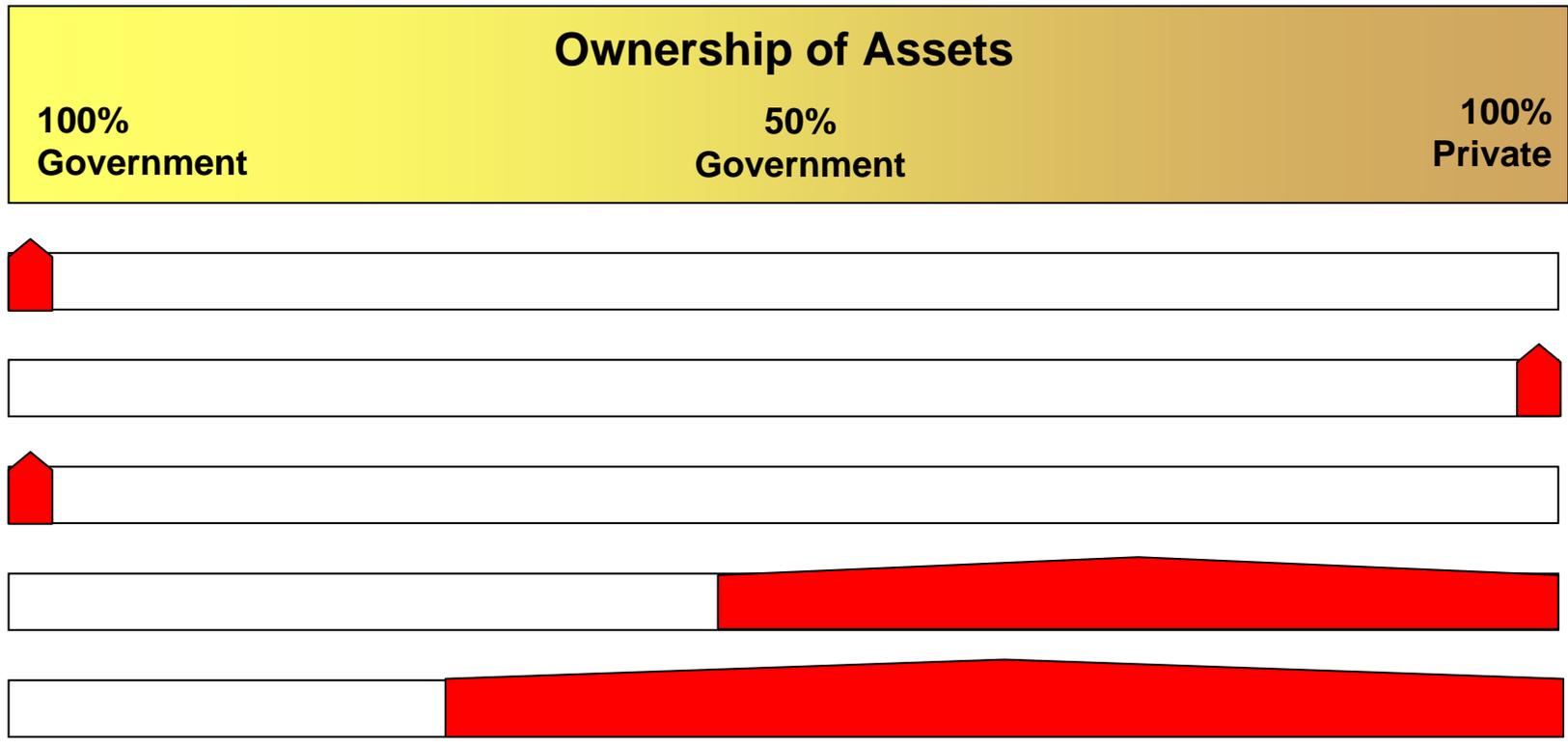
Privatisation involves permanent or long term transfer of *existing* assets to the control of a private investor

...But privatisation is always PSP

What is PSP?



The benefits of private sector management and capital can be delivered in a variety of packages with different ownership structures



What is PSP?



The private sector is often viewed with suspicion when it comes to “strategic” services like electricity:

“You are selling the family jewels for a knock down price”

“They only want to buy this company so they can close it down”

“We don’t need foreign investors, just more training”

“We are not ready for private investment in electricity”

“You are selling the people something they already own”

Remember: investors are not always 100% bad, Government is not always 100% good

Objectives for PSP – Why do it?



Government-owned utilities have suffered years of:

- Political interference
- Use as a social policy instrument - reduce inflation, increase jobs
- Financial constraints on investment - compete with other Ministries
- Inflexible and inefficient – trapped in Government bureaucracy
- Lack of customer focus – run by technical, not commercial people

PSP can deal with all of these

There are services that may best be provided by the public sector – economic and social development, security, international relations – PSP allows Government to focus on what it does best

Objectives for PSP – Why do it?



The electricity sector is a classic case of neglect:

Installed generation capacity	11,000 MW
Usable generation capacity	4,000 MW
Demand (peak)	8,000 MW
Generation gap	\$4 – 6 billion
Power cuts (average per day)	12 hours
Private generation	“most people”
Households with electricity	50%
Technical and commercial losses	33%
% of operating cost covered by revenue	less than 10%
Direct Government subsidy	\$819 million
Indirect fuel subsidy	\$6,040 million
Gas flaring	“most of it”
Customers per employee	55

The security situation has made things worse

Objectives for PSP – Why do it?



Case Study: compare Iraq with Nigeria

	Iraq	Nigeria
Installed generation capacity	11,000 MW	5,712 MW
Usable generation capacity	4,000 MW	2,800 MW
Demand (peak)	8,000 MW	6,000 MW
Generation gap	\$4 – 6 billion	\$3 – 4 billion
Power cuts (average per day)	12 hours	3 hours
Private generation	“most people”	97% of manufacturers
Households with electricity	50%	36%
Technical and commercial losses	33%	44%
% of operating cost covered by revenue	less than 10%	95%
Direct Government subsidy	\$819 million	\$272 million
Indirect fuel subsidy	\$6,040 million	\$236 million
Gas flaring	“most of it”	55%
Customers per employee	55	150

Objectives for PSP – Why do it?



Case Study: Nigeria is relying on PSP to revive the sector

- Private generators are selling electricity to NEPA under contract
- Rehabilitate-Operate-Transfer for the Afam generating plant
- Management contract with Eskom to improve repairs and maintenance
- Independent Power Producers – initial focus on oil companies
- All Government buildings have prepayment meters
- Unbundling NEPA: holding company, 6 Generation, 11 Distribution, 1 Transmission
- President ordered privatisation “by 2006”
- Electricity Law passed May 2005, independent regulator being set up

“It is the intention of Government that management and ownership control in unbundled generation and distribution companies shall be transferred to the private sector”

Objectives for PSP – Why do it?



It is important to set your objectives at the beginning

What kind of objectives would you suggest for Iraq?



Objectives for PSP – Why do it?



Governments have many more objectives than private organisations

- Cash payment
- Increase connections/access
- Improve efficiency/cut costs
- Improve profitability/reduce subsidy
- Access investment capital
- Access new technology/systems
- Improve collections
- Maintain employment
- Reduce inflation
- Improve customer service
- Modern management & systems
- Wider share ownership

Objectives for PSP – Why do it?



Objectives must be prioritised to avoid conflicts

Potential conflicts...

Improve efficiency
VS
Maintain employment

Reduce inflation (tariffs)
VS
Increase connections

Generate proceeds
VS
Increase investment

Increase connections
VS
Reduce costs

You should adopt no more than 5 priority objectives

Benefits of PSP



Today PSP is believed to be the only way to achieve the objectives

What are the benefits for Iraq?



Benefits of PSP



Numerous studies demonstrate the benefits from successful PSP

(% change from privatisation to 1998)	Peru Luz Del Sur	Argentina Edesur	Argentina Edenor	Chile Chilectra
Year privatised	1994	1992	1992	1987
Energy sales	↑ 19%	↑ 79%	↑ 82%	↑ 26%
Energy losses	↓ 50%	↓ 68%	↓ 63%	↓ 70%
Number of employees	↓ 43%	↓ 60%	↓ 63%	↓ 9%
Customers per employee	↑ 135%	↑ 180%	↑ 215%	↑ 37%
Net cash receivables	↓ 27%	↓ 38%	n/a	↓ 68%
Provision for bad debt	↓ 65%	↓ 35%	n/a	↓ 88%

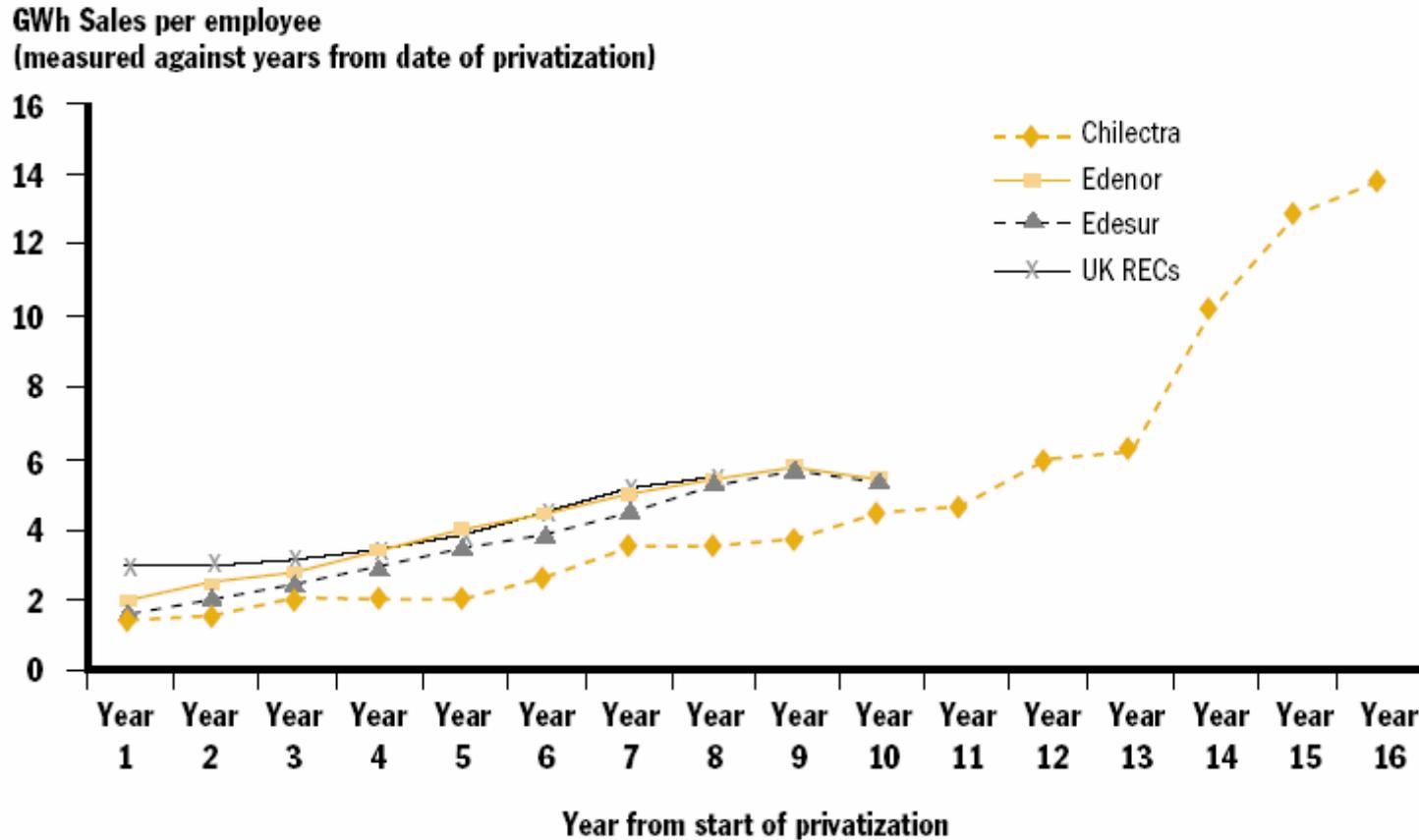
Providing it is accompanied by other reforms (regulation, competition, restructuring)

(Source: "Global Electric Power Reform, Privatisation and Liberalisation of the Electric Power Industry in Developing Countries" World Bank Discussion Paper June 2002)

Benefits of PSP



Figure 3.9 Post-Privatization Labor Productivity in Electricity Distribution in Argentina, Chile, and the United Kingdom

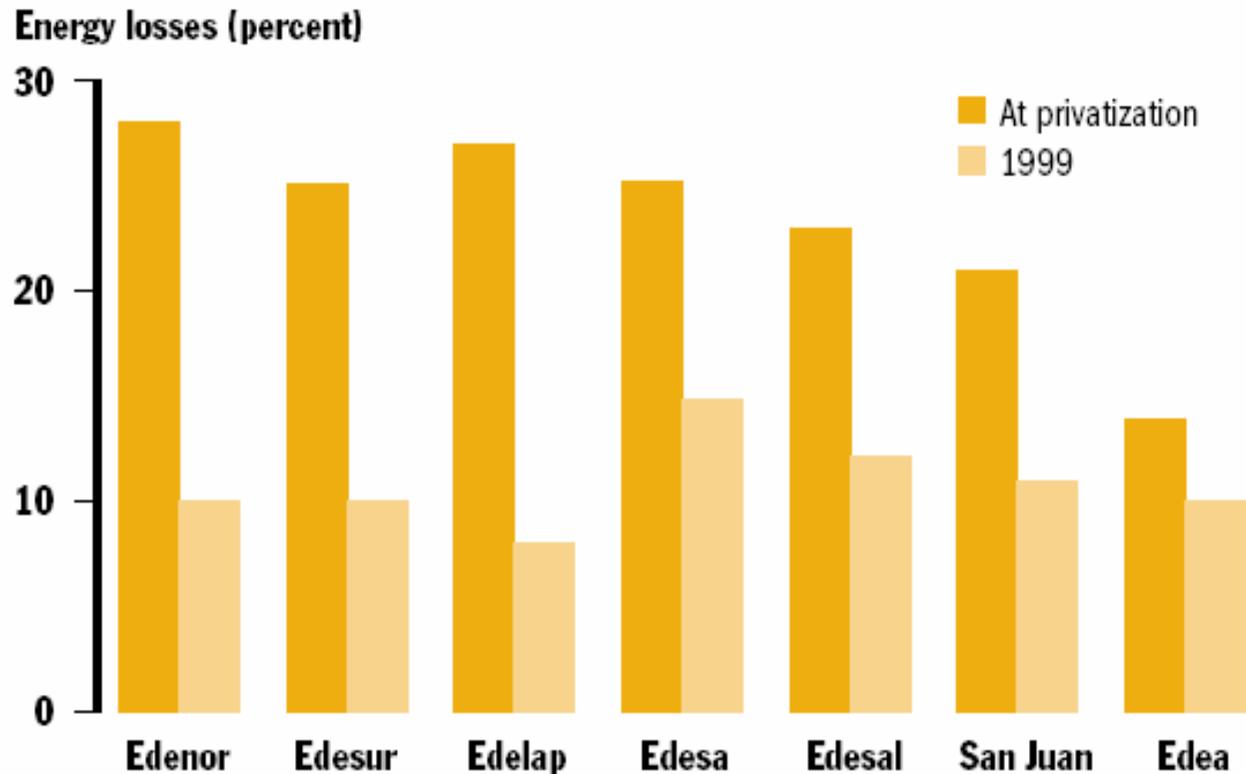


(Source: "Reforming Infrastructure: Privatization, Regulation, And Competition" World Bank Policy Research Report 2004)

Benefits of PSP



Figure 3.10 Energy Losses among Argentina's Distribution Companies, at Privatization and in 1999



(Source: "Reforming Infrastructure: Privatization, Regulation, And Competition" World Bank Policy Research Report 2004)

Exercise 1: Breakout Session

Exercise 1: Breakout Session



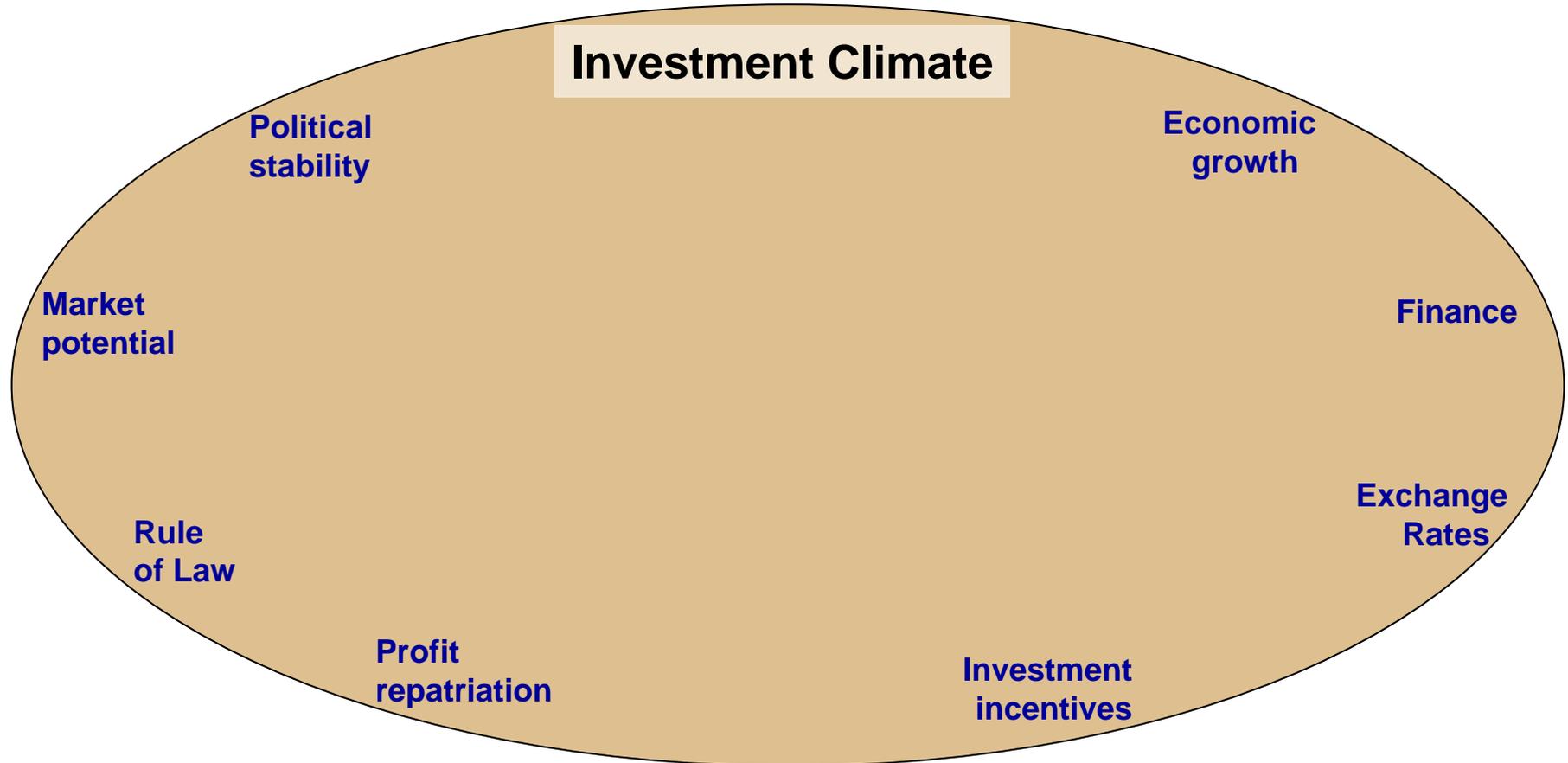
Which parts of the Ministry could benefit from PSP?



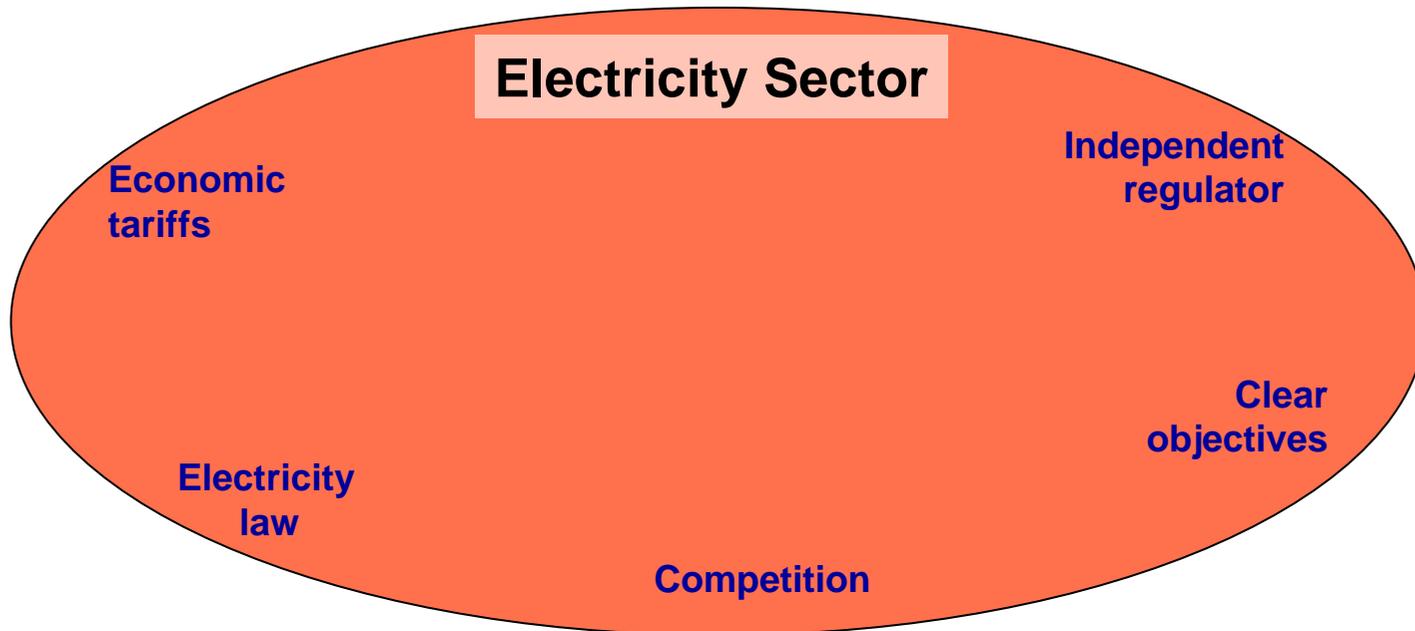
Preconditions for Success



Investors look at many factors – here are the most important



Preconditions for Success



Preconditions for Success



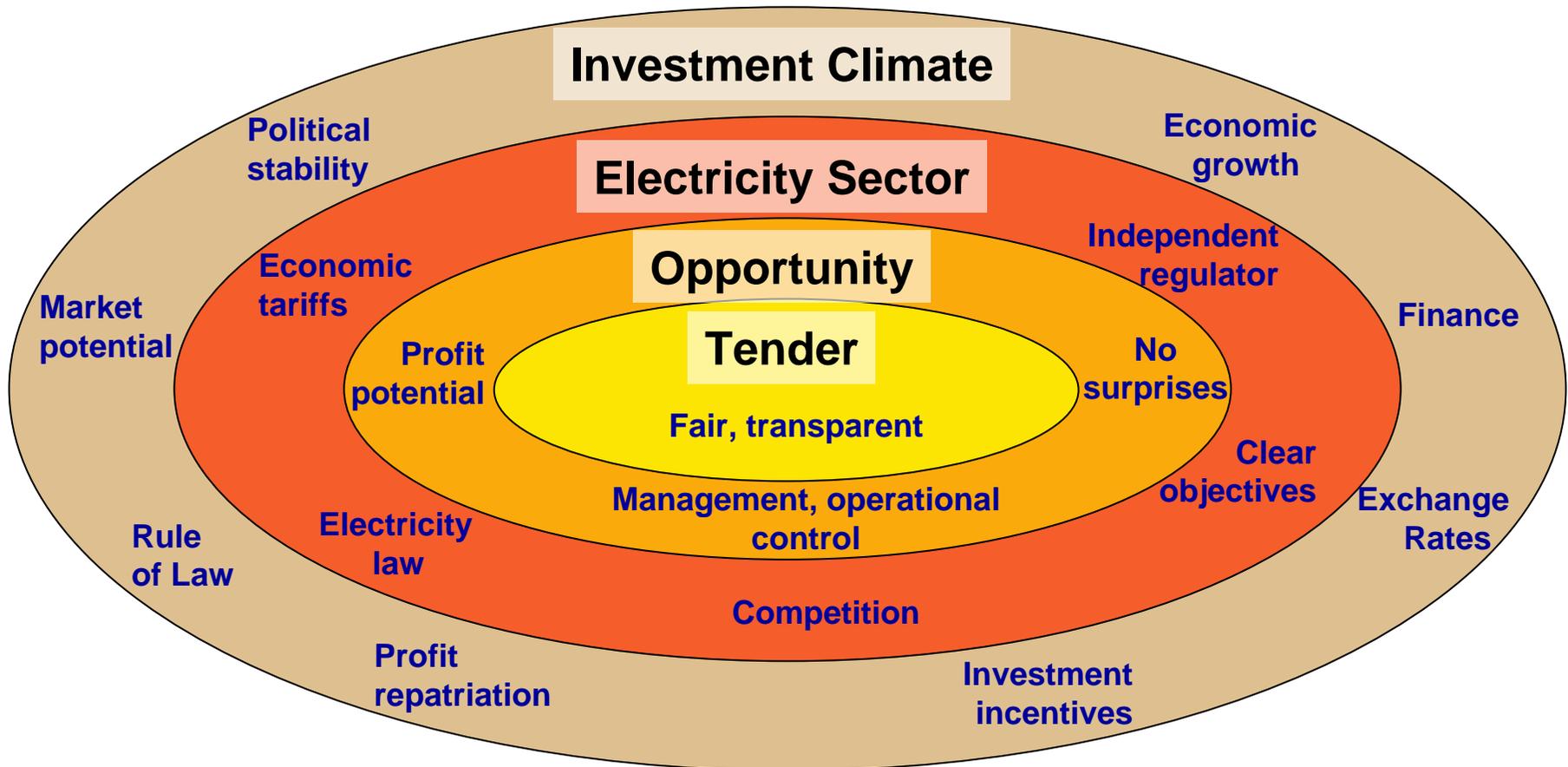
Preconditions for Success



Preconditions for Success



Investors hate uncertainty – clarity and stability are as important as favourable terms and conditions



Exercise 2: Homework

Day 2: Types of PSP

Contents



- Preconditions for PSP in Electricity
- Overview of the Options
- PSP for New Assets
- PSP for Existing Assets

Preconditions for PSP in Electricity



The World Bank has a simple scorecard for electricity privatisation

Table 3.5 Electricity Reforms by Region, 1998

(percentage of countries where reform has occurred)

Reform	East Asia and Pacific	Europe and Central Asia	Latin America and Caribbean	Middle East and North Africa	South Asia	Sub-Saharan Africa
State utility corporatized	44	63	61	25	40	31
Enabling legislation passed	33	41	78	13	40	15
Independent regulator at work	11	41	83	0	40	8
Private investment	78	33	83	13	100	19
State utility restructured	44	52	72	38	40	8
Generation privatized	22	37	39	13	40	4
Distribution privatized	11	30	44	13	20	4
All reforms taken	41	45	71	17	50	15
Reform score (scale of 1–6)	2.44	2.70	4.28	1.00	3.00	0.88

(Source: “Reforming Infrastructure: Privatization, Regulation, And Competition” World Bank Policy Research Report 2004)

Exercise 3: Group Session

Exercise 3

How does Iraq score

- State utility corporatised?
- Enabling legislation passed?
- Independent regulator at work?
- Private investment?
- State utility restructured?
- Generation privatised?
- Distribution privatised?



Overview of the Options



The options available depend on whether the assets already exist

New Assets

- Greenfield investment/Joint Venture
- Build-Own-Operate (BOO)
- Build-Own-Operate-Transfer (BOOT)
- Build-Operate-Transfer (BOT)
- [Concession]

Existing Assets

- Asset sale
- Strategic Share Sale
- Concession
- Initial Public Offer (IPO)
- Rehabilitate-Operate-Transfer (ROT)
- Management Contract
- Contract Out
- “Spin Off” (sell subsidiary company)

Overview of the Options



What are the main differences?

Existing Assets

vs

New Assets

Temporary

vs

Permanent

Private Investment

vs

Government Investment

Investor Pays Government

vs

Government Pays Investor

Overview of the Options



What are the similarities?

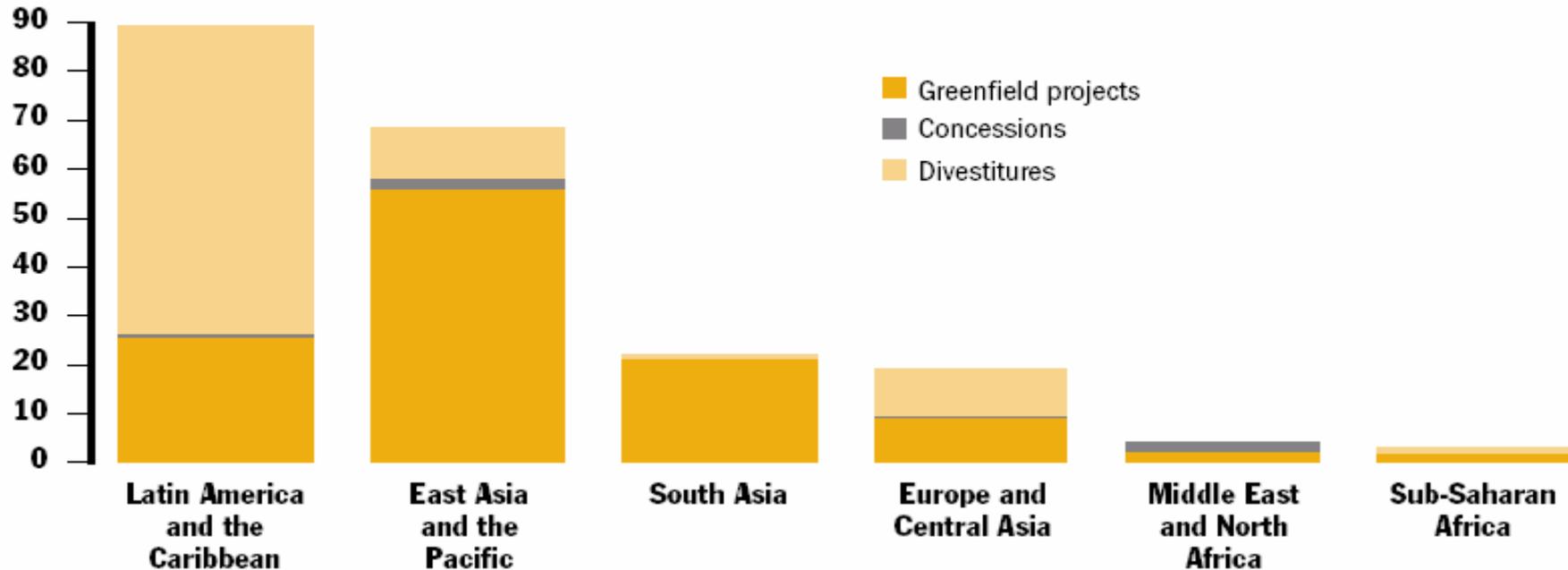
All of the options involve transfer of management and operations from Government to the private sector

Exercise 4: Breakout Session

Exercise 4

Figure 3.7 Types of Private Investment in Electricity, by Region, 1990–2001

Billions of 2001 U.S. dollars



Why is private investment in the Middle East so low?

What else is interesting about this region?

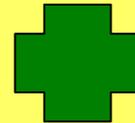
(Source: “Reforming Infrastructure: Privatization, Regulation, And Competition” World Bank Policy Research Report 2004)

PSP for New Assets

Build-Own-Operate (BOO)/Greenfield Investment/Joint Venture

- ❖ New build investment
- ❖ Usually 100% investor
- ❖ Typical for electricity generation
- ❖ Initiated by Government or investor

- 
- ↓ No proceeds for Govt
 - ↓ Tax holidays may be required



- ✓ Job creation
- ✓ New investment
- ✓ No legacy issues
- ✓ Additional capacity
- ✓ Private O&M
- ✓ Competitive tender → better deal



- ✗ May compete with existing assets
- ✗ No improvement of existing assets
- ✗ Without a competitive tender you may not get the best deal



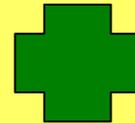
Permanent

PSP for New Assets

Build-Operate-Transfer (BOT)/Build-Own-Operate-Transfer (BOOT)

- ❖ New build investment
- ❖ 100% Government owned
- ❖ Operation by investor until capex funded
- ❖ Initiated by Government
- ❖ Construction funded by operations

- 
- ↑ Capex funded by investor
 - ↑ Assets transferred to Govt
 - ↓ No cash proceeds
 - ↓ Tax holidays may be required
 - ↓ Capex cost after transfer



- ✓ Job creation
- ✓ New investment
- ✓ No legacy issues
- ✓ Additional capacity
- ✓ Private O&M
- ✓ Competitive tender → better deal



- ✗ Investor isn't owner
- ✗ Private O&M temporary
- ✗ Investor incentive to cut corners
- ✗ No improvement to existing assets



Government owns immediately (BOT) or investor owns for a fixed period (BOOT), private O&M for a fixed period

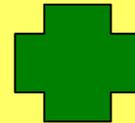
PSP for Existing Assets

Asset Sale

- ❖ Sale of assets as a single block
- ❖ Can include employee contracts
- ❖ Investor acquires 100%
- ❖ Strategic investor most likely
- ❖ Initiated by Government



- ↑ Sale proceeds
- ↑ Future tax revenue
- ↓ Cost of liabilities
- ↓ Cost of redundancies



- ✓ Quick, straightforward process
- ✓ Potential for additional investment
- ✓ Easier to change corporate culture
- ✓ Additional capacity
- ✓ Private O&M
- ✓ Competitive tender → better deal



- ✗ Govt responsible for liabilities
- ✗ Legacy issues remain with Govt
- ✗ Job losses
- ✗ Negative publicity
- ✗ Difficult to value – risk of “fire sale”



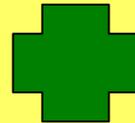
Permanent

PSP for Existing Assets

Sale of Shares to a Strategic Investor (“Strategic Sale”)

- ❖ Sale of shares to strategic investor
- ❖ Going concern basis
- ❖ Majority or large minority sold
- ❖ Investor has management, operational, financial control
- ❖ Initiated by Government
- ❖ Fewer benefits if sold to financial investor

- 
- ↑ Sale proceeds
 - ↑ Future tax revenue
 - ↑ Dividends on remaining shares
 - ↑ Capital gain on remaining shares



- ✓ Efficiency improvements
- ✓ Additional investment likely
- ✓ Additional capacity
- ✓ Private O&M
- ✓ Competitive tender → better deal
- ✓ Proceeds



- ✗ Legacy issues remain with Govt
- ✗ Job losses
- ✗ Resistance from employees, public, politicians



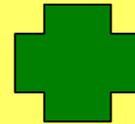
Permanent

PSP for Existing Assets

Concession

- ❖ Sale of concession to strategic investor
- ❖ Investor has right to operate as if it were the owner
- ❖ Government retains ownership
- ❖ Investor responsible for capex
- ❖ Becoming more common for power assets, especially wires
- ❖ Can also be used with BOO, IPP

- 
- ↑ Concession fees
 - ↑ Payments can be annual (more attractive to investors)
 - ↑ Future tax revenue



- ✓ Efficiency improvements
- ✓ Additional investment likely
- ✓ Private O&M
- ✓ Competitive tender → better deal
- ✓ Proceeds
- ✓ Govt retains long term ownership
- ✓ Less public resistance
- ✗ Investment tails off towards end of concession period
- ✗ Job losses
- ✗ Other legacy issues



Fixed period (15 – 30 years)

PSP for Existing Assets

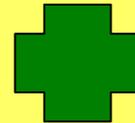
Initial Public Offer (IPO)

- ❖ Shares sold on stock market
- ❖ Can include international tranches
- ❖ Often special offers to employees, individuals
- ❖ Can sell any amount
- ❖ Existing management remains



↑ Sale proceeds

↓ Cost of international flotation



- ✓ Encourages wider share ownership
- ✓ Price set by the market
- ✓ Market pressure on management to improve performance
- ✓ Less resistance from the public, management
- ✗ No strategic partner benefits
- ✗ Diverse ownership dilutes pressure on management to improve
- ✗ No new investment in the company
- ✗ Requires developed, liquid stock market



Permanent

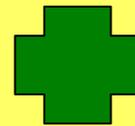
PSP for Existing Assets

Rehabilitate-Operate-Transfer (ROT)

- ❖ BOT for existing assets
- ❖ Combines concession & management contract
- ❖ Government ultimately retains ownership
- ❖ Capex recovered from profits
- ❖ Focus on asset rehabilitation



- ↑ Capex funded by investor
- ↑ Improved profits (after Transfer)
- ↑ Tax revenue (after Transfer)
- ↑ Capital gain on Govt shares
- ↓ No cash proceeds



- ✓ Efficiency improvements
- ✓ Focus on rehabilitation
- ✓ Private O&M
- ✓ Competitive tender → better deal
- ✓ Govt retains long term ownership
- ✓ Less public resistance



- × Not permanent
- × Complex to negotiate & monitor
- × O&M benefits temporary
- × No incentive to expand operations
- × Job losses & Other legacy issues



Fixed period

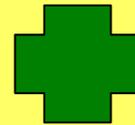
PSP for Existing Assets

Management Contract

- ❖ Private operator takes over management & operations
- ❖ Can target part or all of the assets
- ❖ Government retains 100%
- ❖ Government responsible for capex
- ❖ Can be used to prepare for full privatisation



- ↑ Dividends
- ↑ Future tax revenue
- ↑ Capital gain on Govt shares
- ↓ Management fees
- ↓ Cost of capex



- ✓ Efficiency improvements
- ✓ Can target specific areas (collections)
- ✓ Private O&M
- ✓ Competitive tender → better deal
- ✓ Govt retains long term ownership
- ✓ Less public resistance



- × Short term
- × Complex to negotiate & monitor
- × Disputes common
- × Cost of fees, capex
- × Job losses & Other legacy issues
- × Govt still responsible for liabilities



Fixed period (3 - 5 years)

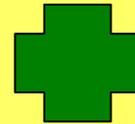
PSP for Existing Assets

Contract Out

- ❖ Specific services put out to tender
- ❖ Government retains core assets
- ❖ Contract out services: cleaning, security, construction, transport



- ↑ Capex funded by investor
- ↑ Improved profits
- ↑ Tax revenue
- ↑ Capital gain on Govt shares
- ↓ Fees paid to contractor
- ↓ Redundancy payments



- ✓ Targeted efficiency improvements
- ✓ Jobs transferred to private sector
- ✓ Private O&M
- ✓ Competitive tender → better deal
- ✓ Risk transferred to private sector
- ✓ Less public resistance



- ✗ Only partial solution
- ✗ Cost of contract supervision



Typically short term, renewable contracts

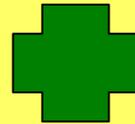
PSP for Existing Assets

Spin Off

- ❖ Non-core assets/activities sold
- ❖ Government retains core assets
- ❖ Spin off: construction, maintenance, “social” assets



- ↑ Cash proceeds
- ↑ Capex funded by investor
- ↑ Improved profits
- ↑ Tax revenue
- ↑ Capital gain on Govt shares



- ✓ Targeted efficiency improvements
- ✓ Jobs transferred to private sector
- ✓ Private O&M
- ✓ Competitive tender → better deal
- ✓ Risk transferred to private sector
- ✓ Less public resistance
- ✓ Smaller businesses sold to local investors
- ✗ Only partial solution
- ✗ No improvement to core business
- ✗ May create private monopoly
- ✗ Negative reaction if spin off fails



Typically short term, renewable contracts

Exercise 5: Homework



Day 3: Case Studies

Contents



- Choosing Your Option
- Case Study: Current Ministry Initiatives
- Progress in the Region
- Case Study: Jordan
- Case Study: Turkey
- Case Study: Other Countries
- Privatising the Ministry of Electricity

Choosing your Option



How do they meet Government's objectives?

Option	Proceeds	Investment	Efficiency	Operations & Maintenance	Ownership	Term
<i>New Assets</i>						
BOO/Greenfield/JV	x	✓✓✓	✓✓✓	✓✓✓	Investor	Permanent
BOT/BOOT	✓	✓✓✓	✓✓✓	✓✓✓	Government	Long Term
<i>Existing Assets</i>						
Asset Sale	✓	✓✓	✓✓	✓✓✓	Investor	Permanent
Strategic Sale	✓✓✓	✓✓✓	✓✓✓	✓✓✓	Investor	Permanent
Concession	✓✓	✓✓	✓✓✓	✓✓✓	Government	Long Term
IPO	✓✓	x	x	x	Shareholders	Permanent
ROT	x	✓✓✓	✓✓✓	✓✓✓	Government	Long Term
Management Contract	xxx	xxx	✓✓	✓✓	Government	Short Term
Contract Out	xxx	x	✓✓	✓✓	Government	Short Term
Spin Off	✓✓✓	✓✓✓	✓✓✓	✓✓✓	Investor	Permanent

This demonstrates the importance of setting objectives up front

Exercise 6: Individual Session

Case Study: Current MoE Initiatives



The Ministry has already taken the first steps towards PSP

BOO Tender

- Tender took place in 2004
- 4 x 400 MW generators
- Heavy fuel oil
- 100% private owned
- 20 expressions of interest by investors
- 4 contracts signed
- Tender stalled because investor demanded large initial payments from the Ministry

What is the current status?

Case Study: Current MoE Initiatives



Billing & Collections Contract

- Management contract
- 2 x pilot areas – Basrah and Salahaddin
- Initial tender in 2004
- No acceptable bids
- Tender will be re-run in 2005/2006
- Tender documents being prepared

Any others?

Progress in the Region



Almost all countries in the region have some PSP in electricity

	Abu Dhabi	Algeria	Bahrain	Dubai	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	Saudi Arabia	Syria	Turkey
IPP	✓	✓	✓	x	✓	✓	x	✓	open	✓	✓	✓	✓	planned	x	✓
Generation	✓	x	x	x	✓	x	x	ongoing	x	x	x	✓	x	x	x	✓
Transmission	✓	x	x	x	x	x	x	x	x	x	x	✓	x	x	x	x
Distribution	ongoing	x	x	x	✓	x	x	✓	x	x	x	✓	x	x	x	✓

- Mostly IPPs
- Abu Dhabi, Turkey, Oman, Jordan have made the most progress
- Iraq, Dubai, Syria have made no progress
- In Iraq private micro-generation/distribution companies have evolved because the Ministry cannot provide a reliable supply

The following Case Studies provide more information

Case Study: Jordan



As a major part of the Economic Reform Process, Jordan has been implementing an ambitious Privatization Program since late 1996 with the aim of :

- Raising the efficiency and competitiveness of the enterprises
- Attracting local, Arab and international investments
- Strengthening and deepening the financial market
- Reducing the debt burden of the Treasury
- Enhancing the transfer of modern technology

Case Study: Jordan



60 transactions have been successfully completed

- Privatisation proceeds & associated investments of over \$2,000 million were generated
- The programme improved the image of the Jordanian economy with regard to its investment climate
- The programme resulted in an increase in the employment levels in the sectors that were opened to the private sector: around 12,000 jobs in telecoms, transport, hotels

Case Study: Jordan



The Government initiated an electricity sector reform program in 1997, aiming at :

- Achieving an adequate and reliable electric power supply under the most efficient conditions in terms of quality and cost
- Increasing Private Sector Participation in the generation and distribution of electricity

Case Study: Jordan



The Reform Process comprised the following:

- Restructuring the sector through redefining the roles of the Government (policy maker), the different companies operating in the sector and the ERC (regulating & licensing the companies in the sector) as stipulated by the new Electricity Law of 1999
- Unbundling NEPCO, the vertically integrated state-owned electricity company, into three operating companies for Generation, Transmission and Distribution
- Establishing the Electricity Regulatory Commission (ERC) in January 2001
- Privatising the Generation and Distribution assets, retaining the Transmission company

Case Study: Jordan

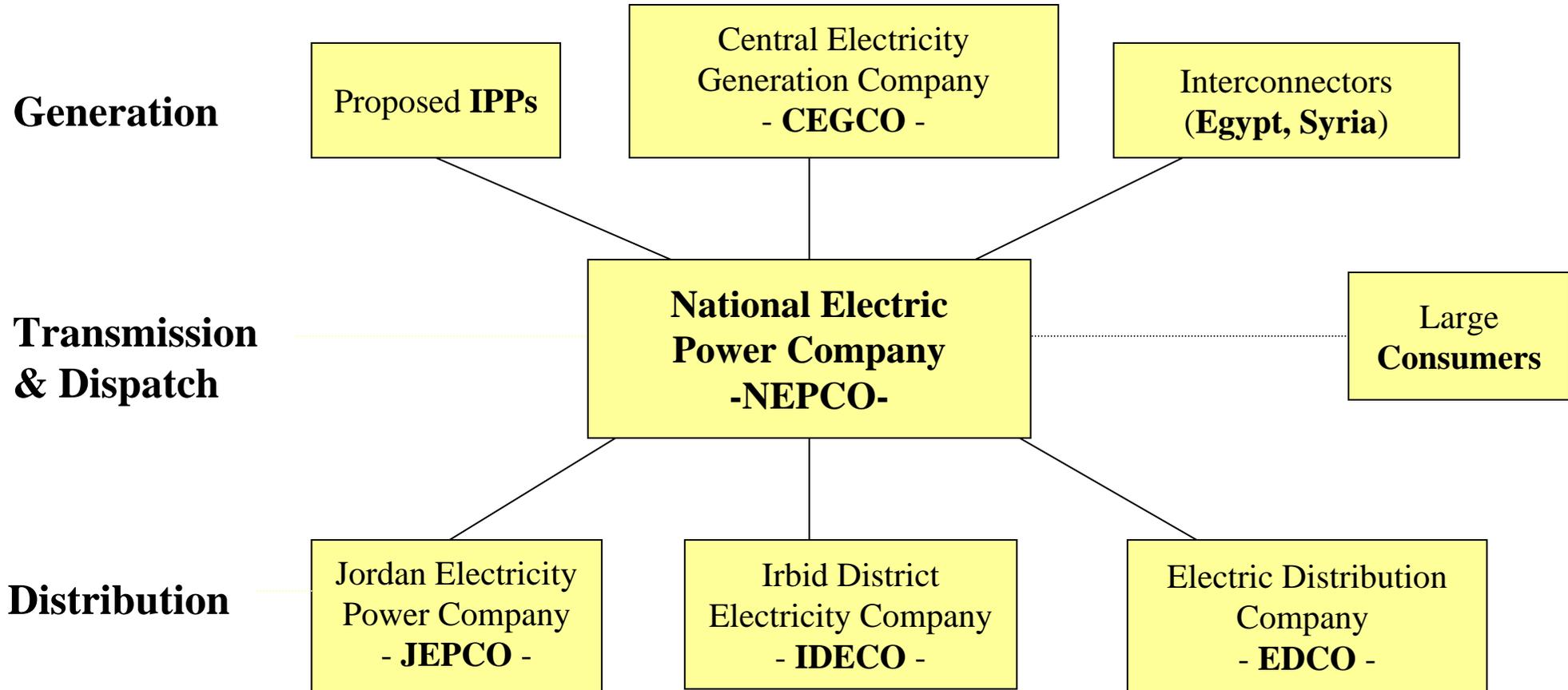


The initial stage included unbundling NEPCO into three separate companies:

- CEGCO (generation)
- NEPCO (transmission)
- EDCO (distribution in the South and East)

There are two other distribution companies in Jordan operating under concession agreements: JEPCO (privately owned) and IDECO (partly state-owned)

Case Study: Jordan



Case Study: Jordan



Privatisation forms a major part of the reforms. The Government is selling the following shares through international tenders:

- 51% of CEGCO
- 100% of EDCO
- 55.4% of IDECO

A consortium led by the investment bank NM Rothschild was appointed as Financial Adviser in December 2001, following an international competitive bidding process

Case Study: Jordan



Phase One comprised the following tasks :

- Privatisation strategy options analysis and valuation
- Resolve restructuring issues
- Environmental review
- Legal due diligence
- Transaction approach analysis and time schedule
- Recommendations for legal and regulatory framework
- Preparation of technical asset files

Phase Two involves implementation of the privatisation programme

Case Study: Jordan



- A new Electricity Law was enacted in October 2002
- Government endorsed the results and recommendations related to Phase One in November 2002
- Marketing and preparation of bidding documents and preparation of the privatisation plans were endorsed by the Government in February 2003
- Privatisation of CEGCO started in April 2004
- Prequalification, distribution of Tender Documents and due diligence were completed
- Bids evaluated, winning bidder selected
- Negotiations with winning bidder ongoing (slowly)
- Government is now considering opening the tender to financial investors who expressed interest

Case Study: Jordan



CEGCO

At privatisation, a contractual package similar to that of an operational IPP project will be put in place, including:

- A long term PPA (15 years or life of plant) with NEPCO
- Fuel supply agreements in respect of CEGCO oil fired plants
- Tolling arrangements with NEPCO in respect of gas fired plants (other than Risha plant which will have its own Gas Supply Agreement)
- A Shareholders' Agreement will grant the investor management control over the business
- An Implementation Agreement grants the investor various protections including fiscal and legislative stability
- A Government Guarantee supports the above contractual package (to back NEPCO's payment obligations to CEGCO)

Case Study: Jordan



The Distribution Companies (EDCO, IDECO)

At privatisation a regulatory settlement for the two companies will be put in place:

- A specified rate of return is ensured up to 2012
- An incentive mechanism focusing on operating cost reductions will be included, granting investors the opportunity to improve this rate of return
- Implementation Agreements with the government will be put in place giving the investors similar protections to those granted to the CEGCO investor

Case Study: Turkey



Turkey has adopted an ambitious privatisation programme for electricity

- Electricity Market Law passed in March 2001
- Independent Regulator established – Energy Market Regulatory Authority
- Sector has been unbundled – generation, transmission, distribution separated
- High Planning Council adopted the privatisation strategy in March 2004
- Privatisation of generation and distribution has begun

“The basic objective is the provision of adequate, high-quality, uninterrupted and low-cost electricity ... to consumers”

Case Study: Turkey



Expected benefits of electricity privatisation

- Lowering costs by efficient operation of generation and distribution assets
- Ensuring supply reliability and improving supply quality
- Reducing technical distribution losses to the level of OECD countries and preventing thefts
- Ensuring that the necessary rehabilitation and expansion investments are made by the private sector without inflicting any burden on public institutions
- Transferring to consumers the benefits obtained through competition in electricity generation and distribution activities

“The privatisation programme will not be solely aimed at the maximisation of privatisation income”

Case Study: Turkey



Privatisation is starting in Distribution

- Driven by market liberalisation and EU requirements
- 21 regional Distribution companies
- 49 year licences
- 5 Year Tariff Plan, fixed before privatisation
- Power Purchase Agreements will be put in place for 85% of forecast demand

Minimum requirements for the bids:

- Quality of Service targets
- Loss reduction forecast
- Investment in rehabilitation
- Proposed tariff methodology

All 21 companies to be sold by 31 December 2006, a very ambitious timetable – Concessions are the most likely option

Case Study: Turkey



Generation assets will be grouped to make them more attractive

- Transition Power Purchase Agreements put in place
- Privatisation will start by July 2006
- Strategic share sale is the most likely approach

There are no plans to privatise Transmission

Case Study: Turkey



The last two attempts to privatise Generation failed

- Used “Transfer of Operating Rights” approach – a 25 year lease
- “A bitter experience”
- Failed because the Government could not legally issue the necessary guarantees
- Investors that won bids are now going to international arbitration to recover their money
- A further attempt, to sell 6 power plants, was begun in May 2002

This demonstrates the need for thorough due diligence before starting privatisation

Case Study: Turkey



There are already private investors in Generation and Distribution

Investment in new Generation plant has been through BOT, mostly coal or gas

1996

- 4 plants completed (287 MW)
- 5 plants being built (770 MW)
- Agreements signed (740 MW)
- Negotiation completed (253 MW)
- Negotiation ongoing (2,150 MW)
- Feasibility studies (21,000 MW)

2005

- EMRA licenses new generators
- Applications received for:
 - 120 wind projects (4,200 MW)
 - 40 hydro projects (1,100 MW)
 - 50 thermal projects (1,900 MW)
 - 4 Wholesale Supply licenses
 - 3 Retail Supply licenses

The market is healthy with much interest from investors

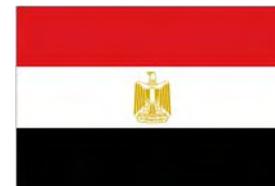
Case Study: Turkey



Turkey's BOT programme has been a success

- Started in 1984
- Driven by the need to avoid Government borrowing limits
- Implementation was delayed by legal problems
- Since 1993 23 BOT and 5 BOO projects were commissioned
- In February 2004 a \$1.5 billion, 1,210 MW coal-fired Generator was completed at Iskenderun – German investors
- Most other projects are gas-fired – 4 plants were completed in 2002-2003, adding 4,600 MW

Case Study: Egypt



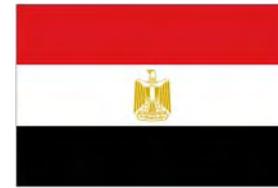
“The private sector is crucial to my vision for the future of the energy sector”

- First BOOT completed in 2000 (Sidi Kerir, 680 MW) – tender run by advisers
- Second BOOT (Suez Canal, 1,300 MW) – tender run by EEHC, negotiations by advisers
- Third BOOT was run entirely by EEHC
- 20 year Power Purchase Agreements with the Transmission Company
- 4 industrial electricity producers are connected to the Transmission network
- Private generators and distributors operate in isolated markets

“New power generation will come almost exclusively from privately funded projects”

(Both quotes from Ali El-Saeidi, Minister of Electricity)

Case Study: Egypt



But

- EEHC still owns 90% of all generating capacity
- The legislation is weak – the regulator has no power to regulate tariffs and licenses are not legal requirements

Progress has been slow and the sector remains dominated by Government, through the EEHC. The regulator is too weak to be effective

Case Study: Oman



Probably the most progress in the region

- September 2005 – 18 Expressions of Interest from investors for the combined \$1 billion, 500 MW Barka IWPP (start operations in 2009) + 688 MW Rusail privatisation (by share sale)
- Electricity Law passed in August 2004, independent regulator set up, sector has been unbundled
- Plans are under way to privatise Transmission and Distribution
- A 240 MW power plant + Transmission + Distribution were completed at Salalah in 2003 under a 20 year Concession – 35% of the shares were sold in 2005 through an IPO

The only private Transmission operator to date

Case Study: Abu Dhabi



“The Emirates has been the ideal regional example of how attracting private investment can reap huge benefits”

- Electricity Law passed, sector has been unbundled, strong independent regulator set up
- 4 IWPPs operate as joint ventures (60% ADWEA, 40% investors) with a capacity of 5,760 MW – privatisation of existing plant and construction of new generators
- Negotiations on the 5th, Taweelah B, completed in January 2005
- Government is currently carrying out the sale of shares in Distribution Companies to financial investors through private placements

“Major international power companies are queuing up to invest in the UAE”

Case Study: Qatar



Significant progress has been made

- Established Qatar Electricity and Water Company (QEWC), 57% owned by private Qataris, 43% Government
- In 1998 650 MW Ras Abu Fontas B power and desalination plant transferred to QEWC
- In 2003 750 MW Ras Laffan electricity and water plant was completed at a cost of \$700 million – joint venture between QEWC and international investors
- 50 year Concessions

Privatisation has reduced the cost of power and water by 40%

Case Study: Saudi Arabia



The reform programme is picking up speed

- New Electricity Law being debated by Shoura Council – includes privatisation, restructuring and regulation
- Government's current Development Plan includes electricity privatisation
- Studies have been completed on selling Generating plant and on issuing tenders for private supply to villages and rural communities

IWPP – Marafiq Independent Water and Power Plant

- Tender started in 2004
- 17 investors expressed interest, 10 were short-listed
- 2,400 MW capacity

Case Study: Iran



Reforms are at an early stage

- New Law being drafted, aiming to open up the way for PSP
- Private sector wind farms are being set up
- Significant interest in IPPs:

2003-04

- Tender announced for 2 x 500 MW at Zanfan
- Tender announced for 2,000 MW elsewhere
- Permit issued to private investor to build 2,000 MW near Tehran
- 6 BOT projects being negotiated
- Tenders for sale of 6 existing generating plants were prepared

There has been most progress in Generation

Case Study: Bahrain



PSP has just started

- In July 2005 the first IPP contract was signed for Al Ezzel
- BOO
- Phase 1, for 470 MW, will be completed in April 2006
- The tender took only 6 months and 5 bids were received

But the first attempt looks like a success story

Case Study: Algeria



Reforms are at an early stage

- New Law passed in 2002 breaking Sonelgaz into electricity and gas companies
- Independent regulator being set up
- Government plans to sell 30% of Sonelgaz subsidiaries have stalled
- 10 IPPs, totalling 7,214 MW, are at various stages

And progress is slow

Exercise 7: Group Discussion

Exercise 7



How would you privatise the Ministry of Electricity?

(assume the other necessary changes – Law, regulation, restructuring, unbundling – have taken place)

Privatising the Ministry of Electricity



Preconditions:

- **Pass new Electricity Law**
- **Set up an independent electricity regulator**
- **Establish the market model for electricity (eg Single Buyer)**
- **Unbundle Generation, Transmission, Distribution**
- **Set up new Generation, Transmission, Distribution companies**

Generation can be privatised and IPPs set up without these preconditions using “Regulation by Contract”

Privatising the Ministry of Electricity



A possible privatisation strategy



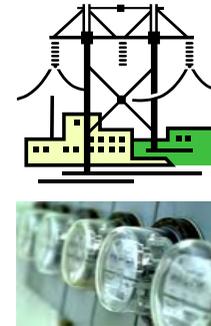
Generation

Strategic Sale
Or
Asset Sale



Transmission

Management Contract
Or
Concession



Distribution
& Sales

Strategic Sale
Or
Concession



Non-Core
Activities

Spin off

All new Generation should be through IPPs using the BOO approach



Day 4: The Tender Process

Contents



- Why Hold a Tender
- Types of Tender
- The Tender Process
- Bid Criteria
- Consortia
- Key Documents
- Timetable
- Public Relations
- After the Tender

Why Hold a Tender



A transparent, competitive tender is essential to get the best results

- Pressure from other bidders encourages competitive offers
- Government sets the rules of the game
- Strengthens Iraq's international reputation
- Less likely to be questioned later

...And to rebuild confidence in Iraq

Types of Tender



Various approaches can be used

Public Auction ("open outcry")

- Best for simple transactions
- Focus on price
- Fully transparent
- Used in UK 3G telecom license tender

Public Sealed Bid

- Most common option for Governments
- Very flexible

Invited Sealed Bid

- When there are few potential investors
- Less competitive – risk of collusion, less pressure on bidders

"Beauty Parade"

- Fixed price
- Winner selected on technical criteria
- Less transparent outcome, more open to objections
- Used when the focus is on "quality"

Normally a public sealed bid process is best

The Tender Process



For large projects it is best to appoint experienced advisers:

- Have contacts with potential bidders
- Know how to run a transparent, competitive tender
- Will have templates for key contracts and documents
- Someone to blame if things go wrong

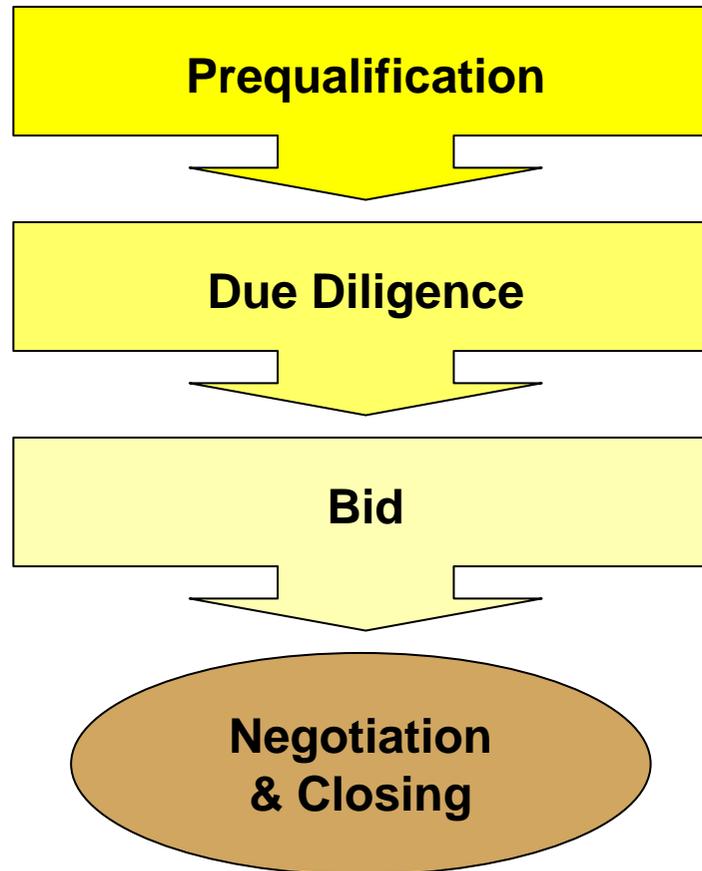
As a minimum the Ministry will need a Financial/Transaction Adviser and an international legal adviser. They may also bring in: local legal adviser, accountants, technical experts

- Advisers appointed by competitive tender
- Will be paid a fixed “retainer fee” and often a variable “success fee” that depends on completing the tender

The Tender Process



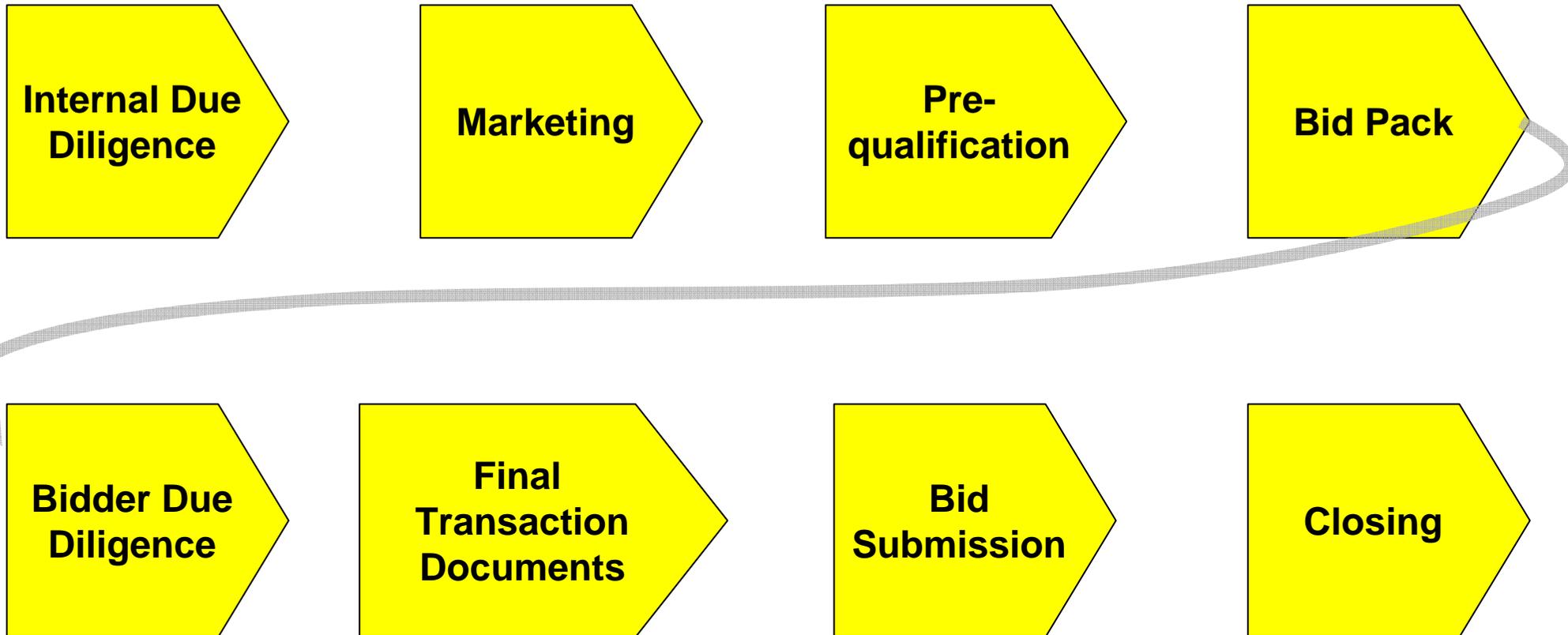
A standard competitive tender involves 2 phases:
prequalification & bid



The Tender Process



The main stages of the tender



The Tender Process



Internal Due Diligence

- Legal review – laws, regulations, court cases
- Financial review – accounts, systems, valuation
- Technical review – technology, operations

Objectives

- Identify problems and fix them, or adjust the tender
- Collect information to give to Bidders

The Tender Process



Marketing

- Prepare Invitation to Qualify/Request for Proposals (RFP)
- Issue RFP to interested parties
- Advertise – newspapers, internet, direct contacts
- Roadshow – for the biggest tenders, hold presentations in Iraq or other countries

Objectives

- Generate as much interest as possible from potential Bidders
- Demonstrate the Tender process is transparent and professional

The Tender Process



Pre-qualification

- Evaluate Expressions of Interest against the qualification criteria
- Check credibility of Bidders
- Select shortlist who can participate in the Tender

Objectives

- Select enough Bidders to maximise competitive pressure
- Eliminate time-wasters and unqualified Bidders

The Tender Process



Bid Pack

- Qualified Bidders must sign a Confidentiality Agreement
- Tender Rules/Instructions to Bidders sets out how the Tender will be run
- Information Memorandum – a more detailed marketing document
- Draft Transaction Documents – the draft contracts

Objectives

- Provide as much information as possible to Bidders
- Make the investment look attractive
- Establish a fair, transparent bid process
- Include protections for the Ministry
- Reduce time spent in negotiations

The Tender Process



Bidder Due Diligence

- “Data Room” – all relevant documents and information – often provided on a secure website or CD ROM
- Bidder Conference or individual meetings with Bidders – presentations from the Ministry and other relevant parties, opportunity for Bidders to ask questions
- Site visits
- Requests for additional data
- **All Bidders must receive the same information**

Objectives

- Provide as much relevant information as possible
- Continue to “sell” the investment to Bidders
- Ensure a transparent and fair Tender

The Tender Process



Final Transaction Documents

- Reissue Transaction Documents incorporating comments from Bidders
- Aim to minimise potential for changes after bids are submitted

Objectives

- Finalise as much as possible while there is still competitive pressure from other Bidders
- Reduce time needed to reach Closing by minimising negotiations

The Tender Process



Bid Submission

- Separate Technical and Financial Proposals
- Open and check Bids
- Review Bids against the Evaluation Criteria
- Select the Preferred Bidder

Objectives

- Maintain a fair and transparent process
- Select the bid that best meets your objectives

The Tender Process



Closing

- Negotiate final contracts (if necessary)
- Complete final contracts (name, address, price)
- Sign final contracts
- Transfer funds (if necessary)
- Issue shares/permits/concession, etc, (if necessary)
- Hand over to the winning Bidder (if necessary)
- Final Press Release

Objectives

- Complete the Tender as quickly and efficiently as possible
- Hand over to the winning Bidder

Qualification Criteria

- Want to qualify as many bidders as possible to increase competition
- Want to keep out unqualified bidders and time wasters
- No more than 5 criteria
- Focus on the Bidder's experience of similar projects and its financial strength
- Submissions should be easy for Bidders to prepare – do not ask for their proposed approach or business plan at this stage

Participating in the tender costs money – if you make it too expensive early on Bidders will drop out

Bid Evaluation Criteria

- Do not repeat the Qualification Criteria – you are evaluating the Bid now, not the Bidder
- The criteria should match your objectives for the tender to align Bidders' incentives with yours
- Criteria should be objective and, if possible, quantifiable, to make evaluation easier and more transparent
- Assign weights to each criterion – the most important gets the highest weight
- No more than 6 criteria

Objective criteria make it easier to compare bids, losing Bidders will not be able to challenge the result

Exercise 8: Classroom Exercise

Consortia



Bidders will often form a Consortium

- Allows them to provide a full range of services
- Access to funding
- They may use it to reduce competition

You need to know:

- Who is in charge?
- Who are the members?
- Who has authority to sign?
- What are the arrangements between members?
- Will the Consortium collapse after winning the Bid?

For larger contracts a Consortium must form a legal entity

Key Documents



	Invitation To Qualify	Confidentiality Agreement	Information Memorandum
Parties	Government	Government, all bidders	Government
Term	N/A	3 – 5 years after Closing	N/A
Purpose	Marketing document to stimulate initial interest from Bidders	To maintain secrecy of commercially sensitive information	More detailed marketing document to summarise selling points & encourage bids
Contents	<ul style="list-style-type: none"> ➤ The opportunity ➤ Background (sector, economy, company) ➤ Qualification criteria ➤ Indicative timetable ➤ Submission requirements for Expressions of Interest 	<ul style="list-style-type: none"> ➤ Definition of Confidential Information ➤ Non-disclosure obligation ➤ Term of validity 	<ul style="list-style-type: none"> ➤ The sector ➤ The economy ➤ The opportunity ➤ Legal/technical/ financial review ➤ Regulatory framework ➤ Updated indicative timetable ➤ Summary of TDocs

Key Documents



	Tender Rules	Power Purchase Agreement	Share Purchase Agreement
Parties	Government, all bidders	Investor, company, electricity purchaser	Government, investor, company
Term	To Closing	15 – 30 years	Permanent
Purpose	Sets the rules & procedures for the tender process	Provide long term certainty over availability and price of electricity	Govern sale and purchase of shares (or assets)
Contents	<ul style="list-style-type: none"> ➤ Bid process ➤ Due diligence procedure ➤ Bid contents and structure ➤ Prohibitions and permissions ➤ Bid evaluation criteria ➤ Government’s rights 	<ul style="list-style-type: none"> ➤ Services to be supplied (power, capacity, ancillary services) ➤ Prices ➤ Fuel supply ➤ Metering ➤ Termination ➤ Dispute resolution ➤ Penalties 	<ul style="list-style-type: none"> ➤ Price ➤ Shares sold ➤ Guarantees, representations and warranties

Key Documents



	Shareholders' Agreement	Concession	Implementation Agreement
Parties	Government, Investor	Government, company, Investor	Government, Investor
Term	Determined by Government's stake	15 – 99 years	Variable
Purpose	Govern ongoing relationship between Government & investor	Rights/obligations of the company & investor in operating assets	To set out the Government's obligations and give comfort to investors
Contents	<ul style="list-style-type: none"> ➤ Obligations of the parties ➤ Corporate governance – Board membership, voting and veto rights ➤ Operation and management responsibility ➤ Dispute resolution 	<ul style="list-style-type: none"> ➤ Rights and obligations of the company ➤ Rights and obligations of the investor ➤ Rights and obligations of the Government 	<ul style="list-style-type: none"> ➤ Depends on what Government is willing to offer, local laws and investment incentives ➤ Payment guarantees (for PPA) ➤ Medium term tariff plan ➤ Tax and other fiscal incentives ➤ Access to site and services ➤ Assistance with construction and other permits

Other documents include loans & other financing agreements, guarantees, bid & performance bonds, letters of comfort from banks

Timetable



Activity	Time* (weeks)	Months															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	?	?
Draft terms of Reference for Adviser	3	█															
Prequalify Advisers	6	█	█	█													
Select and appoint Adviser	12			█	█	█	█	█									
Internal Due Diligence	4						█	█									
Prepare Invitation to Qualify	4						█	█									
Marketing to investors	6							█	█	█							
Expressions of interest submitted	0																
Prepare Information Memorandum	4								█	█	█						
Prepare Tender Rules	4								█	█	█						
Draft Power Purchase Agreement	10								█	█	█	█	█	█			
Draft Fuel Supply Agreement	10								█	█	█	█	█	█			
Draft other contracts/guarantees	10								█	█	█	█	█	█			
Shortlist bidders	3								█	█	█						
Sign Confidentiality Agreement	2										█	█					
Issue Bid Pack	0																
Bidder Due Diligence	12										█	█	█	█	█		
Bidder Conference	2											█	█				
Bids submitted	0																
Bid evaluation	4													█	█	█	█
Appoint winning Bidder	0																
Negotiations^	0-6-?																
Closing	4																

*Given the current situation in Iraq you can add 30-100% to these timings

^ Depends on how much is pre-agreed and the position of the winning bidders



Public Relations



PR is important to a successful transaction – it must be targeted

Target	Public & Politicians	Potential Investors	Employees	General
Messages	<ul style="list-style-type: none"> ➤ Economic benefits ➤ Impact on quality of service 	<ul style="list-style-type: none"> ➤ Attractive investment climate ➤ Attractive deal ➤ Transparency, fairness, competitive ➤ Government priorities 	<ul style="list-style-type: none"> ➤ Need for efficiency improvements ➤ Reassurance on their future ➤ Transparent tender process ➤ Timetable 	<ul style="list-style-type: none"> ➤ Transparent tender ➤ Attractive investment climate
Importance	Medium - high	High	Medium	Low
Media used	Press releases TV/Radio/Newspapers Briefings to politicians Prepared Questions & Answers (“Q&As”)	Specialist industry press Business press Government websites Personal contacts Iraqi Embassies	Company newsletters Presentations to employees	Mostly covered already in other PR Specific briefings to donors, embassies
When	After key milestones – Eols, Shortlisting bidders, Closing	During marketing phase and bidder due diligence	Immediately before or at the same time as public announcements	Beginning of the process, during marketing phase, subsequently as necessary

After the Tender



It is important to monitor the investor's performance

- To ensure that they meet the terms of the contract
- To evaluate and publicise the success of the Tender

Key points:

- Someone must be responsible for monitoring
- Timing and scope of monitoring should be clear
- Minimise interference with the investor's operations
- Minimise cost for the investor

Training Workshop for Ministry of Electricity Private Sector Participation

Exercise 2

Objectives for Private Sector Participation

Rank the following objectives from 1 to 12 in order of importance, where 1 = “most important”, 12 = “least important”.

Objective	Ranking
Cash payment (proceeds)	<input type="text"/>
Increase connections/access to electricity	<input type="text"/>
Improve efficiency/cut costs	<input type="text"/>
Improve profitability/reduce subsidies	<input type="text"/>
Improve access to investment capital	<input type="text"/>
Improve access to new technology and systems	<input type="text"/>
Increase collection of revenues	<input type="text"/>
Maintain levels of employment (staff numbers)	<input type="text"/>
Reduce inflation (keep tariffs low)	<input type="text"/>
Improve customer service	<input type="text"/>
Introduce modern management and systems	<input type="text"/>
Increase share ownership among the Iraqi people	<input type="text"/>

**Training Workshop for Ministry of Electricity
 Private Sector Participation**

Exercise 5

Which privatisation option would you choose for the following:

Activity	BOO	BOT/BOOT	Asset sale	Strategic Sale	Concession	IPO	ROT	Management Contract	Contract out	Spin off	Comments
Generating plant											
Transmission											
Distribution											
Sales											
Regulation											
Construction											
Maintenance											
Meter testing											
Energy strategy											
Billing & collections											
Meter reading											
Meter installing											
Security											
Gardening											
Transport											
Canteen											

Training Workshop for Ministry of Electricity Private Sector Participation

Exercise 6

Options for Private Sector Participation

Which option would you choose for the following:

1. 400 MW gas-fired Generation plant built in 2003, in good condition but maintenance is poor.

2. 500 MW oil-fired Generation plant built in 1970, poor condition with an operating capacity of 10 MW.

3. 100 MW hydroelectric Generation plant built in 1965, has not operated since 1988.

4. Electricity pole manufacturing facility owned 70% by the Ministry and 30% by a private Iraqi investor.

5. Construction company specialising in distribution projects.

6. Canteen at a large generating plant.

7. Distribution company, needs new transformers and meters, collections only 40% of amounts billed.

8. 20% shares in a Distribution company. 80% of the shares were sold to a strategic investor five years ago and operating performance is very good.

9. Monopoly Transmission company, needs a lot of new investment, management and operations are poor.

10. Small vehicle maintenance workshop in a medium sized town.

**Training Workshop for Ministry of Electricity
Private Sector Participation**

Exercise 8

Bid Criteria

You are running a tender for a contract to provide transport services (vehicles, servicing and repairs).

What Qualification Criteria and Bid Evaluation Criteria would you use?

Qualification Criteria

- 1 _____
- 2 _____
- 3 _____
- 4 _____

Bid Evaluation Criteria

- 1 _____
- 2 _____
- 3 _____
- 4 _____