



# PPPs in Infrastructure

*Day 1*  
*Session 3.2*

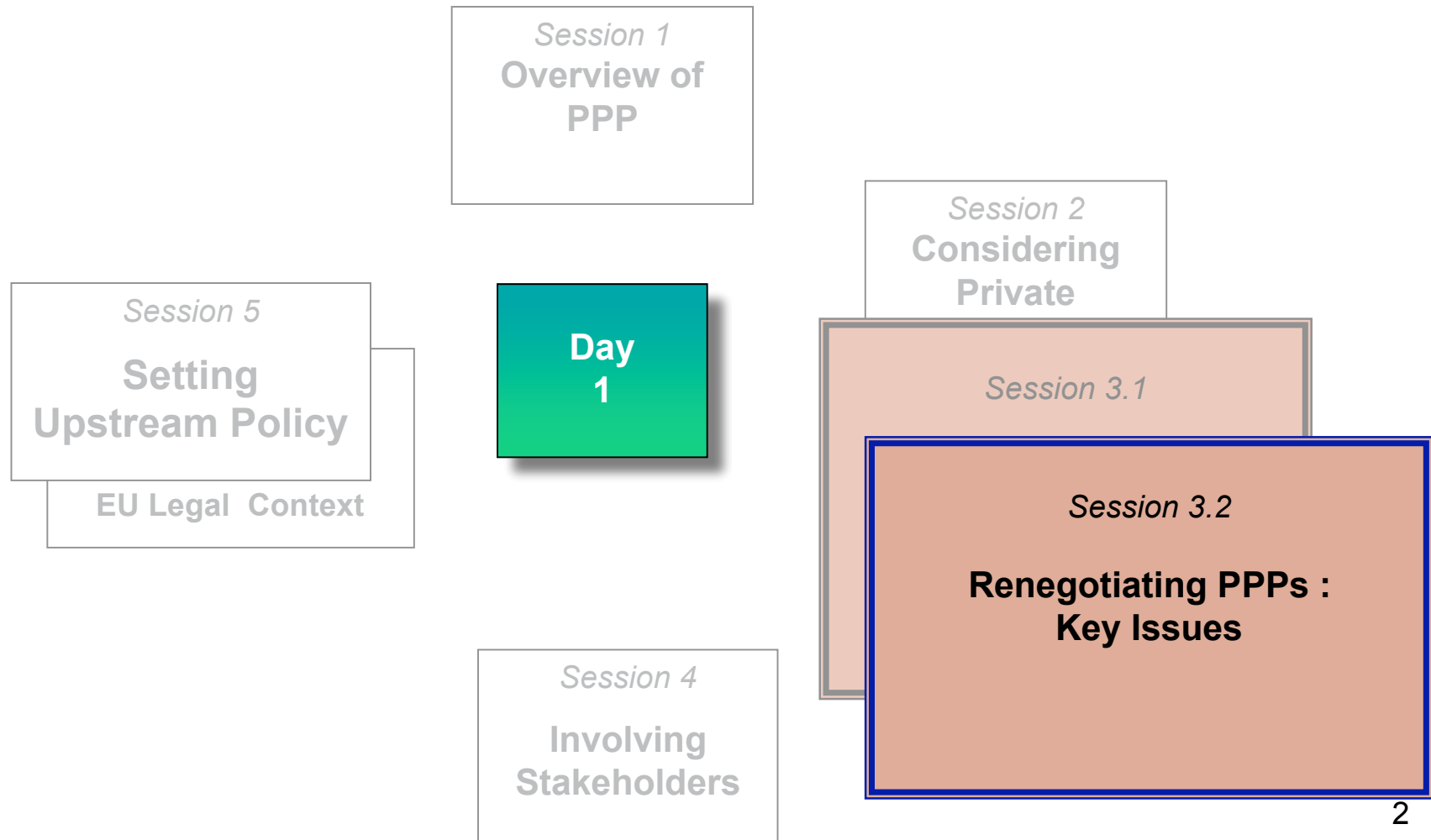
## **Renegotiating PPPs: Key Issues for Policy Makers**

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# Session 3.2

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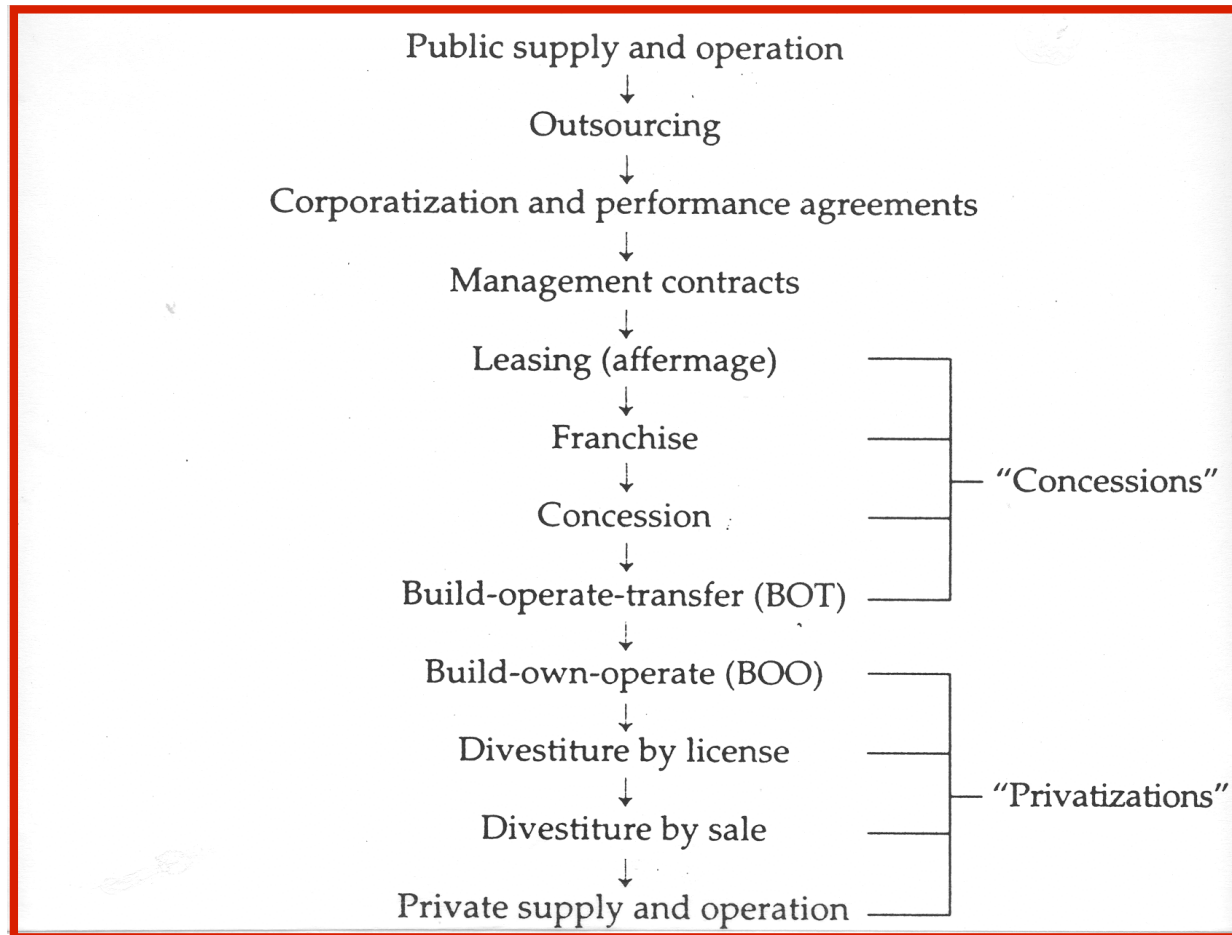


# OUTLINE

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- Motivation
- Data Set of Analysis
- Why are we concern about renegotiation?
- Evidence and Results: Why it matters?
- Determinants of Renegotiation
- What to do about: Recommendations

# Types of Private Participation in Infrastructure

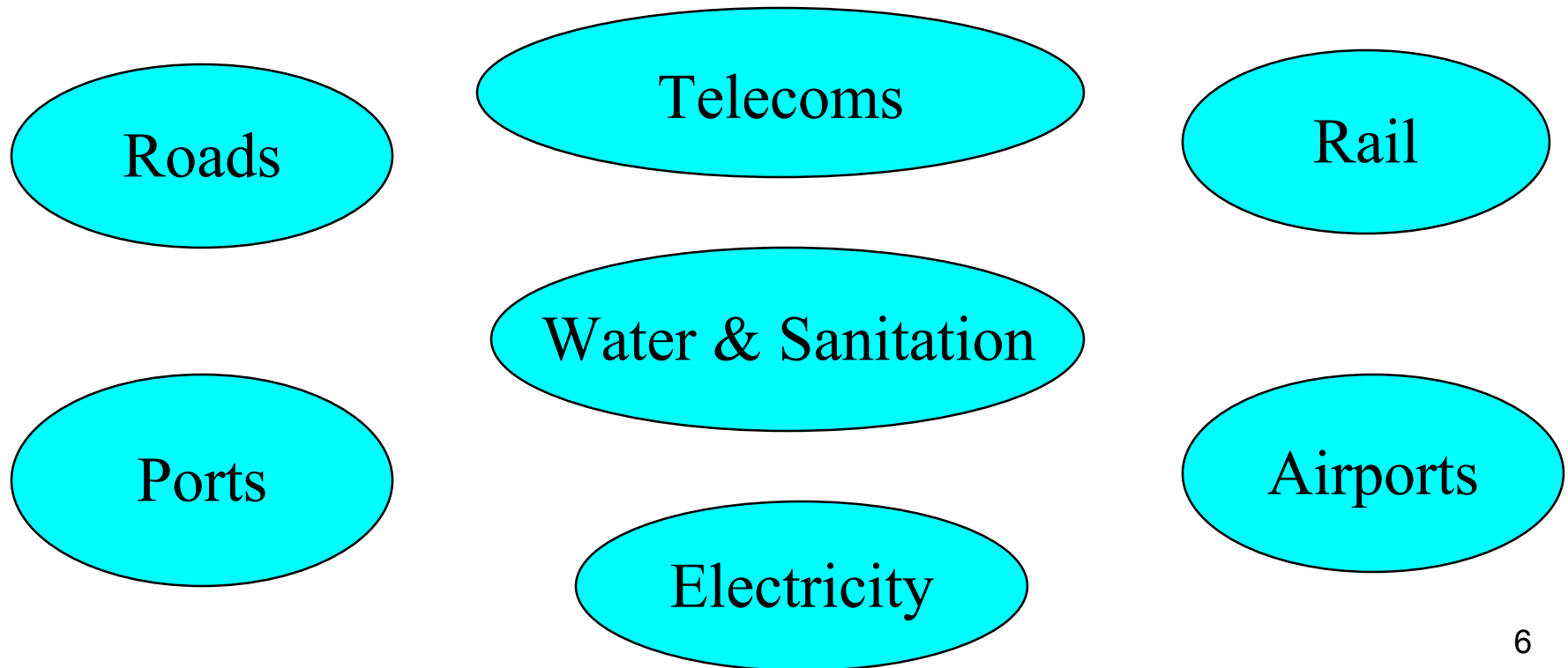


# Salient Choice: Concessions/ PPPs

- Concessions or PPPs → instrument mostly utilized for private participation in infrastructure services: ( 75% total, 98% transport, 89% water and sanitation)
- Privatization → mostly used in the Telecom, and in Electricity - Generation sectors
- Concessions and PPPs: conceptually similar, often differentiated by financial viability: Concessions viable, PPPs not viable & requiring government financial contribution. Fiscal issue-asymmetric-debt vs revenues

# Data Set

Based on the analysis of more than 1,300 concessions in the infrastructure sector awarded since the 1980s to date, in Latin America and Caribbean (Guasch 2004).



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The data set has seven blocks describing:

- (i) country characteristics;
- (ii) type of project or transaction;
- (iii) award and bidding details;
- (iv) regulatory environment;
- (v) concession details;
- (vi) renegotiation details; and
- (vii) risk bearing details

# WHY ARE WE CONCERNED ABOUT RENEGOTIATION?

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- It eliminates the competitive effect of the auction for the concession: questions the model's credibility
- Renegotiation takes place away from competitive pressures in a bilateral - government/operator – environment
- Competitive bidding distorted
- Decreases benefits of concession and welfare of users, usually have fiscal impact, contributes to backlash
- Most likely winner is not most efficient operator but that most skilled in renegotiation
- While some renegotiations are efficient, many are opportunistic and should be deterred

# RENEGOTIATION:

The Norm rather than the Exception (1 of 2)

- Violation of the sanctity of the contract
- Rational expectations: evidence of governments willing to take renegotiation demands
- That in turns leads to vicious cycle
  - To pervasive renegotiation demands
  - Low balling bids, with the intention to win the concession or PPP and then renegotiate better terms
  - Low balling bids:  $R = PQ - 0C - T - D < rKi$

# RENEGOTIATION:

The Norm rather than the Exception (2 of 2)

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- Correlation between renegotiation and profitability
- Correlation between aggressive bidding and renegotiation
- Aggressive bidding-low profitability-renegotiation
- Aggressive bidding: **PQ-OC-T-D<RK**
- Financial equilibrium issue

## **Incidence and Time of Renegotiation of Infrastructure Concessions in Latin America 1988-2005**

	<b>Renegotiated Concession</b>	<b>Average Time to Renegotiation</b>
<b>All Sectors</b>	<b>68%</b>	<b>1.8 years</b>
<b>Electricity</b>	<b>41 %</b>	<b>2.1 years</b>
<b>Transport</b>	<b>78%</b>	<b>2.9 years</b>
<b>Water</b>	<b>92%</b>	<b>1.3 years</b>

Source: Guasch (2004) updated

# Very Low Incidence of Cancelled Concession

## 1990-2001

Total World Infrastructure PPI Projects	Cancelled	Percentage
2,485	48	2.1%
	<i>Composition</i>	<i>By Sector</i>
	19 toll roads	5.8%
	9 energy	
	7 water & sanitation	3.5%
	8 telecom	

Source: Harris (2002)

# CORRELATION BETWEEN RENEGOTIATION INCIDENCE AND PROFITABILITY

**Average Profitability by Sector of Privatized and Concessioned Firms  
and the Cost of Equity in Latin American and Caribbean Countries  
1990 – 2002 (per cent)**

<b>Sector</b>	<b>IRR (adjusted)<sup>a</sup></b>	<b>Initial Cost of Equity<sup>b</sup></b>
Telecommunications	21.0	14
<b>Water and Sanitation</b>	<b>11.0</b>	<b>15.5</b>
Energy	14.5	14
<b>Transport</b>	<b>11.5</b>	<b>13.5</b>

a. The IRR has been adjusted to incorporate management fees.

b. Cost of equity is evaluated at the time of the transaction.

# Contract Award Processes for Concessions in Latin America and the Caribbean by Sector.

Mid 1980s - 2005

Award process	Telecom	Energy	Transport	Water and sanitation	Total	Share of total (percent)
Competitive bidding	245	95	231	125	696	78 (46% renegotiated)
Direct adjudication (bilateral negotiation)	15	143	37	4	199	22 (8% renegotiated)
<b>Total</b>	<b>260</b>	<b>238</b>	<b>268</b>	<b>129</b>	<b>895</b>	<b>100</b>

Source: Guasch (2004)

## Distribution of Concessions by Type of Regulation

<b>Price Caps</b>	<b>56%</b>
<b>Rate of Return</b>	<b>20%</b>
<b>Hybrid*</b>	<b>24%</b>

\*Hybrid regimes are defined when, under a price cap regulatory regime, a large number of costs components are allowed automatic pass through into tariff adjustments

Source: Author's calculations

## **Distribution of Concessions by Existence of Investment Obligations in Contract**

<b>Investment Obligations in Contract</b>	<b>73%</b>
<b>No Investment Obligations in Contract but Performance Indicators</b>	<b>21%</b>
<b>Hybrid</b>	<b>6%</b>

Source: Author's calculations

# HYPOTHESIS FOR RENEGOTIATION

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- Adjustments to macro shocks
- Changes in governments or in priorities
- Take advantage of lack of credible commitment to no-renegotiation
- Aggressive/Opportunistic bidding
- Securing additional investment or projects bypassing due diligence
- Abusing financial equilibrium principle
- Exploiting leverage opportunities-political capital
- Perceived opportunities for corruption
- Fear of corruption attacks dissuades disqualification of aggressive/opportunistic bids

# Typology of Renegotiation

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## **Initiated by Government**

- Opportunistic (politically)
- Change in priorities

## **Initiated by Operator**

- Opportunistic (rent seeking)
- Shock related

## **Ambiguous**

## Who initiated the Renegotiation?(% of total requests)

	<b>Both Government and Operator</b>	<b>Government</b>	<b>Operator</b>
<b>All sectors</b>	<b>13%</b>	<b>26%</b>	<b>61%</b>
<b>Water and Sanitation</b>	<b>10%</b>	<b>24%</b>	<b>66%</b>
<b>Transport</b>	<b>16%</b>	<b>27%</b>	<b>57%</b>

Source: Author's calculations

# Who Initiated the Renegotiation, Conditioned on Regulatory Regime? (% of Total Requests)

	<b>Both Government and Operator</b>	<b>Government</b>	<b>Operator</b>
<b>All sectors</b>			
<b>Price Caps</b>	<b>11%</b>	<b>6%</b>	<b>83%</b>
<b>Rate of Return</b>	<b>39%</b>	<b>34%</b>	<b>26%</b>
<b>Hybrid Regime</b>	<b>30%</b>	<b>26%</b>	<b>44%</b>

Source: Author's calculations

# What Are the Outcomes of the Renegotiation Process?

- On average the terms of the contract improved for the operator/investors
- Efficiency gains are reduced
- Users are on average worse off
- Adverse fiscal impact, including increases in contingent liabilities, are common

## Common Outcomes of the Renegotiation Process

	Percentage of renegotiated concession contracts with that outcome
<b>Delays on Investment Obligations Targets</b>	<b>69%</b>
<b>Acceleration of Investment Obligations</b>	<b>18%</b>
<b>Tariff Increases</b>	<b>62%</b>
<b>Tariff Decreases</b>	<b>19%</b>
<b>Increase in the number of cost components with automatic pass-through to tariff increases</b>	<b>59%</b>
<b>Extension of Concession Period</b>	<b>38%</b>
<b>Reduction of Investment Obligations</b>	<b>62%</b>
<b>Adjustment of canon-annual fee paid by operator to government</b>	
<b>Favorable to operator</b>	<b>31%</b>
<b>Unfavorable to operator</b>	<b>17%</b>
<b>Changes in the Asset-Capital Base</b>	
<b>Favorable to Operator</b>	<b>46%</b>
<b>Unfavorable to Operator</b>	<b>22%</b>

Source: Guasch (2004)

## Contract Features and the Incidence of Renegotiated: Determinants

<i>Feature</i>	<i>Incidence of renegotiation (percent)</i>
<b>Award criteria</b>	
Lowest tariff	60
Highest transfer fee	29
<b>Regulation criteria</b>	
Investment requirements (regulation by means)	70
Performance indicators (regulation by objectives)	18
<b>Regulatory framework</b>	
Price cap	59
Rate of return	16
<b>Existence of regulatory body</b>	
Regulatory body not in existence	62
Regulatory body in existence	23
<b>Impact of legal framework</b>	
Regulatory framework embedded in contract	61
Regulatory framework embedded in decree	41
Regulatory framework embedded in law	18

Source: Guasch (2004).

# Summary of the Results

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## **Determinants of Renegotiation- Significant Variables:**

- Award criteria
- Grounding of regulatory framework
- Existence of proper regulatory body
- Autonomy of regulatory body
- Type of regulation
- Nationality of concessioner
- Number of bidders
- Duration of the Concession
- Extent of Required Investment
- Political Cycle
- Macro Shocks

# Other significant variables

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- Existence of investment obligation increases the probability of renegotiation
- The longer the duration of the concession the lower the probability of renegotiation
- The stronger the legal groundings (law, decree, context) of regulatory framework the lower the probability of renegotiation
- Reputation effect:
  - ➔ As the country has renegotiations incidence the probability of renegotiation increases (there might be also a learning effect)
- Competition- number of bidders:
  - ➔ The greater the number of bidders the higher the probability of renegotiation

# ISSUES ON RENEGOTIATION

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- Financial equilibrium
- Sanctity of the bid:

$$R = PQ - 0C - T - D < rKi$$

- Regulatory accounting
- Incomplete contracts
- Informational asymmetries
- Contingent events

# Common Questionable Actions That Need To Be Addressed Through Regulatory Accounting

- Management fees often equivalent to half of the firm's net profits
- Contracting subsidiaries or related companies to provide services or equipment at significantly higher prices than standard market prices
- Accuracy of reported investments
- Transfer of accumulated profits into the regulated capital base
- Transfer of capital in nonregulated areas of the firm into the regulated capital base of the firm
- Valuation of pre - privatized assets at replacement costs
- Using, when convenient, past performance as justification for demands for future higher tariffs
- Financial equilibrium, yes, but based on best practices and the sanctity of the bid

# Lessons: New Efforts Should be Placed in Properly Addressing:

- I. Pre-Concession Issues
- II. Concession Design Issues
- III. Concession Award Issues
- IV. Regulatory Issues
  - a) Institutional
  - b) Economic/Technical
  - c) Administrative Procedures

# RECOMMENDATIONS (1 of 2)

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- Contract design avoiding ambiguities and incorporating proper contingencies
- Extensive use of regulatory instruments, particularly regulatory accounting, clarity on treatment of assets and liabilities
- Reputation matters: establish early on a reputation for not easily conceding renegotiation demands
- Scrutiny of aggressive bids
- Clarity on context and application of financial equilibrium clauses
- Clause about any contract modification should not change expected return

# RECOMMENDATIONS (2 of 2)

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- Contract should stipulate approach to renegotiations
- Credible commitment to no-renegotiation beyond contract clauses
- A freeze period on demands, five years or more
- Sanctions against frivolous demands-requesting a large fee to accompany demand to be lost if denied and considered frivolous
- Panel of experts to advise

# Contacts

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**THANK YOU!**

