



Financing Urban Transportation

The Korean Framework vs. Global Benchmarks



CRÉDIT AGRICOLE INDOSUEZ

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Global Experience:

**London Underground
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Bangkok “Blue Line”**



London Underground

11 lines with 275 stations spread over 400 km of track

Owned / operated by London Underground Ltd ("LUL", a 100%-owned subsidiary of public authority "Transport for London").

Chronic under-investment had led to reliability problems.

March '98: the Government proposed a PFI / PPP solution = transfer of infrastructure responsibilities to 3 private "infracos" while LUL retains operations (train driving, ticket sales, etc.)

30-year concessions awarded to 2 private consortia:

Metronet (Balfour Beatty, Bombardier, Thames Water, Seaboard and WS Atkins)

Tube Lines Limited (Bechtel, Amey and Jarvis)



London Underground

Infraco's main responsibilities:

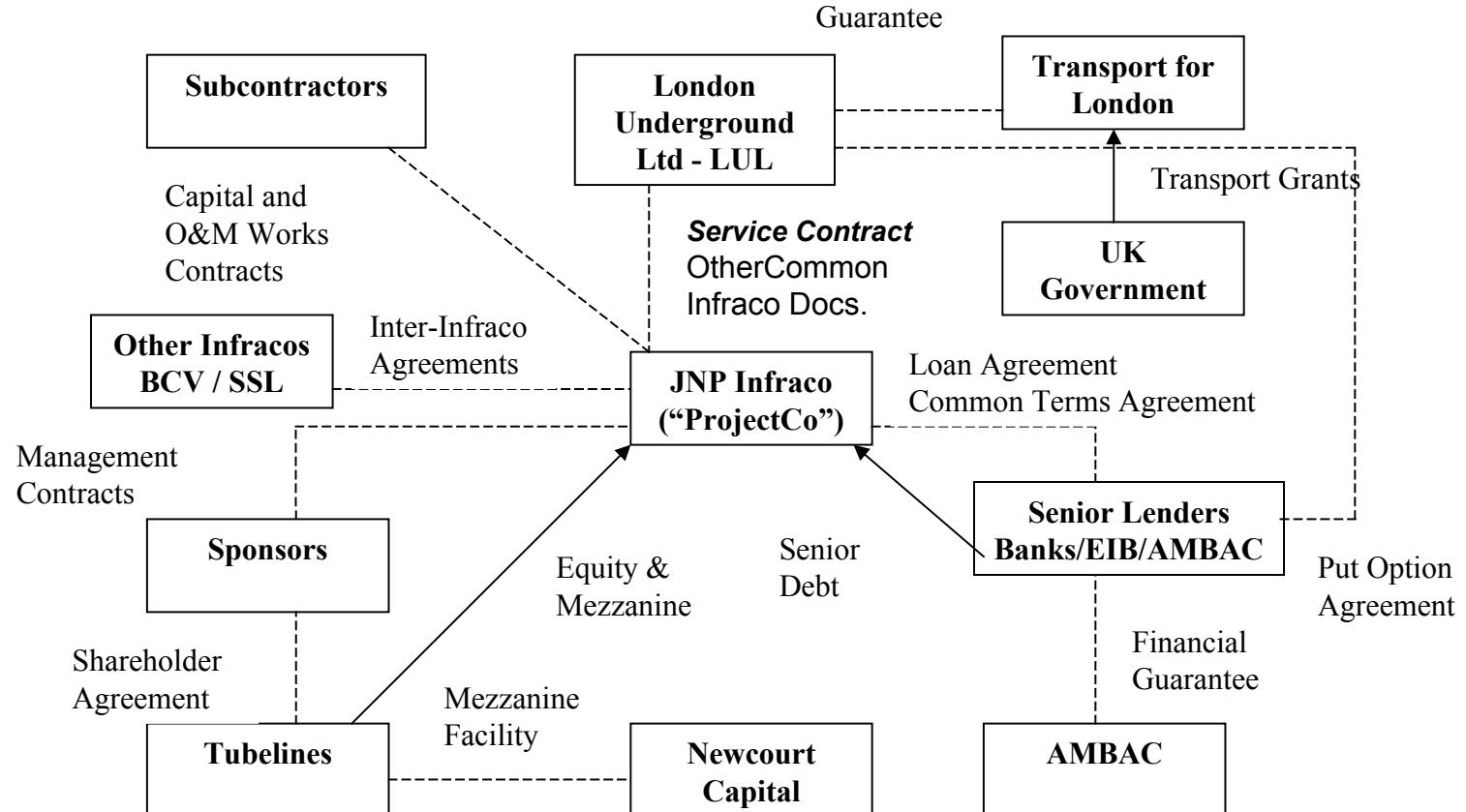
- O&M of existing assets (tracks, stations, control rooms, trains)
- Delivery and financing of numerous capital expenditure projects to replace old assets and improve reliability

Main terms of the services contract between LUL and Infraco:

- Remuneration = fixed payments + performance payments (capability, availability, and ambience).
- Periodic reviews of LUL's requirements every 7.5 years
- 95% [100%] payout of the Senior debt in case of the company [LUL] default as a compensation for the impossibility to take security over key network assets

London Underground

JNP (Jubilee, Northern, Picadilly Lines) - Contractual Structure





London Underground

JNP Infraco's financing plan

GBP135m = sponsors' equity, funded by a 5-year equity bridge loan

GBP135m = 30-year subordinated debt, provided by Newcourt Capital

GBP1,785m = senior debt provided by commercial banks (partial cover from AMBAC Assurance UK) and the European Investment Bank - maturities 18-25 years.

Standby funding plan = GBP200m debt + GBP45 m equity



Thessaloniki Metro

Project Description

Thessaloniki 2nd largest city in Greece (1 million inhabitants) with increasing traffic congestions

A new 9.8 km driverless underground line with 14 stations

25-year BOT concession awarded to a consortium of Bouygues, Bombardier, Keolis and Systra, signed in 1999

Pending State Aid clearance from the European Commission



Thessaloniki Metro

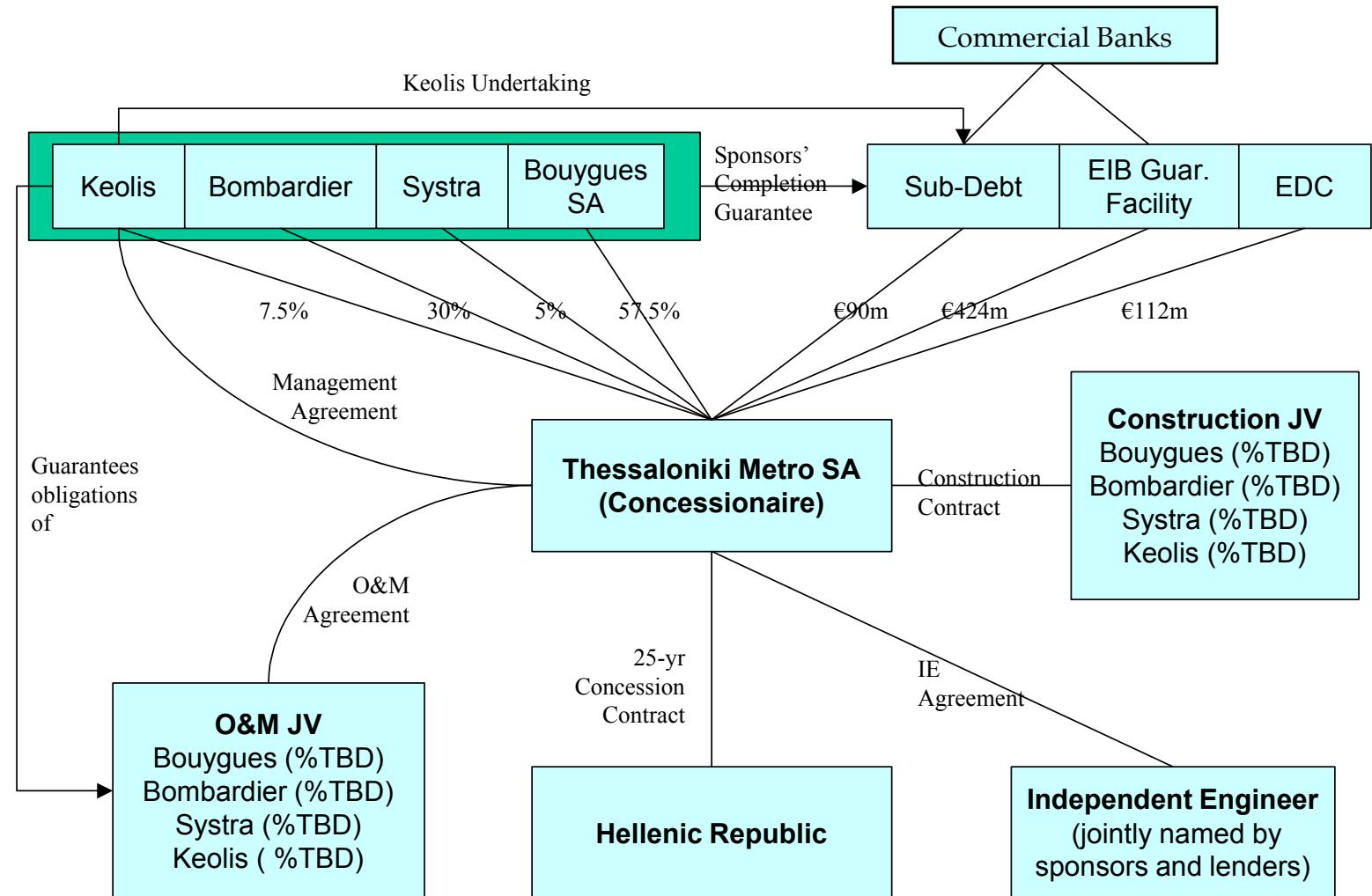
The Government:

- Grants a EUR225m construction subsidy
- Guarantees a minimum patronage of 30 million per annum
- Shares profits if actual traffic is higher
- Subsidizes tickets during operation (“Cost-plus” basis)
- Can terminate the concession if system availability is below standard - guarantees debt in case of termination

The concessionnaire:

- Builds the project within 5 years (LDs for delay, termination if LDs reach 5% of project costs)
- Operates the project with a minimum availability of 98%
- Finances the project

Thessaloniki Metro





Thessaloniki Metro

Tentative Financing Plan (including stand-by funding)

EUR 225m - Government Subsidies

EUR 30m – Equity

EUR 80m - Subordinated debt provided by banks

EUR 450m – Senior debt funded by European Development Bank, guaranteed by banks

EUR 120m - Export credit from EDC (Canada)



Bangkok MRTA Blue Line

Project Description

20-km underground mass-transit system in Bangkok

Public-Private Partnership

The MRTA (Mass Rapid Transportation Authority of Thailand) undertakes and finances the civil works

25-year concession to a private consortium which will supply and finance the M&E equipment (20% of total project cost), and operate and maintain the project



Bangkok MRTA Blue Line

Main Terms of the Concession

The tariff is preset in the concession agreement

MRTA is responsible for providing the infrastructure by date certain – interface risk could lead to termination of the concession by the concessionaire

The concessionaire pays a fixed and variable fee to the MRTA, and shares excess profits with the MRTA

Large unfavorable variations in interest or foreign exchange rates can be claimed from the MRTA in the form of increased tariff, reduced fees, variations in the concession agreement or cash payments.

Termination payments based on asset value



The Korean Framework





The PPI Framework

The PPI Act enacted 1999 provides a comprehensive framework for private participation in infrastructure:

- Covers road, rail, port and environment projects
- Clear process for solicited and unsolicited proposals
- Allows all types of concessions (BTO, BOT, ROT, etc.) 30-year BTO concessions are most frequent
- Government incentives = subsidies, revenue guarantees, partial FX risk protection, tax reductions and exemptions
- Establishment of one-stop shop PICKO
- Establishment of Korea Infrastructure Fund

Today PICKO lists about 40 projects designated as PPI projects.



Typical Process for a Railway Project

1. Project initiation by a government entity (municipality, MoCT)
2. Korea Development Institute conducts a preliminary feasibility study
3. Approval by the Ministry of Planning and Budget
4. Feasibility study and request for proposal
5. Negotiation of concession agreement
6. Validation of detailed implementation plan

Unsolicited projects initiated by private companies are first reviewed by PICKO before being evaluated by the MPB.

Risk Allocation

	Korea	London	Bangkok	Thessaloniki
Traffic Risk	G, PC	G	PC	G
Tariff Risk / Price Elasticity	PC, G	-	PC	G
Foreign Exchange Risk	PC, G	-	PC	-
Interest Rate Risk	PC	PC	PC	PC
Construction Risks	PC, S	PC	G, PC	PC
Technical / Design / Interface	C, PC	C, PC	G, C, PC	C, S, G

S: Sponsors

PC: Project Company

G: Government

C: Contractor(s)



Financing Transportation Projects in Korea





Investment Structure

Government Subsidies (40-50%)

Equity / Subordinated Debt (15%-20%)

Debt (35%-45%)



Sources of Debt

Domestic and Foreign Banks

- KRW commercial loans
- US\$/EUR/JPY commercial loans
- Export credits

Insurance companies / pension funds

- Quite conversant with project financing
- Long-term fixed-rate loans to projects
- Some can also provide subordinated debt

Subordinated debt

- Infrastructure funds



Main Financing Terms

Long maturities available (up to 16-17 years)

Pricing based on 3-year A / AA corporate bond yield – fixed rates are also available through interest rate hedging, or from insurance companies

Some limited recourse to sponsors sometimes expected to cover construction risks and cash deficiency in the early stage of operation



Comparison with Global Experience

	Korea	London	Bangkok	Thessaloniki
S&P Rating (Local/Foreign)	A+/A-	AAA	A-/BBB-	A
Concession period	30	30	25	25
Senior debt maturity	16-17	18-25	15	22
Subordinated debt	Yes?	Yes	No	Yes
% of debt covered (termination)	100%	95%/100%	-	100%
Revenue Guarantee	Yes	-	No	Yes
Construction subsidies	40-50%	-	80%	25%
Ticket subsidies	No	-	No	Yes
Excess return sharing	Yes	-	Yes	Yes



Conclusion

The Korean PPI framework

provides a framework for subsidies

allocates revenue risks to the Government

enticing the private sector to compete on technology, operational efficiency and financial ingenuity.

Domestic debt markets have been able to address PPI projects financing requirements.

Korea is seeing the emergence of infrastructure funds and growing involvement of institutional investors in the financing of infrastructure projects.

Increased competition from local and foreign banks will also result in greater financing efficiency.



Introduction to Crédit Agricole Indosuez



Crédit Agricole / Crédit Agricole Indosuez

Crédit Agricole is the largest banking group in France

- Capital Reserves (Dec 02): EUR34 bn
- Total Assets (Dec 02): EUR506 bn
- 16 million retail customers
- Credit Ratings: AA / Aa2
- Present in 60 countries



CAI : the wholesale & investment banking arm of CA

- Serving the group's institutional and corporate clients
- 12,000 staff in over 50 countries
- Business lines include financing (including Project & Structured Finance), capital markets, advisory, private banking and investment services.





Crédit Agricole in Korea

Crédit Agricole Group in Korea: long-established – local connections – multi-metiers

- Branch → Credit Agricole Indosuez: full-fledged branch / 1st French bank to settle in Korea in 1974
- Equity Broker → Credit Agricole Indosuez Chevreux: Electronic brokerage, execution, trading
- Futures / Derivatives Broker → Carr Futures
- Asset Management → Credit Agricole Asset Management; set-up of new JV: NACF / CA ITC in Sept 02

Credit Agricole Indosuez Seoul: full-fledged product range

- Fixed Income (Market Activities) – Forex, Global bonds, Interest rate, reverse repo, derivatives, trade on bonds & derivatives...
- Asset Based Finance – in conjunction with dedicated teams: Project Finance, Export Credit, Aircraft Finance, Shipping Finance
- Corporate Finance – cross-boarder operations with European MNCs / Privatization
- Debt Capital Market – FRN, loan syndication
- Corporate banking: trade finance, ST & MT commercial loans...

Project & Structured Finance

One-stop shop providing:

- **Advisory services**

- Infrastructure , oil & gas, power, telecoms
- Acquisitions, market tapping, loan restructuring



- **Limited recourse financing**

- Greenfield projects
- Acquisition financing
- Refinancing



- **Multi-source financing, combining**

- Export credits
- KRW and foreign currency loans

- **Underwriting / Syndication**

- Capacity to underwrite large amounts of debt
- Regional teams in Hong Kong and Singapore



- **Hedging instruments**

Asia Advisory



2001

West East Pipeline



c. US\$ 5 billion

Financial Advisor to Shell



CRÉDIT AGRICOLE INDOSUEZ

Thailand, 1998-2002

MRTA Blue Line



Mitsubishi Corporation

Financial Adviser



CRÉDIT AGRICOLE INDOSUEZ

Thailand, ongoing

TA Orange



Financial Adviser



CRÉDIT AGRICOLE INDOSUEZ

2001

Shanghai Caojing Cogeneration Plant



Financial Advisor



CRÉDIT AGRICOLE INDOSUEZ

2001

Singapore Incineration Plant #5



Financial Advisor to Keppel



CRÉDIT AGRICOLE INDOSUEZ

China, 2000-2001

Guohua, CPI Power Plants Acquisitions



Financial Adviser to CLP



CRÉDIT AGRICOLE INDOSUEZ



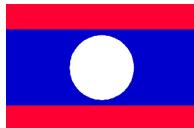
CRÉDIT AGRICOLE INDOSUEZ

Asia Advisory



On-going

Nam-Theun 2



US\$ 1.0 – 1.2 bn

Financial Advisor to
the Government of the LAO PDR



CRÉDIT AGRICOLE INDOSUEZ

2000

**Jakarta Airport
Privatisation**



Bid Advisor



CRÉDIT AGRICOLE INDOSUEZ

2000

**The World Bank /
Government of China**



Private Participation in
Infrastructure in China

Financial Consultant



CRÉDIT AGRICOLE INDOSUEZ

2000

**Beijing No. 10
Water Treatment Plant**



新世界基建有限公司
New World Infrastructure Limited



US\$ 350 mn

Financial Advisor



CRÉDIT AGRICOLE INDOSUEZ

1999

**Hong Kong International
Theme Parks Ltd.**



HK\$ 18.1 bn

Financial advisor to
The Hong Kong SAR Government



CRÉDIT AGRICOLE INDOSUEZ

1999

**Tate's Cairn Tunnel
Debt Rescheduling**



大老山隧道有限公司
Tate's Cairn Tunnel Company Limited

HK\$ 950 mn

Financial advisor



CRÉDIT AGRICOLE INDOSUEZ



Korea Advisory

1999

Houay Ho
(Laos)



Electricite du Laos
Loxley PCL

US\$ 250 mn

Financial Advisor / Participant



CRÉDIT AGRICOLE INDOSUEZ

1999-2000

Korean Airlines
5 Airbus A330



US\$ 500 mn

Financial Advisor / Global Arranger
Agent / Security Trustee



CRÉDIT AGRICOLE INDOSUEZ

1998

Sri Lanka
Combined Project



Heavy Industries
& Construction

Financial Advisor



CRÉDIT AGRICOLE INDOSUEZ

1996

Yulchon IPP



Bid to KEPCO

Financial Advisor



CRÉDIT AGRICOLE INDOSUEZ

1999

Tema Oil Refinery
(Ghana)



US\$ 185 mn

Financial Advisor



CRÉDIT AGRICOLE INDOSUEZ

1998

Whitefield Power Plant
(India)



Heavy Industries
& Construction

US\$ 230 mn

Financial Advisor / Lead Manager



CRÉDIT AGRICOLE INDOSUEZ

Asia Infrastructure Financing



1994, 2000

Korea High Speed Rail Core System



US\$ 2.5 bn

Bid Advisor
Financing Coordinator



CRÉDIT AGRICOLE INDOSUEZ

2001

Sino-French Water Development Co. Ltd



中法水務投資有限公司
SINO FRENCH WATER DEVELOPMENT COMPANY LIMITED

HK\$ 1.2 bn

Coordinating Arranger
Joint Bookrunner



CRÉDIT AGRICOLE INDOSUEZ

On-going

Nanhai Petrochemicals



c. US\$ 1 bn

Mandated
Lead Arranger



CRÉDIT AGRICOLE INDOSUEZ

Philippines, 2002

Manila North Tollway Corporation



US\$ 261 mn

Lead Arranger



CRÉDIT AGRICOLE INDOSUEZ

2000, 2001

Asia Container Terminals Ltd.



HK\$ 3.4 bn
HK\$ 2.5 bn (refinancing)

Arranger



CRÉDIT AGRICOLE INDOSUEZ

2000

Hong Kong Disneyland



HK\$ 3.3 bn

Lead Arranger



CRÉDIT AGRICOLE INDOSUEZ