PRIVATIZATION PPP AND CONCESSIONS IN AIRPORTS IN SOUTH EAST EUROPE

AN OVERVIEW MAY 2013 – S. TRAVLOS
AN OVERVIEW OF TRENDS IN SOUTH EAST EUROPE
Airport privatisation is an ongoing international trend which has brought a diverse range of new operators and investors into the industry.

Potential key benefits include access to new funding and more efficient and commercial Operations but also increased network economies as part of larger group.

Each privatization option has a number of advantages and drawbacks and each airport requires a different approach.
The airport business is very capital intensive and substantial investment is needed to accommodate traffic growth. Attracting private capital was seen as an option for airport development.

The privatisation run of the 1990s slowed down after 2000 and recovered prior to the 2007 crisis in Europe and North America, where we saw the highest level of activity – in line with anticipated worldwide traffic increases. Following another slow down in the period 2008-2011 privatisation activity restarted with major initiatives undertaken in UK, Portugal and several countries in the CEE region.

Still only a limited percentage of the world’s airports can be considered as being privatised.

Projects embrace all types of concessions and models and a wide range of financial instruments; in developing countries (Asia in particular) Public-Private-Partnerships are increasing.

Investor groups are diversifying and expanding their business scopes; IPOs and green-field developments are increasing (with mixed success).

Activity in CEE is diverse in terms of privatisation structures, but initiatives are constrained by investment climate and air traffic considerations.
OWNERSHIP OF EUROPE’S AIRPORTS

OWNERSHIP STRUCTURE IN TERMS OF NUMBERS OF 404 EUROPEAN AIRPORTS

- **Publicly Owned**: 78%
- **Mixed Owned**: 13%
- **Investor Owned**: 9%

OWNERSHIP STRUCTURE IN TERMS OF PASSENGERS HANDLED

- **Publicly Owned**: 52%
- **Mixed or Privately Owned**: 48%

# MODELS OF PRIVATE SECTOR PARTICIPATION IN AIRPORTS

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<th>POLICY OPTIONS/ROLES</th>
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<td>PPP OPTIONS</td>
<td>▪ Service Concessions</td>
<td>▪ BOT, BOOT, BTO etc.</td>
<td>▪ Trade Sales</td>
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<td>▪ Management Contracts</td>
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<td>▪ Multiple Concessions</td>
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<tr>
<td>OWNERSHIP</td>
<td>STATE</td>
<td>STATE</td>
<td>PRIVATE SECTOR</td>
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<tr>
<td>INVESTMENT</td>
<td>STATE</td>
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<td>MANAGEMENT/OPERATION</td>
<td>PRIVATE SECTOR</td>
<td>PRIVATE SECTOR</td>
<td>PRIVATE SECTOR</td>
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<tr>
<td>DURATION</td>
<td>SHORT</td>
<td>MEDIUM TO LONG</td>
<td>INDEFINITE</td>
</tr>
<tr>
<td>REVENUE CONSIDERATIONS</td>
<td>Annual fee</td>
<td>A combination of up front fee and annual fees</td>
<td>Priority for up front payment</td>
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</table>

**BOT** = Build-Operate-Transfer  
**BOOT** = Build-Own-Operate-Transfer  
**BTO** = Build-Transfer-Operate  
**LDO** = Lease-Develop-Operate
<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>PROJECT</th>
<th>TYPE OF PPP</th>
<th>VALUE Mil euro</th>
<th>INVESTORS</th>
<th>COMPLETION YEAR</th>
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<tbody>
<tr>
<td>CROATIA</td>
<td>ZAGREB</td>
<td>CONCESSION BFOT</td>
<td>236</td>
<td>AEROPORT DE PARIS</td>
<td>2012</td>
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<tr>
<td>RUSSIAN FEDERATION</td>
<td>PULKOVO</td>
<td>CONCESSION BROT</td>
<td>1530</td>
<td>FRAPORT (36%) VTB GROUP (58%)</td>
<td>2011</td>
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<tr>
<td>TURKEY</td>
<td>ZAFAIR AIRPORT</td>
<td>GREENFIELD BOT</td>
<td>71.65</td>
<td>IC HOLDING</td>
<td>2010</td>
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<tr>
<td>KOSOVO</td>
<td>INTERNATIONAL AIRPORT</td>
<td>CONCESSION BOT</td>
<td>127</td>
<td>LIMAK HOLDING (90%)</td>
<td>2010</td>
</tr>
<tr>
<td>MACEDONIA FYR</td>
<td>SKOPJE AND OCHRID</td>
<td>CONCESSION RLT</td>
<td>295</td>
<td>TAV AIRPORT HOLDINGS (100%)</td>
<td>2009</td>
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<tr>
<td>TURKEY</td>
<td>ANTALYA GAZIPASA</td>
<td>CONCESSION RLT</td>
<td>500</td>
<td>TAV AIRPORT HOLDINGS (100%)</td>
<td>2009</td>
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<tr>
<td>TURKEY</td>
<td>ISTABUL SABIHA</td>
<td>CONCESSION BRT</td>
<td>1343</td>
<td>MALAYSIA BERHAD (20%), GMR (40%), LIMAK (40%).</td>
<td>2009</td>
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<tr>
<td>ARMENIA</td>
<td>SHIRAK</td>
<td>CONCESSION ROT</td>
<td>10</td>
<td>CASA (100%)</td>
<td>2007</td>
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<tr>
<td>GEORGIA</td>
<td>BATUMI</td>
<td>LEASE CONTRACT</td>
<td>28.5</td>
<td>TAV (60%) URBAN (30%)</td>
<td>2007</td>
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<tr>
<td>KAZAKHSTAN</td>
<td>ASTANA</td>
<td>MANAGEMENT CONTRACT</td>
<td>CANCELLED</td>
<td>MALAYSIA BERHAD (100%)</td>
<td>2007</td>
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### MAJOR AIRPORT PPPs CEE & TURKEY

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>PROJECT</th>
<th>TYPE OF PPP</th>
<th>VALUE Mil euro</th>
<th>INVESTORS</th>
<th>COMPLETION YEAR</th>
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<tbody>
<tr>
<td>ROMANIA</td>
<td>BRASOV GHIMBAV</td>
<td>GREENFIELD BOT</td>
<td>116.8</td>
<td>INTELCAN TECHNO SYSTEMS (100%)</td>
<td>2007</td>
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<tr>
<td>RUSSIAN FEDERATION</td>
<td>SHEREMETYEVO</td>
<td>MANAGEMENT CONTRACT</td>
<td>N.A.</td>
<td>CHANGI AIRPORTS (49%)</td>
<td>2007</td>
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<tr>
<td>TURKEY</td>
<td>ANTALYA</td>
<td>LEASE CONTRACT</td>
<td>1556</td>
<td>FRAPORT AG (51%) IC HOLDING (49%)</td>
<td>2007</td>
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<tr>
<td>BULGARIA</td>
<td>VARNA AND BOURGAS</td>
<td>CONCESSION</td>
<td>529</td>
<td>FRAPORT AG (60%) BM STAR (40%)</td>
<td>2006</td>
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<tr>
<td>GEORGIA</td>
<td>TBLISI</td>
<td>CONCESSION</td>
<td>76.5</td>
<td>URBAN (30%) TAV (30%)</td>
<td>2006</td>
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<tr>
<td>RUSSIAN FEDERATION</td>
<td>SOCHI</td>
<td>DIVESTURE</td>
<td>144</td>
<td>BAZOVYY ELEMENT (100%)</td>
<td>2006</td>
</tr>
<tr>
<td>SLOVAK REPUBLIC</td>
<td>KOSICE</td>
<td>DIVESTURE</td>
<td>42</td>
<td>FLUGHAFEN WIEN (32%) PENTA HOLDING (22%)</td>
<td>2006</td>
</tr>
<tr>
<td>TURKEY</td>
<td>IZMIR ADNAN MENDERES</td>
<td>CONCESSION</td>
<td>146</td>
<td>TAV (35%)</td>
<td>2006</td>
</tr>
<tr>
<td>ALBANIA</td>
<td>TIRANA IA</td>
<td>CONCESSION BROT</td>
<td>308</td>
<td>HOCHTIEF (47%)</td>
<td>2005</td>
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## MAJOR AIRPORT PPPs CEE & TURKEY

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</thead>
<tbody>
<tr>
<td>HUNGARY</td>
<td>BUDAPEST INTERNATIONAL</td>
<td>CONCESSION ROT</td>
<td>2320</td>
<td>HOCHTIEF (49.7%)</td>
<td>2005</td>
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<tr>
<td>TURKEY</td>
<td>ANKARA ESENBOGA</td>
<td>GREENFIELD BOT</td>
<td>305</td>
<td>TAV (95%)</td>
<td>2005</td>
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<tr>
<td>TURKEY</td>
<td>ATATURK AIRPORT</td>
<td>CONCESSION</td>
<td>2543</td>
<td>TAV (90%)</td>
<td>2005</td>
</tr>
</tbody>
</table>

**SOURCE:** WORLD BANK PRIVATE INFRASTRUCTURE PROJECTS DATA BASE
SMALL AND MEDIUM AIRPORTS HAVE ATTRACTED CONSIDERABLE INTEREST

VALUE OF CONCESSION INVESTMENT IN SMALL AND MEDIUM AIRPORTS IN CEE AND TURKEY (in $ million)

- Zagreb: 236
- Zafer Airport: 72
- Kosovo Airport: 127
- Skopje and Ochrid: 295
- Antalya Gazipaşa: 500
- Shirak: 10
- Batumi: 29
- Brăsov Ghimbav: 117
- Varna and Bourgas: 529
- Tbilisi: 77
- Sochi: 144
- Kosice: 42
- Izmir Adnan Menderes: 146
- Tirană: 308
- Ankara Esenboğa: 305

SOURCE: WORLD BANK PRIVATE INFRASTRUCTURE PROJECTS DATABASE
CEE AIRPORT PPP OVERVIEW

TOTAL PROJECTS IN 2005-2012: 22

TOTAL VALUE: 12.229 $ MIL.

AVERAGE CONTRACT PERIOD: 24.4 YEARS

MAJOR INVESTORS IN THE AREA: TAV, FRAPORT, URBAN, MALASYA BERHARD, LIMAK AEROPORT DE PARIS
In the near future major Airport PPP projects in the Europe area are expected to come into the market:

- **Regional airports in Greece:** Greece plans to privatise 37 regional airports, 8 of which have a passenger traffic of between 250 and 1 million passengers (with total investment requirement of 95 million euro). Airports will be grouped in packages so the concession is more attractive.

- **Slovenia:** The master plan for Ljubljana’s expansion includes the construction of a new terminal facility, multi-modal logistics centre and airport rail link at a cost of €60 million would have eventually provided additional terminal capacity of 2.5 million passengers per year.

- **Montenegro:** Tivat Airport plans for investment of 23 million Euro by 2017 and further 76 by 2030.

- **Spain:** Postponed privatization of the management of Barcelona El Prat and Madrid-Barajas airports on a concession basis is expected to come to the market within 2013.
CASE STUDY I - STRAIGHT CONCESSION: PRISTINA INTERNATIONAL AIRPORT
BASIC FACTS

- PIA is one of the busiest airports in the Balkans, serving 1.2 million passengers and handling 14,000 aircraft operations in 2008.
- Before PPP over 35 aviation companies operate at PIA, serving over 30 destinations and providing direct connections to many of Europe’s largest cities, including Zurich, Vienna, and Istanbul.
- In 2008 aeronautical revenues have already reached 21.8 million euro.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2008</td>
<td>Initial Kosovo Government Decision 14/24</td>
</tr>
<tr>
<td>February 2009</td>
<td>Transaction Advisor Appointed</td>
</tr>
<tr>
<td>June 2009</td>
<td>Kosovo Government Decision 05/68 PPP structure</td>
</tr>
<tr>
<td>August 2009</td>
<td>RFQ published</td>
</tr>
<tr>
<td>October 2009</td>
<td>Submission of offers</td>
</tr>
<tr>
<td>December 2009</td>
<td>RFP published and draft contract prepared</td>
</tr>
<tr>
<td>March 2010</td>
<td>Final version of RFP and Contract</td>
</tr>
<tr>
<td>April 2010</td>
<td>Submission of offers</td>
</tr>
<tr>
<td>June 2010</td>
<td>Limak Aeroport de Lyon selected</td>
</tr>
<tr>
<td>August 2010</td>
<td>PPP agreement signing</td>
</tr>
<tr>
<td>April 2011</td>
<td>Transfer of PIA to Limak International Airports</td>
</tr>
</tbody>
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22 MONTHS FROM START TO FINISH
TRANSACTION STRUCTURE

- **Contract Structure**: Design-Build-Finance-Operate-Transfer (DBFOT)
- **Contract Duration**: 20-years
- **Required Minimum Investment Plan**: Master Plan Option 2, including, amongst others:
  - New Landmark Terminal (25,000m2)
  - New control tower and related facilities
  - Relocation of the NAVAIDS equipment (radar, localizer)
  - New apron: 9 Code C (B 737) aircraft parking positions
  - New automobile parking (1,750 new bays)
  - New taxi and bus staging areas
  - New airport access lane
  - New water treatment plant
  - Airport equipment
  - Widening of taxiway shoulders (to accommodate code E aircraft)
- **Minimum Performance and Capacity Levels**: IATA level C (within 2 years of contract inception)
- **Scope of Service**: All airport services, excluding Air Navigation Services.
- **Concession Fee**: Payments by the Private Operator to the Government in the form of a percentage of gross revenues.
- **Rates and Charges**: Aeronautical rates and charges are to be capped at current levels over the term of the contract, with potential inflation adjustments subject to regulatory approvals.
- **Employment Considerations**: Private Operator will honor existing employment contracts for a predefined period of time.
- **Ownership**: Moveable and immovable assets will be leased to the Private Operator, while ownership of all assets remains with the State.
- **Competitive Tender**: Contract award will be based on a competitive and transparent international procurement process.
Three bidders took part in the final stages of the tender process:

- German-Turkish airport operating and construction alliance of Fraport IC and ICTAS;
- Consortium comprised of French concession companies Bouygues Batiment International and Egis Group; And
- Consortium consisting of the Turkish construction company Limak Group and the French airport operator Aéroport de Lyon.

The winning bid based on offered concession fee:

- Limak Group- Aeroport de Lyon have offered an average of 39.42% of gross revenues, in exchange for concession rights.
- IC Frapport Havamanli ICTAS, the bidder that has occupied the second place, has offered an average of 30.37% of gross revenues.
CASE STUDY II-PPP: ATHENS INTERNATIONAL AIRPORT
The Athens International Airport project consisted of a 30-year BOOT concession which received EU grants amounting to approximately €250 million or 11% of the project cost.

An EIB loan of €997 million supported approximately 45% of the initial project cost. The Hellenic Republic and a private consortium created a private company, Athens International Airport SA, to own and operate the airport for a period of 30 years.

A grant from the Hellenic Republic amounted to €150 million and share capital amounted to €134 million, additional project financing came from commercial loans. A consortium led by Hochtief and also comprising ABB and TKT Krantz GmbH, undertook the construction project. Subcontractors, of which 80% were Greek companies, carried out 70% of the construction work.
AIA STRUCTURE AND PARTNERS RELATIONS

GREEK STATE

55%

AIA S.A.

45%

HOCHTIEF AIRPORT 39.875% - ABB 5.0% - FASP mbH 0.125%

CONSTRUCTION CONTRACT TURN KEY

HOCHTIEF AG - ABB KRANTZ TKT

AIRPORT DEVELOPMENT AGREEMENT

AIRPORT ADVISORY

CONSULTING ENGINEERS

PARSONS

FRAPORT
AIA FINANCING STRUCTURE

- EIB Loan: 41%
- Commercial Bank Loans: 14%
- Airport Development Fund: 13%
- European Cohesion Fund: 10%
- Greek State Grants: 6%
- Private Shareholders Loan: 2%
- Private Share Capital: 7%
- Greek State Share Capital (55%): 6%

Other: 1%

Hellenic Republic participated with 55% following upfront contribution in capital.

Hellenic Republic provided assistance through the allocation of special tax to the AIA company.

Hellenic Republic secured EU funding for the AIA development.

The Board of Directors was split evenly among the Greek State and the private investor (5 members each) and an independent member (from EIB) kept the balance.

The management was allocated to the private investor through the right to appoint the Chief Executive Officer.

The Hellenic Republic is currently considering the sale of its participation to AIA.

The private investor Hochtief - acquired by Spanish Group ACS - is also in the process of selling its participation.

HR in discussions with ACS to extend concession by 20 years and jointly sell their shareholdings¹.

¹ ACS has finally decided to sell separately all its airport holdings to PSP Investments, a Canadian pension fund.
MAJOR CONSIDERATIONS FOR AIRPORT PPP STRUCTURE
PPP PARTNERS MUST RECONCILE DIVERGENT CONSIDERATIONS

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<tr>
<th>PUBLIC SECTOR</th>
<th>PRIVATE SECTOR</th>
<th>FINANCIAL INSTITUTIONS</th>
</tr>
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</table>
| • Attract new capital for infrastructure.  
  • Increase efficiency in project delivery, and operation and management.  
  • Shift responsibilities and risks to the private sector. | • Strategic considerations of managing a portfolio of investments.  
  • Reduce various types of risk and shift to other partners.  
  • Exploit profit opportunities through better management. | • Proper assessment and allocation of risks especially demand risk.  
  • Secure repayment of loans on time.  
  • Selection of the best consortium in terms of management in order to secure long term viability of project. |

REALISTIC BUSINESS PLAN ACCEPTABLE BY ALL PARTIES AND SOUND CONCESSION AGREEMENT ARE REQUIRED
KEY AIRPORT CHARACTERISTICS FOR SUCCESS

- Traffic volumes at satisfactory levels
- Well defined catchment area with limited direct competition
- Regular and growing traffic with a combination of regular and charter connections
- Dynamic passenger profile with high spending power
- Regular service covering main market segments
Open to foreign direct investment (FDI) with respective investment code and legal framework.

Stable with regard to tax laws and foreign exchange transfers.

Transparent aviation tariff scheme which leaves room for adjustment induced by legal or macro-economic factors.

Clear approval mechanisms and a clear division of tasks among the various regulatory authorities.
QUALIFIED PROJECT PARTNERS

Have the necessary know-how for the development of the project.

Have the financial capacity to fulfill necessary equity payments and sponsor support obligations.

Have good knowledge of local market and conditions.

Have specified their relationship among each other and third parties in a well drafted contractual and financial structure.
RISK CONSIDERATIONS IN PPPs

- **Construction risk** – wholly undertaken by the private sector.

- **Availability risk** – a government will be assumed not to bear availability risk if it is entitled to reduce significantly its periodic payments.

- **Demand risk** – a government may assume this risk where it is obliged to ensure a given level of payment to the partner, independently of the effective level of demand expressed by the final user, rendering irrelevant the fluctuations in level of demand on the partner’s profitability.
MAJOR RISK PARAMETERS

AIRPORT INDUSTRY RISK
- National and regional competition
- Passenger and cargo volumes
- Industry risks
- Regulatory framework

MACROECONOMIC RISK
- Economic reforms
- Currency risk
- Country rating
- Growth prospects
- Investment climate

POLITICAL RISK
- Privatisation strategy
- National stability
- Government continuity

PROJECT RISK
- Market conditions
- Availability of finance
- Management capabilities
- Soundness of concession

RISKS

S. TRAVLOS MAY 2013
Forecasting traffic demand is crucial in transport PPPs since traffic influences both project costs (through capital and maintenance expenditures) and project revenues, especially if direct user charges, such as tolls, are the main source of cash flow for the PPP Company.

An accurate estimation of the future level and composition of traffic volumes is, however, a difficult task as: traffic forecasts tend to overestimate actual traffic levels (the so-called “optimism bias”); and inflated traffic forecasts may be linked to traffic modeling flaws but also to strategic decisions of PPP consortia when they bid.

Traffic forecasts commissioned by the lending banks, for example, are less prone to traffic optimism bias.

Given such uncertainty, the allocation of traffic revenue risk is a key decision in the design of a transport PPP contract and the payment mechanism.

THREE MAIN OPTIONS TO ADDRESS DEMAND RELATED RISK

Several options for allocating traffic revenue risk

Revenue-sharing bands: lower and upper thresholds for sharing traffic revenue risk between the PPP Company and the Authority if traffic is outside the thresholds.

Flexible-term contracts: the PPP contract will end when the PPP Company has received a certain amount of revenue from users (e.g. the “least present value of revenue” approach implemented in Chile).

Financial re-balancing: provisions to change the economic balance of the PPP contract if traffic is much lower/higher than planned or at set regular intervals.

Recent practice in transport projects has seen the use of a mixed payment mechanism consisting of an availability payment and a direct user charge.