

# Airport Ownership and Regulation

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IATA  
GUIDANCE  
BOOKLET

## Purpose

This Guidance Booklet (“Booklet”) is designed as a manual for decision-makers in government institutions, airlines and airports who are considering, or are impacted by private sector participation and airport privatization. It sets out recommendations for alternative ownership and operating models for airports globally, improved governmental decision-making, and required regulatory safeguards for privatized airports.

## Acknowledgements

This Booklet incorporates inputs through interviews and written feedback from a broad range of senior aviation industry experts, including representatives of IATA, airport companies, investors, airlines, regulators and industry and consumer groups. We wish to thank everyone who participated in this study, which would not have been possible without your help.

## Authors

Dorian Reece  
Global Airport Lead,  
Deloitte Professional  
Services (DIFC) Limited  
dorreece@deloitte.com

Toby Robinson  
Government and  
Infrastructure Advisory,  
Deloitte Professional  
Services (DIFC) Limited  
tobyrobinson@deloitte.com

IATA Guidance Booklet:  
Airport Ownership and Regulation

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# Executive Summary

## PRIVATE SECTOR PARTICIPATION (“PSP”) IN THE AIRPORT INDUSTRY

Since the 1950s, there has been a trend in moving away from direct government ownership, financing and management of airports, towards a greater role for the private sector. Airport Public-Private Partnership (“PPP”) and privatization programs may stem from a range of government objectives, which typically include financial sustainability and maximizing financial benefit, new sources of private finance and enhanced management capability. They have led to a range of both advantages and disadvantages. Advantages have included the efficiency gains associated with greater specialization in the airport industry, access to new sources of private sector investment, and stimulation of aviation-driven economies. However, the private ownership and operation of airports with high degrees of market power and the monopolistic tendencies of the industry can increase the risk that these benefits are not passed on to airlines and consumers.

What is often overlooked is that there are a range of ownership, operating and PSP models that can meet government objectives, without a transfer of control or ownership to the private sector. Also, there is no “one size fits all” solution that should be pre-assumed as the optimal model for airport ownership.

Historically, there has been a lack of clear guidance within the aviation industry or for governments on ownership and operating models for airports, and the appropriate regulatory framework to govern them. This Guidance Booklet (“Booklet”) provides an assessment of the spectrum of ownership and operating models for airports based on consumer and public interest, and assesses how governments can best select the most appropriate options to meet their strategic objectives. Where PPP or privatization is pursued, the Booklet provides clear recommendations on how best to manage the transactions and considers the regulatory safeguards required whether there is public or private ownership of an airport.

Above all, the analysis in this Booklet seeks to set public value at its heart. A fundamental consideration in any change in airport ownership or control should

be the governments’ responsibility to safeguard the interests of passengers and cargo consumers, and the continued development of the economies and communities which the airport serves.

The strategic objectives for government include a range of macroeconomic, financial and management objectives. A clear understanding of each area allows governments and decision-makers to develop an understanding which looks beyond short-term financial gains and investments, and recognizes airports as critical drivers of long-term, macro-economic and societal benefits. A successful PPP or privatization process depends on how these objectives, such as improved customer experience and enhanced operational and financing efficiency are translated into ownership and regulatory models to deliver sustainable benefits for consumers.

## ALTERNATIVES TO PRIVATIZATION

Government objectives for reviewing airport ownership and operating models need to include a balanced view of the strategic national significance of airport assets and the need to protect consumers. There is a broad range of ownership and operating models that can often meet government objectives without the sale of assets and loss of strategic focus. In many instances, corporatization as a model can be combined with other models, to facilitate financing and efficiency improvement, to achieve these.

This Booklet evaluates the benefit of different models and how they can achieve the strategic objectives defined by governments. These range from government-owned, corporatized entities, which can be used alongside other models like alternative finance, and management and service contracts to achieve financial and efficiency objectives. PPP, concession models and minority and majority sales of equity are also considered. A range of different airport archetypes are then defined to demonstrate how different potential ownership and operating models can respond to different circumstances and government requirements.

Whichever solutions are pursued, governments need to understand the pros and cons of different

models, and should be able to justify their selection based on the public value expected.

## DELIVERING A PSP PROGRAM

Where a PPP or privatization model is determined through a robust business case process as the best option to generate the most significant economic benefit, a key determinant of success is in the detailed transaction process and its design, ensuring the deal structure and execution meets the objectives set and is in the public interest. Robust communication and engagement from the outset, with the aviation industry and other stakeholders, is critical to the successful delivery of this process.

There is a broad range of global best practice guidance to appraise ownership and operating models and design an appropriate transaction process for a PPP, concession or privatization project. This Booklet reviews existing material and determines lessons from other industries and best practices for airports. It is important for governments to follow these practices to avoid pitfalls that may occur during a change in an airport's ownership model, which could have lasting consequences.

In all cases, a competitive and transparent transaction process is a "must have" to assure public value, and governments should ensure bids are assessed on balanced criteria and that the key terms of any concession contracts ensure improvement in efficiency, quality of service and appropriate investment in the airport for the benefit of airlines and end-consumers.

As airport concession contracts are highly complex, technical knowledge is required to draft them appropriately. Recommendations are provided in this Booklet on how best to address different key areas in concession agreements.

## MANAGING PRIVATELY OWNED OR OPERATED AIRPORTS

The assessment of an airport's market power and the development of the appropriate regulatory framework should take place in parallel with an

assessment of future ownership models, if such a framework does not exist. As private participation requires robust regulation, any existing regulatory framework should be reviewed to determine if it will remain efficient and effective given a change in ownership model.

When combined with limited or weak economic regulation, all models (public or private) can lead to adverse impacts or outcomes on customers and end consumers. However, airports where greater control rests with the private sector carry a higher risk of adverse outcomes. Strong safeguards are required to prevent market abuse, secure efficiencies that are passed on to users, and ensure service quality expectations are met.

IATA advocates for more robust forms of economic regulation to be applied where full privatization is undertaken. Further, it is also recommended that regulators be: centralized; appropriately funded; independent; and have a clearly-defined mandate, endorsed by government and defined within legislation.

A regulatory system should aim to mimic competition, giving the travelling public a fair price, whilst motivating the airport owner/operator to deliver an appropriate level of service at an appropriate level of charges. The airport owner/operator should be incentivized to identify and implement incremental efficiencies, both in operations and capacity enhancement.

In all cases, there should be assurance that the regulatory function will be fit-for-purpose to provide the necessary safeguards. It is important that the regulatory system and its mandate remain relevant. There may be a need for reassessment of the market power of an airport and the elected regulatory model applied as the market power and ownership of airports change over time, and always where there is a material change in circumstances. This may result in an alternative regulatory model providing a better fit.

# Introduction



**There has been a long-term move away from direct government ownership, financing and management of airports towards greater involvement of the private sector. This trend looks set to continue, driven by governments' search for economic growth and competitiveness, a need to meet and overcome fiscal objectives and constraints, and belief that the private sector can provide management efficiency allowing government to focus on its regulatory role.**

**However, there are a range of ownership and operating models that can meet these requirements, and there is no optimal "one size fits all" solution for airport ownership.**

**This Booklet provides an assessment of the spectrum of ownership and operating models available, assesses how governments can best select and deliver PPP and privatization models where they are required, and considers the regulatory safeguards required to reflect the varying degrees of private ownership of an airport.**

## **SCOPE OF THIS GUIDANCE BOOKLET**

Historically, there have been differing views within the aviation industry as to the optimal ownership and operating models for airports, and the appropriate regulatory framework to govern them. The provision of effective and efficient airport infrastructure is essential to the industry. A governments' central responsibility is to ensure that the best interest of passengers, cargo customers, as well as the continued development of the economies and communities it serves are at the heart of decision-making pertaining to these matters.

This Booklet provides an independent review of privatization in the airport industry. It is designed as a framework for decision-makers globally in government, institutions, airlines and airports which are considering or are impacted by airport privatization, as well as the customers they serve. It sets out guidance and recommendations for alternative airport ownership and operating models, improved governmental decision-making, and required regulatory safeguards for privatized airports.

This Introduction sets out the definitions for privatization, PSP and Public Private Partnerships ("PPP"), which will be used in the Booklet. Further, it discusses the key trends in airport ownership and operating models, and identifies why governments

typically undertake programs to change these, and the common objectives they seek to achieve when doing so.

The Booklet then considers different ownership and operating models from the perspectives of a range of different stakeholders, to understand the varying degrees of success and identify common factors that industry can learn from, to support and guide the decision-making process. The objective is to identify alternative solutions to PPP and privatization that could meet the objectives of a change in ownership model.

The Booklet draws on best practice and describes how a structured approach, when pursuing a change in ownership model, can maximize the objectives of all stakeholders and safeguard long-term public value and economic development.

Finally, this Booklet provides an assessment of what specific safeguards are required to ensure that privately-held airports are effectively regulated.

## **PSP IN PUBLIC INFRASTRUCTURE**

There is a long history of the involvement of private sector finance, capability, and expertise in the development, delivery and operation of public infrastructure. The transcontinental railroad of the mid-19th Century was partly financed by



Figure 1. Types of Public-Private Partnership (“PPP”), Abridged

government and privately-issued bonds, and developed by private companies. Similarly, the transatlantic telegraph cable of the same era required public and private financing, and capability.

From the 1980s and 1990s, the current trend for privatization, deregulation and PPP was driven through major programs like the Private Finance Initiative (“PFI”) in the UK, Western Europe, Canada and Australia. In recent decades, these programs have become more commonplace globally to meet the underlying demand for economic and social infrastructure. These have been driven by a range of factors and government objectives, including economic diversification and access to new sources of finance and expertise. Experience of privatization and PPP across sectors with natural monopolies and limited competition has shown these models can lead to improved efficiency and new sources of investment. However, there is a risk of these benefits being retained by shareholders and not shared sufficiently with consumers, in addition to service quality failings and misdirected investment, unless there is robust economic regulation.

In the years since the global financial crisis, there has been growing pressure on governments to unlock value from government-owned assets and look to the private sector to finance and deliver public infrastructure and services. This trend is expected to continue, with the estimated global annual infrastructure investment up to 2030 of \$2.5 trillion set to fall short of the \$3.3 trillion funding requirement to meet growth forecasts<sup>1</sup>.

There is a broad range of models that are associated with PPP and privatization. A well-recognized spectrum of models for private sector participation is included at Figure 1 (“Types of Public-Private Partnership”), published by the World Bank.<sup>2</sup>

This ranges from government-owned and operated assets (either within government Ministries or

Departments, or “corporatized” state-owned enterprises wholly owned by government) with very limited or no private sector involvement, to PPP models including long-leases, concessions and privately-financed infrastructure with a long-term government offtake, through to fully divested and privately operated businesses.

PPP and privatization terminology is often used interchangeably and differently in various markets globally, and the range of overlapping terminology can at times cause confusion. For clarity, drawing on the diagram above, PSP is used in this Booklet to refer to the broad range of ownership and operating models involving the private sector, institutional and individual investors in some capacity, which may range from service contracts, through to full divestiture. For the avoidance of doubt, we do not include corporatized entities wholly-owned by government in this definition, unless they involve management contracts with the private sector. In its widest sense, PPP can be used to refer to a broad set of arrangements whereby the private sector shares operating risk with government through a contract or agreement; in some cases these may also involve private sector financing, but it is not a pre-requisite. It is used in this Booklet in its narrower definition to refer to concession or similar limited-term contract, typically involving capital investment.

Privatization is used more specifically and refers to a majority, controlling private sector acquisition of government shareholdings in an asset, or full divestiture and transfer of control.

## HISTORY OF CORPORATIZATION, PPP AND PRIVATIZATION IN THE AIRPORT INDUSTRY

Over the past 50 years, driven by growth rates, market deregulation, and specialization in the aviation industry, amongst other factors, the vast majority of airports have transitioned out of government Ministries or Departments and adopted new ownership and operating models. The drivers

<sup>1</sup> Bridging Global Infrastructure Gaps, United Nations web site

<sup>2</sup> Types of Public-Private Partnerships, World Bank Group

of this trend and how different models have been adopted in different markets are examined in further detail in Appendix 2 (“History of PPP and Privatization in the Airport Industry”).

## GOVERNMENT STRATEGIC OBJECTIVES FOR AIRPORT OWNERSHIP AND OPERATING MODELS

A broad range of strategic objectives underpin governments’ rationale for changes in airport ownership or operating models. In essence, governments’ have a responsibility to maximize the long-term economic benefits for their nations and local communities, and to maximize flows of passengers and cargo that generate economic benefits and jobs. However, there may be a trade-off between these objectives and generating returns to government from government-owned airports.

The relative influence of strategic objectives varies, dependent upon the features of specific airports, market conditions, and the political, economic and social environments. As a result, the rationale for a government’s “business case” to change the ownership or operating model of an airport, typically reflect differing priorities that need to be considered to determine the preferred model.

Typical strategic objectives are set in Figure 2 (“Strategic Objectives for Changes in Airport Ownership and Operating Models”) with definitions to support government decision-makers in the process of defining their objectives.

### Macro-Economic Objectives

**Domestic Economic Impact:** Improved economic outcomes, connectivity, and growth in Gross Domestic Product (“GDP”), through trade connections and export-led trading, tourism and by maximizing domestic value creation (which in turn may generate increased future tax receipts for government).

**Efficient Sector Governance and Regulation:** Efficient structuring of the aviation industry for better alignment to global best practice, including independence of regulation and operations.

**Sector Efficiency and Competitiveness:** Enhanced airport sector performance through improved infrastructure, reduced cost to serve, and enhanced service delivery.

**Government Control:** The priority placed by government on the control of nationally strategic assets, which creates incentives to operate an airport in the public interest, and appetite for foreign ownership.

### Financial Objectives

**Capital Receipts for Government:** Generate a non-recurring capital receipt as a result of a change in ownership (i.e. minority or majority sale), transfer of certain types of rights (for example, leases, concessions, or external debt providers with a call on the airport assets).



Figure 2. Strategic Objectives for Changes in Airport Ownership and Operating Models

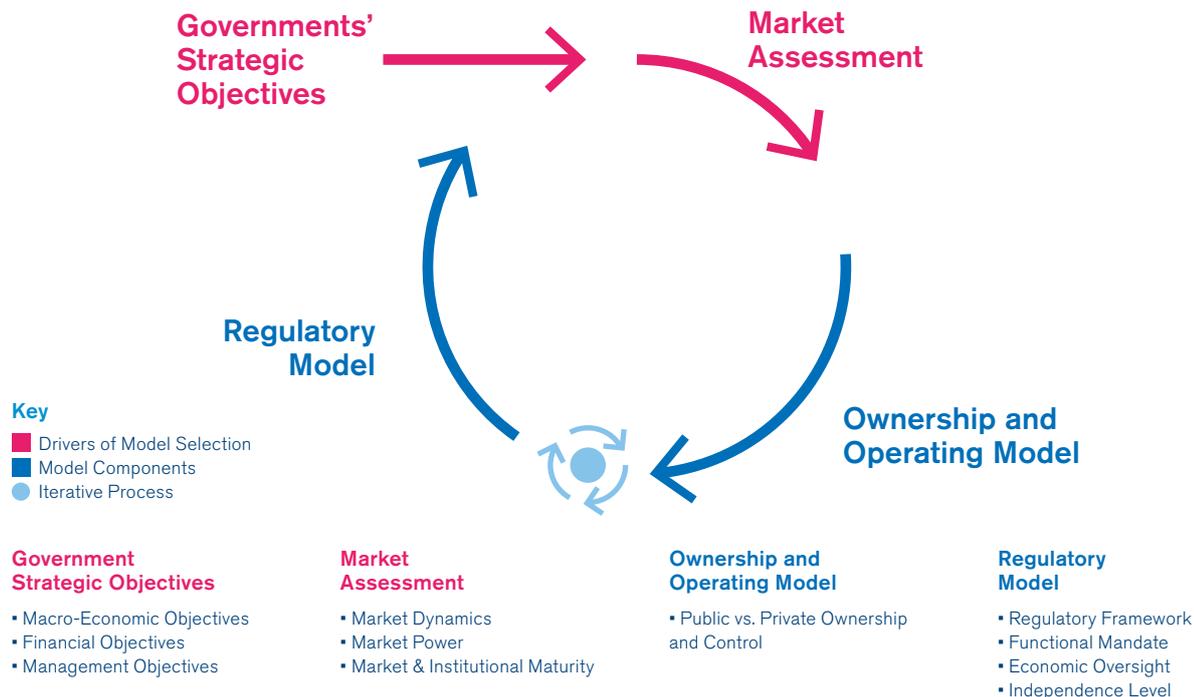


Figure 3. Model Decision Process

**Revenue Return Profile for Government:** Ongoing returns to the government from an airport. Government needs to determine its required trade-off between upfront capital receipts, as compared to an ongoing payment. Alternatively, it may choose to receive dividends from a corporatized airport.

**New Sources of Private Finance:** Accessing new sources of private finance for major capital programs, particularly where governments are Balance Sheet constrained.

**Capital Financing Efficiency:** Improved access to sources of capital finance.

## Management Objectives

**Improved Customer Experience:** Enhanced airline and passenger experience through a culture of commercial innovation and customer centricity.

**Commercial and Operational Efficiency:** Enhanced commercial and operational capabilities, and productivity of management and employees.

**Capital Projects Efficiency:** Improved efficiency in the delivery of infrastructure projects, in terms of time, cost, scope, and lifecycle planning and management.

Government decision-makers should seek to establish the trade-off between these different strategic objectives when assessing options to

change an ownership or operating model. For example, maximizing capital receipts for government through a favorable regulatory regime to a new private owner may have a negative impact on a number of macro-economic objectives, which may not be to the long-term benefit of the national economy. This requires careful consideration, appraisal, and stakeholder engagement. Further, governments' desire to maximize the capital receipt from the sale of an airport needs to be traded-off against maintaining influence of defined strategic objectives; as ceding this could lead to negative macro-economic outcomes in the long-term and limit flexibility to adapt to changes in the industry.

It is therefore critical that governments diligently assess the strategic objectives for a change in ownership of an airport, and use the objectives as the basis to assess different ownership and operating models. It is important that a broad range of stakeholders are consulted to determine strategic objectives, and consideration is given to the interests of all stakeholders, including airlines and customers. Where there are potential risks to stakeholders, appropriate mechanisms like regulation need to be put in place to protect them.

Further, the solution proposed should be developed iteratively, and continue to consider the relationship between the ownership and operating model, regulatory model, governments' strategic objectives, and the market features of a specific airport. This is

as set out in Figure 3 (“Model Decision Process”), which defines the iterative relationship between drivers of model selection (government strategic objectives and market factors), and the components of the ownership and operating and regulatory model. Each of these elements are explained in further detail in the sections of the Booklet that follow.

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“There can be a certain conflict of interest within the involved governmental entities when it comes to maximizing returns to the state in a privatization process. As financial criteria are often used for the selection of the winning bidder, the regime around the charges needs to be structured in a smart way to avoid unreasonable increases in charges over time and to ensure a win-win situation for all relevant parties with the goal to improve connectivity”.

Aletta von Massenbach – Senior Executive Vice President, Fraport AG

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## ASSESSING SUCCESS OF CHANGES IN OWNERSHIP OR OPERATING MODELS

Strategic objectives, the circumstances that governments find themselves in, and the continued growth in complexity and technology and other forms of specialization in the aviation industry will continue to drive governments to consider changes to ownership and operating models.

However, whilst there continue to be strong drivers to consider the use of PPP and privatization in the airport industry, they should not be pre-assumed to be the “best fit” model without due consideration of the full suite of options and alternatives available to governments.

Globally, some of the most successful airports are operated as corporatized entities, ultimately owned by national governments. Recently there has been a growing call for a re-assessment of the success of the first wave of privatization and PPP programs from the 1980s and 1990s onwards. In the UK, which was a frontrunner in this early wave, the National Audit Office has recently determined “there is still a lack of data available on the benefits of private finance procurement” and also that the Value for Money (“VfM”) process has historically favored privately financed solutions over publicly financed ones and has not reflected that government can also issue debt<sup>3</sup>, which is typically at a lower cost.

<sup>3</sup> PFI and PF2, National Audit Office

IATA does not have a pre-determined view of the preferred ownership of airports globally. Far less important than how airports are owned, is that they meet the needs of customers and airport infrastructure users, at a reasonable price. PPP and privatization models have in some instances become a default solution, without a structured and robust approach to assessment of the options, benefits, and how to maximize them. Also, this is not reflective of the broad range of institutional maturity and requirements of different markets. As a result there is no “one size fits all” solution, and good and bad outcomes for aviation customers exist across the full spectrum of ownership models.

There is no guarantee that the privatization models of the past will be fit for the requirements of the future. The aviation industry is highly dynamic and models that incorporate flexibility are likely to best facilitate timely adaptation. The industry is reliant today, and will be more so in the future, on collaboration and coordination between airports, airlines and regulators to meet the needs of the customers and the economies they serve. Further, new solutions and innovations including technology, service delivery, alternative financing models, and realizing value from airport assets, are leading to the emergence of new ownership and operating models, and governments seeking to adopt multiple solutions to meet a range of strategic objectives.

Whilst there is no silver bullet that answers the question of airport ownership, the time is right for a thorough appraisal of PPP and privatization practices in the airport sector, drawing on the significant lessons learned over the past fifty years.

The three key questions that are addressed by this Booklet are:

**What are the PPP and privatization options and alternatives?**

Defining the spectrum of ownership and operating model options for airports.

**How is a PPP or privatization program best delivered?**

Assessing the critical success factors for a successful program and transaction process, from project identification and structuring through to implementation, and the key concession terms that can be used to safeguard public value.

**How are privately-owned and operated airports best regulated?**

Identifying the optimal regulatory model, reflective of the identified ownership model, the airport’s market power, and the country’s market and institutional maturity.

# What are the PPP and Privatization Options and Alternatives?



**Government objectives for airport ownership and operating programs need to include a balanced view of the strategic national significance of airport assets and the need to protect consumers and public interest. There are a broad range of ownership and operating models that can often meet government objectives without the sale of assets or transfer of material control to the private sector. In many instances, corporatization as a model can be combined with other models to achieve these objectives.**

**Whichever models are pursued, governments need to understand the pros and cons of different models, and determine a robust evidence set to support the selected option. Proper engagement with a broad range of stakeholders is key to identify and test options and alternatives, and effective economic regulation is essential to ensure public interest is safeguarded.**

## **AIRPORT OPERATING AND OWNERSHIP MODELS**

### **Defining the Range of Models**

The spectrum of ownership models for infrastructure assets is well-defined in a body of existing literature. This includes the framework defined by the World Bank's PPP in Infrastructure Resource Center ("PPPIRC"), used in the introduction to this Booklet. A selection of guidance and policy documents from national and multilateral organizations and other resources is included in the "Toolkit" at Appendix 1.

This Booklet does not intend to re-produce this material, but seeks to support decision-makers and stakeholders to the airport industry through:

- Setting out a more granular range of ownership and operating models;
- Setting these specifically in the context of the airport industry, through the use of case studies and by linking them to the strategic objectives which governments typically have in mind when they consider a change in ownership or operating model; and,
- Recognizing that these models are not always mutually exclusive, but can be interdependent and overlapping and a number of models can be combined to create a best-fit solution to the ownership and operation of an airport over time.

Getting the ownership and operating model right is critical. Private sector ownership and operation of airport assets can be more complex and contentious than in other infrastructure sectors. Airports have a very direct and significant impact on local communities, security and border control implications, and complex operations, which directly interface with the travelling public. In addition, airports are strategically significant at a national and regional level, with the aviation industry often being a lifeblood of the economy.

The airport industry can also suffer from excess market power, and the risk of excessive, monopolistic pricing is particularly acute, as are risks of bankruptcy of a private participant and the resulting impact on an airport as a going concern. The risk of failure of a private participant will ultimately fall on the government. The national and regional importance of airports mean that governments may not be willing or able to let them fail. Further, whilst recommending that "where it is economically viable and in the best interest of providers and users, States should consider establishing autonomous entities to operate their airports", the International Civil Aviation Organization ("ICAO") requires governments to retain ultimate responsibility for safety, security and economic oversight of these entities.<sup>1</sup>

<sup>1</sup> ICAO's Policies on Charges for Airports and Air Navigation Services (DOC 9282), ICAO

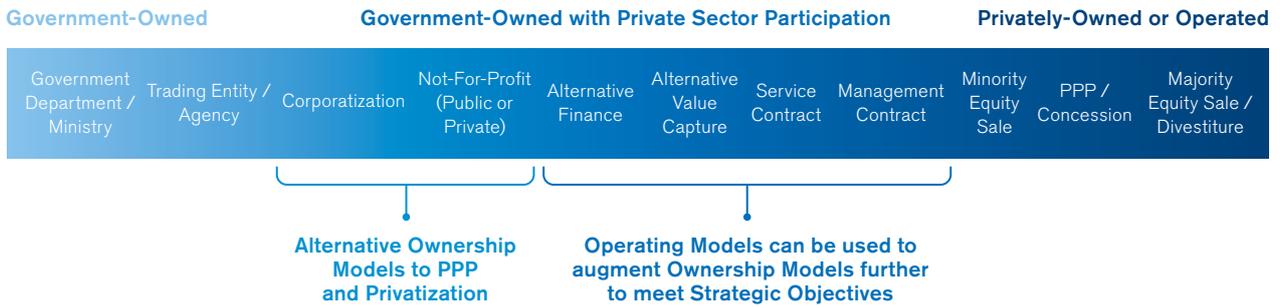


Figure 4. Alternative Ownership and Operating Models

There is also recognition that passing efficiency gains on to customers and the continuous improvement in customer experience, are essential for the industry’s growth.

All of these factors frame why establishing the right ownership and operating model for an airport is so important.

Put simply, an ownership model defines how an airport is owned (for example, whether in a corporate structure or not, and if so who owns the shares); an operating model defines how the entity manages the delivery of services to customers.

Figure 4 shows the full spectrum of ownership and operating models, from a fully government-owned and managed airport within a government Department or Ministry, through to a fully-privatized airport where ownership and control of the airport’s assets are fully-transferred to the private sector through a majority share sale or divestiture.

Generally, moving from government-owned models on the left towards the privately-owned models, on the right, results in greater levels of private sector involvement, risk and potential reward for the private sector, and reduced levels of government influence to deliver against their strategic objectives. However, this is illustrative only, and it should be noted that many variants of these models exist, and that they are overlapping and interdependent rather than mutually exclusive.

A key observation within this Booklet is that governments should take a broad view of airport ownership and operating models when appraising their options. There are frequently opportunities to meet the strategic objectives sought by government without necessitating a transfer of ownership and

control to the private sector. The private sector will typically have a narrower view of the economic and social value of the airport than government will, and also has an imperative to strike the most advantageous deal for their shareholders. It is therefore critical that a broad set of options are considered in detail rather than pre-determining a specific form of private ownership and operation as the preferred solution.

Figure 5 represents an “Ownership and Operating Model Decision Tree” which has been developed as an illustrative guide to help government decision-makers consider the key triggers which typically determine the selection of a preferred ownership and operating model. In reality, decision-making is an iterative process and strategic objectives, market conditions (market dynamics, market power and market and institutional maturity), and regulatory models should be considered in parallel.

This figure demonstrates how typical government public policy objectives can be achieved through a range of ownership and operating models. It is recommended to explore these in full before a preferred model is pre-empted, and in all cases the fit of the model should consider a government’s capability and capacity to deliver it.

Effective independent economic regulation supported by the right policies is key to protect value for customers and end users. This increases where there is higher market power for the airport, and where there is an increased role of the private sector. This needs to be considered in the selection of the preferred model, and the design of an appropriate regulatory function, which is considered in the “How is a Privately-Owned or Operated Airport Best Regulated?” section of this Booklet.

## Government Department or Ministry

Historically, a government Department or Ministry was the typical model for airport ownership and operation, whereby all functions are retained by government within a specific Department or Ministry, often the Ministry of Transport.

This model has progressively faded out over the past 50 years, driven by continued growth in the complexity of airport operations, technology and other forms of specialization. Today there are very few airports operated under this model. It is now broadly accepted within the industry that “where airports and air navigation services are operated by autonomous entities, their overall financial situation and managerial efficiency have generally improved”<sup>2</sup>. Based on this finding, ICAO recommends moving from this model where possible and in the interests of the industry IATA supports this recommendation.

### Conclusions

This model is no longer prevalent given the pace of technological development and specialization in the airport industry.

## Government (or Public) Trading Agency

A Government Trading Agency model, sees airport ownership and management functions retained by government, but through a dedicated entity or agency within government. A range of governance models exist to oversee specific functions, but this differs from fully-corporatized models, because management is accountable to government, rather than a corporate governance structure, typically a Board of Directors.

A Government Trading Agency is able to be more specialized and may be more efficient than operating within a Department or Ministry. However, the model does suffer from a lack of independence, with key decisions frequently taken at ministerial level and not by the trading entity individually, putting into question its autonomy.

This lack of separation of regulatory functions from operations and management decision making is one reason why this model is not recommended for the airport industry in the most part, although there are some successful, large-scale airports that are run using models with similarities to this.

Other features of this model that are not suited to the airport industry include the tendency for shorter-term investment planning, more aligned to the political business cycle, which is not recommended given airports’ status as a long-lived capital assets. This can lead to inefficiency in capital and operating costs, which are ultimately passed to airlines and consumers.

Due to the organic manner in which airports governed in this way have grown and developed, they may also suffer from a range of legacy arrangements with other parts of government, which are not on commercial terms. This may mean it is challenging to establish the true capital and operating costs of airport infrastructure, and in turn the fair price charged to airlines and consumers. Similarly, related entities providing services are at risk of having agreed contracts at sub-optimal terms that are not considered to be at “arm’s length”. It may also be the case that government salary restrictions can limit the ability to attract and retain senior management, impacting commercial and operational performance.

Overall this model may improve efficiency at an airport relative to direct management by a government Department or Ministry, but this ownership and operating model is not considered to optimize efficiency outcomes, and as a governance model it can lead to transparency and accountability short-falls.

### Case Study: Dubai Airport Financing

The government of Dubai in 2017 secured USD \$3 billion in private financing for expansion and development work of its Dubai International Airport and the new Al Maktoum International Airport. In the framework set out here, Dubai Airports are owned and operated as a government Trading Agency. It was able to raise the loan in two seven-year tranches, syndicated between twelve international and local banks, through a consortium of state entities comprising the Department of Finance, the Investment Corporation of Dubai, and the Dubai Aviation City Corporation.

Source: Dubai Government Secures \$3 billion Financing for Airports Expansion, Reuters

### Conclusions

This model can cause inefficient outcomes, transparency and accountability deficits.

<sup>2</sup> ICAO’s Policies on Charges for Airports and Air Navigation Services (DOC 9282), ICAO

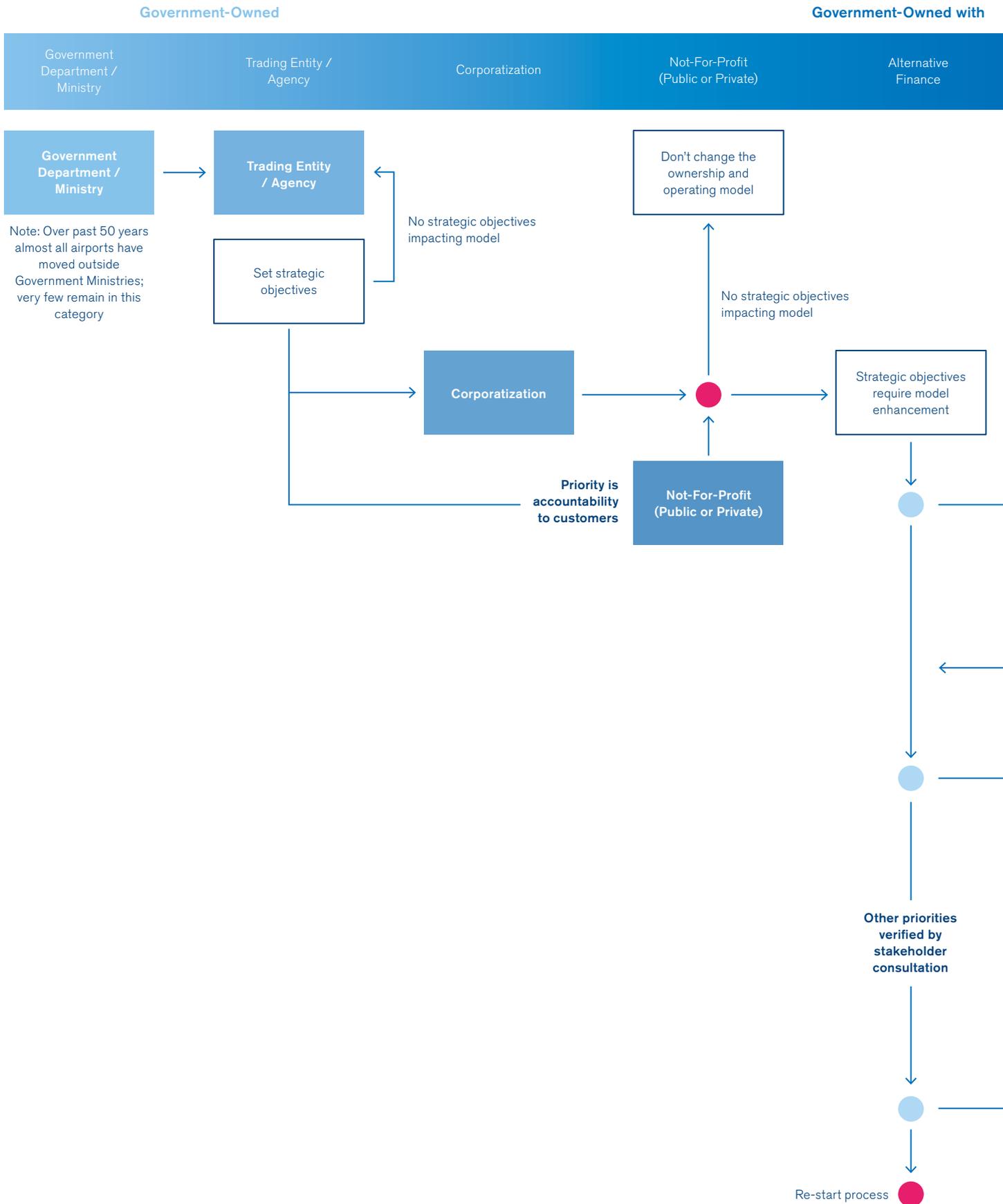
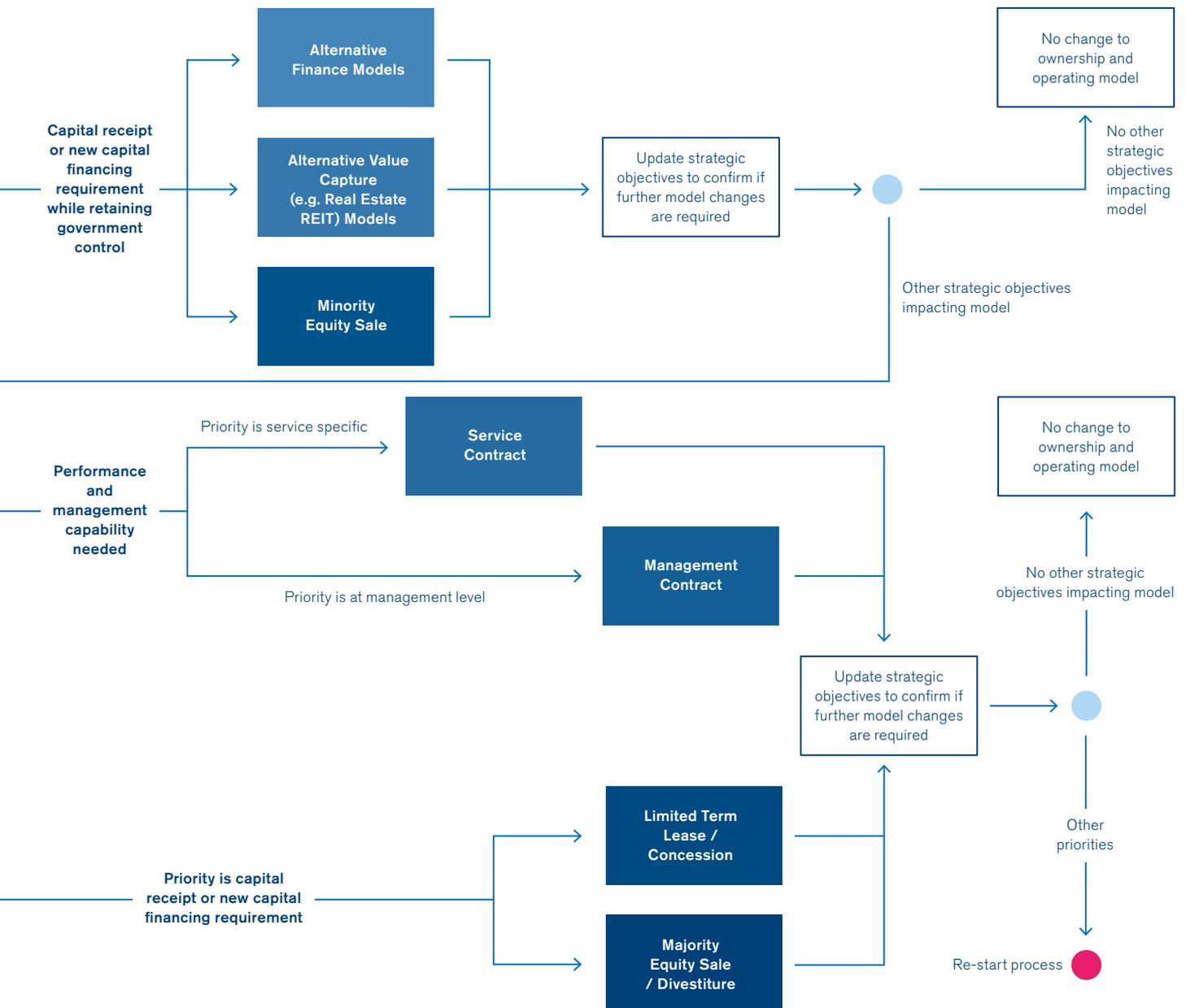


Figure 5. Ownership and Operating Model Decision Tree

Private Sector Participation

Privately-Owned or Operated

Alternative Value Capture (e.g. Real Estate REIT)	Service Contract	Management Contract	Minority Equity Sale	PPP / Concession	Majority Equity Sale / Divestiture
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## Corporatization

In the Corporatization model, the ownership of an airport is transferred to a dedicated corporation or airport authority, owned by government. This is typically in the form of a single airport authority responsible for all airports nationally.

This model has several advantages when compared to non-corporatized government-owned models. Both sector and corporate governance can be improved through the separation of regulatory functions and operational responsibility for the airport, and the formation of an independent corporate board and management structure in line with good corporate governance principles. Clarity and transparency in airport key performance indicators can enable better performance assessments.. Since the corporate entity is fully responsible for its' financial performance and long-term capital planning, this may drive greater management incentivization for efficiency, improved performance and responsiveness to consumer needs.

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“There has been a paradigm shift in the airport sector. Airports are increasingly seen more as a business rather than basic transport infrastructure. Corporatization will enhance Changi Airport’s ability to compete in this changed landscape ... Through this corporatization exercise, Changi Airport will have greater flexibility to attract and retain top talent and compete with global airport operators.”

Speech on the Corporatization of Changi Airport Group by Raymond Lim, Minister for Transport, Singapore in 2007

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Over time and with a proven track-record, the creation of a defined Balance Sheet and a clear “line of sight” to assess the financial performance of an airport, a corporatized airport can gain access to external financing sources. For the same reasons, it is considered that whilst corporatization is a necessary step towards the partial or full sale of equity, it also has many benefits in its own right.

However, there are still instances where governments seek fixed rents or a predefined return from a government corporation, which are not related to the performance of the airport, and it is also the case that corporatized airports can also suffer from market power abuses. Although government as an equity owner has the right to expect equity returns, these should be linked to the financial performance of the airport, and government should be incentivized to improve its financial and operational performance. Similarly, government corporations are not divorced from the process of politics and the board and management team may be subject to political appointments and changes with political cycles, which can undermine the effectiveness of management and governance. When incorporating an airport or airport authority there is a need to consider best practice when defining the Articles of Association to safeguard against these types of influences.

### Case Study: Changi Airport Group

The formation of Changi Airport Group as an independent entity, separate from the regulator; the Civil Aviation Authority of Singapore, was announced in 2007 and completed by 2009.

Changi Airport is widely seen as a success story; it is a 5-star airport as rated by Skytrax, and was voted as the World’s Best airport for the sixth straight year in 2018. The number of passengers increased from circa 40 million in 2010 to circa 60 million in 2017.

Changi Airport Group is also able to borrow independently from government, with USD 684 million of loans and borrowings on their Balance Sheet as of March 2017. This has enabled the funding of international expansion as Changi Airport Group has sought to leverage its specialist airport management expertise internationally through a range of service, management and concession contracts.

Source: Changi Airport Sees Record Numbers for 2017, The Straits Time

## Conclusions

- Corporatization can incentivize improved financial and management performance for an airport, and may improve access to external finance.
- There are a number of highly successful global airport companies who operate on a corporatized basis. Typically these have grown from mature airports with specialized management capabilities, and this is not in itself an indication that corporatization will yield such benefits for all airports.
- Corporatization as a model may also be combined with other models to improve the efficiency and effectiveness of airport management and performance.
- This model should be considered, but governments should recognize that corporatized airports can also suffer from market power abuses, and it is important that there are safeguards against these.

## Not-For-Profit

The Not-For-Profit model is where an airport asset is transferred to or leased by a Not-For-Profit corporation. Not-For-Profit corporations are expected to be financially self-sufficient and fully responsible for funding all operating and infrastructure costs, and are able to increase their tariffs. The Not-For-Profit nature requires the corporations to re-invest all profits back into the airport.

Not-For-Profit models can aim to align stakeholders such as the airport management, staff, and customers by including them in the organization's decision-making process. The focus of the organization becomes one of putting industry or customer needs at the center of decision making,

rather than a profit motive. The idea can even come close to a “cooperative” model such as those traditionally present in agriculture or banking, but also in other sectors such as retail.

There are a number of differences between the profit-seeking government corporatization model and the Not-For-Profit model:

- Government corporations typically have Boards which are appointed by the government, while the Not-For-Profit corporations have an independent Board selection process. This increases governance stability and reduces exposure to government political cycles. The Board selection process can also be tailored so that various stakeholders are represented without having a direct financial stake in the corporation;
- Not-For-Profit corporations are financed independently of government, without loans or guarantees provided by government; and
- Profits of the Not-For-Profit corporations are all re-invested back into the airports and not distributed across other government department / entities (although lease payments are paid to government).

The upside of this model for government has been improved financial self-sufficiency of the airports. In addition, Not-For-Profit models may be required to make lease payments to the owner of an airport, yielding a sustainable income stream for the government.

The most widely publicized case in aviation is the formation of Not-For-Profit airport corporations and a national air traffic control Not-For-Profit in Canada. The intent of the program for Canadian airports was to minimize subsidies paid to non-profitable airports. However, stakeholders have expressed concern on the efficiency of operations, and the level of transparency and consultation on charges and service levels. A factor leading to this has been the role of economic regulation and oversight for these airports.

### Case Study: Canadian CAAs

In 1994, the National Airports Policy (“NAP”) was introduced along with Canadian Airport Authorities (“CAAs”). The Federal Government identified 26 airports as part of the National Airports System (“NAS”), which were self-sufficient as a group, while some individual airports were not. The Federal Government retained ownership of the airports part of the NAS and leased them to CAAs, not-for-profit private corporations, without any subsidy and without regulating airport charges. Under this model, the CAAs are fully responsible for funding all operating and infrastructure costs and must invest all profits back into the airports. Federal Government receives an annual lease payment.

Major Canadian airports rank well, they are efficient and infrastructure is well maintained. However, critics question whether this model is truly in the interest of end-consumers, given the level of passenger charges, airport rents, fees, and other service charges, which are perceived to limit Canadian Airport Authorities located near the U.S. border when competing with US airports.

Sources: Airport Privatization: Issues and Options for Congress, Congressional Research Service; Privatization of Airports – The Canadian model, Aéroports de Montréal.

Not-For-Profit models that have been applied to other industries with similar monopolistic tendencies and market power features as the airport industry. For example, Not-For-Profit companies limited by guarantee and consumer mutual models have different governance features and associated incentives to for-profit corporate structures (whether privately-held or publicly traded).

For example, Welsh Water, previously a Public Limited Company, was sold to Glas Cymru in 2001,

a company limited by guarantee. This is a “single purpose company with no shareholders and is run solely for the benefit of customers”<sup>3</sup>. Annual profits are either reinvested or retained as an equity buffer.<sup>4</sup> Its’ Board is made up of circa 70 unpaid members, appointed through an independent membership selection panel. The model creates a different relationship with customers than other models enjoy; in 2016 over 12,000 customers were involved in consultation on how to re-invest the profits generated, and the Not-For-Profit model is seen to increase consumer trust significantly<sup>5</sup>.

In addition to this, advantages to this model include the removal of assets and liabilities from government, reducing the potential call on future government funding or additional borrowing, since a company limited by guarantee is independent and can issue its own debt, subject to its financial position, market appetite and market costs of borrowing. Similarly to corporatization, the Not-For-Profit model can be combined with other models to improve access to financing and efficient management practices.

### Conclusions

- Not-For-Profit corporatized entities in the airport industry are more independent from government, and are able to re-invest profits back into the airport.
- In other industries, private Not-For-Profit models have increased customer trust and proven a viable alternative corporate governance structure.
- However, the absence of a profit motive may reduce the incentive to deliver efficiency gains in operations, which need to be built

<sup>3</sup> Dwrcymru.com

<sup>4</sup> Social Market Foundation, The Cost of Nationalising the Water Industry in England (February 2018)

<sup>5</sup> Peter Davies, Chair of Welsh Water’s Customer Challenge Group, Fdsd.org

into management incentive mechanisms and regulation.

- As with all models, transparency and consultation on charges and service levels are key.

## Alternative Finance

A primary strategic objective often cited for governments pursuing PPP, concession and privatization solutions is to raise private finance, whether as a capital receipt for government or to finance capital expansion plans at an airport.

However, there are a range of alternative financing mechanisms that have been used in the airport sector which can allow governments to achieve these objectives. Government should consider the full spectrum of financing options, and their pros and cons and achievability, before selecting PPP and privatization models. In particular, government debt is typically cheaper than private finance and, assuming management efficiency, the benefits of lower financing costs can be passed on to airlines and consumers, to the benefit of the aviation industry and the economy which depends on it. This is predicated on management's ability to demonstrate and deliver comparable capabilities to the private sector to satisfy the credit rating agencies who shape financing costs.

There are a broad range of financial and commercial mechanisms which can be used to secure finance without a change in ownership model for the airport as a whole. These include a number of potential solutions, which are not mutually exclusive and can be applied in a variety of different ways:

- Municipal bonds, secured by government;
- Single purpose bonds, secured against specific airport assets (similar to corporatized airports raising debt, as noted above);

- PPP and concession models at a sub-airport level, for example terminal-level concessions which provide for the financing and delivery of new infrastructure whilst retaining a degree of competition at the airport; and
- Export Credit Agency ("ECA") financing, where part of an airport development or specific capital-intensive components (for example, baggage handling services, automated people movers, passenger boarding bridges and other equipment) is financed by another government's ECA on preferential terms, where a threshold is met for the involvement of contractors or suppliers from that country. Examples of ECAs include UKEF (UK), Coface (France), US EXIM (US), KEXIM and K-Sure (Korea) and NEXI and JBIC (Japan). Preferential financing costs can significantly impact the total financing payments over the life of the asset.

## Case Study: Delta Airlines LaGuardia Terminal Renovation

In August 2017, The Port Authority of New York and New Jersey approved a USD \$4 billion plan from Delta Airline to redevelop its facilities in terminals C and D into a new, 37-gate facility. This represented the largest single airline investment at any of the three New York Airports.

Delta Airlines entered into a 33 year lease for the terminal. The original funding for the project was due to include a USD \$600 million contribution from the Port Authority, and external equity and debt investment. Following a review of this arrangement, Delta Airlines decided to directly fund and finance the costs of the project, and pledged \$3.4 billion to it.

New operations were planned to be phased in to the new terminal building from 2020.

Sources: Delta is Getting a New \$4 Billion Terminal at New York LaGuardia Airport

(businessinsider.com); Delta Proceeds with New York's LaGuardia (reuters.com); Delta Lands \$1.4B Construction Package for New \$4B LaGuardia Terminal (commercialobserver.com).

Financing solutions of this nature can be combined with a variety of other models such as management contracts to enhance management capabilities. However, there is a risk of over-engineering commercial and financing arrangements considering the complex operating environment at an airport.

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“The commercial structures and ownership models used for airport and terminal development can have a material impact on the interests of the traveling public and this needs to be considered at the outset.”

Charles Leocha – President, Travelers United

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Additionally, these alternative solutions can be complex to structure and are not always possible; in many cases there are hard government fiscal constraints, as well as different regulatory regimes and rules governing borrowing by government agencies. There may also be requirements for government guarantees, giving rise to contingent liabilities, which government might not be willing or able to accept.

### Case Study: Denver International Airport Financing

In 1995 the new Denver International Airport was built using a range of financing models. “Denver International Airport is owned by the City and County of Denver and is operated by the Denver Department of Aviation. The \$4.9 billion city investment in the design and construction was financed by a combination of airport bonds, federal aviation grants, and monies generated by Denver's former airport; Stapleton International”.

In this example, a broad range of financing solutions were used for the airport, which is financially self-sufficient from government, whilst retaining ownership and control. As such, the airport plays a key role in stimulating local economic development and delivering public value; in fact, the airport CEO serves as a member of the Mayor's cabinet.

Denver International Airport is the 18th busiest airport in the world, and generates more than \$26 billion for the region annually.

In August 2017 a new USD \$1.8 billion 34 year PPP contract was awarded to Ferrovial Airports, heading the Great Hall Partners consortium, for a terminal concession to redesign the Jeppesen Terminal at the airport. After the four-year construction period, the private consortium will manage concessions in the terminal and receive 20% of concession revenues.

Source: Ownership, Management & Employment, Department of Aviation; Denver Approves \$1.8 billion, 34-year PP Airport Contract, Reuters

Governments and the aviation industry should also be conscious of changes and dynamics in financial markets. For example, the UK Financial Conduct Authority (“FCA”) announced in 2017 a transition away from the London Interbank Offered Rate (“LIBOR”) as the key interest reference rate index used for a range of financial contracts and products globally. This transition will have an impact on a range of contract mechanisms in the aviation industry, from aircraft leasing to reference rates used to calculate regulated returns for airports, and airport valuations.

### Conclusions

- There is a range of alternative financing models that can be viable options at a government-owned airport to raise capital receipts or finance capital expansion plans.

- These include municipal bonds, ECA finance, and sub-airport level concessions.
- These should be considered as alternatives to airport-level PPP, Concession and Privatization models as options to meet strategic objectives whilst retaining government influence to ensure focus on consumer benefits and the wider economy.

### Alternative Value Capture

Similarly to Alternative Finance models, there are a number of commercial business models and financing structures (for example, Real Estate Investment Trusts or development Joint Ventures) which allow government-owned airports to capture value, raise private finance, and generate returns, without changing the ownership model or relinquishing control of the airport.

Examples of these may include:

- Revenue ring-fencing and sale of “income strips” (for example, a share of future revenues generated from an airport car park, creation of real estate special purpose vehicles);
- Optimization of real estate development and ancillary uses, including retail, hotels and parking; and
- Disaggregating assets with different risk profiles (for example, operational and non-operational assets) to recognize an enhanced capital value associated with the differing Weighted Average Cost of Capital (“WACC”) caused by differing risk profiles of different assets.

Many airports and airport groups, for example Changi Airport Group, Malaysia Airport, Munich Airport and Dublin Airport Authority, have also recognized and sought to monetize the value in their human capital, processes and technology, and pursued service and management contracts internationally, outside of their domestic markets. This trend looks set to continue as the airport

industry continues to specialize, and become more technology- and data-driven. The ability to monetize what have typically been cost centers through selling products and services or through spreading fixed costs by having a network of airports, are emerging market solutions to increasing investment requirements for technology and human capital in airport management.

### Case Study: Schiphol Airport Real Estate Development

Schiphol Group was corporatized as a limited public company in the 1950s, owned wholly by the Dutch Government and the Municipalities of Amsterdam and Rotterdam. In 2008 Aéroports de Paris acquired an 8% share in the Schiphol Group as part of an alliance arrangement.

The Schiphol Group has developed Amsterdam Schiphol Airport as an AirportCity, seeking competitive advantage and to generate enhanced returns from non-aeronautical assets through development of a wide range of commercial activities outside aviation, including Real Estate development.

As a result, whilst in 2017 the return on aviation activities was capped at 2.2%, the airport was able to generate a total return of 14.4% on offices within its Real Estate business.

Sources: Case Study on Commercialization, Privatization and Economic Oversight of Airports and Air Navigation Services Providers, ICAO; Schiphol Group Annual Report, Schiphol Group

### Conclusions

- There is a range of commercial business models and financing structures that can be used at a government-owned and operated airport to release value, raise private finance and enhance financial performance.

- The creation of airport real estate Special Purpose Vehicles (“SPVs”) enabling airports to partner with real estate developers, with complementary skill sets, to maximize commercial return is increasingly being applied
- Monetizing technology investments and advanced managements capabilities are increasingly being applied by global leading airport companies
- These may provide alternatives to PPP, Concession and Privatization models as options to meet one or more strategic objectives whilst retaining government control.

## Service Contracts

Service Contracts are contracts for goods and services provided by third parties, which could range from purchase of equipment, to procurement of capital works, and outsourcing of back-office (for example, finance systems or technology platforms) and front-of-house (for example, security or customer service). Arrangements can be relatively simple (such as outsourcing of cleaning services) to far more complex arrangements (such as the provision of operationally integral and complex Information Technology services). Similarly, the tenure of service contracts can vary significantly.

This has long been an important part of operations in mature and advanced airports. Contracting out services can provide operational flexibility, reducing an airport’s fixed cost base and providing greater financial flexibility and ability to cope with seasonality and other demand fluctuations. It also allows access to specialist skills, capabilities and technologies that will continue to be important given increasing complexity and specialization in airport management. New and innovative contracting out strategies and service unbundling models continue to emerge with an increased focus on risk share and outcome-based remuneration. These models can also be applied to similar functions across a number of airports.

## Case Study: Dubai International Airport Baggage Handling Service Contract

In October 2015, Siemens Postal, Parcel and Airport Logistics, a subsidiary of Siemens AG, announced a contract to provide operation and maintenance services for baggage and material handling systems at Dubai International Airport. The contract covered Terminals 1, 2 and 3, and was for a period of several years with the option of extension.

The contract covers all aspects of operational support, as well as process improvement and preventive and predictive maintenance. It was reported as a performance-based contract, with jointly established Key Performance Indicators (“KPIs”) used to create performance incentivization. The long-term nature of the contract is seen to allow for a more strategic approach to accessing benefits for Dubai International Airport through the contract, including process re-engineering, energy and cost savings, and other efficiencies.

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“Our focus on customer service and operational excellence played a crucial role in choosing a professional long-term service partner for our baggage and material handling systems. We trust this partnership with Siemens will continue to make a major contribution to our strategic goals.”

Chris Garton, Executive Vice President of Operations at Dubai Airports.

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Source: Siemens Press Release, October 2015 (accessed here)

Much like Management Contracts, Service Contracts can vary significantly in complexity, level of transfer of responsibility and risk to the private

sector, and tenure. However, in countries with limited experience with complex contracting models, they can represent a relatively simple way of bringing specialized airport competencies in place of the need to transfer the full responsibility of the airport. Critically, if a government is increasing its reliance on service and management contracts to ensure benefits are realized, there needs to be an adequate investment into the capabilities managing the contract terms to maximize the intended benefits.

### Case Study: Delhi International Airport IT Services Contract

In 2009, Wipro Limited and Delhi International Airport Private Limited (“DIAL”) entered into a Joint Venture creating Wipro Airport IT Services Limited.

Wipro held 74% stake with the balance held by DIAL. The JV was created to provide IT infrastructure and services to Indira Gandhi International Airport, and the contract was for a 10-year period, which is extendable on mutually agreeable terms. In 2018, Wipro sold 63% stake of the JV to Antariksh Softech Private Limited for Rs 3.15 crore (circa US \$4.7m) as part of the divestiture of the unit.

According to a statement issued by Wipro, “DIAL is considering expansion of the airport and procuring more assets under the JV. The parties have mutually agreed to introduce a third party into the JV, with reduction of stake by Wipro. Consequent to the sale, Wipro Limited holds 11 percent stake in Wipro Airport IT.”

Source: Wipro Sells 63% Stake, Times of India

### Conclusions

- Service Contracts of varying complexity can be used to “buy in” specialist expertise and services and reduce costs at a government-owned and operated airports.

- Used alone this model may contribute to improved financial and operational performance, but it is not a mechanism to raise capital receipts of finance capital expansion plans.
- However, Service Contracts can be used with other models as part of an overall financial and commercial strategy to achieve a range of government strategic objectives.

### Management Contracts

Under a Management Contract, the ownership of the airport remains with the airport authority or government, and contractors may be appointed for the day-to-day operation of specific functions, or the airport as a whole. However, like Service Contracts, Management Contracts come in many shapes and sizes and at their most complex may be performance based, involve the private operator taking demand and revenue risk, and responsibility for asset maintenance<sup>6</sup>. Given the broad range in complexity of management arrangements, from a single operational aspect such as retail or car parking through to full responsibility for the day-to-day operations of an airport, their tenure can be quite varied. Simpler contracts may be two to five years, or even shorter, whilst more complex contracts involving greater transfer of risk to the private sector might be longer, up to ten years.

Longer-term and more complex management contracts that include responsibility for asset maintenance and management, replacement costs and potentially new capital costs, move closer towards PPP and concession models. However, they typically have a shorter term, are less capital intensive, and involve working capital and establishment costs rather than fixed capital investments. The deployment of capital and increased risk allocation through performance requirements to the private sector operator is typically associated with longer contract tenure.

<sup>6</sup> Management/Operation and Maintenance Contracts, World Bank Group

Similarly, different revenue and payment mechanisms exist associated with differing levels of risk share. For example, government may pay a flat management fee to a private sector contractor, may include performance incentivization mechanisms and ratchets in the contract, or indeed the private sector contractor may take a share in airport revenues.

A Management Contract can generate significant benefit for government and the airport without transfer of control, or loss of staff and capability. It provides a short- to medium-term route to access specialized airport management expertise, generally leading to improved performance and transfer of best practice. It can also be used as a model to navigate a particularly complex change process, for example the transition to a corporatized entity, or in preparation for a more complex PPP or privatization initiative.

However, it should be recognized that Management Contracts might add incremental cost in the short-term and the financial benefits are dependent on realizing revenue gains and cost efficiencies associated with improved management. The shorter-term nature of the contracts may not provide the private sector with the incentive or opportunity to drive efficiencies and making lasting change to management through an appropriate level of knowledge transfer. Further, a Management Contract is most applicable where there is no requirement for new capital investment or replacement capital investments. As external financing requirements rise, so does the typical length of contract required by the private sector party to recover their investment and service external finance providers, and the model may move closer to a PPP or concession model with reduced levels of government influence, therefore requiring strong regulatory safeguards.

### **Case Study: Airport Management Contracts in the Kingdom of Saudi Arabia**

In 2008, Germany's Fraport was awarded six-year management contracts at King Khaled

International Airport ("KKIA") in Riyadh and King Abdulaziz International Airport ("KAIA") in Jeddah. Under the contract, Fraport employees were seconded to both airports and their teams were responsible for daily operations. They led a wide range of projects, with a particular focus on improving service quality, and an extensive training program for the management staff of KKIA and KAIA was a significant feature of the contract.

In 2008, Changi Airports International ("CAI") was also awarded a six-year management contract to operate King Fahd International Airport ("KFIA") in Dammam, with a similar mandate, including development of human capital and improving key aspects of the airport's management. As reported by CAI, KFIA did achieve strong growth in the number of airlines, passengers, and non-aeronautical revenues over the period. This example was separate and preceded the longer-term 20 year management contract CAI secured at KAIA in Jeddah in 2017, which was reported to have been terminated in early-2018.

The management contracts at these three prominent airports in Saudi Arabia show how this contract can be used to transfer private sector expertise, whilst retaining government control and ownership, particularly where external private sector financing is not a priority.

Sources: TRBusiness, CA

### **Conclusions**

- Similar to Service Contracts, Management Contracts of varying complexity can be used to "buy in" specialist management expertise and improve performance, but are typically not seen as a mechanism to raise capital receipts of finance capital expansion plans.
- Management Contracts can vary significantly in scope, complexity and length, and in the level of risk passed to the contractor.

- Like Service Contracts, Management Contracts can be used with other models as part of an overall financial and commercial strategy to achieve a range of government strategic objectives.

## Minority Equity Sale

Sale of a minority equity shareholding in an airport can allow government to access external equity financing to raise capital receipts for government or finance new airport capital investment. This has the benefit of allowing access to private capital, without government losing majority ownership and control of the asset. New shareholders who are likely to be motivated by profit may also provide additional impetus to improve management performance and financial efficiency.

The mechanisms for the disposal of minority equity interest may include private offerings, or public offering via a stock exchange. In 2006 the French Government sold c. 30% stake in Aéroports de Paris (“ADP”) through an IPO. Subsequently ADP and Schiphol Group exchanged an 8% share in each other, as part of an alliance agreement intended to strengthen the competitiveness of the two airport companies, share best practice, and strengthen the dual hub<sup>7</sup>.

Often a minority equity sale has been part of a process of full divestiture (for example in the case of BAA in the UK). However, a minority equity sale will typically provide a lower receipt for the government owner than a majority equity sale or outright divestiture. A key factor in this is the absence of a control premium. Investors are likely to pay a higher price for an airport asset where they are able to exercise control, although the loss of control and influence on the operation of airports through a majority sale may not be a preferred model for government.

<sup>7</sup> Case Study on Commercialization, Privatization and Economic Oversight of Airports and Air Navigation Services Providers, ICAO

## Case Study: New Mexico City Airport Innovative Financing

In a case which demonstrates the interdependent and overlapping nature of many of the models identified here, the Grupo Aeroportuario de la Ciudad de Mexico (“GACM”) sought to raise USD \$1.6 billion in March 2018 through certificates issued on the Mexican Stock Exchange. These certificates were ring-fenced and held in a custody account to finance the construction of the New Mexico City Airport, which was also funded in part by the government and through bond issuance. These certificates were not pure equity, and GACM retained control, but they are an innovative financing mechanism with equity-like features including entitling the holders to non-guaranteed returns, paid for from the profits of both the old and new airports. The certificates also included provisions in the case of a future public share offering.

Source: Mexico City Airport Issues MXN 30bn Fibras E Certificates, Inframation News

## Conclusions

- A Minority Equity Sale can allow government to realize value from or finance capital expansion through new shareholders at a government-owned and operated airport whilst retaining control.
- It may provide a preferable alternative model to a PPP or Concession model, or a Majority Equity Sale.

## PPP or Concession

PPP and concession models have become one of the most common private sector participation models for airports, notably for greenfield airport developments. The model is typically applied where significant capital upgrades are required, but are also common in the form of a long-lease or concession for established airports with a variety of capital spend requirements.

As with many of the models that have already been assessed, it can be challenging to define models precisely, and there are numerous “grey” areas. Key dimensions determining how a model might be defined include not only ownership, but control, access to cash flows, risk allocation, potential reward and upside.

PPP and concession models are identified here as instances where government has granted rights to private companies to operate an airport and control one or all of the airport’s activities for a limited period of time, and have financial risk and reward in the successful management and operation of an airport over that tenure. At the end of the contract period, the asset typically reverts back or is granted to the government. Long-lease models, such as in Australia where airport leases were granted for 50 years with a 49 year extension option, are deemed to be a full transfer of control, albeit that they might be more politically tolerable in many jurisdictions, as they do not represent a permanent transfer of public assets to the private sector.

PPP and concession contracts can cover a broad scope involving the role of the private sector in providing financing, development, operations and maintenance services. New capital investment requirements can range from the redevelopment of a single passenger terminal through to a greenfield airport. Contract tenures typically last over 30 years, and are longer where there is a higher capital spend requirement, but also dependent on other operating cost and revenue sharing arrangements with government. Key differentiators from previous models are the level of transfer of risk from government authorities to the private sector, and private capital investment requirements. The extent of control transferred can vary significantly; in some markets, governments will retain operational control of airside assets including runways, taxiways and aprons, and the private sector is responsible for the management and operations of landside assets, including terminals, car parks and other assets. Generally, this has been

as a result of government seeking to maintain control of nationally strategic and security-critical assets.

Similar to Management Contracts, PPP and concession models can provide access to private sector expertise and management capability. However, the longer-term nature of the contract, greater transfer of risk and reward potential, and the requirement to finance capital investment provides additional incentives to a typical Management Contract. These include greater incentives to improve financial performance over a longer-period, including sustainable cost reduction and revenue growth. The longer contracts better-match the long-term nature of capital investments, and create incentives for efficient planning of capital investment, whole lifecycle costing and thorough asset management. Additionally, external finance providers (for example, banks providing debt), provide an additional level of governance and scrutiny of investments.

These models are generally best-suited where existing airport management, operational or capital delivery capability is limited, and/or where there is expected to be growth in demand and infrastructure requirements, but constraints on available government funding.

However, it is often the case that where these features exist there may be relatively low government capacity or market, institutional and regulatory maturity. This increases the chance of government negotiating a poor deal that is not in the public interest, which may mean significant increases in charges. There are numerous cases of unsolicited and sole-source proposals for airport PPP and concession projects, which may not demonstrate best value to government, the public or the wider stakeholder community, including airlines. The long-term nature of concession agreements limit flexibility for change, particularly if investment requirements and/or charges are pre-set in the contracts for the entire duration. A robust and transparent

government business case and transaction process is critical to safeguard public value in these cases. This requires adequate capacity within the government to secure longer-term solutions for public interest and economic growth and not just focus on financial gains from PPP or concessions.

### Case Study: Queen Alia International Airport Rehabilitation, Expansion and Operation Agreement

Queen Alia International Airport was built in 1983, and accounts for more than 97% of Jordan's air traffic. By the mid-2000's sustained traffic growth of 7% per annum was creating capacity constraints. Government funding to increase capacity was limited whilst at the same time government sought to reduce budgetary support to the airport and maximize returns to government. In parallel, the government sought to improve service standards and grow tourism and economic development through a new terminal with expanded capacity.

The process was supported by a strong political commitment, in addition to the key enablers of the 2000 Privatization Law and the Executive Privatization Commission, the governance body responsible for privatization and related transactions. The government played a critical role in ensuring necessary reforms, a fair concession design and a competitive tendering process. The government sought advice from the World Bank and in 2006 appointed the World Bank's International Finance Corporation ("IFC") to act as lead transaction advisor. The involvement and support of multilateral development banks and IFC helped to provide comfort to international investors and bring global experience and advice in the project preparation, structuring and tendering phases.

The 25 year Rehabilitation, Expansion and Operation concession contract was competitively

tendered, with pre-qualified bidders invited to submit final tenders. In 2007, the Airport International Group (a consortium comprising Aéroports de Paris, a construction group, and regional financial investors, as well as multilateral funders including the IFC, Islamic Development Bank and USAID) won the bid, offering the government a 54.6% share of gross revenue over the concession term. The capacity improvements have widely been seen as a success, with Queen Alia Airport named the best airport of its size in the Middle East by the Airports Council International in 2014, 2015 and 2016. However, the relatively high revenue share for government needs to be balanced against macro-economic and other strategic objectives, and the interests of airport users.

Sources: PPP Stories – Jordan: Queen Alia International Airport, IFC; EMCompass: Queen Alia International Airport, IFC

### Conclusions

- PPP or Concession models can enable access to global best-in-class private sector expertise, management capability, and investment for capital expansion. They can also pass operating risk from government to the private sector counterparty, albeit potentially at a premium. This can be of particular use where airport management, operational or capital delivery capability is limited, and/or there are government funding constraints.
- However, they require a reduction in government strategic influence over an airport for a substantial period and, dependent on the commercial structure, can reduce flexibility to adapt within a rapidly evolving industry.
- As such, governments should consider implementing the safeguards needed to protect public value in the commercial structuring of the model, transaction process and the regulatory framework. Further, these

models should only be selected through a robust and detailed business case process, incorporating the inputs of a variety of impacted stakeholders and considering the full spectrum of alternative models.

### Majority Equity Sale or Full Divestiture

A Majority Equity Sale or Full Divestiture entails the transfer of control of an airport from the government to the private sector. The mechanics of share sales is similar to a Minority Equity Sale, but disposal of a majority of shares means relinquishing control, and typically enhances the value of divested shares through the control premium investors are willing to pay. Ownership and full responsibility for operation, capital improvements and maintenance are transferred to a private buyer (or multiple private buyers) in perpetuity. However, government's regulatory responsibility and ongoing role must remain, and government should remain responsible for aviation policy and protection of consumers. Further, mechanisms such as "golden shares" may be used to retain special privileges for government, although these will typically reduce the valuation of the privatized asset.

The public offering of BAA Plc shares on the London Stock Exchange in 1987 is an early example of airport privatization. Since then, BAA Plc has been de-listed following its acquisition by Ferrovial in 2006, and BAA Ltd broken up from 2009, following the requirements of the Competition Commission. This, the UK Airports Commission argues, "is driving significant investment, innovation and growth, as these airports compete on cost and quality of service"<sup>8</sup>. Until September 2003 the UK Secretary of State retained a golden share with the primary intention to prevent a take-over by foreign investors. This was ultimately redeemed because of a judgment of the European Court of Justice ruling

against it<sup>9</sup>. The case of BAA demonstrates how ownership, operating and regulatory models may need to be adapted over time to reflect changing markets, objectives and constraints.

### Case Study: Australia Airport Privatization Program

Australia's Airport Privatization Program saw Brisbane, Melbourne and Perth airports effectively privatized and sold with long-leases of 50 years with a 49 year extension option in 1997; Sydney followed in 2002, along with a number of other regional airports previously owned and managed by the Federal Airports Corporation. The privatized airports in Australia are either publicly-listed companies, or privately held by large investment or superannuation funds.

The Australian Government's privatization objectives were to increase both airport operational efficiency, and also increase the international competitiveness of major airports. According to the Airport Monitoring Report from the Australian Competition & Consumer Commission ("ACCC"), passenger numbers have grown significantly since the privatization process, and profits per passenger have also risen substantially. ACCC have expressed concerns that the absence of price regulation does not sufficiently constrain the market power of the four major airports in Australia, with a negative impact on consumers and airlines. In 2018, the ACCC has initiated a study into Australia's airports assessing future airport regulation.

Sources: ACCC, "Airport Profits Continue to Grow"; Case Study on Commercialization, Privatization and Economic Oversight of Airports and Air Navigation Services Providers, ICAO

<sup>8</sup> Airports Commission: Final Report, UK Airports Commission

<sup>9</sup> Case Study on Commercialization, Privatization and Economic Oversight of Airports and Air Navigation Services Providers, United Kingdom, ICAO

## Conclusions

- A Majority Equity Sale or Full Divestiture may maximize capital receipts received by government, but will result in loss of government ownership control in perpetuity.
- As such, governments should consider implementing the safeguards needed to protect public value in the commercial structuring of the model, transaction process and the regulatory framework. Further, these models should only be selected through a robust and detailed business case process, incorporating the inputs of a variety of impacted stakeholders and considering the full spectrum of alternative models.

## RELATIVE SUCCESS OF DIFFERENT MODELS

To reiterate there is no “one size fits all” solution. As we have seen, different models can have a range of consequences, intentional and otherwise. Their relative success may vary significantly depending on the drivers of different stakeholders, and also the strategic objectives and constraints faced by a government at a particular time that may give rise to the decision to pursue alternative ownership and operating models. The wide variety of strategic objectives that typically underpin a government’s rationale for privatization mean it is difficult to recommend one ownership or operating model that can best meet the strategic objectives of the government whilst balancing other stakeholders’ objectives, and it needs to be recognized that these might change over time.

The aviation industry continues to develop at a rapid pace. New and developing technologies, for example, longer aircraft ranges opening new point-to-point services and routes, are disruptors to the industry. Models are only sustainable if they are flexible and able to address the dynamics of an

air travel market which is and will continue to go through much disruption and change in the future.

The impact of private sector participation and privatization in the provision of airports services should be assessed from the perspective of all impacted stakeholders. These include government, private sector participants, aircraft operators, passengers, employees of the airports and air navigation services organizations, and the local communities.

Figure 6 (“Alignment of Ownership and Operating Models with Strategic Objectives”) provides an indication of how different ownership and operating models align to government strategic objectives for a change in airport ownership. This is not intended to be prescriptive, but demonstrates that alternative ownership and operating models can often better meet government objectives without the sale of assets. Further, the premise of the figure is that governments need to start with an assessment of their strategic objectives to assess a preferred model; the “best” model will be dependent on these, and there is no universally-preferred model.

Corporatization as a model can be combined with other models identified above to achieve objectives of privatization without the same loss of control and potential impact on customers and the economy. For example, the use of Service Contracts and Management Contracts may provide access to the required skills and expertise to improve commercial and operational efficiency of an airport.

Above all, Figure 6 shows that, whilst there is no “one size fits all” solution, there are some models which lend themselves to specific national and other circumstances. A number of “archetypes” in Figure 7 (“Archetypes for Airport Ownership and Operating Models”) have been defined to illustrate this point. This identifies where alternative models to PPP and privatization may suit specific circumstances, subject to a full and detailed evaluation of options and business case, and a recognition that models

may need to be changed over time to reflect changing market and other dynamics.

For example, global hub airports which are critical contributors to national economies are typically of such national strategic significance that governments may seek to retain long-term influence over the airport and its operation. In these circumstances, a suitable model that has seen considerable success in a number of instances, particularly where the airport is mature and well-managed, may be a Corporatized model. Where specialist expertise is required, this may be “bought in” under specific Service Contracts.

For a network of community airports providing critical connectivity to smaller communities and a social responsibility, it may be that a Corporatized model with a Not-For-Profit mandate can help to localize management of an airport and its accountability to local public users. For a regional airport owned by a municipal government requiring a release of capital value, there are Alternative Value Capture and Alternative Finance models which can achieve this without transfer of government control. Equally, there have been examples of “bundled” PPP concessions to build scale, such as in Mexico, although bundling a range of airports together can lead to cross-subsidization and a risk that this implicit rather than explicit subsidy obscures the true cost and performance of individual airports.

In the case of an emerging market airport with a requirement for new capital investment and infrastructure expansion and the need to rapidly improve services in the face of poor performance, there may be a variety of potential solutions. Management Contracts may allow access to specialized skills and management expertise, but are not typically associated with capital investment. PPP and Concession models can enable access to private sector investors in addition to skills and expertise, but require a robust contract and safeguards in both the transaction process and ongoing management and regulation.

Above all, this Booklet recognizes that individual cases vary significantly and the choice of model selection is often driven by the detail. However, there are generally viable alternative models that meet the needs of government and the aviation industry, and a full set of options should be considered in detail before a preferred model is selected. Guidance on this process is presented in the following section, “How is a PPP or Privatization Program Best Delivered?”.

Strategic Objectives Defining Model Selection		Government-Owned	
		Government Department / Ministry	Trading Entity / Agency
Macro-Economic Objectives	Domestic economic impact through development of aviation cluster	★	★
	Efficient sector governance and regulation	★	★
	Sector efficiency and competitive advantage	★	★
	Government control	★★★★	★★★★
Financial Objectives	Capital receipts for Government	★	★
	Revenue return profile for Government	★	★★
	New sources of private finance and minimize government funding (e.g. for capital spend)	★	★
	Capital financing efficiency	★★	★★
Management Objectives	Capital projects efficiency	★	★
	Commercial and operational efficiency	★	★
	Improved customer experience	★	★

**Government-Owned with Private Sector Participation**

**Privately-Owned or Operated**

Corporatization	Not-For-Profit (Public or Private)	Alternative Finance	Alternative Value Capture (e.g. Real Estate REIT)	Service Contract	Management Contract	Minority Equity Sale	PPP / Concession	Majority Equity Sale / Divestiture
★★	★	★	★★	n/a	n/a	★★	★★	★★
★★	★★	n/a	n/a	n/a	n/a	★	★★	★★
★★	★★	n/a	n/a	★	★	★	★★	★★
★★★★	★★	n/a	n/a	★★	★★	★★	★	☆
★	★	★	★	n/a	n/a	★★	★★	★★★★
★★★★	☆	n/a	n/a	★★	★★	★★	★★	☆
★	★	★★	★★	n/a	n/a	★	★★★★	★★★★
★★	★★	★★	n/a	n/a	n/a	★	★	n/a
★★	★★	n/a	n/a	★	★★	★★	★★	★★
★★	★★	n/a	n/a	★★	★★	n/a	★★	★★
★★	★★	n/a	n/a	★★	★★	n/a	★★	★★

**Alternative Models to PPP and Privatization**

**Operating models (applicable across all ownership models) can be combined with Alternative Ownership Models to PPP and Privatization**

Figure 6. Alignment of Ownership and Operating Models with Strategic Objectives

Archetype	Global Hub Airport	Community Airport	Regional Airport	Emerging Market Airport
Archetype Description	<p>This is an airport in a mature market, with high demand growth and a level of competition for transfer passengers. The aviation sector is a key contributor to the national economy, with a competitive national airline using the airport as its hub.</p>	<p>This is a small, sub-regional airport serving a community, focused on local economic needs and development, with limited availability of government funding, low demand growth, and a high level of local market power.</p>	<p>This is a mid-sized, regional airport serving a city and surrounding area in a mature market with medium level demand growth and medium level of market power. There is limited available government funding and a short-term government budget constraint.</p>	<p>This is an airport in an emerging market with high levels of demand growth and a high level of market power. There is a dated regulatory framework in place, immature financial markets and very limited government funding. Further there are new capital spend requirements, limited management capability and current service failures at the airport.</p>
Example Strategic Objectives	<ul style="list-style-type: none"> <li>▪ Continue to be a macro-economic driver</li> <li>▪ Earn a reasonable return for Government</li> <li>▪ Improve management and efficiency</li> </ul>	<ul style="list-style-type: none"> <li>▪ Domestic connectivity</li> <li>▪ Capital financing and financial efficiency and self-sustainability</li> </ul>	<ul style="list-style-type: none"> <li>▪ Domestic economic diversification, connectivity and growth</li> <li>▪ Minimize Government funding and recognize some capital value whilst continuing to support economic growth</li> </ul>	<ul style="list-style-type: none"> <li>▪ Effective sector governance and regulation</li> <li>▪ New sources of finance and stable return to Government</li> <li>▪ Rapid improvement of management capability and airport performance</li> </ul>
Potential or Suggested Ownership & Operating Models	<p>Corporatization with Service Contract(s) where required</p>	<p>Not-for-profit model (Public or Private)</p>	<p>Corporatization with Alternative Value Release or Alternative Finance (e.g. asset securitization)</p>	<p>Corporatization with incentivized management contract (subject to capital investment needs)</p> <p>PPP / concession model, subject to process and regulatory safeguards (see next sections)</p>

Figure 7. Archetypes for Airport Ownership and Operating Models

# Key Takeaways

- Airport privatization programs may stem from a range of strategic government objectives, which typically include financial sustainability, new sources of private finance and enhanced management capability. These objectives need to be balanced against the need for government influence, given the strategic national significance of airport assets, their critical macro-economic role, and the need to protect consumer interests.
- There are a broad range of alternative ownership and operating models that can often meet government objectives without the sale of assets. Corporatization as a model can be combined with other models to achieve the objectives of privatization without the sale of assets and loss of government control which creates incentives to operate an airport in the public interest. Alternative, not-for-profit governance models may also have similar incentives.
- There is no “one size fits all” solution to airport ownership. Any change in ownership and operating model should be justified with reference to clear and transparent objectives, which guide its design. Governments need to understand the pros and cons of different models, and provide a robust evidence set, which supports the preferred option, with reference to a set of alternatives for these objectives.
- Models are only sustainable if they are flexible and able to address the dynamics of an air travel market which is and will continue to go through much disruption and change in the future.
- Where a PPP or Privatization model is pursued, a key determinant of success is in the detailed transaction process and commercial structure design, ensuring the deal structure and execution meets the objectives set. Proper communication and engagement with a broad range of stakeholders is critical to the successful delivery of this process.

# How is a PPP or Privatization Program Best Delivered?



**There is a broad range of global best practice guidance to appraise alternative ownership and operating models and design an appropriate transaction process for a PPP, concession or privatization project.**

**It is recommended that governments do not pre-empt any preferred model without sufficient analysis and planning, incorporating the perspectives of aviation industry stakeholders and consumers.**

**The assessment of a regulatory framework should take place in parallel to the assessment of future ownership models.**

**In all cases a competitive and transparent transaction process is a “must have”.**

## **BEST PRACTICE APPROACHES AND TOOLS**

### **PPP and Privatization Guidance**

Governments considering PPP or privatization should ensure they follow best practice to appraise alternative ownership models and, if appropriate, design and execute a successful PPP or privatization transaction process. Failed or underperforming transactions which adversely impact airlines and passengers typically result from a lack of adherence to the principles of best practice.

There are a range of “best in class” guidance documents and technical manuals which provide a framework to governments and their stakeholders as they establish the business case for PPP and privatization projects, assess alternative options, financially and commercially structure the deal, and execute and manage delivery. A significant volume of literature comes from countries with long-established PPP and privatization programs, such as Australia and the UK, and from supranational organizations and Multilateral Development Banks (“MDBs”) such as the World Bank.

This literature ranges from technical guidance documents specifying financial and other

treatments, through to broader business case and process review check-lists and summations of best practice. For example, at the more technical end the UK Government’s Green Book: Central Government Guidance on Appraisal and Evaluation (the “Green Book”) contains insights and learnings from editions that have been published for over 40 years, to guide government project evaluation and investment appraisals, including for PPP and privatization projects. It covers all proposals for public spending, and the sale and use of government assets. The European Investment Bank (“EIB”) European PPP Expertise Centre PPP Guide (“EPEC PPP Guide”) collates national and supranational guidance documents and other resources from around the world across the PPP project lifecycle from identification, preparation and procurement, through to implementation.

Many countries publish national-level guidance, including government business cases and approval requirements, often federally under the auspices of finance ministries, or at state level. In the case of countries with nascent or emerging PPP and privatization frameworks, this international and supranational guidance may provide a reference point, and is frequently adapted to the needs of local programs with specialist legal, technical, economic and financial advice.

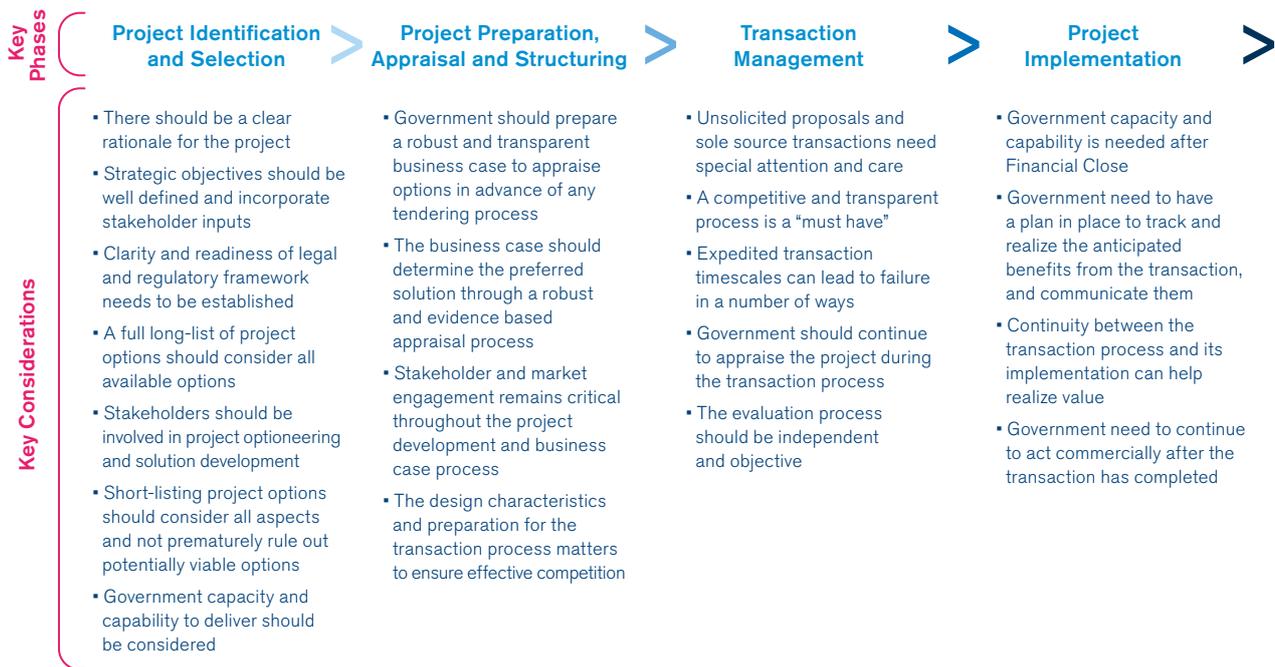


Figure 8. PPP Project Process

## Airport-Specific Guidance

Whilst much of this documentation is sector-agnostic and can be applied to the business case and options analysis for public infrastructure and service delivery projects across sectors, a range of guidance documentation is tailored to the transportation and aviation sectors. For example, the World Bank's PPP Infrastructure Resource Centre ("PPPIRC") includes a dedicated webpage for PPP in airports, recognizing the need for guidance given that "airports were traditionally owned, managed and operated by governments, but there has been a worldwide trend towards private sector involvement with varying degrees of private ownership and responsibilities"<sup>1</sup>. PPPIRC include a checklist of issues relating to airport concessions, sample concession agreements, and further reading and resources for practitioners globally.

That said, airport-specific guidance and considerations on how to assess, execute, and manage the process to increase the private sector role in funding and managing airport assets is relatively under-developed. This Booklet does not intend to repeat the existing body of technical documentation (selected key resources are included in Appendix 1, "PPP and Privatization Toolkit"). Instead, this Booklet seeks to identify the key

themes and common features of these best practice approaches and methodologies, and bring them to life through examples and lessons learned in the airport industry, to support practitioners in the airport PPP and privatization decision-making and execution processes.

## COMMON THEMES AND PRINCIPLES OF BEST PRACTICE

Whilst there is a range of different terminology used in best practice literature, there is a fairly consistent view on the key stages in executing a PPP or privatization transaction from inception to financial close, and on-going management.

Drawing on a range of different sources, these key stages are characterized as follows:

1. Project Identification and Selection;
2. Project Preparation, Appraisal and Structuring;
3. Transaction Management; and
4. Project Implementation.

The analysis that follows assesses the key features of the activities required by best practice in each of these phases, and draws on lessons learned from airport privatization and PPP programs globally, to bring the best practice to life and develop practical

<sup>1</sup> Public-Private Partnerships in Airports, World Bank Group

advice for decision-makers and stakeholders involved in airport privatization.

## PRACTICAL ADVICE TO DELIVER PPP AND PRIVATIZATION SUCCESSFULLY

### 1. Project Identification and Selection

#### There should be a clear rationale for the project

Any project should start with a clear rationale, which will help to define the strategic objectives for the government. For example, there may be a requirement for capital expansion at the airport, driven by forecasted capacity constraints.

Consideration may be given to unsolicited proposals from the private sector, although it should be recognized that there may be a risk associated with proposals being accepted from the private sector that do not provide a clear rationale, are not rooted in public and consumer interests and are not independently validated by the government.

#### Strategic objectives should be well defined and incorporate stakeholder inputs

Well defined strategic objectives are a key driver of model selection. These should provide clarity on the issues to be addressed and inputs from the perspective of a wide variety of stakeholders, including airlines and passengers, employees of the airports and air navigation services organizations, and the local community.

They should be societal in nature, focused on economic, social, environmental, and not only financial and public spending factors. In fact, the trade-off between financial return and economic impact should be explicitly recognized by decision-makers.

There should be a limited number of strategic objectives, in order to maintain focus on the rationale for the project. Objectives should be 'SMART' (Specific, Measurable, Achievable, Realistic and Timed) and clearly define the outcomes that are sought.

#### Case Study: Aeroportos de Portugal Concession

In 2013, the shareholding of the Aeroportos de Portugal ("ANA") was acquired by Vinci with a 50 year concession to own and operate 10 airports

in Portugal after a competitive sales process comprising five shortlisted bidders. A primary driver for the Portuguese government was the reduction in public debt required as a result of the Economic Adjustment Program conditions imposed by the European Commission ("EC"), European Central Bank ("ECB") and the International Monetary Fund ("IMF"). As such, the stated aims included maximizing revenue from the sales process, as well as the growth and efficiency of ANA.

Airport charges were set in the concession contract, and airlines have raised a number of concerns in respect to the level of charges and process to define them. In particular, airlines have expressed concern at the lack of consultation prior to the methodology being set in the concession contract, and that these pre-determined charge levels limit the benefit of consultation and engagement between ANA and airlines on costs and capital investment through the charge review process. Further, airlines have argued that the framework significantly limits the ability of the Independent Supervisory Authority to address situations where there is no agreement on charges between the airport and its airline users. As a result of this, airline associations have submitted a complaint to the European Commission under the Directive.

Source: Support Study to the Ex-Post Evaluation of Directive 2009/12/EC on Airport Charges, Steer Davies Gleave (2017)

#### Clarity and readiness of legal and regulatory framework needs to be established

Successful transactions, and willingness for credible private sector partners to invest in the process, require clarity and stability in the legal and regulatory framework. This should be established at the outset, including the entities involved, their mandate and role, scope of the law and regulation (although this does not mean charges should be pre-determined).

#### Case Study: New Quito International Airport ("NQIA") Arbitration

NQIA incurred years of delay due to the need to renegotiate the commercial terms of the concession awarded to Aecon and its consortium partners. In 2009 the Ecuadorian Constitutional Court found that the financing

plan, which was the basis of the original 2002 concession contract was partially unconstitutional as a result of the adoption of the new Ecuadorian Constitution of 2008. The concessionaire's right to collect passenger charges was deemed by the Constitutional Court as non-compliant with the new Constitution law. Following this decision, both sides were forced to renegotiate the concession contract causing protracted delays, highlighting the need for legal and regulatory clarity to be defined at the outset of the project.

Source: Consortium building new Quito Airport takes Ecuador to ICSID, IISD

### A full long-list of project options should consider all available solutions

Government should not pre-empt a preferred solution without sufficient independent analysis and planning, and a full long-list of models should be considered at the outset of a project.

International guidance recognizes the risks of “zoning in” on a preferred option too early; “starting out with a narrow set of options or a pre-determined solution may miss the opportunity to explore more novel, innovative solutions that might offer better social value.”<sup>2</sup>

### Stakeholders should be involved in project optioneering and solution development

Stakeholder consultation and engagement should be a consistent theme across the whole lifecycle of any PPP and privatization initiative. Identifying key stakeholders and understanding their interests and positions is important at the outset of a PPP or privatization program to enable selection of achievable projects and inform their structuring.

At this stage of the process and prior to detailed options analysis, a stakeholder consultation should ensure all options are considered and ‘red flags’ are raised where relevant. This is also an opportunity to communicate the pipeline of transactions, and build a competitive market. Critical stakeholders to any airport PPP and privatization will include airlines, local communities and end consumers, airport operators and investors.

### Short-listing project options should consider all aspects and not prematurely rule out potentially viable options

Government should not pre-empt a preferred model without sufficient analysis and planning. All aspects of the airport and its environment should be considered in parallel when short-listing project options. These include the maturity of the market, performance, demand growth and relative economic significance of the airport, relative market power of the airport, and the government’s strategic objectives and constraints.

As identified throughout this Booklet, the assessment of the preferred ownership and operating model should also take place in parallel to the assessment of the airport’s market power and the development of the appropriate regulatory framework. The solution proposed should be developed iteratively, and consider the relationship between the ownership and operating model, regulatory model, government’s strategic objectives, and the market features of the specific airport. Additionally, timing is an important dimension used in assessing options; governments often seek to establish an appropriate phasing strategy for PPP and privatization, which may include preparation of assets prior to transaction.

A “do nothing” option should also be considered, which allows an impartial comparison to other options, particularly noting that airport PPP and privatization projects may be politically motivated.

<sup>2</sup> UK HMT “Green Book”, HM Treasury

## Government capacity and capability to deliver should be considered

It is recommended that decision-makers have a critical view of their own capability and capacity to deliver, in particular where novel commercial and financial arrangements are under consideration. Airport developments are often “once in a lifetime” investments that require broad and careful consideration. It is not uncommon for a government entity or ministry to lack the capabilities to deliver an outcome that achieves the intended strategic objectives. Under-estimating these factors might endanger the deliverability of the project or lead to a “bad deal” that is not in the interest of the public or industry stakeholders.

## 2. Project Preparation, Appraisal and Structuring

### Government should prepare a robust and transparent business case to appraise options in advance of any tendering process

Project appraisal can be defined as “the process for assessing the costs, benefits and risks of alternative ways to meet government objectives”<sup>3</sup>. This is most frequently prepared in the form of a “business case”, which is developed in parallel to project activities and provides the evidence base for the preferred solution.

There are a range of different government business case frameworks, with terminology ranging from “Strategic Outline Business Case”, “Strategic Business Case”, “Outline Business Case” and “Full Business Case” (UK Green Book) to “Strategic Business Case”, “Rapid Business Case”, “Full Business Case” (Australia Transport Assessment and Planning Guidelines) to “Pre-Feasibility Study” and “Feasibility Study” (World

Bank). What these frameworks have in common is that the business case for PPP or privatization progressively expands as the project is developed, and the preferred solution is identified.

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“Airport deals are complex and unique. The effective structuring of an airport transaction requires a clear understanding of the aviation-specific regulatory, demand and revenue factors, and unique stakeholder requirements that will govern the viability of any private sector solution. Access to global and regional knowledge in specialist areas such as demand forecasting, revenue and cost modelling, regulatory structures and transaction management are critical to success. A well-considered and informed process can help government decision-makers understand the value generated by the deal, build investor confidence, and attract a greater number of higher-quality bidders. This ultimately translates into better solutions for government and other impacted parties.”

David Beare – Divisional Director, Aviation,  
Mott MacDonald

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This should be an activity that the government undertake independently of the private sector, albeit incorporating market inputs and the findings of market testing to ensure the project is commercially deliverable. This independence is important to ensure that governments are not unduly influenced by the private sector, or a particular company, to develop a commercial structure or regulatory framework which is not in the public interest.

### The business case should determine the preferred solution through a robust and evidence based appraisal process

Given the technical knowledge required to develop a detailed business case, it is often recommended to use qualified specialist advisors. The business case should be a standalone document to ensure

<sup>3</sup> UK HMT “Green Book”, HM Treasury

approvers and stakeholders have the information needed to make decisions. It will also require specialist technical expertise to support evaluation of the Value for Money (“VfM”) of options in a number of different areas, which may include:

- Rationale for intervention and well- defined transaction objectives;
- Comparison of options, considering costs, benefits and risks of different options;
- Consideration of the macro-economic impact of different options, and not only financial implications;
- Assessment of risks and sensitivities of different options, which may often include explicit adjustment for “optimism bias”;
- Use of an appropriate discount rate to assess Net Present Value (“NPV”) of different options;
- Use of an appropriate time-frame, for example aligned to the lifecycle of an asset or contract;
- Development of proposed transaction structure, including ownership and operating model, scope of services, bundling and packaging of assets, and key terms; and
- Implementation plan with a realistic transaction timeline and detailed activity plan, which may include the time for the proposed transaction structure to obtain necessary regulatory approval, which should be obtained prior to initiating the transaction.

### Case Study: Brisbane AirportLink Toll Road Insolvency

The USD \$5 billion AirportLink toll road was reported in 2013 to have gone into insolvency, resulting from a short-fall in anticipated traffic levels. Traffic levels were reported at around 40% of the forecasted 135,000 vehicles per day, suggestive of a project which was not originally viable under the concession terms.

### Source: Brisconnections Goes Into Receivership, Road Pricing

Common errors in a government business case include evaluating the NPV of options using a Weighted Average Cost of Capital (“WACC”), which is the typical “hurdle rate” used in corporate finance, whereas government projects ought to have wider social and economic rationale for society as a whole. For this reason, the Social Time Preference Rate (“STPR”) is used in a number of jurisdictions, which is a discount rate that estimates how society values consumption at different points in time. Another common error is to evaluate project options over short or non-comparable time-frames. This can lead to decision distortions, for example in the case where terminal values of assets are not properly incorporated into the analysis

### Case Study: Greek Airport Concession Packaging Strategy

In 2016, the Greek Government awarded a 40-year concession for 14 regional airports. This included both mainland and island airports accounting for approximately 25 million passengers.

This is an example where the government sought to optimize a national program by packaging different assets together to create sufficient scale and, effectively, cross-subsidize less viable airports with more viable ones, through an implicit subsidy.

It is recommended that the business case appraisal establishes the benefits of a packaging approach. Where a subsidy is required to support social and economic outcomes, IATA prefers an explicit to an implicit subsidy mechanism to ensure clarity to airlines and consumers that they are receiving the best possible deal.

Source: Concessions for 14 Regional Airports, Lexology

## Stakeholder and market engagement remains critical throughout the project development and business case process

The business case should determine the preferred solution before commencing the transaction process. As such, full and thorough engagement with a range of stakeholders is essential, including market engagement with potential private sector counterparties. Soft market testing with airport investors and operators can help assess whether a particular ownership and operating model, specific commercial terms and regulatory models are deliverable by the private sector, and create market interest and awareness in advance of a transaction, as well as stimulating private sector innovation. Engagement with airlines and consumers is key to ensure the economic interests of the industry are met.

In some airport PPP and privatization programs the introduction of novel features, particularly in regulatory regimes, has led to confusion on the part of investors. Whilst innovation can be a positive, “off market” terms and features can cause confusion and potentially erode value.

It is essential to have a well-defined communications strategy to ensure stakeholder engagement and buy-in. This can also help attract the right market participants to build the market and achieve best value from the transaction.

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“Consultation between governments and private sector players is key to successful airport PPP transactions. Globally, various governments have implemented different models for airport development. The engagement model adopted by the Government of the Philippines for instance – of having one-on-one interactions with qualified bidders, helped in creating an optimum concession and project structure for the government as well

as interested players and finally resulted in the government’s objectives being met – ensuring airport development as well as value for money.”

Sidharath Kapur, President GMR Airports Ltd.

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## The design characteristics and preparation for the transaction process matters to ensure effective competition

The transaction process should be designed to maximize outcomes against the strategic objectives set. Ultimately the design of this process is a key factor in ensuring the right investors or operators are selected through a process with competitive tension to provide the right level of infrastructure at a fair price.

Market theory suggests that attracting more bidders and improved competitive tension will result in higher bids and better outcomes<sup>4</sup>. However, achieving the highest value bid should not be governments’ sole objective, and it should always be balanced against other objectives. There should be a clear evaluation framework in the tender documents to trade-off bid value against other factors, i.e. quality of bidder submission, investment plans and the established capabilities of the potential operators. Care should be taken that these evaluation frameworks cannot be easily manipulated by private sector bidders.

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“The private sector looks for certainty in tariffs – it is extremely important that the mechanism of tariff regulation is made clear upfront by the government”.

Alain Brun, Business Development Director,  
Asia-Pacific  
VINCI Airports

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<sup>4</sup> Policy Brief: Competition Policy and Concessions, OECD

Credible airport investors and operators often spend millions of dollars preparing tender submissions, and carefully select projects to bid for. Further, engagement with the private sector can help bidders to better-understand government requirements and therefore deliver better-quality proposals, but this can be resource intensive and costly for government. For these reasons, a pre-qualification process to select a defined number of bidders to invite to tender, is in most cases preferred. The importance of bidder pre-qualification should not be under-estimated; often credible bidders who may be best-placed to provide the optimal solution for the subject airport and the industry as a whole may be put off by a long list of bidders without suitable experience, as well as signs of under-preparedness by government counterparties. This may be seen as a sign of the validity of the process and impact their willingness to bid.

Where a sales process is undertaken, it is recommended to design the transaction or process to protect against common failings. For example, the Vickrey sealed-bid process, whereby the bidder with the highest price wins at the price of the second-highest bidder, can help prevent the “winner’s curse” of over-bidding.

### Case Study: Brazilian Airport Privatization Program

The multiple tranches of Brazil’s airport privatization program have been recognized as a success from the perspective of government in terms of capital receipts received. However, it has been noted in the industry that the winning bidders paid a high price, and have subsequently been impacted by a declining Brazilian economy. This has manifested itself in difficulties paying royalty payments to government. Some bidders have been accused of over-payment.

Source: How successful has airport privatization been for Brazil?, Travel Markets

## 3. Transaction Management

### Unsolicited proposals and sole source transactions need special attention and care

Unsolicited proposals, i.e. those provided to government in the absence of a formal tender process, and sole-source contracts, i.e. where contracts are awarded in the absence of a competitive process, are not uncommon in the airport industry. For example, in March 2018, a consortium led by Spanish airport operator AENA were reported as presenting an unsolicited PPP proposal to Colombian Procurement Agency ANI with a capital investment plan of USD \$272 million<sup>5</sup>. Sole-source contract awards are also relatively common. In December 2015, Changi Airport Group was announced to have signed a Memorandum of Understanding under a government-to-government agreement to deliver management services for the Airports Authority of India at Jaipur and Ahmedabad airports<sup>6</sup>. The extent of government-owned global airport groups like Changi Airport Group mean government-to-government agreements are not uncommon.

International guidance on unsolicited proposals is still emerging. They are recognized as having potential benefits, particularly in encouraging private sector innovation and efficiency, however, they can also be viewed with suspicion as they may preclude a competitive process.

A competitive process is typically preferable in airport PPP and privatization, for the benefit of the industry and consumers. The global airport industry is a competitive marketplace, and well-structured and managed transactions continue to appeal to investors and operators.

<sup>5</sup> Unsolicited Airports PPP Advances in Colombia, Inframation News,

<sup>6</sup> Government Avoids Concession Route, FirstPost

Where unsolicited proposals are taken forward, governments should seek to stimulate or simulate competition where possible and appropriate, and seek for governments to refer to international guidance documentation on approaches to do so in the absence of national policy, for example the World Bank's 2018 "Unsolicited Proposals Guidelines".

### Case Study: Bermuda Airport PPP

In March 2017, financial close was reached on the Bermuda Airport PPP, under a government-to-government contract between the Government of Bermuda and the Canadian Commercial Corporation ("CCC"), a Crown corporation of the Government of Canada. Under the commercial structure, CCC fully sub-contract the work to Aecon, the concessionaire responsible for financing, constructing and operating the USD \$274m airport over a 30-year concession term.

The process began in 2014, and was not competitively tendered but delivered as an "incremental project development process", a sole-source negotiated process with CCC/Aecon. However, the Government of Bermuda committed to put in place processes that ensure the project satisfies a VfM test, including an independent fairness assessment.

There are instances where unsolicited proposals and sole source transactions can provide VfM. Government needs to put in place robust VfM testing measures on such projects, with appropriate safeguards to prevent a project that is not in the public interest proceeding.

Sources: Government of Bermuda, Airport Redevelopment Project Fact Sheet; gov.bm; airport-world.com

### A competitive and transparent process is a "must have"

Maintaining competition and transparency in the tendering or transaction process is critical to achieve the objectives set, secure value for money, and maximize social and other benefits.

Best practice dictates the process to be transparent, with tenderers having visibility of the process, timeline and key deadlines. The transaction structure and risk allocation should be provided with the tender documents, which should usually include a draft contract. Criteria for pre-qualification and evaluation should be known by participants before they submit tenders.

### Expedited transaction timescales can lead to failure in a number of ways

Governments, particularly given the political pressures associated with PPP and privatization transactions, frequently seek to transact as quickly as possible, putting pressure on the required level of preparation work required. Rushing projects to market, with insufficient specialist analysis (for example, traffic forecasts, legal, regulatory or financial requirements) is a common source of failure. This can lead to a variety of negative outcomes, including transaction failure or lack of market appetite, pushing negotiation to post-award when the government has eroded negotiating leverage, or a risk premium or other adverse commercial terms being applied by the private sector.

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"Upfront preparation will save time during the tender phase as well as the long-run, and cutting corners is a recipe for failure"

Alexandre Leigh – PPPs & Privatization Financial Advisory, International Finance Corporation, World Bank Group

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### Government should continue to appraise the project during the transaction process

At times, unexpected changes can impact the transaction. These might include changes to bidders, changes in financial and other markets, political or regulatory changes. Government should continually be appraising and re-assessing the transaction against its expected outcomes to maximize value for money. In some instances, pausing a transaction may be warranted, as was the case with Sydney Airport in 2001, following the events of 9/11 and their impact on the aviation sector.

#### Case Study: Chicago Midway Airport

The concession transaction for Chicago Midway Airport underwent two failed attempts in 2009 and 2013. In 2009, the City of Chicago cancelled the privatization because the winning bidder failed to secure the financing required due to the global financial crisis. In 2013, the City proposed a shorter lease term and revenue-sharing provision, driven by public pressures. The transaction terms resulted in one of two bidders withdrawing. The City re-appraised its position given the non-competitive nature of the bidding process, and cancelled the project.

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“That doesn’t mean that we shouldn’t consider such investments in the future. It means that we must be willing to say “no” when partnerships don’t measure up to our standards.”

Rahm Emanuel, Mayor of Chicago, 2013

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Source: City Cancels Midway Privatization Deal, Airport Revenue News

### The evaluation process should be independent and objective

A strict and independent transaction evaluation process should be in place, with an objective to avoid any conflicts of interest and ensure fair competition in the selection of a preferred bidder.

The evaluation should be conducted by specialists against the criteria set out in the evaluation framework in the tender documents, reflecting the trade-off between cost, quality and other factors. It is best practice to conduct independent bid evaluations, followed by an independent moderation process to prevent any biases in evaluation.

In some instances, as is the case in the Chicago Midway Airport case study, there may be only one tender in spite of a number of pre-qualified bidders. Such examples require a case-by-case approach, based on assessment of the root causes for this outcome. Where this outcome resulted from issues with the tender documents or process it may be advisable to re-tender the project, learning from these issues. In other cases, if a bidder is fully compliant and passes all bid criteria the procurement may continue, but it is advised to ensure the offer is “on market” through benchmarking in the absence of market comparators received through the tender process. After a preferred bidder is selected, in many jurisdictions there is a standstill period (for example, the European Union) which allows other bidders to consider whether they want to challenge the outcome.<sup>7</sup> This is an additional protection to safeguard the impartiality of the process.

In a number of airport transactions, the presence of multilateral organizations (for example, Multilateral Development Banks) or independent professional advisors have ensured a degree of transparency and due process to a transaction.

<sup>7</sup> Guidance from The EPEC PPP Guide

## 4. Project Implementation

### Government capacity and capability is needed after Financial Close

It is common to see reductions in government resource once a transaction has reached Financial Close. In fact, this is a critical time to ensure the appropriate capability and capacity is in place to safeguard delays and defaults in implementation, and oversee the counterparty so they deliver their commitments. As with all complex projects, a robust governance structure, along with strong budget and quality control should be present. There should be a clear approval process, with a responsibility matrix and a clear delegation of authority.

### Government need to have a plan in place to track and realize the anticipated benefits from the transaction, and communicate them

Realizing the strategic objectives of a PPP or privatization requires proactive management. Past transactions show that public and stakeholder perception of the success of a PPP or privatization process is directly linked to the proper communication of the objectives and benefits of the chosen model. The government in question needs to develop a clear, unified communication strategy and focus on the long-term benefits of the transaction. Further, there is an ongoing need to confirm and manage the anticipated impact, i.e. measuring and demonstrating how the strategic objectives have been met, and proactively managing any underperformance.

### Continuity between the transaction process and its implementation can help realize value

Retaining knowledge of the transaction and commercial structure is a critical success factor for

government to manage commercial arrangements successfully going forward. Continuity between personnel involved in the transaction and development and negotiation of concession terms, and mechanisms to institutionalize their knowledge, increase the likelihood of government being able to effectively manage the concession once operational.

### Government need to continue to act commercially after the transaction has completed

Achieving ongoing value, particularly from a PPP or concession contract, requires ongoing management and commercial acumen. This should be built into the contract where possible, including through performance and other reporting arrangements. In instances where there is limited government capacity or capability, independent concession contract monitoring and audit arrangements should be put in place.

There will continue to be reasons where commercial judgement is required, for example in the case of capital investment plans. Triggers for future investment should be clearly defined in the contract where possible, and should not be arbitrary or lead to incentives for gold-plating. However, technology gains may reduce the required capital investment over time, and contract management should be flexible to ensure these benefits are captured and passed on to consumers.

## ASSESSMENT OF KEY CONCESSION TERMS

PPP contracts can be highly complex and require technical knowledge to be drafted appropriately. Appendix 3 (“Assessment of Key Concession Terms”) provides high-level recommendations on a number of key concession commercial terms and their benefits, particularly in safeguarding public value. This is an indicative selection of key areas of a concession agreement and is not intended to be comprehensive.

## Legal

There should be a clear, transparent and stable regulatory framework, tested with stakeholders, to safeguard government's interest and optimize market interest.

There should be a multi-stage dispute resolution process, recognizing that concessions are long-term partnerships and multiple forms of dispute might arise.

## Scope of Concession and Concession Obligations

The concession should cover services which can be delivered by the private sector with greater effectiveness and/or lower cost than government, or where the private sector is better placed to manage the risk in order to optimize the value for money.

The contract tenure should be tailored to the specific requirements of the airport, particularly where driven by new capital investment requirements, and mechanisms should be in place to deal with terminal value of the airport.

The specifications need to be comprehensive, and consider the inputs of different stakeholders to prevent under- or over-investment. Government need to assess which party is best-placed to develop the design specification and take responsibility (and therefore be liable) in the case of mis-specification. Specifications that are materially incomplete might delay the project and lead government to under-estimate the value for money of the concession.

Triggers for future investments should be clearly defined in the contract where possible to avoid creating an incentive to over-invest. These should not be time-bound and predetermined, but should use a mechanism such as service quality to reflect how, for example, changing technology over a concession period might change required levels of capital investment or influence service level agreements.

Any contract that includes a major infrastructure component should include clear definitions of what factors will trigger a major investment, and what factors could lead to the investment being cancelled. Contracts that hinge on a limited number of major investments should foresee the consequences of such cancellation in advance.

## Concession Monitoring, Management and Termination

There should be clear step-in rights, but they should be clearly justified to avoid being perceived as an irrevocable right to interfere with the concessionaire's operations.

Robust reporting arrangements must be included in the concession contract, including definition of specific service levels, and the periodicity of reporting. This will foster the alignment of objectives of both parties, and allow both accountability and recognition.

Generally, IATA prefers that governments do not allow concessionaires to take excessive risk through their financing strategy in the form of short-term debt. Where a re-financing gain results in a benefit, mechanisms should be considered that share the benefit between airport owners, airlines and end-consumers.

A clear definition of termination payment calculation values is recommended, as are clarity over handover to ensure service continuity. Terminal value clauses should be considered to ensure the concessionaire is incentivized to continue capital and replacement cost investments in the latter phases of the contract.

# Key Takeaways

- Governments pursuing PPP and privatization should ensure they follow global best practice guidance to appraise alternative ownership and operating models and design an appropriate transaction process.
- Governments should not pre-empt any preferred model without sufficient analysis and planning, considering the views of aviation industry stakeholders and consumers.
- Governments and the aviation industry should also be conscious of changes and dynamics in financial markets which impact PSP solutions and their application.
- The assessment of the preferred ownership and operating model should take place in parallel with the assessment of the airport's market power and the development of the appropriate regulatory framework.
- In all cases of PPP or privatization programs, a competitive and transparent process is a "must have".
- Government should consider and take advice on the key terms of a concession contract required to safeguard public value, ensure continuity of service and appropriate investment in the airport, and be realistic on the timescales required to complete a transaction.

# How is a Privately- Owned or Operated Airport Best Regulated?



**When combined with limited or weak economic regulation, all models (public or private) can lead to adverse impacts on airlines and consumers. However, airports where greater control rests with the private sector may carry a higher risk. Strong safeguards are required to prevent market abuse, secure efficiencies, and ensure service quality.**

**IATA advocates for more robust forms of economic regulation to be applied where full privatization is undertaken. Further, it is also recommended that regulators are centralized; appropriately funded; independent; and have a clearly-defined mandate, endorsed by government and defined within legislation.**

## **SAFEGUARDS FOR AIRPORT USERS AND CONSUMERS**

It is common for airports to have a level of market power that gives rise to the risk of an airport imposing excessive charges to its customers, suboptimal investment plans and service standards, and a failure to achieve the desired economic impact.

Airports with significant market power, however they are owned and operated, can abuse this power in the presence of limited or weak economic regulation.

However, private sector participants typically have enhanced and clearer incentives to increase shareholder returns. The increased involvement of the private sector and the resulting transfer of management responsibility and control, which may include the ability to set airport charges, typically requires strong safeguards in the form of economic regulation to prevent market abuse, secure efficiencies, and ensure service quality.

Economic regulation seeks to use government intervention where there is market failure or distortion. Broadly the main reasons for economic regulation include to:

- Restrict excessive pricing;
- Ensure service quality and operational efficiencies;

- Ensure effective capacity through timely and cost-efficient capital investment;
- Ensure wider economic benefits through a healthy and balanced aviation system; and
- Safeguard the interests of the travelling public and airlines.

A regulatory system should aim to mimic competition, giving the travelling public a fair price whilst motivating the airport owner/operator to deliver an appropriate level of service at an appropriate level of charges. The airport owner/operator should be incentivized to identify and implement incremental efficiencies, both in operations and capacity enhancement.

In all cases it is important for governments to focus on the effectiveness of its role as a regulator, enhancing the efficiency of the sector as a whole. There are a range of economic regulatory models that are available to government to achieve this, together with available guidance from ICAO and formal requirements in some jurisdictions, such as the EU Directive 2009/12/EC on airport charges. This guidance should be fully-considered when designing the optimal regulatory model to accompany a change in ownership for an airport.

### Deep-Dive: ICAO – Purpose of Economic Oversight

ICAO defines the primary purpose of economic oversight to:

“Achieve a balance between the interests of airports and air navigational service providers (ANSPs), including government-operated providers, and those public policy objectives that include, but are not limited to, the following:

1. Minimize the risk of airports and ANSPs engaging in anti-competitive practices or abusing any dominant position they may have;
2. Ensure non-discrimination and transparency in the application of charges;
3. Ascertain that investments in capacity meet current and future demand in a cost-effective manner; and
4. Protect the interests of passengers and other end-users.”

Source: ICAO's Policies on Charges for Airports and Air Navigation Services (Doc. 9082)

The purpose of this section of the Booklet is to identify unique regulatory considerations, where the private sector is involved in the ownership and management of an airport.

### COMPONENTS OF EFFECTIVE ECONOMIC OVERSIGHT

Effective and efficient regulation requires a number of key components to enable and empower the regulator. These elements should be considered before the start of any PSP process. In IATA's experience, economic regulation inevitably needs to be adjusted during and after the PSP process. States must exercise caution to ensure that the regulatory framework is truly independently

developed, to avoid it being designed mainly to maximize the sale price of the airport and/or maximize private investor returns.

General Principles:

1. **Respect of the ICAO Principles:** ICAO has a document regarding charges (ICAO DOC 9082) which contains four fundamental principles regarding the setting of aeronautical charges – consultation, transparency, cost-relatedness, and non-discrimination. These principles should be present in any form of regulation selected.
2. **Regulatory Framework:** The legal definition of the regulation to be put in place to support the control, application and implementation of the defined rules, principles or laws.
3. **Regulatory Mandate, Governance and Capability:** The design of the various entities involved in the regulation need to have clearly defined roles and responsibilities, with an effective and appropriately designed mandate by law to undertake these functions, as well as the capacity and capabilities for implementation.
4. **Regulatory Independence:** Economic oversight should be clearly independent from ownership and operations of the airport function as well as from the state entity which handles private involvement in airports. The roles and responsibilities should have no conflict of interest and be clearly defined. The objective should provide stability, safeguard the interests of the travelling public and support investor confidence in the market. The designated regulatory body should have the mandate to set charges, as well as to set a regulatory framework that allows it to fulfil its duties.
5. **Economic Oversight:** Should be clearly defined and balance the interests of airports, governments, investors, travelling public and other stakeholders. It should also be transparent and reflective of market norms to ensure investor confidence and include oversight of service levels, capacity as well as pricing.

6. **Escalation Procedures:** In the event of non-compliance with regulations, there should be a clear and transparent process for enforcement and escalation for conflict resolution.
7. **Regulatory Relevance:** The regulatory function and its mandate should remain relevant. There is the need for reassessment of the market power of the airport(s) and the elected regulatory model applied as the market power and ownership of airports change over time, and always where there is a material change in circumstances. This may result in an alternative regulatory model providing a better fit.
8. **Sufficient Funding, Capabilities and Capacity:** Regulators need to be appropriately funded to enable access to the capacity and capabilities required to implement the type of economic regulation being applied. The capabilities of the regulator should be reflective of the type of regulation applied. For example, in an incentive-based environment the ability to critically assess capital investment plans and safeguard against over or under investment, as well as awareness of financial markets, specifically the appropriate return on investment for comparable asset classes, is important. The costs of effective regulation should be evaluated and incorporated into the government business case, when a change in ownership is considered.
- In many cases, private entities seeking to enter a market are members of large international groups with experience operating in multiple environments and in promoting their interests with multiple regulators. The regulator must be capable to regulate and avoid undue influence from such entities. Further, specialist skills and experience are often required to provide regulators with assurance and comfort in fulfilling their mandate and ensuring airport compliance with regulation, for example considering the role of independent audit.
9. **Centralised Regulatory Function:** There is a risk multiple agencies within a country have similar or overlapping mandates and as a result appropriate oversight “falls between the cracks” or conflicts, undermining the effectiveness of regulation.
10. **Clear Strategy and Regulatory Performance Monitoring:** A regulator should have a defined strategy, with clear performance indicators to allow its performance to be proactively managed. Frequent review of the regulator should be undertaken by an independent body monitoring pre-defined targets and performance indicators. This should ensure that airports, airlines and consumers are consulted, and that the regulatory performance management systems remain appropriate.
11. **Legislative and Ownership Consultation:** When legislative changes are made, the economic regulator should be involved in the process to ensure that the changes’ impact are balanced between all parties. In certain cases, private participation in airports gives rise to contracts or legal instruments that limit the regulator’s ability to exert its powers independently. Involving the regulator can help avoid having, for example, a concession contract that is incompatible with the regulation at hand.

## TYPES OF ECONOMIC OVERSIGHT

Without effective economic oversight, any ownership model, public or private, can adversely impact airlines and consumers; examples include governments demanding significant payments from corporatized airports. However, airports with private sector participation or that have been privatized, in part or in full, carry the highest risk and therefore require stronger safeguards to prevent market abuse, secure efficiencies, and ensure service quality in line with user requirements. Thus identification of the appropriate regulatory model and framework should be undertaken with care.

The following types of economic oversight are typically found in the airport industry. These are listed in descending order of strength.

### Incentive-Based Regulation (Price-Cap)

Under this system, regulated airport charges are set over a certain period (typically, 3 - 5 years), based on operating expenses, depreciation and the cost of capital, discounted by productivity gains. The regulator scrutinizes each element and makes a judgement as to the productivity factor that they think the airport can achieve. Unlike rate of return regulation, the price cap regulation does not regulate returns, but sets incentives to reduce costs. Airports may keep the gains from outperformance during the regulatory period or have the ability to pass them on to the travelling public, in the form of lower aeronautical charges to stimulate growth.

Revenue sharing arrangements, for instance through traffic risk sharing, can be combined with price cap regulation, but this is not the case by necessity.

### Rate of Return Regulation

Under this system, regulated charges are based upon the pre-defined return set by the regulator. The intention is that the charges match the total costs including operating costs, depreciation and the cost of capital, which includes allowable return on the Regulated Asset Base ("RAB").

It is assumed that Incentive-Based Regulation as described here has a greater level of scrutiny of costs than Rate of Return regulation, although in practice, the two approaches can be combined to an extent.

### Regulation by Consultation and Appeals Processes

Consultative regulation is a form of regulatory oversight which enforces general ICAO principles to ensure consultation, transparency, cost-relatedness and non-discrimination during the price setting process. The option for appeals is an important characteristic, which allows a safeguard should the consultation not be undertaken according to established rules or if excessive charges are

applied. Provisions should include the need to consult with users on all aspects underpinning the calculation of charges (including the various stages of investment planning) as well as the ability to implement service level agreements. There should be an independent regulating body that can step-in with the right to determine pricing and service levels. In many cases, mostly in states where there is not enough institutional stability or well defined strategic objectives, this type of regulation can lead to a higher uncertainty both for the airports and airlines as the appeals process can be unpredictable and subject to political interference.

IATA has made its views in respect of consultation and appeals processes and the ACD clear, as outlined in the "deep dive" below.

### Deep-Dive: EU Airport Charges Directive

The EU Airport Charges Directive 2009/12 (the "Directive" or "ACD") provides a baseline for regulating essential features of airport charges aimed at creating a common framework for the regulation of airport charges at EU airports with more than five million passengers per annum.

IATA considers this a minimum standard for governments globally to adopt for airports that have a level of market power.

Key features of the Directive include:

- Airport charges should not discriminate between airport users;
- The calculations of charges should be transparent, and include:
  - Services and infrastructure provided;
  - Calculation methodology;
  - Revenue from different charges;
  - Finance provided by public authorities; and
  - Disclosure of forecast;

- Airport users and associations should be consulted regularly and at least once a year; and
- Countries are required to establish an independent supervisory authority, and in the event that charges cannot be agreed this should be referred to the authority.

In November 2017, the European Commission undertook an assessment of the Directive with a focus on the charges for the use of airport infrastructure. A number of issues were identified, including:

- Insufficient independence and power of the Independent Supervisory Authorities (“ISAs”) to intervene effectively in the airport charges setting process;
- The regulation at airports is not enough targeted to airports with significant market power (or not alleviated where it is potentially not needed); and
- There are unjustified differences in the airport charges setting process across EU airports.

IATA's view is that the Directive should be replaced with a new legislation clarifying the requirements relating to consultation and transparency and strengthen the powers, resources and independence of the ISAs. In addition, require ISAs to apply screening criteria to airports in their jurisdiction to identify those most likely to have significant market power and to determine application of more robust regulatory requirements.

### Regulation by Contract

This system is not a recognized method of economic oversight. It does not require the presence of a regulating entity as regulation is limited to reflecting obligations of the airport contractually, through service standards and pricing.

IATA typically advocates against the absence of a regulatory regime and independent authority to determine charges. However, it is recognized that in some exceptional cases the benefits of engaging a new private sector operator to rapidly improve an under-performing airport can outweigh the imperative to put in place a regulatory regime, particularly in some emerging markets where government capacity is limited and processes to develop and approve a regulatory framework may take several years. In such cases airlines and other stakeholders should be fully-engaged in the development of the required service standards and pricing criteria. If applied due to exceptional circumstances identified above, regulation by contract should be fully-enforced (including through independent review and audit where government capacity is limited), and a commitment to put in place a consultation/appeal process is strongly recommended.

### Price Monitoring (often called Light Touch Regulation)

Under price monitoring, the performance of the airport owner/operator is observed by an independent body who undertakes a regular review of the aviation sector performance. The behavior and performance of airports is closely monitored and the entities responsible for monitoring have the ability to make recommendations to develop alternative regulation. IATA do not support light touch regulation as it is not seen to provide a strong enough level or regulatory safeguard.

This model is applied, for example, in Australia, where the Australian Consumer and Competition Commission annually releases an Airport Monitoring Report. With this form of oversight, corrective action can only be undertaken if the regulatory environment is adapted to address concerns raised by the assigned independent body.

## REGULATORY MODEL SELECTION

The form of regulation applicable to an airport is, in theory, more dependent on the market power of an airport rather than the public or private ownership of an airport. The higher the degree of market power – the stronger regulation needs to be in place. There is, however, one key difference that manifests itself when increasing the degree of private control of the airport. Governments who own airports have to trade-off between profit, efficiency, and long-term impact on the GDP and the economy. In the case of private investors, the impact on the GDP/economy and, in general, their motivation for public interest activities is lower, as the entities focus more on maximizing shareholder remuneration. As such, often regulation needs to be strengthened either by adapting the current regulatory model or by moving to a stronger regulatory model.

Furthermore, some forms of privatization can impact the amount of market power that an airport may have if the private ownership or operation involves changes to the competition or market characteristics for airport services. This would also therefore lead to a need to look at whether the regulatory model needs to be strengthened or “upgraded.”

It is recommended that assessment of the optimal regulatory model be undertaken in parallel to the assessment of an airport’s market power, and selection of the ownership or operating model and level of private sector control.

Airport market power is a key determinant of the type or appropriate form of regulation. Most airports above a certain size have market power. Airports and airport operators with high levels of market power require stronger economic regulation due to the ability to impose onerous pricing on users, which may have limited or no alternatives, due to high switching costs for both airlines and consumers.

A common mistake is to associate market power of an airport only to its traffic level. The type of

traffic (O&D, transfer, business, tourism) capacity, airport networks, separation of tills and the relevant catchment area also have impact on airport market power. There are several approaches to evaluating market power to identify exceptional cases where airports do not have dominant positions. For instance, in 2016, the UK’s Civil Aviation Authority (“CAA”) released CAP 1433, which provides guidance on the assessment of an airport’s market power.

By contrast, airports with high levels of competition can typically apply lighter forms of oversight. However, the optimal regulatory model need to be reassessed when there are changes in circumstance, as an airports market power as well as the market in which it operates can change over time.

### Potential risks to be addressed in economic oversight when introducing a change in airport ownership

There are a number of potential risks that need to be addressed through economic oversight, including:

- **Under-investment** can occur due to lowering costs and extracting profits from existing assets. This is particularly the case when charges are pre-determined and without a specific link to investments or service levels.
- **Unnecessary investments** with a desire to build big for greater returns may be prioritized, while costs can be passed on to airlines and passengers. This can happen on RAB-based charges where there is not enough scrutiny of investments in terms of scope, timing and cost efficiency.
- **Increase in non-regulated charges** through a change in the till approach can be used to attract more private bidders or receive higher bids.

The table in Appendix 4 (“IATA’s Regulatory Framework Risk Assessment”) provides a summary of the effectiveness of the different regulatory models in addressing the risks of privatization.

There are also specific notes in areas where privatization has, in IATA's experience, led to a need for further development of regulatory models.

### **Risk-based assessment to selection of the appropriate type of economic oversight**

Figure 9 ("Type of Economic Oversight Decision Tool") represents an illustrative, risk-based approach to selection of the appropriate type of economic oversight. In this model the risk of an abuse of market power at an airport is assessed based on two key dimensions that influence the features of an airport:

1. **Airport Market Power** – which reflects the ability of an airport to abuse its position; and
2. **Airport Ownership Model** – which reflects the incentive of an airport to abuse its position, and therefore the probability of such an abuse to occur.

In principle, the greater the risk of abuse, the more stringent the regulatory model should be. However, it is acknowledged that there should be a test on whether the preferred regulatory mode is actionable in reality or not.

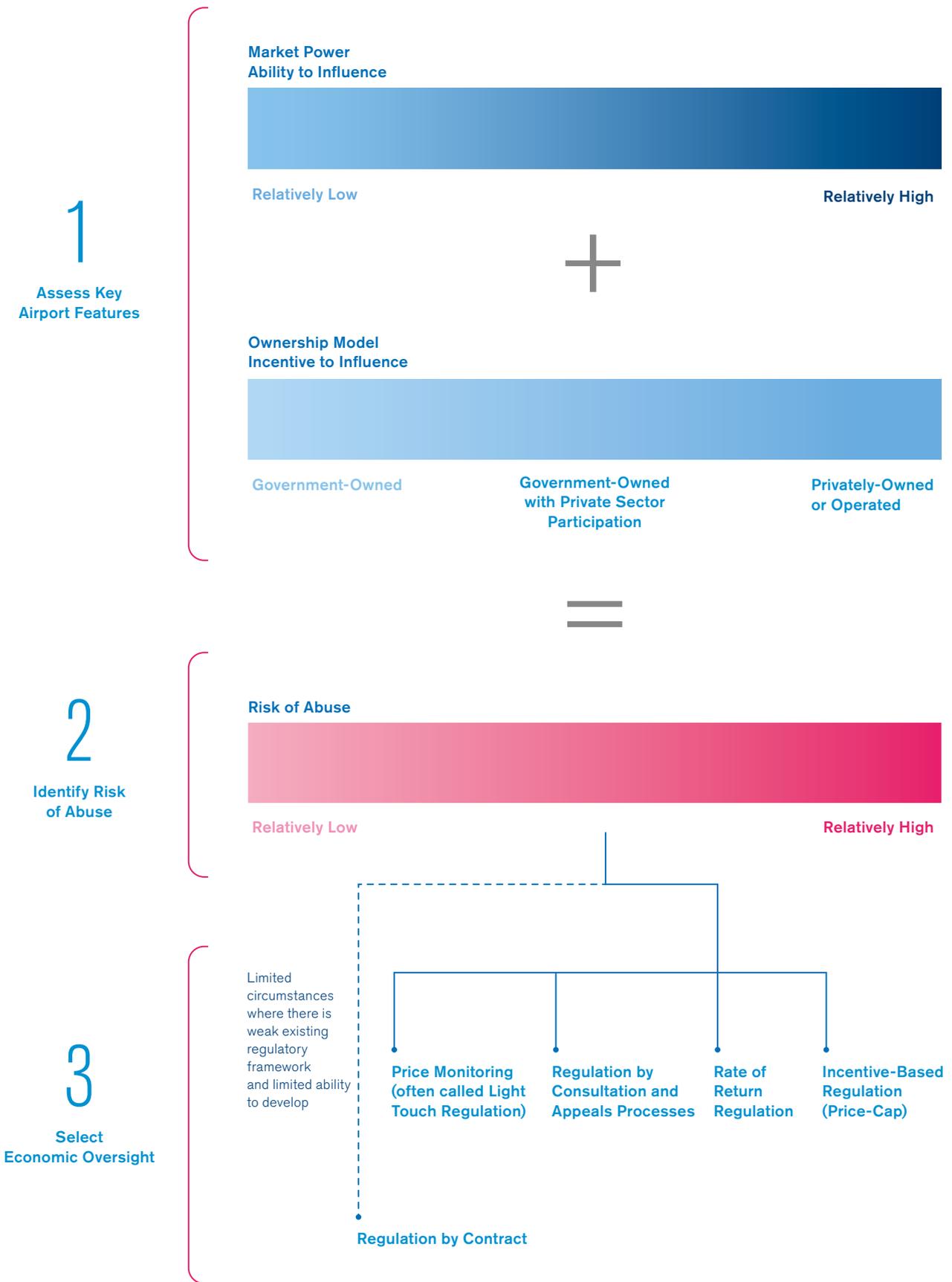


Figure 9. Economic Oversight Decision Tool

# Key Takeaways

- When combined with limited or weak economic regulation, all models (whether public or private) can adversely impact airlines and consumers. However, airports where greater control rests with the private sector may carry a higher risk due to the different incentives faced. Robust safeguards are required to prevent market abuse, secure efficiencies, and ensure service quality.
- IATA advocates selecting the optimal regulatory model in parallel to assessing an airport's market power, and selection of the ownership and operating model. Stronger forms of economic regulation are required where a full privatization is undertaken.
- The appropriateness of a regulatory model needs to be continually assessed over time. Further, it is recommended that regulators are: centralized; appropriately funded; independent; and, have a clearly-defined mandate, endorsed by government with a clear escalation process, defined within a regulatory framework.

# Appendix 1

**PSP Toolkit**



There are a range of “best in class” guidance documents and technical manuals which provide a framework to government and their stakeholders as they establish the business case for PPP and privatization projects, assess alternative options, financially and commercially structure the deal, and execute and manage delivery. An indicative selection of these documents is included here.

## EXAMPLE NATIONAL GUIDANCE AND POLICY DOCUMENTS

UK (HM Treasury), “The Green Book: Central Government Guidance on Appraisal and Evaluation” (Source: [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/685903/The\\_Green\\_Book.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/685903/The_Green_Book.pdf))

Infrastructure Australia, “National Guidelines for Infrastructure Project Delivery” (Source: [infrastructure.gov.au/infrastructure/ngpd/index.aspx](http://infrastructure.gov.au/infrastructure/ngpd/index.aspx))

New Zealand Treasury, “Public Private Partnership (PPP) Guidance” (Source: [www.treasury.govt.nz/statesector/ppp/guidance](http://www.treasury.govt.nz/statesector/ppp/guidance))

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# Appendix 2

## History of PSP in the Airport Industry



## HISTORICAL GROWTH DRIVING NEW OWNERSHIP AND OPERATING MODELS

Many airports were historically built with government support and, in many cases before the 1950s, with military use in mind. In these cases airports were often directly owned and managed by a Ministry or Department of Aviation or similar entity.

From the 1950s onwards the declining cost of air transport, globalization trends and dynamics, increased consumer ability and propensity to travel resulted in high growth rates in the aviation industry, as illustrated by the growth in passengers carried in the chart below:

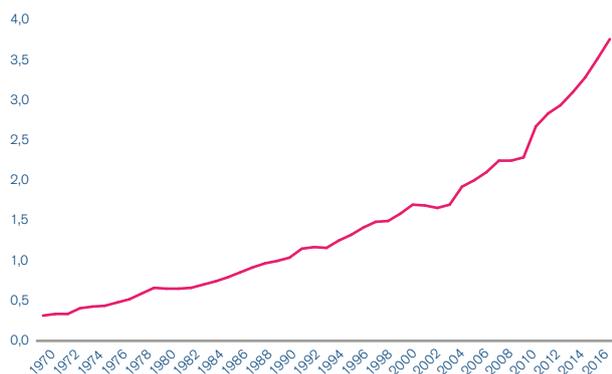


Figure 10. Air Transport, Passengers Carried, 1970-2016<sup>1</sup>

Further deregulation of the aviation market in Europe and the advent of budget travel from the 1990s onwards led to increased pressure on existing infrastructure and demand for material increases in global capacity, which continues today. As the aviation industry grew dramatically, it also became more professionalized and specialized.

<sup>1</sup> Air Transport, Passengers Carried, World Bank

The response to this from governments has been to explore and deploy a broader set of funding solutions and ownership structures. Over the past decades the vast majority of airports have transitioned out of government Ministries or Departments into government trading entities, solely responsible for the management of an airport or airports. Many have gone further, and established corporate entities as airport companies (described within this Booklet as “corporatization”).

In one of the first examples of this trend, in 1966 ownership and control of Heathrow, Gatwick, Stansted and Prestwick moved from the United Kingdom’s Ministry of Aviation to the British Airports Authority (“BAA”), established by the Airports Authority Act 1965. Since then a large number of airports globally have followed a similar course and been established as corporate entities separate from government. In some cases, this has been a pre-cursor to privatization, but often these entities are still owned and controlled by government.

There have been a number of drivers of this trend. Corporatized airports were often created to ensure improved sector governance, with a clear separation of airport authorities from governments’ regulatory functions, and improved accountability and corporate governance through a board structure. In many jurisdictions, they have greater flexibility to hire specialists from outside of the government, for the specialized activities involved in managing an airport, resulting in improved commercial performance and responsiveness to customer needs. Importantly, the closer alignment and control of revenues and costs has often lead to enhanced financial performance. In particular, it is recognized that airports are long lived capital assets and control over longer-term financial and capital investment planning is critical for management efficiency. An airport’s responsibility for its own Balance Sheet and (in varying degrees) financial self-sufficiency

can yield significant efficiency benefits and help avoid inefficient investment associated with shorter-term political business cycles.

Whilst many airports remain as government-owned and controlled corporate entities, this corporatization model has also been used as a stepping-stone towards privatization in many jurisdictions. Again, the UK was a front-runner in this regard. In 1987, BAA Plc shares were offered for sale and the company was listed on the London Stock Exchange. Since then there have been a range of airport privatization programs globally. New Zealand's largest airports were incorporated from the late 1980s, with the government gradually selling its shareholding. Australia's Airport Privatization Program saw Brisbane, Melbourne and Perth airports sold with long-leases in 1997; Sydney followed in 2002, along with a number of other major and regional airports previously owned and managed by the Federal Airports Corporation. All of these examples saw ownership and operation of a number of airports transfer from a government trading agency to multiple private sector owners.

Growth rates in emerging markets and demand for new aviation infrastructure, amongst other factors, has seen PPP and privatization models adopted more broadly. In Brazil, in advance of the 2014 World Cup and 2016 Olympic Games, majority shareholdings in concessions were sold with 20-30 year concessions through auction in 2012. PPP and concession models have been used in different ways to build, finance, manage and operate a range of greenfield and established airports in major regions globally, including Latin America (for example, Bolivia, Chile, Argentina, Mexico, Peru and Ecuador), Middle East and North Africa (for example, Turkey, Jordan and the Kingdom of Saudi Arabia), as well as in infrastructure markets with a longer record of using private finance, such as Europe.

## MARKET TRENDS AND DYNAMICS

High growth trends are set to continue in the aviation industry, with increasing population levels, economic growth and urbanization trends increasing pressure on existing airport infrastructure. In parallel, the industry continues to become increasingly reliant on specialist technology and management expertise, evidenced by the globalization of successful airport operators owning a network of airports globally, such as Fraport, TAV, Malaysia ADP, Airports and Changi Airport Group. Travelers' have become more discerning, and customer expectations continue to grow. As a result, leading airports are shifting to be more customer-centric, focused on "travel as an experience", leveraging technology and innovation. Aviation also continues to be seen as a strategic national industry and an economic growth driver. These are all positive trends for the aviation industry, for airports, airlines, and ultimately customers.

Growth trends continue to support significant expansion and infrastructure investment at existing airports, as well as the need for new greenfield airport developments, although forecasted growth varies by region.

Similarly, the existing growth trends towards greater PSP in financing, building and managing airports are expected to continue, but with significant variation between regions.

### Africa and Middle East ("AME")

Saudi Arabia was a relatively early adopter of PSP and has applied various ownership and operating models. These include the award of management contracts to Changi Airports Group (King Fahd International Airport in Dammam) and Fraport (King Khaled International Airport in Riyadh and King Abdulaziz International Airport in Jeddah), in 2008. In 2009, the General Authority of Civil Aviation launched the process for a 25 year concession for Madinah, which was secured by a consortium led

by TAV and is widely considered a success by both investors and the government.

Jordan, with the support of the International Finance Corporation (“IFC”), launched a concession process in 2007 seeking additional financial capacity and capabilities to redevelop Queen Alia Airport. This too is considered a regional success and has recently been renegotiated to accommodate further required expansion of the airport with the support of its existing equity investors and financial facilities, and was successfully re-financed. Further transactions are anticipated in the region as governments seek economic diversification, reduced dependence on oil revenues, and alternative finance sources to expand airport infrastructure. In parallel, the less mature markets seek to leverage international management capabilities to transfer knowledge and build domestic capabilities.

Forecast growth in African passenger traffic presents a key opportunity for the airport industry and the communities they serve. However, private sector involvement in Africa’s airport industry has been relatively slow to take off. In Egypt, two regional airports (Marsa Alam and Al Alamain) are Build-Operate-Transfer (“BOT”) concessions, and Cairo International Airport is operated under an 8-year management contract with Fraport. Similarly, two of Tunisia’s airports (Enfidha and Monastir) are under BOT concessions, and operated by TAV. Chinese investors have also financed new airports in Africa such as the new Bugesera Airport in the Republic of Rwanda, contracted under a BOT concession model. China’s Anhui construction and China National Aero-Technology Import and Export Corporation (“Catic”) were selected to build a new terminal in Nairobi to handle circa 20m passengers per annum. However, it was put on hold in 2016 because of excess capacity, following upgrades to the existing airport.

Ghana Airports Company, which is a corporatized government entity, secured USD 400m in 2015 in

funding from commercial and development finance institutions including the African Development Bank to finance the construction of a new Terminal 3 in Accra.

## Europe

Europe is a mature privatization market, with continued activity in the secondary market. France has commenced a program recently, granting concessions for Nice Airport in 2016. There is also the anticipated privatization of Aéroports de Paris. There are PPP and privatization processes in Italy and Greece, and Nikola Tesla Airport in Serbia is as at May 2018 at advanced stages to transfer to Vinci with more activity anticipated in Eastern Europe. The Lithuanian Government is seeking private investment in the state-owned company, Lithuanian Airports, to improve efficiency and modernize airport infrastructure. Also, the Government of Montenegro is considering a PSP initiative for the two international airports, in Tivat and Podgorica, but as at the writing of this Booklet no timescales have been confirmed.

## China and North Asia

Despite the considerable growth in passenger numbers and quantum of airports under development or being expanded, there has been limited PSP activity across the airport industry in China. In 2015 China launched a series of transactions which resulted in seven airports being privatized but there is limited activity anticipated in the near future. In 2015 the Airports Corporation of Vietnam launched an Initial Public Offering (“IPO”) for a 3.47% stake in the company. The sale was 1.5 times oversubscribed and raised US \$51.6 million, which was supported by strong passenger growth in the lead up to the IPO.<sup>1</sup>

<sup>1</sup> Reuters.com

## Asia Pacific

In the Philippines, GMR secured a 25-year concession to develop and operate the Mactan-Cebu Airport in 2014; however, the broader program for additional airports to be brought to market was abandoned with the change in government. India was an early adopter of PSP with Delhi and Mumbai being privatized in 2004. The Airport Authority of India in 2017 secured backers for two greenfield projects: Navi-Mumbi and Mopa-Goa, with additional regional airports under consideration as a part of a broader review of India's aviation sector, which is forecast to grow in excess of 3.4% CAGR between 2014 and 2034. In late 2014, the Japanese Government launched its first airport concession for Kansai and Osaka Airports with Vinci and local partner ORIX securing a 44-year concession for the airport in an US \$18 billion deal. There are a number of other Japanese airports such as Hokkaido, Fukuoka at advanced stages of securing PSP in the form of similar length concessions as at the writing of this Booklet.

## The Americas

Full privatization is not common in the US or Canada; the US's Airport Privatization Pilot Program ("APPP") has resulted in only two airport PPPs, Puerto Rico securing PSP through a 40-year concession, and Stewart Airport (Newburgh, New York). However, there are various examples of airports leveraging alternative financing models as an alternative to using the private sector to fund major development projects. There is a growing trend for airports to involve the private sector on a project specific basis such as funding terminal development, evidenced by La Guardia Central Terminal Replacement Project. The New York Port Authority has selected Meridiam, Skanska and Vantage Airport to design, build, operate and maintain the Central Terminal B facility through to 2050. The project will be financed using private equity and debt, funded through passenger facility

charges, retail, and airline revenues. The City of Denver in 2017 awarded a 34-year USD \$1.8 billion PPP contract for a terminal concession. At JFK Airport, JetBlue is seeking a partner to develop Terminal 6 and 7. At the time of writing, the Port Authority of New York is in the process of tendering two projects, one for a new terminal A at Newark Airport and a 15-year management contract to operate the terminal. In addition the City of St Louis has applied for a slot in the FAA's APPP. Florida's Hendry County's decision on 27 February 2018 to approve the sale of the Airglades Airport to the private investor group, The Airglades International Airport consortium, could create the US' first fully-private cargo airport, pending completion of the Federal Aviation Administration's (FAA) application process.

In Canada, the government has been exploring privatization; however, it would appear this program has been put, at the time of writing on hold whilst further analysis of the available options are considered.

Elsewhere in The Americas, recent years have seen elevated levels of PSP activity in airports, as high passenger growth rates have put pressure on aging infrastructure, combined with limited government capacity to fund required upgrades. Brazil has completed three tranches of airport concessions, starting in 2012, and Colombia has introduced new regulations providing greater clarity for investors as they seek to stimulate PSP and investment.



# Appendix 3

## Assessment of Key Concession Terms



PPP contracts are highly complex and require technical knowledge to be drafted appropriately. This appendix provides high-level recommendations on a number of key concession commercial terms, which can help safeguard public value. This is an indicative selection of key areas of a concession agreement and is not intended to be comprehensive:

Key Concession Area	Recommendation	Benefits
<b>Legal</b>		
<p><b>Unilateral Rights</b></p> <p>Rights to amend Concession Agreement, which government may seek to retain unilaterally in some cases to the detriment of market interest</p>	<p>Government should ensure a clear, transparent and stable regulatory framework, tested with stakeholders (particularly around pricing) prior to inviting bidders</p>	<p>A well-defined regulatory framework should define the rights of government in case a contract is established, thereby minimizing the need to include unilateral amendment rights in a Concession Agreement. This should safeguard governments' interest while optimizing market interest</p>
<p><b>Governing Law and Dispute Resolution</b></p> <p>Determines where and how disputes will be heard, including the governing law</p> <p>The court system should be assessed to decide if alternative form(s) of dispute resolution may be more appropriate in the Concession Agreement</p>	<p>A multi-stage dispute resolution process is recommended, recognizing that concessions are long-term partnerships and multiple forms of dispute might arise. Further in some instances redress through a domestic court system may not be deemed sufficient by international investors</p>	<p>In principle, government and the concessionaire should be incentivized to escalate disputes based on their criticality, according to a process agreed in advance. An unclear dispute resolution process might lead to bidders' risk pricing and leading to sub-optimal concession terms and outcomes for government</p>
<b>Scope of Concession and Concession Obligations</b>		
<p><b>Roles and Responsibilities</b></p> <p>The range of services to be provided through the PPP contract, and the allocation of roles and responsibilities to provide these</p>	<p>The concession should cover services which can be delivered by the private sector with greater effectiveness and/or lower cost than government</p>	<p>Allocating the appropriate scope to the concessionaire should optimize the value for money</p>
<p><b>Contract Duration</b></p> <p>The tenure of the concession contract.</p>	<p>The contract tenure should be tailored to the specific requirements of the airport, particularly capital investment plans, and based on an assessment of the optimal length to secure value for money for all stakeholders</p>	<p>Aligning the tenure to capital investment plans will support reaching a feasible business case for the concessionaire whilst ensuring government control is not "given away" for longer than is necessary</p>
<p><b>Commencement Date</b></p> <p>The date for the start of the concession</p>	<p>The Commencement Date should be realistic, reflecting necessary approvals and other requirements. Government should seek late commencement protection</p>	<p>Late commencement protection should safeguard the government against failings in service continuity, and incentivize private sector delivery</p>

Key Concession Area	Recommendation	Benefits
<b>Scope of Concession and Concession Obligations</b>		
<b>Design Specification</b>	The specifications need to be comprehensive, and consider the inputs of different stakeholders to prevent under- or over-investment. Government need to assess which party is best-placed to develop the design specification and take responsibility (and therefore be liable) in the case of mis-specification	Specifications that are materially incomplete might delay the project and lead Government to underestimate the value for money of the concession. Taking into account different stakeholder's views should ensure the specifications are fit for purpose and feasible
<b>Airport Infrastructure</b>		
<b>Capital Investment Triggers</b>	<p>Capital investments should be based upon a consulted and detailed demand/capacity analysis linked to demand triggers clearly defined in the contract where possible and should not be arbitrary. Investment decisions should not be time-bound or pre-determined, recognizing that demand changes over time, and technology gains may improve the efficiency of airport infrastructure resulting in deferred investment over time. Contract management should be flexible to ensure these fundamental airport planning elements result in balanced capacity and demand in all stakeholder's interests</p> <p>Solutions to prevent arbitrary capital investment, overinvestment and underinvestment include:</p> <ul style="list-style-type: none"> <li>▪ Independent demand/capacity assessment and technical analysis (e.g. buildings, runways, etc.) that would include a consultation process with users before a concession tender is issued</li> <li>▪ Regular Traffic Forecast reviews such as every five years with an annual check are useful to determine the broad scale and timing of infrastructure development</li> <li>▪ Using Airport Service Level Agreement reports to identify bottlenecks and trigger a review of what action may be required (i.e. operational improvements to optimize existing infrastructure, or capital investments )</li> </ul>	Avoids arbitrary or predefined investments leading to over- or under-investment, Negative consequences could impact airport service quality, returns to government and the private sector, and potentially leading to unnecessary airport charges to users

Key Concession Area	Recommendation	Benefits
Airport Infrastructure		
<p><b>Consultation</b></p> <p>Mandated and transparent consultation with the airline community regarding capital investments at defined project stages, levels of service and airport service level agreements within the concession contract</p>	<p>Early, ongoing and structured consultation between airports and airlines is essential to support transparent, informed decision making and to ensure airport facilities are functional, fit-for-purpose and cost effective for airline customers</p> <p>A Business Case clearly demonstrating costs, benefits and a return on investment for airline users is critical and essential</p> <p>Constructive and collaborative airport-airline community dialogue with the objective of aiming towards consensus decision making</p> <p>Provision for an independent regulator should be made to oversee the consultation process and make a final determination if no consensus agreement can be reached</p> <p>IATA provides best practice guidance regarding capital development processes referenced in the “Best Practice Consultation – Airport Infrastructure” (noting this is still in draft form)</p>	<p>Capital investments that deliver airline customers passenger, operational service level requirements, at a price they are willing to pay through airport charges</p> <p>The buy-in and support of airline customers to capital investments, service levels and related airport charges</p> <p>Investments that deliver a clear return on investment for users</p> <p>Informed, transparent decision making for all stakeholders</p> <p>Meaningful and effective consultation is an important means for maximizing the benefits of investments by aligning capital planning objectives with airport and airline business plans. Failing to do so may result in uncoordinated business strategies and investments that are incorrectly prioritized, mistimed, or not functional and cost effective</p> <p>A healthy exchange of ideas between airports and airlines can identify inefficiencies and generate ideas on how existing capacity can be better utilized whether that is from changing processes or systems. In addition, future scenarios can be taken into account so that planned infrastructure is flexible, functional, and able to adapt to technological trends and changes</p>

Key Concession Area	Recommendation	Benefits
Airport Infrastructure		
<p><b>Airport Master Plan</b></p> <p>Airport master plan to support long-term planning and efficient infrastructure development</p>	<p>An Airport Master Plan is essential to guide the future infrastructure development in an efficient and logical manner. Without a master plan there is a risk that short-term decision making will result in capacity enhancement projects being poorly located or inappropriately sized, resulting in wasted CAPEX or restrictions on the airport's overall capacity or performance</p> <p>Regardless of the term of a concession agreement, an airport master plan should be mandated. The "ultimate" end game master plan should be developed regardless of the concession term</p> <p>The master plan should be consulted on and agreed with users and reviewed at least every five years</p>	<p>This will ensure that the concession agreement is compatible with the airport's development plans and investments.</p>
<p><b>Airport Service Level Agreements ("ASLA")</b></p> <p>Performance measurement for airport facilities and assets</p>	<p>The establishment of Airport Service Level Agreements (ASLA) is essential to deliver airline users' requirements in return for the charges they pay</p> <p>ASLA's promote the efficient use of airport infrastructure and improve the passenger experience, while giving the airport and opportunity to enhance its reputation for quality and accountability. A robust system of monitoring and reporting on service quality should be put in place, based on objective, quantitative metrics</p> <p>IATA provides best practice guidance and recommended practices in its "Airport Service Level Agreement (SLA) – Best Practice."</p>	<p>Delivers airline Users needs in return for the airport charges</p> <p>An ASLA measures the performance of an airport's facilities and assets on an ongoing basis and helps ensure the consistent and timely delivery of services. It provides a framework for agreed operational performance measures and clearly establishes the link between service quality and the charges users pay</p>

Key Concession Area	Recommendation	Benefits
<b>Concession Monitoring, Management and Termination</b>		
<p><b>Step-In / Cure Rights</b></p> <p>Step-in rights in the case of concessionaire default, for example where there is serious risk to health and safety</p>	<p>There should be clear step-in rights, but they should be clearly justified to avoid being perceived as an irrevocable right to interfere with the concessionaire’s operations</p>	<p>Step-in rights strictly limited to specific situations should ensure government are able to act in the case of a major issue, while the concessionaire feels confident that it remains in control of its operations</p>
<p><b>Reporting and Monitoring</b></p> <p>Regular reporting requirements covering performance indicators and other reporting requirements (for example, financial accounts and management reports)</p>	<p>Robust reporting arrangements must be included in the concession contract, including definition of specific service levels, and the periodicity of reporting. Government should retain audit rights</p> <p>Where government capacity and capability is limited, independent concession contract monitoring and audit arrangements can be put in place</p>	<p>Defining the reporting arrangements will foster the alignment of objectives of both parties, and ensure accountability for service and outcomes</p>
<p><b>Refinancing Gains</b></p> <p>Mechanism for government to capture some of the benefit from a refinancing on preferential terms by the concessionaire</p>	<p>Generally, IATA prefers that governments do not allow concessionaires’ to take excessive risk through their financing strategy in the form of short-term debt. Therefore, refinancing is considered here as upside only</p> <p>Where a re-financing gain results in a benefit, IATA advocates that the benefit be shared with airlines and consumers</p>	<p>Excessively risky short-term financing strategies represent a “gamble” on the future price of debt and may lead to increased financial stress for the concession Special Purpose Vehicle, ultimately increasing the risk of bankruptcy</p> <p>Refinancing gains reflect in part market movements, and benefits associated with these should be passed to end users</p>
<p><b>Termination and Contract End</b></p> <p>Mechanism to terminate the concession contract, including early termination for default, force majeure, or voluntary reasons, or at the end of the contract term due to the effluxion of time</p>	<p>A clear definition of termination payment calculation values is recommended, as are clarity over handover to ensure service continuity</p> <p>Terminal value clauses should be considered</p>	<p>Terminal value clauses will ensure the concessionaire is incentivized to continue capital and replacement cost investments in the latter phases of the contract, and a fit-for-purpose and high performing airport is reverted to government</p>

# Appendix 4

## IATA's Regulatory Framework Risk Assessment



Types of Economic Oversight

Privatization Consideration	No Regulation <sup>1</sup>	Monitoring Regulation	Consultation and Appeals	Regulation by Contract	Cost-Based Regulation / Rate of Return	Incentive-Based/ Price-Cap <sup>2</sup>
Underinvestment: Can occur due to lowering costs and extracting profits from existing assets without provisioning for required levels of service quality	<p>Airports will invest if there is no congestion, but there is a risk of abuse if there is congestion</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>▪ No known mitigation</li> </ul>	<p>Airports will invest if there is no congestion, but there is a risk of abuse if there is congestion</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>▪ No known mitigation</li> </ul>	<p>If an airport does not invest – they will likely not consult or minimally consult. This is very difficult to appeal as airlines do not have the ability to put in counter-proposals</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>▪ Regulators to set rules for frequent consultations on charges/ investments/ service levels, and allow for appeals regardless of whether there is a proposed change in charges or not</li> </ul>	<p>The private investors will want predictability in the contract to ensure they reduce their risk. This predictability means some parameters will be fixed. The actual environment will change and those parameters will likely be wrong. The investors may sweat the assets to maximize profitability</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>▪ Set quality standards in the contracts and triggers for capital investments. Specifically, reference standards such as the IATA Airport Design and Reference Manual that could be used to state optimal design criteria</li> <li>▪ Apply penalties or use the appeal mechanism if the quality standards or triggers are not respected</li> </ul>	<p>Generally not an issue under this type of regulation</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>▪ Consult to have the airport and airlines agree to investment plans</li> </ul>	<p>Significant risk of underinvestment to maximize return within the regulatory period</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>▪ Mandate long term planning with capital triggers</li> <li>▪ Focus should be on setting expected capacity and service level parameters through user consultation</li> <li>▪ Impose financial penalties in case of non-delivery of investments (including claw backs)</li> <li>▪ Ensure investment is applied in a balanced way across airside and terminals</li> </ul>

<sup>1</sup> Except for competition law

<sup>2</sup> Price cap = incentive based regulation based on forecast building blocks reviewed periodically

## Types of Economic Oversight

Privatization Consideration	No Regulation <sup>1</sup>	Monitoring Regulation	Consultation and Appeals	Regulation by Contract	Cost-Based Regulation / Rate of Return	Incentive-Based/ Price-Cap <sup>2</sup>
Overinvestment: A desire to “build big” for greater returns may be prioritized, while costs can be passed on to airlines and passengers	<p>Risk of over-spending in unneeded areas and / or recovering costs from airlines and passenger for facilities they do not need or use</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>No known mitigation</li> </ul>	<p>Risk of over-spending in unneeded areas and/or recovering costs from airlines and passengers for facilities they do not need or use</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>No known mitigation</li> </ul>	<p>Risk that insufficient information will be provided or that consultation will be started too late in the process</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Regulators to set rules for frequent consultations on charges/ investments/ service levels, and allow for appeals regardless of whether there is a proposed change in charges or not</li> </ul>	<p>Risk of omitting factors regarding the market (e.g. assuming consistent growth) leading to unneeded investment</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>The same as for underinvestment but specifically, reference standards such as the IATA Airport Design and Reference Manual could be used to state optimal design criteria</li> </ul>	<p>High risk that the asset base will be inflated to generate higher returns</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Strong consultation process on investments, appeals procedure and cost benchmarking done by an independent third party</li> </ul>	<p>High risk that the asset base will be inflated to justify higher price cap</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Strong consultation process on investments, appeals procedure and cost benchmarking done by an independent third party</li> </ul>
Till Shift: Single to Hybrid or Dual till can be used to attract more private bidders or receive higher bids	<p>High risk of shift to dual/hybrid till without justification</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>No known mitigation</li> </ul>	<p>High risk of shift to dual/hybrid till without justification</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>No known mitigation</li> </ul>	<p>High risk of shift to dual/hybrid till without justification</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Regulator to set ex-ante principles/ methodology on how charges should be calculated (including a decision on the till)</li> </ul>	<p>Risk that the contract includes a till model that will increase the sale price</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Regulators should select the till in the best interest of consumers, not to maximize the appeal to investors</li> </ul>	<p>Risk of shift to a dual/hybrid till environment to maximize profits, and then inflating the cost base on the aeronautical charges to maximize return</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Regulators should select the till in the best interest of consumers, not to maximize the appeal to investors</li> </ul>	<p>Risk of shift to a dual/hybrid till environment to minimize the number of revenue sources that count towards the price cap</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Regulators should select the till in the best interest of consumers, not to maximize the appeal to investors</li> </ul>

<sup>1</sup> Except for competition law

<sup>2</sup> Price cap = incentive based regulation based on forecast building blocks reviewed periodically

Types of Economic Oversight

Privatization Consideration	No Regulation <sup>1</sup>	Monitoring Regulation	Consultation and Appeals	Regulation by Contract	Cost-Based Regulation / Rate of Return	Incentive-Based/ Price-Cap <sup>2</sup>
Pre-determination of Charges: Setting charges in concession contracts may lead to a focus on profit maximization and not allow any regulatory intervention such as passing on efficiencies to consumers	Not applicable	Not applicable	Slight risk if there is a consultation/appeals mechanism but subject to a predefined charges formula included in a concession contract (which would render the consultation/appeals process meaningless)  <b>Possible mitigations:</b> <ul style="list-style-type: none"> <li>Fix principles and not parameters and ensure a consultation and appeal process is implemented</li> </ul>	Contracts that pre-determine charges will lack flexibility needed for a changing market  <b>Possible mitigations:</b> <ul style="list-style-type: none"> <li>Fix principles and not parameters and ensure a consultation and appeal process is implemented</li> </ul>	Unlikely, unless a multi-year framework is in place. The Rate-Of-Return form means charges will vary between periods but could be quite volatile  <b>Possible mitigations:</b> <ul style="list-style-type: none"> <li>Include revision clauses in any multi-year framework and avoid excessively long periods of time</li> <li>Foresee an appeal process</li> </ul>	Charges are by definition pre-determined. Risk of pricing to the cap even if that is above efficient levels  <b>Possible mitigations:</b> <ul style="list-style-type: none"> <li>The cap needs to be reviewed periodically in order to adjust charges and pass efficiencies on to consumers</li> <li>Construct the cap on the basis of efficient, allowable costs</li> </ul>
Concession Fees: Increases in fees paid to the government may be passed on to airlines and their passengers through artificially higher charges, while governments do not necessarily provide any additional service in return for the concession fees	High risk of excessively high fees  <b>Possible mitigations:</b> <ul style="list-style-type: none"> <li>No known mitigation</li> </ul>	High risk of excessively high fees  <b>Possible mitigations:</b> <ul style="list-style-type: none"> <li>No known mitigation</li> </ul>	High risk of excessively high fees unless there is a government or regulatory step-in  <b>Possible mitigations:</b> <ul style="list-style-type: none"> <li>Exclude concession fees from allowable expenses, they should be paid from the airport's profit</li> </ul>	High risk of excessively high fees unless there is a government or regulatory step-in  <b>Possible mitigations:</b> <ul style="list-style-type: none"> <li>Exclude excessive concession fees from allowable expenses, they should be paid from the airport's profit</li> </ul>	High risk of excessively high fees unless there is a government or regulatory step-in  <b>Possible mitigations:</b> <ul style="list-style-type: none"> <li>Exclude excessive concession fees from allowable expenses, they should be paid from the airport's profit</li> </ul>	High risk of excessively high fees unless there is a government or regulatory step-in  <b>Possible mitigations:</b> <ul style="list-style-type: none"> <li>Exclude excessive concession fees from allowable expenses, they should be paid from the airport's profit</li> </ul>

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Privatization Consideration	Types of Economic Oversight					
	No Regulation <sup>1</sup>	Monitoring Regulation	Consultation and Appeals	Regulation by Contract	Cost-Based Regulation / Rate of Return	Incentive-Based/ Price-Cap <sup>2</sup>
Increases in Non-Regulated Fees: Fees such as fuel fees, ground handling infrastructure, catering infrastructure, airline office space, lounges, can occur in order to increase profits outside of any regulated charges area	Not applicable	Not applicable	<p>Strong incentive to increase revenue from anything not regulated and for the airport to create new services/activities outside of the perimeter of regulation. There is also an inherent difficulty to define the scope of regulation</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Require the consultation and appeals process to apply to both regulated and non-regulated charges (particularly those related to aviation activities)</li> </ul>	<p>Strong incentive to increase revenue from anything not regulated and for the airport to create new services/activities outside of the regulated perimeter, with an inherent difficulty to define scope</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Define the regulated fees by excluding non-regulated activities.</li> <li>Require the airport to demonstrate clear process for setting of non-regulated fees in line with market. For fuel, ground handling and catering-related fees, these should be cost-related as per ICAO policy</li> </ul>	<p>Strong incentive to increase revenue from anything not regulated and for the airport to create new services/activities outside of the regulated perimeter</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Apply the rate of return to all activities (aeronautical or not)</li> <li>Require the airport to demonstrate clear process for setting of non-regulated fees in line with market. For fuel, ground handling and catering-related fees, these should be cost-related as per ICAO policy</li> </ul>	<p>Strong incentive to increase revenue from anything not regulated, and for the airport to create new services/activities outside of the regulated perimeter even if not needed/desired by customers</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Define the regulated fees by excluding non-regulated activities</li> <li>Require the airport to demonstrate clear process for setting of non-regulated fees in line with market. For fuel, ground handling and catering-related fees, these should be cost-related as per ICAO policy</li> </ul>

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Types of Economic Oversight

Privatization Consideration	No Regulation <sup>1</sup>	Monitoring Regulation	Consultation and Appeals	Regulation by Contract	Cost-Based Regulation / Rate of Return	Incentive-Based/ Price-Cap <sup>2</sup>
Pre-funding: Pre-funding through airline or passenger charges defeats one of the main drivers for engaging in privatization which is access to private investment and capital markets	<p>Likely as easier than seeking new, external funding. Difficult to distinguish pre-funding from excess profit</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>No known mitigation</li> </ul>	<p>Likely as easier than seeking new, external funding. Difficult to distinguish pre-funding from excess profit</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>No known mitigation</li> </ul>	<p>Likely as easier than seeking new, external funding. Difficult to distinguish pre-funding from excess profit</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Prohibit the practice</li> </ul>	<p>Likely as easier than seeking new, external funding</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Disallow pre-funding unless demonstrated cheaper to airlines and consumers than other sources financing available through a business case</li> <li>Ensure that pre-funding is separated from excess profit and ring-fenced for transparency</li> </ul>	<p>Likely as easier than seeking new, external funding. The regulatory model implies that pre-funding should be ring-fenced (otherwise it would be considered as excess profit)</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Disallow pre-funding unless demonstrated cheaper to airlines and consumers than other sources financing available through a business case</li> <li>Any pre-funding to be omitted from RAB to protect airlines and passengers from paying returns on their own investment</li> <li>Ensure that pre-funding is separated from excess profit and ring-fenced for transparency</li> </ul>	<p>Likely as easier than seeking new, external funding. The regulatory model implies that pre-funding should be ring-fenced (otherwise it would be considered as excess profit)</p> <p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Disallow pre-funding unless demonstrated cheaper to airlines and consumers than other sources financing available through a business case</li> <li>Any pre-funding to be omitted from RAB to protect airlines and passengers from paying returns on their own investment</li> <li>Ensure that pre-funding is separated from excess profit and ring-fenced for transparency</li> </ul>

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Types of Economic Oversight

Privatization Consideration	No Regulation <sup>1</sup>	Monitoring Regulation	Consultation and Appeals	Regulation by Contract	Cost-Based Regulation / Rate of Return	Incentive-Based/ Price-Cap <sup>2</sup>
Commercial Agreements:	High risk of discrimination	High risk of discrimination	High risk of discrimination	High risk of discrimination	Risk of discrimination	Risk of discrimination
Arrangements may be amended as part of the privatization process which can lead to non-equitable charges and discrimination between airlines and their passengers	<p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>No known mitigation</li> </ul>	<p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>No known mitigation</li> </ul>	<p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Ensure appeals can be filed based on discrimination and that the entity that hears the appeal has access to all agreements</li> </ul>	<p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Ensure contracts set out conditions to meet ICAO policies and ensure charges are set equally for all users of the same service</li> </ul>	<p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Ensure independent regulatory review to meet ICAO policies and ensure charges are set equally for all users of the same service</li> </ul>	<p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Ensure independent regulatory review to meet ICAO policies and ensure charges are set equally for all users of the same service</li> </ul>
Cross-Subsidization:	High risk of cross-subsidization	High risk of cross-subsidization	High risk of cross-subsidization	Risk of cross-subsidization	Risk of cross-subsidization	Risk of cross-subsidization
Cross-subsidization can occur during privatization of multiple airports in a regional or national network, leading to cross subsidization from the profitable airports to the less profitable ones and deviates from the user-pays principle	<p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>No known mitigation</li> </ul>	<p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>No known mitigation</li> </ul>	<p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Set ex-ante regulatory principles/ methodology on how charges should be calculated (including restricting cross-subsidization)</li> </ul>	<p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Set the objective to make these airports financially independent or supported by local governments where they are not commercially viable. Fix a time horizon to end subsidization</li> </ul>	<p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Set the objective to make these airports financially independent or supported by local governments where they are not commercially viable. Fix a time horizon to end subsidization</li> </ul>	<p><b>Possible mitigations:</b></p> <ul style="list-style-type: none"> <li>Set the objective to make these airports financially independent or supported by local governments where they are not commercially viable. Fix a time horizon to end subsidization</li> </ul>

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# Appendix 5

## Glossary



**ACD**

EU Airport Charges Directive 2009/12

**ADP**

Aéroports de Paris

**AME**

Africa and Middle East

**APPP**

Airport Privatization Pilot Program (United States)

**BAA**

British Airports Authority

**BOT**

Build-Operate-Transfer

**CAA**

Canadian Airports Authority

**CAA**

United Kingdom's Civil Aviation Authority

**CAI**

Changi Airports International

**Catic**

China National Aero-Technology Import and Export Corporation

**DBO**

Design-Build-Operate

**DIAL**

Delhi International Airport Private Limited

**EIB**

European Investment Bank

**FCA**

Financial Conduct Authority (UK)

**GACM**

Grupo Aeroportuario de la Ciudad de México

**GDP**

Gross Domestic Product

**ICAO**

International Civil Aviation Organization

**IFC**

International Finance Corporation

**IPO**

Initial Public Offering

**ISAs**

Independent Supervisory Authorities

**KAIA**

King Abdulaziz International Airport

**KFIA**

King Fahd International Airport

**KKIA**

King Khaled International Airport

**LIBOR**

London Interbank Offered Rate

**MDB**

Multilateral Development Banks

**NAP**

National Airports Policy (Canada)

**NAS**

National Airport System (Canada)

**NPV**

Net Present Value

**O&M**

Operations and Maintenance

**PFI**

Private Finance Initiative

**PPP**

Public Private Partnership

**PPPIRC**

World Bank's PPP Infrastructure Resource Centre

**PSP**

Private Sector Participation

**RAB**

Regulated Asset Base

**STPR**

Social Time Preference Rate

**VfM**

Value for Money

**WACC**

Weighted Average Cost of Capital

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