

RISK & DUE DILIGENCE IN AIRPORT PRIVATIZATION

By

Victor Craig
Director Air Transport
Halcrow AirPlan - Malaysia

1.0 INTRODUCTION

Private sector participation in the development and operation of airports is now a common and accepted concept, and the term "airport privatization" is now an essential part of the industry vocabulary¹. The privatization approach to airport and facility development is increasingly relied upon by nations, unable to maintain, finance and develop their own airports, as the principal means by which new airport facilities can be added. In the past, the privatization approach has been applied to develop major highways, bridges, tunnels, power transmission and telecommunications networks under Build-Operate-Transfer (BOT) schemes. For these schemes, national and state governments have awarded commercial concessions to development consortia to construct and operate for a guaranteed period of time.

In all cases, development of public infrastructure, including airports, had been the exclusive responsibility of public agencies. Capital funds for construction were obtained from taxes or from issue of public bonds, and operating costs were offset by revenues collected from users, either directly as tolls, or indirectly through the taxation system. By the 1970's and 80's the continued ability of governments to finance major projects from the tax base was seen to be doubtful, especially in a climate of severe budgetary constraints. An alternative approach, to tap the capital resources of the private sector as partners in development of public infrastructure, appeared to offer the means by which governments could encourage implementation of needed capital projects. A new environment had to exist, however, since to attract private capital, the projects had to have a commercial character, be capable of generating revenues from users, and guarantee an adequate return on private capital investment through a share of the operating profit.

The concept of privatization of airports, although originally applied on a project by project basis as BOT schemes to develop passenger or cargo facilities, has now been extended to include systems of regional airports and even entire national airport infrastructure. The same has occurred in other infrastructure areas, such as for telecommunications

¹ In this paper airport privatization is considered as being the direct financial involvement of the private sector to a significant extent in the ownership and/or management and operation of airports or major airport facilities.

networks, national electric power distribution or railway services, for example.

The essential feature in privatizing airports, or airport activities, has been the commercialization of these operating systems. Whereas previously, under government control, many or most public airports may not have recovered their costs of operation, the climate of privatization dictated that not only would privatized services cover all operating costs, but use of private capital demanded that a return on investment had to be generated as well.

The need for privatization schemes to be commercial in character and to achieve certain levels of financial performance has created a new requirement in the assessment of project feasibility. This is the need to identify and manage risk. The fact that risk exists in developing public infrastructure under privatization schemes is evident from several of the projects that have been implemented in other transport sectors. For instance, one of the first public/private toll roads to become operational in the United States (Dulles Greenway in Fairfax County, Virginia) has attracted only about one-third of its forecast users, significantly affecting its revenue performance. Similar stories of under-performance may be told about other transport sector projects. Under-performance may be influenced by the relatively short time period for which these projects have been active, but it is clear from experience so far, that most of the privatization projects initiated in the 1970's and 80's have yet to demonstrate hard evidence of successful completion.

More alarming, though, is the evidence that risk has generally been underestimated, especially in relation to the capital cost for project construction, and in terms of forecast revenues from operations. Airport privatization is not immune to risk, in fact there is reason to believe that there is a greater number of risk elements associated with airport privatization than for other sectors, and these are quite different in character.

This paper focuses on the privatization of aviation infrastructure, notably airports and airport facilities, and on the issue of risk in privatization. Since risk can take several forms and may affect different parties to privatization in different ways, it is important at the outset to define what is meant by risk. For the purposes of this paper, risk is defined as:

"the chance or probability of an unexpected event occurring, or an expected outcome not being realized"

In the paper attention is drawn to the need to identify and manage risks that may affect the business of the proponent, the aspirations of the owner, and the needs of the investor. As a means of identifying and containing risk, the process of due diligence is recommended as being necessary at an early stage in project identification, as well as progressively throughout the project preparation and financing stages.

2.0 PRIVATIZATION OF AIRPORTS & AIRPORT FACILITIES

2.1 Privatization Concept

Although the concept of privatization in the airline industry goes back a long way, privatization of airports and airport facilities is a more recent concept, which commenced in the 1980's.

For airports, privatization covers a range of outcomes, from development of new facilities with public financing under BOT schemes to sale of single and multiple airports to private sector investors, developers and operators, and operation of terminals entire airports and airport systems for long-term concession periods. Along with privatization, especially where a system of airports is privatized, there has been a need for governments to re-structure the airports element of their Civil Aviation Departments, once administration and operation of airports passes to a new entity in a privatized environment.

In addition, privatization has, in some cases, been achieved in two stages, with the first stage being a process of commercialization, possibly through ownership and operation under a parastatal organization, followed by final sale of the entity to the private sector. Privatization of the major British airports is an example of this approach, where the principal airports were first commercialized under a parastatal agency, the British Airports Authority, which was then later privatized as BAA plc in 1987 by means of a public share issue.

2.2 Forms of Airport Privatization

Privatization of airports may occur in one of the following ways:

- Sale of a concession to a private sector entity (consortium of operator, financier and developer) to operate and develop a single airport for a stipulated concession period ranging from 20 to 50 years,
- Sale of a concession to a private sector entity to develop and operate a system of several airports on behalf of one or more strategic investors, or on behalf of the public at large as shareholders, for a stipulated concession period,
- Sale of shares in a national airports authority to the private sector (entirely or in partnership with government), such that the authority becomes an entity in the private sector,
- Sale of a concession to a private sector entity to develop and operate a facility on a government-owned airport (passenger terminal, cargo centre etc.) for a stipulated period of time, after

which ownership in the facility may revert to the state. This is the typical build-operate-transfer (BOT) project.

Examples of each of the above models of privatization may be found at airports around the world. Outright sale of an airport to private sector interests is the most common model, as exemplified by the privatization of the major federal airports of Australia to consortia of domestic and foreign investors. Recently, the New Zealand government followed the same model for Wellington Airport, and also sold its interest in Auckland Airport to the public through a general share issue.

The multi-airport privatization is best illustrated by the long-standing British example of the privatization of the BAA and its seven airports (the three London airports of Heathrow, Gatwick and Stansted, as well as Southampton, and three airports in Scotland). The third example, privatization of an entire national airport authority with a multi-airport system, may be seen in the very recent move to privatize the Malaysian Airports Authority through a public share offering to nationals and foreign investors. Finally, also common, is the privatization of major facilities at airports, through BOT development projects. Typical of these are the Third Terminal at Toronto International Airport, Canada, and the Eurohub Terminal Building at the Birmingham Airport in the United Kingdom.

Development of entirely new airports under BOT schemes are rare. This is partly because new airports are themselves a rarity, and possibly partly due to the massive capital investment required. However the new Athens Spata International Airport, currently under construction by a German consortium including the German contractor Hochtief and the Frankfurt Airport Authority is one such case. This airport, which is being developed on a new site east of Athens, is to have two parallel runways and a central development comprising a passenger terminal, cargo centre and aircraft maintenance facilities. Development under the BOT concession from the Greek Government is based on a 25-year concession period.

Another proposed BOT airport is the new Berlin-Brandenburg Airport, to be constructed on new land on the south side of the former East Berlin Airport of Schonefeld. This is planned to be the international airport for Germany's re-established capital city and will replace three existing airports. The new Berlin airport will have two parallel runways and a major terminal complex sized for up to 30 million annual passengers. Construction is to be financed entirely from private sector sources, and operation is to be carried out by the successful concessionaire.

Most of the examples of airport privatization are found in the developed nations, where a strong air traffic base and a wealthy travelling public provide the essential ingredients for a potentially successful commercial venture.

But have the airports privatized in the 1980's, or the airport projects carried out under BOT agreements, been successful ? This really depends on from whose point of view success is measured, and over how long a period of time. The BAA case in the UK would generally be seen by government to represent a successful privatization, in that it removed a burden on the public sector to operate and maintain the principal airports. On the other hand, some twelve years later, government is now faced with a need to plan for a major capacity increase in the South-East of the U.K., which is unlikely to be funded by the BAA, or possibly by any other private sector entity. The travelling public, experiencing congestion resulting from insufficient investment in capacity (especially at London Heathrow and Gatwick Airports), would likely hold the opposite view of the success of the BAA privatization.

But how would the investor view the BAA privatization ? Measured in terms of the performance of the BAA stock, the investor who bought in at the time of the original share issue would have realized a fourfold increase in their holding in the twelve years since public share floatation. To these investors the privatization would be seen as successful, due to the capital gain and regular dividend realized from their holding. Shorter-term investors have not fared so well. As for the future, recent abolition of European duty-free privileges will affect share performance, as could the large capital requirement for the proposed Terminal 5 construction.

The perception in the airport industry is that privatization is both worthwhile and successful, and considerable enthusiasm has been generated around the concept. But, in reality, too short a time has passed to be conclusive about the success of airport privatization. A note of caution may be gleaned from a Deputy Minister of Transport from Canada, who when speaking at an industry conference in Hong Kong in the mid-1990's, claimed that Toronto's privatized Terminal 3 development "had not turned a dime for the Canadian government".

Taking their lead from the enthusiasm of western nations for the concept of privatization, several developing nations are looking seriously to proceeding along this path also. In this case, the objectives may include:

- To provide an environment that will ensure that the principal national airports are upgraded and expanded as necessary to assist national economic growth goals,
- To relieve government of the obligation to invest further capital in the airport infrastructure at a time when such capital funds are unavailable, and

- To relieve government of the responsibility for supporting the cost of operating and maintaining the airports, and retaining airport employees on the government payroll.

The fact that sale of an airport to a private sector developer might also generate a windfall profit may also be a factor in making the concept attractive.

However, to attract private sector investors to bid for an airport privatization, investor interests have to be satisfied. Foremost among these are two requirements:

1. A need to limit capital investment to upgrade and expand airport facilities to a level that can be recovered well before the end of the concession period, and
2. A need to ensure that there is a sufficient revenue base, now and in the future, that can generate revenues that will offset operating costs and capital carrying charges, and provide an overall operating profit and an adequate return on equity.

The objectives of government in seeking to privatize its airports, and the requirements of the investors are not always in harmony. Indeed, there may well be conflicting objectives, and therein lies one of the major risks associated with privatization ventures.

3.0 RISK IN AIRPORT PRIVATIZATION

3.1 Who is at Risk ?

Privatization of airports carries risk to all parties involved. Most obviously, there is risk to the development consortium that is proposing on a privatization bid. The consortium will normally be committing to an up-front payment to government for the privatization concession, to a development commitment involving a specified capital investment within a limited time period, and to taking on responsibility for operational costs of running the airport. All of this represents a financial risk to the investor, emphasized by the fact that it involves an actual capital outlay and a financial commitment at the very start of the project - often before any revenues are received. Often, too, the concession agreement will include a penalty should the developer fail to provide the stipulated capital investment within a specified time.

Risk to the investor is quite normal and investors expect to take on a certain amount of risk in order to benefit from a return at a later date. In most privatization projects, the "investor" is not confined to the developer alone, as airport concessionaires will limit exposure by taking on investment partners. While the developer may be investing some of his own capital funds as part of the proposed financing

package, it is more normal for most of the capital investment to be obtained through loans from commercial banks. Privatization projects have also included loans from a Regional Development Bank in addition to those sourced from the commercial banks. Examples of this are the Asian Development Bank involvement with Deutsche Bank in the BOT project to develop the third passenger terminal at Manila International Airport, and the Inter-American Development Bank with various international commercial banks in the case of the privatization of the principal airports in the Dominican Republic. As a result of the involvement of the commercial banks and Regional Development Banks as investors in privatization schemes, risk is also carried by these financial institutions.

Generally overlooked in the euphoria of government to privatize its airports is that, in doing so, government will also incur risk. This commonly arises because a government entering into privatization will rely on the bidder to define the technical and financial scope of the project. It is very rare to find that a government has provided highly detailed terms of reference to which bidders respond with proposals, and consequently the development proposals, when compared against each other, can be very different. In this situation, government cannot be sure that it will receive the type of development it wants, and is in a disadvantageous position in attempting to evaluate one proposal against another. As a result, evaluation tends to be influenced by whichever proposal provides the greatest financial return to government. The main risk to government is that a proposal that may appear attractive in financial terms, and consequently accepted, may have under-estimated capital requirements for construction, while being overly optimistic regarding revenue projections. The risk then is that the concessionaire may not perform as promised in its proposal, be unable or unwilling to invest sufficient capital, and may ultimately renege on the concession agreement, possibly through bankruptcy.

Government has little recourse in such situations other than to cancel a concession agreement, and no option other than to take over the airport again, thus incurring costs to government in the process. This may sound overly pessimistic, but it is to be noted that in the Australian privatization of federal airports, the government has no mechanism in the concession agreements to ensure that the concessionaires actually invest in the airports to the extent intended in the Airport Master Plans. No recourse for non-performance is available, other than to cancel the agreements, and take back operation of the airports until another operator can be found.

The history of airport privatization is too short for the industry to have experienced failure by a development consortium and consequent cancellation of a concession agreement, but there is no guarantee that such failure will not happen in the future. At the same time, this short history should itself suggest caution, as there are few, if any, examples of airport privatization projects that can yet be labelled as

successful. Following the example of other projects is, therefore, somewhat of a gamble.

In summary, the parties at risk in the privatization of airports, and the nature of the risks facing them, may be defined as:

1. The Concessionaire

A consortium selected as the concessionaire for an airport privatization is exposed to risk from several unknowns. Some relate to the unknown prospects for achieving an adequate return from commercial operation of the airport, and some from an unknown change of success for enhancing their ability to increase revenues through capital improvements and facility expansions. At the outset, the concessionaire also faces a risk from technical influences, relating to the adequacy of the planning for facility provision and growth, adequacy of materials specified, and accuracy of capital cost estimation, resulting from the input of its professional advisors.

2. Commercial Banks & Regional Development Banks

The commercial and development banks involved in privatization project financing, are subject to risk from the same sources as faced by the concessionaire. Essentially, this constitutes a direct risk that the concessionaire may fail to repay loans granted for capital works associated with the privatization concession. Indirectly, the banks are therefore affected by the risk that the concessionaire may fail to achieve its target operating profits, and may fail to generate sufficient revenue to repay debt.

3. Governments hosting Airport Privatization

Governments inviting or hosting airport privatization are exposed to a number of different risks. First, and foremost, is the risk that the concessionaire may fail to generate sufficient profit to carry the project through the concession period. It may then abandon the project, file for bankruptcy, scale back the level of service offered to users, or attempt to increase user charges beyond reasonable limits. The risk to government is that, at worst, it may have to replace the concessionaire at a cost to itself, or at best attempt to force the concessionaire regarding level of service and user charges. A secondary risk lies in the scope and quality of capital works carried out by the concessionaire. Driven by the profit motive, the concessionaire will, from the outset, be tempted to minimize capital investment. Minimum capacity may be provided in public facilities, as observed in the BAA airports, and material specification can favour a low-cost approach, possibly resulting in structures and finishes that have a useful life only as long as the concession period. At a later date, especially on transfer of the facilities back to government, the state may find

that it will have to expend substantial capital to replace obsolete and run-down facilities.

3.2 Risk Elements in Privatization

There are a number of fairly specific areas that can be identified as being primary sources of risk to a concessionaire, to a financial institution or to a host government in the process of privatizing an airport. These are discussed in this section, with examples from actual due diligence projects.

3.2.1 Air Traffic Forecasts

The air traffic forecast for an airport is the key risk element for the concessionaire and investor alike. Indirectly, it is also a key risk to the host government.

Forecasts of air traffic are generated by planners and economists as a means of estimating future growth in air passenger and cargo traffic. They reflect estimated growth in key indicators of the economy, notably gross domestic product, which tends to be well correlated with air passenger traffic. A good forecaster will adopt more than one approach to generating a forecast, and will also forecast for a range of outcomes - a high growth scenario and a low growth scenario. The forecast then usually adopted as "official" is one that lies in the mid-range between these two extremes.

Air traffic forecasts are used in different forms for two main purposes:

- As annual forecasts of passengers and cargo for estimation of annual revenues to be derived from airport users, thus forming a vital part of the financial feasibility analysis, and
- As derived forecasts (i.e. for peak hour) of passengers and aircraft for development of airport capacity requirements, and hence capital financing needs, through the forecast period.

Forecasting is rather easier for a rising traffic trend than where either uncertain economic conditions exist, or where scenarios involving penetration of new markets are relevant. In the former case, the risk in the forecast is that the mid-range forecast may be exceeded, and greater traffic occurs than is forecast for any particular date (i.e. traffic growth outpaces the forecast). Conversely, the forecast may fail to be achieved, in which case predicted traffic levels would be expected to occur later than originally forecast. The implication of this is that where traffic growth exceeds the forecast, a shortfall of terminal or airside capacity may result, creating pressure to invest greater levels of capital, and earlier than planned.

The case where a forecast has to account for development of new markets, is particularly at risk. For the forecast to be achieved other events, possibly outside the control of the concessionaire, may have to take place first. These may or may not actually happen, yet the

forecast used by the concessionaire when planning a privatization bid may have relied on achieving these market development scenarios. As to how believable the forecast is...that depends on who creates it. The common approach is for the host government to expect each bidder to develop its own forecast. In some cases where a civil aviation authority may have a capability to prepare forecasts, these will be provided to bidders, who may accept them as valid, or may modify them to reflect the views of their own experts.

Where forecasts are prepared by the bidders themselves, which is the normal case, there will likely be as many forecasts as there are bidders. This makes evaluation of the bids difficult, as a forecast that might appear to be appropriate may be part of a bid that offers a lower financial return to government and is therefore less attractive. Also, as does happen, some forecasts prepared by bidders have not demonstrated any sensitivity testing, suggesting that there could be a worse case situation that has not been accounted for in the use of the forecast for financial analysis.

Another feature of forecasts prepared by bidders, apparent in due diligence reviews, is that there is sometimes a questionable linkage between the annual passenger forecasts, and forecasts derived from the annual forecast. Because these two types of forecast are used for different purposes by the bidder on the one hand, and the bidder's airport planner on the other, an inconsistency between annual forecasts and derived forecasts can distort the financial picture.

Essentially, what this means is that an annual forecast may be prepared with an optimistic slant to suggest a robust traffic growth scenario resulting from the bidder's efforts in airport operation and development. When this is then used as the basis for revenue estimation, an overly optimistic revenue picture can emerge, creating a risk to the concessionaire, other investors and the government.

At the same time, if the peak period traffic forecast does not bear a normal relationship to the annual forecasts, but is lower than might be expected, then the estimation of required passenger terminal capacity, gate requirements or airside capacity, will also be lower than anticipated. In turn this will result in a possible underestimate of the capital cost to develop facilities to accommodate the annual traffic forecast.

The above two distortions have been found in forecasts prepared for airport privatization bids.

Air traffic forecasts are critical to the process of bidding for privatization projects, and potentially contribute to a large amount of the risk associated with a bid. Much greater examination of the basis for forecasts is required, just as there is a need to ensure that proper sensitivity testing, and cross-checking against industry markers, is carried out.

3.2.2 Airport Development Proposals

Bidders in a privatization normally prepare a physical development proposal to indicate the scope of development they propose for the site. Facilities illustrated on the plan will normally reflect the air traffic forecast, and be limited in scope or phasing by the length of the concession period.

Site development proposals submitted by bidders are also a source of risk to the bidder and to the host government, arising essentially from three main areas:

- Aircraft Safety,
- Airside and Terminal Design, and
- Capacity and Site Expandability

Aircraft Safety is a concern at some airports, including airports in process of privatization. Occasionally, privatization is proposed for an airport where there is an existing safety issue, either because of natural physical features in the vicinity, or because of violations of international standards on the airport itself.

Natural features that might jeopardize aircraft safety include terrain (hills or mountains) in the approach and departure areas, or hazardous runway over-run areas. In the privatization of the Wellington Airport in New Zealand, for example, a significant risk was attached to the lack of runway end safety areas, since at this airport the runway lies across a narrow neck of land with the sea at both ends. A steep drop from the runway at one end and a rocky shore at the other represents a serious hazard to aircraft in over-run or under-shoot situations. Any accident off the runway ends at this airport could be life-threatening and would certainly result major structural damage to an aircraft. As this was a known hazard, bidders for the airport had to assess their risk in terms of the capital cost to rectify the problems (very substantial) or, alternatively, to take a chance that an accident would not occur, and accept possible future liability.

Violations of international safety standards are also found at airports proposed for privatization, and even at new airports proposed for private sector development under BOT. This is becoming apparent where nations are looking to privatize some of the smaller regional airports, at which attention to enforcing ICAO SARP's may have been lacking. Deficiencies observed include insufficient obstacle clearances resulting from runway lengthening and use of airports by aircraft beyond the Code for which the airport was originally constructed. In addition, upgrading of instrumentation from non-precision approach aids to installation of ILS, without at the same time complying with the wider strip and obstacle clearances associated with precision approaches, is also found. In such cases, the concessionaire is faced

with taking over ownership and responsibility for an airport that is possibly non-compliant with respect to the volume and types of aircraft intended as the market to be served.

Risk to the concessionaire lies in the potentially large cost to bring about compliance with the relevant Code standards if government chooses to enforce this. For government, the risk is that enforcement of safety standards in a privatized environment may not be so easily achieved. Depending on the strength of the civil aviation department, government could be unwilling to suspend an airport license and so affect the business of the concessionaire, while at the same time purporting to encourage private sector investment in airports.

An alarming trend in the application of standards and recommended practices has been noticed under due diligence where new BOT facilities are concerned, and in one case where a new "green field" airport is proposed for private financing. The for-profit motive of the bidders involved in privatization proposals has been found to cause airport designers to adopt a minimalist approach, in order to reduce capital cost, and apply reduced obstacle clearances and pavement widths. For instance, in one new airport privatization bid, one of the bidders is proposing that taxiways be designed to taxiway criteria. Keen examination of bidder proposals is clearly necessary, to avoid the risk of sub-standard development and violation of safety standards.

Airside and Terminal Design proposals by bidders contain risks to both the bidders and to the host government. Generally resulting from the actions of the bidders' professional designers, but also due to direct intervention of the developer in over-ruling the advice of architects and engineers, airside and terminal design proposals have been found to be flawed in a number of cases. In the bid proposals, the focus of the bidder is often on presenting an architectural concept of a terminal building, with the result that other aspects of the airport, particularly those concerned with operations and capacity tend to be down-played or even overlooked in the proposal. The most common problems found in concepts proposed for privatization bids concern poor operational design for the airside, an imbalance between airside capacity and passenger terminal capacity, and an incompatibility between the proposed concept and the needs of the airport beyond the concession period.

Risks do arise for both the host government and the bidders from the design proposals themselves. Concepts that create inefficiency for operations (mainly airside operations), can add to operating delays and costs. Concepts with inadequate capacity in some elements and excessive capacity in others, can mean a need for additional capital on the one hand and wasted investment on the other. Failure of the design concept to allow an ability to expand either the airside or terminal system can place the government at risk of further major expenditure once the concession has been completed.

An example of this is sometimes seen in passenger terminal concepts proposed by bidders. One problem which appears often is where cul-de-sac pier concepts are proposed, yet aircraft using the inner gates are often expected to be pushed back out of the apron, all the way to the taxiway, representing a potential delay and congestion situation under high traffic volumes. Another is in the choice of aircraft size for gate planning - this may reflect what mix will fit on the pier rather than what the forecast aircraft mix requires. A mis-match in gate sizing was found in one BOT bid, where contact gates were planned for a new terminal building, yet a significant proportion of the aircraft projected to serve the airport were small commuter aircraft and thus too small to be served at contact gates.

Planning and design concepts therefore have to be rigorously assessed at a technical level to ensure that there are no hidden risks that might jeopardize either the business of the bidder or the interests of government. The preferred approach is for government to provide the bidder with at least a basic level of airport planning, and hopefully a fairly well-developed airport concept, so that all of the designs proposed in the bids are compatible with government objectives.

Capacity and Site expandability is an area of risk to the bidder where the capacity of any of the proposed systems is either too great or too little. Too much capacity in a bid proposal represents an excessive capital cost to the bidder at the outset, while insufficient capacity will possibly create congestion and delays and likely result in pressure to increase facility size at an earlier date than might have been intended.

An example is drawn from a BOT bid for the Birmingham (UK) Eurohub Terminal, where technical review and simulation showed that the baggage claim area was larger than necessary, while other areas of the terminal were planned with insufficient space. Another due diligence review of a passenger terminal proposal for Budapest, carried out for financing agencies, showed that the BOT developer was proposing to construct an excessive amount of apron for aircraft parking, derived from a very low aircraft utilization for the fleet of the national carrier. Excessive capital expenditure was being proposed for apron development to cover for inefficiency in the national airline.

As far as expandability is concerned, the risk arising from this is one that ultimately falls back on the host government. A bidder for an airport privatization may plan to develop adequate capacity in the terminal area, or in the airside, to accommodate the needs of the concession period - but no more than that. If by doing so, the bidder has used up the available land and no further expansion can be accommodated, government can later be faced with the difficulty of accommodating further expansion beyond the concession period. An airport privatization in Europe illustrates exactly this constraint. In this case, the bidders are proposing development of the airport only to the capacity limit specified in the terms of reference, and are not preserving space for expansion of the terminal complex beyond the

concession period. If government wishes to avoid building a new airport at that time, it will have to redevelop the terminal complex, and shift other established functions such as cargo, airport maintenance and other activities out of the central zone, in order to provide additional longer term terminal capacity. Similarly, at this airport, space has not been preserved for an additional runway to serve development beyond the original airside capacity date. Both of these constraints will later result in an increased capital cost to government, that might have been foreseen or mitigated through early attention to this potential issue in the terms of reference.

Site expandability was also a risk item identified in the technical due diligence carried out for privatization of Wellington Airport in New Zealand. This airport has a very limited site area, most of which is already developed. The site itself is constrained by the sea at both ends of the runway and by urban development and terrain on either side. Site expansion is not an option. The risk to the bidder and to government concerns what happens when the site is fully developed and no more terminal expansion can take place. Estimated to occur within 20 years and therefore within the concession period, this issue raised the possibility of the concessionaire being unable to accommodate increasing traffic demand on the airport, and the risk that a new airport would have to be developed. Local culture did not conceive that a new airport would ever be needed and bidders were certainly not proposing to construct a replacement airport towards the end of the concession period. In this case the risk will fall on government, although the realization of this will likely take several years to gel.

3.2.3 Air Transport Risks

Risks in the area of air transport development can affect the business of the concessionaire. At the outset, in the creation of air traffic forecasts, future change in the air transport environment of the airport is important to gauge correctly.

Changes in Aircraft Mix

Airlines will change their route and service pattern over time, and will also change the type of aircraft serving any particular airport. Among all of the airlines serving an airport, a continually changing mix of aircraft types is a common trend. This will mean that the mix of gate sizes and apron space required for aircraft parking will change over time, possibly affecting parking revenues and gate charges. A competent forecaster will be knowledgeable about the air transport industry and will be able to develop scenarios of traffic development to account for airline changes of this type. Forecasts that assume a status quo throughout the concession period must be viewed with suspicion.

Competing Airports

The possibility of over-lapping air transport markets must also be considered. Such a situation only arises where airports are relatively close together, and while under public ownership were able to establish their own local market service area. Prior to privatization, these airports could be managed as an airport system, with traffic allocated among them in the interests of service to the travelling public. Balanced investment in infrastructure between airports was possible, recognizing their respective roles in the aviation system. When these airports are privatized, each airport becomes focussed on its own commercial interests and will therefore compete strongly to offer more and better than its near neighbour. Competition through the price mechanism can occur, effectively resulting in a "price war" to attract airlines and travellers at one airport to shift to the other, to maximize revenue.

While this might result in lower costs to the user airlines and possibly provision of additional service to customers at one airport, it can also mean less choice for the traveller in the services and frequencies available, unless competing airlines mirror services provided at nearby competing airports. From the national perspective, the effect of intense competition between nearby airports generates a heavier use of the airspace, possibly lower load factors for airlines and a measure of duplication of investment in facilities. Certainly, the ability of national government to plan or manage the overall airport system is lost in such competitive situations. Examples of competing airports in close proximity exist in a few nations with high density populations and extended conurbation settlement patterns. A good example of this may be found in the Midlands of the U.K. where three airports are in relatively close proximity - Birmingham, East Midlands and Leeds-Bradford - and are competitors with a degree of market overlap. Interestingly, too, these airports along with Manchester Airport, are also now direct competitors to the BAA airports of Heathrow and Gatwick for traffic with regional European destinations, as a result of increasing congestion and user inconvenience at the BAA airports. Government needs to be aware of the potential changes in the air transport patterns arising from competition between airports in close proximity offering services to the same market, and possibly take a more regional approach to privatization.

Airline Alliances

Another area in which risk arises from the actions of the air transport industry is due to the trend for airlines to join into alliances with other carriers. This may have several effects, including:

- Developing of hubbing as one airline operates a feeder service to a partner airline in an alliance, with consequent possible need for modification to terminal spaces and gate provision,

- Changes in airline check-in and handling arrangements, where one airline will start to use its alliance partners to handle its in-terminal and on-apron services, rather than to contract elsewhere or to handle itself, and
- A possible change in the terminal used by an airline in a multi-terminal airport.

All of the above possible changes to the way airlines operate at an airport, brought about as a result of forming alliances and changes in alliances, represent a risk to the bidder and successful concessionaire. Changes in airline operations can result in pressure being brought to bear on the concessionaire to modify or expand terminal space, aprons and gate positions, thus creating an unforeseen capital expenditure. An example of the effect of joining an airline alliance occurred at Toronto International Airport, when Cathay Pacific Airways joined the One World Alliance. As a result, Cathay moved operations from Terminal 2 (where it had been handled by Air Canada) to Terminal 3, where it could be handled by its alliance partner Canadian Airlines. The effect was most markedly exemplified by a sudden insufficiency in the number of check-in positions available and crowding in the terminal departure concourse.

An interesting sequel to this, resulting from the recent acceptance by Canadian Airlines of a takeover bid by Air Canada, is that the risk dimensions will change again, possibly quite drastically for the Airport Authority as owner of the terminals. Certainly, it will invalidate a number of assumptions upon which the future airport development has been planned.

3.2.4 Revenue Estimation

Estimation of revenue is a key element in establishing financial feasibility of a privatization proposal. Two areas of risk surround revenue estimation:

- Reliance on air traffic forecasts creates a direct risk to the bidder and to the investor when those forecasts may be optimistic, or may rely on air transport market development activity that is outside the control of the bidder. Overly optimistic traffic forecasts generate overly optimistic forecasts of revenues to be derived from users. This can distort the cash flow projection for a project, suggesting a earlier payback and a greater ultimate return on investment.
- Assumptions used to establish the fees and charges that can be derived from users and tenants may be unrealistic, and if not subjected to sensitivity testing may distort the financial analysis. Assumptions regarding the rate at which user charges can be increased over time may also be unrealistic.

Both areas of risk can affect the business of the concessionaire, yet surprisingly, both frequently appear in proposals for privatization. An example of the former may yet be found to exist in the privatization bid for four airports in the Dominican Republic, where strong reliance is being placed on development of the tourist industry to generate traffic through the airport, and so justify the airport privatization. Based on this, the concessionaire is proposing investment of \$203M in terminal development and airport upgrading at the four airports over three years (1999 to 2001) and a further \$106M investment along with a tourism promotion fund of \$85M over the 20 year concession period. The airports involved have an existing traffic base of around only 4.5 million annual enplaned and deplaned passengers, of which less than 2 million E/D passengers (i.e. 1 million individuals) could be classed as foreign tourists. One has to suspect that reliance on developing the local tourist industry, to create sufficient passenger traffic to create an adequate return on the investment within the concession period, carries considerable risk. The risk to the government is that the Phase 2 investment of \$106M, which is dependent on a sufficient travel market being developed, may never actually take place.

An example of self-serving assumptions is also evident in one of the financing proposals for Manila's Terminal 3, a \$400M BOT project to develop a new international passenger terminal designed for nominally 15 million annual passengers. In calculating revenues, the bidders' analysts assumed that all rates and charges could be increased by 10% per year over a 25-year concession period, a figure considerably higher than could be sustained in the economy. The major user of the terminal to be affected by the proposed charging regime (the national airline - Philippine Airlines) was moving ever closer to financial collapse and assumptions about its ability to pay were very risky indeed. Space rentals in the new terminal, which would be on fixed-term leases, were also assumed to be capable of being increased annually, which clearly could not occur.

Another feature of that project that carried risk was the assumption that the concessionaire could retain the Passenger Service Charge, presently levied by the Airport Authority. If permitted, this means that the Airport Authority would face sudden loss of one of its own major sources of revenue, used to cover other operating and maintenance costs on the airport. If denied, then the bidder's assumption would clearly have been a gross error, and therefore a risk.

3.2.5 Capital Cost Estimates

Privatization bids are normally characterized by proposals to construct or expand facilities, such as runways, taxiways, aprons, passenger and cargo terminal buildings. The bidders themselves even tend to emphasize the level of capital investment being proposed, almost as a selling point for the project.

Capital investment normally refers to financing physical development in pavement areas, buildings and equipment. For a bidder to be able to commit to a level of capital investment in airport pavements and buildings, a physical plan of the development must first be prepared. However, capital cost estimation based merely on an airport layout plan, or master plan, can be quite crude because of variables that are beyond the control of the architects and engineers at the time the plan is prepared. For instance, airfield pavement costs can vary greatly due to the underlying soil conditions and whether or not unsuitable material has first to be excavated, or rock blasted. The only way to be certain of the capital cost of construction is to ensure a sound knowledge of the underlying ground and groundwater conditions, and to carry out costing not on the basis of a master plan, but with the benefit of engineering design.

Similarly, building construction costs, and cost of imported materials, can vary considerably from one country to another, and professionals used to costing projects in North America and Europe may be surprised to find that the costs produced by local contractors can exceed by a factor of two their original estimates.

Diligent professionals will seek out factors such as this, but as sufficient engineering design is rarely done prior to submission of a bid, the risk remains that, at the time of the bid, the required capital costs may well be underestimated.

3.2.6 Concessionaire Composition & Culture

For the host government, the composition of a suitable consortium bidding for a privatization project is most important, and can itself be a source of risk. Operation and management of an airport requires that skills in operations, marketing, retail and commercial operation, and financial management be brought together. Bidding consortia therefore now generally include an airport operator, along with a land/building developer, strategic financial investor, and commercial / retail operator, as principal partners. In some cases, as in the new Athens Airport project, the consortium may also include a major contractor to provide all engineering and project management services.

Review of the composition of the bidding consortium is necessary to ensure that all of the required skills are included either as strategic partners, or designated as sub-contractors to the consortium. The role of each needs to be examined to ensure that the managing partnership has sufficient checks and balances in place among the participants to the bid, in order to benefit from the professional advice of each. Consortia that do not offer professional skills in airport management are quite clearly a risk to the government.

This may sound quite obvious, but review of privatization bids shows that, on occasions, there is a dominant partner that influences the bid. This is certainly the case in one airport privatization. The engineering bias of a major contractor in the consortium clearly influenced the form of the proposed airport development, and appears to have overruled the operational advice of the operating partner. An example of lack of balance in a bidding consortium may be drawn from the ill-fated privatization of Toronto's Terminals 1 and 2. Risk analysis carried out on one of the bids showed that all of the forecasting, analysis, planning, engineering and architectural input was dominated by a single firm, which was also one of the strategic partners in the consortium. None of the other partners had skills that would have enabled them to question the sizing, the planning and design elements, or the costing of the proposed terminal development, and this was clearly a risk to the investors. The project did not proceed because of government intervention, but the example serves as a reminder that some of the critical aspects of the project preparation must be carried out independently, and be clear of any conflict of interest from within the consortium itself.

A cultural influence from within a consortium can generate a risk to the concessionaire, to outside investors, and ultimately to the host government as well. Where a land/building developer is involved as a principal partner in a consortium, the "developer" culture can result in a low cost development that has a short useful life, often only as long as the concession period itself. Risk arises for the concessionaire if capital improvements and upgrading have to be made to the facilities within the concession period due to early obsolescence in the facilities, or failure of pavements, resulting from a minimum cost approach to development. To the government, the risk is that on "transfer" of the facilities back to government at the end of the concession period, a large amount of capital is required to re-construct, upgrade or replace an obsolete building.

In building projects, such as passenger terminals, the developer culture can result in sub-standard materials being specified in the original construction in order to minimize costs. Later, replacement may become necessary, resulting in further expenditure of capital funds. An illustration of the impact of the developer culture may be seen in Toronto's Terminal 3, where the original developer of the privatized terminal building over-ruled his own architects in the specification of materials. As a result, inferior specifications were used in places and, for instance, cracking of the floor tiles can be seen in the departure concourse where a thinner tile was adopted than originally specified by the architects.

3.2.7 Institutional Influences

Risk may arise for the concessionaire, and for the investors in a privatization, from the actions of government or from other institutional difficulties. Government policy can change in ways that

can affect the business of the concessionaire. One of these is through intervention in the regulation of air transport services and operating authorities, which affects the development of the air transport market. This can, indirectly, curtail the revenue opportunities of a concessionaire. Another possible, and quite dramatic, influence can occur when government itself changes, such as from one ruling party to another, and the official viewpoint on privatization can change as well. Institutional influence may also exist in the form of hidden government subsidy in airports, which may understate costs, or through concessions in rates and charges to a national carrier or state-owned enterprises, which may understate revenue.

One institutional risk highlighted in the due diligence process for Manila's new International Terminal 3 was the fact that the commitments of one out-going national president do not form commitments for the next president. Although the concession agreement includes compensation for the concessionaire in the event of early termination of the concession, the ability of the government to pay the required compensation for capital invested in buildings and pavements is very doubtful. This same project also suffered from another risk arising from possible government policy. At the same time that the terminal privatization was being initiated, the government was also proposing relocation of all international air traffic to another airport, 100kms north of the city, well before the completion date of the Terminal 3 concession. Developer and investor risk is quite obvious in this privatization, and the project appears to be proceeding cautiously, with a great deal of blind faith that nothing drastic will actually happen to upset the project before revenue can begin to flow.

A concern under privatization is also found in the effect on environmental impact. With a measure of government control over airport operations and traffic allocation, there is also an ability to manage and mitigate the impact of aircraft noise resulting from airport operations, and control traffic growth accommodated. While noise abatement flight procedures can be applied, and even a night curfew established, privatization of airports leaves little or no control available to government to limit air traffic operations, or even to enforce the night curfew to the fullest extent. To do so can directly affect the commercial performance of the airport, and interference in this runs counter to the principles of privatization. There is a risk that government will be reluctant to constrain airport operations in the interests of environmental impact mitigation.

3.2.8 Effect of Terms of Reference for Privatization

Some of the problems and issues, and indeed some of the risks, arising in airport privatization projects, can be traced back to the original terms of reference issued to bidders by the host government. The more simple and lacking in definition are the terms of reference,

the greater will be the difficulty in evaluating bids, and the greater will be the ultimate risk to the government from its selection of a concessionaire.

In very few privatization projects have governments been sufficiently specific in their terms of reference to define how they would wish their airports to develop. In the absence of detailed development plans provided by government, the form and scale of airport development has been left up to the bidders to determine. This will mean that the bidders decide just what type of development they will propose, based on what facilities and size of facilities they wish to finance, rather than developing the airport according to traffic needs, or according to the wishes of the host government.

The development of one new airport illustrates this point. Terms of reference created by the state involved focused on the shareholders' objectives (essentially financial objectives) and manner of evaluation of proposals, but provided no master plan to illustrate the form that the airport should take as a long-term development, or any other guide to physical development. Only some minimum technical requirements were defined by the state, which although establishing the location for a new runway, defined only the capacity requirement for a passenger terminal complex (20 mppa expandable to 30mppa), criteria regarding maximum walking distance for passengers and a need to accommodate the New Large Aircraft. As a result, the bidders for this project each generated their own master plan for a future airport. Later review of the bids showed that the bidders responded literally to the terms of reference, interpreted the minimum technical requirements only to their own financial advantage, and provided only minimum schemes that did not accommodate the longer-term needs of the region. This could have been safeguarded had the terms of reference been better prepared in the first place². The risk to government in this case is that, at the end of the concession period, or when traffic volumes exceed the capacity of the limited terminal area development planned by the bidders, government will have to find a site on which to build another new airport.

The lack of clear and firm guidance from government to a BOT or privatization bidder at the stage of the invitation to bid can result in a poor design concept for development of the airport. Evaluation of bids is also very difficult as each bidder will have its own development concept, generating different results, and none will have started from the same base. For government, the end result can be a scheme, which may meet the bidder's financial objectives, but does not safeguard the interests of government beyond the end of the concession period. Indeed, the development may be incompatible with a master plan that may have been in effect prior to the BOT bidding process, but had been allowed to be over-ruled in the interests

²

It is to be noted that in the case cited, the refusal of the state involved to modify the terms of reference resulted in all but two of the original bidders withdrawing from the bidding process. As a consequence, the state was faced with a choice between only two contenders for the project.

of attracting private developers. This is exactly what has happened in the case of the proposed BOT terminal development at Manila, and the end result is a terminal development scheme that is not consistent with an earlier master plan, and operationally questionable, both in terms of airside operations and landside access. The fact that the proposed terminal development will result in a greater passenger processing capacity at the airport than can be served by the airside system is another inconsistency, resulting directly from a failure of government to guide the BOT process.

An attempt by a host government to offset the risk of being forced to accept a private development proposal that is less than adequate, or of being left with a constraining element following completion of the concession period, is illustrated by the approach taken by the Taiwan Civil Aviation Administration. In the development of the third passenger terminal for Taipei Chiang Kai Shek International Airport, the CAA has decided to prepare the concept design for the 14 million passenger terminal under its own funding, using consultants. This is to ensure that the terminal is sized and planned according to government needs. When the project ultimately goes out to bid for development under a BOT scheme, all bidders will be bidding on the same size of terminal and same development concept and layout. That way, government will ensure that what is ultimately constructed by a concessionaire will be exactly the type of development the government desires.

4.0 DUE DILIGENCE

4.1 What is Due Diligence ?

Due diligence is a strange term used in, among other things, the evaluation of airport privatization projects. The term has come to mean:

"to take careful and proper account of all factors pertaining to a proposal, in order to validate claims and establish credibility".

In the context of the evaluation of proposals for airport privatization, due diligence refers to a very thorough review of proposals, both technically and financially, in order to satisfy an evaluator as to the merit or otherwise of the proposal. Commonly, due diligence for a privatization project is done at the request of financing agencies, such as the regional development banks or the commercial banks, at the time that application is made to them by a successful bidder.

Because of the financial interest of the banks, the primary focus of the due diligence process has been towards establishing the financial feasibility of a project. Financing agencies have now expanded the scope of due diligence to cover all technical aspects of the project proposal that would ultimately represent a financial risk to the bidder or to the investor.

In current usage, and in this paper, due diligence is taken to describe the entire process of critical review of a proposal for private sector participation in airport development. This then includes financial and technical studies of feasibility for airport privatization, or BOT project development, that might be carried out by government at the outset, by bidders during the course of bid preparation, and by investors during a review of financing.

4.2 Components of a Due Diligence Assessment

Due diligence can be regarded as being of two types - financial and technical. Sometimes banks require that only financial due diligence be carried out, and at other times both financial and technical assessment is required. In fact, the two areas of due diligence are closely related, since much of the technical work is actually directed towards identifying risk, and assessing the financial impact of risk arising from technical issues.

Due diligence can, at the most simple level, involve only a review of proposal documents, and submission of comments and opinion to the sponsor of the work. At a more in-depth level, due diligence can involve rigorous investigation of a development concept, including separate forecasting and analysis, testing of the concept through computer simulation of airside and terminal operations, and consultation with eminent experts in specialist areas of aviation.

Considering the broader context, the main components of the due diligence process are as follows:

Air Traffic Forecasts

- Review historical and current scheduled and charter aircraft movements, passenger traffic, cargo volume and air carrier service, and trends.
- Review and update bidders' current forecast for airline traffic, including airline service patterns, growth in passenger departures, aircraft operations, cargo landed weight. Review bidders' derived forecasts of peak period traffic and compare against industry indicators. Analyse for inconsistency and revise derived forecasts.
- Analyze socio-economic base and key economic demand drivers and evaluate economic changes in the Region and, as necessary, globally on airport system traffic as it relates to this project. Evaluate competition for domestic and international air transportation and competing tariff structures.
- Review bidders' business plan and tariff assumptions, including capital programme and facilities plan, and government services

(i.e. Air Traffic Services, Immigration, Customs etc.) in context of demand and capacity and level of service.

Airport Facilities Development Plan

- Investigate all of the candidate airport sites, and review facility requirements in relation to bidders' planned capital expenditure programme, and its compliance with government requirements for development of the airport(s). Identify risk elements for government and for investors.
- Examine the feasibility of the bidders' airport development plan, with respect to required development for the concession period and its provision to safeguard for future development requirements beyond the concession period. Identify any risks to government that the proposed development will not satisfy long-term government aims.
- Examine bidders' proposal for airside facilities, such as runways, taxiways, apron space and gates. Relate capacities of these elements to derived forecasts.
- Examine proposed capital development and assess the validity of capital cost estimates.
- Examine risk and evaluate bidders' ability to complete the stipulated capital programme, based on airside and terminal capacity requirements as determined from the air traffic forecasts.
- Benchmark existing and proposed airport system operating costs and tariffs against other comparable airports in the region. Identify any anomalies.
- Discuss with bidders' their proposal in order to clarify risk elements. Identify and resolve areas of uncertainty or misunderstanding with bidders'. Carry out an independent assessment of feasibility and cost of key business plan components.

Operations Review

- Review all airside operations, including airside capacity and aircraft manoeuvring. Identify areas of potential congestion and delay to aircraft operations.
- Review all terminal operations, including capacity of terminal processing elements, circulation space and gate provision.
- Review Bidders' management and staffing organization and manpower levels, and evaluate ability to operate and develop the airport system.

- Review past, existing and proposed arrangements with principal airlines that will use the airport facilities.
- Complete an operational review of the candidate airport(s) identifying operations and maintenance expenses. Compare to industry indicators for similarly sized airports.
- Review required operations of government-provided services (ATC, MET, immigration, customs etc.) and any other services to be provided by the government. Evaluate the impact of these services and costs to be borne by the bidder.

Regulatory

- Check compliance of airside elements with ICAO Annexes. Identify areas where compliance is not obtained and assess risks where non-compliance cannot be achieved. Assess costs of achieving compliance.
- Check compliance of terminal processing areas with IATA space and level of service standards. Assess risk of congestion and costs to achieve IATA LOS requirements.
- Check and review local authority requirements and standards, and health and life safety regulations, and assess compliance of terminal buildings and other public areas.
- Check local land use regulations and constraints due to airport site limitations and to aircraft noise, if any.
- Review Concession Agreement and evaluate in comparison with other international airport concessions
- Review existing rates and charges, and identify constraints on increasing charges. Assess risk of regulatory constraints that may affect the business of the bidder.

Financial

- Review bidders' financial assumptions for costs and revenues.
- Review bidders' financial model and examine assumptions in the model, and extent to which model accounts for sensitivity to changes in key variables and assumptions.
- Establish a conclusion regarding whether the bidders' financial model generates reasonable results. Revise and update bidders' model to account for factors not otherwise accommodated.
- Review financial projections and sustainability of growth projections

- Evaluate ability of the bidder to support the stipulated capital expenditure programme.
- Review currency risk, percentage of revenue generated in hard currency, and the ability bidder to manage currency risk
- Recommend and test aviation, development and financial risks and sensitivities associated with the financial plan.

Other Development Risks and Opportunities

- Identify potential risks, difficulties and requirements for airport system development.
- Assess bidders' estimated capital expenditure requirements associated with commercial and other development opportunities at the airports.
- Identify future potential airport related opportunities at the airport(s).

5.0 CONCLUSIONS

The following conclusions may be drawn about the issue of risk in airport privatization:

1. Risk exists in the privatization of airports to a greater extent than may be realized, and may affect the concessionaire, the investor and the host government in different ways, and to differing extents. All parties need to be aware of risk and mitigate against this in preparing terms of reference, in developing plans and proposals and in the bidding process. All risk elements need to be identified, measured and their impact assessed, while mitigation needs to reduce risk to levels that are as low as can be reasonably accepted.
2. The experience with airport privatization, and with airport facility BOT projects, is too limited to be able to label the concept of privatization a success. In making a decision to privatize an airport, a system of airports, or to implement a single BOT project, governments need to assess probability for success, and be realistic in their aspirations. Other forms of public/private sector partnership can be considered. Commercialization of airports can also be considered rather than privatization, where privatization is not obviously viable, or may not be desirable.
3. Not all airports are financially viable for privatization. Those with low traffic volumes and a limited revenue base may never be able

to cover operating costs, let alone provide a return on investment capital.

4. They are some primary risk elements for all parties entering into a privatization concession. Foremost among these are the air traffic forecasts, airport development plan, estimation of revenues, and capital cost estimation. Other important risk elements include the air transport environment, institutional influences and the composition and culture of the concessionaire.
5. The Terms of Reference issued by government and used by bidders can give rise to later risk to government if the TOR are not detailed and properly developed. Lack of an official air traffic forecast and an airport development plan, or other clear guidance by government as to the desired ultimate form of the airport or BOT project, risks loss of control by government over development of its infrastructure.
6. The process of due diligence is generally only carried out by the financing agencies and banks at the time of application for funding. By this time, problems arising in due diligence reviews are difficult to rectify and bidders risk rejection. To safeguard all parties, technical and financial review of the privatization proposal needs to be carried out at an early stage by government, and a similar process carried out by bidders and investors, before submission for evaluation and approval.