

# How to Integrate Claims in Public Private Partnerships: Indian International Airports<sup>1, 2</sup>

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## ABSTRACT

Public-Private Partnerships (PPPs) are increasing daily in most developing nations such as India, for bringing innovation with proper expertise to deliver services or products. However, the inefficiency in PPP projects occasionally is because of several reasons which mainly arise due to the claims made without prior commitment of the contracting parties. The motto of this paper is by using Multi-Attribute Decision Making analysis and in that with additive weighing technique to determine which is the best alternative method to ensure that the claims are properly integrated in PPPs. Based on the analysis, contracting parties should understand well a concession contract model and adopt it. Also, considered in it, with a detailed planning and allowing appropriate change order requests as soon as possible.

**Key words:** Claims, PPP, Construction, Concession, Agreement, Contract, Greenfield, India.

## INTRODUCTION

A PPP or 3P is Public-Private-Partnership, which is defined in many ways, generally, it can be referred to as a contractual arrangement between a public-sector entity and a private sector organisation, ensuring that skills, risks and assets are shared together for the provision of products and/or services. There are several types of contracts in PPP such as Build-Operate-Transfer (BOT), Design-Build-Finance-Operate-Maintenance (DBFOM), Concession and few more etc.<sup>3</sup> There are many issues causing failures in PPP contraction projects in India. Issues, such as the implementation of improper contract models like Concession, BOT, DBFOM, Management etc, inflated traffic projections, corruption, land acquisition, red tape, lack of

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<sup>3</sup> See Yong Hee Kong (2007). Different models on PPP [https://ppiaf.org/sites/ppiaf.org/files/documents/toolkits/Cross-Border-Infrastructure-Toolkit/Cross-Border%20Compilation%20ver%2029%20Jan%2007/Session%204%20-%20Private%20Sector%20Participation/Private%20Sector\\_02%20Diferent%20Models%20of%20PPP%20-%2029%20Jan%2007.pdf](https://ppiaf.org/sites/ppiaf.org/files/documents/toolkits/Cross-Border-Infrastructure-Toolkit/Cross-Border%20Compilation%20ver%2029%20Jan%2007/Session%204%20-%20Private%20Sector%20Participation/Private%20Sector_02%20Diferent%20Models%20of%20PPP%20-%2029%20Jan%2007.pdf)

safety clearances on time.<sup>4</sup> These can result in a compounded issue like improper risk transfer between the parties which create controversies that could delay or stall the overall process and delivery of the intended services. Such issues can be minimised by understanding the requirements, the socio-economic benefits of the intended service and by initially considering that the appropriate contract models are well interpreted and selected by the respective contracting parties. In addition, clear-cut claims of both the parties must be negotiated initially, which can reduce the controversies towards the later stages of the project. For mega-infrastructure projects, claims made in accordance to their own obligations will often cause controversies between parties. Therefore, “How can Claims help contracting parties perform efficiently in PPP projects”. So, in this case, considering that claims can be an efficient way to ensure both parties face minimum or no issues, is mainly by taking into account that, the additional clauses of claims which are beneficial for either parties are evaluated and then to be incorporated, considering the reasons particularly for arise of claims issues such as, delay in payments, force majeure, schedule delays, liquidated damages, disputes, change order and proposal requests etc.

### **Step 1- PROBLEM RECOGNITION, DEFINITION AND EVALUATION**

The author intends to know “How can Claims help contracting parties perform efficiently in PPP projects”, by

- Firstly, what type of contract model can be adopted?
- Secondly, how can unanticipated delays be addressed by contracting parties?
- Thirdly, how can proper documentation of claims mitigate unforeseeable issues in between contracting parties?

### **METHODOLOGY**

#### **Step 2- FEASIBLE ALTERNATIVES & ATTRIBUTES**

The following are the feasible alternatives chosen:

- 1- Concession contract model
- 2- Management contract model
- 3- Detailed planning
- 4- Appropriate Change order requests

The attributes to be compared with the above-mentioned alternatives are:

- 1- Communication efficiency
- 2- Implementation flexibility
- 3- Risk sharing
- 4- Addressing claims issues

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<sup>4</sup> Arindum Chaudhuri (2013). *Why the public-private partnership model has failed in India*  
<http://www.thesundayindian.com/en/story/why-the-public-private-partnership-model-has-failed-in-india/46608/>

### **Step 3- DEVELOPMENT OF THE FEASIBLE ALTERNATIVES**

#### **1- Concession contract model**

This is a type of contract model in PPP, where it is mostly utilised for greenfield and brownfield construction projects, in which the design, construction and operations are done by Private sector even though the asset ownership is in the hands of Public sector. In this model the duration of the contract is typically long, it can be a minimum of 20 years and maximum of 30-40 years. The risk entitled to Private sector is mainly high tariff revenue because the role of private sector is to design, finance, construct, manage and maintain. So, the private sector responsibility is, providing the intended services in a specified area, including all the operations and further rehabilitations required by recovering costs from user charges.

#### **2- Management contract model**

This is also a type of agreement in PPP among several agreement models, in which the owner is public sector and generally contracts with private sector for operations and maintenance of the public service, where the responsibility and capital investment is entitled completely to the public sector and the risk to private sector is low with a pre-determined charge and maybe including performance incentive also, as the private sector must control the daily management of the services. The duration of the contract can be short (2-3 years) to medium (3-6 years). In some cases, the duration can also be from medium to long, when the contract involves additionally rehabilitation and expansion works, which are also the responsibilities of private sector and here the risk to private sector will be medium as it includes tariff share also.

#### **3- Detailed planning**

In any construction project, it is mandatory to have a detailed planning before design and construction phase. The tasks involved in this stage are identifying the required solution for the project considering socio-economic factors, political factors then preparing a valid scope definition, defining all the activities clearly, Budgeting, Scheduling. Realistic economic analysis is to be done for the tasks to see that there will not be any issues in long run. Scheduling is basically assessing the time required for the project to complete and deliver the service by calculating the time for each activity involved. Budgeting is calculating the total cost of the project, by considering, contractor, sub-contractor charges for their service, allocation of resources such as equipment, materials, labour etc, required for the upcoming activities. Additionally, considering the current and expected future political, weather conditions some extra time and costs should be assessed and accounted properly so that there may be minimum issues regarding claims in further situations.

#### **4- Appropriate change order requests**

Changes may occur from any parties involved in a project, such as a contractor’s Request for Information(RFI), owner’s meeting notes or an architect’s finding of an error or omission in the issued documents. In addition, changes can occur due to the political reasons, weather conditions in that specified area. So, a change order in construction contract is a complete or partial modification of a contract in writing. It is a change to the original contract that has been previously established and previously written. These can affect the ongoing and upcoming activities of a project by leading to change in scope of the project, delay in the project duration and/or increase in the project costs. So, firstly, it is the responsibility of the contracting parties to presume the most common changes that would occur in the initial stages itself and prepare a realistic plan with scope definition, budget and schedule. Secondly, the unexpected changes occurring are to be considered by both the parties as soon as possible and accordingly produce a change order form with clear-cut negotiation of the situation and involved risks, to reduce the issues that will arise due to several claims.

**Step 4- SELECTION CRITERIA**

In this paper, Multi Attribute Decision Making(MADM) analysis method is selected for analysis and comparison of the feasible alternatives and attributes. Here the alternatives are scored based on the attributes as very high, high, medium, low, very low. Whereas the difference in colours is, as it goes into complete green then it is positive and as it goes into complete red, it means negative. Those alternatives with high positive score are selected and the alternative with least positive score is omitted. Here Management contract model is with least positive score and this is omitted.

*Table 1 – Multi-Attribute Decision Matrix*

Feasible Alternatives / Attributes	Concession contract model	Management contract model	Detailed planning	Appropriate change order requests
Communication efficiency	Medium	Low	High	Low
Implementation flexibility	Medium	Very high	Very low	Very low
Risk sharing	Very high	Low	High	Very high
Addressing claims issues	High	Very low	Low	High

## FINDINGS

### Step 5- ANALYSIS AND COMPARISON OF THE ALTERNATIVES

To utilise compensatory approach, we need to represent our feasible alternatives quantitatively for the analysis. So, we will start by converting relative scoring options (Very High, High, Medium, Low, Very Low) as dimensionless values.

*Table 2. Quantitative representation of the attributes*

Attributes / Relative scoring options	Communication efficiency	Implementation flexibility	Risk sharing	Addressing claims issues
Very high	1	1	1	1
High	0.75	0.75	0.75	0.75
Medium	0.5	0.5	0.5	0.5
Low	0.25	0.25	0.25	0.25
Very low	0	0	0	0

Now, we will use the above-mentioned dimensionless values to create a “relative weighting” for each of the alternatives.

*Table 3 - relative weighting*

Feasible Alternatives /Attributes	Concession contract model	Detailed planning	Appropriate change order requests
Communication efficiency	0.5	0.75	0.25
Implementation flexibility	0.5	0	0
Risk sharing	1	0.75	1
Addressing claims issues	0.75	0.25	0.75
<b>Total</b>	<b>2.75</b>	<b>1.75</b>	<b>2</b>

We use the “additive weighting technique” by ranking each of the attributes by their importance. The sum of each alternative can be compared to the normalized weight of 1.0, which is the score to be reached. So, the attributes are ranked from Most important to least important, like this, Addressing claims issues > Communication efficiency > Implementation flexibility > Risk sharing.

Table 4 - additive weighing technique

Attributes	Relative rank/Weight	Normalized weight	Concession contract model		Detailed planning		Appropriate change order requests	
Communication efficiency	3	0.3	0.5	0.15	0.75	0.23	0.25	0.07
Implementation flexibility	2	0.2	0.5	0.10	0	0	0	0
Risk sharing	1	0.1	1	0.10	0.75	0.07	1	0.10
Addressing claims issues	4	0.4	0.75	0.30	0.25	0.10	0.75	0.30
<b>TOTAL</b>	10	1.0	<b>TOT</b>	<b>0.65</b>	<b>TOT</b>	<b>0.40</b>	<b>TOT</b>	<b>0.47</b>

### Step 6- SELECTION OF THE PREFERRED ALTERNATIVE

After ranking the attributes by importance with the “additive weighting technique”, we could see that the difference between all the alternatives has been reduced precisely and say that the better choice is “Concession contract model”. In fact, this alternative is 138% better than the “appropriate change order requests” alternative. The last 2 alternatives (appropriate change order requests and detailed planning) were almost similar with this analysis.

### Step 7- PERFORMANCE MONITORING AND POST-EVALUATION OF RESULTS

This analysis has been performed to find the best choice among the chosen alternatives, which ensures that how well claims are integrated in PPP, Indian International Airports. Here we assumed that Claims help both the parties involved in a PPP project, perform efficiently and make it a successful project eventually by adopting a particular contract model, here in this case, Concession contract model and having appropriate change order requests made on time and a well detailed planning.

Indeed, this should be a long-term analysis as we know that especially in PPPs, Construction projects often have longer durations for the whole project, maybe even for completing a project phase it may typically be long durations. Finally, we could also have considered few more alternatives and attributes for the analysis and even added with some more analyzing methods such as PARETO analysis to the one used. In that way, we could have specified a bit more the results of the analysis and maybe we could have found different results too.

### CONCLUSIONS

In this paper, the author wanted to identify the feasible alternatives which can integrate claims in PPP, Indian International Airports. So that, claims could help both the contracting parties to perform efficiently and make a successful project. In this paper, the chosen feasible alternatives are analysed and compared to determine which one would be the best alternative. So, the best choice is to adopt Concession contact model in which claims are well interpreted and negotiated, considering the group of shareholders involved from both the parties.

Moreover, the remaining two alternatives with almost equal preference are detailed planning and appropriate change order requests, which could be considered into the best alternative obtained itself. So that, claims can be integrated in a sensible manner, because practically making appropriate change order requests on time can reduce the impact of change on the project duration and budget without arising any issues related to claims. Also, with a detailed planning, cases of unanticipated delays can be minimised, also it helps with a proper documentation of claims from the very initial stages, which could mitigate issues in between the parties involved.

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