

Dispute Prevention Approaches in PPP Projects—Practical Issues

Serge Y. Bodart*

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1. The growing share of PPP projects

For the past decades, the number of major infrastructure project developed under Public Private Partnership (PPP) contracts has been growing significantly in the construction industry. A good indicator of this growth is the amount financed by the European Investment Bank in PPP's in Europe: in 1990, the total invested amount represented €250 million, growing to €1.3 billion in 2012.¹

Since PPP contracts usually involve large complex public infrastructure projects and are long-term arrangements with multiple goals and interrelated parties, the risks of potential disputes under PPP projects are common. The mechanism to prevent and resolve these disputes becomes accordingly a major part of the PPP contract risk assessment and negotiations process.

After having examined the specificity of PPP contracts and recent trends (in section 2), potential sources of disputes under PPP contracts will be identified (in section 3), dispute prevention approaches will be introduced (in section 4) and finally practical issues in dispute prevention for PPP projects will be presented (in section 5).

2. PPP contracts and recent trends

2.1 Main features of PPP projects

The main characteristics of PPP projects are that they usually involve a large and complex public infrastructure; they are a long-term commitment with a close co-operation between the contracting parties and that they take into consideration the project during its whole life cycle.

Typically under a “conventional” contract, a contractor will design and build for a client an infrastructure at an agreed price, quality and deadline. He will then transfer the infrastructure at the end of the construction period subject to certain guarantees. Under a PPP contract the contractor (Private Partner) will not only build the infrastructure for the client (Public Partner), but will also design it, finance it as well as operate and maintain it to specified performance levels for a given contract period (usually between 25 and 50 years) before handing it back to the Public Partner.

* Partner at PMG Consulting Engineers & Economists.

¹ European PPP Expertise Center report April 2013.

The rationale of a PPP approach is to develop, implement and operate a public infrastructure in the most efficient way possible, through a close and long-term co-operation between the Private Partner (usually a consortium of contractors, investors and operators) and the Public Partner (usually a local, regional, or national public authority, or administration).

By taking into consideration the whole life cycle of the infrastructure from its initial development up to its handing back to the Public Partner, while operating and maintaining the infrastructure, the Private Partner is in a better position to optimise the project in terms of required quality, costs and delays but also in terms of the infrastructure functionality in the most efficient way. The infrastructure operation scope, maintenance scope and risks during the entire contract period are studied and optimised from the very beginning of the project development and design of the project.

The Private Partner's compensation can be paid through revenues generated by the project itself (PPP/Concession Contract—for example, toll paid by users on a highway), or by an availability payment paid by the Public Partner (PPP/Availability Contract—for example, a hospital, or a school building) and subject to availability performance criteria.

One of the keys to a successful PPP project which contributes to the project optimisation is a balanced allocation of the rights and obligations and therefore the project risks between the partners. The basic principle for a balanced risk distribution is that each partner carries the project risks it is best able to master, thus reducing the overall cost of risk and contributing to the project optimisation.

As it stands, PPP projects may not be a “new idea”, but the closer and long-term co-operation, together with a life cycle approach, offers more optimisation possibilities. This approach coupled with a proper control of the infrastructure functional performance over the contract term will provide overall benefit to both the Public and Private Partners.

Based on this short review of PPP project features, one can easily picture that these will have an impact on the potential sources of disputes and on the approaches to dispute prevention.

2.2 Contract structure and risk allocation

The main parties to a PPP contract are the Public and the Private Partner. In practice, the Private Partner, a consortium of companies, usually establishes a project company (a project Special Purpose Vehicle, or Company—an SPV). This SPV, while managing the PPP contract and the interface with the Public Partner, will usually sub-contract the design and construction works to an EPC contractor, whilst the operation and maintenance services will be sub-contracted to an operator. All the rights and obligations under the PPP contracts are directly passed through to these sub-contractors in the sub-contracts (on the back to back principle)

This structure is part of the project optimisation process, but implies multiple parties with multilayer of contracts and interfaces adding to the complexity of the PPP contractual structure.

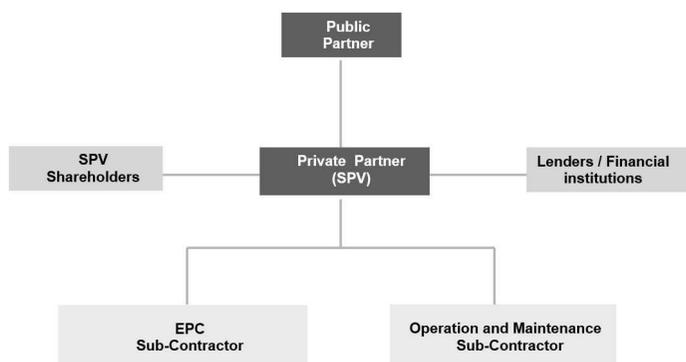


Figure 1:

As mentioned before, the risk allocation is a key issue for PPP projects. The following risk allocation is based upon the experience and data of more than 30 PPP projects. It provides an “average” picture of a typical risk allocation, although a risk allocation will vary for each PPP by its nature and following the contract negotiations.

Table 1 emphasises the mains risks and the responsibility distribution between the Public and Private Partners and provides a sense for potential sources of disputes.

Table 1

Risks	Public Partner	Private Partner
General risks		
General change in law		X
Specific change in law (specific to the project)	X	
Development phase		
Land expropriation for the project	X	
Documents for permits and authorisation		X
Issue of authorisations and permits	X	
Design (cost and delays)		X
Private financing/Financial close		X
Construction phase		
Existing site conditions		X
Existing networks (electricity, water, gas, etc.)		X
Geotechnical risks	X	X
Archaeological risks	X	X
Existing contamination risks	X	X
Construction works including equipment		X
Lump sum fixed price		X
Working programme/Construction delay		X

Risks	Public Partner	Private Partner
Force majeure	X	X
Construction guarantee and insurances		X
Operation and maintenance phase		
Documents for permits and authorisation		X
Issue of authorisations and permits	X	
Revenue risk	X	X
Availability payment	X	X
Lump sum operations and maintenance costs		X
Major equipment replacement and repair		X
Technology changes		X
Availability and performance criteria		X
Force majeure	X	X
Operation and maintenance guarantee and insurances		X
Hand-back requirement at end of contract period		X

2.3 Recent trends in PPP contracts

Recent trends shows that there is a growing share of PPP projects which are being contracted for existing infrastructures which need to be upgraded, or extended to today's standard with a focus on the equipment renewal, operation and maintenance services, rather than on new construction works.

With regard to the procurement process, one observes that in the PPP procurement procedure, the public procurement authorities require more often from the bidders a two- to three-step competitive dialogue before the contract is awarded. This comes as an addition to the initial prequalification procedure. The rationale of this procurement approach is for the Public Partner to obtain from the Private Partner candidates the best possible proposal. By having these multi-step competitive dialogues, the Public Partner provides himself with a tool whereby he can negotiate in parallel with several candidates and extract from these dialogues the best possible functional project and optimised risk allocation. Usually in the ultimate step before the contract is awarded, two bidders are invited to provide their best and final offer (BAFO). After nomination of the one preferred bidder (the final stage of the process), the Public Partner still benefits from an alternative BAFO in case the preferred bidder cannot reach financial close. In this way, the Public Partner is not obliged to repeat the process and is in a position to rapidly award and implement the project.

During the last decade, the financing of infrastructures with 100 per cent revenue risk for the Private Partner (revenue generated by the project, e.g. a toll highway) has become more and more difficult to obtain under reasonable and competitive financing conditions from banks and financial institutions. Banks and financial institutions are nowadays reluctant to finance the Private Partner carrying 100 per cent of that risk without having some guarantees from the Public Partner on the revenue forecast. Approach to project revenue risk has evolved to models and risk

allocation whereby this risk is better shared between the Public and the Private Partners.

3. Potential sources of disputes under PPP contracts

3.1 Overall context

The above short review of the main PPP characteristics and features is helpful to identify the areas in which potential disputes may arise under PPP contracts.

The recent financial crisis has also highlighted some of the feasibility weaknesses of certain PPP projects which underwent a full restructuring of the PPP deal (e.g. the highway concessions in Greece).

The list of potential disputes which follows the main project phases does not intend to provide an exhaustive list of potential sources of disputes, but provides some of the conflict issues the Partners may encounter based upon practical experience on several PPP projects. The main project phases are the bid and financial close phase, the construction phase, the operation and maintenance phase, as well as the infrastructure handover at the end of the contract period.

3.2 Bid and financial close phases

The financial close phase follows the PPP contract award after the preferred bidder stage. It requires the Private Partner to fulfil a series of conditions precedent before the contract comes into force. One of these conditions is of course the financial close for the financing of the project.

At this early stage of the project, the main risks and potential sources of dispute can be the following:

- Interruption of the project procurement process by the Public Partner in the bid phase—depending on the reasons for this interruption, the parties may disagree on the justification and level of compensation of project initial development and design services.
- A bad anticipation from both Partners of a bankable risk allocation—this situation could lead ultimately to the impossibility of reaching financial close.
- A drastic change of economic conditions between the contract award and the planned financial close date, affecting the feasibility of the project. This is typically a Private Partner's risk, but may lead to a renegotiation of the PPP contract.
- An excessive optimism (e.g. in the case of traffic forecast for an airport PPP) at the signing of the contract from both sides, with the risk of having to renegotiate the PPP contract, usually relatively soon after the contract award, with as a consequence potential disagreements.

3.3 Construction phase

Before looking into potential sources of dispute in the construction phase, it is worth to emphasising that with regard to the construction scope, PPP contracts are

in most cases “cost and date certain” contracts, as indicated in the risk allocation table. This should limit the sources of potential disputes related to the cost and completion dates.

As for other contracts, there are penalty clauses in a PPP contract for the benefit of the Public Partner. On the other hand, the Private Partner may claim in case the Public Partner has not fulfilled their obligations. But there are two major conditions in a PPP project which bring the Private Partner to another approach when it comes to potential cost and delay overruns:

- The Private Partner has an obligation to provide a functional infrastructure at a certain cost and date. The detailed infrastructure design and specifications are mostly their own responsibility, as long as the Private Partner fulfils the functional and performance requirements as specified by the Public Partner.
- The Private Partner is self-motivated to finish on time and at cost. Any delay or cost overrun will affect the timing for their compensation and their own return on investment: compensation will start when the infrastructure starts to be operational and in most cases the Private Partner supports any cost overruns (see risk allocation).

These conditions reduce the risk of cost and delay overrun. At the same time, the risk of poor quality is also reduced because the Private Partner is responsible to operate and maintain the infrastructure after its construction on a long-term basis. The Private Partner will see that they have the highest but optimised level of quality in order to keep their operation and maintenance cost under control and service performance to the required level.

Nevertheless, disputes may arise during construction. Based upon the risk allocation matrix presented in section 2.2 above, the potential sources of disputes are:

- compensation for delays in providing the required lands which need to be expropriated;
- cost overrun in land expropriation;
- delays in obtaining authorisation and permits;
- unpredictable archaeological discovery;
- unpredictable geotechnical difficulties;
- unpredictable level of pollution and required level of treatment measures;
- potential dispute sources due to the multiple interfaces (public administration—SPV, SPV—construction contractor, SPV—construction sub-contractor—operator sub-contractor); disputes may arise in case of a poor, or inadequate PPP scope limitation and distribution between the multiple parties.

3.4 Operation and maintenance phase

This phase is characterised by the fact that it is the longest one, covering most of the contract period (typically 25 to 50 years, less the construction period).

During this phase, the Private Partner is subject to performance control and a penalty regime. The Public Partner can monitor and control the level of the infrastructure functional performance. This performance control and penalty regime are more, or less detailed, harsh and very often the result of intensive negotiation between the Partners.

As for the general risk allocation, this penalty regime has to be balanced, providing on one hand the Public Partner a proper control tool and on the other hand sufficient incentive for the Private Partner to perform well. The penalty regime should be simple to implement and should not be too harsh so as to prevent the Public Partner from properly operating the infrastructure at reasonable cost.

Typical sources of disputes during this phase are, for example:

- Disagreement on the justification and on the level of penalties in case of non-compliance of performance criteria and user dissatisfaction.
- The risk of change in law is logically higher during the operation phase. In case this change of law has an impact on the performance of the infrastructure, there is a potential source of dispute on the level of compensation for the Private Partner.
- As in the construction phase, potential disputes may come from the multiple number of interfaces (public administration—SPV, SPV—operator sub-contractor). Disputes may arise in case of a poor, or inadequate PPP scope limitation and distribution between the multiple parties.
- Disagreement on the impact of changes in the competitive environment (e.g. if the Public Partner builds a new alternative road to a new toll bridge or tunnel). There is a potential source of dispute on the level of compensation for the Private Partner.

This phase also includes the handing-back of the infrastructure to the Public Partner at the end of the contract period. Some specific hand-back requirements and conditions are usually fixed in the PPP contract setting the hand-back conditions for the infrastructure. Again, the level of requirements and the way these conditions are verified at the time of the hand-back are subject to intensive negotiation of the PPP contract and may lead to disputes at the time this hand-back takes place. This issue is particularly sensitive for the Private Partner as these hand-back conditions may be capital and investment intensive and they are taking place at the very end of the contract period.

4. Dispute prevention approaches

4.1 Main approaches

The main approaches related to dispute prevention for other type of contracts are of course applicable to PPP contracts. They all have the common goal of preventing disputes at a very early stage and providing informal assistance with the aim of avoiding potential disputes and preserving the relationship between the parties. They are usually less time and cost consuming than dispute resolution.

These main approaches include partnering, claims appeals committees, early neutral evaluation and Dispute Boards, which may not only serve the purpose of resolving but also preventing disputes.

4.2 Partnering approach

The partnering approach consists of having formal and periodical meetings during the implementation phase of the contract. In the case of a PPP contract, these periodical meetings would also be held during the operation and maintenance phase, but at a reduced frequency.

The aim of this method is to maintain an on-going dialogue and improve communication between the parties, the rationale being that it is more efficient to discuss problems, disagreements and causes of dissatisfaction as soon as they appear, in order to avoid affecting the relationship between the parties. In the case of a PPP contract because it is of a long-term nature, not damaging the parties' relationship becomes even more important.

From a practical point of view, these meetings involve senior management of the parties. In an initial meeting at the very beginning of the contract, a mutual understanding of the concept of partnering is established and procedures to resolve critical issues are decided. At the conclusion of this workshop, a "partnering charter" is drafted and signed by the parties. The meetings between the parties are usually chaired by a neutral person and should take place at regular intervals.

4.3 Claims appeals committees

The method is frequently used in the construction industry. Because PPP contracts are long-term contracts, this method is also suitable for PPP projects.

The main function of this committee consists of reviewing disagreements or potential conflicts which could not be solved at lower management levels.

A committee is constituted by senior executives of the parties who are not directly involved in operational matters of the contract, either in the construction or in the operation and maintenance phase in the case of a PPP project. In this way, the committee has a more distant and objective view of potential issues which could lead to disputes. This "broader" view should increase the chances of resolving issues and agreeing on pragmatic solutions.

The procedure for a claims appeals committee (which is a standing body) may be formal and structured. They may also involve the exchange of written reports. This committee has the advantage of being faster in decision making, having lower cost and being more flexible, while decisions remain within the control of the parties.

4.4 Early neutral evaluation

This ad hoc procedure aims to evaluate important issues of fact or law during the execution of the contract. It makes sure that a recognised expert (or a panel of experts, if needed) is jointly appointed by the parties. The evaluation produced by the expert would be based on fact findings and provide concrete solutions and

recommendations according to an independent neutral view. The professional experience of the expert is therefore essential to this dispute prevention method.

The expert's evaluation is set out in the form of a report, including conclusions and recommendations, which are not binding on the parties. This method has the advantage of being relatively low cost, and is usually faster and simpler.

4.5 Dispute boards

Project contracts for large infrastructure projects often establish standing boards composed of experts appointed by both parties: Dispute Boards (DBs). DBs are boards with one or three members which settle claims and differences as they arise during the execution of the contract by issuing recommendations or opinions.

DBs may not only serve the purpose of resolving disputes, but also preventing them:

- DB procedure foresees regular site visits and meetings, which enable the DB members to stay conversant with the project and the parties to submit any issues to the board.
- Disagreements or differences may be submitted to the DB at an early stage, increasing the chances that it does not become a dispute.
- DBs may provide for informal assistance, if requested by both parties. This assistance will favour dispute prevention.
- These regular site visits and meetings improve the communication and develop confidence between the parties.
- Opportunity is given to the parties to settle their differences in a mood of co-operation.
- Parties and DB members get to know and trust each other.

5. Dispute prevention in PPP projects

5.1 Overall context

The potential dispute sources analysis (section 2 above) shows that some of these potential sources under a PPP contract are comparable with other forms of more conventional contract (turnkey contracts, design and build contracts, and so on).

Although PPP contracts are more complex because of their multi-parties and multi-goals structures, overall some of their features will improve dispute prevention.

The following review of the dispute prevention approaches for PPP projects does not intend to be exhaustive but aims to provide some initial thoughts on these approaches based upon practical experience of several PPP projects

5.2 Project validation before implementation

Following the features of PPP contracts described earlier, because of the long-term commitment, the PPP project undergoes an intensive validation and review during its development phase before contract award. This intensive verification favours the project knowledge and risk assessment, stimulating a better identification and evaluation of potential sources of disputes.

These in-depth verifications include the following processes:

- **The project risk analysis:**

The Private Partner performs an in-depth risk analysis for all phases during the entire project contract period. This risk analysis includes risk identification, risk potential impact evaluation (risk occurrence probability and risk cost impact) and the search for risk mitigation measures. Based upon this analysis, the Private Partner develops some downside and pessimistic scenarios in order to anticipate potential difficulties, while at the same time evaluating the impact of these scenarios on the feasibility of the PPP project.

- **The project optimisation/competitive dialogue:**

Because of its life cycle nature, the project will undergo a project optimisation process. This process favours a deeper review by the Private Partner of the project, while identifying areas of potential optimisation and risk. In case the bid process includes a competitive dialogue (see section 2 above), this will also favour a deeper review of the project not only by the Private Partner but also by the Public Partner who is party to these competitive dialogues. The competitive dialogue is usually a two to three step process, where the project is at each step optimised and again scrutinised in detail by both Partners.

- **Financial institution/lenders involvement:**

The Private Partner in a PPP contract commits to provide the project finance. Typically, the Private Partner will bring 10 to 20 per cent of project equity, while the lenders will bring the rest in the form of loans to be paid back. This means that in addition to the previous verification process, the project will undergo a fully independent due diligence managed by the lenders and performed by its advisors. This due diligence usually includes all aspects of the PPP project (legal, technical and commercial). This process will provide an additional comfort in identifying and verifying any project risk and critical aspects.

- **Project rating:**

In case the project financing will be done through a bond, the investment institution will require a bond rating. Again, the PPP project will undergo a full and exhaustive due diligence required by the institutions guaranteeing the bonds.

5.3 The partner's close co-operation

The PPP contract features described earlier (close co-operation between the Partners, long-term contract, life cycle consideration and so on) coupled with usually high contract volumes (several hundred million euros) and the fact that usually strategic infrastructures are involved (such as roads, rails, hospitals, prisons, schools, etc.), brings more or less naturally the PPP contract Partners to

find pragmatic and acceptable solutions in case of disagreement. This is a very strong incentive to dispute prevention in PPP projects.

This brings us back to what has been experienced for the past 30 years. Disputes can be reduced, solved, or prevented simply by a better communication between the contract parties. This is of course not specific to a PPP contract. But the simple fact that the Partners are “married” on a long-term basis for a project which is usually of critical or strategic importance definitely favours and stimulates the communication between the Partners.

Particularly in the case when the PPP procurement procedure includes a competitive dialogues process, the Partners learn from the very beginning to communicate and to work very closely together. This process can usually last for a period of one to three years before contract award and provides the opportunity to develop confidence between the Partners.

5.4 Contract guarantees and penalty regimes

PPP contracts, as with other contracts, include a series of guarantees which have to be provided by the Private Partners during all phases of the project (financial close/implementation phase, construction phase, operation and maintenance phase). Considering the typical PPP contract volume these guarantees can rapidly amount to several hundred million euros.

PPP contracts will include for these phases some guarantees and penalty regimes which will run during the whole contract period, including the hand-back period at the very end of the contract period. Because of the long-term nature and the guarantees running during the whole contract period, the Private Partner is encouraged to find pragmatic solutions in case of disagreement with the Public Partner.

The following review of guarantees provides a sense of what level of guarantees is expected from the Private Partners:

- construction performance bond: 5 to 15 per cent of construction volume;
- construction delay penalty : up to 5 to 10 per cent of construction volume;
- cap (financial) on liability for the construction scope: 25 to 40 per cent of construction volume;
- operation and maintenance (O&M) performance guarantee: 3 to 6 months of O&M fee;
- O&M penalty regime: 2 to 10 per cent of O&M fee;
- cap (financial) on liability for the O&M scope: 12 to 18 months of O&M fee;
- hand-back guarantee: 2 to 5 per cent of initial construction volume.

The Public Partner may also have to provide some guarantees to balance certain risks. For example, in road projects, the Public Partner may have to provide a minimum traffic/revenue guarantee.

But practical experience shows that the major incentive for the Public Partner to prevent, or resolve in a pragmatic way potential disputes is the Public Partner’s own reputation and credit rating. Any contract breach or “misbehaviour” would

at some point in time penalise the Public Partner, which could in some extreme cases even lead to a lower administration credit rating. The consequence could be that this Public Partner (national, regional, or local administration) will have more difficulty obtaining loans at competitive rates.

6. Conclusions

This short overview of PPPs has highlighted the features of PPP projects and contracts.

PPP projects are complex, with multiple goals and contract layers but the level of project analysis and validation before contract award by the Public Partner, the Private Partner, or the lenders is tremendous. The level of co-operation between the Partners all along the contract period is also intensive. These main features will definitely improve the level and the quality of communication between the Partners, which is essential for preventing disputes. It could also be an inspiration for conventional contracts by improving the way that projects and contracts are prepared before their award and implementation.

But these features are of course not by themselves a guarantee of not having conflicts and disputes between the Partners. The technical, contractual and financial complexity of PPP projects can be a source of disputes and disputes do arise in PPP projects. PPP projects will therefore also benefit from conventional procedures for dispute prevention. These dispute prevention procedures become even more important in the case of PPP projects. Indeed, PPP project amounts are significant both in the construction phase and in the operation phase, meaning that conflicts can lead to extreme disputed amounts. In PPP contracts, the Partners are bound together on a long-term basis. This means that maintaining a good relationship over these long periods becomes even more important if the Partners want to manage the PPP project in the most efficient and successful way.