



Original Research Article

**DISPUTE RESOLUTION IN PUBLIC-PRIVATE PARTNERSHIPS
(PPPS) CONTRACTS IN NIGERIA**

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ABSTRACT

Disputes are residual risks inherent in public-private partnership (PPP) projects due to multiple contracts involved. This study examined dispute resolution techniques (DRTs) used in PPP contracts administration in Nigeria and the specific objectives were to identify DRTs used, criteria for selecting DRTs and developing a framework for enhanced selection of the techniques. Survey questionnaires were used to collect primary data from the study populations. The populations comprised PPP projects consultants, contractors, subcontractors, suppliers, private organisations, public organisations and facility users. Discussion between the parties, arbitration, and fast track resolution process were the most commonly used techniques of dispute resolution. Litigation, expert determination and dispute resolution board (DRB) were the least used techniques. Factor analysis (FA) was used to determine the criteria for selecting DRTs. Five criteria were extracted and these are: contractual relationship, business interest, remedy requirements, flexibility of DRT, and organizational policy on dispute management. Technical, operation and social disputes were preferred to be resolved through alternative dispute resolution. Arbitration was the most preferred technique for settling construction and financial/economic disputes while litigation was considered the most suitable technique for resolving legal and political disputes.

1. INTRODUCTION

The adoption of public-private-partnerships (PPPs) for infrastructure development is increasingly gaining prominence in both developing and developed economies (Benes and Stary, 2007). It has been found efficient in some climes and also inefficient in others (Mundhe, 2008; Abdul Quium, 2010). The major cause of the inefficiency has been attributed to the constant state of conflict and disputes among project participants (Kumaraswamy, 1997; Yeoman et al., 1998; Sanni, 2012). According to Kumaraswamy (1997) and Cheung (1999), commercial-oriented construction contracts are increasingly growing complicated. The contract terms are cumbersome, tasking and risky; and their interpretation and execution exposes the contracts to disputes (Essex, 1996). The one-stop nature of construction project, long delivery duration and its high exposure to macro and micro economic variables further make construction contract vulnerable to disputes. PPP contracts often contain anticipatory hedging clauses for unintended or unpredictable scenarios; as it is not every contingency that the contract can cater for (Asenova and Beck, 2003). Plurality of participants and legal jurisdictions further make disputes unavoidable in PPP contracts (PIFS, 2006).

The prevalence of uncertainty, long maturity duration, changing legal and economic regimes often test the efficiency of the dispute-hedging clauses and methods specified in the PPPs agreements (NEPAD-OECD, 2005). Disputes are unavoidable in commercial relationships due to conflicts of interests and its effective management contributes to the corporate performance of the PPP project (Brook and Murray, 2003). Therefore it should be adequately managed through strategic assessment of occurrence and effective mitigation of impacts with a view to enhancing PPP contract delivery. This is succinctly captured by Christian Strenger cited in International Finance Corporation (IFC) (2011) that “*countries seeking to create a capital market (and companies seeking to attract local or global capital) must develop a framework that assures investors of two things: first, the assets they provide will be protected and, second, the disputes related to the company’s governance can be addressed effectively.*” This position is corroborated by Abdul Quium (2010) that private sector entities (concessionaire, credit providers, insurance organisations and contractors amongst others) feel encouraged when they have confidence that disputes can be resolved fairly and efficiently’.

It is necessary to understand that dispute resolution is a subset of project risk management in construction activities and has received significant attention in project management (Guislan and Kerf, 1995; IPPR, 2000). It seems that elimination of disputes in contracts involving significant construction and plurality of stakeholders like PPP is a proverbial holy grail. This is succinctly captured by Love *et al.* (2010) that while appreciable quantity of knowledge has been generated on contractual disputes in infrastructure procurement, disputes continue to erupt and disrupt the process of construction and this has considerable consequence on the delivery cost, time and quality. Considering the extensive exposure of PPP to contractual conflicts and poor investment climate in Nigeria within which the projects are procured, there is a need to have an enhanced knowledge of disputes resolution practices for effective management of occurrence and impact of disputes. This study examined dispute resolution

techniques (DRTs) used in PPP contracts administration in Nigeria and the specific objectives were to identify DRTs used, criteria for selecting DRTs and developing framework for enhanced selection of the techniques.

2. METHODOLOGY

2.1. Study Population

This study is a survey research and both primary and secondary data were used to achieve the objectives of the study. Primary data were collected using survey questionnaire and secondary data were sourced from relevant publications. The determinants of dispute resolution techniques were examined using factor analysis. Population comprised key organisations and individuals involved in the contracts. Both projects and organisations were selected using purposive technique of population sampling. The PPP projects and study population were located in Lagos State (Nigeria) and were selected from the database of the Lagos State Office for PPP and Infrastructure Concession Regulatory Commission. Lagos State is the economic hub of Nigeria, it has the highest concentration of PPPs projects in Nigeria and it is the only State with Enacted Laws regulating PPP practice in Nigeria. The study population comprised of personnel of consulting organisations (18), personnel of contracting organisations (12), personnel of subcontracting organisations (8), personnel of supplier entities (10), personnel of private sector organisations (25), personnel of public sector organisations (17), and facility users (6). Out of the 96 questionnaires administered, 61 were retrieved and used for the study. This represent 63.54% response rate and would enrich the finding of the study.

2.2. Techniques for Data Analysis

Collected data for the first objective (DRTs used in PPP contracts) were analysed using mean, factor analysis was used to analysed the second objective (criteria for selecting DRTs) and percentile-based simple majority rule was used to analysed the third objective (framework for selecting DRTs in PPP contract). Principal Component Analysis (PCA) and Varimax with Kaiser Normalization of extraction and rotation methods were used respectively for the factor analysis.

2.2.1. Mean

Mean is a measure of central tendency tool for determining the relative position among variables in grouped and ungrouped data. As used in this study, it is the summation of the product of response rating and corresponding number of responses and dividing the figure by total number of responses (in grouped data). Kometa et al. (1996) used it to analyse risks in construction projects and called it mean item score (MIS).

2.2.2. Factor analysis (FA)

FA is a statistical tool used for identifying a relatively small number of factors that can be used to represent relationships among set of many interrelated variables. Principal component analysis (PCA) method is the most commonly used because of its distinctive capacity for data

reduction and it explains the correlative relationship among set of variables using fewer factors. FA works by producing a table indicating rows as observed raw indicator variable and columns as factors (or Variables) show the variance in the variables. Table cells are factor loadings and the relationship structure of factors are induced from variables according to loading .

2.2.3. Percentile-Based Simple Majority Rule

This rule was used by Li (2004) to develop a framework for enhanced risk allocation between the public and private sectors in PPP contracts. This allocation technique is similar to Delphi technique but it is slightly different because consensus among the population is not needed. It involves seeking expert advice of the contract stakeholders (study population) on the sector (public or/and private) a contractual obligation be allocated to base on the capability of the party. To arrive at conclusion, fifty percent (or more) of the contract stakeholders must consider a sector to be the most suitable risk allottee. If more than 50% of respondents indicated that a certain risk should be allocated to a private sector, it is deemed most suitable sector to be allocated the risk. However, if the percentage of stakeholders is below fifty percent the risk allocation is considered situational. The principle was applied to determine the most suitable technique among alternative dispute resolution (ADR), arbitration and litigation for dispute resolution. ADR, arbitration and litigation were selected amongst other techniques because they represent the typical attributes of flexibility, moderately flexible and highly flexible techniques respectively.

3. RESULTS AND DISCUSSION

3.1. Respondents and Projects Background Information

The respondents' affiliation revealed that 45.89% were in public and private sectors organisations, consultants and contractors were 31.14% and subcontractors and suppliers 14.75%. Majority (72.12%) of the respondents had only been involved in less than 5 PPP projects and this confirms that adoption of PPP is not widespread in Nigeria. The most undertaken PPP models (86.87%) were service contract, management contract and leasing. They do not require huge take-off capital. The private sector considers PPP risky and prefers undertaking models with minimal start-up capital. This is further corroborated in the types of project procured with PPP. For instance, more than half (52.55%) of PPP projects types were waste management and housing development which do not require high financial obligation from the private sector. Airport and railway construction had high risk exposure and huge financing requirements were 3.40% of the PPP types. On the success rate of PPP projects; about half (49.98%) of the investigated PPP projects were suspended, cancelled or awaiting contract award. This further confirms the susceptibility of PPP contracts to disputes or renegotiations.

3.2. DRTs Used in PPP Contracts

Table 1 shows the use of dispute resolution techniques in Nigerian PPP contracts. Discussion between the parties (3.46), arbitration (3.41), and fast track resolution process (3.14) were the

most commonly used techniques. Litigation (2.41), expert determination (2.43) and dispute resolution board (2.47) were the least used techniques. The findings corroborate those of Chau (2007) who observed that disputants prefer faster and less binding techniques and that; litigation is usually adopted as a last resort and DRB is often seen as avoidable expenses.

Table 1: Use of DRTs in PPP contracts

DRTs	Frequency of use (Sub-mean value)	Level of effectiveness (Sub-mean value)	Mean value	Rank
Discussion between parties	3.25	3.66	3.46	1st
Arbitration	3.42	3.40	3.41	2nd
Fast Track resolution process	3.07	3.21	3.14	3rd
Mediation or conciliation	2.91	2.48	2.70	4th
Dispute resolution board	1.45	3.49	2.47	5th
Expert determination	2.53	2.32	2.43	6th
Legal court system	1.88	2.93	2.41	7th

This finding also conforms to that of Athanasakis (2007) and Halem (2007) who reported that ADR methods were preferred to litigation due to its time-consuming nature, higher cost, low damages recovery capability, tendency to damage future business relations and exposure of corporate secret to competitors. DRB, legal court system and expert determination were the least used methods as shown in Table 1. DRB is a dispute preventive method and is consequently viewed as avoidable transaction expenditure if dispute did not occur. While legal court system is usually expensive and time-consuming (Chen, 2008), expert determination is not usually indicated in the MOU unlike arbitration and its decisions are usually not binding on the parties (Halem, 2007). The decisions of moderately used dispute resolution techniques are usually non-binding and this reduces their suitability perception by the contracting parties. As shown in Table 1, there is no significant relationship between usage and effectiveness levels of dispute settlement techniques in PPP contracts in Nigeria. The most effective methods of dispute settlement used in PPP projects in Nigeria were subsets of ADR and these comprised discussion between parties, DRB and arbitration. These were rated effective because of their capability to recover damages and protect business interests and relatively low transaction costs. Aside legal court system that is binding and its decision is appealable in higher courts of law; other techniques with low effectiveness do not usually have binding decisions on the parties. This gives them an outlook of wastage of money and time in contracts that time is of utmost essence.

3.2. Selection Criteria of DRTs in PPP Contracts

Table 2 shows the rotated factor matrix of DRTs used in PPP contracts in Nigeria using factor analysis. Table 3 presents the summary of the factor matrix and weightings. It has a cumulative percentage variance explained (PVE) 69.76% and produced five criteria for selecting DRTs. These are: contractual relationship, business interest, remedy requirements, flexibility of DRT, and organizational policy on dispute management. Contractual relationship is the most significant criterion for selecting DRT in PPP contracts in Nigeria. It has 3.55 EV and 22.68% PVE. This implies that majority of Nigerian PPP contracts specify the terms for dispute resolution. It confirms Kumaraswamy (1997) assertion that MOU

usually limit the DRTs options of the disputants. The consideration supersedes other determinants and the disputing parties always comply with the provisions. This finding corroborates Cheng (1998) that a contract condition usually contains the modalities for amicable settlement of contractual disputes in construction industry. The need to protect business interest is the second factor. Stakeholders aspire to protect the business interests among the contracting parties. It enhances current contract success and form component foundation for future investment relationships. This is necessary because corporate organisations aspire to be in operation for long period and its survival primarily depends on winning contracts. Athanasakis (2007) canvassed against litigation due to its capability to damage future business interest and negative publicity of the other party. This finding is in tandem with common wisdom that the need to protect business interest cannot override contract provisions. Requirement for accessing remedy is the third determinant of dispute resolution technique and has 1.95 EV and 12.42% PVE.

Table 2: Rotated factor matrix of selection criteria for dispute resolution techniques

Criteria for selecting DRTs	Factor Groupings				
	1	2	3	4	5
Contractual relationship between parties	0.8741				
Preservation of business interest	0.7810				
Type of PPP model and contract	0.7094				
Parties influence on process/proceeding	0.6253				
Need to address risk/reward imbalance	0.5644				
Remedies		0.8217			
Confidentiality		0.7143			
Enforceability of outcome		0.6904			
Flexibility of technique		0.5829			
Cost economy of process			0.7942		
Speedy in time			0.6294		
Local law or jurisprudence			0.5219		
Third party control on the process				0.7041	
Degree of formality				0.6932	
Organizational policy					0.7076
Cultural background					0.5159

Note: Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalization
Rotation converged in 12 iterations

Table 3: Summary of factor analysis output

Factor number	Factor name	Eigen value (EV)	Percentage variance explained (PVE) (%)	Cumulative PVE (%)
1	Contractual relationships	3.5542	22.68	26.68
2	Business interest	2.8093	17.93	40.61
3	Remedy requirements	1.9455	12.42	53.03
4	Flexibility of technique	1.3973	8.92	61.95
5	Organizational policy	1.2235	7.81	69.76

The financial expenses and duration of the technique influence the choice of technique. The remedy obtainable should be greater than the input for the remedy. It would be contractually unwise for the cost and time committed to accessing remedy to be greater than the achievable

remedies. In similitude to Sanni (2012) report on the need to economize transactions cost of risk management in PPP contracts in Nigeria; the cost of managing risk by a party in PPP contract should not exceed the overall liability of the risk if it eventually occurs. Flexibility of DRTs connotes the preference of the disputing parties not to unavoidably commit them to dispute resolution techniques with rigid outcomes where salutary compromise will be impossible. This determining factor makes ADR techniques most preferred and litigation as the last resort in the construction industry. It reduces frosty relationship, negative publicity and protects corporate secrets from business competitors and political opposition. Organisation's policy on dispute resolution has 1.22 EV and 7.81% PVE. Impliedly, it is not a significant criterion for selecting DRT because other disputing party also determines the trajectory of the settlement process. The contract circumstances determine that organisation's policy on dispute resolution especially where it is outside the control of the organisation.

3.4. Framework for Enhanced Selection of DRT

Table 4 shows the preference of PPP stakeholders for dispute resolution techniques based on the nature of the dispute. Out of seven dispute types, three were preferred to be resolved through ADR, two each for arbitration and litigation. This shows that the use of ADR in the construction industry is high in comparison with arbitration and litigation. Technical (53.33%), social (53.57%) and operation (51.85%) disputes were preferred to be resolved through ADR. Essentially, technical and operation disputes resolution require the expertise of the professional taking into consideration the peculiarity of the industry and not necessarily the legal provisions of the law. This protects future business interests, reduces expenses and saves time. Financial/economic (57.89%) and construction (67.80%) disputes were preferred to be resolved using arbitration. These disputes are primarily influenced by external factors such as involvement of numerous parties and spanning across different jurisdictions. Therefore, a resolution technique with a binding outcome and formality would be more suitable. For instance, financial institutions do not usually favour ADR because its outcome is non-binding and are tend to avoid of litigation due to undue publicity it could bring. Litigation was considered most appropriate for legal (66.67%) and political (50.30%) disputes. These disputes are usually outside the control of the private sector and mainly caused by government actions and inactions. These are mainly constitutional matters and courts of law (litigation) would be in a better position to resolve with dispute in accordance with provision of the law. Furthermore, the public sector that usually provide guarantees for legal and political risks in PPP contracts might not accept ADR and arbitration due to possibility of non-binding outcome and limited admissibility of purely legal evidence.

Table 4: Framework for enhanced selection of DRTs in PPP contracts

Dispute	Sub-disputes	Number	DRTs (%)		
			ADR	Arbitration	Litigation
Technical	Design defects	60	53.33	21.67	25.00
	Unsuitable construction methods				
	Different site conditions				
	Unproven technology				
Operation	Legislation affecting operation standards	54	51.85	16.67	31.48
	Delay or interruption in operation				
	Poor quality of services				
	Operating and Maintenance cost overrun				
Social	Labour Strikes or disputes	56	50.00	28.57	21.43
	Discrimination				
	Ethical or religious strife				
	Different working conditions				
Construction	Dishonesty, bribe or fraud	59	22.03	67.80	10.17
	Failure to meet performance criteria				
	Cost and time overrun				
	Delay/default caused by subcontractors				
Financial/ Economic	Higher inflation rate	57	17.54	57.89	24.56
	Higher exchange rate variation				
	Interest rate variation				
	Fluctuation in tax obligations				
	Severe pricing war				
Legal	Decrease in market consumption	54	14.81	18.52	66.67
	Change in legal or regulation regime				
	Permits or license delay or renewal delay				
	Inadequate provision for dispute resolution				
Political	War	57	31.58	17.54	50.88
	Confiscation or expropriation				
	Embargo or restriction				
	Contract or agreement break				
	Difficulty in land acquisition				

4. CONCLUSION

The involvement of numerous parties in PPP contracts encourages cross-fertilization of expertise required for enhanced service delivery. However, numerous parties with differing interests also expose PPP contract to disputes. The study examined dispute resolution in PPP contracts in Nigeria. Discussion between parties, arbitration and fast-track resolution

techniques were the most used DRTs. This implies litigation and other regimented techniques are not widely used and should be resorted to if flexible techniques failed. Contractual relationship, business interest and remedy requirements were the significant criteria for selecting DRT. Adequate provision should be made for resolving disputes in the MOU prior to contract formation. This would build confidence in other partners and encourage good commitment to the contract. Risk-prone obligations should be effectively allotted to the party that has the utmost capability to mitigate it and incentive should be given for accepting the risk. Contracting parties should have organisational policy on dispute resolution which should be clearly stated on brochures. This guides other party on how to undertake pre-contract negotiation or structure the contract terms. ADR was recommended for resolving technical, operation and social disputes. Arbitration was preferred for settling construction and financial disputes while; litigation was considered most suitable for resolving legal and political disputes. Suitability of DRT is determined by capacity to protect future investment interests, recover liability claims, less expensive to undertake and protect corporate secrets from hostile interests.

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6. CONFLICT OF INTEREST

There is no conflict of interest associated with this work.

REFERENCES

- Abdul Quium, A. S. M. (2010). Legal framework for PPPs laws, contract, and dispute resolution. Accessed from <http://www.unescap.org/ttdw/ppp/online>
- Athanasakis, D. (2007). Effective dispute regimes for large infrastructure projects in Greece. Paper to 3rd Hellenic Observatory PhD Symposium, held at London School of Economics (LSE), London 14 & 15 June 2007.
- Asenova, D and Beck, M. (2003). Scottish local authorities and the procurement of private finance initiative projects: A pattern of developing risk management expertise? *Public Works Management Policy*, 8(11), pp. 11-27.
- Benes, M. and Stary, O. (2007) Economic risk in PPP energy projects. Retrieved from www.fel.cvut.cz/journalarticles/benes-2006-pdf on 22nd September, 2010.
- Brook, P. and Murray, P. (2003). Output-based aid: Precedents, promises, and challenges. Retrieved from http://www.uneca.org/adfiii/docs/output-based_aid on 13 July, 2010.

- Chan, E. H. W., Suen, H. C. H. and Chan, C. K. L. (2006). MAUT-based dispute resolution selection model prototype for international construction projects. *Journal of Construction Engineering and Management (ASCE)*, 132(5), pp. 444-451.
- Chau, K. W. (2007). Insight into resolving construction disputes by mediation/adjudication in Hong Kong. *Journal of Professional Issues in Engineering Education and Practice, ASCE*, 133(2), pp. 143-147.
- Chen, J. (2008). KNN based knowledge-sharing model for severe change order disputes in construction. *Automation in Construction*, 17, pp. 773-779.
- Cheung, S.O. (1999). Critical factors affecting the use of alternative dispute resolution processes in Construction. *International Journal of Project Management*, 17(3), pp. 189-194.
- Dugug, C. (2000). Dispute resolution in international project finance transactions. *Fordham International Law Journal*, 24 (4), pp. 1064-1082.
- Essex, R. (1996). Means of avoiding and resolving disputes during Construction. *Tunneling and Underground Space Technology*, 11(1), pp. 27-31.
- Guislan, P. and Kerf, M. (1995). Concessions—The way to privatize infrastructure monopolies. Public Policy for the Private Sector Note 59, World Bank: Washington. Retrieved from www.rru.worldbank.org/doc/publicpolicyjournal/059guslan.pdf
- Halem, A. (2007). Are environmental issues suitable subject matter for alternative resolution processes in construction? *Rutgers Conflict Resolution Law Journal*, 5(1), pp. 1-12.
- International Finance Corporation (IFC) (2011). Resolving corporate governance disputes. Washington: The World Bank. Accessed www.gcgf.org
- IPPR (2000). Call for evidence: Consultation paper on public private partnerships. Retrieved from <http://www.ippr.org.uk> on 13 July, 2010.
- Kometa, S. T., Olomolaiye, P. O. & Harris, F. C. (1996). A review of client-generated risks to project consultants. *International Journal of Project Management*, 14(5), pp. 273-79.
- Kumaraswamy, M. (1997). Conflicts, claims and disputes. *Engineering, Construction and Architectural Management*, 4(2), pp. 95-111.
- Love, P., Davis, P., Ellis, J. and Cheung, S. O. (2010). Dispute causation: identification of pathogenic influences in construction. *Engineering, Construction and Architectural Management (ECAM)*, 17(4), pp. 404-423.
- Mundhe, R. (2008). Infrastructure concession contracts: An introduction. Retrieved from www.cuts-ccier.org/publications/012 on 22/09/2010.
- NEPAD-OECD (2005). Encouraging public private partnerships in utilities sector: Role of development assistance. Retrieved from www.oecd.org/dataoecd/29/45/34843203.pdf
- Pacific Islands Forum Secretariat (PIFS) (2006). Public private partnerships and Build, Operate and Transfer (BOT) schemes. Proceedings of Forum of Economic Ministers Meeting, held at Honiara, Solomon Islands on July 03-05, 2006.

Sanni, G. A. (2012). Evaluation of Risks associated with concession contracts in Lagos State, Nigeria. MSc thesis submitted to the Department of Quantity Surveying, Obafemi Awolowo University, Ile-Ife, Nigeria.

Sanni, G. A., Adebisi, J. O. and Osazuwa, M. (2016). Risk forecast template for Build-Operate-Transfer (BOT) Transportation Infrastructure in Nigeria. In Proceeding of 2nd University of Benin Annual Research Conference (UBARD), held on 20th -21st October, 2016.

Yeoman, R., Ndekugri, I and Shaw, T. (1998). Fast-Track Dispute Resolution in Construction: The Emerging Agenda. Proceeding of RICS COBRA 1998 Conference. Accessed from www.rics.org/cobra.