

Delay Issues at the Pre-Contract Phase of Public Private Partnership (Ppp) Projects in Abuja, Nigeria.

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ABSTRACT: The study investigated the stage at which delay occurs the most during the pre-contract period of PPP in Abuja, Nigeria, aimed at mitigating delays during pre-contract period of PPP projects. Various studies revealed that the pre-contract process of PPP is prone to time delays and this leads to discouragement of prospective bidders thereby decreasing competition and thus reducing the rate of achieving Value for Money (VFM) in PPP implementation. Also, it increases the transaction cost to the parties involved. Literature review was carried out in order to identify the stages of pre-contract period of PPP, the mitigating measures were identified through group discussion with professionals who had practical experiences with PPP implementation processes, and questionnaire survey was used as instrument for data collection. The data was analysed using descriptive statistics and ANOVA was used to test the hypothesis. The study revealed that Evaluation/Selection and Negotiation and Award stages are the stages that delays occur the most as perceived by private and public sectors respectively. The most effective mitigating measure in reducing delays as perceived by both parties is commitment to project by all parties involved. The study recommends that the public and private sectors should be more committed on the activities of the pre-contract process of PPP project in Nigeria especially during negotiation stage so as to reduce the time it takes to arrive at a win-win and satisfactory negotiation. The findings assist key stakeholders in acquiring techniques for timely future PPP implementation.

Keywords: Public Private Partnership, Delay, Pre-contract Period, Value for Money

I. INTRODUCTION

Public Private Partnership projects are complex ventures and delays surfacing at each stage of the pre-contract phase is inevitable. PPP is

a procurement process that is impossible without partnering parties engaging in a contractual agreement in order to achieve the value for the money. The expected value for the money in PPP projects includes; high level of quality and profit, life cycle cost reduction, appropriate and equal distribution of risk within the partnering sectors, understanding the objectives and scope of the project by both parties and building trust in order to bring the project to fruition (Rahman, Memon, & Zulkiffli, 2014). The pre-contract process of PPP has been observed to be associated with lengthy time consumption in different countries (Klyneld Peat Marwick Goerdeler (KPMG), 2010), and Nigeria is not an exception. There are different stages/phases of PPP method of construction projects procurement from conception to possible transfer of the project to the public party and each phase has its unique characteristics that contribute to the success of the scheme. PPP procurement process differs from the traditional procurement tender process in that the latter has a single stage when an offer is made which an institution can either accept or reject while the formal has multiple stages (Ekow, 2011). The pre-contract stages of PPP comprise of Planning and feasibility, Expression of Interest (EOI), Request for Qualification (RFQ), Request for Proposal (RFP), Select the Preferred Bidder, Contract Negotiations, Contract award/financial close (Sudki, 2005; Ekow, 2011).

PPP implementation globally has proven to be beneficial to the public and the government and it entails shifting of governmental responsibility of designing, building and operating public infrastructures to the private party depending on agreed concession period. PPP differs from conventional approach of procuring construction projects by ensuring that the funding, construction, renovation, management, and maintenance of construction projects are all the

responsibility of the private party (Rahman, Memon, & Zulkiffli, 2014). Government has no need to do everything, in that it should do what it is best placed to do, that is setting development agenda and overseeing its actualisation (Umar & Ikechukwu, 2015). Even though the alternative to conventional acquisition processes of public assets has been considered as PPP due to its financing mechanism and management solutions (Zin, Mi, & Thayaparan, 2016), past procurement experiences of PPP suffered set back with negotiation and tendering related issues resulting to time delays and high transaction costs due to lengthy/protracted pre-contract processes (Reeves, Palcic, & Flannery, 2015; Casady, 2016).

Studies in the area of delays in PPP pre-contract period has been scanty in the Nigerian construction industry, the understanding of the stage at which delays occur the most during procurement of PPP projects is a significant step in improving the whole process. Delay affects all the parties engaged in construction processes particularly time and cost overrun irrespective of the specified objectives of the project. Delay leads to loss of money by contractors due to increase in maintenance of temporary facility, rate of overhead costs of a project and labour costs (Assaf & Al-Hejji, 2006). In addition, Public and private parties in concessions meet at the negotiating table with differing concerns and objectives (Idornigie, 2006). Private sector and their investors would like to seek adequate returns in sufficiently stable environment while the public sector would want to minimise the abuses of monopoly power, maximise productivity efficiency, and ensure that quality, environmental and health standards are in order (Idornigie, 2006). The pre-contract phase is the period that runs from the conception to the financial close/contract award which is the focus of this study, focusing on analysing the pre-contract stages and mitigating measures of delays so as to ease the stress encountered during procuring PPP projects in Nigeria.

II. LITERATURE REVIEW

Delays are general problems in the construction industry; however, the effects can be reduced when the mitigating measures are put in place. The implementation phase of PPP is one of the most crucial stages, and evaluation criteria at the pre-contract process is key to PPP achieving value for money (PPP Cycle, 2021). Aibinu and Jagboro (2002) opined that the major criticism facing Nigerian construction industry is the rate at

which delays are growing in construction project delivery.

Impact of Delays in Construction

The delay impacts are numerous or its effects as identified by literature are time overrun, disputes, cost overrun, litigation/arbitration and project abandonment were the major effects of delay of construction projects (Assaf & Al-Hejji, 2006; Abisuga et al., 2014). This view was supported by Aibinu and Jagboro (2002), the study evaluated the effects of construction delays on project delivery in the Nigerian construction industry. The study discovered that the six effects of construction delay were: time overrun, cost overrun, dispute, arbitration, litigation, and total abandonment. This was supported by Pourrostan and Ismail (2012) in Iranian construction industry. Delay could generate distrust and create tension between the contractor, owner, and the owner's project management team (Aibinu, 2009). Delay has an enervating effect on clients, contractors, and consultants in terms of growth in adversarial relationships, mistrust, arbitration, cash flow problems, and a general feeling of fear towards each other (Ahmed, Azher, Castillo, & Kappagantula, 2002). Construction delay in Nigeria was studied by Abisuga et al (2014). The study identified five critical effects of construction delays as perceived by the construction firms based in Nigeria as: time overrun, dispute, cost overrun, project abandonment, and arbitration. In Aibinu and Odeyinka (2006), the processing time and cost related claims as a result of delays, tend to generate disputes and lead to additional or further delays. The effects of delay at the pre-contract stages of PPP projects are time overrun, high cost on citizens, deterrent of bidders/less competition, direct negotiation, and total abandonment (Ismail & Harris, 2014; Dominic, Ezeabasili, Okoro, Dim, & Chikezie, 2015; Casady, 2016).

Challenges of Public Private Partnership

Research on PPP dealt with assessing the effectiveness of PPP, examining its potentials, risks, drivers and challenges at the construction stage. The study by Danraka (2012), examined the effectiveness of Public Private Partnership (PPP) procurement model in Nigeria. Danraka (2012) established the three most effective factors with regard to PPP procurement model which are established demand, risk apportionment to proper party, and user fees long-term management. The study adapted Garvin (2009) PPP equilibrium framework and its appraisal templates as a tool for

assessing the effectiveness of PPP procurement model in Nigeria. Danraka (2012) used Garvin's approach to determine whether Public Private Partnership (PPP) procurement model is effective for infrastructure development in Nigeria through the assessment of the effectiveness of PPP and developing an equilibrium framework for Nigerian PPP procurement model. The study concluded that the effectiveness of PPP in Nigeria is not effective, since it was unable to balance the interest of the various stakeholders. Hodge and Greve (2007) conclude that the economic and financial benefits of PPPs are still subject to debate and hence considerable uncertainty. Egboh and Chukwuemeka (2012) examined the theoretical and conceptual dimensions of human relations management in PPP, leadership and motivation were also examined as forces that determine the failure or survival of PPP.

Dabak (2014) on the study of PPP sought to find out how PPP initiative can bring about infrastructural development in Nigeria through proper policy formation and implementation. The study recommended that to overcome the challenges faced by PPP in Nigeria, there should be formation of proper regulatory and legal framework, strengthening of the banking sector to be able to loan out long term finances to investors, also strengthening of the capital market which is the main source of long-term finance so that funds can be raise for such projects. The challenges militating against the implementation of Public Private Partnership (PPP) agreements in Nigeria were analysed by Oluwasanmi and Ogidi (2014). Oluwasanmi and Ogidi (2014) concludes that for PPP to work in the provision of infrastructure in Nigeria there is need for enabling laws to be domesticated in each state of the federation. Owzor, Ojo, Nkpurukwe, and Abdul Alim (2015) gave a highlight of the importance of infrastructure development to economic growth and the need for government to take more strategic approach to tackling its dearth in Nigeria.

PRE-CONTRACT STAGES

According to Construction Management Report in Saudi Arabia by Sudki (2005), the detailed processes of procuring PPP project are as follows:

Phase 1: Project Identification

The identification of the right project is the key to the success of a PPP project. This phase comprises of the following

1. The objective of this phase is to determine the suitable projects and markets to be initiated as PPP project.
2. At this level of analysis, the model evaluates the market demand of each sector.
3. The relevant ministry should conduct pre-feasibility study and the project economics.
4. This phase could result in the list of sector specific projects that can award as eligible PPP basis.
5. The next step is to formulate a team or a committee with the relevant ministry to peruse PPP process.
6. Because of the limited government expertise in BOT, the services of project consultant specialized in dealing with PPP project should be acquired.

According to Felsing (2011), the preparation stage is the time to develop the preliminary specifications. Development of the final technical specifications of a project is a repeated process which builds on market feedback and the affordability or cost and value of the project at each design stage. The technical design of a project starts with identification of desired scope and maximum coverage targets and service standards. From these starting points, estimating the cost of these desired services (factoring in presumed efficiency gains) and cost recovery tariffs is achievable.

Phase 2: Financial Viability of the project/Feasibility Study

According to Sudki (2005), the project should demonstrate sufficient revenues to

1. Meet its debt obligations
2. Meet its operation and maintenance costs (O & M)
3. Earn a reasonable profit.

According to Infrastructure Project Development Facility (IPDF) (2007), the feasibility stage should entail the following:

1. ensure that the project is in accordance with predetermined needs and is the most suitable technical solution to the needs;
2. provide information about costs (explicit and hidden), and give an indication whether these costs can be met from within institutional budgets without disruptions to other activities;
3. consider the economic rationale for the project;
4. allow for the identification, quantification, mitigation and allocation of risks associated with its whole life cycle;
5. complete a Resettlement Plan including all relocation plans and resettlement impacts
6. compensation programs and costs;

7. document all consultation completed for the project;
8. include the project specific land acquisition;
9. provide management programs for supervision to ensure compliance with approvals and defined mitigation plans;
10. consider whether or not the project is affordable to the government and/or the end user of the services in terms of explicit and contingent fiscal obligations

Phase 3: Expression of Interest (EOI), Pre-Qualification and Request for Proposal (RFP)

The objective of this phase is to provide a framework for pre-qualification, and conducting transparent bidding process. The development stage of PPP is complex and risky and as such requires a clear, open and transparent process of competitive bidding (Sudki, 2005).

The EOI phase is the first step in a formal tendering/bidding process. The main objectives for this phase according to Guidelines for Public Private Partnership (2016) are to:

1. Confirm the Government's commitment to the project;
2. Formally notify the market, through tender notices, of the project and the service delivery requirements the ACT Government is seeking to procure;
3. Communicate to the market the proposed timeframes, evaluation criteria and any challenges that need to be met for the project to proceed along the tender process;
4. Validate the level of market interest in the project by providing a channel to allow prospective private sector bidders to provide any feedback and/or concerns on the proposed project structure; and
5. Solicit formal EOI responses from prospective private sector bidders for the Government to evaluate and shortlist to the next stage in the tender process. Shortlisted candidates will be evaluated against the project objectives over the life of the project and their capabilities in delivery.

The purpose of pre-qualification (Request for Qualification) according to Ekow (2011).

1. To provide interested parties with the information useful in the formulation of their application for Qualification
2. It is not an agreement and neither an invitation to an offer
3. Interested parties are expected to conduct their own Due-Diligence and check the accuracy,

reliability and completeness of the information.

Request for Proposal entails the following key issues (Ekow, 2011)

1. If the requirements are not clearly defined in RFP stage, then it can lead to assumptions in minds of the bidders which will increase the chances of renegotiations and thus would lead to cost overruns and eventual delays
2. If the format and content for submitting the proposal is not clearly defined, it would be difficult to make a consistent and fair comparison and evaluation of all the proposals
3. Any pre-decided approach for implementation of project can lead to inflexibility in considering any alternative approaches or better solutions of the bidders
4. In the formal environment during the pre-bid conference many bidders may withhold concerns or may be unwilling to share good ideas
5. Thus a bid document consultation is proposed where all bidders may be invited to comment individually on the draft documents and then a full set of responses

Phase 4: Evaluation and Selection of Concessionaire

The objective here is to evaluate proposals and select a bidder, according to Sudki (2005) these objectives are;

1. The evaluation criteria should be decided prior to the issues of RFP.
2. Bids can be evaluated from standpoint of technical and financial package.
3. The technical proposal should satisfy requirements setup by the Government.
4. The financial evaluation should investigate the financial aspects of the proposal.

The following criteria could be adopted for evaluating bids according to Felsinga (2011)

1. Shortest concession period
2. Lowest tariff/ toll level
3. Debt & Equity ratio capital structure of project
4. Source of loans

Phase 5: Negotiation Phase:

The objective here is to reach a common ground between government and private entity on complex issue such as toll rate, concession period and rate of return (Sudki, 2005).

This phase plays an important role in finalizing the selection process of successful concessionaire. Negotiations of issues, such as financial parameters (e.g., toll rates) are fundamental. The government agencies or relevant

ministries should establish sufficient capacity in terms of human resources required to deal with the negotiation and clarification process. Felsing (2011) stated that negotiations present the final chance to work through contractual issues and both parties may have saved issues to be dealt with at this last stage. Important team members should be involved in negotiations, and minutes of the meetings must be kept. Negotiations should deal with goals that are predefined and need to be achieved. Negotiations concentrate on conditions to be met by both sides to declare the contract operational and the timetable and process for transition should also be discussed (Felsing, 2011). In every negotiation interaction, be it social, labour, political or contractual, there are hosts of influencing factors that determine the whole outcome of the negotiations in terms of the time it takes to reach a satisfactory agreement including the cost to the parties (Ahadzi & Bowles, 2004). The next is the execution and implementation phase which entails the signing of concession agreement between the concessionaire and government. This phase consists of construction phase, Operation & Maintenance phase and ultimately the transfer.

Previous research on PPP such as Egbewole (2011), Ibem and Aduwo (2012), Hodge and Greve (2007), Egboh and Chukwuemeka (2012), focused on the construction stage of PPP. Egbewole (2011) concludes that government should provide a strong framework for the private sector in order to build their confidence in the scheme. Ibem and Aduwo (2012) examined the adoption of PPP in urban housing in Ogun State Southwest Nigeria and conclude that the future of PPP in housing in the study area is consequent upon increasing social content in the PPPs. Owor et al. (2015) outlined its benefits as a catalyst to infrastructure development in Nigeria and conclude that in order to guarantee value for money (VFM), the relative strengths and weaknesses of each PPP scheme should be considered. Hodge and Greve (2007) conclude that the economic and financial benefits of PPPs are still subject to debate and hence considerable uncertainty. Egboh and Chukwuemeka (2012) examined the theoretical and conceptual dimensions of human relations management in PPP, leadership and motivation were also examined as forces that determine the failure or survival of PPP. The study concludes that the human side of Public-Private Partnership should be handled with care to ensure organizational goal attainment.

III. RESEARCH METHOD

Deliberate/purposive sampling technique was used because only the input of the experts who have practical experience in PPP procurement process was required for the study. The sample size was determined using Cochran's formula for an unknown population (Neuman, 2000). Since the population of the stakeholders involved in PPP projects execution in Nigeria is unknown, and there is no known data base for PPP stakeholders in Nigeria (Ibrahim, Price, & Dainty, 2006; Danraka, 2012; Babatunde & Perera, 2017). A questionnaire survey was requested to obtain the stage at which delays occur the most at the pre-contract stages of PPP from public sector and private sector viewpoints so as to get a broad perception of the stakeholders. The questionnaire was divided into two sections. Section A covers the respondents' demographic information while section B contains the different stages of pre-contract process of PPP and the mitigating measures of delays at pre-contract phase. Respondents were asked to rate the degree of agreement of the stage that delays occur the most at the pre-contract process of PPP from their own perspective using a 5-point Likert scale, 1 strongly disagree to 5 strongly agree. Section B also contains the most common identified mitigating measures of delays from interview/group discussion of the PPP experts in the study area. Respondents were asked to rate the effectiveness of these mitigating measures of delay at the pre-contract process from their own view using a 4-point Likert scale, 1 not effective to 4 very effective.

The statistical techniques employed to analyse the quantitative data acquired from the questionnaire survey are percentage frequency and descriptive statistic technique. Percentage frequency was adopted to analyse the demographic information about the respondents and descriptive analysis was conducted to obtain the stage at which delays occur most. The 5-point Likert scale was used to calculate the mean score, which was then used to determine their relative rankings in descending order of agreement. It was also employed to determine the most effective measure that is responsible in mitigating delays.

In addition, one-way Analysis of Variance (ANOVA) tests were performed to test whether significant variation exists amongst the stakeholders on the stage at which delays occur. ANOVA test was used because there are more than two groups of independent variables, that is the stages at which delays occur the most in the pre-contract period of PPP projects in Nigeria.

According to Ekeh (2003), t-test should be used to compare two group mean while ANOVA is used to compare mean that are more than two groups. If the test result was significant, then the null hypothesis which states that there is no significant variation in the mean values of the group respondents can be rejected (Norusis, 2002).

IV. RESULTS AND DISCUSSIONS

In general, results show all stages have a mean rating higher than midpoint 3 of the 5-point Likert scale, while the effectiveness of the mitigating measures are above 2.5 of the 4-point likert scale indicating the high level of delays in the stages and effectiveness of the mitigating measures during the pre-contract period of PPP projects.

Table 1
Response rate of the questionnaires administered

Questionnaire Administered	No	Percentage %
Public Sector	80	44.4
Private Sector	100	55.6
Total	180	100
Returned		
Public sector	55	68.8
Private sector	70	70
Total	125	69.4
Used for the study		
Public sector	55	68.8
Private sector	70	70
Total	125	69.4

Table 2
Respondents Demographic Information

	Private Sector		Public Sector	
	Frequency	Percent%	Frequency	Percentage%
Professional qualification				
Architect	13	18.6	9	16.4
Builder	23	32.9	13	23.6
Engineer	27	38.6	19	34.5
Quantity Surveyor	7	10.0	14	25.5
Total	70	100.0	55	100.0
Years of experience				
1-5 years	15	21.4	10	18.2
6-10 years	18	25.7	10	18.2
11-15 years	19	27.1	20	36.4
16-20 years	15	21.4	13	23.6
20 years and above	3	4.3	2	3.6
Total	70	100.0	55	100.0

Table 3
The stage at which delays occur the most during the pre-contract process of PPP projects

Stages	1	2	3	4	5	N	TS	Mean	SD	Rank
Planning & Feasibility	7	25	26	48	19	125	422	3.38	1.123	3
RFQ	9	24	41	39	12	125	396	3.17	1.053	5
RFP	4	19	34	57	5	125	403	3.22	1.017	4
Evaluation/Selection	5	23	21	58	17	124	431	3.48	1.079	2
Negotiation/Award	3	23	20	61	18	125	443	3.54	1.038	1

N= Number, TS=Total Score, MS= Mean score, SD= Standard Deviation

Table 4
The effectiveness of the mitigating measures at the pre-contract stage of PPP projects.

Mitigating Measures	1	2	3	4	N	TS	Mean	SD	Rank
Proper coordination between the parties involved	3	19	64	39	125	389	3.12	.746	2
Commitment to projects by all parties concerned	0	20	64	41	125	396	3.17	.686	1
Proper information and communication flow	2	36	54	33	125	368	2.94	.775	6
Appointment of a competent project manager	8	32	51	34	125	361	2.89	.875	7
Complete project feasibility study and site investigation	3	34	53	35	125	370	2.96	.794	5
Use of comprehensive contract documentation	3	21	63	38	125	386	3.09	.755	3
Use of multidisciplinary	1	30	60	34	125	377	3.02	.742	4

nary/competent project team

N= Number, TS=Total Score, MS= Mean score, SD= Standard Deviation

Table 5
Differences among stakeholders of the private sector on the stage at which delays occur at the pre-contract stages of PPP projects (ANOVA)

Stages		Sum of Squares	Df	Mean Square	F	Sig
Planning & Feasibility	Between Groups	8.157	5	1.631	1.223	.308
	Within Groups	85.343	64	1.333		
	Total	93.500	69			
Request for qualification	Between Groups	24.326	5	4.865	4.939	.001
	Within Groups	63.045	64	.985		
	Total	87.371	69			
Request for proposal	Between Groups	8.743	5	1.749	1.574	.180
	Within Groups	71.100	64	1.111		
	Total	79.843	69			
Evaluation/ Selection	Between Groups	5.430	5	1.086	1.108	.365
	Within Groups	61.730	63	.980		
	Total	67.159	68			
Negotiation & Award	Between Groups	4.711	5	.942	1.062	.390
	Within Groups	56.789	64	.887		
	Total	61.500	69			

Table 6
Differences among stakeholders of the public sector on the stage at which delays occur at the pre-contract stages of PPP projects (ANOVA)

Stages		Sum of Squares	Df	Mean Square	F	Sig
Planning & Feasibility	Between Groups	.854	5	.171	.134	.984
	Within Groups	62.528	49	1.276		
	Total	63.382	54			
Request for qualification	Between Groups	2.423	5	.485	.480	.790
	Within Groups	49.504	49	1.010		
	Total	51.927	54			
Request for proposal	Between Groups	5.945	5	1.189	1.337	.265
	Within Groups	43.582	49	.889		

	Total	49.527	54			
Evaluation/ Selection	Between Groups	6.287	5	1.257	.921	.476
	Within Groups	66.913	49	1.366		
	Total	73.200	54			
Negotiation & Award	Between Groups	4.048	5	.810	.609	.693
	Within Groups	65.152	49	1.330		
	Total	69.200	54			

V. DISCUSSION

The questionnaires were administered by hand, a total number of 180 questionnaires were administered to both public and private party. Out of the 180 questionnaires, 125 were retrieved which represent a response rate of 69.4%. Table 1 shows the response rate of the 100 and 80 questionnaires administered to the private sector and public sector respectively, out of the number administered, 70 (70%) and 55 (68.7%) were retrieved from private and public parties and these questionnaires were found fit for the analysis. Studies such as Ahadzi and Bowles (2004), Aibinu (2009) used response rates of 21% and 23% respectively in PPP and construction survey related studies. Majority of the respondents are Engineers for both public and private sectors respondents as indicated in Table 2 and most of the respondents have years of experience between 11 to 16 years which indicates that they are qualified and well experienced in the procurement process of PPP projects in Nigeria. Thus, the information obtained from the survey is adjudged adequate for the study.

Table 3 shows the agreement amongst the stakeholders on the stage at which delays occur the most during the PPP pre-contract period. The respondents were asked to rate their level of agreement among the stages of the pre-contract process at which delay occurs the most based on five-point likert scale ranging from 1 “strongly disagree” to 5 “strongly agree”. This scale type has been well used in construction related research such as Mangai (2016). The stage that delay occurs the most according to the ranking of each party is negotiation and award while the least stage that experiences delay is request for qualification with mean value of 3.55 and 3.15 respectively. Negotiation and award being the stage that delay occurs the most could be because each party is after the interest of its organisation and team. The activities of this stage are also numerous and both the public client, Public officers and the private party negotiating team with their investors all have

their various objectives to achieve at the negotiating table. The public sector would want to minimise abuse of power by the private sector while the private sector would want a soft ground that would give the full chance to recoup their investment before the concession period is over. According to Idornigie (2006), parties to the negotiation comes to the negotiation table with different objectives thus leading to protracted negotiation. This finding is in line with the statement of Ahadzi and Bowles (2004), which states that delay is more prominent in contract negotiation. Negotiation’s process must be carefully planned and managed to ensure that it is fair and transparent, confidentiality of both parties must be maintained and sharing of risks should be the responsibility of the party that is capable of bearing such risk. Delay tactics or techniques should be introduced during negotiation such as crashing techniques in order to reduce the time to arrive at satisfactory and a win-win negotiation by both parties to the negotiation.

Table 4 shows the effectiveness of the mitigating measures at the pre-contract phase of PPP projects. These measures were identified through interviews/group discussion with PPP procurement experts in the study area, after a careful review of relevant literatures. These measures include but not limited to; commitment to projects by all parties concerned, proper coordination between the parties involved, use of comprehensive contract documentation, use of multidisciplinary/competent project team, complete project feasibility study and site investigation, Proper information and communication flow, appointment of a competent project manager.

The measures were assessed based on the effectiveness of each measure in mitigating delays during pre-contract period so as to obtain the measure that is most effective in dealing with time delays. A 4 point Likert scale was used ranging from 1 “not effective” to 4 “very effective”. This type of scale has been used in PPP and construction

related studies such as Ibrahim et al. (2006), Danraka (2012) and Yom (2010). The first factor that is ranked amongst other is commitment to projects by all parties concerned with mean value of 3.15 while the least effective measure is appointment of a competent project manager (2.75). Commitment to project is ranked first because, if every member of the team is well committed to the pre-defined goals of the project, issues of conflict of interest would hardly arise, transparency would be order of the day and closed communication channels would be opened and time delays would be shortened. A well committed team increases their individual efforts, a consultant that is committed throughout the pre-contract process would achieve a more far-reaching result than uncommitted team. The whole measures are very effective in mitigating delays since no measure has a mean value that is less than 2.5 under a four point likert scale. Thus, application of these measures would definitely mitigate time delays during pre-contract period of PPP.

The null hypothesis which states that there is no significant variation among stakeholders on the stages at which delays occur was used to test the difference in the perceptions of the various stakeholders on the stages of pre-contract process. This was carried out using Analysis of Variance (ANOVA) because it involves more than one variable as shown in the Table 5. The results of the (ANOVA) in Table 5 revealed that there is no significant variation among the stakeholders on the stages except request for qualification stage. Planning and feasibility, request for proposal, evaluation/selection and negotiation have P values of 0.308, 0.180, 0.365, and 0.390 respectively which are more than 0.05 Alpha level of significance while the calculated F value of 1.223, 1.574, 1.108, and 1.062 are less than the F critical of 2.36 respectively. Thus, this signifies that the null hypothesis is accepted because the stakeholders believe that delays seriously take place at these stages. The request for qualification has P value of 0.001 which is less than 0.05 level of significance and F calculated value of 4.939 is greater than F critical of 2.63, thus significant variation exists at this stage among the stakeholders of private respondents, therefore, the null hypothesis is rejected meaning that delays are minimal at this stage.

For the public sector respondents, shown in Table 6, there exist no significant variation among the stakeholders on the stages at which delays occur. Planning and feasibility, request for qualification, request for proposal,

evaluation/selection and negotiation have P values of 0.984, 0.790, 0.265, 0.476 and 0.693 respectively which are more than 0.05 Alpha level of significance while the calculated F value of 0.134, 0.480, 1.337, 0.921 and 0.609 are less than the F critical of 2.39 respectively. The null hypothesis is accepted signifying that there is no significant variation among the stakeholders, thus delays occur at the whole stages of the pre-contract period of PPP projects in Abuja, as perceived by the public sector participants.

VI. CONCLUSION

The research examined the stage at which delays occur the most during the pre-contract stage of PPP with a view of eliminating such delays. Delays are challenges that are currently facing every phase of the construction industry globally and Nigerian PPP market is not an exception. Lengthy pre-contract process discourages prospective bidders thus reducing competition and leading to not achieving value for money expected from the project. The methodology adopted both literature review and questionnaire survey in order to get a larger perception of the targeted population. The questionnaires were analysed using descriptive analysis such as frequency and mean so as to obtain the main case of the issue. The hypotheses were tested using parametric tests such as ANOVA for the different groups because the data has a normal distribution.

The study finds negotiation stage as the stage that delays occur the most during the pre-contracts process of PPP. Commitment to project by all parties concerned and application of time acceleration techniques were the major delay elimination measures proposed. Comparing the variation among the stakeholders of the private sector respondents on each stage of the pre-contract period, the result revealed that the null hypothesis which states that there is no significant variation among the stakeholders on planning and feasibility, request for proposal, evaluation/selection and negotiation stages is accepted while request for qualification stage is rejected. Comparing the variation among the stakeholders of the public sector respondents on each stage of the pre-contract period, the result revealed that the null hypothesis which states that there is no significant variation among the stakeholders on the stages at which delays occur is accepted. The study recommends proper coordination between the parties involved reduces delay during pre-contract process because objectives differ between the parties, adequate coordination can align the parties to focus towards

single objective. The public and private sectors should be more committed to the activities of the various pre-contract stages in order to achieve the target of each stage within the stipulated time line. The implication of the study is that the understanding of the mitigating factors and the critical stage of delays is beneficial to the key stakeholders through development of methods for timely PPP pre-contract implementation for both currently conceived and future PPP projects in Nigeria.

Limitation of the study stems from the method of data collection, questionnaires were used to collect data, in-depth oral interviews and probably multiple cases can be used in future studies to verify or contradict the findings of this research. The study only concentrated on the pre-contract stage of PPP; future work can also look at other stages within the PPP framework in other developing countries.

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