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Conceptual Framework for Public-Private Financed Road Infrastructure Development in Nigeria

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***Abstract* - The provision of road infrastructure in Nigeria has primarily been through the traditional procurement arrangement by Federal, State and Local Governments through budgetary allocations. Recently, with the increasing demand for road infrastructure coupled with the scarcity of public resources, Nigerian government have sought to involve the private sector in the development and provision of road infrastructure facility through Public-Private Partnerships (PPP). The success of the procurement strategy which depends on the creation of an enabling environment for both the public and the private investors that are involved in the development of road infrastructure facilities. This which can be best achieved through an efficient and effective institutional and legal framework.**

This paper is aimed at assessing the effectiveness and efficiency of the present institutional and legal PPP framework in the delivery and performance of road infrastructure facilities in Nigeria. A comprehensive review of literature on PPP road project development in Nigeria was carried out to elicit the perception of the investors and researchers on the effectiveness and efficiency of the conceptual PPPs institutional and legal framework. The assessment of the key factors impacting on the effectiveness and efficiency of PPP framework was also carried in the literature review. The findings of the study shows that the development and provision of road infrastructure facilities in Nigeria has been on joint venture arrangement inform of Public-Private Partnerships (PPP). The findings further revealed that the key challenges affecting road infrastructure project development in Nigeria are the institutional and legal framework of the procurement arrangement. With the increase in the demand for road infrastructure in Nigeria, the study therefore concluded that the effectiveness and efficiency of PPP framework is contingents upon addressing these challenges.

Keywords: Effectiveness, Efficiency, Framework, Public-Private Partnerships, Procurement.

BACKGROUND

In a study conducted by Okeke (2010), the goals of Public-Private Partnership includes; (i) obtaining more value for money; (ii) better risk allocation; (iii) faster implementation; (iv) improve service quality; (v) achieving additional revenue streams; (vi) reducing life-cycle costs; and (vii) reducing waste and blocking avenue for corruption. However in Nigeria, the ambition of the public sector in the provision of road infrastructure through PPPs was impacted by many challenges such as (i) problem of transparency in the selection of concessionaire, (ii) poor project preparation and lack of bankable studies, financial models and business plans, (iii) lack of knowledge of PPP legislation, (iv) ill experienced PPP institutions at Federal level in ensuring quality, and (v) lack of experience in concession agreement (African Development Bank, 2010). These challenges were as a result of an ineffective and inefficient institutional and legal framework.

Although in spite of all the challenges, application of PPPs in Nigeria has in recent time become very popular for both new development and management of old facilities. However, many infrastructure projects especially road infrastructure facilities that had been developed through PPPs, have failed in term of effectiveness and efficiency (Sanusi, 2012). In recognition of the challenges with road infrastructure project under this procurement strategy, Nigerian government made a great effort by establishing the mechanisms and frameworks for PPPs. These include the adoption of the Infrastructure Concession Regulatory Commission (ICRC) Act in 2005 and the subsequent creation of the ICRC office, the enactment of National Policy on PPPs in the year 2009 and the formulation of Public-Private Partnership Regulations in the year 2011. These are geared towards dealing with the current and the impending challenges facing the development and management of road infrastructure projects through PPP procurement strategies in Nigeria (Sanusi, 2012).

PUBLIC-PRIVATE FINANCED ROAD INFRASTRUCTURE DEVELOPMENT IN NIGERIA

In practice, most governments adopt PPP principles as a matter of ideological persuasion by utilizing private sector expertise to lever greater efficiency and change management by using private companies for an effective approach in enhancing project productivity, then boost economic growth by way of transferring the greater part of the risk involve in a project development to private sector. Because according to WEF (2013), Public-Private Partnerships provides an opportunity for private sector participation in financing, designing, construction, operating and maintenance of public sector programmes and infrastructure projects on a whole life-cycle cost. Public-Private Partnerships for infrastructure service development and delivery has four key characteristics which includes;

- Involvement in an efficacious sharing of risks between public and private sector;
- Providing public services;
- Offering value for money; and
- Long term partnership over many years.

The PPP procurement strategies involve competitive tendering and the successful bidder (or franchisee) is selected on the basis of the value for money (VfM) outcome for the government. VfM is determined using both quantitative and qualitative criteria while tenders for road infrastructure development are generally conducted on the following basis;

- The private provision of an asset for government use on a take-or-pay basis (for example, the provision of a serviced hospital bed or a primary school building);
- The private delivery of services to or on behalf of government (for example, a convention centre or public transport system); and
- Private provision of an asset on a market-risk user-pays basis (for example, a toll road).

The payment method in PPPs according to Regan & Smith (2011), has two components: a base fee calculated by reference to quantitative service provision under the contract and an incentive fee calculated by reference to service delivery that exceeds key performance indicators, while projects in PPPs are generally bid on the basis of the fee to the government or the user-pays tariffs bid criteria and nonconforming bids may also include up-front payments to the government. Service delivery failure can result in an abatement of fees or the imposition of financial penalties. At the end of the tenure period as contained in the contract agreement, the asset reverts to the government.

The choice of PPP procurement strategy for road infrastructure projects according to ICRC (2012) depends on the objectives of the public sector, the stakeholders involved, and allocations of risks between the private and public partners in improving service efficiency, transferring investment risks and maintaining service control. Table 1.1 shows the major project finance strategies for infrastructure project development and delivery in Nigeria.

Table 1.1: Major PPP Road Procurement Strategies in Nigeria

CONTRACT TYPE (DURATION)	CHARACTERISTICS				SERVICE & PAYMENT TO PRIVATE SECTOR CONTRACTOR
	ASSET OWNERSHIP	O&M	CAPITAL INVESTMENT	COMMERCIAL RISK	
Service Contract (1-3 years)	Public	Public & Private	Public	Public	A definitive, often technical service fee paid by government to private sector for specific services
Management Contract (3-8 years)	Public	Private	Public	Public	Private sector manages the operation of a government service and receives fees paid directly by government
Lease Contract (5-10 years)	Public	Private	Public	Private	Private sector manages, operates, repairs and/or maintains a public service to specified standards and outputs. Fees are charged to consumers/users and the service provider pays the government rent for the use of the facility.
Concession, BOT, BOO, etc. (10-30 years)	Private & Public	Private	Private	Private	Private sector manages, operates, repairs, maintains and/or invests in infrastructure to specified standards and outputs. Fees are charged to consumers/users. The service provider may also pay a Concession Fee to the government.

Source: Adapted from ICRC, 2012

NIGERIA PPP ROAD PROJECT LIFE-CYCLE

Successful PPP procurement strategies realise on the quality of information served at the project preparation stage in project development which determines the success of the project life-cycle. But according to ICRC (2012), the success or failure of PPPs can often be traced back to the initial design of the PPP policies, legislation, and guidance in the conception and development of the road infrastructure project. In view of this, (ibid) stated that the process for the development, procurement, implementation and handing over or exiting a PPP procurement strategy in road projects in Nigeria consists of the following phases and steps, project development; project procurement; project implementation; and project maturity. Figure 1.1 shows the PPP road project development tasks in Nigeria.

Hence ICRC (2012) and FMW (2013) noted that PPPs transaction for road infrastructure project development in Nigeria involves;

- Mobilising private sector's money, expertise and capacities for road infrastructure;
- Long-term relationship between government and private sector (usually longer than 10years);
- Sharing of Risks and Rewards with no lop-sided agreements- (privatising the profits or rationalising the loses);
- Private sector performs to agreed KPIs i.e. output focused;
- Life-cycle focus on operations and maintenance;
- Public project with private investment;
- Internal Rate of Return (IRR) greater than Weighted Average Cost of Capital;
- Return of Equity (RoE) greater than Shareholders Requirement;
- Debt Service Cover Ratio greater than Bankers or Lenders Requirement;

- Loan Life Cover Ratio greater than Bankers or Lenders Requirements;
- Availability of Viability Gap Funding and FGN Capital Grant;
- Financial Intermediary Loan;
- Sovereign Wealth Fund (SWF) Infrastructure Enabler Investments.

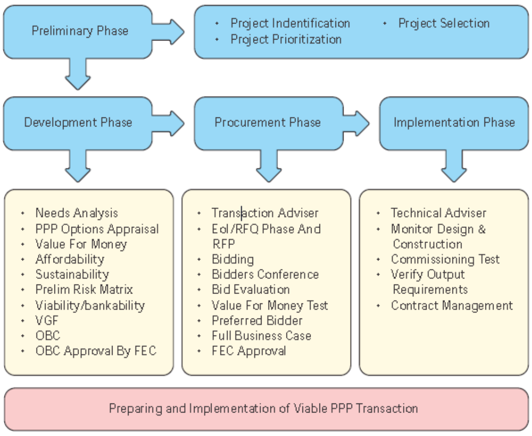

Figure 1.1 PPP Road Project Development Tasks in Nigeria

Source: Adapted from FMW (2013)

Key Definitions:

VGF- Viability Gap Funding;

EoI- Expression of Interest;

RFP- Request for Proposal;

OBC- Outline Business Case;

FEC- Federal Executive Council

According to FMW (2013), at the project development stage, the road infrastructure projects are initiated by Ministry, Department, and Agencies (MDAs) of the Nigerian government. Furthermore according to ICRC (2012) and FMW (2013), in few selected cases, the road infrastructure projects could also be initiated by the private partners in the procurement strategy as an Unsolicited Proposal under a transparent, competitive process which will also be managed by the MDAs. This stage will involve, project planning, preparation and approval of outline business case for the proposed road infrastructure development.

At the project procurement stage, ICRC (2012) observed that the road projects will be advertised in the press and through other media inviting potential bidders to submit their Expressions of Interest (EOI). The project procurement stage involves the following processes; preparation of bid documents, selection of preferred bidder and negotiations, preparation of full business case and contract award. At the implementation stage, the oversight of the road development will shift from the project team to the MDA's project board and/or the management board linked at this stage for the road project. ICRC (2012) observed the commencement of the road projects begins at this stage while the MDA appoints the independent engineers jointly with the developers in reviewing and auditing the construction activities for the road projects. At this same stage, after the completion of the construction work on the road projects, and begins operations, the MDA, in conjunction with the Contract Monitoring Unit (CMU) within the Infrastructure Concession Regulatory Commission (ICRC) for the public partners monitors the performance of the PPP companies throughout the concession period in ensuring the performance evaluation of the road infrastructure projects. At the project maturity stage, ICRC (2012) and FMW (2013) observed that this phase marks the completion of the road contract period and leads to the natural termination of the procurement agreement. It also involves the exit from the road projects by the PPP companies. Figure 1.2 shows the PPP road project framework in Nigeria in line with the National Policy on Public-Private Partnership Ventures.

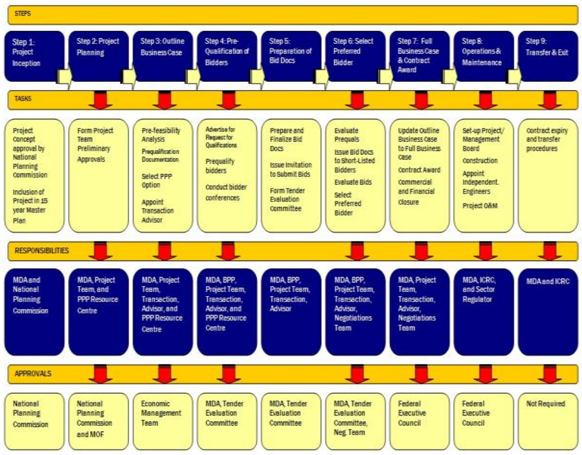

Figure 1.2 PPP Road Project Framework in Nigeria

Source: Adapted from ICRC (2012)

MAJOR CHALLENGES OF PPPS IN ROAD INFRASTRUCTURE PROJECT DEVELOPMENT IN NIGERIA

According to Soyeju (2013), dated back to the inception of the fourth democratic government in Nigeria in May 1999, the Federal Government of Nigeria has embarked on an extensive drive in the liberalisation and privatisation program by encouraging private sector participation in the provision and delivery of quality infrastructure facilities in Nigeria so as to move Nigeria to the status of top 20 economies by the year 2020. The Federal Government of Nigeria therefore articulated its agenda in the year 2007 making road development and provision through PPP a priority however, this ambition was impacted negatively by many challenges such as (i) problem of transparency in the selection of concessionaire, (ii) poor project preparation and lack of bankable studies, financial models and business plans, (iii) lack of knowledge of PPP legislation, (iv) ill experienced PPP institutions at Federal level in ensuring quality, and (v) lack of experience in concession agreement (African Development Bank, 2010).In a related development, ICRC (2012) also reported that the early PPP experiences in Nigeria in road infrastructure project development and delivery have been both promising and sobering where some of the road projects have proven to be financially viable with social and economic benefits, while other road projects have been plagued by delays, cost overruns or renegotiations as a result of the inadequate PPP procurement framework.

In a related development, according to Omisore (2014), infrastructure development since Nigeria independence had been experiencing significant challenges as a result of inadequate government funding principles and lack of the enabling legislature for the private sector investment owing to inefficient and ineffective PPP procurement models. In support of this, Okonjo-Iweala (2014) disclosed that the Federal Government spending on infrastructure stands at about US$ 6 billion which is likely to be higher when the total financial outlay needed for the funding of the Infrastructure Master Plan is calculated this which presented a big gap that needed to be filled, thereby advocated for a refined and improved PPPs framework for the provision and development of infrastructure facilities capable of improving Nigerian economy. Nigeriahaving about 200,000 km of road networks, only 18% of these road networks is paved while the quality of the roads remains a critical challenge owing to a suboptimal maintenance culture and poor quality of work all over the country (Omisore, 2014).

As the stakeholders in road infrastructure projects development are becoming worried at having the various road projects in Nigeria being completed at very high cost, longer duration and below standard. The development and delivery challenges of high cost, longer construction duration and poor standard of road infrastructure projects according to Ameh *et al.* (2010), Sampath (2013) and WEF (2013) have been attributed to the numerous challenges of the Public-Private Partnership (PPP) institutional and legal framework which include: (i) procurement procedures and processes; in securing competitive bids, negotiation and award, (ii) allocation of risks, (iii) management of the inherent risks and the inhibiting risk factors, associated with road infrastructure projects, (iii) preparing an enabling PPP environment, (iv) internalising PPP process within the public sector, (v) project identification and project development, (vi) Preparing the business case, and (vi) supporting implementation and operations.

In a related development, Ndubisi (2012) and Amobi (2013) opined that the negative impact of the institutional and legal framework of PPPs in road infrastructure project development in Nigeria has led to very high cost and time overruns. Because the capacity and political will to enforce the existing PPPs governance framework appears to be missing. Ndubisi (2012) reviewed some of the road infrastructure project development under PPPs in Nigeria and identified the issues and challenges of the PPP institutional and legal framework to include; (i) lack of national infrastructure blueprint, (ii) unclear political direction and support, (iii) weak regulatory and enforcement powers of ICRC, (iv) inadequate financial modelling to enable proper affordability and value for money assessments, (v) technical capacity gaps, (vi) inconsistency in the PPP project pipelines, and (vii) lack of standardisation, hindering replication, etc.

Ijigah *et al* (2012); Amobi (2013) and Aielo (2014) also reiterated that the most pressing challenges of road infrastructure project procured under PPPs in Nigeria was the lack of effective PPP project preparation and acceleration towards bankability which were also attributed to ineffective and inefficient institutional and legal framework which makes the investors held substantial assets under their management making the investors to seek for an attractive long-term infrastructure investment opportunities. As a result of this attitude on the part of the investors, many road projects became stalled in the pipeline. The reason according to Federal Ministry of Works (2013) and Omisore (2014) was also attributed to road project preparation gap resulting from the defective PPPs institutional and legal framework in the areas of; commercial and technical feasibility, inadequate risk allocation, public sector's contractual commitment and capacity, poor demand forecasts, and delayed land acquisition and approvals.

CONCLUSSION

This study examined the effectiveness and efficiency of the conceptual institutional and legal framework for road infrastructure development in Nigeria through a critical examination of Public-Private Partnerships arrangement for road infrastructure development and performance in Nigeria by assessing the factors impacting on the effectiveness and efficiency of PPPs framework. The study further revealed that the efficiency and effectiveness of PPP procurement strategy will depend upon the ability of the public sector by addressing the key challenges of the institutional and legal framework. The study therefore concluded that the current PPP framework for road infrastructure project development in Nigeria needs to be reviewed so as to enhance the effectiveness and efficiency of the framework in the development and performance of road project in Nigeria.

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