

**FEDERAL REPUBLIC OF NIGERIA**  
**MINISTRY OF MINES AND STEEL DEVELOPMENT (MMSD)**

**MINERAL SECTOR SUPPORT FOR ECONOMIC DIVERSIFICATION**  
**PROJECT (MinDiver)**

**TERMS OF REFERENCE FOR THE ENGAGEMENT OF A CONSULTANT**  
**TO SUPPORT THE MMSD IN ANALYSING AND IMPLEMENTING A**  
**ROADMAP FOR ECONOMIC CORRIDOR DEVELOPMENT**

**1.0 INTRODUCTION**

The Federal Government of Nigeria has obtained a credit from the International Development Association (IDA) to fund the Mineral Sector Support for Economic Diversification (MinDiver) Project. The project has the following development objectives:

1. To improve the attractiveness of the Nigerian Mining sector, as a driver for economic diversification, for long-term private sector investment in the exploration and production of minerals.
2. To create a globally competitive sector capable of contributing to wealth creation, providing jobs and advancing our social and human security.

The overall objective of the MinDiver Project is to link with the Ministry of Mines and Steel Development (MMSD), Roadmap for the Growth and Development of the Nigerian Mining Industry, 2016 (the Roadmap) and enhance the mining sector's contribution to the economy by strengthening key government institutions, improving information infrastructure and knowledge, and fostering domestic investment in the sector. The Project consists of the following parts:

**Part A. Establishing a Strong Foundation for Mining Sector Development**

1. Carrying out of a program of activities designed to strengthen the MMSD's capacity for governance and administration of the mining sector;
2. Carrying out of a program of activities designed to strengthen the Nigerian Geological Survey Agency as well as geological knowledge and information infrastructure for the mining sector,
3. Implementing a program of activities designed to strengthen the Recipient's capacity for management of environmental, health and social impacts in the sector

## Part B. Facilitating Downstream Sector Development and Enhancing Competitiveness

1. Strengthening administration of the artisanal and small-scale mining sub-sector,
2. Implementing a program of activities designed to leverage the mineral sector for regional development
3. Implementing a program of activities designed to enhance value addition to mineral products (including upstream development of industrial minerals and dimension stones domain) in the mining sector,
4. Implementing a program of activities designed to advance proof-of-concept investments and to attract private sector investments

## Part C. Project Management and Coordination

1. Strengthening the capacity of the MMSD for implementation, supervision and management of the Project through the provision of goods, consulting services, non-consulting services, operating costs and training for the purpose.
2. Supporting quality control of Project activities and outputs as well as monitoring and evaluation of Project outputs and results.

The key results of the project will include:

1. Increased availability of precompetitive geo-science data enhancing mineral transactions;
2. Institutional information systems integrated with multi-sector planning tools;
3. Incentives created for Artisanal and Small-Scale Mining (ASM) formalization;
4. Improved environmental and social compliance by mining industry operators

## **2.0 BACKGROUND**

The Federal Government of Nigeria is targeting to raise the contribution of mining to Gross Domestic Product (GDP) from the current position of 0.3% to 3.0% in the year 2025 based on a projected annual growth of 10.0%. It has developed the Roadmap to achieve its target. The Roadmap's vision leverages on a sustainable and well governed mining sector that is globally competitive, friendly and plays significantly in a diversified Nigerian economy. The national aspiration is to build a world-class minerals and mining ecosystem designed to serve a targeted domestic and export market for minerals and ores. Focusing on Nigeria's minerals, mining and related processing industry will achieve this over a 3-phase period. Over 25 years, Nigeria would seek to achieve the following: (a) rebuild its domestic utilisation of industrial and energy minerals to support industrialisation in the first phase of 2-3 years; (b)

expand its domestic ore and mineral asset processing industry in the second phase of 5-10 years; and (c) return Nigeria to the global ore and mineral markets expected to coincide with the next commodity upswing.

The Roadmap identifies insufficient infrastructure as one of the range of challenges being faced by operators across the mining value chain and affecting the proper functioning of the minerals and mining ecosystem. Part of the objectives for attracting major mining companies is through: (i) the creation of an enabling environment that would see the development of necessary ancillary infrastructure to accelerate growth of the sector nationally and regionally; and (ii) incentivising investments in large-scale mining equipment and infrastructure. Leaving the responsibility of developing and building the necessary infrastructure to individual mining projects is expensive and would also affect the economic viability of the projects.

To address the challenge of insufficient infrastructure and to align with the government's Economic Recovery Growth and Development (ERGP) plan objectives for 2017-2020, the Government has adopted a spatial development approach through linking 'anchor mines' or groups of mineral producers with Economic Corridors (EC) to improve and develop mines infrastructure for mineral resource development. Resource and infrastructure development investments will be maximised for their multi-sectoral development impact potential as part of this approach. This is an integrated planning process involving a sequence of investments and actions to leverage mineral resource-based anchor projects with high demand for transport, logistics, water and energy in order to trigger economic multiplier effects and to maximise their social and economic development impact. In addition it is expected that such integrated landscape planning will lead to:

- increased social and environmental sustainability and climate change resilience,
- promotion of trade and investment-led growth;
- optimal utilisation of infrastructure;
- encourage value-added processing (beneficiation) and
- enhance competitiveness of the Nigerian economy.

This is fully consistent with the African Mining Vision's (AMV) goals of linkages, investment and diversification through an integrated approach to mining development to meet the AMV's "transparent, equitable and optimal exploitation of mineral resources to underpin broad-based sustainable growth and socio-economic development."

It is recognised that planning for delivering investments requires a full assessment of economic drivers affecting a specific area or corridor for development. This is key to unlock mining's full value chain potential in Nigeria, as significant infrastructure investments will be necessary in the future. This will include power generation and transmission, railroads, water processing plants, roads and port handling systems necessary to enable boosts in mining output. While some infrastructure is in place, mining will benefit from a broad upgrade and overall quality of economic infrastructure. This will in turn improve development conditions all along the line of infrastructure corridors bringing benefit to those areas along the route. Coordination with other MDAs, financial institutions, and private investors will be critical to reduce the need for individual mining/exploration investors to create their own infrastructure.

The Federal Government of Nigeria has recently identified four Transport Corridors in the country, namely:

1. The Lagos-Kano Corridor (shown red in **Figure 1**);
2. The Central Economic Corridor; Warri – Lokoja – Abuja – Kaduna (shown green in **Figure 1**);
3. The Coastal Corridor; Lagos – Calabar (shown blue in **Figure 1**);
4. The Eastern Access Corridor; Calabar - Maidaguri (shown purple in **Figure 1**);

It is along these corridors that arguably provide the greatest opportunity for locating 'anchor mines' where the provision of power, transport and infrastructure can be aligned



**Figure 1: FGN identified Transport Development Corridors**

The MinDiver project is also seeking to support scalable, proof-of-concept projects that can unlock sector potential. Many of the proof-concept-sites are anticipated to have potential for mine development and may align with the large-scale economic corridor projects carrying key physical infrastructure, including energy. It is considered possible that several of these proof-of-concept projects may cluster together to form the catalyst for bringing infrastructure into the region. Further discussion is provided in Annex 1.

The Central Economic Corridor (CEC), which is yet to be integrated and completed, is anchored on the iron ore resource within the Itakpe-Agbaja axis and other minerals, gold, coal, clay, lead/zinc ore, limestone, bitumen along the Central Railway Line. Based on the iron ore and limestone deposits found in Itakpe, the government established the Nigerian Iron Ore Mining Company. It also established the Ajaokuta Steel Plant to process the iron ore concentrates from Itakpe into steel. The mine and the steel complex are connected by a rail line that terminates at the Delta Steel port at Aladja, Warri for exportation of steel.

The complete plan for CEC's Central Rail crosses through Delta, Edo, Kogi, Niger states, the Federal Capital Territory and extends into the North-Western rail line in Kaduna and terminates in Kano. Once completed, it can serve existing industries along the railway route such as textile companies, vehicle assembly plants, a rolling

mill company, plastic factories, cement plants, glass factor, steel plants, and a vehicle manufacturing company. An example of the potential opportunities within the CEC is in the Ajaokuta-Itakpe axis, where two ceramic companies are located because of their proximity to industrial mineral raw materials, and the gas pipeline transporting gas to ASCL where there is an non-operational 110 MW gas turbine power plant and to Geregu I and II, which are both open cycle gas turbine power plants with total installed capacity of 414 MW and 560 MW, respectively. Previous spatial analysis work undertaken identified potential mineral and agricultural value chains in Kogi, Kaduna, and Kano states.

The government has developed the Nigeria Mineral Resource Decision Support System (NMRDSS), a web-based decision support system for resource corridor analysis, to allow for regionally based resource corridor analysis. The main task of the NMRDSS is to centralise the collection and collation of mineral data from relevant government departments. The system serves to improve decision making for the mining sector and infrastructure development planning. It integrates spatial data on mineral occurrences, mineral licenses, infrastructure, and other parameters such as socio-economy, population, density, and land use. The information would facilitate analysis and prioritisation of areas for socioeconomic growth and development based on the availability of mineral assets in the country. Through this analysis, the government will identify opportunities for infrastructure development, value chain and local content development in these regions. NMRDSS is fully multi-sectoral and will also serve for planning future land-use development, agriculture, transport, oil and gas, power, and overall industrial and urban development envisaged under the planned corridors. Although the NMRDSS has been developed both conceptually and in a rudimentary system it has yet to be made fully operational. Full operation and utilisation of the NMRDSS is an objective of this assignment.

It is the strategy of the government to stimulate broad-based development through mineral resource related anchor projects and to go beyond supplying raw materials to the global economy. The government intends to utilise the extensive resource development opportunities to establish the requisite economic infrastructure across the country through a regional approach and to create the crucial resource sector linkages into the local & regional economies. This “deepening” of the resource sector through up-, down- & side-stream industrial linkages could form the core industrialisation nuclei for Nigeria. Specifically, this will take place after configuring the “anchor” economic & infrastructural projects to optimise linkages into the local, regional, and national economies. Multi-sector development is anticipated through mining, transport, power, water, social, environmental and private sector development.

The government now requires an assessment of potential ECs to support the government in analysing the outward economic linkages for the resource corridor towards achieving the following general outcomes within each EC:

- a. sustainable economic growth, job creation, and poverty reduction;
- b. reduction of social, environmental, biodiversity and climate change negative impact;
- c. reduced risk of social tension and conflict;
- d. increased likelihood of success of resource anchored EC projects.

It is noted that the outcomes may differ based on the regions that the EC passes through.

### **3.0 OBJECTIVE OF THE ASSIGNMENT**

The primary objective of this assignment is to advise and assist the Federal Government of Nigeria in preparing and implementing a Roadmap to catalyse the mineral sector for regional economic development and economic diversification through integrated multi-regional development corridors. The principle is to leverage Nigeria's mineral resources to stimulate infrastructure development and develop sustainable enterprises providing goods and services.

Annex one provides a detailed conceptual background on the proposed economic corridor development task, the proof of concept task, and the task to identify target prospective areas.

### **4.0 SCOPE OF WORK**

#### **PHASE I - ECONOMIC CORRIDOR (EC) IDENTIFICATION AND CONCEPTUAL STUDY**

The objective of the scoping of the EC area is to build the conceptual business case in which a broad development objective and the main economic drivers are identified and achieved. This will be based on the identification of viable resource anchor project/s and associated trunk infrastructure. The adviser is expected to work toward achieving consensus amongst stakeholders on the business case. The assignment is divided into three main phases.

To implement the phases, the adviser is required to review all the relevant national and sectoral strategies of the Federal Government such as the Economic Reform and Growth Plan (ERGP), Nigeria Industrial Revolution Plan (NIRP), National Integrated Infrastructure Master Plan (NIIMP), Gas Master Plan, National Trade Policy, The National Enterprise Development Programme– NEDEP ( for Micro, Small, and

Medium Enterprises), Transport Strategy and those relating to agriculture, power sector, automobile development, skills development, research and technology etc.

### **1.1. Global and Nigerian Mining Industry Assessment**

- 1.1.1. The adviser should assess the current stage of the global mineral commodity cycle and the level of demand and prices for the anchor mineral commodities to determine the impact of the economic viability of the mines and potential mines;
- 1.1.2. The key question that the adviser should seek to answer is whether the mining projects are marginal or viable under current global commodity prices.

### **1.2. Comparative Studies of other Economic Corridors**

- 1.2.1. The adviser should provide comparative examples of economic corridors/development corridors/spatial development initiatives undertaken across Africa. Examples include the Maputo Development Corridor (MDC), Zambezi Valley Development Corridor, Mtwara Development Corridor, Central Development Corridor, Simandou iron ore corridor etc. Examples from other corridors in Germany and Nordic countries, can also be highlighted. Key tasks include:
  - a. Provide the regional context for economic corridors/development corridors/spatial development initiatives in Africa in support of the African Mining Vision's resource-based African industrialization and development objective. This should also include an assessment of the potential impact of the recently signed African Continental Free Trade Agreement on resource-based industrialisation and competitiveness within and among African countries;
  - b. Summarise the objectives on which each of the corridors were established and provide details on the notable successes and failures of each highlighted corridor in terms of natural resource development; business case/anchor projects; infrastructure development projects; economic development projects; private sector development; community development; policy and regulatory support; political will; corridor authority; stakeholder participation; linkages; cross border arrangements, where applicable; skills and technical capacity.
  - c. Identify all the necessary ingredients for a successful economic corridor based on the comparative analysis and the lessons that Nigeria can learn

### **1.3. Identification of Viable ECs**



The adviser will undertake a detailed assessment to identify viable ECs. To achieve this, it shall utilise the Nigeria Mineral Resource Corridor Decision Support System (NMRDSS) located at the Nigerian Geological Survey Agency (NGSA) to assist in conducting a thorough and rigorous desktop study to identify financially, environmentally, socially and economically viable ECs that can enhance job creation, incomes and sustainability of investment. Accordingly, the adviser is required to use the NMRDSS to operationalise and finalise the NMRDSS and use it to integrate and geospatially analyse data on the mineral resources, hydrology, ecosystem, biodiversity, socio-economic data, and alternative land-uses to examine various scenarios of economic development management to come up with the potential national, regional, and local economic benefits and risks associated with developing the mineral resources. This will be used to model economic activities and/or the development of infrastructure in support of mining. The objective is to identify (i) additional mineral resources that might support economic development, and the (ii) potential impacts of mineral-related development on water resources, ecological resources, and of the national, regional and local communities.

- 1.3.1. In each EC, the focus will be to encourage public-private synergies to enable shared uses in infrastructure or public interventions to enable the Nigerian private sector to take advantage of the demand for goods and services from the mines. The tools to be used for identification and assessment of each EC includes Strategic Environmental and Social Assessments (SESAs), Environmental and Social Management Framework (ESMF), Resettlement Policy Framework (RPF), scenario planning, pro-poor participatory analysis, ecosystem valuation, cost-benefit analysis, governance assessments, policy impact assessment, climate change impact analysis, risk analysis, preliminary economic appraisal, gender and disability inclusion etc;

*Pilot Program- Central Economic Corridor (CEC)*

- 1.3.2. This study shall start with the Central Economic Corridor (CEC), which has the Kogi state located Itakpe iron ore deposit as its anchor mine and the Agbaja iron ore deposit as an advanced deposit, as the pilot EC. Therefore, the study will focus on the iron ore and steel corridor within the CEC. Proof-of-concept sites within the CEC will be given priority in analysis the anchor and densification projects. The objective is to consider how the anchor projects and other mineral resources might benefit directly from new or improved infrastructure in the CEC and what additional mineral, non-mineral, and social development activities may be stimulated through additional and alternative

infrastructure construction and routes within the corridor and even those that are remote from the corridor.

The adviser shall place heavy emphasis on improving linkages between energy and mining which will include improved access of mines to energy (gas and power, including renewable energy), and/or may require establishment of regional interconnections and last-mile connections; given longstanding experience that this gap has been a barrier to mining development within Nigeria.

1.3.3. Specific activities to be undertaken under the pilot include the following, which will subsequently be scaled into other ECs:

- a. Division of each EC into segments and anchoring of the segments on specific resource investments bearing in mind the possibility that some segments will just involve expanding the number of transport options for each of the resource investments and associated activities and producing spill-over benefits. The objective is to increase the multiplier effects in terms of direct, indirect, and induced jobs;
- b. Identification and analysis of the anchor projects, proof-of-concept sites, existing mines, idle brown-field resource assets, and greenfield resource assets based on their location, quantity of the resource, estimated production costs, potential environmental and social impact of exploration etc. Using data generated from NGSA through the NIMEP and MinDiver financed airborne geophysics and proof-of-concept program (where applicable), the adviser will define the underlying mineral resource potential of a region through geologic endowment and mineral resource estimates;
- c. Identification and analysis of downstream industries utilising mineral resources as production inputs such as iron ore and industrial minerals, including their capacity and status;
- d. Along each segment, the adviser will identify:
  - “soft” actions (enterprise development, supply of goods and services to the mine and infrastructure, community development agreements to ensure community benefits sharing around the mine, land acquisition) and;
  - “hard” infrastructure investments and actions (roads, bridges, water, energy (gas and power), and railway line) that would cohere to form an integrated whole supporting inclusive growth. This will involve:

- Identifying and analysing infrastructure (rail, water transport, major trunk roads, energy (gas and power) infrastructure, ) with emphasis on the major trunk infrastructure and other gaps that may be a barrier to these mineral assets progressing to full production as well as progression into mineral processing and refining, and any other gaps across the mineral value chain that are impeding production;
- identifying the routes and physical carrying capacities for existing supporting infrastructure and where existing gaps would be met by investments in minor infrastructure and/or mineral processing centres;
- analysing the potentials, and challenges/constraints for power-mining integration as well as scenarios in which mining companies, mineral processing companies etc can become anchor customers for utilities, facilitating generation and transmission investments by producing the economies of scale needed for large infrastructure projects that could be shared by host communities and other economic sectors. In doing this, the adviser will:
  - start the assessment with an understanding of the current interaction between mines and mineral processing companies with the government on energy access and the potential and opportunities for broader stakeholder discussions between mining and mineral processing groups with the government on energy access;
  - analyse the energy (gas and power) capacity needs of the anchor mines, proof-of-concept sites, brownfield (operating) and greenfield (potential) mines as well as smelters, refineries for selected minerals;
  - assess their proximity to existing energy (gas and power) infrastructure sources through an energy (gas and power) demand and supply study within the ECs and power-mining coordination potentials within the corridor;
  - analyse existing energy (gas and power) supply options within the EC, including self-supply, collective sale of power by mines to the grid, mines serving as anchor demand for independent power producers (IPP) etc and their proximity to the anchor mines, gas suppliers within proximity to the anchor mines, proof-of-concept sites, brownfield (operating) and greenfield (potential) mines, existing exploration projects, and other mineral resources;

- assess options for financing energy (gas and power) investments;
  - analysing the economic translation impact-for each of these assets- of introducing new infrastructure, along with regulatory changes, new policies, job training, and other potential MinDiver interventions;
  - The adviser will also identify the investments that the identified anchor deposits will need in terms of goods, and services as well as livelihood improvement needs of the host mining communities and how they can be leveraged to maximise their developmental and economic impact and achieve inclusive growth. For example some deposits might have limited energy (gas and power) infrastructure requirements but require services and transport infrastructure.
- e. Accordingly, the adviser should estimate the value, size, and number of investments (associated infrastructure, goods, and services) required. The adviser will assess ongoing investments, planned investments, those under development, and identify where there are gaps;
  - f. Undertake a political economy assessment focusing on the local communities, regions, country and regional geopolitics, including, local, state, and federal government and the effect of their perceptions on the ability of investments to proceed efficiently and to operate securely;
  - g. Understand the environmental/social legacy issues or other landscape considerations or land acquisition challenges within the EC that need to be addressed
  - h. Assess the potential mining Impacts on communities with emphasis on the Community Development Agreements (CDAS) signed between companies and communities;
  - i. Undertake hydrogeological and ecological assessments and related studies.
- 1.3.4. As part of the pilot study, the adviser is also expected to assess other major transport corridors in the country, namely: (i) Lagos-Abuja-Kano; (ii) Lagos-Benin-Enugu-Port Harcourt; (iii) Benin-Abuja-Kano; (iv) Lagos-Maiduguri. Specifically, the study will assess their suitability to become mineral economic corridors based on globally accepted criteria for classification of economic corridors and:
- a. availability of attractive large-scale economic corridor anchor resource projects;
  - b. existence of inherent economic and latent investment potential e.g. presence of industrial bases and other mineral raw materials that can create opportunities for Small, Micro, and Medium Enterprises (SMMEs).

### *Full Program*

- 1.3.5. Based on results from the pilot (CEC and transport corridors that can be expanded into economic corridors), the adviser will scale the assessment into other potential mineral resource ECs. In those other potential ECs, the adviser should identify large scale anchor resource investments. The sub-tasks to identify the viable ECs will involve undertaking the relevant sub-tasks stated in 1.1.2 as well as identifying the following:
- a. Potential corridors based on rehabilitating existing or defunct transport routes;
  - b. Existing transport corridors that can be converted or transformed into an EC, and whether the addition of the developmental (“densification”) component would improve their viability and impact to underpin a full EC;
  - c. Constraints to converting existing multi-state logistics corridor to bring in the other critical economic sectors (minerals, agriculture, water, industry, energy (gas and power), tourism, forestry, etc.).

### *Implementation Arrangements and Structure*

In undertaking the scope of work, the adviser is expected to advise on the appropriate governance structure for undertaking the EC development program as well as the composition of a high-level steering committee consisting of ministers and heads of agencies and a multi-sectoral technical committee to support the steering committee. This will be guided by a governance structure for the ECs, which the adviser will prepare:

- a. Identify the critical political, economic, behavioural, institutional, legal, regulatory, environmental, social infrastructure bottlenecks that could undermine the realisation of the inherent economic and financial potentials of the development corridors and overall development of the economic corridor;
- b. Based on the identification of the bottlenecks and political economy of infrastructure development and inter-state development, the adviser should propose an appropriate EC development and coordination governing structure in which infrastructure, mineral, energy (gas and power), land, forestry resource, trade, and industrial sectors etc can be coordinated by the Federal Government and the role for state and local government authorities as well. Accordingly, the adviser is expected to advise on the composition of a: (i) high-level inter-ministerial governing structure comprising of ministers and heads of agencies and the (ii)

appropriate multi-institutional and multi-sectoral coordination and management structure for the development of the ECs.

***Deliverables:***

1. CEC identification pilot report
2. Transport EC identification report
3. EC Identification full program report
4. Implementation arrangements and structure

**2. PHASE 2 - INVESTMENT PROGRAM DESIGN**

Following the conclusion of the phase 1 scope of work, the adviser will design the resource corridor's potential investment program across the short, medium, and long term. It will include a technical and economic (e.g. pre-feasibility level) study to guide further private sector feasibility studies and investments. The objective of this phase is to profile and package viable resource anchor project/s and associated trunk infrastructure.

The adviser should build in flexibility from the onset, prioritise and sequence actions and investments that will be inclusive, support the realisation of scenarios and should be consciously designed to maximise spill-over effects on other sectors including transferability of skills. The adviser will propose hard and soft infrastructure investment scenarios for each of the segments across the short, medium, and long term based on their potential to generate economic returns. Programs should be piloted on one segment, linked to anchor investments, and then replicated or scaled up in others following incorporation of earlier learning.

The adviser should propose options for financing publicly-owned infrastructure in each segment and each EC through a variety of source, including public finance, private finance, private finance initiatives/ public-private partnerships (PPPs) structures and the leveraging of private sector investments on critical programs and projects. The adviser should put emphasis on socially and environmentally sustainable investments with high employment generation impacts for the youth and women.

**2.1. Investment Scenarios and Program Design**

In designing the investment scenarios, the adviser should also consider various macro scenarios and risks and propose strategies for mitigating them. Examples of

scenarios and associated risks include: (a) investments in infrastructure investments are waster or stranded; (b) private sector investments occur but are “enclaves without any catalytic effects in terms of livelihoods and inclusive growth; (c) a single investment becomes viable and broader development takes place along it, but the inclusive growth is not uniform and inequalities could result; (d) multiple segments are built but growth in the country as a whole remains vulnerable and constricted; (e) full development with a thriving corridor and deep integration.

The specific components of the investment scenarios should include designing strategies for enabling and leveraging private sector investment through sequences, prioritised investments across the following dimensions:

- 2.1.1. **Infrastructure:** this will involve (a) Roads: the objective should go beyond reducing costs and time to also sparking growth and jobs and meeting the needs of the poor; (b) energy (gas and power) systems: this will combine small incremental public investments and private investments in substations, transmission lines, generation plants, distribution networks, renewable energy systems; (c) railway development: rail links, rail systems, and terminals.
  - a. Specifically, the adviser is expected to design a mineral-related infrastructure subprojects program based on the pre-feasibility study and environmental and social viability that will focus on the development of minor infrastructure defined as being ancillary to the mine (within the boundaries of the mineral lease) and associated with facilitating mine development, such as building or refurbishing an access road and rail line, energy (gas and power) connections, water management system, and so on. This must be prepared in accordance with MinDiver’s Environmental and Social Management Framework/Resettlement Process Framework and will include an Environmental and Social Impact Assessment, site-specific Environmental Impact Assessment and Environmental Social Management Plan where relevant;
  - b. Design a framework for energy (gas and power) -mining integration to spur electrification for communities and nearby businesses and industries etc within the ECs as well as broader stakeholder discussions between mining and mineral processing groups with the government on energy access. The framework should include various supply and investment financing options;
  - c. Design strategies for converting the viable transport corridors into economic corridors;

- d. Equally, the adviser will develop a selection criterion for the subprojects, type of infrastructure, operation and maintenance, and legal, financial, and procurement modalities.

2.1.2. **Livelihoods:** this will contain:

- Mining value chain: this involves creating the opportunities for the direct and indirect jobs (skilled or semi-skilled, local and urban with gender consideration) effect of large mines specifically through identification of opportunities for (a) domestic supply through basic goods and services for which the domestic private sector could today be competitive particularly in rural areas and can be short term activities or more low skill jobs and (b) goods and services not currently within reach of domestic capabilities but potentially so with some investment and have wider catalytic effects; (c) and those whose goods and services that are unlikely to be procured domestically in the foreseeable future. From this, the adviser should propose a public-private mechanism to facilitate the transmission of technical specifications from mines to suppliers and credible prices and standards from suppliers to mines;
- Downstream development: this involves identifying downstream development opportunities and potentials that are catalytic as well as their resource and infrastructure needs. However, detailed economics and mechanisms for realising such investments will need to be under detailed study by the private sector;
- Agriculture and agribusiness along the corridors: the objective is to induce agricultural production from the resource corridor and will involve the adviser identifying strategies for complementing agriculture and agribusiness with mining. This also includes the identification of binding constraints to agriculture and agribusiness development potentially through agricultural sector reviews undertaken by the federal government, development partners etc

2.1.3. **EC densification & deepening (industrialisation):** The objective of this activity is to identify and profile requisite feeder infrastructure to other resource-based investment (densification), realised through the mineral resource anchor project/s infrastructure, so that there is a greater developmental impact. In doing so, the focus will be on maximising the backward and forward linkages (local supplier industries and beneficiation/Value Addition) as well as side stream, and lateral migration linkages and reversing the main orientation towards extraction



and shipping of bulk minerals to overseas markets. In this respect, the adviser shall:

- a. Review the existing work on spatial development strategies and economic corridors in Nigeria to inform the work of developing the EC densification strategy and work plan starting with the CEC pilot, which will then be extended into the other ECs under the full program. In doing this, the adviser will:
  - Identify the strategic commodities within the ECs that offer greater possibilities for national and regional industrial development and integration;
  - identify sectoral growth drivers that can contribute most effectively to faster productivity growth and structural transformation in each EC;
  - identify the myriad of interventions that are best suited to realise the development potential of the ECs, including the regions that the EC cuts across, and support sub-national growth and development. The Adviser will assess policy interventions that have been used by government to support sub national development in Nigeria such as:
    - place-based policies to enhance the economic performance of specific regions such as Special Economic Zones (SEZ) and transport corridors;
    - people-based policies to improve the well-being of individuals or households: such as skills accumulation, provision of basic public services and health and education; and
  - broad-based policies that focus on strengthening governance and institutions: such as policy reforms.
- b. Review the economic clusters and established Special Economic Zones that are within proximity to the EC or within the EC and establish their viability and potential location for most of the resource linkages economic clusters that could emerge around the mineral resource;
- c. Identify the logistics, marketing, transport infrastructure (rail/road & ports), environmental industries, human resource development and skilling entities and other resource sectors that supply inputs into the resource sector (e.g. mineral inputs such as fertiliser & conditioners into agriculture, chemicals into mining, etc.).
- d. Identify the linkages of mining within the ECs to the economy (agricultural, upstream, downstream, and side-linkages) either in the form of “densifying” the infrastructure, through the dimensioning and shaping of the ancillary infrastructure to maximise the impact (particularly for Small, Micro, and Medium Enterprises (SMMEs) and especially agricultural small-holders). Accordingly, the adviser will assess the requirements for promoting the growth

and development of various businesses and industries in the ECs such as access to energy, access to mineral resources, formalisation and professionalisation of Artisanal and Small-Scale Miners (ASM) and design a strategy for enhancing and developing the skills of SMEs to (i) operate along the upstream providing goods and services to the mining industry as well as providing equipment to perform specialised tasks across several small mining operations; and (ii) operate along the downstream using raw materials from the mining industry as production input;

- e. Working with various stakeholders that have the expertise for creating an enabling environment for SME development and provide a plan for stimulating these impacts;
  - in the form of “deepening” both the infrastructure and economic projects through the maximisation of outsourcing to local entrepreneurs and the maximisation of local economic linkages. This will include developing strategies for expanding the higher technical skills required by the mineral, upstream, downstream, sidestream, and lateral industries within the EC;
  - estimate the potential economic and social impact of these linkages. It should include an estimation of the social infrastructure that the government and private sector should establish within the EC to support the local community and the potential economic clusters. The Adviser will review the linkages that already exist within the EC.
- f. Identify the comparative advantages that each of the regions that the EC cuts across has in establishing the clusters.
- g. Identify various stakeholders (ministries, departments, and agencies, NGOs, development agencies etc. that have the capacity to develop an enabling environment to enable the emergence of an SME ecosystem along the EC and work with them to ensure gender and disability inclusion.
- h. Demonstrate how the integrated resource linkages economic clusters can integrate the different components of the resource linkages (upstream (mineral supply chain companies), side-stream, and downstream (mineral value chain companies)) and work to reinforce each of them.
- i. Design a strategy that initially satisfies local demand and then expand to develop competencies to export goods and services;
- j. Advise on a strategy for increasing density in economic clusters to enhance each EC’s natural comparative advantage. This will include assessment of policy options and development of policies to incentivise mining investors to deepen the integration of their projects with the economy, including local content;

2.1.4. **Environmental and social impact:** The adviser will focus on ensuring direct / indirect environmental and social compliance while increasing focus on indirect impacts to mitigate against enclave development. This will also involve assessing and improving improvement in benefits for the communities affected by the extractive investments within the ECs through community development agreements (CDAs). It will also focus on strengthening land acquisition and land management as land acquisition will be required to enable investments along the resource corridor using various environmental and social impact tools. This will also involve sensitising affected communities and for those that are not directly affected by resource corridors, the adviser will develop a resettlement plan, if required

2.1.5. **Governance:** The adviser shall:

- k. Assess the national and local institutional and governance capacity to plan and implement corridors as well as infrastructure PPP projects in Nigeria. In so doing, the consultant will also identify infrastructural, policy, legal and regulatory, bureaucratic, or institutional constraints to investment as well as those strategies required to overcome them (“de-bottlenecking”). In this context, the expert will also undertake a political economy analysis around infrastructure development in Nigeria to assess the interests and claims of different stakeholders.
- l. Enhance service/product delivery in public and private service organisations and instil corridor governance. This will also include proposing appropriate governance arrangements for the success of the project.
- m. Prepare an infrastructure governance framework based on the Nigerian Integrated Infrastructure Master Plan (NIIMP) and other sectoral plans including the mining roadmap, Nigerian Industrial Revolution Plan, renewable energy plan etc. \_

2.1.6. **Development:** The adviser shall (a) undertake detailed and intensive sectoral scans of latent investment and economic potential and prepare the identified projects for private sector investment; (b) Conduct an assessment of critical paths to implementation of the short-listed projects: For each EC, identify the critical path for its successful implementation taking into consideration technical, fiscal, socio-economic, environmental, regulatory and legal considerations, and institutional and right-of-way issues that will impede its implementation. Where possible identify the financing gaps to be filled and reforms needed; (c) Identify the critical institutional (investment regimes, border procedures, etc.) and

infrastructure “bottlenecks” to realising the inherent economic potential of the EC; (d) Propose various options along with the pros and cons of each option.

## **2.2. Pre-Feasibility Study**

The program design will include a pre-feasibility study starting with the CEC pilot, which will then be extended into the other ECs. The objective is to carry out project appraisals to develop a portfolio of investment projects that can be tested for feasibility and for which appropriate funding models can be developed through the following tasks:

- a. A pre-feasibility study for each EC to underpin the requisite information about their economic and financial viability starting with the iron ore and steel corridor in the CEC. The financial and economic viability should be robust enough to justify the investment in a full EC. The adviser is expected to properly package investment projects for investors;
- b. The adviser will develop a promotion and marketing plan of the corridors based on the attractiveness of the packaged projects;
- c. Development of pre-feasibility reports with an Indicative Rate of Return (IRR) which shall:
  - contain an economic report of mineral resources in the area;
  - identify critical infrastructure bottlenecks constraining current economic activity;
  - include an environmental and social management plan (ESMP) following the conduct of a full economic social impact assessment (ESIA);
  - estimate the value of the infrastructure assets including the public investments required to develop minor infrastructure defined as being ancillary to the mine (within the boundaries of the mineral lease) and feeder infrastructure that will support densification and those associated with facilitating mine development, such as building or refurbishing access roads and rail lines, energy (gas and power) connections, water management system, and so on. Planning for these infrastructure needs should explore combinations of usage by other economic sectors and should therefore enable third-party access for multiple commercial users with benefits also accruing to communities, which should be managed using community development agreements (CDAs)
  - identify potential sources of funds for financing the Definitive Feasibility Study (DFS) such as the government, the development financial institutions (DFIs) and project preparation agencies etc;

- engage with and mobilise private sector interest through the development of appropriate public finance, private finance, private finance initiatives/ public-private partnerships (PPPs) options for funding the critical infrastructure and short-term funding required from government to get the corridor operating to meet the limited current demand. The role of the mine operators in the financing, development, and usage of the infrastructure should be properly defined. A strategy for financing feeder infrastructure designed to support densification should also be identified and proposed. The adviser is required to develop the PPP, PFI, and all infrastructure finance documents and appropriate investment marketing documents;
  - assess the current policy and regulatory framework and implementation and institutional arrangements for PPI/PPP in Nigeria from a policy, institutional, legal, and regulatory as well as political economy perspective and propose recommendations on reforms to strengthen it in preparation for the EC development;
  - identify the competitive procurement procedure required for the PPP projects;
  - identify and propose the role of the Federal, State, and Local Governments, mining investors, infrastructure investors etc in infrastructure financing and development.
- d. A business plan for a pilot phase in the CEC. Where the inherent economic potential is not confirmed, the adviser should propose alternative development strategies. Results from the pilot will be used to guide further work in other ECs.

### ***Deliverables***

1. Detailed sectoral scans of economic potentials report
2. Densification strategy and workplan
3. Livelihoods development
4. Environmental and social impact, including the use of CDAs to drive benefits to mining communities;
5. Governance and capacity development
6. SME ecosystem development strategy
7. EC Pre-Feasibility Pilot Study;
8. EC Pre-Feasibility Full Program Study;
9. EC Pilot Business Plan;
10. Major and minor infrastructure development plan with the iron ore and steel corridor as the pilot;
11. Investment program design and workplan

### **3. PHASE 3 – IMPLEMENTATION SUPPORT**

Under this phase, the adviser will support the high-level steering committee and multi-sectoral technical committee to implement the program. This will include the following:

- a. Provide a stakeholder engagement strategy and develop and deliver a presentation to a stakeholders' workshop/meeting to discuss and get feedback on the findings and build consensus around the potential CEC pilot project and next steps. A seminar will be conducted to build consensus toward preferred reforms;
- b. Organize two stakeholder workshops including one for government and public service, one for operators and users to present the results of the consultancy. An initial workshop (stakeholders' engagement) should be organized during the Conceptual Study. The consultants are expected to develop a stakeholder engagement strategy. This would ensure how those eventual workshops should be part of a larger coherent approach of stakeholders;
- c. Develop key transaction documents for structuring the mineral resource tenders and infrastructure investment projects and packages within the ECs
- d. Support the process of undertaking comprehensive field monitoring of compliance with all relevant regulations and including preparation/submission/approval of the ESIA, ESMPs, RAPs and other associated management plans

#### **Deliverables**

1. Stakeholder engagement strategy and workshop in the Conceptual Study Stage;
2. Stakeholder Workshops to present and validate findings.
3. Key transaction documents

#### **5.0 REQUIRED QUALIFICATIONS OF FIRM/CONSORTIA AND EXPERIENCE**

##### **Consortia of Firms' Experience**

The consulting advisory firm shall include a multi-disciplinary team with all the necessary expertise required to complete the work as specified under the terms of reference for the assignment. Firms may associate with other firms in the form of a Consortium, joint venture or sub-consultancy to enhance their qualifications and experience areas identified in the Terms of Reference and should include a good balance of local and foreign firms and must include consortium members with a

thorough knowledge of the issues related to the design and development of economic corridors.

MMSD expects the firm/consortium will collectively demonstrate a track record of working with economic corridors and or similar spatial development initiatives. The collective experience required of the firm/consortium should include the following:

- Demonstrate the understanding of the issues and institutional requirements for sustainable development.
- Proven expertise in corporate and project finance and infrastructure and natural resource financing, including a proven track record of serious involvement in undertaking a number of economic corridor financing and mining transaction financing, and in countries at a similar state of development, particularly in emerging markets, Less Developed, or sub-Saharan African countries over the past 10 years or more.
- Proven experience in spatial development initiatives, economic corridor development, urban and land use planning, specific experience in the establishment of economic zones along multinational highway corridors and development services (Studies, Technical Assistance, Project Management) for large-scale infrastructure projects during the past 10 years.
- Demonstrate that they have undertaken similar projects in challenging environments and be able to provide necessary expertise across a wide range of resource corridor and infrastructure expertise
- Capable in Preparing and recommending spatial development initiative and economic corridor development strategy
- Large scale infrastructural development and finance projects, including public private partnership (PPP) design and finance
- Proven experience in the development of spatial development initiatives (SDIs) with a sectoral and industrial focus such as: (i) special economic zones (SEZs); (ii) science parks; (iii) industrial parks; (iv) clusters and (v) economic corridors and with experience in private-sector development as well as micro, small and medium enterprises, and employment. This should include experience in preparing feasibility studies for industrial and entrepreneurial development projects
- Experience with providing independent professional geological, mining engineering, and mineral economics advisory services covering mineral exploration of various commodities, mine and project implementation, operation and

management. Experience with at least two projects of similar nature to the assignment, with at least 1 of the projects having been produced in Sub-Saharan Africa.

- Experience in developing pre-feasibility projects for mining, energy, transport, and investment projects with financial, legal, technical (including asset valuation), environmental and social due diligence skills
- Excellent analytical skills and sectoral expertise relevant to the investigation of key Private-Public Partnership (PPP), policy issues and structuring PPP transaction documentation;
- Proven experience in providing technical assistance with the development of laws and regulations related to economic corridors design and development, including land use, trade, infrastructure, mineral development PPP development etc.
- Proven experience in energy market consulting with a strong focus on integrated resource planning (generation and transmission planning), power systems operations and planning generation (planning, design, and operation of interconnected power systems), power economics, generation products and services, renewable energy integration, rural electrification, and green energy solutions. This experience should include development of energy corridors within economic corridors to forge greater economic connectivity through energy access development
- Substantial experience of integrated territorial development, resource-based spatial development corridors, and using natural resources to build strong and competitive economies through resource linkages in African and Nordic countries will be an added advantage;
- A demonstrated capacity to deliver planning outputs that were implemented and led to the physical development of a corridor and achieved successful outcomes;
- A demonstrated capacity to deliver planning outputs that complied with statutory requirements and that were accepted across sectoral ministries, departments, and agencies; and
- Experience in conducting detailed baseline studies in the field using innovative and cost-effective techniques; and
  - Experience in preparing marketing plans and road shows, and selection criteria for presenting investment projects for prospective investors;
  - Experience in leading workshops and engaging stakeholders through participatory planning methods. Information to be provided should include



name of assignment, name and full contact address of the client, input of the consultant in the assignment, assignment value, period of execution of assignment, etc.

- Proven experience in providing environmental and social expertise (design, implementation, and supervision) in mineral resources, infrastructure, and industrial projects, including experience in establishing green corridors. This should include conducting ESIA's, developing ESMP's, resettle action plans (RAP).
- Have proven experience in fully integrating transport investments with corridor logistics, transport infrastructure engineering and logistics for large-scale infrastructure projects and specific experience in the establishment of economic zones along multinational highway corridors to forge greater economic connectivity through infrastructure development.

### **Staff Experience**

The team shall include a Day-to-Day Project Manager and key experts for each of the necessary expertise:

1) **The Project Manager (1No. for 13.5-man months)**

- a. The Project Manager should meet the following requirements:
  - i. Relevant educational qualifications in Regional Planning, Urban Planning, Civil Engineering, Transport Planning or Logistics, Development Economics, International Trade Policy or a related field;
  - ii. Relevant experience in coordinating large investment programs and technical skills in project appraisal and economic analysis
  - iii. Experience of successfully delivering urban/regional/national spatial planning and corridor development projects
  - iv. 15 years of project management experience leading multi-disciplinary teams of international and local experts in large investment corridor development project preparations and procurement covering infrastructure development, transport logistics, spatial planning, spatial development etc;
  - v. Experience in multi-modal transport, logistics, energy as part of corridor and spatial development is a key requirement
  - vi. Extensive experience with resource corridor and/or similar infrastructure projects as well as national, regional, and urban spatial planning processes and products as well as using spatial planning in development planning
  - vii. Strong spatial analytical skills including computer applications (ArcGIS, SPSS) is a key requirement
  - viii. Advanced technical skills in spatial and attribute data collection, analysis and reporting; national, regional and urban economic analysis and planning; urban and land use policy; and strategy formulation and plan

- ix. ix. Knowledge of geospatial and attribute analysis and interpretation
- x. x. Interpersonal skills will be essential, including the ability to work with the staff of the MMSD, ministries, departments, and agencies (MDAs), National Assembly, private sector organisations and associations and other critical stakeholders.
- xi. xi. It is a requirement of the assignment that the Project Manager work full-time on the assignment and spend at least one-half of the project duration in Nigeria.
- b. b. The Project Manager has the following responsibilities:
  - xii. xii. Responsibility for the day-to-day management and tracking of the project
  - xiii. xiii. Responsibility for all negotiations and joint planning with the client, government officials, and other stakeholders including management of the relationships
  - xiv. xiv. Coordinate internal resources, both local and international team of experts towards the flawless execution of the project
  - xv. xv. Set the technical direction of the project and define the project scope, schedule, objectives, costs and approaches
  - xvi. xvi. Develop detailed project plans to monitor and track progress
  - xvii. xvii. Meeting client needs within quality, time, and cost conditions using appropriate verification techniques
  - xviii. xviii. Lead the entire project through all the phases of the project
  - xix. xix. Report on the project activities and progress with the client and address all concerns raised by the client
  - xx. xx. Perform risk management to identify and mitigate risks

## **Key Experts**

The key experts should also have not less than ten [10] years of professional working experience in their respective fields, some of which should include relevant experience in the mining sector. They should also have a minimum education of a master's degree in their field of experience as well as requisite professional certification. They should collectively demonstrate an even spread of expertise in the required areas that will arise in executing the tasks outlined herein. Key experts should also include several Nigerian individuals who have extensive experience in the relevant fields as they relate particularly to Nigeria.

- 1) **Multi-sector infrastructure planning specialist (1 No. for 4.5-man months)** with relevant educational qualifications in engineering/planning or other related fields. The specialist should have Multi-modal transport sector planning, power distribution/supply and water resource development and

management experience. Having such experience in Africa would be an advantage.

- 2) **Infrastructure policy and governance expert (1 No. for 3.35-man months)** with relevant educational qualifications in political or social sciences, economics, international development studies or related disciplines. The specialist should have relevant experience in providing policy support and hands-on experience in institutional governance reforms analysis and design, policy formulation, macro-economic analysis, and project designing related to infrastructure issues. The specialist should demonstrate experience in undertaking political economy analysis, preparation of infrastructure governance framework, long-term integrated strategic infrastructure plans with a connection to national development goals and other sectoral plans, assessment of institutional capacity and the lack of governance ability in the public sector organizations to deliver viable infrastructure projects. Furthermore, the specialist should have experience with designing the framework for a green and blue economy, and renewable energy within the infrastructure planning context.
- 3) **Transport economist (2 Nos. working collectively for 2-man months)** with relevant educational qualifications in economics or a related professional field. The specialist should have international experience in economic evaluation of large-scale transport projects, feasibility studies, or similar infrastructure projects. One of the experts should be a road economist and the other should be a railway economist.
- 4) **Transport engineer (1 No. for 2-man months)** with relevant educational qualifications in engineering or a related professional field. The specialist should have international experience in analysis of transport projects, monitoring and evaluation of transport projects, quality control and project management skills for transport projects. Experience in railway engineering is required.
- 5) **Financial expert (1 No. for 5-man months)** with relevant educational qualifications in finance, accounting, management or a related professional field with international experience in corporate and project finance, financial analysis, and PPP transactions involving large-scale infrastructure projects i.e. transport, road, railway, energy and etc. Experience of working in natural resources including mining and energy (gas and power) is key as well as expertise in financial modelling and energy (gas and power) pricing. He/she should also have an established record of experience that includes successful

infrastructure PPP transactions in emerging markets, Less Developed, or sub-Saharan African countries;

- 6) **Energy economist (2 Nos working collectively for 2-man months)** with relevant educational qualifications in economics, engineering, finance, accounting, management or a related professional field with international experience in economic evaluation of large-scale power projects, feasibility studies, or similar infrastructure projects. One of the experts should have Nigerian experience.
- 7) **Energy engineering (1 Nos for 1.85-man months)** with relevant educational qualifications in engineering or a related professional field with international experience in analysis of energy projects, monitoring and evaluation of energy projects, quality control and project management skills for energy projects.
- 8) **Energy (gas and power) infrastructure and regulatory experts (2 Nos working collectively for 1.85-man months)** with relevant educational qualifications in engineering, finance with working on technical issues relevant to energy (gas and power) infrastructure design, operations and maintenance as well as drafting of energy (gas and power) contracts, transmissions. One expert should be for gas while the other should be for power.
- 9) **GIS/IT expert (1 No. for 3.5-man months)** with relevant educational qualifications in engineering/science/social science or a related professional field with international experience in maps preparation and database development using GIS software in corridor and/or similar infrastructure projects
- 10) **Development planning expert (1 No. for 5.2-man months)** with relevant educational qualifications in urban/rural planning or other related fields with experience in Spatial Development Initiative scheme planning and implementation, regional/rural development planning and policy making skills particularly in Natural resources sustainable development planning.
- 11) **Exploration geologist (1 Nos. for 8.1-man months)** with relevant educational qualifications in geology with professional experience in corporate, operations, project management, consulting, strategic planning, for all range of mining projects in diverse commodities in senior operating positions. A track record in taking projects from exploration to the development stage with the completion of mineral resource assessment,

preliminary economic assessment, pre-feasibility and a feasibility studies is compulsory; together with experience in mining projects in Africa. The expert should be a competent person.

12) **Mining Engineer (1 Nos. working for 5.85-man months)** with relevant educational qualifications in mining engineering or a similar field with professional experience in corporate, operations, project management, consulting, strategic planning, engineering studies for all range of mining projects in diverse commodities in senior operating positions. A track record in mine planning, budgeting, and estimation for starting new mines, expanding, or extending the life of existing mines through to mine closure. This should include a track record of taking projects from feasibility, mine planning to mine design, development, and implementation as well as technical audits, mining methods selection, development and implementation of optimal mining strategies, financial evaluations, risk analysis, project reviews, due diligence, etc.

13) **Mineral Economist (1 No. for 2-man months)** with relevant educational qualifications in finance, economics, accounting, statistics or relevant qualification with professional experience in project finance and providing a broad range of clients with financial and commercial due diligence, and having experience in econometric modelling and forecasting with a full understanding of spatial economics and geography. Experience in the mineral and energy (gas and power) sector is essential. Past experience in project formulation and quantitative evaluation methods should be demonstrated. Experience in financial and transaction advisory skills is also required. <sup>[L]</sup><sub>[SEP]</sub>The specialist should have significant experience in supporting clients from conceptualisation, initial strategy, through valuation, execution, including capital raising and experience in financial modelling for mineral and infrastructure related project development.

14) **Environment Expert (1 No) and Social Development Expert (1 No.) working collectively for a total of 5.5-man months** with relevant educational qualifications in environmental sciences or related field from a recognized university with at least ten (10) years practical post-qualification experience in environmental impact analysis, planning, mitigation, and management. She/he will have demonstrated expertise in the design and implementation of environmental and social management plans, environmental and social impact assessments, and environmental management and community development. She/he will have demonstrated

skills in working effectively with public sector clients, and in implementing effective consultation and participation at project and community levels, especially in Nigeria. Experience of undertaking project financing advisory work using the Equator principles and IFC performance standards as well as Social development/environmental management and safeguards planning experience. Skills in <sup>[1]</sup><sub>[SEP]</sub> Natural hazards identification and mitigation planning should be demonstrated.

- 15) **Legal and Regulatory Experts (2 Nos. for 2-man months)** with qualifications in law and required professional experience with relevant professional experience PPP legal and regulatory advisory services track record, including drafting energy (gas and power) contracts, transmissions and other relevant legal agreements. Experience with the Nigerian PPP framework and legal and regulatory matters is required of at least one of the experts. Experience with mineral law is an added advantage.
- 16) **Publicity/Communication/Marketing Expert (1 Nos for 1.85-man months)**: with relevant educational qualifications in public relations, media, communications, public policy etc and professional experience in developing and implementing communication and promotional strategies for PPP, economic reform, and business opportunity (in key industries and sectors) programs to a broad range of public, private, legislative, community, civic actors, and investors. Experience with managing the interface with the market of prospective bidders during a PPP and concession tender is required.
- 17) **Gender Specialist (1 No for 0.85-man month)** with educational qualification in public policy, economics, development, mining, geology, earth sciences or relevant social sciences. Professional experience in gender related development, implementation, support and management, including design, monitoring activities, evaluation and monitoring. The expert should have the following professional experience: (1) In-depth knowledge in social development and gender theory, policy and practice; (2) Gender knowledge of rural development in Nigeria; (3) Know of key cross-cutting issues including gender, equality, and right-based approaches.

**Table 1: List of experts and duration of work**

No	Expert	Number of Experts	Man-Months	Phase 1	Phase 2	Phase 3
1	Project Manager	1	13.5	4	6.5	3

2	Multi-sector infrastructure planning specialist	1 No.	4.5-man months)	1.25	2.5	0.75
3	Infrastructure policy and governance expert	1 No.	3.35-man months	1	1.6	0.75
4	Transport economist – road	1 Nos.	Working collectively for 2-man months)	0.5	0.75	0.75
5	Transport economist - rail	1 Nos.				
6	Transport engineer	1 No.	2-man months	0.5	0.75	0.75
7	Financial expert	1 No.	5-man months	0.75	2.75	1.5
8	Energy economist	2 Nos.	Working collectively for 2-man months	0.5	0.75	0.75
9	Energy engineering	1 No.	1.85-man months	0.5	0.6	0.75
10	Energy (gas and power) infrastructure and regulatory experts	2 Nos.	Working collectively for 1.85-man months	0.5	0.6	0.75
11	GIS/IT expert	1 No.	3.5-man months	1	1	1.5
12	Development planning expert	1 No.	5.2-man months	1	2.675	1.525
13	Exploration geologist	1 No.	8.11	3.25	1.85	3
14	Mining Engineer	1 No.	5.85	2.75	1.6	1.5
15	Mineral Economist	1 No.	2-man months	0.5	0.75	0.75
16	Environment Expert	1 No.	Working collectively for a total of	0.5	3.5	1.5
17	Social Development Expert	1 No.				

			5.5-man months			
18	Legal and Regulatory Experts	2 Nos.	2 -man months	0.5	0.75	0.75
19	Publicity/Communication/Marketing Expert	1 Nos	1.85-man months	0.175	1.175	0.5
20	Gender Specialist	1 No	0.85-man month	0.20	0.40	0.25
Total			70.9-man months			

## 6.0 PROJECT ADMINISTRATIVE ARRANGEMENTS

The Adviser will confirm acceptance of the administrative matters detailed below:

### Project Work Plan

- a. The Adviser will prepare a plan of work covering the required period of the assignment. The plan will accompany the Adviser's proposal. Within 30 days of the Adviser beginning the performance of the contract, the final program will be submitted to MMSD and after approval will form part of the Terms of Reference of the contract.
- b. The plan will include both an outline of the program over the full period and a detailed plan for each component of the project.
- c. The Adviser will be available to participate whenever required in meetings with MMSD, and other relevant stakeholders.

## 7.0 REMUNERATION AND PAYMENT TERMS

Remuneration of the Advisor is attractive and commensurate with those offered by international bodies for similar assignments. The assignment will be based in Abuja. However, the Advisor will also be reimbursed for operational expenses such as travel, accommodation, and telephone incurred while carrying out this assignment and in line with World Bank guidelines and procedures. Before reimbursement can be made, the Advisor will need to submit a statement of expenses supported by valid documentation.

The successful Advisor would be paid a lump sum amount in accordance with an agreed schedule of deliverables set out in the table below and subject to satisfactory performance, timely receipt and approval of deliverables.



## 8.0 DURATION OF SERVICE

It is expected that service of the Advisor is required for a period of eighteen (18) months and could be extended subject to requirement and satisfactory performance of the Advisor and based on necessity.

## 9.0 DELIVERABLES & TIMEFRAME

The Adviser will submit the following deliverables bound in three (3) copies and an electronic copy in CD. Payment will be tied to the submission of the inception report, technical report deliverables and the final report. Table 2 includes the list of all required deliverables.

- a. **An Inception Report** to outline the work plan of the adviser, define its tasks and the planned implementation periods and schedules, identify target submission dates on each task. Attention will be given towards the planned coordination within other teams and preparation of a detailed schedule. Stakeholder mapping will be included in the Inception Report. The inception report will be submitted within one month of the commencement of the assignment and once approved and issued in its final form, will serve as the adviser's baseline for the management and monitoring of the tasks;
- b. **Quarterly progress reports** of the activities carried out within the preceding quarterly period. The adviser's Project Manager will prepare consolidated Progress Reports of the information contained monthly reports together with a summary of adviser's activities and conclusions on all pertinent issues concerning the assignment. In addition, the Quarterly Progress Reports will outline recommendations, for amendment or solutions to issues and matters raised or found during the study and any other information considered necessary in respect of service delivery. These reports shall be submitted at the end of the first week of the succeeding quarter;
- c. **Technical Reports** on the scope of work activities listed in section 4.0. Such reports listed out in Table 3 are to be submitted in line with the schedule set out in the Inception Report.
- d. **A Draft Final Report**, within the first week of the penultimate month of the assignment.
- e. **Final Report** bound in three (3) copies and an electronic copy in CD, within the last week of the assignment.

**Table 2: List of all required deliverables**

No	Deliverables	Timeline	Payment Milestones
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			<b>(based on submission of below named reports)</b>
1	Inception report	Within one month of the commencement of the assignment	Inception report submission
2	Quarterly progress reports	At the end of the first week of the succeeding quarter	
3	Technical reports from the scope of work	See Table 3 for the schedule of the technical reports	See Table 3 for details
4	Draft Final Report	Within the first week of the penultimate month of the assignment.	
5	Final Report	Within the last week of the assignment.	Final report submission

**Table 3: Technical report deliverables, timing, and man months**

	<b>Tas k</b>	<b>Description</b>	<b>Timi ng</b>	<b>Deliverable(s )</b>	<b>Staff Month s (Man Month s)</b>	<b>Payment Milestones (based on submission of below named reports)</b>
<b>Pha se 1</b>	2	<b>Developmen t Corridor Identificatio n and</b>	Mont hs 1-3	Development Corridor Identification and Conceptual Study report	19.375	1. Draft Develop ment Corridor Identific

		<b>Conceptual Study</b>		<p>containing the following sub-deliverables:</p> <ol style="list-style-type: none"> <li>1. CEC identification pilot report</li> <li>2. EC Identification full program report</li> <li>3. Transport EC identification report</li> <li>4. Implementation arrangements and structure</li> </ol>		<ol style="list-style-type: none"> <li>1. Conceptual Study report</li> <li>2. Final Development Corridor Identification and Conceptual Study report</li> </ol>
<b>Phase 2</b>	3	<b>Investment Programme Design</b>	Months 4-10	<p>Investment programme design report containing the following sub-deliverables:</p> <ol style="list-style-type: none"> <li>1. Detailed sectoral scans of economic potentials report</li> </ol>	30.5	<ol style="list-style-type: none"> <li>1. Draft Investment Programme Design report</li> <li>2. Final Investment Programme Design report</li> </ol>

				<p>2. Densification strategy and workplan</p> <p>3. Livelihoods development</p> <p>4. Environmental and social impact, including the use of CDAs to drive benefits to mining communities;</p> <p>5. Governance and capacity development SME ecosystem development strategy</p> <p>6. EC Pre-Feasibility Pilot Study;</p> <p>7. EC Pre-Feasibility Full Program Study;</p> <p>8. EC Pilot Business Plan;</p>	
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				<p>9. EC Full Business plan</p> <p>10. Major and minor infrastructure development plan with the iron ore and steel corridor as the pilot;</p> <p>11. Investment program design and workplan</p>		
<b>Phase 3</b>	3	<b>Implementation Support</b>	Months 10-18	<p>Implementation support report containing the reports on the following activities:</p> <ol style="list-style-type: none"> <li>1.</li> <li>2. Stakeholder engagement strategy and workshop in the Conceptual Study Stage;</li> <li>3. Stakeholder Workshops</li> </ol>	21.03	<p>Draft report following the conclusion of the implementation support activities (workshops and preparation of key transaction documents)</p> <p>Final report following the conclusion of the implementation support activities (workshops and</p>

				to present and validate findings; 4. Key transaction documents		preparation of key transaction documents)
<b>Total Staff/Man Months</b>					70.9	

The estimated number of key staff-months and calendar months required for the assignment is: 70.9 man-months and 18 calendar months.

**All Reports Shall Be in English and Presented in Hard and Soft Copies for review and approval by the Project Co-coordinator**

**THE ADVISER WILL SIGN A CONFIDENTIALITY and NON-DISCLOSURE AGREEMENT WITH THE PIU (Project Coordinator overseen by the World Bank). Noncompliance will subject to legal penalties not inferior to the Full Cost of the Contract.**

**NO FINAL PAYMENT WILL BE MADE UNTIL QA/QC HAS BEEN PASSED.**

#### **10.0 SELECTION METHOD**

The Advisor will be selected according to the Quality Cost Based Selection (QCBS) Method.