

Request for Proposals

1. ASSIGNMENT SUMMARY

Title of assignment	Feasibility study and road map for deepening local content in Zambia's mining supply chain
Location of assignment	Zambia
Sector	Mining and Mining Services
Anticipated start date	4 January 2021
Duration of contract	4 Jan – 28 March 2021

2. ABOUT PROSPERO

Prospero is a UK Aid funded private sector organization designed to incentivise investment in innovation that will change the way that market systems work and create new growth opportunities for MSMEs. We focus on the following high-growth potential sectors:

- **Food and Agriculture:** Increasing competitiveness and value of Zambian food products in end consumer markets.
- **Mining and Mining Services:** Increasing the sustainable and inclusive economic impact of mining in Zambia.
- **Tourism and Hospitality:** Increasing the value and proportion of tourist revenues captured by local businesses.
- **Investment Services:** To increase MSME access to appropriate financial services by strengthening the Zambian finance and investment ecosystem
- **Business Services:** To increase MSME access to appropriate non-financial services to stimulate business innovation and growth

We partner with leading private sector players, government agencies and business associations to design synergistic initiatives that support strong business model development, promote transformative financial services, attract quality investors and foster enabling business and investment environments.

We work at the intersection of market system development and the impact investment ecosystem, recognising that enterprise growth at scale requires access to substantial and sustainable sources of commercial finance

3. CONTEXT OF THE ASSIGNMENT

Zambia's main development goals are industrialization, economic diversification, job creation and citizen's participation in the economy. Within this context, the African Development Bank (AfDB), in partnership with the Ministry of Mines and Minerals Development (MMMD), undertook (in 2019) an in-depth assessment of the mining industry's procurement value chain. The assessment concluded the following:

- The industry procures US\$ 3-5 billion of goods and services annually. Localisation of part of the procurement value chain could therefore contribute greatly to economic growth, industrialisation and job creation, with attendant dividends in greater welfare gains;
- For selected goods and services included in that study, annual industry expenditure was about US\$2.4 billion. The two main components comprised US\$1.3 billion in core mining goods and US\$942 million in core mining services, making up 93% of total annual procurement expenditure. The two categories are hence inevitable targets for localisation; and
- About 90% of goods and services are supplied by foreign firms and only about 10% originate from Zambia. About 2.1% of goods and services are supplied by Zambian owned companies. This essentially means that Zambian firms are fringe or marginal players in the large mining procurement value chain.

The [AfDB report](#) identified 12 'quick win' project opportunities across five economic clusters which would significantly raise the levels of locally manufactured goods and resident services as well as the proportion of Zambian firms participating in the procurement value chain.

Prospero has been working with the Ministry of Mines and Minerals Development to implement the recommendations of the AfDB report and bring the above opportunities closer to implementation. To date, a pre-feasibility study has been conducted on the local manufacture of mill balls and rods, mill liners, and crusher and feeder wear plates. The study showed that mill balls can entirely be produced locally in Zambia within a short time frame.

The next stage of work requires a detailed assessment of the feasibility for domestic manufacture of the following:

1. Nuts and bolts (and wire and nails)
2. Centrifugal pumps
3. Flow control valves

These items are notably key input goods in the mining industry but are also widely used in other economic sectors. They hence present multiplier opportunities for economic diversification and industrialisation through inter-sectoral production linkages.

Ultimately, Prospero plans to cover the commercialisation of all twelve opportunities. The outcomes of these studies have also been used to develop legislation for mining local content on behalf of the Ministry of Mines and Minerals Development and will also be useful in developing a new Mines and Minerals Development Policy for the Ministry that takes into account the local content needs of the country.

4. SCOPE OF WORK

There is a broad range of nuts and bolts, as well as pumps and valves, that are used by the industry. It is hence necessary to narrow down the market information to more commonly used types. The service provider will be responsible for conducting the following:

1. Detailed Market Analysis

The market analysis should highlight the target range of goods and their specifications and include:

- an estimated level of demand and market potential both within and outside of the mining industry.
- a list of main domestic consumers.
- indicative demand projections for the next 5 – 10 years.
- technical specifications of the target range of goods.

a) Demand side mapping

The demand side mapping should ensure to target a range of goods on demand and their specifications for domestic manufacture.

b) Supply side mapping

The supply side mapping should target a range of goods and provide detailed information on:

- sources of goods, costs and country of manufacture.
- the quantities supplied and their technical specifications.
- the main suppliers, including their domicile and firm ownership.
- Zambian firms that have the potential to manufacture the target goods locally and their capacities.
- the level of local content that the Zambian firms could achieve on the target goods.
- technical limits and constraints of Zambian potential manufacturers and suggestions for closing the gap towards local manufacture.

2. Product feasibility and technologies manufacture

a) Raw material supply

Nuts and bolts and pumps and valves are fabricated from a range of steels and copper alloys. It is necessary to establish the following:

- Are the materials available locally and are they currently exploited?
- If so, by who and in what quantities and specifications
- Is there current production of intermediate inputs?
- What are these and in what quantities and specifications.
- If there is no current domestic production, what is the potential for this?
- Where can raw materials and intermediates be sourced easily and at what cost?

b) Technologies of production

The main technology requirements are a foundry, machine shop and heat treatment facilities. Key information is required on:

- Foundry and machine shops available and current state of equipment.
- Heat treatment facilities available and their current state.
- Potential to manufacture the three items and what equipment upgrading would be necessary to close the gap.
- Sources and types of equipment for upgrade and indicative levels of investment costs required.
- Standards and levels of technical compliance required for domestic production and use.

c) Organisational feasibility

All three product lines require technical know-how and the availability of technical and business skills. It will be necessary to assess:

- current levels of operating practice and expertise at existing foundries and machine shops.
- levels of business, technical skills and expertise required to manufacture the product groups
- organisational staff levels required and skill gaps that require upgrading.
- key business drivers and barriers that would facilitate investment into the product lines (e.g. joint venture partnerships, incentives that may be required, materials acquisition and logistics, growth potential, technical limitations and risks, etc).

The assignment involves both deskwork and field interviews to collect relevant data and information. The service provider will report to Prospero's Mining and Mining Services Sector Lead and will work collaboratively with the mining companies and Zambian registered supplier SMEs and manufacturers throughout the assignment. To support the implementation of the assignment, Prospero will ensure that:

- the mining companies, through the CoM, identify and make available experts at mining companies on the selected products from the Zambian mining industry.
- appointments are made to facilitate interviews.

5. DELIVERABLES

1. Implementation Action Plan

This should outline the steps that are required in order to manufacture the three products and take them to market. This includes:

- identification of Zambian owned firms that should receive supplier development support from mining companies, and the type of such support required;
- approach to skills, expertise and technology acquisition and how organizations such as ZDA might help;
- approach to capital raising and possible sources including potential contributions from parties that may be involved; and
- how raw materials and any intermediate products should be secured.

The service providers will draw on relevant international experience of BEE factors that impact mining sector local content (either positively or negatively) as a reference point for this assessment.

6. DELIVERABLES

The deliverables from this assignment and the due dates for submission are:

Deliverables	Due date
Product opportunity feasibility study report: A draft and final report that captures and outlines the findings of the assessment and sets out a timed implementation action plan to increase local content in the selected product supply chains.	14 March 2021
Presentation of findings	28 March 2021

7. PROFILE OF THE SERVICE PROVIDER

Prospero expects the selected service provider to have extensive expertise in the mining sector, to be well-connected in Zambia's mining sector and its stakeholders, to have a track record of developing local content in mining.

An individual or small team with a combination of the following expertise is required:

- Degree and or Master in either or Engineer, Finance, Business Administration, etc.
- An industrial engineer conversant with mining manufacturing and maintenance services SME assessments on the team a must.
- Worked in Extractive Industries or other Global Industrial Supply chain.
- Entrepreneurship, Business and or finance expertise.
- Demonstrated leadership capability in driving industrial change, expansion and reconstruction.
- Worked with multinational national corporations and global supply chains.
- Individual experience of over 15 years in the above fields.

8. PROPOSAL SUBMISSION GUIDELINES

Potential service providers are required to submit the following documents for consideration:

1. Technical proposal (no more than 6 pages) comprising:

- Individual/corporate profile, highlighting relevant experience with specific references to past assignments.
- Understanding of the assignment and any comments on the objectives, scope of work or deliverables.
- Methodology to deliver against the assignment objectives.
- Roles and names of key personnel.
- Suggestions to improve the effectiveness of the assignment, if applicable.
- Risk management plan for undertaking the assignment

2. Curriculum vitae for key personnel named in the proposal (no more than 2 pages per person).

3. Financial proposal (in a MS Excel compatible spreadsheet) showing:

- **Fees:** Names and roles of individuals, number of days input, daily fee rates and total cost (inclusive of all taxes)
- **Reimbursable expenses budget:** Items of expenditure, definition of units, number of units required, maximum cost per unit, and maximum budget for each item of expenditure (Note: expenses will be reimbursed at cost, up to the maximum amount outlined in the final budget)
- **Proposed payment schedule:** Payments on contracting, inputs and deliverables.

Potential service providers should submit their proposals electronically to:

Submission email address	procurement@prospero.co.zm Please indicate ' Local Content Feasibility Study ' in the subject line.
Deadline for submission	5 December 2020

Prospero reserves the right to amend, extend or cancel this request for proposals at any stage. The costs of preparing proposals is entirely on the account of the organisation preparing the proposal.

9. PROPOSAL EVALUATION AND CONTRACT AWARD

Prospero will seek (but does not guarantee) to complete an evaluation of compliant proposals within fourteen days of the deadline for submission. The preferred bidder will be informed and invited to contract negotiations. If the contract negotiations with the preferred bidder are unsuccessful, Prospero may either:

- cancel the request for proposals, or
- identify an alternative preferred bidder based on the evaluation of the remaining proposals.

In any case, contract award will be subject to the standard Prospero due diligence assessment.

10. TAX DEDUCTIONS

Prospero is in full compliance with the tax laws of the Republic of Zambia and will make any necessary deductions for withholding taxes (WHT) or any other applicable taxes when making any payment to an independent consultant or contractor.