

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION TERMS OF REFERENCE (TOR)

FOR THE PROVISION OF LONG-TERM SERVICES RELATING TO THE DEVELOPMENT OF INTEGRATED AGRO-FOOD PARKS

PACKAGE D:

DESIGN REVIEW OF DETAILED DESIGN AND ENGINEERING PLANS FOR INTEGRATED AGRO-FOOD PARKS, INCLUDING RURAL TRANSFORMATION CENTRES

DATE: 16 MAY 2024

1. Background and objective of the work

The feasibility study is a critical phase in the IAFP planning process. The outcome of the feasibility and technical studies will define the design and implementation modalities of the programme that will cover the project objectives. This phase undertakes a series of interrelated technical studies, resulting in an IAFP masterplan, a financial analysis (complete with project cost estimations and revenue streams), a development strategy, a governance system and private sector participation model, and an implementation schedule with phasing recommendations. The preparation of the master plan will require detailed architectural drawings, including with area statement of floor plates for the proposed buildings for common amenities. Designs should cover base enabling infrastructure, core infrastructure, industrial infrastructure and social infrastructure. The engineering design stage covers allocation and sizing of built-up areas for various activities and common facilities, road networks, stormwater drainage network with recharge facilities, comprehensive water supply system, sewerage system along with sewage treatment plant and recycling of treated wastewater for green and landscaped areas, electrical distribution centre along with locations and capacities of transformers, landscaping plan, solid waste management system, access control in the form of entry and exit, security, appropriate fire hydrant systems, and others. A review of the design works is required to ensure the quality, safety, and success of engineering projects by facilitating error detection, compliance with standards, interdisciplinary coordination, cost efficiency, and risk mitigation.

2. The Scope of the services

Review the critical contents of the detailed design and engineering plans review shall include the following aspects:

- Assessing the final design relative to the statement of requirements detailed in the terms of references pertaining to the design and engineering plans, as well as the relevant engineering standards, quality requirements and mandatory requirements for the safety, functionality, and sustainability of the project;
- Determination on the completeness of the design documents for the purpose of construction;
- Comment and make recommendations based on international best practices. The design review should also take into account environmental impact analysis and social as well as economic impact;

- Where the design and engineering plan do not meet national/international recognized standards related to the construction of industrial parks, the contractor shall detail the shortcoming, relevant standard and recommendation on what needs to be by the designer in order to rectify the design. Important elements of the review should take into account:
 - Location
 - o Climate
 - o Rainfall
 - Topography
 - Soil characteristics
 - Geology
 - o Hydrology
 - Ambient air quality
 - Noise
 - Air and water pollution
 - Ecology and biodiversity in the region
 - Socio economic conditions
 - o Livelihood
 - Identification of project affected people (PAP), project affected families (PAF),
 specific compliance to the resettlement action plan
 - Environment management plan (EMP)
 - o Compliance to sustainable environmental guidelines
 - o Inference

Expected demands in the coming 3 (+ 2) years

The Long-term Agreement(s) will be established for an initial period of three (3) years with possibility of extension for additional up to two (2) years (i.e. total LTA(s) period of up to five (5) years). The contractor(s) will provide deliverables as defined in the specific call-off orders within the Long-term Agreement.

UNIDO will not commit to purchase any minimum quantity of the services, and purchases will be made only if and when there is an actual requirement. UNIDO will not be liable for any cost in the event that no purchases are made under any resulting LTA.

	2024	2025	2026	
LTA Requirements	Estimate USD\$	Estimate USD\$	Estimate USD\$	Grand Total USD\$
Package D: Engineering Design review	0	750,000.00	1,000,000.00	1,750,000.00

3. General Time Schedule

The overall duration of this work shall be in total 3-4 months from the date the service provider signed the contract.

4. Results / Deliverables

The assignment shall be completed once the following deliverables will be received and accepted by UNIDO:

No.	Activities	Deliverables	Time Schedule	
1	Preliminary	Containing the initial assessment of design	Within three weeks after	
	report	including comments, observations for the	the signing of the PO	
		designer to review and respond		
2	Progress	Containing the review and feedback on items	Within six weeks after the	
	report	cleared or still open	signing of the PO	
3	Draft Final	Containing the comprehensive review results	Within nine weeks after	
	Report	and conclusions	the signing of the PO	
4	Official	Presenting the final conclusions of the review	Within twelve to sixteen	
	Statement of		weeks after the signing of	
	design review		the PO	

Note: An annex to the report should include a list of all the persons consulted/interviewed, first- or second-hand data used, reports referenced, as well as a bibliography of documents used for the study. Deliverables must be provided in the English language.

5. Reporting and Monitoring

The service provider will work under the supervision of the UNIDO Project Manager and coordinate with the in-country project team accordingly. A kick-off meeting will be organized at the early stage of an assignment under respective call-off Purchase Order/Contract with the UNIDO team at HQ and the project team.

The service provider shall identify a focal person for facilitating communication and coordination. The focal person will be responsible for coordinating with UNIDO and reporting regularly to the UNIDO Project Manager (or the delegated expert) regarding the progress of the services required.

The project team will share relevant information with the service provider. The project team will monitor the progress and evaluate the results of the activities undertaken by the service provider.

For Annexes (1-9) please refer to the <u>Terms of Reference - Introductory</u>