



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

ID: 210021

“Industry 4.0 to foster youth employment in Tunisia and Côte d’Ivoire”

Title:	Business & Investment Specialist (Technical Expert in private sector development / SMEs upgrading and business technical assistance for Industry 4.0 / industrial business network promotion)
ISA level non-HQ	
Main Duty Station and Location:	Tunisia, Tunis with possible travels to Côte d’Ivoire, Abidjan and other countries
Mission/s to:	As required
Start of Contract (EOD):	01/01/2023
End of Contract (COB):	31/12/2023 (with possibility for extension)
Number of Working Days:	Full time

ORGANIZATIONAL CONTEXT

The United Nations Industrial Development Organization (UNIDO) is the specialized agency of the United Nations that promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability. The mandate of UNIDO is to promote and accelerate inclusive and sustainable industrial development in developing countries and economies in transition.

The Directorate for Technical Cooperation and Sustainable Industrial Development (TCS), headed by a Director General, oversees the Organization's development of capacities for industrial development as well as industrial policy advice, statistics and research activities, and the Organization's normative contribution to member states and the global development community for the achievement of the SDGs. The Directorate also ensures the implementation of strategies and interventions for sustainable industrial development related to the environment, energy, SMEs, competitiveness and job creation, as well as Digitalization and Artificial Intelligence (AI). Through coordination in-house and with Member States and industry stakeholders, it ensures that the services provided in these areas contribute toward effective and appropriate technical, business and policy solutions, and are results-oriented and focused on realizing any potential for scaling up and positioning UNIDO as a leading platform for industrial development in developing countries and global forums. The Directorate houses the following technical divisions: Capacity Development and Industrial Policy Advice (TCS/CAP); Circular Economy and Environmental Protection (TCS/CEP); Decarbonization and Sustainable Energy (TCS/DSE); SMEs, Competitiveness and Job Creation (TCS/SME); and Digital Transformation and AI Strategies (TCS/DAS). The Directorate also ensures close coordination and collaboration across divisions as well as with relevant entities in the Directorates of Global Partnerships and External Relations (GLO) and SDG Innovation and Economic Transformation (IET).

This position is located under the Division of Digital Transformation and AI Strategies (TCS/DAS), which promotes digital transformation and Fourth Industrial Revolution (4IR) associated technologies (including

cloud computing, artificial intelligence (AI), industrial Internet of things, additive manufacturing, big data, blockchain, e-commerce, and others) as part of innovation ecosystems consisting of productive capacities in manufacturing, services and digital firms, with the purpose to advance the competitiveness of industries and manufacturing firms in Member States. It helps industries to benefit from the rapid progress in digital and convergent technologies associated with the Fourth Industrial Revolution (4IR), ensuring a smooth transition towards safe and secured cyber-physical industrial systems and a smart society and mitigating any negative adverse effects on employment and quality of work. Through the Division's services, the productive transformation will be key, integrating industrial businesses, dynamic entrepreneurship, and acceleration services, in less developed countries will have the opportunity to technologically catch up instead of falling behind industries in more advanced countries.

PROJECT CONTEXT

Project number: 210021

Project title: Industry 4.0 to foster youth employment in Tunisia and Côte d'Ivoire

This project addresses a major socio-economic problem in Tunisia, as well as in the complementary country Côte d'Ivoire, namely the high unemployment rates among youth and women. In the context of the industrial sector, the focal problem lies in the lack of dedicated policy and mechanisms as well as updated capabilities and infrastructure to benefit from the 4IR in promoting growth and fostering youth employment. BMZ's has a Special Initiative on training and Job Creation with emphasis on technology and innovation development and value chains promotion, under which the current project document is designed to boost integration into 4IR ecosystems combined with increased and enhanced employment opportunities and conditions in selected enterprises in Tunisia and Côte d'Ivoire. The suggested industrial sector for intervention are: Mechanical (engineering), textile, pharmaceutical and agro-food (Tunisia); ICT and agro-industry (Côte d'Ivoire).

The intervention will foster higher demand for skilled workers by addressing constraints on the business side that prevents firm growth and cluster development and will support youth and others to engage in these opportunities by increasing access to technology, skills, and information about jobs and business prospects. Consequently, the project will focus on agents working in the targeted clusters, especially youth and women, support for labour market integration, entrepreneurship, incubators and training structures; and strengthening of financing institutions (banks, micro-credit institutes, etc.). In addition, alignment will be sought with the broader framework of relevant national policies.

Objective of the project: The main goal of UNIDO interventions is to support Tunisia and Côte d'Ivoire in increasing youth employment, salaries and labour conditions through shaping and consolidating a digital economy ecosystem. The envisaged wide impact of this objective will contribute to a structural transformation of the economy in Tunisia and set the ground for this transformation in Côte d'Ivoire in the targeted sectors, leading to sustainable job creation.

The Outputs and Activities of the proposed project are the following:

1. Enhanced and conducive business environment for employment generation and adoption of 4IR technologies and methods within priorities VC and sectors.

- 1.1. Readiness assessment conducted with focus on employment generation opportunities.
- 1.2. Foresight exercise for identification and confirmation of priority VC, sectors and key technologies to be targeted and support establishment of 4IR index.
- 1.3. Policy, strategies, recommendations and governance assurance.
- 1.4. Advocacy and awareness raising campaign to disseminate digital culture and benefits for the manufacturing sector.
- 1.5. Revision and improvement of contractual regulation statements for supporting the use of PPP schemes, strategic alliances and overall mechanisms among major stakeholders.

2. Establishment of a SMART factory for 4IR technology adoption and integration in the industrial

sector.

- 2.1. Feasibility study for the SMART Factory.
- 2.2. Design of a SMART factory with support from partners and providers of technology.
- 2.3. Creating capability building facilities for experimenting, on-the-job learning, internships and prototyping.
- 2.4. Acquisition and instalment of needed equipment and technologies.
- 2.5. Training of trainers and personnel.

3. Development of dedicated training capacity on 4IR knowledge in vocational centers, universities and business schools.

- 3.1. Identification and selection of pilot target institutions.
- 3.2. Preparation of advanced training curricula, modules, computer-based facilities, digital tools, material and guidelines.
- 3.3. Supporting the implementation of the pilot training programmes.
- 3.4. Evaluation of the pilot phase and drafting of road map for the GvT to scale up this initiative.

4. Establishment and strengthening of 4IR institutions and centres for shared training, knowledge, experience and activities (multi country intervention).

- 4.1. Assessment and mapping of institutions and initiatives related to 4IR among target countries.
- 4.2. Provide assistance for selecting and strengthening 4IR centres.
- 4.3. Training staff of centres based on the needs assessment and in line with national priorities.
- 4.4. Establishing a platform for sharing experience, data, curricula, and teaching materials.

5. Pilot on adopting and operating 4IR technologies in a selected number of enterprises (links to Output 2).

- 5.1. Selection of target beneficiaries from SME based on agreed criteria.
- 5.2. Developing and conducting 4IR enterprise level diagnosis.
- 5.3. Instalment, guiding and training staff on the use of new technologies.
- 5.4. Monitor and follow up impact on performance.
- 5.5. Prepare guidelines on adoption of 4IR on SME level.

6. Investment promotion network/digital transformation facilitation for attracting investors/partners/finances for acquiring 4IR technologies.

- 6.1. Establish linkages with potential investors, providers of technology and partners.
- 6.2. Organize meetings, b2b, etc. between SMEs receiving support under the project and potential partners, providers of tech and investors.
- 6.3. Provide support for optimal transfer of knowledge, technology and equipment.

CONTEXT OF THE TERMS OF REFERENCES:

The Technical expert / Business & Investment advisor is expected to implement activities under Output 5: Pilot on adopting and operating 4IR technologies in a selected number of enterprises and Output 6: Investment promotion network / digital transformation facilitation for attracting investors, partners and finances for acquiring 4IR technologies (only in Tunisia).

He or she will perform under the supervision of the Project Manager and the Chief Technical Advisor and in coordination with both National Coordinators in Tunisia and Côte d'Ivoire and the project team and UNIDO team in HQ.

<u>MAIN DUTIES</u>	Concrete/ measurable Outputs to be achieved	Expected duration W/d	Location
<p>5.1. Selection of target beneficiaries from SME based on agreed criteria.</p> <p>In collaboration with the Chief Technical Advisor and project team, build 4 sectorial groups of enterprises in the pilot sectors for each country (mechanics, textile, pharmaceutical, agribusiness in Tunisia / ICT and agribusiness in CIV) :</p> <ul style="list-style-type: none">- Define enterprises selection criteria- Contact professional associations and chambers of commerce and outreach to companies / employers- Organize Regular meetings of industrials in each sector, or in interdisciplinary form, to discuss opportunities to grow business, common actions, implementation and review, in order to explore opportunities to grow business and employment with a main goal to create sustainable and quality jobs in 4IR.- Co-organize multilateral meetings between the industrial groups, academic and vocational training groups	<p>Data collection / list of industrials for each sector completed and groups targeted</p> <p>Joint industrial groups formed and regular discussion meetings organized</p>	<p>According to Action plan / timeline</p>	<p>Respectively Tunisian and Côte d'Ivoire</p>

<u>MAIN DUTIES</u>	Concrete/ measurable Outputs to be achieved	Expected duration W/d	Location
<p>5.2. Developing and conducting 4IR enterprise level diagnosis.</p> <p>a) coordinate the design the diagnosis template (using the readiness assessment tool) taking into consideration the findings from the conducted meetings with the industrial groups</p> <p>b) coordinate the roll out the firm level I4.0 the diagnostic tool</p> <p>c) Monitor the experts intervention in 150 enterprises, identify specific needs and opportunities (individual and cluster level) and based on the diagnosis result provide final selection of 130 enterprises that will be supported.</p> <p>d) Once final intervention plan per SME is finalized, draft an agreement that will be concluded with each beneficiary SME, defining their rights and duties and provide regular information related to the progress of cooperation</p>	<p>Groups of experts mobilized for each pilot sector (TdR developed, selection process coordinated and achieved)</p> <p>Requirements' matrix for the selected 130 SMEs conceived</p> <p>Close follow-up of the Progress of cooperation and measuring the impact of the technical assistance (business evolution + potential of job creation)</p>	According to Action plan / timeline	Respectively Tunisia and Côte d'Ivoire
<p>5.3. Coordinate the implementation of the agreed digital plans that might include:</p> <p>a) The acquisition and installment of new technologies</p> <p>b) The implementation of the intervention plan:</p> <ul style="list-style-type: none"> - (Detail the interventions): development of new business models, trainings, skills improvement - Supporting the acquiring and cultivation of the new technology for production and supply chain, - Design thinking 	Required technical assistance according to the diagnosis, provided	According to Action plan / timeline	Respectively Tunisia and Côte d'Ivoire

<u>MAIN DUTIES</u>	Concrete/ measurable Outputs to be achieved	Expected duration W/d	Location
<p>5.4. Monitor and follow up impact on performance</p> <ul style="list-style-type: none"> a) Contribute to the design of the system for monitoring the performance indicators b) Implement the monitoring in concertation with the project monitoring expert. 	Monitoring system implemented	According to Action plan / timeline	Respectively Tunisia and Côte d'Ivoire
<p>5.5. Prepare guidelines on adoption of 4IR on SME level in collaboration with the mobilized experts (pilot experience for duplication)</p> <ul style="list-style-type: none"> a) Document the experience and tools, including lessons learned and success stories. b) Share and disseminate with developing partners (public, private) with aims to scale up the SME support approach and share best practices. 	Manual for SMEs scaling up approach and best practices and tools developed and shared.	According to Action plan / timeline	Respectively Tunisia and Côte d'Ivoire
<p>6.1 Establish linkages with potential investors, providers of technology and partners</p> <ul style="list-style-type: none"> a) Methodology for selection and call for proposals for investment projects in cooperation with national and international partners b) Develop 20 business plans for 20 selected SME c) Select and support 10 SMEs out of the 20 for developing investment readiness proposals, with a priority for partnerships amongst Tunisia and Côte d'Ivoire d) Promote the investment plans through ITPO networks e) Monitoring of the impact of promotion 	<p>Beneficiary SMEs selected</p> <p>Business plans established and then investment plans for the selected SMEs</p> <p>Follow-up and impact monitoring system implemented</p>	According to Action plan / timeline	Tunisia

<u>MAIN DUTIES</u>	Concrete/ measurable Outputs to be achieved	Expected duration W/d	Location
<p>6.2. Organize meetings, b2b, etc. between SMEs receiving support under the project and potential partners, providers of tech and investors</p> <ul style="list-style-type: none"> a) Screen and assess the existing and new B2B initiatives b) Define intervention and partnership modalities for existing initiatives (for example SITIC) c) Develop B2B platforms and organize the events, for the new initiatives 	<p>New B2B initiatives assessed and intervention and partnerships defined. Then events organized.</p>	<p>According to Action plan / timeline</p>	<p>Tunisia</p>
<p>6.3. Provide support for optimal transfer of knowledge, technology and equipment</p> <ul style="list-style-type: none"> a) Select a national structure responsible of providing B2B services b) Involve the structure in the organization of the B2B events c) Capacity building and transfer of knowledge to upscale the B2B events. 	<p>The national unit selected and involved with an upscaling to sustain these new B2B events.</p>	<p>According to Action plan / timeline</p>	<p>Tunisia</p>

REQUIRED COMPETENCIES

Core Values

WE LIVE AND ACT WITH INTEGRITY: work honestly, openly and impartially.

WE SHOW PROFESSIONALISM: work hard and competently in a committed and responsible manner.

WE RESPECT DIVERSITY: work together effectively, respectfully and inclusively, regardless of our differences in culture and perspective.

Key Competencies

WE FOCUS ON PEOPLE: cooperate to fully reach our potential –and this is true for our colleagues as well as our clients. Emotional intelligence and receptiveness are vital parts of our UNIDO identity.

WE FOCUS ON RESULTS AND RESPONSIBILITIES: focus on planning, organizing and managing our work effectively and efficiently. We are responsible and accountable for achieving our results and meeting our performance standards. This accountability does not end with our colleagues and supervisors, but we also owe it to those we serve and who have trusted us to contribute to a better, safer and healthier world.

WE COMMUNICATE AND EARN TRUST: communicate effectively with one another and build an environment of trust where we can all excel in our work.

WE THINK OUTSIDE THE BOX AND INNOVATE: To stay relevant, we continuously improve, support innovation, share our knowledge and skills, and learn from one another.

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education: Advanced university degree in economics / engineering / ICT / industrial business / one of the target sectors specialties (agribusiness, mechanics, textile, ICT or pharmaceutical & health-tech) or other relevant discipline with a specialization in private sector business development / digital transformation is **required**.

Technical and Functional Experience:

- A minimum of 10 years practical experience in the field of private sector development, industrial upgrading, innovation, B2B, digitalization in developing countries, is **required**.
- Experience in industrial business and enterprise development with focus on digital transformation/4IR technologies, is **required**.
- Experience in private sector outreach, business development services and consulting to SMEs (firm diagnosis, growth plans assessment, performance monitoring), is **required**
- Experience in value chain improvement tools and mechanisms (minimum one specific pilot value chain), is **required**.
- Experience in evaluating the needs, conditions and problems in developing countries is **required**.
- Practical experience in strategic planning is **highly desirable**.
- Prior knowledge and familiarity with the local conditions of the pilot sectors of the project in both countries, is **highly desirable**

Languages: Fluency in written and spoken French is **required**, English is an asset. Fluency and/or working knowledge of another official UN language, particularly Arabic is **desirable**.

Other: Excellent understanding of international certification standards / Experience in B2B events / Strong communication and interpersonal skills / Strong business ethics, are **required**.

Dépôt de candidature :

Les intéressés sont invités à envoyer leur dossier de candidature (CV + lettre de motivation) à l'adresse électronique suivante : employment4youth@unido.org. Objet : Candidature Business & Investment Specialist

Dernier délai de candidature : **25 décembre 2022**

L'ONUDI se chargera de la gestion de ce processus de recrutement.

Seuls les candidats sélectionnés seront contactés.