

## UNICEF China Terms of Reference For Consultant Recruitment

**Job Title of Consultancy:** Technical Consultant for UAV Education Needs Assessment Study

**Requesting Section:** Public Partnership Section

**Job Title of the Supervisor:** Public Partnership Specialist

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### **Background of Consultancy Request:**

According to the Country Program Action Plan between Chinese Government and UNICEF (2021-2025), the parties will strengthen cooperation in disaster risk reduction capacity building, and response under the framework of South-South cooperation. As concrete actions to implement the initiative, the National Disaster Reduction Center, Ministry of Emergency Management of China (NDRCC of MEM) and UNICEF China Office has been implementing cooperation in a Knowledge Hub for South-South cooperation on Disaster Risk Reduction Innovation and Technology to carry out policy dialogue, technology exchange, expert interaction, policy research, and capacity building activities under the framework of South-South cooperation.

Drones technology is applied in emergency management and response in African countries. Communities and children are benefited from the technology in ways of food and medicine delivery, prevention of infectious diseases, technical training for adolescence and so force. In 2020, the African Drone and Data Academy was established with the support of UNICEF. In 2020, 25 students from Malawi and other African countries, were trained to assembly, operate drones and analyse data collected. China has rich teaching and practical experience in the application of drone technology. The NDRCC has developed technology and business capabilities in drone remote sensing monitoring, data processing and analysis, and product services.

Under the framework of South-South cooperation, through a scoping study, UNICEF and NDRCC are planning to explore the possibilities to implement drones' technology capacity building in Asia and Africa to facilitate humanitarian assistance and development cooperation to benefit African people including children, and accelerate the achievement of sustainable development goals.

### **Purpose of Activity/Assignment:**

NDRCC and UNICEF is seeking a technical consultant (working together with the other leading consultant) to conduct the needs assessment study to formulate implementation strategy to carry out UAV education for young people in Asian and African countries and capacity building for disaster management officials in other developing countries through South-South cooperation.

### **Major Tasks, Deliverables & Timeframe:**

1. *Desk research and literature review of*
  - a. Mappings, reports, and studies on current domestic policies, standards, guidance of using drones;

- b. Existing resources and prospects in China for conducting UAV vocational education and training;
- c. Current development progress in this field, including in China and overseas programmes/investments and cooperation in Asia and Africa, the gaps and needs for drones industry and capacity and talent needs.

**2. Stakeholder engagement**

- a. In collaboration with leading consultant, engaging with Chinese stakeholders to discuss key challenges in drones application and capacity building, working towards consensus on overcome obstacles and identify potential South-South cooperation programme:
  - Work with the leading consultant to organize and facilitate two consultation meetings.
  - Review agenda, develop questionnaire and facilitate the discussion at the consultation meetings with related stakeholders to identify the basic situation of the drone academy, such as African Drones and Data Academy (ADDA) in Malawi, related Technical and Vocational Education and training (TVET) schools, civil society organizations, youth organizations in other countries.
- b. Determine the stakeholders and experts to be engaged
- c. Work with leading consultant to engage internal UNICEF stakeholders and NDRCC partner and external stakeholders for feedbacks on draft paper

**3. Data collection and field visit**

- a. Conduct basic data collection according to programme needs
- b. Prepared concept for field visit and conduct the visit to NDRCC UAV network partners to get knowledge of UAV partners' research capacity and recent development, talent training and employment, as well as the existing cooperation between academia and enterprises.

**4. Drafting and finalizing the report**

- a. In collaboration with the leading consultant to generate related content based on desk research, literature review, stakeholder engagements and field visits
- b. Draft report
  - Develop substantive content together with the leading consultant with summarizing of China's experience that can inform UNICEF and NDRCC on carrying out UAV education for young people and capacity building for disaster management officials from Asian and African countries.
- c. Revise draft report based on feedback collected
- d. Submit final paper
- e. Work with leading expert to prepare a draft proposal for how UNICEF, NDRCC and other partners can implement drone capacity building South-South cooperation programme
- f. Participate in the coordination and convening of a consultation, and on the basis of preliminary study and discussion, provide different options for implementation roadmap for drone capacity building.

No.	Tasks	Deliverables	Working days
1.	<i>Desk research and literature review</i>	<ul style="list-style-type: none"> <li>a. Mappings, reports, and studies on current domestic policies, standards, guidance of using drones;</li> <li>b. Mapping of existing resources and prospects in China for conducting UAV vocational education and training;</li> </ul>	5

		c. Mapping of current development progress in this field, including in China and overseas programmes/ investments and cooperation in Asia and Africa, the gaps and needs for drones industry and capacity and talent needs	
2.	<i>Stakeholder engagement</i>	a. Engage with Chinese stakeholders b. Work with leading consultant to organize and facilitate two consultation meetings c. Note from engagement of relevant stakeholders, including list of stakeholders to be engaged; notes from preliminary individual stakeholder discussions	2
3.	<i>Data collection and field visit</i>	According to the structure of the report, in collaboration with leading consultant to provide related inputs: a. Draft report with three basic parts: - <b>Part I:</b> Major policy constraints and opportunities for drones' application and capacity building; - <b>Part II:</b> Role of different stakeholders in implementing and contributing to the opportunities, including challenges and current gaps identified; - <b>Part III:</b> Recommendations on how each stakeholder can address challenges and contribute to the opportunities b. Finalize report	6
4.	<i>Draft proposal</i> on UAV capacity building South-South cooperation in the selected Asian and African countries	a. Review and contribute to the draft proposal for how UNICEF, NDRCC and other partners can implement drone capacity building South-South cooperation programme b. Participate in the coordination and convening of a consultation, and on the basis of preliminary study and discussion, provide different options for implementation roadmap for drone capacity building	2
<b>Sub-total</b>			<b>15</b>

**Methodology & Expected Output:**

Desk review, questionnaires, facilitation and participation in consultations and field visits, coordination with unicef and ndrcc

**Start Date:** 1 SEPTEMBER 2023

**End Date:** 31 DECEMBER 2023

**Total Working Days:** 15 DAYS FOR TECHNICAL CONSULTANT

**Consultancy Requirements:**

- **Minimum Academic Qualifications required and disciplines:**
- An advanced university degree (Master's) in disaster risk reduction, emergency technology and management, humanitarian response, UAV Engineering, UAV Application Technology, Avionics Technology, Aerospace Engineering, Surveying, Mapping and Remote Sensing.
- **Knowledge/Experience/Expertise/Skills required:**
- A minimum of ten years of relevant professional experience in research on human rights, disaster risk reduction, humanitarian assistance, emergency management.
- A strong research background is required.
- Applicants must have a proven record of excellent writing and analytical skills in both English and Chinese.
- Developing country work experience is considered an asset.