

## TERMS OF REFERENCE FOR INDIVIDUAL CONTRACTORS/ CONSULTANTS

PART I		
Title of Assignment	<i>International Consultancy: Cold Chain &amp; Vaccine Management support to Ministry of Health (MOH) for introduction of COVID-19 Vaccine in Malawi</i>	
Section	Health & HIV	
Location	Lilongwe	
Duration	<b>130 days over 6 months</b>	
Start and End Date	<b>From:</b> 15 February 2021	<b>To:</b> 15 August 2021

### BACKGROUND

COVID-19 pandemic is a global health crisis that becomes the greatest challenge to countries in a short period of time. Since its emergence late last year the virus has spread to every continent. The pandemic is more than a health crisis that created an unprecedented socio-economic crisis stressing every country it touched.

In order to fight this pandemic, a group of global health actors launched an initiative called “Access to COVID-19 Tools Accelerator (ACT-A)” to promote and accelerate the development, production and equitable distribution of COVID-19 vaccines, diagnostics and therapeutics.

One of the goals of ACT-A is to avail 2 billion doses of COVID 19 vaccine by end of 2021. Rapidly deploying and quickly vaccinating target group will be of most goal of the exercise. In this regard the importance of effective supply chain in general and cold chain management remains vital. In such situation, several activities need to be accomplished within a record time, this includes but not limited to determination of the required logistics the will be informed by vaccination strategies, The storage and transportation need for the vaccine should be understood and the required capacity should be determined in a short window of time. A detailed storage and distribution plan need to agree and followed strictly. These activities requires additional time and knowledge.

Hence, UNICEF Malawi Office, is seeking assistance in the form of a consultancy equivalent to 130days of full-time work to be completed over a period of 6 months, to support on planning, monitoring and implementation of Cold Chain and Vaccine Mangement related activities during the deployment of COVID-19 vaccines.

### JUSTIFICATION

An effectively managed supply and cold chain is crucial to the successful deployment of COVID-19 vaccines. Based on the current information shared by the manufacturers, it is assumed that most vaccines will be stored at +2 °C to +8 °C, with exceptions that some vaccines that would require ultra-cold chain (UCC) equipment (-70 °C) and either frozen phase change material (PCM) or dry ice in lieu

of traditional cold packs during transport. Prior to vaccine introduction, MOH needs to conduct careful assessments of the existing supply chain system to be able to identify and address gaps, such as in storage, distribution, temperature monitoring and tracking, tracing and reporting vaccine stocks. The global supply of vaccine will be limited, especially in the initial stages of vaccine deployment, and this may result in a number of shipments of small amounts of vaccine over time.

Deployment strategies include conducting an urgent assessment (or re-assessment) of existing cold chain and supply chain capacity, and of available surge capacity, to ensure quality vaccine can be equitably delivered to the service points in the right place, at the right time and in the right quantity. Mapping of cold and dry storage facilities, including potential sources of additional capacity from private sector sources, estimating the relevant costs, and facilitating rental agreements, should be done in advance and any gaps should be addressed prior to vaccine arrival in country.

The following are pre-requisites to the development of appropriate deployment strategies:

1. **Forecasting vaccine and logistics needs using the Immunization Supply Chain Sizing Tool** provides information on equipment, supply and budget requirements for supporting deployment and vaccination operations based on the size of the population to be vaccinated.
2. **Assessing available storage capacity using the Cold Chain Equipment Inventory and Gap Analysis Tool** and assessing vaccine volumes and corresponding cold chain capacity per catchment area.
3. **Identifying surge capacity:** Assess and map available cold chain capacities according to the three temperature ranges (e.g. +2 °C to +8 °C, -20 °C, and -70 °C) for storing the different types of COVID-19 vaccines under development with inclusion of all available cold chain equipment outside the immunization programme (e.g. pharmaceutical division, national reference laboratories, and private and business sectors) in the inventory and calculation of capacity.
4. **Preparing a distribution plan:** Prepare a distribution plan for vaccines and ancillary supplies (such as syringes, safety boxes, vaccine carriers, cooling packs, markers, data collection forms, AEFI response kits and IPC/PPE) based on the target population and number of staff that will comprise the vaccination and monitoring teams (e.g. vaccinators, recorders, social mobilizers, supervisors and monitors).
5. **Reinforcing supply and stock management:** Initially, the COVID-19 vaccine supply will be scarce, with short shelf life, and may not have VVM. Therefore, the monitoring and recording of cold chain equipment temperature, vaccines distribution, inventory and stock management, wastage rates should be done rigorously and efficiently throughout the supply chain.
6. **Establishing a vaccine traceability system:** Establish a robust mechanism to ensure the traceability of the COVID-19 vaccines to avoid a risk of diversion and falsification of the vaccines.
7. **Planning for the security of vaccines and concerned staff:** In the context of high demand but limited stocks, clear security arrangements must be in place to ensure the safety and integrity of COVID-19 vaccines and ancillary products throughout the supply chain. Develop a plan to

safeguard the security of all concerned staff and all vaccine storage facilities, including during transit.

Currently, neither Ministry of Health nor UNICEF Malawi has the in-house capacity to perform the above mentioned planning and preparatory activities for successful introduction of COVID-19 vaccine in Malawi hence the requirement to engage a short-term technical consultant to deliver on the activities.

## **PURPOSE OF THE ASSIGNMENT**

The overall objective of this consultancy is to ensure that country supply chain has the capacity to receive, store, package and safely ship the COVID-19 vaccine and ancillary items to specified distribution/usage points within the agreed timeline. In this regard the consultant is expected to understand supply chain management processes required to successfully deploy vaccine and ancillary items. This should be done through assessment and documentation of the capacity of the country's supply chain system, identification of gaps, and preparation of surge capacity as required along with the budget to support it.

## **SCOPE OF WORK/OBJECTIVES**

Under the general guidance of the Health Specialist-Community Health and in close collaboration with EPI Manager & Cold Chain Officer-Ministry of Health, Government of Malawi, the selected consultant will assist the planning, monitoring and implementation of cold chain related activities for COVID 19 as outlined below.

### **1. PLANNING PHASE (PRE-CAMPAIGN COVID\_19 ACTIVITIES)**

#### **Coordination / Project management role**

- Coordinate with national level technical group such as NLWG and NITAG to ensure timely planning, monitoring and implementation cold chain related activities. This includes but not limited to preparation of detail planning with timeline, roles and responsibilities, timing and resource requirement.
- In collaboration with NLWG assign members with their roles and responsibilities to ensure efficient implementation and avoid delays.
- In collaboration with NLWG, Conduct country specific stakeholder mapping (specific to cold chain) and support NLWG in articulating communication strategy,
- Map cold chain related risks and prepare management strategy in collaboration with the country NLWG.
- Develop a checklist for ensuring cold chain and waste management readiness prior to the campaign

- Support the preparation of waste management and reverse logistic plan that clearly describes how, when, where and by whom filled safety boxes and left-over vaccines should be transported and stored/incinerated/discarded?
- In collaboration with NLWG, implement an efficient temperature monitoring system including dashboard
- In collaboration with NLWG and other technical groups, review / develop training materials related to CC and supply needs, distribution, storage and maintenance and waste management

#### **Assessment role**

- Conduct quick assessment of cold chain. Transport and waste management capacities at all levels to determine adequacy and identify gaps. Support in maintenance management of existing cold chain equipment.
- Develop procurement and distribution plans as applicable and follow up procurement process.
- Identify training needs of health workers including the reverse cold chain, develop training plans and participate on training and Micro plan activities.
- Waste Management Maintenance of incineration facilities for SIAs.
- Assess if the received supplies of vaccines and other inputs consistent with target population and expected wastage factors.

### **2. IMPLEMENTATION AND MONITORING PHASE (INTRA CAMPAIGN COVID\_19 ACTIVITIES)**

- Evaluate the quality of the training with the designated health worker on correct use and preventive maintenance of the new CCE.
- Plan, evaluate and participate on random quality survey during and at the end of the campaign
- Evaluate the content and quality of the training to technicians on preventive maintenance, installation, trouble shooting and repair of the new CCE.
- Use intra-campaign supervision visits to identify and correct inappropriate cold chain practices and safety and waste management.
- Participate in daily data aggregation, reporting and analysis
- Reinforce importance of adequate stock levels, accurate forecast of vaccine requirements and wastage reduction.

### **3. POST CAMPAIGN COVID\_19 ACTIVITIES**

- Document lessons learnt and convene stakeholders to share lessons learnt
- Include cold-chain equipment purchased for the SIA in the RI Programme equipment inventory and maintenance plan
- Make sure that vaccines collected after the campaign are accounted for are stored in correct storage conditions.

## **REPORTING REQUIREMENTS**

**To whom will the consultant report (supervisory and any other reporting/communication lines):**

The consultant will report to the Health Specialist-Community Health and work closely with the Program Manager, EPI, Ministry of Health and Immunization Specialist of UNICEF Health & HIV Section. Chief of Health & HIV Section, UNICEF Malawi will support with providing guidance for this assignment.

**What type of reporting will be expected from the consultant and in what format/style will the submissions of reports/outputs be done:**

It is expected that the consultant prepares an implementation plan with timelines for the assignment, outlining planned tasks and concrete steps to be undertaken to accomplish the planned tasks within the scheduled time. Regular discussions will be held face-to-face, virtually, the consultant is expected to stay in touch via telephone, e-mails and other means such as Zoom or Skype. The consultant will be based at Lilongwe with regular field visit.

The consultant will need to present the draft documents as well as the final report to UNICEF and MOH. At the beginning of the assignment, the consultant is expected to produce and agree with UNICEF and EPI Unit of MOH on work plan schedules for the assignment period.

#### EXPECTED DELIVERABLES

In alignment with the scope of work as described above, the consultant will be expected to perform the following activities and deliverables as per the schedule and estimated dates below:

Task	Deliverable/Outcome (e.g. Inception, progress, final reports, training material, workshop, etc.)	Estimated # of days/weeks	Planned Completion date	% of total fee payable
Prepare and submit an inception report and work plan of consultancy assignment after consultations with MOH and key stakeholders and Desk Review of key documents	Inception report with detailed cold chain / supply chain deployment plan with roles and responsibilities, timeline and associated budget	16 days	5th February 2021	15%
Development of tools for Cold Chain Assessment; Orientation of team members on data collection; Data analysis and draft response preparation	Comprehensive Cold Chain Assessment Report	38 days	26th March 2021	20%
Stakeholder who can provide support in cold chain (as applicable) are mapped and prior communication strategy articulated; Cold chain related risks are regularly mapped, and	Cold chain equipment inventory Report for national level and all 29 districts	33 days	7th May 2021	25%

management strategy devised; Checklist for ensuring cold chain, waste management and reverse logistic plan developed				
Efficient temperature monitoring system implemented; Training materials related to CC and supply needs, distribution, storage and maintenance and waste management reviewed/ developed; Quick assessment of cold chain, transport and waste management capacities at all levels to determine adequacy and identify gaps conducted; procurement and distribution plans developed; Participate in daily data aggregation, reporting and analysis; lessons learnt documented	Final COVAX introduction and roll out plan Report	43days	15th July 2021	40%

However, as the actual starting date may impact the dates estimated in the TOR, the exact timeframes and actual delivery dates will be jointly agreed upon between the contractor and the supervisor upon contract signature.

#### PERFORMANCE INDICATORS FOR EVALUATION OF RESULTS

The performance of work will be evaluated based on the following indicators:

- Completion of tasks specified in TOR
- Compliance with the established deadlines for submission of deliverables
- Quality of work
- Demonstration of high standards in cooperation and communication with UNICEF and counterparts

#### PAYMENT SCHEDULE

All payments, without exception, will be made upon certification from the supervisor of the contract, of the satisfactory and quality completion of deliverables and upon receipt of the respective and approved invoice.

Travel costs will be reimbursed on actual expenditures and upon presentation of original supporting documents.

## **DESIRED COMPETENCIES, TECHNICAL BACKGROUND AND EXPERIENCE**

### **Academic qualification:**

Advanced university degree from a recognized academic institution in one or more of the following areas is preferred: Supply Chain Management, Engineering, Project Management, Data Management and Analysis or related to supply and logistics operations in UNICEF program areas.

First university degree combined with relevant professional work experience and understanding of relevant functions may be considered in lieu of advanced university degree.

### **Work experience:**

Minimum eight years progressively responsible professional work experience at national and international levels in supply management, vaccines programming including cold chain and vaccine management.

Work experience managing large-scale projects, working with governments, working in resource-limited settings, monitoring and evaluating supply chains, and risk management, mitigation will be an asset.

### **Technical skills and knowledge:**

Product knowledge on cold chain equipment, new cold chain technologies and understanding of the principles of vaccine management, knowledge and experience with data collection, data management analysis and reporting are essential. Knowledge of procurement processes and good distribution practice could be beneficial.

### **Competencies:**

Strong analytical, negotiation, oral and written communication skills

Effective presenter including ability to adapt the message and visual aids for multiple audiences to deliver concise, impactful presentations of primary health care interventions.

Effective facilitator with proven ability to engage and train a group of individuals at national level and for front line health workers as well

Ability to work in a multi-cultural environment

### **Languages:**

Written and spoken fluency in English

## **ADMINISTRATIVE ISSUES**

UNICEF will regularly communicate with the specialist and provide feedback and guidance and necessary support so to achieve objectives of the work, as well as remain aware of any upcoming issues related to the performance and quality of work.

As per policy on consultants and individual contractors, the individual will be expected to complete a list of mandatory training, including policies on Prohibiting and Combatting Fraud and Corruption; Prohibition of discrimination, harassment, sexual harassment and abuse of authority and other relevant policies for their information and acknowledgment. Within 5 days of the contract commencement, the consultant/individual contractor is requested to complete the applicable mandatory trainings.

The assignment requires the consultant when in Malawi, to actively engage with partners as well as the focal person in Ministry of Health (EPI), City Councils and NGOs.

The consultant will need to present the draft documents as well as the final report to UNICEF and EPI, MOH. At the beginning of the assignment, the consultant is expected to produce and agree with UNICEF and EPI, MOH on work plan schedules for the assignment period.

As per policy on consultants, the individual will be expected to complete a list of mandatory training, including policies on Prohibiting and Combatting Fraud and Corruption; Prohibition of discrimination, harassment, sexual harassment and abuse of authority and other relevant policies for their information and acknowledgment and within 5 days of the contract commencement, the individual consultant is requested to complete the applicable mandatory trainings.

The consultant will work from the UNICEF Malawi Country Office premises, pending the return to office strategy for consultants and as per the approved footprint plan for the section and office, keeping COVID-19 safety and preventative measures in mind. If the footprint plan does not allow working from UNICEF premises, the consultant will work from home.

The consultant will use a personal computer and phone to carry out the work, however UNICEF will provide the airtime as per applicable.

## **CONDITIONS**

- The candidate selected will be governed by and subject to UNICEF's General Terms and Conditions for individual contracts.
- No contract may commence unless the contract is signed by both UNICEF and the consultant.
- The consultant will be based in Lilongwe and working from UNICEF Malawi Office premises or from home as per office footprint until such a time when COVID travel restrictions are relaxed to allow in-country travel.



- The consultant will be paid an all-inclusive fee (stationary, communication and other miscellaneous expenses) as per the stipulated deliverable and payment schedule.
- Under the consultancy agreements, a month is defined as 21.75 working days, and fees are prorated accordingly for actual days worked.
- The consultant is not entitled to payment for overtime, weekends or public holidays, medical insurance, taxes, and any form of leave.
- Travel expenses for official in-country trips, including living costs, will be covered in accordance with UNICEF's rules and tariffs, by the consultant and reimbursed against actuals, unless otherwise agreed.
- Transport will be provided to the consultant during in-country field travel, if planned and approved.
- No travel should take place without an email travel authorization from section prior to the commencement of the journey from the duty station.
- Standard UNICEF procedures will apply for invoicing and all other financial management requirements set out in the contract.
- Standard penalty clauses will also apply for late and poor-quality deliverables. The supervisor of the contract will provide the consultant with the criteria for the evaluation of the quality of each deliverable.
- Additional details of UNICEF rules, regulations and conditions will be attached to the contract.
- Consultants will not have supervisory responsibilities or authority on UNICEF budget.
- The assignment is an on-site/off-site support.

## HOW TO APPLY

Interested consultants should provide the following:

1. Curriculum Vitae
2. Brief technical proposal (no longer than five pages) demonstrating the consultant's understanding of the assignment and approach/methodology to the assignment
3. Financial proposal including a breakdown of their all-inclusive fees (including professional fees, travel, living cost, visa and other costs). Complete the attached form.



Financial  
Proposal.xlsx

4. References details