

## Terms of Reference

**National Consultancy: IT Specialist for Development of MIS system for Family Package, support the system-based cash delivery of Cash Transfer Programmes, Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY)**

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UNICEF Cambodia

### 1. Background

The Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY) has implemented the Cash Transfer programme for pregnant women and children up to the age of 2 years, launched in mid-2019, Cash Transfer Programme for the Poor and Vulnerable households affected by covid-19, launched mid – 2020 through digitization system of the programmes’s Management Information System (MIS), with the provincial department of MoSVY (P-DoSVY) and communes included in the updating, management and use of the MIS. The MIS has been managed at the national level, which required data handling capacity in terms of staff and equipment to manage the MIS database. The MIS has been linked to the ID-Poor Social Registry managed by the Ministry of Planning, as well as the relevant database/application of the Ministry of Health.

With the recent approval of family package programme concept notes by the Executive Committee for the National Social Protection Councils to integrate four cash transfer programmes, the Cash Transfer Programme for Pregnant Women and Children under 2 years, the Cash Transfer programme for Elderly people, the Cash transfer programme for persons with disabilities, and the scholarship programme, MoSVY will be the lead implementing ministry of the family package with the new planned establishment of “National Social Assistance Fund, NSAF” for coordination the implementation and monitoring of the programme, using App/MIS cash delivery system of CTPWC as the main system integration for all components of the family package. In order to manage the operation of the MIS system of the current Cash Transfer Programme and to expand the system for the implementation of family package programme, there is a strong need for a timely placement of the IT MIS specialist to support the functioning of current system for smooth delivery of the programmes as well as to support the development of an integrated MIS system for the Family Package Programme.

### 2. Purpose

The purpose of this consultancy is to provide IT Technical Assistance to MoSVY in managing the MIS for the national CT programme for pregnant women and children and the National Covid-19 Cash Transfer Programme and support the system upgrading for integration into the main Family Package MIS system, and building capacity of the MoSVY team.

### 3. Work Assignment

The key assignments for the consultancy include:

- Develop an IT workplan for completing the project. It should include a project timeline for project execution, including dates, resources, dependencies and a plan for communications/issue resolution to all team members and the management team of MoSVY.
- The consultant must review relevant documents including but not limited to
  - Operational and M&E framework manuals
  - Cash transfer programme for pregnant women and children under 2 years
  - Family package programme design
  - App/MIS system documentation for all existing systems (CTP, M&E, CTP IDPoor and ID Poor Covid-19 immunization)

**As a core member of the Family Package Programme delivery the consultant will perform the following tasks:**

- Design, coding and implementation of mobile and web-based interfaces, including the modification of existing designs and the design of new apps.
- Develop new, and modify existing wireframes, and work on other prototypes as required.
- Coordinate, collaborate, and support MoSVY colleagues to ensure the timely development, adaptation and execution of the work plans. Ensure plans are implemented on schedule and that targets are achieved. Communicate in advance if any milestone deliverables will be delayed for any reason.
- Evaluate, improve, modify, and add additional features and functionality to existing Android applications, and their associated Web portals, and administration interfaces.
- Modify and secure existing, and create new secure API interfaces with WING, GIZ & Ministry of planning IDPoor, and On-Demand systems if required.
- Build, test, and deliver User Interface, and User Experience designs in the form of mobile apps and web interfaces.
- Oversee mobile application development
- Provide guidance and assistance to team members.
- Work extensively with large and complex datasets.
- Write unit tests, perform quality assurance, and write clear and concise comments on all codes.
- Work with a code repository and operate on a development and production platform.
- Clearly document all aspects of the work.
- Continue the development of the M&E mobile app and MIS for the Family Package Programme Monitoring
- Continue the development of dashboards and visualizations for M&E management and analysis

#### **Training:**

- Develop training manuals for user, admin user (super user) and the technical support team.
- Support the roll-out of Family Package cash delivery App and M&E system to National and Provincial focal points.
- Provide ongoing technical support and coaching to the MoSVY IT team to identify and solve user issues during the launch phase of the Family Package.

#### **Technical Documentation**

- Provide detailed information of the system architecture and data structure, including but not limited to:

- Pseudo code and flow charts.
- System requirement document.
- Technical specification document.
- Database schemas.
- API docs.

### **Management**

- In coordination with UNICEF and MoSVY develop and execute work plans.
- Estimate time and resources required to perform particular tasks.
- Understand complex timelines, meet milestones, and contribute to project success.
- When required work with 3rd party providers, consultants, etc. to successfully deliver system components.

## **4. Qualifications or Specialized Knowledge/Experience Required**

### **Qualifications and Experience**

- Academic qualification such as a University degree in IT, digital systems, or software.
- Other qualifications with sufficient and related work experience will suffice.
- At least 3 years of professional experience working with complex digital platforms
- At least 3 years of progressive experience working with App/MIS systems design and/or systems management.

### **Knowledge and Skills**

- Designing and working with large databases.
- Understand elaborate policies and convert them into operational, user friendly digital products.
- Designing complex IT systems.
- Experienced in delivering concise pseudocode, and flowcharts that reflect the functions of the product to be built and coded.
- Working successfully as a member of a project team.
- Working collaboratively with stakeholders and partners such as UNICEF, Government ministries, and third-party service providers.
- Knowledge of electronic payment gateways (API).
- Managing large-scale projects.
- Working collaboratively with other IT and non-IT team members to successfully deliver milestones.
- Coding in PHP, and a number of years working with the Laravel framework.
- Deep knowledge of MySQL and other database systems.
- Experienced in using code repositories.

### **Competencies of Successful Candidate**

- Communication
- Working with people
- Drive for results
- Applying technical expertise

### **Languages**

- Fluency in spoken and written Khmer and English

## 5. Location

The consultant is expected to work in country and full-time and be based in the MoSVY Office. Travel to all provinces for a total of 50 days is anticipated during the contract duration.

## 6. Duration

The consultant is expected to work for a period of 11.5 months (241 working days), with an expected starting date of 15 February 2022 until 31 January 2023. The indicative schedule of the work assignments with specific timelines is mentioned in “7. Deliverables.”

## 7. Deliverables

The indicative schedules of the work assignments with specific timelines are in the below table:

<b><i>Deliverables</i></b>	<b><i>Timeframe</i></b>	<b><i>Payment (including travel costs)</i></b>
<p><b><u>Deliverable 1: Report on the implementation status of the MIS</u></b></p> <p>1.1 Monthly Work Plan for delivery 1(maximum two pages)</p> <p>1.2 Progress report (maximum three pages), covering the following:</p> <p><u>A. Specific products:</u></p> <ul style="list-style-type: none"> <li>• Report on the continued support for the Family Package Programme, specifically in February covering the provision of High Level system design (microservices, infra, DevOPS) and Database Specifications</li> <li>• Inputs on the screenshots on MIS to be used as inputs to the development of training materials.</li> <li>• Technical documentation for the Family Package programme.</li> </ul> <p><u>B. Certified completion of the following regular/ongoing activities:</u></p> <ul style="list-style-type: none"> <li>• Calculation for monthly reports of benefit amounts for each IDPoor household based on the updated information of members and vulnerable members in the family and prepare the monthly report to transfer to Wing payment agent through API connection for making payment to beneficiary households</li> <li>• Training and assistance to other team members; continued capacity building on IT issues.</li> <li>• Define data to be imported from 3rd party sources including IDPoor</li> <li>• Continued improvement, integration, and testing of the Family Package MIS</li> <li>• Detailed modification of existing APIs</li> <li>• Additional APIs and Standard Operating Procedures and Workflows as needed</li> </ul>	<p>By 28 February 2022 (11 days)</p>	<p>5%</p>

<b>Deliverables</b>	<b>Timeframe</b>	<b>Payment (including travel costs)</b>
<ul style="list-style-type: none"> <li>Analyze and assess IT monitoring software, and disseminate the results to management</li> </ul>		
<p><b><u>Deliverable 2: Report on the implementation status of the MIS</u></b></p> <p>1.1 Monthly workplan for deliverable 2 (maximum 2 pages)</p> <p>1.2. Progress report (maximum 3 pages), covering the following:</p> <p><u>A. Specific Products:</u></p> <ul style="list-style-type: none"> <li>Report on Family Package Database Specifications</li> <li>Report on structure design for importing data from 3rd party sources including IDPoor data, disability identification data</li> <li>Report on standard Operating Procedures and Workflows</li> </ul> <p><u>B. Certified Completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> <li>Calculation for monthly reports of benefit amounts for each IDPoor household based on the updated information of members and vulnerable members in the family and prepare the monthly report to transfer to Wing payment agent through API connection for making payment to beneficiary households</li> <li>Training and assistance to other team members; continued capacity building on IT issues.</li> <li>Continued improvement, integration, and testing of the Family Package MIS</li> <li>Detailed modification of existing APIs</li> </ul>	<p>By March 31, 2022 (23 days)</p>	<p>8%</p>
<p><b><u>Deliverable 3: Report on the implementation status of the MIS</u></b></p> <p>1.1 Monthly workplan for deliverable 3 (maximum 2 pages)</p> <p>1.2. Progress report (maximum 3 pages), covering the following:</p> <p><u>A. Specific Products:</u></p> <ul style="list-style-type: none"> <li>Testing report of MIS system for readiness for rollout and go-live of Family Package.</li> <li>Report on maintenance of the Family Package digital platform</li> <li>Draft of the user-friendly manual on the MIS system</li> </ul> <p><u>B. Certified Completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> <li>Calculation for monthly reports of benefit amounts for each IDPoor household based on the updated information of members and vulnerable members in the family and prepare the monthly report to transfer to Wing payment agent through API connection for making payment to beneficiary households</li> <li>Training and assistance to other team members; continued capacity building on IT issues.</li> <li>Continued improvement, integration, and testing of the Family Package MIS</li> </ul>	<p>By April 30, 2022 (19 days)</p>	<p>8%</p>

<b>Deliverables</b>	<b>Timeframe</b>	<b>Payment (including travel costs)</b>
<ul style="list-style-type: none"> <li>Detailed modification of existing APIs</li> </ul>		
<p><b><u>Deliverable 4: Report on the implementation status of the MIS</u></b></p> <p>1.1 Monthly workplan for deliverable 4 (maximum 2 pages)</p> <p>1.2. Progress report (maximum 3 pages), covering the following:</p> <p><u>A. Specific Products:</u></p> <ul style="list-style-type: none"> <li>Testing report of MIS system for readiness for rollout and go-live of Family Package.</li> <li>Drafted inputs for development of App/MIS System for Family Package IT helpdesk</li> </ul> <p><u>B. Certified Completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> <li>Calculation for monthly reports of benefit amounts for each IDPoor household based on the updated information of members and vulnerable members in the family and prepare the monthly report to transfer to Wing payment agent through API connection for making payment to beneficiary households</li> <li>Training and assistance to other team members; continued capacity building on IT issues.</li> <li>Continued improvement, integration, and testing of the Family Package MIS</li> <li>Detailed modification of existing APIs</li> <li>Analyze and assess IT monitoring software, and disseminate the results to management</li> </ul>	<p>By May 31, 2022 (21 days)</p>	<p>8%</p>
<p><b><u>Deliverable 5: Report on the implementation status of the MIS</u></b></p> <p>1.1 Monthly workplan for deliverable 5 (maximum 2 pages)</p> <p>1.2. Progress report (maximum 3 pages), covering the following:</p> <p><u>A. Specific Products:</u></p> <ul style="list-style-type: none"> <li>MIS Manual on the MIS for the Family Package Programme</li> <li>Training report on the roll-out of the MIS for the Family Package Programme System</li> </ul> <p><u>B. Certified Completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> <li>Calculation for monthly reports of benefit amounts for each IDPoor household based on the updated information of members and vulnerable members in the family and prepare the monthly report to transfer to Wing payment agent through API connection for making payment to beneficiary households</li> <li>Training and assistance to other team members; continued capacity building on IT issues.</li> <li>Continued improvement, integration, and testing of the Family Package MIS</li> </ul>	<p>By June 30, 2022 (22 days)</p>	<p>8%</p>

<b>Deliverables</b>	<b>Timeframe</b>	<b>Payment (including travel costs)</b>
<ul style="list-style-type: none"> <li>Detailed modification of existing APIs</li> <li>Analyze and assess IT monitoring software, and disseminate the results to management</li> </ul>		
<p><b><u>Deliverable 6: Report on the implementation status of the MIS</u></b></p> <p>1.1 Monthly workplan for deliverable 6 (maximum 2 pages)</p> <p>1.2. Progress report (maximum 3 pages), covering the following:</p> <p><u>A. Specific Products:</u></p> <ul style="list-style-type: none"> <li>Training report on the roll-out of the MIS for the Family Package Programme System</li> </ul> <p><u>B. Certified Completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> <li>Calculation for monthly reports of benefit amounts for each IDPoor household based on the updated information of members and vulnerable members in the family and prepare the monthly report to transfer to Wing payment agent through API connection for making payment to beneficiary households</li> <li>Training and assistance to other team members; continued capacity building on IT issues.</li> <li>Continued improvement, integration, and testing of the Family Package MIS</li> <li>Detailed modification of existing APIs</li> <li>Analyze and assess IT monitoring software, and disseminate the results to management</li> </ul>	By July 31, 2022(20 days)	8%
<p><b><u>Deliverable 7: Report on the implementation status of the MIS</u></b></p> <p>1.1 Monthly workplan for deliverable 7 (maximum 2 pages)</p> <p>1.2. Progress report (maximum 3 pages), covering the following:</p> <p><u>A. Specific Products:</u></p> <ul style="list-style-type: none"> <li>Updated and finalised MIS manual for the Family Package Programme based on issues/feedback collected during roll-out training</li> </ul> <p><u>B. Certified Completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> <li>Calculation for monthly reports of benefit amounts for each IDPoor household based on the updated information of members and vulnerable members in the family and prepare the monthly report to transfer to Wing payment agent through API connection for making payment to beneficiary households</li> <li>Training and assistance to other team members; continued capacity building on IT issues.</li> <li>Continued improvement, integration, and testing of the Family Package MIS</li> </ul>	By August 31, 2022 (23 days)	8%

<b>Deliverables</b>	<b>Timeframe</b>	<b>Payment (including travel costs)</b>
<ul style="list-style-type: none"> <li>Detailed modification of existing APIs</li> <li>Analyze and assess IT monitoring software, and disseminate the results to management</li> </ul>		
<p><b><u>Deliverable 8: Report on the implementation status of the MIS</u></b></p> <p>1.1 Monthly workplan for deliverable 8 (maximum 2 pages)</p> <p>1.2. Progress report (maximum 3 pages), covering the following:</p> <p><u>A. Specific Products:</u></p> <ul style="list-style-type: none"> <li>Report on documentation of issues encounter and draft helpdesk MIS for input for development of the provincial helpdesk manual, including regular questions and solutions.</li> </ul> <p><u>B. Certified Completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> <li>Calculation for monthly reports of benefit amounts for each IDPoor household based on the updated information of members and vulnerable members in the family and prepare the monthly report to transfer to Wing payment agent through API connection for making payment to beneficiary households</li> <li>Training and assistance to other team members; continued capacity building on IT issues.</li> <li>Continued improvement, integration, and testing of the Family Package MIS</li> <li>Detailed modification of existing APIs</li> <li>Analyze and assess IT monitoring software, and disseminate the results to management</li> </ul>	<p>By September 30, 2022 (20 days)</p>	<p>8%</p>
<p><b><u>Deliverable 9: Report on the implementation status of the MIS</u></b></p> <p>1.1 Monthly workplan for deliverable 9 (maximum 2 pages)</p> <p>1.2. Progress report (maximum 3 pages), covering the following:</p> <p><u>A. Specific Products:</u></p> <ul style="list-style-type: none"> <li>Report on the Helpdesk Manual training for provincial helpdesk officers.</li> </ul> <p><u>B. Certified Completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> <li>Calculation for monthly reports of benefit amounts for each IDPoor household based on the updated information of members and vulnerable members in the family and prepare the monthly report to transfer to Wing payment agent through API connection for making payment to beneficiary households</li> <li>Training and assistance to other team members; continued capacity building on IT issues.</li> <li>Continued improvement, integration, and testing of the Family Package MIS</li> </ul>	<p>By October 31, 2022 (21 days)</p>	<p>8%</p>



<b>Deliverables</b>	<b>Timeframe</b>	<b>Payment (including travel costs)</b>
<ul style="list-style-type: none"> <li>● Detailed modification of existing APIs</li> <li>● Analyze and assess IT monitoring software, and disseminate the results to management</li> </ul>		
<p><b><u>Deliverable 10: Report on the implementation status of the MIS</u></b></p> <p>1.1 Monthly workplan for deliverable 10 (maximum 2 pages)</p> <p>1.2. Progress report (maximum 3 pages), covering the following:</p> <p><u>A. Specific Products:</u></p> <ul style="list-style-type: none"> <li>● Draft report on data structure system for integration into the monitoring system</li> </ul> <p><u>B. Certified Completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> <li>● Calculation for monthly reports of benefit amounts for each IDPoor household based on the updated information of members and vulnerable members in the family and prepare the monthly report to transfer to Wing payment agent through API connection for making payment to beneficiary households</li> <li>● Training and assistance to other team members; continued capacity building on IT issues.</li> <li>● Continued improvement, integration, and testing of the Family Package MIS</li> <li>● Detailed modification of existing APIs</li> <li>● Analyze and assess IT monitoring software, and disseminate the results to management</li> </ul>	<p>By Novemb er 30, 2022 (19 days)</p>	<p>8%</p>
<p><b><u>Deliverable 11: Report on the implementation status of the MIS</u></b></p> <p>1.1 Monthly workplan for deliverable 11 (maximum 2 pages)</p> <p>1.2. Progress report (maximum 3 pages), covering the following:</p> <p><u>A. Specific Products:</u></p> <ul style="list-style-type: none"> <li>● Report on testing/updating data linkage of the family package delivery and its monitoring system</li> </ul> <p><u>B. Certified Completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> <li>● Calculation for monthly reports of benefit amounts for each IDPoor household based on the updated information of members and vulnerable members in the family and prepare the monthly report to transfer to Wing payment agent through API connection for making payment to beneficiary households</li> <li>● Training and assistance to other team members; continued capacity building on IT issues.</li> <li>● Continued improvement, integration, and testing of the Family Package MIS</li> <li>● Detailed modification of existing APIs</li> </ul>	<p>By Decemb er 31, 2022 (22 days)</p>	<p>8%</p>

<b>Deliverables</b>	<b>Timeframe</b>	<b>Payment (including travel costs)</b>
<ul style="list-style-type: none"> <li>Analyze and assess IT monitoring software, and disseminate the results to management</li> </ul>		
<p><b><u>Deliverable 12: Report on the implementation status of the MIS</u></b></p> <p>1.1 Monthly workplan for deliverable 12 (maximum 2 pages)</p> <p>1.2. Progress report (maximum 3 pages), covering the following:</p> <p><u>A. Specific Products:</u></p> <ul style="list-style-type: none"> <li>Report on the implementation of data linkage of the family package delivery and its monitoring system</li> </ul> <p><u>B. Certified Completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> <li>Calculation for monthly reports of benefit amounts for each IDPoor household based on the updated information of members and vulnerable members in the family and prepare the monthly report to transfer to Wing payment agent through API connection for making payment to beneficiary households</li> <li>Training and assistance to other team members; continued capacity building on IT issues.</li> <li>Continued improvement, integration, and testing of the Family Package MIS</li> <li>Detailed modification of existing APIs</li> <li>Analyze and assess IT monitoring software, and disseminate the results to management</li> </ul>	By January 31, 2023 (20 days)	15%

## 8. Reporting Requirements

This assignment requires the Consultant to produce work plans for each deliverable output and progress reports (maximum three pages) in English against the above objectives and activity plan, and submit them to MoSVY and UNICEF.

## 9. Payment Schedule linked to deliverables

Payment terms in relation to key deliverables are specified in “Deliverables section”. The payment is made on deliverable output basis upon the submission and approval of the progress report and workplan of the following deliverable output.

*\* The fees shall be calculated based on the days estimated to complete the assignment in the Terms of Reference and shall be considered the maximum compensation as part of a lump sum contract and agreed on a work plan for submission of deliverables. No additional fees shall be paid to complete the assignment. Payment will be made upon delivery of all final products and full and satisfactory completion of the assignment.*

## **10. Administrative Issues**

- The consultant shall be required to include the cost of in-country travel in the financial proposal. Travel cost shall be calculated based on economy class travel, regardless of the length of travel. Costs for accommodation, meals and incidentals shall not exceed applicable daily subsistence allowance (DSA) rates, as promulgated by the International Civil Service Commission (ICSC).
- Access to UNICEF office and internet will be provided by UNICEF based on need and availability.

## **11. Contract supervisor**

The consultant will work under the supervision of the Social Policy Specialist and in close coordination with the App Developer. Compliance with the ToR and timely delivery of the expected deliverables will be closely monitored. Upon completion of work assignments, the supervisor will evaluate the consultant's work, certify relevant documents and process/follow-up on the payments.

## **12. Nature of 'Penalty Clause' to be Stipulated in Contract**

Unsatisfactory performance: In case of unsatisfactory performance the contract will be terminated by notification letter sent five (5) business days prior to the termination date in the case of contracts for a total period of less than two (2) months, and ten (10) business days prior to the termination date in the case of contracts for a longer period

Performance indicators: Consultants' performance will be evaluated against the following criteria: timeliness, quality, and relevance/feasibility of recommendations for UNICEF Cambodia.

## **13. Submission of applications**

Interested candidates are kindly requested to apply and upload the following documents to: <http://www.unicef.org/about/employ/> by close of business of 10 January 2022.

- Letter of Interest (cover letter)
- CV or Resume
- Performance evaluation reports or references of similar consultancy assignments
- Financial proposal: All-inclusive lump-sum cost including travel and accommodation cost for this assignment as per work assignment.

## **14. Assessment Criteria**

A two-stage procedure shall be utilized in evaluating proposals, with evaluation of the technical proposal being completed prior to any price proposal being compared.

Applications shall therefore contain the following required documentation:

- a) Technical Proposal: Containing a cover letter, updated CV or resume, and copies of 2 relevant performance evaluation reports or references of similar consultancy assignments conducted by the consultant. No financial information should be contained in the technical proposal.

- b) Financial Proposal: Lump-sum offer with the cost breakdown, including consultancy fee, in-country transportation costs for a total of 10 days, per-diem to cover lodging and meals during in-country travel and any other cost required for this consultancy. The travel shall be calculated based on the most direct and economy fare.

For evaluation and selection method, the Cumulative Analysis Method (weight combined score method) shall be used for this recruitment:

- a) Technical Qualification (max. 100 points) weight 70 %
- Academic qualification at the University level in the relevant fields (20 points)
  - Professional experience working with complex digital platforms (50 points)
  - Knowledge in social protection, skills social transfer system, competencies and languages (30 points)
- b) Financial Proposal (max. 100 points) weight 30 %

The maximum number of points shall be allotted to the lowest Financial Proposal that is opened /evaluated and compared among those technically qualified candidates who have attained a minimum 70 points score in the technical evaluation. Other Financial Proposals will receive points in inverse proportion to the lowest price.

The contract shall be awarded to a candidate obtaining the highest combined technical and financial scores, subject to the satisfactory result of the verification interview.