

National Consultancy: IT Specialist for Development of Family Package Mobile App and Frontend, Support the functioning of App and MIS CTPWC implementation of the M&E system, and update M&E CTPWC App and MIS for family package M&E, Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY)



1. Background

The Cash Transfer programme for pregnant women and children up to the age of 2 years is a government run programme, the Ministry of Social Welfare and is implemented by multiple stakeholders responsible for health care and social welfare in Cambodia, which enables the achievement of the programme's primary objectives. The Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY) has developed M&E framework and App/MIS system for systematic data collection on monitoring and reporting of the programme implementation, expecting to roll-out nationwide in first quarter of 2022.

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, the MoSVY will be the lead implementing ministry of the family package with the new planned establishment of "National Social Assistant Fund, NSAF" for coordination the implementation and monitoring of the programme, using App/MIS cash delivery and M&E App/MIS system of CTPWC as the main system integration for all components of the family package. Therefore, there is a strong need for additional IT specialized support for the development of the Family Package Mobile App and Frontend, Update M&E CTPWC App and MIS for the family package M&E, as well as supporting the design and development of the Rapid-Pro system for feedback and communication messages from/to beneficiaries.

2. Purpose

The purpose of this consultancy is to provide IT Technical Assistance to MoSVY 1) Development of Family Package Mobile App and Frontend 2) Support the functioning of App and MIS CTPWC implementation of the M&E system 3) Update M&E CTPWC App and MIS for family package M&E 4) Support the design of Rapid-Pro feedback system, and 5) Building capacity of the MoSVY team.

3. Work Assignment

The key assignments for the consultancy include:

- Develop a workplan for completing the project. It should describe the way the consultant will work with the MoSVY to provide a timeline for project execution, including dates, resources, dependencies and a plan for communications/issue resolution with the IT project and management team of MoSVY, in addition to agreed Terms of Reference.
- Review relevant documents such as operational and M&E framework manuals for cash transfer programme for pregnant women and children under 2 years, family package programme design, App/MIS system of the programme delivery system of cash transfer programme for pregnant women and children under 2 years and its M&E system

As a core member of the Family Package Programme delivery and its M&E Web and App Developer will:

- Design, code and implement mobile and web-based interfaces, including the modification of existing designs, design new apps
- Develop new and modify existing wireframes, and work on other prototypes as required.
- Coordinate and negotiate and support to MoSVY counterparts to ensure the timely development, adaptation and execution for the work plans to be implemented on schedule and that targets are achieved.
- Evaluate, improve, modify, and add additional features and functionality to an Android application, and Web portal.
- 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 delivery User Interface, and User Experience designs in the form of mobile apps and web interfaces.
- Write unit tests, perform QA, and write clear and concise comments in all code.
- Work with a code repository and operate on a development and production platform.
- Clearly document all aspects of your work.
- Develop M&E App/MIS for Family Package Programme Monitoring
- Develop dashboard with visualized information for the management of the monitoring system

Training:

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

Technical Documentation

- Provide detailed information of the system architecture and data structure
- Provide user manual and operational manual etc for all levels of users (users, super user and any other technical users) who will need to understand and support the System

4. Qualifications or Specialized Knowledge/Experience Required

Qualifications and Experience

- A University degree in IT, digital systems, coding, or other qualifications with sufficient relevant work experience.
- At least 3 years of professional experience in DevOPS, PHP, React and Javascript

- At least 3 years of progressive experience working with App systems design and/or systems management

Knowledge and Skills

- Solid Experience building Progressive Web Applications
- Proven experience building Native Android applications in JAVA
- Proven experience building Native IOS applications in SWIFT
- Advanced Java and Swift coding, debugging, and compilation experience
- Knowledge of using the Flutter framework
- Experience with programming in Objective-C
- NET coding experience is a plus
- Proven experience interfacing securely with core banking systems
- Expertise in interfacing and manipulating large datasets (e.g. IDPoor nationwide data)
- Knowledge of translating graphical designs into fluid user interfaces
- Expert level coding utilizing PHP, the Laravel Framework (or other PHP framework)
- Experienced in using code repositories such as GIT
- Experienced in delivering concise pseudocode, and flowcharts that reflect the functions of the product to be built and coded
- Solid Experience with designing, and implementing microservices
- Ability to work with complex database structures
- Ability to write unit tests, perform other code tests, and UI and UX testing
- Able to manage a development environment and production systems
- Ability to write concise training and documentation as the project is in progress
- Excellent level of English and Khmer (written and spoken)
- Be able to show examples of operational IOS and Android applications, and Websites they have designed and coded
- Proficiency in designing and implementing secure systems that utilize a multitude of real-time transactions.

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:

<i>Deliverables</i>	<i>Timeframe</i>	<i>Payment (including travel costs)</i>
<p><u>Deliverable 1: Report on the implementation of M&E App/MIS CTPWC</u></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"> • Report on training to national and provincial M&E and MIS team on App/MIS • Report on support provided to the national trainer teams to roll-out the training M&E to provincial, district and commune/sangkat on App/MIS CTPWC. • Report on support provided to the Family Package Programme system design and other monitoring system, including RapidPro. <p><u>B. Certified completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> • Support trouble shooting of App/MIS CTPWC system • Conduct regular coaching to strengthen capacity of MoSVY M&E and MIS team on App/MIS system management 	By 28 February 2022 (11 days)	5%
<p><u>Deliverable 2: Report on the implementation of M&E App/MIS CTPWC to Subnational level</u></p> <p>2.1 Monthly Work Plan for delivery 2(maximum two pages)</p> <p>2.2 Progress report (maximum three pages), covering the following:</p> <p><u>A. Specific products:</u></p> <ul style="list-style-type: none"> • Report the inputs on family package system design • Report on support provided to national trainer teams to roll-out the training M&E to provincial, district and commune/sangkat levels on App/MIS CTPWC. <p><u>B. Certified completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> • Support trouble shooting of App/MIS CTPWC system during the implementation. • Conduct regular coaching to strengthen capacity of MoSVY M&E and MIS team on App/MIS system management. 	By March 31, 2022 (23 days)	8%
<p><u>Deliverable 3: Report on the Development of Family Package Mobile App and Frontend</u></p>	By April 30, 2022	8%

Deliverables	Timeframe	Payment (including travel costs)
<p>3.1 Monthly Work Plan for delivery 3 (maximum two pages)</p> <p>3.2 Progress report (maximum three pages), covering the following:</p> <p>A. <u>Specific products:</u></p> <ul style="list-style-type: none"> • Report on the development plan for modification of existing CTP-PWYC App and design/update new apps for the family package programme • Report on the result of the evaluation, improvement modification, and add additional features and functionality to an Android application, and Web portal. <p>B. <u>Certified completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> • Support troubleshooting of App/MIS CTPWC system during the implementation • Conduct regular coaching to strengthen capacity of MoSVY M&E and MIS team on App/MIS system management. 	(19 days)	
<p><u>Deliverable 4: Report on the Development status of Family Package Mobile App and Frontend</u></p> <p>4.1 Monthly Work Plan for delivery 4(maximum two pages)</p> <p>4.2 Progress report (maximum three pages), covering the following:</p> <p>A. <u>Specific products:</u></p> <ul style="list-style-type: none"> • Report on new developments, and modification of existing wireframes, and on work done on other prototypes as required. • Report on the support provided to MoSVY IT team to build new and expand current databases. • Report on the support provided to MoSVY design team on User Interface, and User Experience designs. • Report on the progress in Building, Testing, and Delivery of the User Interface and User Experience designs in the form of mobile apps and web interfaces. <p>B. <u>Certified completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> • Support trouble shooting of App/MIS CTPWC system during the implementation • Conduct regular coaching to strengthen capacity of MoSVY M&E and MIS team on App/MIS system management. 	By May 31, 2022 (21 days)	8%
<p><u>Deliverable 5: Report on the Development status of Family Package Mobile App and Frontend</u></p> <p>5.1 Monthly Work Plan for delivery 5(maximum two pages)</p> <p>5.2 Progress report (maximum three pages), covering the following:</p> <p>A. <u>Specific products:</u></p>	By June 30, 2022 (22 days)	8%

Deliverables	Timeframe	Payment (including travel costs)
<ul style="list-style-type: none"> • Report on the support provided to MoSVY and WING and/or other financial providers; including on planning and design of their new secure APIs for additional payment gateways if required. • Report on the result of modifying and secure existing, and creating new secure API interfaces with WING, GIZ & Ministry of planning ID-Poor, and On-Demand systems if required. • Report on the quality control of the translation of new conditions and features into coded algorithms and functions. • Report on the inputs in preparation of the family package roll-out training plan <p><u>B. Certified completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> • Support trouble shooting of App/MIS CTPWC system during the implementation • Conduct regular coaching to strengthen capacity of MoSVY M&E and MIS team on App/MIS system management. 		
<p><u>Deliverable 6: Report on the roll out training of App for Family Package Implementation</u></p> <p>6.1 Monthly Work Plan for delivery 6 (maximum two pages)</p> <p>6.2 Progress report (maximum three pages), covering the following:</p> <p><u>A. Specific products:</u></p> <ul style="list-style-type: none"> • Report on the results of TOT training to national and provincial on App for family package delivery <p><u>B. Certified completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> • Support trouble shooting of App/MIS Family Package • Conduct regular coaching to strengthen capacity of MoSVY M&E and MIS team on App/MIS system management. 	By July 31, 2022 (20 days)	8%
<p><u>Deliverable 7: Report on the roll out training of App for family package Implementation</u></p> <p>7.1 Monthly Work Plan for delivery 7(maximum two pages)</p> <p>7.2 Progress report (maximum three pages), covering the following:</p> <p><u>A. Specific products:</u></p> <ul style="list-style-type: none"> • Report on the support provided to national trainer teams to roll-out the training family package to provincial, district and commune/sangkat on App/MIS. <p><u>B. Certified completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> • Support trouble shooting on the App issues for the family package implementation. • Conduct regular coaching to strengthen capacity of MoSVY M&E and family package and MIS team on App/MIS system management 	By August 31, 2022 (23 days)	8%

Deliverables	Timeframe	Payment (including travel costs)
<p><u>Deliverable 8: Support the roll-out training of App for family package implementation</u></p> <p>8.1 Monthly Work Plan for delivery 8 (maximum two pages)</p> <p>8.2 Progress report (maximum three pages), covering the following:</p> <p><u>A. Specific products:</u></p> <ul style="list-style-type: none"> • Report on the new updates/adjustments of the App/MIS system as required before GoLive. <p><u>B. Certified completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> • Support trouble shooting on the App/MIS issue for the family package implementation. • Conduct regular coaching to strengthen capacity of MoSVY M&E and family package and MIS team on App/MIS system management 	<p>By September 30, 2022 (20 days)</p>	<p>8%</p>
<p><u>Deliverable 9: Report on the status the family package implementation and the updating of M&E App for Family Package</u></p> <p>9.1 Monthly Work Plan for delivery 9 (maximum two pages)</p> <p>9.2 Progress report (maximum three pages), covering the following:</p> <p><u>A. Specific products:</u></p> <ul style="list-style-type: none"> • Workplan for updating M&E App/MIS into integrated M&E for family package • Report on the progress of work on the M&E App/MIS into integrated M&E for family package. • Report on the updating of manual for user, admin user (super user) and technical support team for M&E App for Family Package <p><u>B. Certified completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> • Support trouble shooting on the App issues for the family package implementation. • Conduct regular coaching to strengthen capacity of MoSVY M&E and family package and MIS team on App/MIS system management 	<p>By October 31, 2022 (21 days)</p>	<p>8%</p>
<p><u>Deliverable 10: Report on the roll-out training of M&E App and the family package implementation</u></p> <p>10.1 Monthly Work Plan for delivery 10 (maximum two pages)</p> <p>10.2 Progress report (maximum three pages), covering the following:</p> <p><u>A. Specific products:</u></p> <ul style="list-style-type: none"> • Training plan for the roll out of the M&E App for family package • Report on the system architecture and data structure • User manual and operational manual for all user levels (users, super users, and any other technical) who will need to understand and support the Systems – both Family Package App and App for M&E of Family Package 	<p>By November 30, 2022 (19 days)</p>	<p>8%</p>

Deliverables	Timeframe	Payment (including travel costs)
<p><u>B. Certified completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> • Support trouble shooting on the App issues for the family package implementation. • Conduct regular coaching to strengthen capacity of MoSVY M&E and family package and MIS team on App/MIS system management 		
<p><u>Deliverable 11: Report on roll-out training of M&E and family package implementation</u></p> <p>11.1 Monthly Work Plan for delivery 10 (maximum two pages)</p> <p>11.2 Progress report (maximum three pages), covering the following:</p> <p>A. <u>Specific products:</u></p> <ul style="list-style-type: none"> • Report on the results of the TOT training to national and provincial staff on M&E App for family package delivery <p><u>B. Certified completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> • Support trouble shooting on the App issues for the family package implementation. • Conduct regular coaching to strengthen capacity of MoSVY M&E and family package and MIS team on App/MIS system management 		8%
<p><u>Deliverable 12: Capacity development to MoSVY staff on M&E App/MIS for the family package monitoring system</u></p> <p>12.1 Monthly Work Plan for delivery 12 (maximum two pages)</p> <p>12.2 Progress report (maximum three pages), covering the following:</p> <p>A. <u>Specific products:</u></p> <ul style="list-style-type: none"> • Report on the support provided on the M&E App for the roll-out training of the family package to districts and communes <p><u>B. Certified completion of the following regular/ongoing activities</u></p> <ul style="list-style-type: none"> • Support trouble shooting on the App issues for the family package implementation. • Conduct regular coaching to strengthen capacity of MoSVY M&E and family package and MIS team on App/MIS system management 	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 will 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 the applicable daily subsistence allowance (DSA) rates, as promulgated by the International Civil Service Commission (ICSC).

11. Contract supervisor

The consultant will work under the supervision of the Social Policy Specialist and in close coordination with the MIS developer. Compliance with the TORs and timely delivery of the expected deliverables will be closely monitored. Upon the 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 (if available)
- 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 degree in the relevant fields (20 points)
 - Professional experience in DevOPS, PHP, React , Javascript and App systems (50 points)
 - Knowledge in social protection, skills, 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.