

REPUBLIC OF KENYA



**MINISTRY OF LABOUR AND SOCIAL PROTECTION**  
**STATE DEPARTMENT FOR SOCIAL PROTECTION AND SENIOR CITIZEN AFFAIRS**  
**DIRECTORATE OF SOCIAL ASSISTANCE**

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**THE KENYA SOCIAL ECONOMIC AND INCLUSION PROJECT (KSEIP) TERMS OF REFERENCE**  
**(TOR) FOR A SENIOR SOFTWARE DEVELOPER FOR THE**  
**CONSOLIDATED CASH TRANSFER PROGRAMME (CCTP)**

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**Background of the Consolidated Cash Transfer Programme CCTP)**

The Government of Kenya (GoK) has made strides in its fight against poverty using a number of tools to achieve this. One of the tools employed by the Government is the non-contributory Cash Transfer Programmes to augment incomes of the most poor and vulnerable households within the territory of Kenya.

Since 2004, the government has steadily increased the coverage and the number of households that directly benefit through Cash Transfer Programmes. Through the State Department for Social Protection and Senior Citizen Affairs, the GoK supports three cash transfer programmes namely: Cash Transfer for Orphans and Vulnerable Children (CT-OVC), Older Persons Cash Transfer (OPCT) and Persons with Severe Disability Cash Transfer (PwSD-CT).

CT-OVC being the initial Programme was established in 2004 to meet the needs of increasing number of children falling into vulnerability as a result of poverty and HIV/AIDS. It started as a pilot program in then three Districts of Garissa, Kwale and Nairobi. At the time only 500 beneficiaries were benefitting with a monthly stipend of Kshs 500. This Programme has since grown to cover 353,000 households with a monthly stipend of Kshs 2,000 in the FY 2022/2023 in all the 47 Counties.

In 2007, the Government piloted the OPCT Programme in three larger Districts of Nyando, Thika and Busia. The objective of the program was to provide regular and predictable cash stipend to households with poor and vulnerable older persons who were 65 years and above. In 2017, the OPCT programme was made a universal Programme for older persons 70 years and above. The Programme currently disburses monthly stipends to 833,000 older persons.

The PwSD-CT was launched in 2011 with the sole aim of targeting children and adults with severe disability who require 24-hour care by the caregiver. PwSD-CT currently supports 47,000 households across the Country.

The three programmes were initially administered by two Departments; OPCT and PwSD-CT by the Directorate of Social Development (DSD), CT-OVC by the Directorate of Children Services (DCS). This fragmentation resulted in inefficiencies and duplication of effort.

In 2016 the three programmes were consolidated under the Social Assistance Unit (SAU), now the Directorate of Social Assistance (DSA). The DSA is responsible for the administration of cash stipends to over 1 million beneficiaries. This consolidation resulted in improved efficiency by allowing a harmonized approach to targeting, disbursement of funds and case management which has greatly improved the turnaround time in responding to the poor and vulnerable households. The harmonized implementation has equally resulted in reducing the cost of implementation.

As part of the consolidation strategy for the cash transfer programmes, the Ministry of Labour and Social Protection (ML&SP) in 2017 embarked on the development of a Consolidated Cash Transfer Programme Management Information System (CCTPMIS). This move was aimed at automating the operations of the Consolidated Cash Transfer Programmes. CCTPMIS is a tool designed to streamline and centralize the administration and management of multiple cash transfer programs across the country. The system is intended to efficiently handle data collection, processing, and reporting for the various cash transfer initiatives, enabling better coordination, monitoring, and evaluation of these programs. CCTPMIS has greatly enhanced efficiency in the implementation of Cash transfer Programmes in the State Department.

Management of the voluminous amounts of data emanating from the activities associated with targeting and payroll generation would be a nightmare if managed manually. CCTPMIS ensures quick and safe generation of payroll and automated sharing with contracted payment service providers (PSPs). Additionally, the system has enabled the decentralization of key modules to all the 47 Counties i.e., Reporting module and Grievance and Case Management module which has greatly reduced the turn-around time in addressing concerns emanating from beneficiaries.

Through the Kenya Social and Economic Inclusion Project (KSEIP), which became effective in March 2019, one of the KSEIP Project Delivery Objective (PDO) for this World Bank funded project is supporting the GoK to enhance institutional capacity and Social Protection (SP) delivery systems. DSA in particular is expected to ensure the rollout of an improved payment system, and the integration and implementation of the G&CM mechanism for all interventions supported by the proposed KSEIP. CCTPMIS is critical in supporting realization of these initiatives. CCTPMIS is also linked for purposes of disbursement of funds to complimentary programmes to other KSEIP Programme MISs including Nutrition Improvement through Cash and Health Education (NICHE) and Economic Inclusion Programme (EIP).

CCTPMIS has also been integrated through Application Programming Interface (API) with six PSPs for purposes of payroll sharing and reporting. Application of technology in Programme administration has greatly improved fiduciary controls and has considerably assuaged the likelihood of pilferage of public funds. In line with the recent Presidential directive to up-scale cash transfer Programme by an additional 500,000 beneficiaries, as well as to pay on a monthly basis, the Ministry is considering introducing mobile payment to enhance efficiency in the disbursement of cash and ensure that beneficiaries move the shortest distance to pay points. Leveraging on the agency network of mobile money networks operating in Kenya, this will ensure that beneficiaries collect their monthly stipend without incurring cost associated with travel as opposed to the current payment solutions with banks whose agency banking infiltration is inadequate.

DSA has been receiving technical support in terms of design and development of CCTPMIS from Development Pathways (DP) with the support of World Food Programme (WFP). The support from DP is almost coming to an end and the firm is currently in the warranty implementation phase. With the impending changes in program implementation with regards to monthly payment and onboarding of mobile money service providers, the Directorate intends to procure services of a Senior Software Developer to provide Technical Assistance (TAs) necessary in supporting the CCTPMIS to undertake this transition.

#### **Job Description and Responsibilities of the Senior Software Developer**

The Senior Software Developer will support the CCTPMIS team in system and software development while keeping track of project design and development. Specifically, the Senior Software Developer will undertake the following: -

- i.) Support in the onboarding of mobile network operators, design and develop requisite technologies, including APIs and required documentations.
- ii.) Modifying CCTP MIS to fix errors by updating software solutions, upgrading interfaces as well as ensuring that disaster recovery procedures are in place as required to improve performance of the system and ensuring that a disaster recovery plan is in place.
- iii.) Support in the design and implementation of CCTP MIS payment solutions and manage transitions to the proposed model.
- iv.) Recommend and enhance the reporting module of CCTPMIS to address program needs.
- v.) Assist in review and the implementation of the recertification module.
- vi.) Enhance API integration between IPRS and CCTPMIS.
- vii.) Enhance API integration between CCTP MIS and other KSEIP MISs (Enhanced Single Registry (ESR), Economic Inclusion Programme (EIP), The Nutrition Improvements through Cash and Health Education (NICHE) Programme, Hunger Safety Net Programme (HSNP).
- viii.) Support migration of CCTPMIS geo-location master list from 2009 to 2019 census master list.
- ix.) Recommend and implement CCTP MIS API Integration with Civil Registration Service (CRS).

- x.) Development of a deployment pipeline to allow for testing of deployed solutions and to effectively monitor application versions any time there are changes proposed to CCTPMIS.
- xi.) Act as a link between the CCTPMIS Officers and developers and act as Quality Assurance (QA) on behalf of DSA.
- xii.) Should be able to check on the quality of deliverables from the developer and interpret to DSA proposed changes by the developer.
- xiii.) Ensure CCTPMIS is developed as a configurable system to respond to the dynamic nature of cash transfer Programme implementation that will allow MIS officers the ability to modify the system without the need for an external developer.
- xiv.) Develop, administer, and maintain all CCTPMIS databases in accordance with all data management policies and protocols to ensure they are operational and securely backed up to prevent data loss, as well as generating CCTPMIS database reports.
- xv.) Support in onboarding of CCTPMIS services to the e-citizen platform.
- xvi.) Assist in development of SMS solutions (Bulk, single), Chatbots, Telegram and other communication services for CCTPMIS.
- xvii.) Develop, update and review documentation related to CCTPMIS and aligning our process and systems to the directive of the government, also aligning to the data sharing protocols, and the data protection act.
- xviii.) Troubleshooting and resolving issues related to coding or design by deploying systems and building capacities for automated testing, bug tracking and resolution, reporting on issues within the team and to the management.

#### **General Qualifications and Competencies**

- Masters Degree (or its equivalent) in Computer Science/Information Technology, Software Engineering, or any other related field.
- Extensive experience with at least 10 years in the design and architecture development of MISs and in project management.
- Extensive knowledge of programming languages, tools, development platforms and the software development life-cycle.
- Excellent organizational and leadership abilities.
- Highly analytical mindset, problem solver with an ability to see both the big picture and the details with the ability to solve problems using their in-depth understanding of information systems and computing solutions.
- Strong communication and presentation skills.
- Fluent in most data manipulation languages.
- Have sound technical skills and administrative aptitude.
- Experience in Social Protection Cash Transfer MIS design, development and quality assurance is desired.

#### **KSEIP Specific Qualifications**

- Proven experience as a .NET Developer or Application Developer.

- Expertise in building server-side applications. Along with .NET Core, should have working knowledge of technologies like ASP.NET Core, Web API, and Entity Framework for database interaction.
- Experience in Microservices and agile technologies.
- Expertise in front-end technologies like HTML, CSS, and JavaScript. Familiarity with modern front-end libraries and frameworks such as React, Angular, or Vue.js.
- Proficiency in C# programming language and the .NET Core framework. Should be familiar with the latest features and capabilities of .NET Core to build robust applications.
- Familiarity with SQL and experience with database systems like SQL Server, MySQL, or PostgreSQL.
- Knowledge of how to design and work with RESTful APIs to enable communication between the front-end and back-end of applications.
- Familiarity with cloud platforms like Microsoft Azure or AWS.
- Expertise in design ability, Including knowledge of UI/UX and basic prototype design
- Knowledge of testing methodologies, unit testing, and tools like Nunit/xUnit.
- Understanding of continuous integration and deployment (CI/CD) processes. Familiarity with tools like Jenkins, Azure DevOps, or GitHub Actions.
- Proficiency with version control systems like Git. Knowledge of branching, merging, and pull requests is vital for collaborative development.
- Should be conversant with project management tools such as JIRA.
- Understanding of Agile methodologies.
- Excellent troubleshooting and communication skills.
- Attention to detail.
- International experience in design and development of Social Protection Cash Transfer MISs will be an added advantage.

### **Duration**

This is a full-time engagement where the TA will work five days a week, 8 hours a day for a period of 4 months from the date the contract is awarded. The contract duration may be extended based on TA's satisfactory performance. All travel related costs such as Daily Subsistence Allowances related to the purpose of the assignment will be covered by the Ministry at a rate to be determined during contract negotiation.

### **Reporting**

The TA will be stationed at the DSA offices and will report to the Head of the DSA and supervised by the Head of the MIS section.