# Terms of Reference for CPIMS+ development, deployment and configuration in Nigeria

## Summary

| Title | CPIMS+ development, deployment and configuration in Nigeria |
|---|---|
| Purpose | To configure and deploy the web-based Primero/CPIMS+ application to support child protection integrated case management to improve the service provision for the children who are/were victims of any form of violence in focus states including three emergency states in Nigeria. |

## 1. INTRODUCTION TO THE SECTOR OF WORK

The United Nations Children's Fund (UNICEF) is mandated to respond to the needs of children in emergency situations, and to assist government counterparts in implementing a wide range of **child protection (CP)**[1] programmes. These programmes depend on the timely, accurate collection of data and its secure and efficient management, storage and use. UNICEF's Child Protection objectives are to actively prevent children from being harmed and to support programmes to respond to instances where children are at risk of or have been subjected to violence, exploitation or abuse.[2]

**Primero** is a modern, browser-based open source application that is flexible and highly configurable. Primero supports multiple modules to facilitate information management for different types of child protection programmes. These modules include the CPIMS+ and the GBVIMS+. Primero has granular, role-based access, so that only those who need to see information have access to it. In 2017 UNICEF developed global long-term agreements (LTAS) with multiple software vendors to support the scale up and roll out of Primero globally.

## 2. BACKGROUND INFORMATION

Nigeria is facing a high rate of prevalence of violence against children while before the age of 18, approximately 6 out of every 10 children experience some form of violence, half of the children experience physical violence (Nigeria VAC survey 2014). A key finding of the survey indicates that less than 5% of the children that report having suffered violence receive any form of service. There is a need to significantly increase in the coverage of service delivery to increase the number of children victims of violence who receive support through referrals mechanism. UNICEF is supporting the government at federal and state level to strengthen child protection integrated case management system to provide adequate services to the vulnerable children and build the capacity across the board including social welfare, police, courts, health among others service providers. In order to record an increase in service provision, there is a high demand for regular, reliable, fast and consistent information on the number of children in need of protection that receive services.

Most children in the north-east have been exposed to one or more of the following: violence, loss of friends, family members and neighbors, accumulated stress, deterioration in living conditions, inability to provide for one's self and family, increased military presence, divisions in societies, and lack of access to services. It is estimated that over 20,000 children have been separated from their families and are either unaccompanied or separated and 34,000 have lost one or both parents due to the conflict. These experiences have a significant impact on the psychosocial wellbeing and

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[1] UNICEF uses the term 'child protection' to refer to preventing and responding to violence, exploitation and abuse against children – including commercial sexual exploitation, trafficking, child labour and harmful traditional practices, such as female genital mutilation/cutting and child marriage. UNICEF's child protection programmes also target children who are uniquely vulnerable to these abuses, such as when living without parental care, in conflict with the law and in armed conflict

2 Taken from: http://www.unicef.org/protection/57929_62178.html

development of all children, including unaccompanied and separated children (UASC), with both immediate and long-term consequences for children, families and communities.

Both Boko Haram and CJTF (hereinafter referred to as non-state armed group or NSAG) have been listed by the Secretary General under Security Council Resolution 1612 as recruiting and using children in combat and support roles. Boko Haram has also been listed for abduction. In 2015, the Office of the National Security Advisor estimated 8,000 children formed part of the Boko Haram. However, this estimate is higher than the number of children rescued or recovered by the Nigerian Security Forces (NSF) and handed over to civilian authorities and UNICEF, which stands at 1,587 children (971 boys, 616 girls) to date.

The case management and CPIMS have been rolled out and routine disaggregated data collection helped produced quarterly fact sheets. A total of 11,801 child victims of violence [F: 5,580] received child protections services in seven focus states including three northeast states (Adamawa, Borno and Yobe) and four focus states under development programme which includes Cross River, Gombe, Lagos and Plateau).

To build the capacity and ensure adequate human resources to implementing child protection integrated case management, the Social Welfare Workforce Strengthening National Action Plan was updated and 10,000 copies of social work curriculum for the attainment of the National Diploma and National High Diploma were distributed by the National Board for Technical Education, contributing to 10 polytechnics receiving accreditation. 80 LGA-based social welfare officers were trained on child protection and case management and coordination strengthened with the establishment of inter-agency case management steering committees in 4 focus states. UNICEF also supported the development of state government-led child protection integrated case management frameworks, including the development of the following;

i. Standard operating procedures (covering state and LGA social welfare officers, ward level case workers and community child care worker)
ii. Inter-agency case management protocols and IMS tools
iii. Mandatory reporting protocol for health and education.

However, there is a growing demand for evidence-based decision making and attribution of programme results in the on-going child release and reintegration programmes in country. UNICEF and the responsible government ministries and partners are facing increasing demand to develop, maintain and sustain an effective and efficient data management and reporting system.

Within the government ministries of social welfares in seven (7) focus states, different local government level structures are collecting data that are relevant to the wellbeing of children apart from these, there are non-governmental organizations working in the child protection sector with their own data management systems, and very limited capacity for data consolidation and analysis. In addition, the insufficient technical capacity, poor-quality of data use to inform decision making and policy formulation, as well as generating evidence and demonstrating improvement in programme performance remain a challenge.

In this regard, UNICEF in collaboration with government partners including other child protection actors are working towards improving the quality of services provision through the deployment, integration, use and maintenance of an effective information management system as a key component of an integrated case management system. As an interagency tool, the CPIMS+ will be customized based on programme needs as a secure tool to effectively collect, store, analyze and produces reports on programme performance to support the case management system as well as supporting and strengthening qualitative Case Management response through regular supervision (within the system)

3. **PURPOSES AND OBJECTIVES OF THE PROPOSED WORK**

A. **Purpose:**

In collaboration with the Federal and State Ministries of Women Affairs and Social Development, UNICEF is proposing to lead and support the configuration and deployment of a web-based CPIMS+/Primero application in Nigeria in line with the best practice guidelines for digitization to ensure the trustworthiness and reliability of records keeping for all data subjects as well as supporting and strengthening qualitative Case Management response through regular supervision (within the system) .

This will include the introduction of an effective information management system, the CPIMS+/Primero which will be integrated as part of case management process to track prevention and response to violence, abuse, exploitation and neglect of children to ensure quality service delivery and continuum of care upon identification by source or referrals; monitor the services rendered to children by service providers as well as transfer of cases through inter agency information sharing protocols.

Based on the above, UNICEF Nigeria is interested to contract for the rollout of CPIMS+ in Nigeria.

B. **SCOPE OF WORK:**
The Contractor will undertake all kind of activities which may require for the development, deployment and rollout of CPIMS+ in Nigeria, following are some of proposed activities;

A) Analysis and mapping of workflows, standardization of data collection and reporting forms and operation datasets in Nigeria
B) Technical analysis and deployment support, including hardware configuration (provisioning and configuring servers for launch and staging);
C) Client relations & project management (remote)
D) Software development, taking into consideration that each context will require its own instance, including testing following Agile methodologies;
   a. Localization customization
   b. Test instance for user acceptance testing and training
   c. Configuration support and quality assurance
   d. Any specific feature developments (additional reports such as 5W)
   e. Mobile configuration and Mobile Device Management (MDM)
   f. Day-to-day user support
E) Documentation of all processes
F) Progress reports/assessments at selected project milestones
G) Implementation Planning and support (remote)
H) Data migration from old data tracking tool/transition support to new platform
I) Field support, issue tracking, and maintenance as part of a service level agreement
   Revise and further develop user-friendly manuals and training materials on the use and maintenance of the **CPIMS+/Primero.**
J) Travel and accommodation (UNICEF Nigeria will facilitate the field travel on need basis).

C. **EXPECTED DELIVERABLES, TIME LINE**

| Expected Results | Delivery Date |
|---|---|
| **Phase 1 Output 1**: Pre-deployment engagement planning, alpha | 1 month after signing of |

| configuration and proof of concept | contract. |
|---|---|
| **Phase 1 Output 2:** Implementation plan: development of a phased implementation plan for Nigeria based on approved criteria. | 1 month from date of inception. |
| **Phase 2 Output 1**: Feature development based on user-derived requirements | 1.5 months from date of inception. |
| **Phase 2 Output 2**: Implement the approved phased Implementation Plan to support roll out the CPIMS+ including: distribution, installation of the configured application, data migration, testing, and training support. | 3 months in all locations from date of inception. |
| **Phase 2 Output 3**: As a part of a production support and maintenance contract (PSM), provide ongoing technical support to CPIMS+ for a period of twelve (12) months from date of first "live" instance, including establishing a service protocol, ticketing system, escalation points and contact channels, all as set out in Annex C. | Monthly, for a period of 12 months beginning after go live. |

## 4. PROPOSAL STRUCTURE

The proposal must cover the following sections (additional sections are welcome):

- Proposed workplan and timeline for the deliverables mentioned above and a clear process to coordinate with UNICEF technical team

- Project dependencies and assumptions (where applicable)

- Detailed budget proposal broken down as per instructions in Annex D-Pricing Schedule.

## 5. THE TEAM

The team should have a past experience on CPIMS+ development and deployment along with breadth of knowledge across various applications and a depth of knowledge in the specific applications including the following technical skills, Business Analyst (Strategy & Requirements Analysis), Quality Analysis and Application Development.

## Annex A: Detailed Description of Scope of Work

The below table set outs clear tasks and activities that will be part of the deliverables for each Phase/Output of the contract, along with a timeline. Because this project is managed according to Agile methodologies and must be responsive to the needs of field-level users, this framework is indicative and should be considered flexible.

| PHASE/OUPUT | TASKS | END PRODUCTS & DELIVERABLES | TIME FRAME |
|---|---|---|---|
| **Phase 1 Output 1:** Pre-deployment engagement planning, alpha configuration and proof of concept | - Calls with focal points/teams<br>- Pre-configuring of a cloud hosted, non-production CPIMS+ instance<br>- Remote demos/walk through<br>- Provide an initial activity schedule Nigeria child protection teams and partners<br>- Project charter/governance | - support Primero Lead<br>- cloud hosted, non-production CPIMS+ instance<br>- walk through of POC | 1 month after signing of contract. |
| **Phase 1 Output 2:** Implementation plan: development of a phased implementation plan for **Nigeria** based on approved criteria. | - Using the learnings from previous deployments to develop a plan for scaling the CPIMS+ in Nigeria<br>- Identify prioritization criteria Identify practical approach based on geographic and infrastructure criteria ID server and infrastructure (specs, hosting options, etc).<br>- Secure server<br>- Business Analysis: validate processes/flows, types of devices, connectivity and coverage, prelim usages estimates (i.e. # of users, how often they access, etc)<br>- Configuration (forms, roles, locations, reports) and complete documentation.<br>- Establish that field relevant data is migrated as required.<br>- Establish and document basic protocols (passwords, encryption, import/exports, etc.)<br>- Business analysis; research and validation of number of users, types of users, process flows.<br>- Define deployment requirements (geographic locations)<br>- Validate requirements with estimate for scope of effort | Implementation Plan Document (a phased approach to implementing CPIMS+ /Primero in Nigeria including prioritization of locations, timelines, distribution, hardware requirements for initial and longer term.<br>- Defined configurations for child release and reintegration data requirements<br>- Defined CPIMS+ use: import / export, user population and distribution, protocols<br>- List of CPIMS+ development items for child release and reintegration data requirements<br>- Data migration requirements<br>- Define Mobile configuration<br>- Develop Mobile Device Management solution | 1 month from date of inception. |

| Phase 2 Output 1: Feature development based on user-derived requirements | - Gather end user requirements<br>- Set up a development environment and perform continuous integration<br>- Provide end users with user acceptance testing opportunities<br>- Document processes, user stories, acceptance criteria and test results | - Design, develop and test features to suit programme needs specific to child release and reintegration reporting requirements, including report filters in the UI for time (duration/dates), and two other variables.<br>- Design and develop configurable role-based dashboards for at least 3 roles (case worker, programme manager, +1) to manage transactions related with the caseload, including follow ups and services provided, in order to address the "supportive supervision" requirements of the programme. | 1.5 months from date of inception. |
|---|---|---|---|
| Phase 2 Output 2: Implement the approved phased Implementation Plan to support roll out the CPIMS+ including: distribution, installation of the configured application, data migration, testing, and training support. | - Revisit Implementation Plan for changes to scope or expectation<br>- Execute Implementation Plan<br>- CPIMS+ configured for Nigeria deployed to planned site(s)<br>- Testing of all production sites (including mobile)<br>- Administrative training and train-the-trainer sessions conducted in Nigeria[3] | - Release 1 **CPIMS+** documentation and training materials updated to include new features and functionality<br>- **CPIMS+** installations as outlined in the Implementation Plan<br>-up to 3 Administrative training and 5 train-the-trainer sessions conducted remotely<br>-**CPIMS+** documentation and training materials made available to end-users | 3 months in all locations from date of inception. |

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[3] UNICEF is leading the operationalization of integrated case management and CPIMS in three northeast states where 19 implementing agencies are actively engaged and providing case management services to the vulnerable children. This includes the network of UN agency (UNICEF), Government (three State Ministries), INGO (6) and NGO (9). The scope of CPIMS also been expanding to development nexus, there are currently four states where government (Ministry of Women affairs and Social Development) is leading the case management process. In 2018, there were 11,000 + cases identified and provided case management services. Out of which 8,458 cases from UNICEF implementing partners were verified to potentially migrate into CPIMS+.

| Phase 2 Output 3: Production support and maintenance contract (PSM), provide ongoing tech support to **CPIMS+** | - Production support and maintenance of "live" (production) site<br>- Establish a service protocol with escalation points and ticket system for management of issues<br>- Provide contact channels and escalation points<br>- Bug fixes and updates to production sites | -provide 365 days of support and maintenance to approved production implementations<br>-support contract starts with the "go live" date of the first production instance of **CPIMS+**<br>- provide consolidated monthly service reports including response and cost | Monthly, for a period of 12 months beginning after deployment. |
|---|---|---|---|
| **Handover** | - Conduct a final assessment of the database system and handover developed functional digital system to UNICEF Nigeria. | - Final assessment of the database conducted and 10-page report<br>- Administrative Handoff of the system (all application and system logins and server access transferred) to qualified/designated Nigeria CPIMS+ for release and reintegration administrators as per MoU requirements | |

## Annex B: Specifications for Production Environment of Primero

### HOSTED CPIMS+ /PRIMERO INSTANCE INFRASTRUCTURE

- The application will be hosted successfully on a cloud service providers (Microsoft Azure from UNICEF).
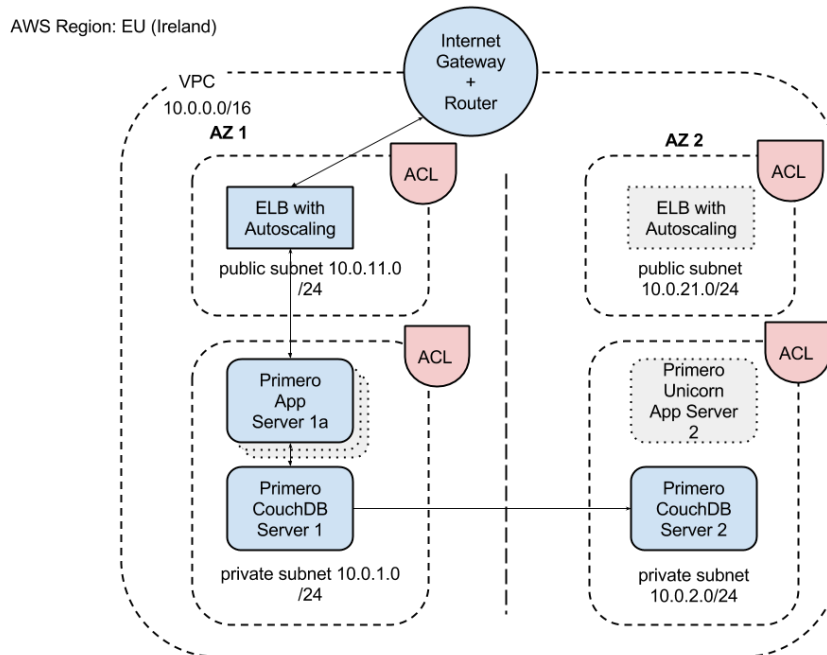


- Database Servers: 2 r3.large (optimized for memory), always up and running. One is the primary master database, the other is the slave failover. It is recommended that CouchDB runs on a high-memory server.
- Application Servers: 1 r3.large (optimized for memory), at 100% utilization, plus an estimated 2 r3.larges at 10% utilization brought up on demand.

## Annex C: Production, Support and Maintenance Agreement

**CPIMS+ / Primero**

### 1. Support Approach

The Contractor will assign dedicated technical resources to support the Primero Platform and its associated systems currently in development and subsequent production. This ongoing support will include problem diagnosis and defect remediation to address software defects (if the defect is not covered by warranty), implementing enhancements, as well as patching, configuration optimization, and maintenance of the Amazon, Azure or other Web Servers hosting the Primero instances. Furthermore, when Primero is released, the Contractor will support the production environment. (The hosting provider is to be determined.)

### 2. Indicative Scope

The Contractor will structure support plans on the basis of part-time or full-time equivalent (FTE) support engineers. A monthly support agreement commits a pre-determined number of staff hours for development and support of the system. An estimated **40** total staff-hours per month is required but this level of effort may be adjusted based on direction from UNICEF. This support will be delivered in parallel with ongoing analysis and development work that is part of a contract to support Primero roll-out in Nigeria.

### 3. Indicative services

The Contractor understands that its principal responsibilities will be:

- Perform day-to-day maintenance and operations for servers, including installation, backup, recovery testing, performance optimization, and other configuration tasks
- Manage periodic updates to the system, including source and configuration management
- Accomplish on-demand enhancements for the system
- Monitor availability and performance
- Support for the Primero Open Source Community, if surplus hours are available or effort is deemed necessary

The Contractor will make available the infrastructure and processes to enable cost-effective support and maintenance services, drawing on extensive experience in operations support for client systems. The infrastructure includes:

- Dedicated email address and telephone number for support requests
- Issue tracking system
- Server monitoring
- Performance monitoring
- Software configuration management
- Automated testing and deployment processes

- Options to expand to 24 x 7 support plans

### 4. New Feature development

In addition to the support described in preceding sections, the Contractor will provide an ongoing assessment of Primero support needs, including analysis of any affects resulting from adoption/increased use of the platform and its related systems. The Contractor anticipates that its PSM team will become increasingly efficient at these support tasks, thus, the scope of support could optionally include the following activities, at the discretion of UNICEF and its partners.

*Security* - In the initial development of the Primero platform, the Contractor focused on application and deployment security for a range of deployment modes. The system therefore will maintain integrity from compromise and confidentiality of information. However, increased adoption and localization of the platform will require deployment to specific operational contexts – laptops and servers, including stand-alone, networked, or Internet-accessible configurations. Localization will require additional diligence to maintain operational security in these contexts, including both system and process related vulnerabilities. Our team understands the possible attacks for these operational contexts and will ensure that each local instance maintains a high-level of security. As appropriate, the contractor will advise local stakeholders on policies and procedures necessary to maintain secure access, including practices for users, passwords, and system access.

*Monitoring* – the Contractor may extend the existing 'alive' monitoring to provide more sophisticated feedback on availability and performance in response to increasing utilization of Primero. In particular, the contractor recommends implementing monitoring tools such as Nagios or NewRelic when the system is released for production use.

*Custom Reporting* – The Contractor PSMM team will write custom reports on an ad hoc basis. This support would provide users with access to the entire Primero data set (for the local instance), and enable a full range of outputs, including formatted reports, charts, and graphs.

*Configuration* – the Contractor will identify and implement any required changes to the application, including language, display formats, workflow, custom forms, custom labels, and other localization of the system, as approved by stakeholders in the localization and Implementation Plan. These changes will be made via administrative capabilities of the platform, and not require custom coding that would yield a local version of the Primero platform. Translation is considered to be outside the scope of this effort, but will collaborate with local UNICEF or other resources to define the appropriate text, based on the local language and taxonomic requirements.

*Deployment* – the Contractor team will configure the designated local or cloud-based servers, test, and initiate the localized instance. As required for a specific country, region, or program, the Contractor will repeat this deployment process

for each operational location or distinct Primero instance.

*Post-Production* – the Contractor anticipates a range of issues related to increasing use of Primero in production, which can be implemented under this support activity. These needs include additional server hardening, tools for data migration or maintenance, self-service for account management, and others.

## 5. Level of Effort

**Table 2** below provides an initial estimate for the approach defined in previous sections. The contractor and UNICEF estimate that, initially, effective Primero support will require a total of **40 staff hours per month**. Support will be available during normal Nigeria business hours (GMT), Sunday-Thursday. This plan can be extended if deemed necessary, subject to rate card prices. The contractor and UNICEF will work together to ensure this level of support remains sufficient as the Primero adoption rate increases over time. Each month, the contractor support team will deliver a detailed report and summary of efforts in order to understand and identify any issues *prior* to their evolving into problems.

| Role | Monthly Effort |
|---|---|
| Technical Lead | tbd hours |
| Project Manager / BA | tbd hours |
| Software Engineer | tbd hours |
| **Total** | 40 |

An online log will be maintained by the PSM team indicating their hours worked. Hours/effort that are *NOT* used in a given month will be carried over and made available in subsequent months of the contract, until termination. Additional hours exceeding the contractual threshold will be invoiced to UNICEF with a log and justification, if requested by UNICEF. NO ADDITIONAL HOURS may be billed without the previous written consent of UNICEF.

If the level of effort required to meet the demand of field-level users exceeds this estimate, The Contractor will invoice for additional hours at the above rates, noting that the UNICEF Product Owner must be informed of the situation beforehand and must approve the additional hours. This PSM agreement may be extended and/or form the basis of subsequent support contracts, as deemed necessary by UNICEF.

## 6. Project Team

The contractor will provide a project team that includes its most experienced and effective technologists. We anticipate the team for this initiative will include the following specific rolls: A Technical Lead, a Senior Software Engineer, and a Project Manager/Business Analyst. The resource pool will be drawn from the current Primero project team, and can be scaled to best support any future increase in scope.

## 7. Data Ownership

Please review the UNICEF Terms and Conditions carefully. Article 6 of the Contract will apply to all data. Article 9 of the Contract will apply to all UNICEF Confidential Information.

## 8. Assumptions

UNICEF will assign a dedicated *Product Owner*[4]. The costs of hosting CPIMS+/Primero in Nigeria will be the responsibility of the UNICEF Nigeria Country Office; the Contractor will not be responsible for the costs of hosting.

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[4] http://scrummethodology.com/scrum-product-owner

## APPENDIX A TO ANNEX C: GENERAL PRODUCTION SUPPORT AND MAINTENANCE (PSM) MODEL

### OVERVIEW

This appendix outlines the Production Support and Maintenance (PSM) model that will cover the deployment of CPIMS+/Primero in Nigeria, and globally. It involves a single, dedicated team working off a single backlog. The backlog would contain maintenance items from all the instances and deployments of Primero. UNICEF will appoint a Product Owner (the "UNICEF Product Owner") to manage this backlog and prioritize items for the contractor team to resolve.  A tiered software support services model provides an effective way to manage support services and their associated costs based on business need. The idea of tiered support levels is to have a standard set of services distinguishing one support tier from another that correspond to standard application classifications.

### DEFINITIONS OF TERMS

| Term | Definition |
|---|---|
| **Tiered Support** | |
| Level 1 ("L1") Support | This is the initial support level responsible for basic customer issues and technical support to end-users. Personnel at this level have a basic to general understanding of the platform or service and may not always have the competency required for solving complex issues, but should be able to handle 70%-80% of the user problems before finding it necessary to escalate the issue to a higher level.   Personnel from the applicable UNICEF Country Office ("CO") will provide Level 1 support. <br><br> The first job of a Level 1 Specialist is to gather the customer's information and to determine the customer's issue by analyzing the symptoms and figuring out the underlying problem.  Where possible the Level 1 Specialist shall resolve the issue directly with the end-user. <br><br> If they cannot determine the solution, then the issue is escalated to Level 2 support by logging a ticket in the issue tracking/ticketing system. |
| Level 2 ("L2") Support | This is the next support level that requires a person with deep knowledge of how the system is used, the business domain and has the required access rights to the production instance (such as "superuser") to resolve operational issues. This level of support does not perform code modifications to resolve the problem.  If resolution requires code modification, the support request is passed on to Level 3 support. <br><br> Level 2 support would assess the time already spent with the client so that the work is prioritized and time management is sufficiently utilized. |

| | |
|---|---|
| Level 3 ("L3") Support | This is the highest level of support, which consists of making infrastructure, code, and/or database changes to resolve a support request. Level 3 Support may also require access to log files or notification alerts from the hosting monitoring tools. Fixes made by Level 3 support shall be tested and then released into production. Release schedules are driven by the severity of the issues. Issues related to system performance and stability may also be addressed within Level 3 support. The Level 3 support may also be required to actively trouble shoot with third party partners such as hosting providers.  These partners and the respective contact, SLAs and escalation plans shall be established with the UNICEF Product Owner. Level 3 support has the same responsibility as L2 support in reviewing the issue ticket and assessing the time already spent with the stakeholders so that the work is prioritized and time management is sufficiently utilized. |
| **Backlog:** | |
| Maintenance | Bugs or issues identified in the application code and/or infrastructure while in production. Changes made post-delivery to correct faults and to improve performance or other attributes. |
| Enhancements | An enhancement is any change/addition to the application, which adds new capabilities, or features or improves existing functionality.  Enhancements will be listed in the backlog but will not be implemented under the PSM model. |
| **Issue Prioritization:** | |
| Critical | A complete interruption causing the system (or a critical piece of functionality) to be completely inaccessible.  No workaround is available. |
| High | Critical functionality degraded or unusable, causing severe impact on service availability for a significant portion of users. A temporary workaround is available, but it is not an acceptable longer-term solution. |
| Medium | Issue affects non-critical functionality, or impacts a small number of users.  A workaround is available. |
| Low | Issue distracts users from their work in the system, but does not impact functionality or data.  A workaround may or may not be available. |

The engagement model or "ways of working" for support and maintenance contemplates all Level 1 support provided by UNICEF.  End users shall contact a respective point of contact with issues. The point of contact shall attempt to resolve the issue or submit the issue using the issue tracking/ticketing system (selected by the UNICEF Product Manager).

Critical or High issues shall automatically be assigned to the contractor PSM team and the point of contact or UNICEF Product Manager shall call the contractor according to the escalation plan below.

The triage process and prioritization assignment to each issue shall be managed by the UNICEF Product Manager and reviewed with the contractor PSM team.  The table below lists the four priority levels and the corresponding response time by the contractor.  The following response levels will be maintained during the specified hours of support.

| PRIORITY LEVEL | RESPONSE TIME |
|---|---|
| CRITICAL | ON CALL |
| HIGH | 3 HOURS |
| MEDIUM | 1 BUSINESS DAY |
| LOW | 2 BUSINESS DAYS |

Response time means that contractor will acknowledge receipt of the ticket and begin researching a solution to the issue within the allotted time. Once a solution has been discovered, the contractor shall account for the time taken to research/troubleshoot the problem, the probable cause and the estimated time required to solve the issue. Level 2 and Level 3 researching and troubleshooting of issues may include contacting third party partners.

The contractor will work with the UNICEF Product Manager to prioritize the backlog of items, based on the priority and support level. Together they would then determine a suitable timetable for the issue to be resolved, tested and implemented within the production environment.

All issues including critical and high issues will be submitted via the online ticketing system. Critical and high issues will also be followed by a call to the designated the contractor's telephone number to ensure prompt attention.  Other channels that may be used to alert the contractor of the Critical or High issues in the ticketing system include SMS, email or Skype.

The contractor will be responsible for providing a primary telephone contact number. This number shall be a local number in the supporting the contractor PSM office.  The number shall be assigned to the contractor PSM team member on call.  Below is the escalation plan in the event the contractor PSM contact is unavailable or an issue has not received a response in the given response time above.

| Contact | Escalation |
|---|---|
| The contractor PSM Team (on call) | |
| Project Manager | |
| Client Principal | |

The contractor will use commercially reasonable efforts to resolve all items in the backlog in priority order, in consultation with UNICEF; provided however, the efforts will be undertaken on a time and materials basis. The work will be done employing an *Agile* development methodology, which means weekly meetings to assess progress, constant prioritization, frequent validation and feedback. If the contractor fails to meet its response times, the Contractor will credit or refund to UNICEF, at UNICEF's election, a proportionate amount of Fees under the Contract in accordance with the table below:

**Remedies**

| Priority Level | Service Level | Credit/Refund |
|---|---|---|
| Critical and High | Less than 5 Incidents per month | None |
| | ≥5 and <10 Incidents per month | 10%  of monthly Support Services Fee |
| | ≥10 Incidents per month | 20%  of monthly Support Services Fee |
| Medium and Low | More than 10 Incidents per month | 5% of monthly Support Services Fee |
| | ≥20 Incidents per month | 15% of monthly Support Services Fee |

*Within this schedule the term "Incident" means an event in which a service level has not been met.*

**THE TEAM**

The contractor will employ a cross-functional poly-skilled team. The team will have a breadth of knowledge across various applications and a depth of knowledge in

the specific applications. The team will consist of the following skills, Business Analyst (Strategy & Requirements Analysis), Quality Analysis and Application Development.