Re: REQUEST FOR NO OBJECTION TO FINANCE PROGRAMMING SUPPORT FOR THE DEVELOPMENT OF A REPORT CUSTOMIZATION COMPONENT FOR PIMA/RIMKU2

1 Background

- 1.1 PIMA or the Performance & Implementation Monitoring Application is an internally developed web based tool that facilitates performance monitoring and reporting. PIMA arose out of the realisation that the lack of effective tool support was hindering Ministries, Departments and Agencies (MDAs) efforts towards monitoring the implementation of Strategic plans. As such, the key goal of PIMA, has been to reduce the "transaction cost" of MDAs in monitoring and reporting on plan implementation.
- 1.2 PIMA does this by adding performance reporting features on a foundation of the Governments Integrated Financial Management System (IFMS) so as to enable the monitoring of both physical and financial implementation concurrently.
- 1.3 Recently, work has been proceeding with Ministry of Planning and Economic Empowerment (MPEE) to continue development on PIMA so as to enable it to address the needs of coordinating agencies. Coordinating agencies are typically central MDAs who have coordination responsibility over the implementation of decentralized National frameworks and programs such as MKUKUTA and PSRP. This new version of PIMA will be known as RIMKU2 or "Ripoti ya Utekelezaji ya Mkukuta 2"
- 1.4 However, work within PO PSM on PIMA, is by no means complete. While PIMA contains a number of pre-defined reports users are not able to customize these reports to more adequately suit their needs. While PIMA integrates with IFMS through a data import routine, this routine has not been formalized and is only semi-automated. As such there is need to enhance PIMA in these two important aspects. It is expected that any work done on PIMA at this stage will also be incorporated into RIMKU2.

2 Objective

- 2.1 The objective of this No-Objection is to seek funds to finance a short term consultancy to provide software development support for PO PSM. This support will be geared towards the development of a software component that enables the customization of reports written in the Report Definition Language (RDL) by **non-technical end users**
- 2.2 This work will have the short term outcome of (1) reducing the number of reports that have to be designed for PIMA/RIMKU2 and the long term outcome of (2) enabling managers, across Government, to more effectively use PIMA/RIMKU2 to meet their informational needs.
- 2.3 In addition, due to the wide spread use of RDL for reporting, it can be reasonably expected that this work could easily be transferred to other E-Government projects such as the HCMIS and IFMS in future.

3 Day to day example of Report customization component benefit's

- 3.1 The PIMA "Activity Implementation" report used for PO PSM programme review meetings correlates physical performance and financial expenditure. This report will display quantitative details such as the schedule status of activities, financial expenditure and the achievement of physical performance targets side by side with qualitative commentary by sub-vote leaders across an MDA.
- 3.2 However, what happens when a leader wants to ask a question such as "which activities have exhausted their fund allocation and are yet to be completed?" or "which activities are more than three months late and have not produced their physical performance targets?". Such information would be useful in exercises such as mid-year budget reallocation or for a PS to prioritize what should be discussed in a PIR.

3.3 While all this information would be available on the "Activity Implementation" report it would be hard to access – due to the **masses of other information** also present. An easy to use Report customization tool would allow **managers to decide for themselves** what information they **need to focus on** in existing reports.

4 Outputs

The consultancy will result in the following main outputs (described more fully in the attached Terms of Reference)

- (1) COMPONENT DESIGN DOCUMENT: Preparation of a brief (2-3 pages) inception report clarifying the scope of the work, highlighting component functionality to be considered and specifying how this functionality will be delivered.
- (2) **PROTO TYPE:** A non-functional the component that can be viewed within a web application and that will depict visually how a user would interact with the component. This will be used to verify the practicality of the component design.
- (3) **UNIT TESTS:** Electronic copy of the programming instructions (code) and data to be used to *test* that the eventual component
- (4) **SOURCE CODE:** Electronic copy of the code used to develop the Reporting component. These programming instructions must be in Microsoft C# or Visual Basic version 2005.
- (5) **COMPONENT:** Compiled (.dll) copy of the Reporting component.
- (6) **USER GUIDE:** Electronic copy of instructions on how an end user would use the component. These instructions are expected to be in the same style as the current PIMA documentation as they will be used as the basis of the online help for the component. This user guide is not expected to be more than 2 pages.
- (7) FINALIZATION REPORT: This will contain (1) instructions on how to integrate the reporting component into Microsoft Visual Studio applications (2) a discussion of any security issues brought about by the component and associated mitigation

strategies and (3) a detailed discussion of how the component works and design trade offs made during implementation. This report is expected to be between 5-6 pages.

Annex 2: Terms of Reference for development of a Report customization component for PIMA/RIMKU2

1 Background

PIMA is an acronym standing for "Performance and Implementation Monitoring Application". It is a tool used by PO PSM and soon, after some enhancement, by other Ministries, Departments and Agencies of the Republic of Tanzania.

In the context of this assignment, PIMA refers to a web application built using Microsoft Visual Studio 2005 running on Internet Information Services (IIS) 5.0 on a Windows 2000 server utilising a Microsoft SQL Server 2005 database server as its primary means for data storage. PIMA incorporates a variety of reports, written in the RDL or Reporting Definition Language XML format

2 Objectives

The main objective of this assignment is to develop software component(s) that can be used to provide a visual interface for configuring the data content of RDL based reports.

3 Outputs

The consultancy will result in the following main outputs (described more fully in the attached Terms of Reference)

- (1) **COMPONENT DESIGN DOCUMENT**: Preparation of a brief document clarifying the scope of the work, highlighting component functionality to be considered and specifying how this functionality will be delivered.
- (2) **PROTO TYPE:** A non-functional mock up of the component that can be viewed within a web application and that will depict visually how a user would interact with the component. This will be used to verify the practicality of the component design.

- (3) UNIT TESTS: Electronic copy of the programming instructions (code) and data to be used to *test* the eventual component. These unit tests must cover the full scope of the component.
- (4) SOURCE CODE: Electronic copy of the code used to develop the Reporting component. These programming instructions must be in Microsoft C# or Visual Basic version 2005.
- (5) **COMPONENT:** Compiled (.dll) copy of the Reporting component.
- (6) USER GUIDE: Electronic copy of instructions on how an end user would use the component. These instructions are expected to be in the same style as the current PIMA documentation as they will be used as the basis of the online help for the component. This user guide is not expected to be more than 2 pages.
- (7) FINALIZATION REPORT: This will contain (1) instructions on how to integrate the reporting component into Microsoft Visual Studio applications (2) a discussion of any security issues brought about by the component and associated mitigation strategies and (3) a detailed discussion of how the component works and design trade offs made during implementation. The report is expected to be between 5-6 pages.

4 Activities

So as to produce the above noted outputs the consultant will be expected to

- (1) Review PIMA with the M & E Database Specialist so as to gain an overview of the context in which the component will work
- (2) Review a Microsoft Access database that implements similar functionality to that expected by the component
- (3) Develop detailed use cases that demonstrate how the component will work from the perspective of the user

- (4) Develop class models, interaction diagrams and other necessary software development artefacts to describe how to implement identified user requirements
- (5) Develop a brief "component design document"
- (6) Develop a proto-type web page(s) that demonstrate how the component will be delivered
- (7) Verify "component design document" and "proto-type" with M & E Database Specialist
- (8) Write "unit tests" for the code required to implement the component design
- (9) Write the code (in C# or Visual Basic, Visual Studio 2005 versions) required to implement the component design
- (10) Integrate component(s) into PIMA and demonstrate that it works with existing reports
- (11) Write user guide, as described in the "Outputs" section of this Terms of Reference
- (12) Write finalization report, as described in the "Outputs" section of this Terms of Reference

5 Clients Input

The client will provide a developer familiar with PIMA for not less than 16 hours during the contract period during which time the developer will

- Demonstrate how the Reporting customization component(s) is expected to fit into PIMA
- (2) Demonstrate a Microsoft Access Application that implements some of the functionality required by this assignment
- (3) Be available for reviews and comments on ongoing work

6 Qualifications and Experience of the Consultant

The consultant should be an effective and experienced software developer with

- (1) Expertise in the development of web components for the .Net framework
- (2) Expertise with the Microsoft Reporting Services architecture
- (3) Expertise in XML development, specifically the Report Definition Language (RDL)
- (4) Expertise in Test Driven Development (specifically NUnit)
- (5) A verifiable track record of delivery in past projects

7 Duration

The maximum duration for this consultancy will be 15 working days from the date of signing the contract