

ANNEX 6.1: PROVISIONAL COSTS FOR WEB-BASED SYSTEMS INTEGRATION

(Note: Cost are excluding all Data Collection and related training aspects)

1.1.1 Summary

Total capital cost of the systems investment amounts to c. US\$ 100,000, comprising approx. 75% foreign costs). The foreign cost component consists mainly of the below items:

Table 1: Total project CAPEX cost estimate – US\$
Source of funds

Foreign Costs	US\$	76,000
Local Costs	US\$	24,000
Total Costs	US\$	100,000

Source: Consultants estimates (US\$)

Note that the local costs include repository hosting cost for 2 years. (Operational expenses). The local cost component in an amount of US\$ 24,000 consists mainly of software development plus procurement of goods.

1.1.2 Foreign costs

The foreign cost component in an amount of US\$ 76,000. - consists of:

- procurement of goods;
- procurement of services; and
- Contingency.

Table Error! No text of specified style in document.2: Foreign project cost estimate – US\$

Foreign Project Cost in US\$

System Design and Installation Costs

No.	Item	US\$
Hardware		
1	Lump Sum KRB	12000
2	contingency	1800
Software		
3		35000
4	contingency	5250
5	travel and expenses	15000
Installation and set-up		
6	Lump sum	2000
Staff Training		
7	Lump sum	5000
Total :		76050

Source: Consultants estimates

1.1.3 Local costs

1.1.3.1 Main components

The local cost component in an amount of US\$ 24,000 consists of:

- Software development costs including Contingencies and
- Agency MoT Repository hosting Operational cost for 2 years.

Table 3 Local project cost estimate – US\$

**Local Project Costs in US\$
Software Development Costs**

No.	Item	US\$
1	Lump Sum KRB	8000
2	Lump Sum MoT	8000
3	University Repository Hosting	8000
	Total :	24000

Notes

- 1 Repository Operations would be 24/7

Source: Consultants estimates

1.1.3.2 Software Development costs and Hardware costs

Development of the repository system. This sum (excluding contingencies) could be broken down as follows:

- System Design 30%.
- Development 25%.
- Functional and load testing 30%.
- Systems Documentation 15%.

Modification of the download links on the individual sites: it is expected that the current site administrators will handle this, as part of their regular duties, although some lump sum allowances are provided. Hardware requirements: for optimum reliability, and availability, it is suggested that each organisation has its own dedicated server, uninterruptible power supply, and hardware firewall. Furthermore, it is suggested that the machines use an industrial grade operating system, which has been especially hardened against intruders, such as BSD. There are some minor costs, such as the installation, and set-up.

1.1.4 Provisional system operations and maintenance costs

The consultant's proposal is to place the Data Repository at a neutral location: in Phase I it would be located at MoT. The server, in particular, should be available continuously. This means having an always-on connection, with sufficient bandwidth, and ideally, a fixed IP address. This area may need addressing. The cost estimates include a limited amount of initial staff training. In terms of the administration of the repositories, the system as envisaged would need minimum intervention, and this would fall under the remit of the various organizations current IT management.

1.2 Qualitative assessment of the framework for data management

1.2.1 Economic Benefits

The capital cost and operating costs of the main components is insubstantial. It appears likely that the project will have economic benefits which will considerably outweigh these establishment and operating costs. The MIS system will provide considerable benefits in providing current information for a range of key sector indicators in an easily accessible environment to sectoral end users and the general public.

1.2.2 Impact on poverty reduction

Poverty Reduction is increasingly a focus of project appraisal and is increasingly seen as an important issue in Africa and elsewhere. The inclusion of focussed poverty indicators within the Socio-economic sub-sector shortlists would lead to greater awareness and other positive impacts.

1.2.3 Possible impact on safety

Transport safety is increasingly a focus of project appraisal and is increasingly seen as an important issue in Europe and in Africa and elsewhere. The inclusion of more safety indicators within the within the sub-sector shortlists would lead to greater awareness and other positive impacts.

1.2.4 Possible impact on other beneficiaries and target groups

The project will provide a number of opportunities for a range of beneficiaries. However, it is important that benefits are optimised through the identification of target groups, and that where necessary, appropriate resources are allocated to facilitate optimisation of benefits. Evidence from other such MIS projects indicates that for user convenience (including ease of access and upload/download time), and cost are primary concerns. Other users might value real-time convenience, and reliable data handling processes and procedures. The sector may increase its customer base if such a customer-responsive system is developed and successfully implemented. This means that systems design, and facilities will have to be provided or designed that meet customer needs and use.

1.2.5 Risks

1.2.5.1 Risk identification

The principal project risks have been estimated as follows:

- a) the agreement/ funding might not be concluded on time;
- b) the TA consultants might not be mobilised on time;
- c) KRB might delay the implementation of the Document Management system in the IT Department and the secondment of staff to assist with the system operations;
- d) MoT might delay the implementation of the Document Management system in the IT Department and the secondment to assist with the system operations;
- e) The MOU for the establishment of the Central Download Repository might be delayed;
- f) the suppliers might be late with the supply and organisation/installation of equipment;
- g) the TA consultant may not be able to manage the implementation on time; and
- h) The money flows do not arrive in time.

1.2.5.2 Risk containment/minimisation strategies

Possible government and donor actions

The minimisation of risks mentioned under items a), b), e) and h) above, for instance, can be assisted through close monitoring by Donors and the Government.

Possible government actions

The minimisation of risks mentioned under items c) and d) above can be reduced if the KRB and MoT will be able implement the Document Management system in their IT Departments, as soon as possible. The secondment of staff from the IT Department would be assisted through the early appointment of TA who can assist in the systems work. The TA could assist, for instance, to workout the optimum structure/requirements of the staff, etc.

Possible TA consultant actions

Risks mentioned under items f), and g) above can be minimised by having an experienced consultant working with assisting KRB and the MoT in the recommended areas at an early date as possible. The consultant would provide Assistance in technical and re-organisational matters only.

1.3 Proposed supply arrangements

The project shall be formed under one package, to minimise the problems between the different locations, organisations, equipment, concepts and programmes. Thus, the internal organisation/logistics required for the programme is expected to be offered by the bidders themselves. The delivery time for any supporting equipment needed is expected to lie between 1-1.5 months.

1.4 Proposed TA arrangements

1.4.1 Main components

The small TA would prepare all software and training for the implementation of the following:

- Establishment of a primary Document Management Facility in the IT Department of the KRB(MoR); and
- Establishment of a secondary Document Management Facility in the IT Department of the MoT; and
- Establishment of a Central Download Repository at MoT;

1.4.2 Technical assistance characteristics

A very small software development team is proposed, since there would be significant benefits through having the same software designer for all three components. A substantial knowledge of web-site implementation will be required.

The preparatory and tendering phases are expected to take place from January 2009 and to be concluded by August 2008. The establishment of a Central Download Repository is expected to take place from October 2009 and to be concluded by December 2009. The establishment of a Document Management Facility in the IT Department of the KRB/MoR is expected to take place from January 2009 and to be concluded by August 2009. The establishment of a Document Management Facility in the IT Department of the MoT is expected to take place from March 2009 and to be concluded by September 2009. The linkages with other Research Groups and Development Agencies (Phase II programme) are expected to be formulated in October 2009.