

***Mass Literacy Campaign
Information and Communications
Technology Infrastructure***

DRAFT

MASS LITERACY CAMPAIGN INFORMATION AND COMMUNICATIONS TECHNOLOGY INFRASTRUCTURE

1. BACKGROUND:

To support the Department of Education's five-year campaign to have South Africa achieve a status of illiteracy free. The Campaign requires an Information and Communications Technology (ICT) infrastructure to be established in the campaign office that supports the delivery and tracking of literacy education to 4.9 million South Africans.

The Campaign Office must be capable of not only serving the immediate requirement of the campaign team but also be flexible enough to support:

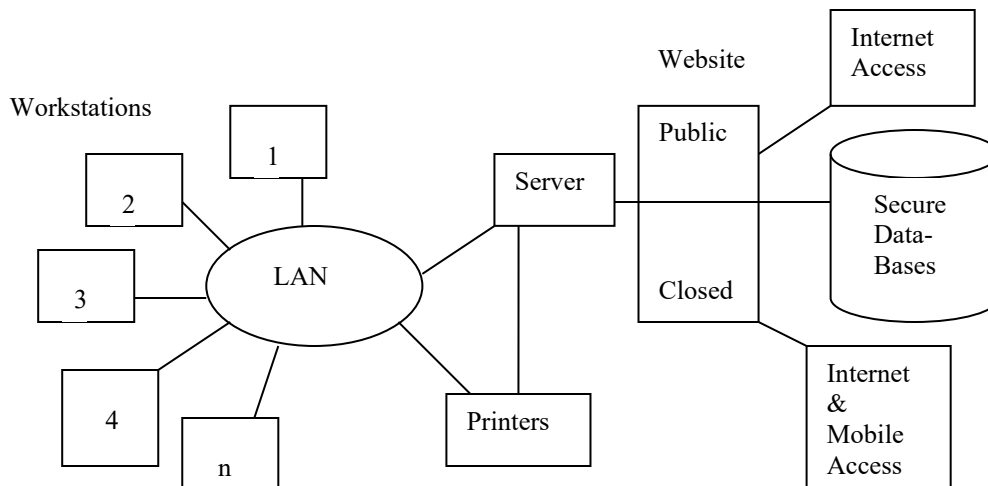
- content management systems,
- learner management system,
- financial management,
- multimedia construction tools,
- materials distribution logistics and warehousing,
- backups,
- monitoring and evaluation,
- remote access by team members and "volunteer" staff across South Africa,
- link to related Government systems such as PERSAL and ID recognition in a safe secure manner,
- archiving all data for historical purposes.

This document serves as a guide for the ICT requirements for the Campaign.

2. SYSTEM REQUIREMENTS

A supplier of technology and services will need to be considered to provide a solution that complies with the specifications agreed by the preparatory task team and outlined below. There is no existing equipment that needs to be considered other than laptops being used by seconded members and the current DoE hardware and connectivity providers and therefore these requirements are being treated as a new installation. The Campaign Office will be installed at the premises of _____ in Pretoria and linked to mandatory Government systems that include PERSAL, financial management and identification number recognition, through both wire line and wireless connectivity options.

Following is a draft schematic of the desired configuration:



2.1 CAMPAIGN OFFICE

This UTP-5, or wireless switched Local Area Network (LAN) must be capable of supporting up to 50 users that will be using Windows standard workstation platform and making use of the office suite of tools to compile documents and publish documents to the web. Requirements for each networked workstation will vary, but at the top end, workstations should have sufficient power and capacity to not only run the above, but should also cater for email and other software such as project management, content management, learner management, financial management, logistics, warehousing, time management software, as well as multimedia.

The users of this network must be able to seamlessly access the working documents on a Server either via the Intranet or Internet. This fault-tolerant Server must have sufficient capacity and expansion capability to cater for Office and Web-based access services that allows for adequate secure document and version management, search and retrieval, content management, learner management, etc...

Regular backup of this infrastructure is required. The document management software must be able to handle all project documents, including office documents, learner and trainer materials, e-mail and list server archives. The main server location is still to be determined and may or may not be co-located with the workstations.

The number of printers is still to be determined. However the campaign office will likely need a high quality color printer attached directly to the LAN, but may be attached to the local server depending on the location of the server.

2.2 INTERNET

The predominant method of access will be via the Internet and it will therefore be important that the infrastructure makes provision for both remote and local users to securely access the information. The ICT infrastructure should allow for a Campaign Web-site and Internet Connection to the Campaign Office, which may require additional technology.

It is intended that the web-site will be hosted by a third-party and not co-located with the project office. The web-site must be able to accommodate public access as well as controlled access through closed user groups using appropriate list server technology and individual staff members. The campaign office must be able to publish/update directly to the web-site and/or contract this activity to a third-party. The Campaign office must be able to administer closed user groups directly.

It is envisaged that 1000's of literacy groups will be established, involving varying numbers of individuals. In addition, project team members and key stakeholders, will need direct access to the web-site. The level of public access is uncertain at this time but is likely to grow through the life of the project. It should be noted that the web-site will be a primary communication vehicle for the Mass Literacy Campaign and various ways need to be considered to significantly increase project exposure through the web-site. For example, one thought could be to establish a virtual technology region for multilingual multimedia content construction and provide a South African gateway into an existing international network (Cuba, New Zealand, Cuba, Brazil). An important aspect of establishing Campaign visibility will be to register an appropriate project domain name (ideally, www.literacy.org.za).

Initial connection between the Campaign office LAN and the web-server may be through the DoE Intranet. However, provision should be considered for direct high-speed Internet access for trainers/volunteers/learners to access different management systems.

2.3 SECURITY

Besides the basic virus software and security provided by the groupware and officeware software there is a need for access control possibly through the use of a Firewall. Given that the Campaign office may record personal information of staff, volunteers, learners and payment transactions, a way to ensure security must be provided. The establishment of basic security policies and procedures should form part of the physical and logical security considerations for the local and remote users.

2.4 INSTALLATION CONFIGURATION AND CUSTOMIZATION

The solution also requires installation, configuration and customization services to make the Campaign Office fully operational. It will include all Intranet, Internet and Security related services and process definitions, as well as access to related Government databases.

2.5 SERVICE DELIVERY

To ensure that service levels are maintained it will be important to consider what backup is required beyond what is provided by the capabilities of the server. Although assumed that the provision of power is adequate it should be seen as a risk that could affect the assurance of service delivery and disaster recovery.

2.6 CAMPAIGN OFFICE TRAINING

Technology transfer to personnel supporting this installation is a key requirement in addition to providing basic education to staff who may be using some of the technology and software for the first time. It is envisaged that an information session to the campaign members and a users-guide may be a minimum requirement.

2.7 NATIONAL INTER-OPERABILITY

All technology and software selected must be fully locally supported across the country and a written warranty from the original supplier and/or third party supplier must be provided. Where application development is required the Mass Literacy Campaign will require localized national support as compliance for delivery.

Discussions with key stakeholders Department of Home Affairs, Department of Social Welfare, Department of Health, Department of Labor, Department of Defense, GCIS (amongst others) must still be considered.

2.8 MAINTENANCE

Besides the manufacturers' warrantee that will apply to the supplied hardware, software and services, any annual maintenance agreements must clearly state any terms and condition that apply.

Provision should be considered for at least one major software upgrade during the life of the Campaign.

2.9 APPROACH

The ICT choices should be scalable allowing for timeous upgrading as the Campaign gathers steam and minimal disruption to delivery.

3. ESTIMATED BUDGET

An estimated budget including an annual maintenance fee will need to be determined for the current fiscal year.