

CONCEPT PAPER FOR CONNECT AFRICA SUMMIT - RASCOM MULTI PURPOSE TELECENTER

The purpose of this concept paper is to explore the feasibility of installing 50000 (fifty thousand) telecenters in underserved rural areas of the member countries of RASCOM and thereby connecting them to the RASCOM satellite.

Name of Organization: Regional African Satellite Communications Organization (RASCOM)

Organization website: <http://www.rascom.org>

Organization Type: Intergovernmental Commercial Satellite Organization

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Name of the Project: RURAL ACCESS IN AFRICA USING RASCOM TERMINALS

1.0 PROJECT OBJECTIVES

RASCOM's rationale for initiating and supporting the multipurpose telecenter project:

- ✓ Reinforce impact of its stated mission of promoting rural connectivity throughout the continent after the launch of the satellite.
- ✓ To serve the information and communications needs of people living in under served rural areas of Africa for the improvement their socio-economic conditions thru the use of ICT and thereby participate in poverty reduction.
- ✓ Ensure a quick take-up of the satellite capacity which will in turn ensure an early break even point for the satellite project in which RASCOM holds its biggest investment today.
- ✓ Develop a profitable and sustainable revenue generating mechanism which will ensure its own financial sustainability and independence.

2.0 PROJECT IMPLEMENTATION APPROACH

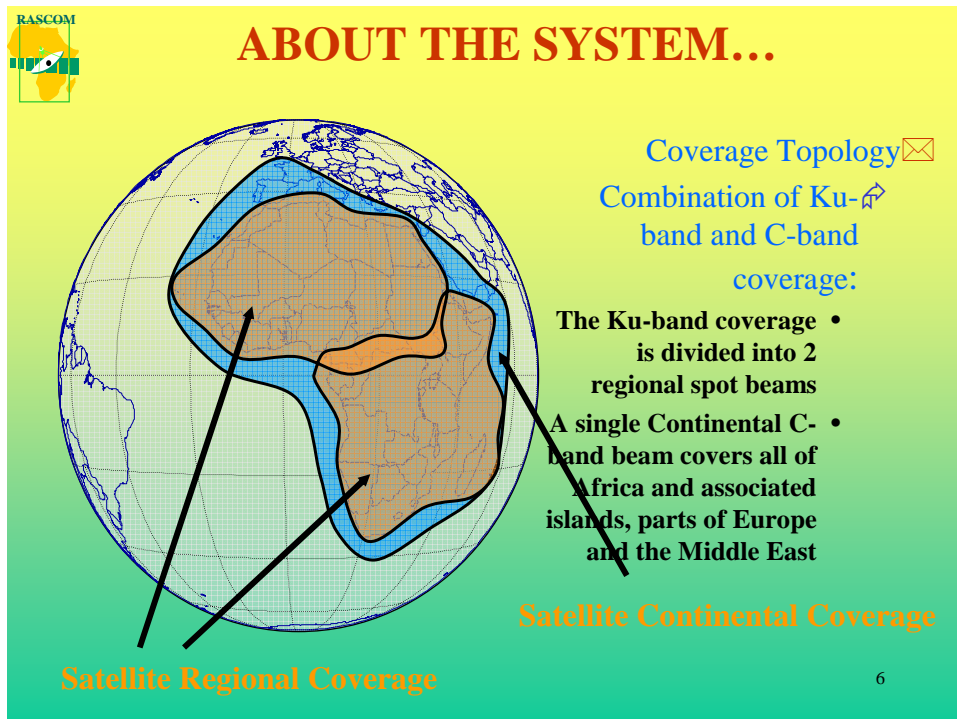
Within the framework of the Connect Africa initiatives:

- In coordination with targeted partners develop a project concept paper and subject it to a rigorous in-house review and analysis.
- Identify partnership which will bring expertise and know-how, financial equity, management capability, and thereby reinforce the project's credibility.
- Identify financial institution partners who could bring funding to the project. Priority should be given to financial institutions particularly development financial institutions which identify themselves with the mission of promoting connectivity in rural areas of Africa.

3.0 TECHNOLOGY

RASCOM MULTIPURPOSE TELECENTER (RMPT) will rely on the RascomStar-QAF's satellite technology, to provide the backbone of its IP network. The launch of the satellite is on 18th December 2007 and start of commercial 3 to 6 months later.

The RASCOM satellite provides a continental coverage of Africa hence offering the same quality of services in all rural areas at the same price.

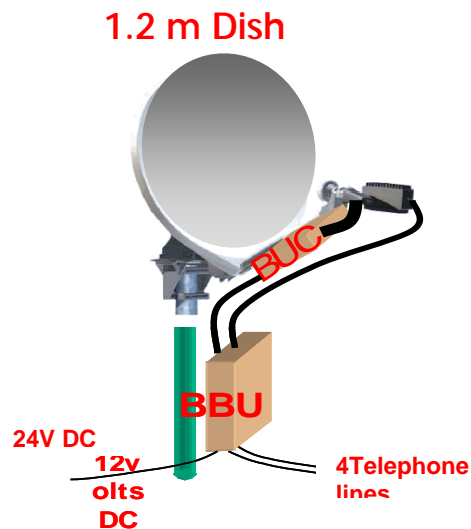


The satellite system will wirelessly support simultaneous voice and data channels delivery to subscriber's anywhere in Africa including the associated islands thru the RASCOM terminal. Its low costs, ease of deployment, and minimal maintenance requirements make the terminal ideally suited for rural use.

Rural Terminals are low cost, easy to install, and full outdoor. They can communicate directly together in the same country and/or with any gateway located anywhere in Africa.

Terminals support up to 4 telephone lines, each with prepaid and post paid capabilities, fax and data connectivity which can support up to 10 internet connections (PCs) hence being also ideal for rural schools within the NEPAD e-school project.

In isolated villages terminals can feed on DC and solar power panels. To lower consumption they have a sleep mode that is activated each time user are not communicating.



THE RASCOM TERMINAL

4.0 FINANCING OF THE PROJECT

The project aims to serve as a catalyst for generalising the establishment and development of universal access funds in the RASCOM member countries. The universal access funds will serve as the first-tier of the funding level in the member countries to be complemented with financing sources from development institutions, private investors and in-country operators within the framework of Connect Africa.

Financing mechanisms which combine financial investors' pledges identified at Connect Africa, govt universal access funds and other financing sources will be targeted to secure funding.

In order to meet the project's service delivery objectives to the rural population, a number of scenarios have been investigated. The following definitions have been considered in our different options (scenario):

- ✓ Small size telecenters – each having: 1 RASCOM terminal and 2 computers with 2 printers
- ✓ Medium size telecenters - each having: 1 RASCOM terminal and 5 computers with 2 printers
- ✓ Large size telecenters – each having: 1 RASCOM terminal and 10 computers with 2 printers.

Each scenario corresponds to a level of investment in infrastructure, buildings and equipment on the ground to meet the expected local demand. The 4 scenarios investigated are summarised below:

Scenario A

This scenario will include:

- 25,000 small size telecenters
- 15,000 medium size telecentres
- 10,000 large size telecentres.

The total investment under this scenario is US\$770 mill.

Scenario B

This scenario will include:

- 25,000 small size telecenters
- 25,000 medium size telecentres

The total investment under this scenario is US\$ 670 mill.

Scenario C

This scenario will include:

- 25,000 medium size telecentres
- 25,000 large size telecentres

The total investment under this scenario is US\$ 1095 mill.

Scenario D

This scenario will include:

50,000 medium size telecentres

The total investment under this scenario is US\$ 845 mill.

5.0 CONTENT AND APPLICATIONS

Demand for kiosk services will be driven by their usefulness in a rural context. Literacy rates, language barriers, and income levels all affect the types of IT-enabled services that telecenters (kiosks) can offer. To overcome these obstacles, the project and its partners will on a long term develop relevant local language content and services aimed at all sectors of rural society. Although it may not be possible to list all the type of services that may be on demand given the diversity of the locations the following gives an idea of what type of services could be offered by each centre:

- public telephone, fax and e-mail and photocopying;
- data communication services (file transfer and e-mail) through modem for simple applications in the following fields:
 - ✓ telemedicine (exchange of medical records, statistics, epidemic surveillance data, transmission of X-rays and EKG test data, updated training for health workers, consultations with specialists through e-mail, etc.);
 - ✓ education and research (access to electronically stored libraries, training material and research papers and, possibly, trial courses for teachers, based on existing material, adapted as required;
 - ✓ trade information services (access to databases with market information, contacts with suppliers and customers through e-mail, etc.);
 - ✓ government and community information services;
 - ✓ business support;
 - ✓ shared office facilities, including IT equipment (computer printer, etc.);

- ✓ training in use of office application software for local entrepreneurs as well as for government, and business employees;
- ✓ attract micro finance institutions and commercial banks to leverage the network to develop money transfer services and widen their financial service offerings.

In a summary, there is enormous potential to leverage RASCOM MULTI-PURPOSE TELECENTER (RMPT)'s rural networks in ways that take advantage of both existing and new technologies in the areas of health, finance, agriculture, e-government and civil society empowerment.

6.0 PILOT PROJECT

The overall aim of the pilot project which will be comprised of designing and installing as many as 100 sites in at least 5 countries so as to test the concept of an affordable and accessible model of a Multipurpose Community Telecentre (MCT) that can later be replicated at other sites in rural areas of the African continent. In this context, the pilot project will also help ascertain the development of modalities to support a sustainable, rural based telecenter within the African context and refine the applications and services which meet the needs of the rural population.

7.0 REGULATORY & LICENSING

In implementing this project we are putting in action the mission vested in RASCOM by its Signatories to provide ICT services to underserved areas of the rural Africa. We believe that by working thru the appropriate regulatory bodies in each country the licensing issue to service the rural areas should not meet any difficulties in achieving the project objectives. We therefore expect that all the member countries will take favourable actions to facilitate the licensing requirement under the project.