



**International Civil Aviation Organization
Western and Central African Office**

**AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP (APIRG)
SECOND MEETING OF COMMUNICATIONS, NAVIGATION AND
SURVEILLANCE SUB-GROUP (CNS/SG/2)
(Dakar, 22-25 May 2007)**

Agenda Item 4: Communication Systems

(Presented by Kenya)

1. INTRODUCTION

1.1 Kenya has experienced shortcomings in the provision of communication Services due to the low quality of services provided by the telecommunication provider.

1.2 It was decided to replace the terrestrial and satellite communication links with a dedicated VSAT network.

1.3 At the time of initiation, the NAFISAT project was under discussion. It was therefore decided that the system be restricted to domestic requirements to complement the NAFISAT network which will meet international requirements. Kenya is in the process of implementing digital circuits with higher speeds with Mumbai, Entebbe and Cairo as an interim measure before the Implementation of NAFISAT.

2. DISCUSSION

Purpose

2.1 The National Aeronautical Very Small Aperture Terminal (VSAT) Network has been designed to provide Voice and Data Communication Interconnections between the Kenya Civil Aviation Authority (KCAA) stations. The Network is expected to provide a reliable and efficient communication infrastructure to meet present and foreseeable requirements.

2.2 The Network provides services for Aeronautical fixed and mobile services, remote control and monitoring of Air Navigation Facilities and Interconnection of Surveillance Radar stations.

Stations Interconnected

2.3 The Network control centre is at Jomo Kenyatta International Airport (JKIA). The Surveillance Services at Mombasa, Wajir, Poror, Eldoret and JKIA are linked to JKIA to facilitate the display of the integrated Radar Air situation at JKIA.

2.4 The VHF extended Range stations at Ngong Hills, Mombasa, Poror and Wajir are linked to JKIA to provide a full VHF coverage of the Nairobi flight Information Region.

2.5 The AFTN and ATS-DS Circuits at Mombasa, Eldoret, Wilson, Kisumu, Lokichoggio and Malindi are linked to JKIA.

2.6 A service telephone network interconnecting all the above stations with each other and with KCAA headquarters and the Central Workshops has been put in place.

Implementation Programme

2.7 The VSAT network was purchased using open tender in the year 2005.

(i) The contract was awarded to Alldean Satellite Network (K) Ltd in June 2005 and the supply and installation commenced in June 2006.

(ii) The contract sum is USD 1,462,850.20 for the 17 terminals and other outdoor interfacing equipment.

(iii) The contract is in the final stages of Implementation. All the terminals have been installed and interfacing is in the final stages.

(iv) The Installation and Commissioning will be completed by 30th June 2007.

(v) The performance of the connected circuits has shown a high rate of performance with an average availability better than 97%.

3. ACTION TO BE TAKEN BY THE MEETING

3.1 The meeting is invited to note Kenya's implementation of the Domestic VSAT which when working with NAFISAT will ensure that all the Aeronautical Communication links are satellite based hence improving performance.

3.2 The meeting is also invited to note Kenya's commitment to the Implementation of NAFISAT and Interim measures being taken to upgrade the speeds of some circuits.
