



INTERNATIONAL CIVIL AVIATION ORGANIZATION

THE FOURTEENTH MEETING OF THE NAFISAT SUPERVISORY BOARD  
(NAFISAT-SVB/14) (CAIRO, EGYPT, 27 – 28 NOVEMBER 2019)

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**Agenda Item 6: NAFISAT High-Level Business Case**

*(Presented by ATNS)*

**SUMMARY**

This paper aims to present the high-level business case of the NAFISAT network's ability to carry the cost of additional services for the remainder of the term of the current contract.

**REFERENCES**

MoU between NAFISAT States and ATNS & IATA  
Convention on International Civil Aviation (Article 28)  
APIRG/18  
APIRG/19  
APIRG/22  
Thirteenth Meeting of the NAFISAT Supervisory Board

**1. INTRODUCTION**

- 1.1 The NAFISAT States recognized the improved reliability of aeronautical fixed service telecommunications network (AFTN) and air traffic service direct speech (ATS/DS) communications in the North Eastern part of the Africa-Indian Ocean (AFI) Region and in the interface with adjoining regions during the first phase of the NAFISAT network operation that commenced in 2007. Through this recognition, the NAFISAT States expressed their wish to continue with the second phase of the services for another seven-year period from 2015 to 2022.
- 1.2 Article 4 of the NAFISAT MoU recognizes the legal responsibilities of the NAFISAT States as per Article 28 of the Convention on International Aviation, that each Contracting State undertakes to provide, in its territory, airports, radio services, meteorological services and other air navigation facilities to facilitate international air navigation, and adopt and put into operation the appropriate standard systems of communications procedure.
- 1.3 The NAFISAT network was upgraded in 2017 to continue to provide voice and data communication (ATS/DS and AFTN) services and to migrate from the traditional ATS/DS and AFTN services to the modern equivalent ATN applications of ATS Message Handling System (AMHS). The network is also able to support the provision of a variety of aeronautical telecommunication services, including the ATS Inter-facility Data Communications (AIDC) and Voice over Internet Protocol (VoIP).

Additionally, the network is capable of supporting the following value-added services:

- 1.1.1. Computer-to-computer data exchanges between ATS flight data processing systems (FDPS);

- 1.1.2. Operational meteorological data exchanges;
- 1.1.3. Operational aeronautical information services exchanges;
- 1.1.4. Aeronautical administrative support;
- 1.1.5. ADS-B and Radar data exchanges; and
- 1.1.6. VHF Extended range.

## **2. DISCUSSION**

- 2.1. During the thirteenth meeting of the NAFISAT Supervisory Board Meeting, the network Service Provider was mandated to provide a Business Case on the provision of value-added services and the implication to the network and report to this meeting.
- 2.2. The Network Service Provider carried out a technical feasibility study in November 2018 and a financial sustainability study in February 2019. The technical feasibility study revealed that the NAFISAT network in its current form, will be able to support the mandated services of AFTN/AMHS and ATS/DS, AIDC and VoIP without changes to the current specifications (hardware, software, bandwidth etc.). The network is also technically capable of supporting the value-added services. It should however be noted that these value-added services will require additional bandwidth and in some cases hardware.
- 2.3. The financial sustainability study revealed that under the current funding model of USD 10 per FIR crossing, the network will be able to carry the cost of the additional (value-added services) services until the end of term of the agreement in 2022. It should be noted that the addition of value-added services will increase the financial burden on the current resources and administrative processes.

## **3. ACTION BY THE MEETING**

- 3.1 The meeting is invited to approve:
  - 3.1.1. The addition of value-added services on the network based on the outcome of the technical feasibility study, the financial sustainability study, as well as the retention of the current funding model of USD 10 per FIR crossing for the remainder of the current agreement.;
  - 3.1.2. That the Network Service Provider engages with the Member States on their plans to rollout these Value-Added Services.