



Information & Communication Technologies Authority (ICTA)

ICTA

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INFORMATION AND COMMUNICATION TECHNOLOGIES AUTHORITY

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DECISION OF 14 DECEMBER 2018 ON AERONAUTICAL MOBILE SATELLITE SERVICE

Date of Release: 16 JANUARY 2019

The Information and Communication Technologies Authority in exercise of its statutory functions under the Information and Communication Technologies Act 2001 as amended issues the following Decision pursuant to Section 17(3) combined with Sections 18(p) and 16 (g) of the said Act.

This decision shall come into force with immediate effect, repealing and replacing the Decision of 04 October 2010 on Aeronautical Mobile Satellite Service.

The Information and Communication Technologies Authority,

Considering that,

- (a) The ICT Authority has received requests from two foreign companies requesting authorisation to provide in-flight entertainment (IFE) and Wi-Fi in-flight connectivity (IFC) services on-board aircrafts equipped with their solutions in the Mauritian airspace during all phases of flight.
- (b) The ICT Authority has received a representation from Air Mauritius, on its intention to provide similar services on-board its aircrafts.
- (c) These services are provided through the operation of an Aircraft Earth Station operating in the Aeronautical Mobile Satellite Service.
- (d) The 29.5-30.0 GHz (Earth-to-space) and the 14.0 -14.5 GHz (Earth-to-space) frequency bands have been allocated for Mobile Satellite Service as per the Mauritius Frequency Allocation Table.
- (e) The ICT Authority has conducted a consultation exercise with the Civil Aviation Department of Mauritius in order to gather its views on the provision IFE and IFC services on board both Mauritian and foreign aircrafts at all altitudes.
- (f) The Civil Aviation Department has no technical objection as regard to the provision of IFE and IFC services during all phases of flight subject to the installation of equipment for provision of IFE and IFC services on board aircraft be approved by the primary certification authority of the aircraft manufacturer.

DECIDES

that AMSS equipment may be operated on board of Mauritian Aircrafts and foreign aircrafts *at all stages of flight* in the Mauritian airspace subject to the following conditions:-

- a) The AMSS equipment to be used on board of Mauritian aircrafts shall have to be certified by the Primary Certification Authority and the State of Design of the aircraft which shall have issued:-

- (i) the necessary certificates of conformity to safety standards defined by the Radio Technical Commission for Aeronautics (RTCA) and;
 - (ii) supplemental type certificate data sheet for the aircraft.
- b) The AMSS equipment to be used on board of Mauritian aircrafts shall be licensed under the Aircraft Station Licence.
- c) Aircraft earth station (AES) may be operated during all phases of flight for the provision of IFE and IFC services on board aircrafts.
- d) The provider of the AMSS system shall not cause harmful interference to, and shall not claim protection from, any other lawfully operating station in particular in the Fixed Service (FS) in the band 14.3 – 14.5 GHz, the Fixed Satellite Service (FSS) (Earth-to-Space) in the band 14 – 14.5 GHz, 29.5 – 29.9 GHz and the Radio Astronomy Service (RAS) in the band 14.47 – 14.5 GHz.
- e) The AMSS system provider shall ensure that its system in the band 14-14.5 MHz, operates **strictly** in compliance with any limits established by the International Telecommunication Union (ITU) to protect other services allocated internationally, especially those limits defined in the ITU-R Recommendation M.1643.
- f) Should harmful interference result from the operation pursuant to an authorisation, the AMSS system provider shall cease operations immediately upon notification of such interference, and shall immediately inform the ICT Authority, in writing, of the incident;
- g) Aircraft earth stations operating under any AMSS system shall be monitored and controlled by a ground-based network control and monitoring centre. Such stations shall be able to receive "enable transmission" and "disable transmission" commands from the network control centre and shall cease transmission immediately after receiving any "parameter change" command until receiving an "enable transmission" command from the network control centre.
- h) The network control centre shall monitor operation of each aircraft earth station to determine if it is malfunctioning, and each aircraft earth station shall self-monitor and automatically cease transmission on detecting an operational fault that could potentially cause harmful interference to a fixed satellite service network.
- i) Stations operated under any AMSS system shall not be used to provide air traffic control communications.

- j) Any AMSS system provider shall take all reasonable measures to prevent human exposure to harmful non-ionizing radiation exceeding the maximum permissible International Commission on Non-Ionizing Protection (ICNIRP) exposure limits. The exterior surface of the antenna shall be prominently marked with a warning of the potential for exposure to high levels of radiofrequency energy.

- k) The provision of in-flight entertainment (IFE) and Wi-Fi in-flight connectivity (IFC) services on-board of Mauritian aircrafts during all phases of flight may be subject to the appropriate Commercial Licence, where applicable.