



Inflight Data Transmission System for Non-essential Monitoring and Entertainment (IDSNM)

1. Definition

The Inflight Data Transmission System for Non-essential Monitoring and Entertainment (IDSNM) described here, consists of electrical on board equipment for the transmission and distribution of video and audio signals as well as other nonessential data. Such equipment is not required by any aviation rule in force today for any flight or aircraft. Its functionality itself does not deliver any contribution to the safety of flight. **It must neither be connected to nor interact with any aircraft system except electrical power and mechanical mounting.**

IDSNM can be used for example for passenger entertainment, information and communication as well as for observing the environment or for research applications.

2. Requirements and Acceptable Means of Compliance

The basic requirement is that IDSNM does not interfere with the essential aircraft systems in any case. Also from the mechanical point of view the equipment and its installation must not be a source of danger even in emergency conditions (e.g. crash or fire). The IDSNM should be operated by the cabin crew, additional persons or fully automatic. It must not affect the workload of the flight crew in any case. The applicant has to show compliance with the following technical requirements if applicable: JAR-25.601, JAR-25.603, JAR-25.1301, JAR-25.1309(a). For the equipment the aforementioned requirements from JAR-25 (Amendment 15) should be applied in an analogous manner.

Acceptable means but not the only means of compliance are given in FAA AC25-10 and AC25-16. The technical requirements related to the equipment itself are to be complied with. The equipment has furthermore to be designed in a manner, that the installation requirements can be fulfilled. It has to be noted that not all parts of the AC's are applicable. If the AC's mentioned above refer to other standards the newest revision of the standard has to be used. Instead of US and FAA rules the corresponding European and JAA rules are valid. For the procedures JAR-21 subparts A, O and Q respectively N-O, N-Q have to be applied.

In order to show compliance, at least the following tests according to EUROCAE/RTCA ED-14D/DO-160D have to be performed: For equipment located inside the aircraft tests described in subparts 4, 4.5, 5, 7, 8, 15, 16, 17, 21, 25 must be conducted. It might be possible (especial for equipment to be installed outside the aircraft), that additional tests in accordance to other subparts of the above document are necessary. All tests related to the mechanics have to be carried out including the mounting provisions.