

## **GUIDANCE ON THE IMPLEMENTATION AND USE OF BACKUP FREQUENCIES**

### **1. Assessment for the need for backup frequencies.**

1.1 Backup frequencies may be operationally required to provide an alternative air/ground communication channel in cases where an operational radio frequency is not available.

*Examples include intentional interference, unintentional interference (e.g. badly designed FM broadcasting stations), stuck microphone, phony air traffic controllers.*

1.2 Implementation of backup frequencies should be limited only to the following ATC services:

- |   |                                  |                        |
|---|----------------------------------|------------------------|
| • | Aerodrome Surface communications | AS                     |
| • | Tower services                   | TWR                    |
| • | Approach services                | APP-L, APP-I and APP-U |
| • | Area control services            | ACC-L, ACC-U           |
| • | Meteorological information       | VOLMET                 |
| • | Flight Information services      | FIS-L, FIS-U           |

Other air/ground communication services such as ATIS, AFIS, generic unspecified air-to-air (A/A), generic unspecified air-to-ground (A/G) services, generic unspecified General Purpose (GP) services and aeronautical operational control services (AOC) do not require backup communication channels.

1.3 Backup frequencies should not be provided when communication channels are lost due to malfunctioning of the ground infrastructure. Adequate backup facilities in cases of malfunctioning of the ground infrastructure (or parts thereof) should be in place.

*Examples are equipment failure, power loss and loss of ground communication links to remote transmitter / receiver sites.*

1.4 The assessment of the required number of backup frequencies should be kept to a minimum. Where possible, it should be based on experience (e.g. number of days per year that a communication channel is not available).

1.5 Where operationally feasible, arrangements should be in place to share backup frequencies either between different services (at the same ATC center) or between different facilities (e.g. different aerodromes or different ACC/FIS services from different ATC centers).

1.6 In the ICAO COM list, backup frequencies are as such identified.

### **2. Backup frequency for short distance communications**

2.1 Short distance communications that may require backup frequencies include AS, TWR and APP services

2.2 Backup frequencies should only be implemented at aerodromes with a clear operational requirement.

2.3 The number of backup frequencies for the combined services in 2.1 above should not exceed two (with a maximum of one backup frequency for TWR and one backup frequency for APP services).

*Note: a single backup frequency can in principle be used to provide for a backup communications channel for both a TWR and an APP service or for a TWR and an AS service.*

2.4 Adjacent ATS units are encouraged and where possible, operationally feasible and spectral efficient to make suitable arrangements to share backup frequencies.

**3. Backup frequencies for long distance communications**

3.1 A study or safety case should be presented to justify the number of backup frequencies required for ACC and FIS services.

3.1 Adjacent ATS units are encouraged and where possible, operationally feasible and spectral efficient to make suitable arrangements to share backup frequencies.

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