Guidelines to reduce fatigue in operational environment

Background

In order to prevent and mitigate against the effect of fatigue, the following guidelines are proposed to be implemented and monitored during the implementation of the ATCOs' rostering system. The rostering system shall include activities intended for the provision of ATC service and non-operational but profession-related activities of ATCOs.

Activities considered to be duties may be:

- 1. ATC service provision
- 2. Preparing, attending and delivering training
- 3. TRM sessions
- 4. ATC-related expertise provision, e.g. procedures development, system validation, safety event investigation, project support, etc.
- 5. Medical and language checks for certification purposes
- 6. Professional development activities agreed with the ATC service provider
- 7. Office activities

Maximum hours per duty period

Maximum hours per duty period should not exceed 8 hours. It should not exceed 12 hours, provided that the extension is validated by a safety risk assessment.

Maximum consecutive working days with duties

Recommended consecutive working days should not exceed 5 days.

Where applicable, fixed forward rotating roster principles should be applied, e.g. Morning shifts, followed by afternoon shifts, ending with night shifts and off days.

Maximum consecutive ATCO duty periods encroaching WOCL

1. The number of consecutive early morning shifts shall not exceed two.

In such cases it shall be ensured that the minimum rest period thereafter is 24 hours before commencement of the next shift.

This is applicable to shifts encroaching the WOCL starting before 7am.

Minimum rest period

The average rest period after a duty period should be 11 hours in order to allow for adequate time that includes rest, sleep, meals, preparing for sleep and life admin.

The ratio of duty periods to breaks

Breaks within a duty period should be planned according to workload, complexity of ATC provision, time of the day, type of rostering system. The minimum duration of a break should be 30 minutes.

Maximum time providing ATC service without breaks

1. The maximum time providing ATC service should be 2 hours for personnel providing ATC service working with visual terminals and/or radar displays.

Intervals can be reviewed periodically or when an increase in traffic load was experienced. ATSUs experiencing low traffic loads for prolonged periods of time may extend shift sessions to 3 hours.

Night duty

- 1. Maximum consecutive ATCO duty periods encroaching the Window of Circadian Low (WOCL), such as night shifts, should not exceed 2, provided that they are followed by at least a 48-hour rest period by the end of the second ATCO duty period encroaching the WOCL.
- 2. Upon the conclusion of a period of night duty, any air traffic control personnel shall be rostered a day off.

Late PM shift followed by an early AM shift

Rostering an individual for a late afternoon shift followed by an early morning shift should be avoided where possible or alternatively be limited to a single occasion per individual per cycle.

Off days in a cycle

1. Operational staff shall be rostered for a minimum two sets of two or more consecutive days off per cycle. Where possible, three sets of two consecutive days off per cycle is recommended.

These limits shall not exceed other applicable legal obligations with regards to working time limitations.