# European Aviation Safety Agency

Report N° IFTSS/2016/002/FI on the notification by Finland on its intention to grant an approval for a flight time specification scheme deviating from certain provisions of CS FTL-1 on the basis of Article 22(2) of Regulation (EC) No 216/2008.

#### A) BACKGROUND

By letter of 09 March 2016, the Republic of Finland notified the Agency of its intention to approve an individual flight time specification scheme (IFTSS) that deviates from CS FTL.1.235 (c)(1), on the basis of Article 22(2) of Regulation (EC) No 216/2008<sup>1</sup> (the Basic Regulation).

In the notification the Finish competent authority (hereafter Trafi) explained its intention to approve an IFTSS for Finnair (hereafter the operator), deviating from the certification specification provision requiring a minimum reduced rest period of 10 hours out of base to demonstrate compliance with ORO.FTL.235 (c).

Trafi quotes the operator's proposed measures as follows:

#### Reduced Rest

Reduced rest may be used only under fatigues risk management.

The minimum planned reduced rest period is 12 hours at home base and 10 hours out of home base including 1 hour for travelling to / from place of rest apply as follows:

- (1) the rest period following the reduced rest is extended by the difference between the minimum rest period above.
- (2) the FDP following the reduced rest is reduced by the difference between the minimum rest period specified above.
- (3) there is a maximum of 2 reduced rest periods between 2 recurrent extended recovery rest periods.
- (4) reduced rest must not be used prior to or following split duty.

The minimum rest away from home base can further be reduced to 9 hours but to not less than 7 hour sleep opportunity provided in addition to items 1 to 4 above:

- (a) reduction is applicable in LHR;
- (b) the preceding local night include 8 hours' sleep opportunity between 22-08;
- (c) no duties between preceding local night (as defined in point b) and flight to LHR;
- (d) the 7 hour sleep opportunity in LHR falls between 22:00 and 08:00 hours in the time zone to which a crew member is acclimatised;
- (e) no following duties after flight from London during that local day;
- (f) the following local night include 8 hours' sleep opportunity between 22-08;
- (a) Reduction of rest period at LHR is not allowed by Commander's discretion.

<sup>&</sup>lt;sup>1</sup> Regulation (EC) No 216/2008 of 20/02/2008 of the European Parliament and of the Council on common rules in the field of civil aviation and establishing a European aviation Safety Agency and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2003 and Directive 2004/36/EC.



## **B) LEGAL FRAMEWORK**

Article 22 (2) of the Basic Regulation states the following:

"With regard to flight time limitation:

- (a) the Agency shall issue the applicable certification specifications to ensure compliance with essential requirements and, as appropriate, the related implementing rules. Initially, the implementing rules shall include all substantive provisions of Subpart Q of Annex III to Regulation (EEC) No 3922/91, taking into account the latest scientific and technical evidence;
- (b) a Member State may approve individual flight time specification schemes which deviate from the certification specifications referred to in point (a). In this case the Member State shall without delay notify the Agency, the Commission and the other Member States that it intends to grant approval for such an individual scheme;
- (c) upon notification the Agency shall, within one month, assess the individual scheme on the basis of a scientific and medical evaluation. Thereafter the Member State concerned may grant the approval as notified, unless the Agency has discussed the scheme with that Member State and proposed changes thereto. Should the Member State agree with these changes, it may grant the approval accordingly;
- (d) in the event of unforeseen urgent operational circumstances or operational needs of limited duration and non-repetitive nature, derogations to certification specifications may apply provisionally until the Agency expresses its opinion;
- (e) should a Member State disagree with the Agency's conclusions concerning an individual scheme, it shall refer the issue to the Commission to decide whether that scheme complies with the safety objectives of this Regulation, in accordance with the procedure referred to in Article 65(3);
- (f) the contents of individual schemes which are acceptable to the Agency, or on which the Commission has taken a positive decision in accordance with point (e), shall be published."

The deviations refer to CS FTL.1.235 (c)(1), which reads:

"The minimum reduced rest periods under reduced rest arrangements are 12 hours at home base and 10 hours out of base."

### C) EVALUATION

The Agency reviewed the proposal with the help of a panel of experts<sup>2</sup>. The experts were provided in advance with the documents submitted by Trafi and the Agency's comments to the documents submitted by Trafi. The experts were invited to comment on the operator's proposal, Trafi's assessment of the operator's proposal and on the Agency's comments. The Agency's and experts' comments and questions were forwarded to Trafi. Documents and comments were discussed during a WebEx meeting on 28 April 2016. Trafi was invited to reply to questions and comment on the remarks concerning the proposed deviation during the Web Ex meeting on 28 April 2016.

The following remarks result from the examination of the documents submitted by Trafi to support the proposed deviation:

 Trafi has verified the operator's compliance with ORO.FTL.120. On-going involvement of frontline staff in the operator's Fatigue Risk Management (FRM) in accordance with ORO.FTL.120 is

<sup>&</sup>lt;sup>2</sup> Panel composition IFTSS 2016/002/FI published on Circabc



- achieved through a fatigue safety action group (FSAG) including amongst its members a line pilot and two operating cabin crew members.
- The deviation is only applicable to the operator's Helsinki London Heathrow Helsinki (HEL-LHR-HEL) route (outbound flight in the early evening hours, overnight reduced rest, inbound flight the next morning) and for crew members based in HEL.
- The minimum duration of rest applying commander's discretion in accordance with ORO.FTL.205(f) is 10 hours. Applying commander's discretion resulting in a rest period of less than 10 hours would require a derogation from ORO.FTL.205 (f) under the provisions of Article 14(6) of Regulation (EC) No 216/2008.
- The hours between 22:00 and 08:00 in the time zone where a crew member is acclimatised are favourable for high quality sleep. A 7-hour sleep opportunity falling between 22:00 and 08:00 is an effective measure to ensure a highly efficient rest period.
- Operational disruptions may lead to delayed arrival in LHR. The delayed arrival may in turn lead
  to a reduced rest period during which the 7-hour sleep opportunity might not fall anymore
  between 22:00 and 08:00. In that case, the efficiency of the reduced rest period could be
  compromised.
- Operational disruptions have the potential to increase workload (e.g. diversions or delays).
   Therefore, this rotation needs to be managed with a view of proactively addressing potential operational disruptions.
- A negative impact on the roster pattern on the following duty days prior to the next extended recovery rest period (ERRP) might result from operational disruption on this rotation. Proactive management of the impact of this rotation on the operator's robustness of rosters is needed to ensure the effectiveness of the proposed mitigation measures.
- A rest period directly following this rotation in addition to being extended by the difference between the reduced and the minimum rest period specified in ORO.FTL.235(b) that always includes an 8-hour sleep opportunity between 22:00 and 08:00 seems to be an appropriate measure to avoid the accumulation of additional fatigue resulting from the reduced rest period.
- Ensuring that crew members have access to food and drink on board might help reducing the time required for physiological needs. This measure therefore helps crew members to optimise the efficiency of the reduced rest period by maximising the time available for sleep.
- For this rotation, the potential fatigue risk emanates from curtailed night sleep during the layover,
  not from high workload or the duration of the FDP. Pilots and cabin crew members are equally
  affected by curtailed night sleep. Therefore, a proactive and reactive fatigue reporting system
  needs to include both categories of air crew members. A broad participation in fatigue data
  collection is desirable to ensure obtaining statistically relevant data from a representative sample
  of flight and cabin crew members to verify the effectiveness of the proposed system.

### D) CONCLUSION

Having reviewed the deviation notified by the Republic of Finland, the Agency sees no reason to consider that the proposed measures do not lead to an equivalent level of protection to that attained by the application of CS FTL-1, provided the following conditions are fulfilled in addition to the mitigation measures listed under A):

 Trafi shall ensure that the effectiveness of the proposed mitigating measures is continuously monitored by Fatigue Risk Management (FRM) in accordance with ORO.FTL.120.



- Trafi shall ensure that the operator's fatigue hazard identification process includes a proactive and reactive fatigue reporting system open to flight and cabin crew members.
- The operator shall take measures to ensure a broad participation in fatigue data collection exercises to obtain statistically relevant data from a representative sample of flight and cabin crew members to continuously verify the effectiveness of the proposed system.
- The use of commander's discretion to further reduce the reduced rest period in LHR shall not be possible.
- The reduced rest period shall be at least 10 hours long if a delayed arrival at LHR leads to a reduced rest period during which the 7-hour sleep opportunity does not fall anymore between 22:00 and 08:00 where the crew member is acclimatised.
- The operator shall provide meal opportunities during the FDPs preceding and following the reduced rest to ensure that the maximum time is available for sleep during the reduced rest.
- The operator shall include measures to proactively address potential operational disruptions during the HEL-LHR-HEL rotation in its procedures.
- Trafi shall agree specific performance indicators with the operator to monitor the reliability of its rostering system including the HEL-LHR-HEL rotation.
- Trafi shall require data collection and assessment to evaluate the potential fatigue impact of the combination of the HEL-LHR-HEL rotation with subsequent flight duty periods (FDPs). The operator shall report periodically to Trafi on this analysis.

This deviation shall be subject, after being applied, to an assessment by the operator to determine the effectiveness of the above mitigating measures. Trafi shall, within 2 years, conduct an independent assessment based on information provided by the operator and share the results of their assessment with the Agency for re-evaluation.

Signed on CV 66/

Executive Director

