

Assessment N° IFTSS 2018/003/FI under ARO.OPS.235 (d) of Regulation (EU) No 965/2012 of a deviation from CS FTL.1.235 (c) approved to the operator Finnair ('reduced rest deviation')

A) BACKGROUND

1. On 3 July 2018, the Finnish competent authority ('TRAFI') notified EASA of their intention to grant a permanent approval to the operator *Finnair* for a deviation from CS FTL.1.235 (c) ('reduced rest deviation') and requested an assessment under ARO.OPS.235 (d) of Regulation (EU) No 965/2012¹.
2. *Finnair* reduced rest deviation scheme is an individual deviation from the minimum rest periods set out in CS FTL.1.235 (c) of Regulation (EU) No 965/2012, which was initially approved by TRAFI on 3 June 2016 on the basis of ORO.FTL.235(c) *idem* and following a positive evaluation of EASA (Evaluation Report No IFTSS/2016/002/FI).
3. *Finnair* reduced rest deviation scheme has been implemented on the route HEL-LHR-HEL.
4. In accordance with ORO.FTL.125 (d), the operator submitted to TRAFI a report² analysing the effects of the approved deviation on aircrew fatigue.
5. TRAFI provided EASA with the following documents: two scientific studies carried out by the operator on sleep and alertness of both flight crew and cabin crew operating the reduced rest rotation; operator's application for a permanent approval; TRAFI's decision on operator's application for a permanent approval; an analysis of the data collected during the initial approval period and the related fatigue risk assessment.

B) LEGAL FRAMEWORK

6. ARO.OPS.235 (d) of Regulation (EU) No 965/2012 reads as follows:

*'(d) Approved deviations or derogations shall be subject, after being applied, to an assessment to determine whether such deviations or derogations should be confirmed or amended. **The competent authority and the Agency shall conduct an independent assessment based on information provided by the operator.** The assessment shall be proportionate, transparent and based on scientific principles and knowledge.'*
7. ORO.FTL.125 (d) of Regulation (EU) No 965/2012 reads as follows:

'(d) For the purpose of point ARO.OPS.235 (d), within 2 years of the implementation of a deviation or derogation, the operator shall collect data concerning the granted deviation or derogation and analyse that data using scientific principles with a view to assessing the

¹ Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council.

² Impact of the AY reduced rest deviation on crew member fatigue and alertness, 2.5.2018

effects of the deviation or derogation on aircrew fatigue. Such analysis shall be provided in the form of a report to the competent authority.'

8. ORO.FTL.235 (c) of Regulation 964/2012 reads as follows:

'(c) Reduced rest

By derogation from points (a) and (b), flight time specification schemes may reduce the minimum rest periods in accordance with the certification specifications applicable to the type of operation and taking into account the following elements:

- (1) the minimum reduced rest period;*
- (2) the increase of the subsequent rest period; and*
- (3) the reduction of the FDP following the reduced rest.'*

9. The deviation refers to CS FTL.1.235 (c), which reads:

'(c) Reduced rest

- (1) The minimum reduced rest periods under reduced rest arrangements are 12 hours at home base and 10 hours out of base.*
- (2) Reduced rest is used under fatigue risk management.*
- (3) The rest period following the reduced rest is extended by the difference between the minimum rest periods specified in ORO.FTL.235 (a) or (b) and the reduced rest.*
- (4) The FDP following the reduced rest is reduced by the difference between the minimum rest period specified in ORO.FTL.235(a) or (b) as applicable and the reduced rest.*
- (5) There is a maximum of 2 reduced rest periods between 2 recurrent extended recovery rest periods specified in accordance with ORO.FTL.235(d).*

C) EVALUATION

10. As required by ARO.OPS.235 (d) EASA, assisted by a panel of FTL/FRM experts³, conducted an independent assessment of the report provided by the operator. The panel met on 13 September 2018. A representative from TRAFI was also given the possibility to attend the panel meeting in order to answer questions and provide clarifications.

11. The examination of the documents as well as the answers provided by both TRAFI and the operator showed that:

- In the context of a wider study on *Finnair pilots' sleep*, operational data on sleep and alertness of 9 pilots during the HEL-LHR-HEL reduced rest rotations was gathered (August 2014 – February 2015). Later on, during the reduced rest rotation implementation, the sleep and alertness of 15 cabin crew members were also measured (13 August 2017 – 13 October 2017). The operator conducted a crew survey on the rotation in April and May 2017 as the crew representation can be considered adequate. This ensured statistically relevant data from a representative sample of flight and cabin crew members to continuously verify the effectiveness of the proposed system;
- The operator effectively manages fatigue hazards associated with the reduced rest rotation under their FRM. Finnair has implemented predictive, proactive and reactive hazard identification and data collection processes, except crew performance data (a proactive data

³ Panel composition IFTSS 2018/003/FI published on Circabc.



source). Trafi attends Finnair FSAG meetings frequently and has also performed an FRM audit to ensure that the effectiveness of the mitigating measures is continuously monitored;

- The operator monitors the robustness of its rostering system, including the alertness predictions for the inbound flight from LHR after a reduced rest. In addition the operator monitors all instances of use of commander's discretion and fatigue calls. On the reduced rest rotation in particular, the OM-A forbids the use of commander's discretion.
- There is evidence to show that the rest at LHR is being prolonged, 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.
- The reporting time for this trip is later and most crew members have had their normal evening meal just before HEL-LHR sector. No duties other than other-standby are assigned to crew members prior to HEL-LHR sector. At the hotel, crew members are entitled to a hotel breakfast. On-board, crew members are provided with crew catering. Coffee, tea, water and a selection of cold drinks are also available.
- The following measures to monitor potential operational disruptions during the reduced rest rotation have been implemented:
 - occurrence reports (ASRs) and fatigue reports (FRs);
 - alertness predictions; overall average prediction is ≈5 KSS;
 - punctuality and regularity of the route HEL-LHR-HEL;
 - length of the actual rest obtained at LHR;
 - rest and duty periods on the day after;
 - early reporting times, days off, sickness, fatigue, family issues, actual rest and duty times for those crew members who have duty the following day.
- No fatigue issues have been reported in relation to the local night rest and duty on the next calendar day, following the reduced rest rotation. Additionally, no fatiguing duty combinations have been identified based on roster analysis.

D) CONCLUSION

12. EASA concluded that the continuation of the deviation for an unlimited period of time would ensure a level of protection equivalent to CS FTL-1 provided that:

- the operator *Finnair* remains in compliance with the conditions of TRAFI's approval; and
- the operator's FRM safety assurance process continues to monitor the reduced rest rotation on HEL-LHR-HEL route by gathering data from the operating aircrew.

Signed on 24.10.18


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