



Cabin Crew Fatigue: A Foreseeable and Manageable Safety Concern

Introduction

Within the aviation industry, cabin crew fatigue is a well-recognised threat to safety, which remains a main concern across Europe. Fatigue impairs one's judgment, alertness, emotions, communication and decision-making abilities, which are critical for normal operations and crucial during emergency situations. Thus, when considering the safety-related role of cabin crew in abnormal circumstances, when managing passengers, and whilst coordinating with the cockpit crew, fatigue leads to a notable operational risk.

Recognised as a predictable hazard, fatigue demands a proactive managerial approach through training, regulation and organisational safety culture. The European Union Aviation Safety Agency - EASA (2025) has reasserted this by issuing the Best Intervention Strategy BIS15 "Aircrew Fatigue (SI-0039)", which recognises fatigue as an underlying safety problem that requires a well-coordinated action between training organisations, operators and cabin crew members.¹

This publication aims to support Cabin Crew Training Organisations - CCTOs in increasing awareness of fatigue, whilst consolidating competence and reporting cabin crew behaviour, in accordance with the European regulations, as

well as safety information and EASA's instructions on Fatigue Risk Management - FRM.

Apprehending Cabin Crew Fatigue

Fatigue is defined as *"a physiological state of reduced mental or physical performance capability resulting from sleep loss, extended wakefulness, circadian phase, and/or workload (mental and/or physical activity) that can impair a person's alertness and ability to perform safety related operational duties"*.²

In aircraft cabin operations, fatigue is often caused by high cumulative workload resulting from: multiple duties; late finishes, early starts and night flights; standby assignments followed by flight duties; operational disruptions which lead to prolonged wakefulness; circadian rhythm disruption and inadequate acclimatisation.

Cabin crew fatigue usually results in impaired judgment, slower reaction time, decreased problem-solving capabilities, reduced communication effectiveness and greater susceptibility to errors. Such effects are of particular concern when performing in unprocedural, time-critical or emergency events.

Scientific research shows that cabin crew frequently experience sleep deprivation and fatigue due to operational demands, irregular rosters, circadian disruption and different time zones.³

EASA's BIS15 "Aircrew Fatigue (SI-0039)" further outlines that fatigue cannot be managed through prescriptive limits alone and that crew fatigue reports remain a vital, yet inconsistent, collected safety data source.¹

European Safety Data

According to the safety investigation underpinning the BIS15, which examined fatigue related occurrences recorded in the European Central Repository between 2019 and 2023, it has been identified that there were no serious incidents or accidents associated with crew fatigue. Despite this, several concerning trends were identified, including: a 2023 significant increase in fatigue related episodes, which reached around 21 reports per 1 million flights; inadequate detail in numerous reports to support and enable meaningful analysis, and a significant increase in fatigue reporting across Member States and operators.¹

Such an outcome reflects that fatigue-related risks may be irregularly recorded, under-reported or poorly investigated, rather than absent. Hence, the improvement of both the quality and quantity of fatigue reports remains a vital safety objective.

Regulatory Framework and Strategic Direction

Within Europe, cabin crew fatigue is addressed primarily through the Air Operations Regulation and related Flight Time Limitations - FTL, which impose limits on duty, rest, and cumulative exposure.⁴ Nevertheless, EASA accentuates that complying with the FTL alone does not ensure adequate alertness during actual operations.

EASA's BIS15 emphasises that an effective fatigue prevention depends on a shared responsibility structure which includes cabin crew, operators and training organisations. Additionally, it also highlights that around 20% of non-compliances which were identified during the operational standardisation inspections related to FRM and FTL matters, accentuating the urge for better training, stronger oversight and improved standardisation.¹

EASA's current strategy is built on three main complementary pillars, which are: standardisation and regulatory oversight of FRM and FTL implementation; ongoing regulatory development and monitoring of FTL evaluation; and safety promotion, which includes fatigue management training and reporting guidance.

Fatigue Management Shared Responsibilities

Cabin Crew Responsibilities: These include optimising the use of rest opportunities, constantly assessing personal fitness for duty, applying fatigue mitigation techniques

learned during the training and fatigue reporting, which should be regarded as a positive safety behaviour rather than a personal shortcoming.¹

Operators' Responsibilities: Operators bear responsibility for ensuring that fatigue risk is reduced to a level that is as low as reasonably practicable. This includes designing rosters that safeguard sleep opportunities and minimise cumulative fatigue, conservatively manage operational disruptions when duty periods or wakefulness are extended, and ensure adequate recovery periods are allocated following night duties and high fatigue risk rotations. Besides, a non-punitive fatigue reporting systems that deliver meaningful feedback should also be in place and where applicable, FRM processes or Fatigue Risk Management System - FRMS should be fully incorporated into the operator's Safety Management System - SMS.

The Role of Cabin Crew Training Organisations

CCTOs play a crucial role in conveying the regulatory intention and safety strategy into operational competence and professional judgement. Fatigue training should provide cabin crew the opportunity to understand the core fatigue mechanisms, the capability to identify fatigue-related impairment, and the competence to implement practical mitigation strategies. Fatigue reporting and the self-declaration of unfitness for duty should also be covered. A scenario-driven, evidence-based learning approach should be adopted. Effective training includes a discussion on rostering and disruption circumstances, as well as assessment methods that focus more on judgement and decision-making rather than on memorising procedures. Thus, fatigue management should form a core part of the cabin safety culture.

Conclusion

Cabin crew fatigue is fundamental to aviation operations; however, the related risks are inevitable. European safety data depicts how the effective management of fatigue goes well beyond knowing the rules alone. It depends on a coordinated approach that brings together clear duty limitations, strong organisational practices, meaningful training, and an open culture which supports fatigue reporting.

EASA's BIS15 highlights the key priorities for enhancing aviation safety in Europe through the strengthening of fatigue awareness, the enhancement of training effectiveness and improvement in reporting. CCTOs play an important role in this process by embedding fatigue management into everyday professional practice and ensuring that cabin crew have both the confidence and understanding required to make safety-driven decisions.

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References

- ¹ European Union Aviation Safety Agency (2025). *Best Intervention Strategy BIS15: Aircrew fatigue (SI-0039)*.
- ² International Civil Aviation Organization (2015). *Fatigue management guide for airline operators*.
- ³ van den Berg, M. J., et al. (2023). Managing cabin crew fatigue during ultra-long-range operations. *Frontiers in Physiology*.
- ³ Wen, C. C. Y., et al. (2023). Fatigue and sleep in airline cabin crew: A scoping review. *Frontiers in Public Health*.
- ⁴ European Union Aviation Safety Agency (2025). *Easy Access Rules for Air Operations (Regulation (EU) No 965/2012)*.
- ⁴ European Union Aviation Safety Agency (2023). *CS-FTL.1 - Issue 1, Amendment 1*.