

Fatigue Safety Performance Indicators

A Key Component of Proactive Fatigue Hazard Identification

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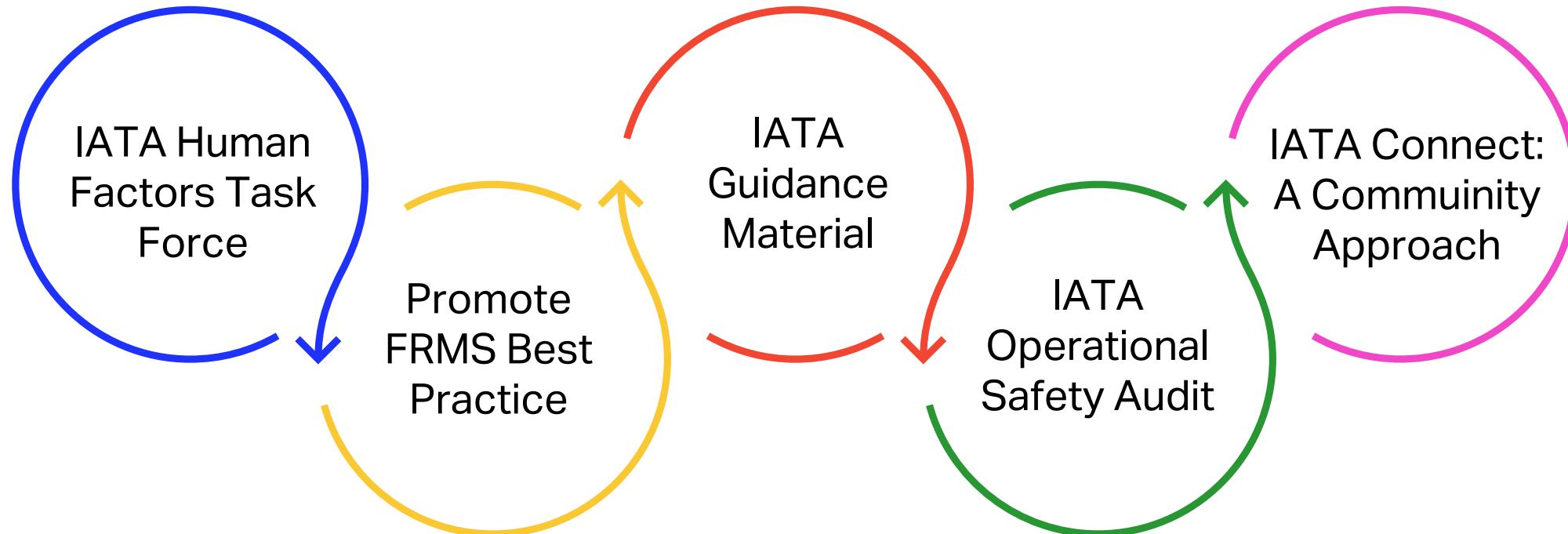
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9 June 2025

IATA Engagement on Fatigue Management





IATA Safety Leadership Charter



Safety Leadership Charter

Guiding Principles

1. Lead obligation to safety through words and actions.
2. Foster safety awareness with employees, the leadership team, and the board.
3. Guide the integration of safety into business strategies, processes, and performance measures.
4. Create the internal capacity to proactively manage safety and collectively achieve organizational safety goals.
5. Create an atmosphere of trust, where employees are encouraged and confident to report safety-related information.
6. Establish a working environment in which clear expectations of acceptable and unacceptable behaviors are communicated and understood.
7. Create an environment where all employees feel responsibility for safety.
8. Regularly assess and improve organizational Safety Culture.



INTENT

The IATA Safety Leadership Charter represents a commitment by industry leaders to the continuous evolution of safety culture within their organizations and by IATA to support this evolution worldwide. It is founded on the principle that a positive safety culture supports open reporting and learning; it facilitates the effective management of safety risks and creates employee engagement based on trust. It acts as an essential enabler for a successful business and a thriving aviation industry.

DECLARATION

I, the under-signed, endorse the IATA Safety Leadership Charter. By signing the Charter, I pledge my air commitment to continuously evolve safety culture by:

- Embedding Charter principles into our organization(s) through measurable, practical actions, and extent possible, sharing with IATA and industry information on progress, including opportunities and challenges, to deliver these actions.
- Inspiring attitudes and behaviors in teams at every level to deliver continuous improvement in performance and operational resilience.

Nurturing an environment of trust where people are willing to share safety-related information within the organization.

Showing collaboration with industry, government and strengthening other stakeholders that may assist in achieving safer operation and strengthening its safety DNA.

PRINCIPLES

1. Commitment to safety through words and actions.

2. Foster safety awareness with employees, the leadership team, and the board.

3. Guide the integration of safety into business strategies, processes, and performance measures.

4. Create the internal capacity to proactively manage safety and collectively achieve organizational safety goals.

5. Create an atmosphere of trust where employees are encouraged and confident to report safety-related information.

6. Establish a working environment in which clear expectations of acceptable and unacceptable behaviors are communicated and understood.

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8. Regularly assess and improve organizational Safety Culture.



IATA Safety Leadership initiative

1 Sign the Charter

2 Demonstrate Commitment

3 Share with Industry

Commitment
From The Top

Practical
Application

Lessons-learned &
Best Practices

IATA safety activities

Safety Culture Assessment



I-ASC

Assess ● Understand ● Improve

Risk-Based IOSA

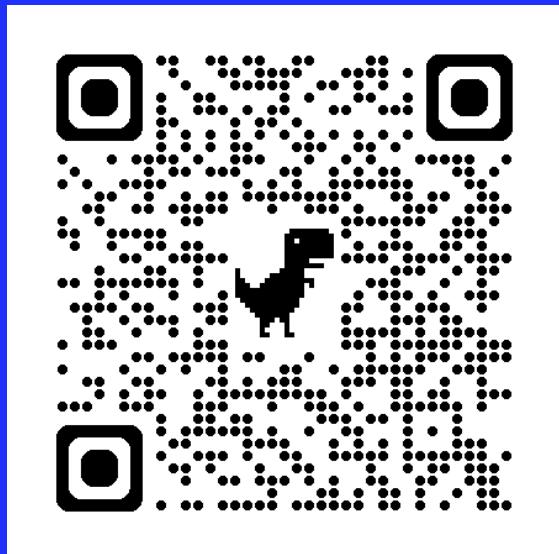


IOSA

Maturity Assessment Criteria



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safety@iata.org



<https://www.iata.org/en/programs/safety/safety-leadership/>



IATA Human Factors Task Force



humanfactors@iata.org

Fatigue Management Best Practices

- IATA fatigue SPI guidance published since 2014
- HFTF is working on updating and upgrading it by the end of year

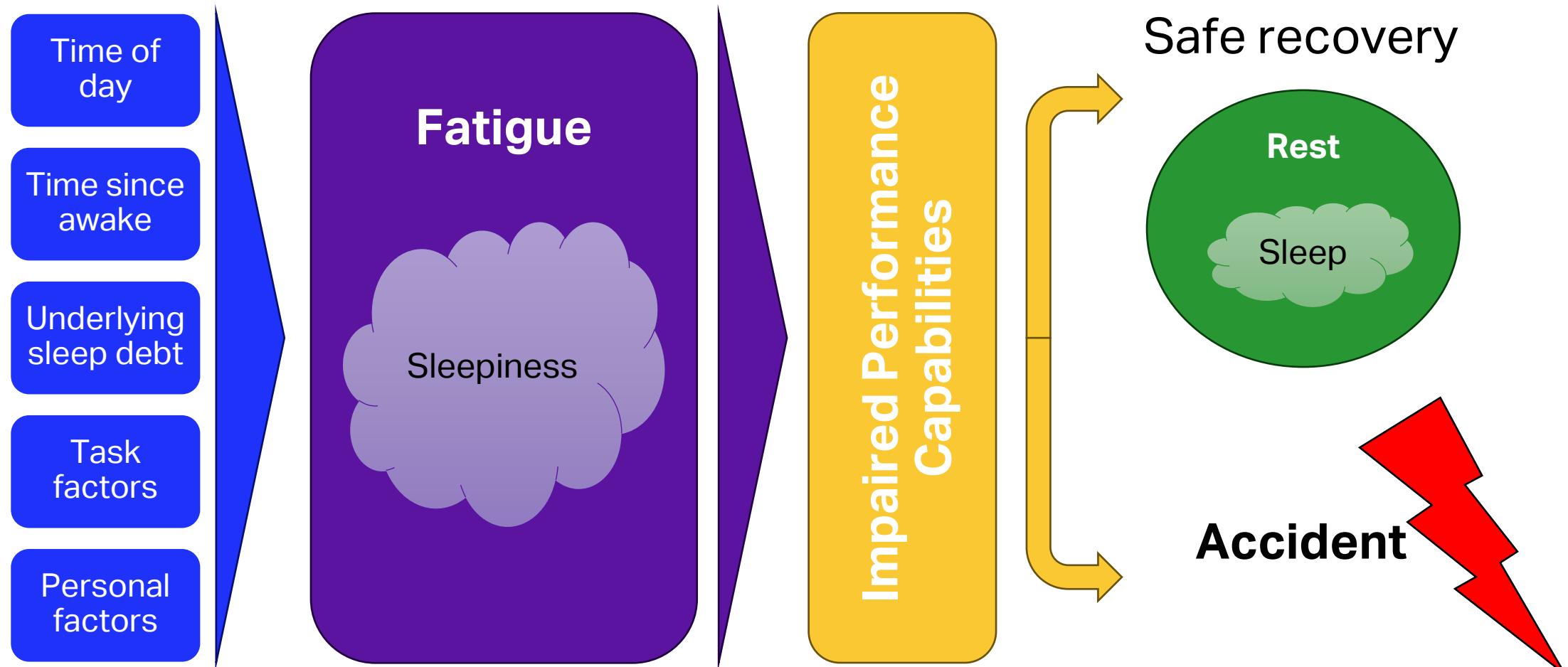
What's cooking?



The screenshot shows the IATA website with a navigation bar at the top. The 'PROGRAMS & POLICY' section is highlighted. The main content area is titled 'Fatigue Risk Management'. It includes a sidebar with a navigation menu for 'PROGRAMS & POLICY' under 'Safety', including 'Fatigue Risk Management' which is currently selected. The main content area discusses the importance of fatigue management and provides details on the prescriptive and performance-based approaches. It also links to 'Implementing Fatigue Management Strategies' and an 'Implementation guide for operators'.



Core Knowledge: The Power of Fundamental Definitions



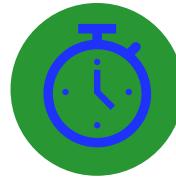
Back to Basics: Embracing Scientific Foundations



The need for sleep: Periods of wake need to be limited. Getting enough sleep (both quantity and quality) on a regular basis is essential for restoring the brain and body.



Sleep loss and recovery: Reducing the amount or the quality of sleep, even for a single night, decreases the ability to function and increases sleepiness the next day.



Circadian effects on sleep and performance: The circadian body clock affects the timing and quality of sleep and produces daily highs and lows in performance on various tasks.



The influence of workload: Workload can contribute to an individual's level of fatigue. Low workload may unmask physiological sleepiness while high workload may exceed the capacity of a fatigued individual.

Edition Two Draft: Elevating Fatigue SPI Standards

1

Tailored taxonomy

2

Iterative process with feedback loops

3

Fatigue SPIs and metrics

4

A balanced scorecard

- Your operation, your hazards, your risks, your data, your taxonomy
- Fatigue sources
- Risk levels
- Operational impacts

- Data
- Metrics
- Indicators
- Mitigation efforts
- Actionable insights

- Predictive, proactive & reactive hazard identification
- Various data sources
- Leading, lagging, hygiene and system indicators

- Duty hours and operational conditions
- Safety & Fatigue reporting
- Rostering, rest and sleep
- Mitigation and fatigue mgmt

Air Europa: A practical perspective



Air Europa

Air Europa's fleet includes

- 18 Boeing 737
- 25 Boeing 787 (10-788 and 15-789)

Our routes

- Latin America
- US
- Europe

Headquarters

- Palma de Mallorca - Spain



Effective Reporting System

The diagram illustrates the workflow of the Air Europa Digital Reporting Portal. It consists of three panels connected by blue arrows:

- Panel 1: Home Screen**

Reports disponibles:

 - REPORTE TRIPULANTE DE VUELO (NO ASOCIADO A VUELO)
 - REPORTE TRIPULANTE DE CABINA DE PASAJEROS
 - SAFETY REPORT

Portal de Reportes Digitales v1.2.0. Frontend v1.4.5
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- Panel 2: Search Screen**

Búsqueda

SAFETY REPORT

SELECCIÓN DEL REPORTE

ASUNTO: *

SELECCIÓN DEL VUELO

Fecha Inicio: 28/4/2025 Fecha Fin: 1/5/2025

Matrícula (ECXXX): N° Vuelo (Sin CIA):

Mis vuelos NO asociado a un vuelo

Buscar Limpiar
- Panel 3: Search Screen (Focused on Fatigue)**

Búsqueda

SAFETY REPORT

SELECCIÓN DEL REPORTE

ASUNTO: *

FLIGHT OPERATIONS

CABIN OPERATIONS

FATIGUE

SECURITY

GROUND SAFETY

MAINTENANCE SAFETY

Fecha Fin: 1/5/2025

Matrícula (ECXXX): N° Vuelo (Sin CIA):

Mis vuelos NO asociado a un vuelo

Buscar Limpiar



ZEUS

- All reports received are registered in our safety database for its investigation and management.
- Registers are filed during an unlimited period of time. Safety database has been developed in-house and allows to execute all department management processes efficiently, including risk assessments, safety actions and management of changes.
- The database is improved every 3 weeks using agile methodologies.



Proactive Fatigue Indicators

- Number of fatigue reports related to:
 - rest in hotel
 - shuttle HTL-APT
 - rostering modifications
- Number of crew members “not fit for duty”
- Use of commanders discretion/ fdp
- Scheduling reports



MANUAL DE GESTIÓN DE FATIGA DE TRIPULANTES

CREW FATIGUE MANAGEMENT MANUAL

AEA-ME-044-R08

Elaborador:	Revisor:	Aprobador:
		
Responsable de GFT: Sasa Janine Leal Tennberg	Responsable de Seguridad Operacional: Jose Antonio Salazar Herrero	Director Responsable: Richard Clark Hall
Fecha: Febrero 2025	Fecha: Febrero 2025	Fecha: Febrero 2025



Proactive Scheduling Indicators

- Differences between actual and scheduled
- Number of night duties and late finishes per crew member
- Number of minimum rest periods prior to an FDP per crew member/month
- Monthly ratio of duty time/rest periods per crew member and month



MANUAL DE OPERACIONES PARTE A: General / Básico

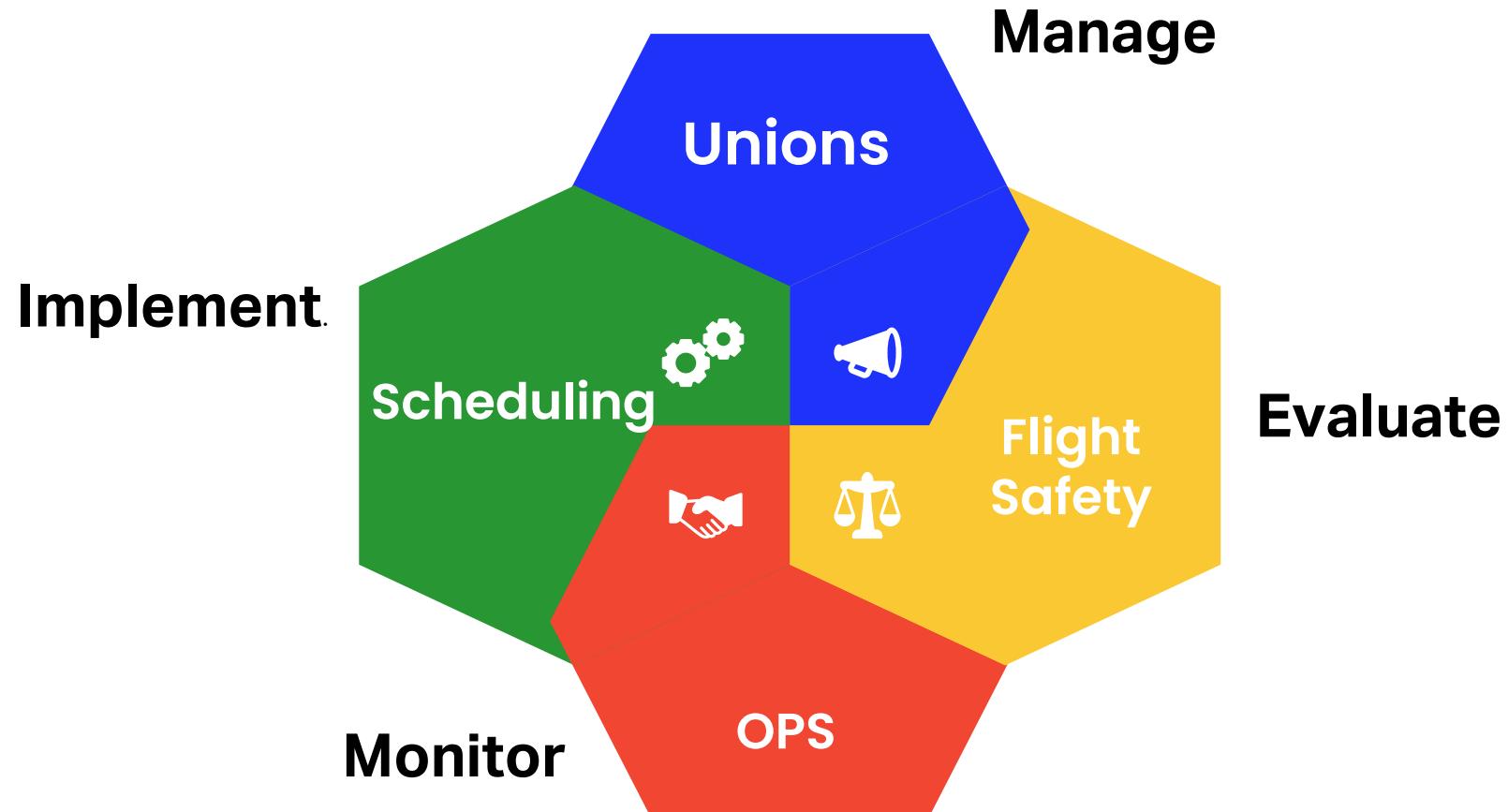
OPERATIONS MANUAL PART A: General / Basic

AEA-MOP3 (AC)-003

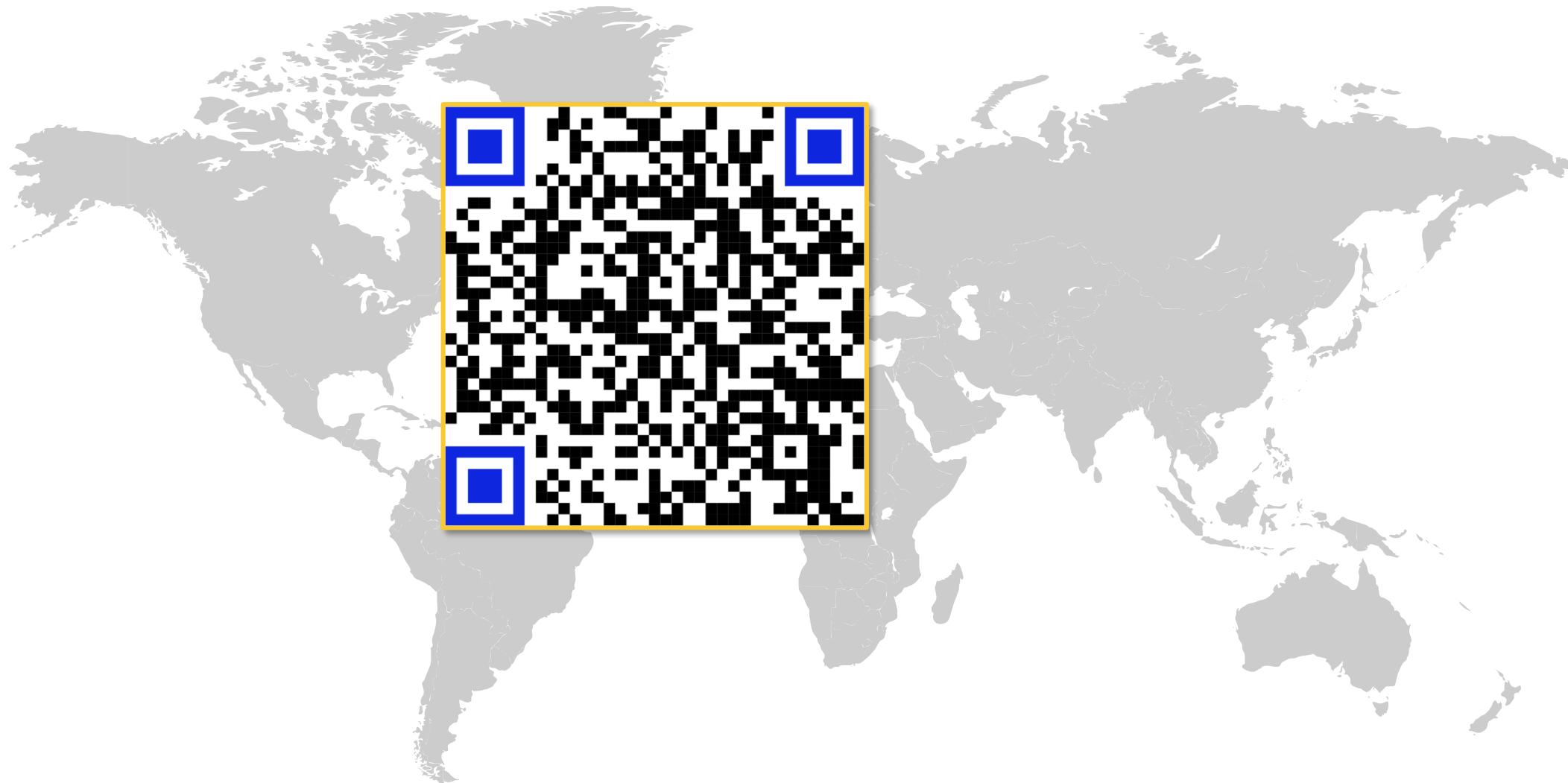
REVISION: 161

Elaborado por: Prepared by:	Revisado por: Revised by:	Aprobado por: Approved by:
Firmado por REBOLLO FERRER LETICIA - ***3687** el día 10/04/2025 con un certificado emitido por AC FNMT Usuarios	Firmado por ROSELLO CORRO JUAN JOSE - ***0274** el día 10/04/2025 con un certificado emitido por AC FNMT Usuarios	BAIGET MAY JUAN BUENAVENTURA - 43121354B Firma digitalizada por BAIGET MAY JUAN BUENAVENTURA - 43121354B Fecha: 2025.04.10 10:46:43 +02'00'
Técnico – Dirección de Operaciones	Adjunto al Director de Operaciones	Director de Operaciones

Assurance: FSAG



Join the Human Factors and Fatigue Group at IATA Connect



"We strongly believe that sharing best practices and lessons learned is key to enhancing awareness of Human Factors, for more resilient safety and better operational outcomes".

