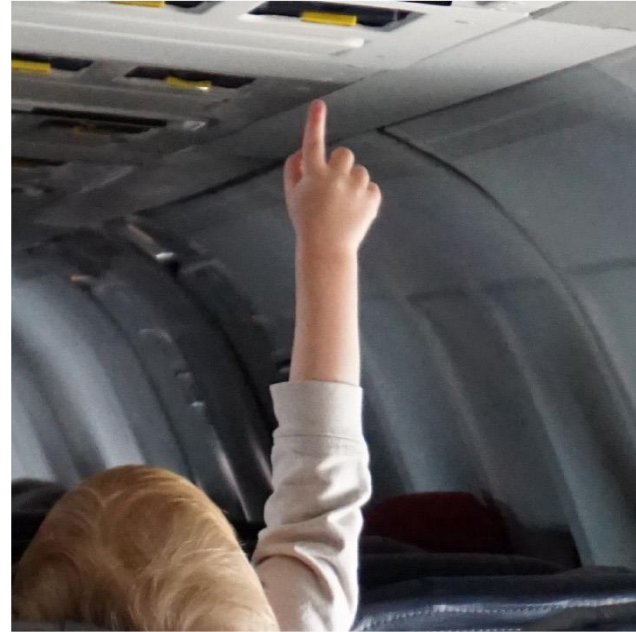


Risk based IOSA



ICAO RASG-AFI |

November 2022 - Kigali



IOSA In Numbers



IOSA In Numbers

400

IOSA
registered
Operators



129

Countries
represented on
the Registry



355

Audits
performed in
2021



270

Accredited
IOSA Auditors



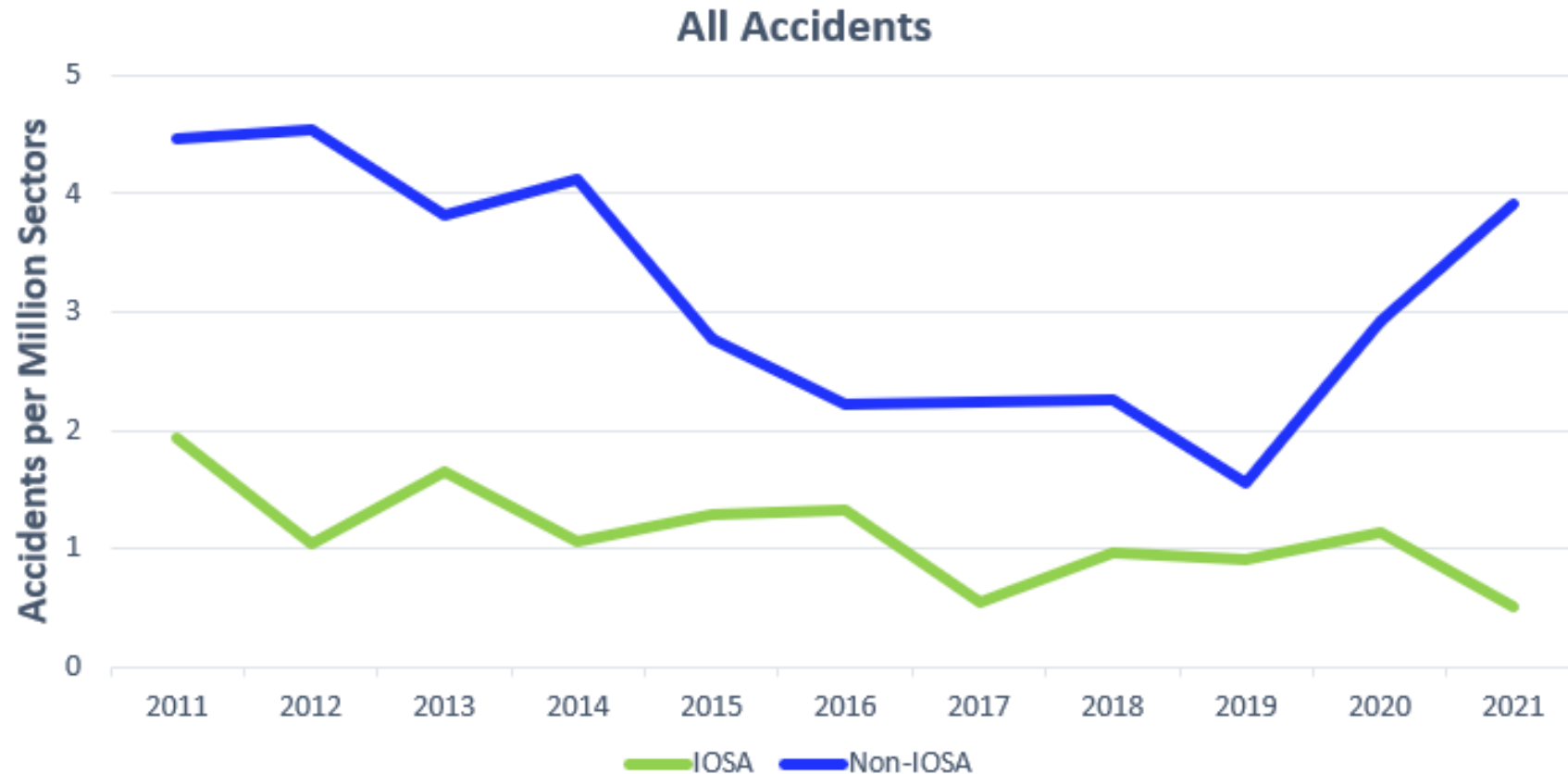
4650

IOSA Reports
exchanged
among airlines



Safety Performance

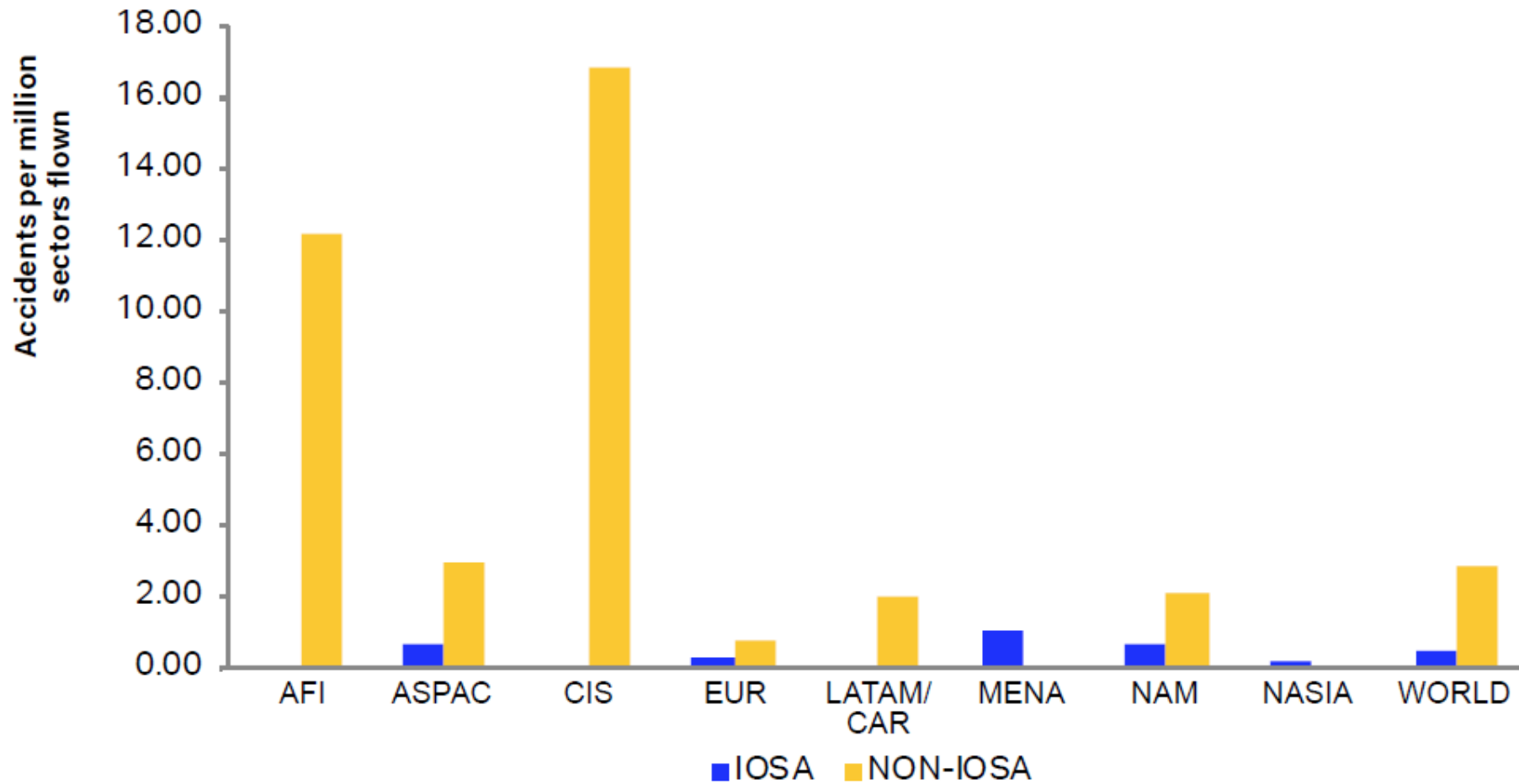
IOSA Operators continually demonstrate higher safety performance despite increasing registry



Source: IATA Safety Report

Accidents Rates

2021 Accident Rate: IOSA-Registered vs. Non-Registered



Regulatory Safety Oversight

Numerous regulators and authorities complement their oversight with IOSA

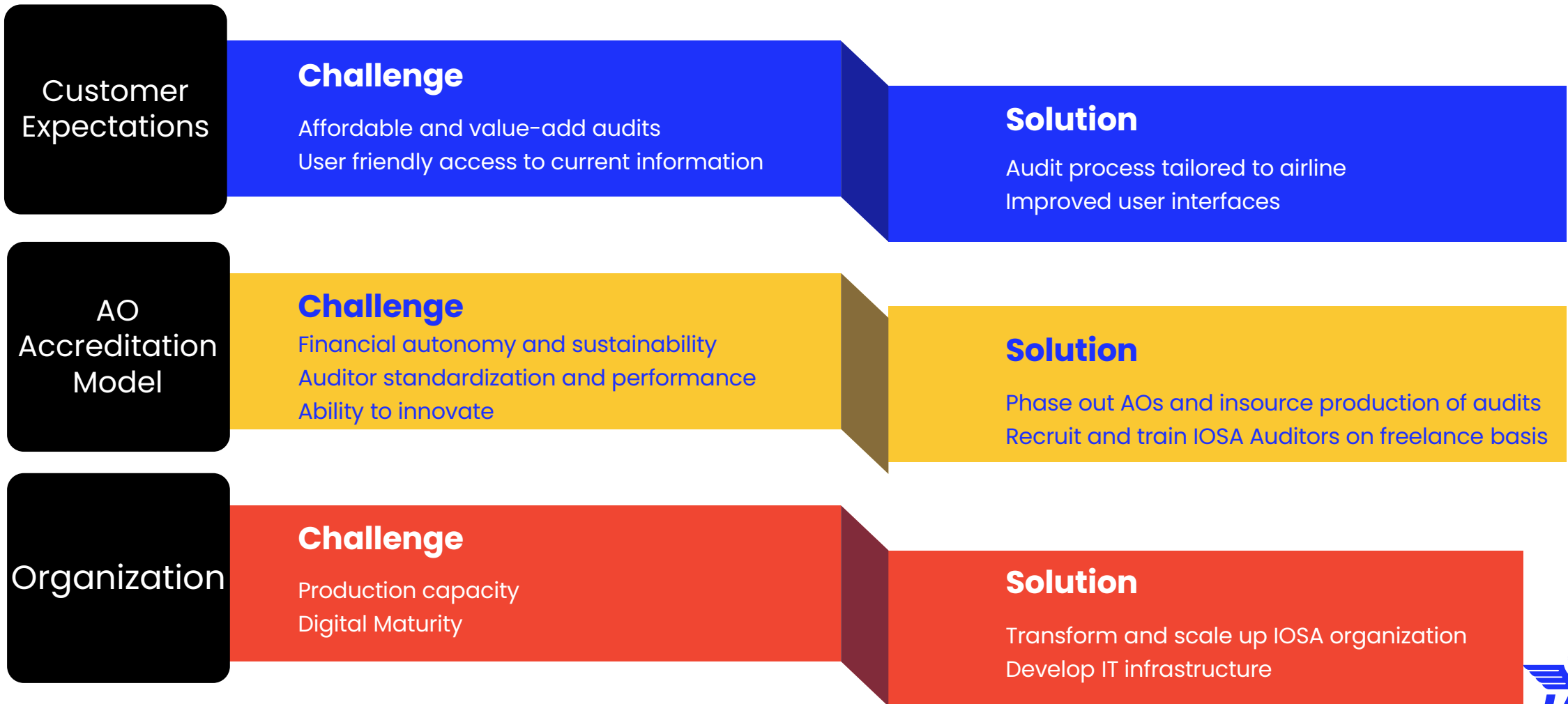


New Risk Based IOSA



The Business Model

A profound business model change will lead to long-term sustainability

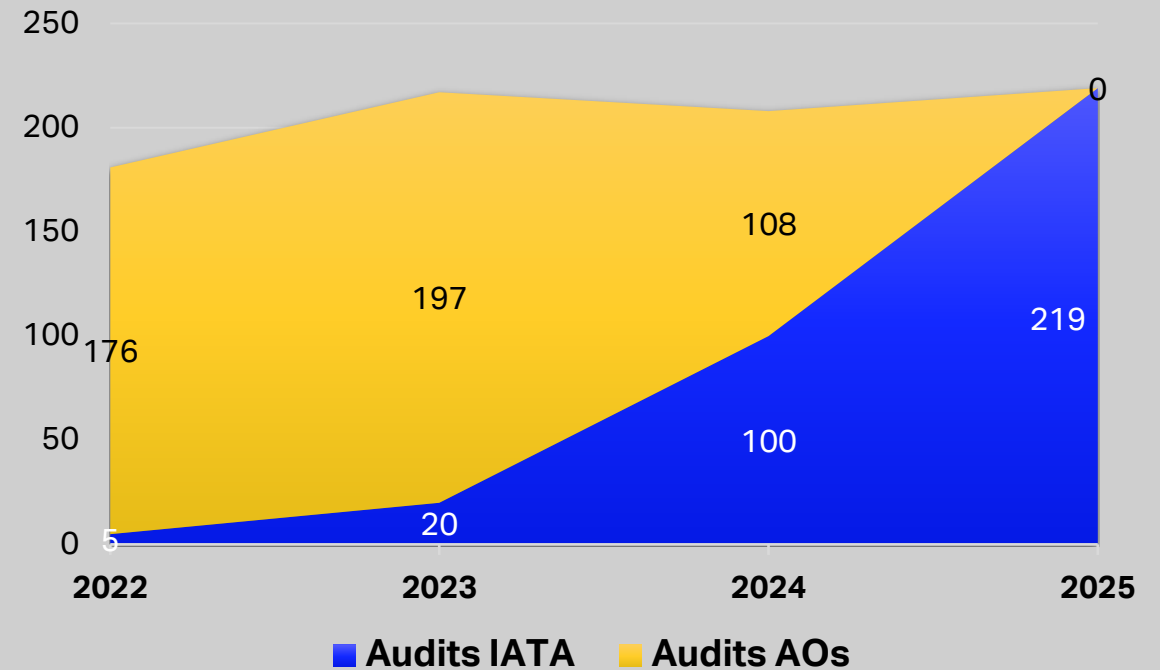


Transition Plan

Transition Plan supports timely scaling up and mitigation of risks

- 2022 trial audits will be performed to test audit methods and audit management process
- AOs will remain until end of 2024 to perform conventional IOSA audits
- 2025 onwards fully insourced model supporting over 200 IOSA audits per year

Projected Transition



Risk-based IOSA

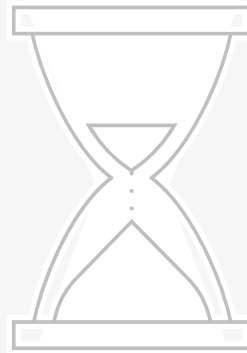
Risk-based approach will contribute to reduce accidents rates



Today

Tomorrow

- Standard audit checklist for all operators in all audits
- Compliance-driven auditing
- Static IOSA reports and forms



- ✓ Tailored audit scope focusing on pertinent safety risks
- ✓ Maturity assessment for SMS and safety relevant programs
- ✓ Digital reporting, risk engine

Contribute to consecutive reduction in accident rates



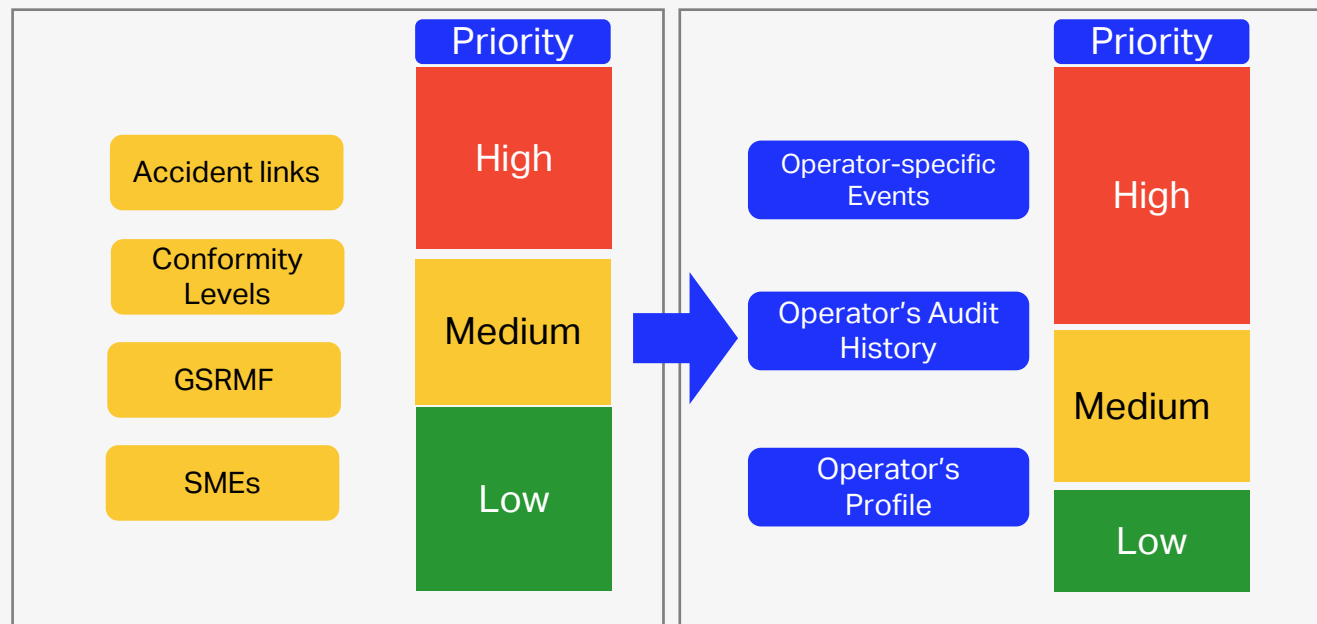
Risk-based Audit Scoping

Audit scope will be reduced to critical standards, freeing up valuable auditing time



Industry Standards prioritization


Operator Audit Scoping



- ✓ Tailored audit scope for each Operator
- ✓ Frees up time to increase depth of auditing of high priority requirements
- ✓ Allows for maturity assessment of critical systems and programs

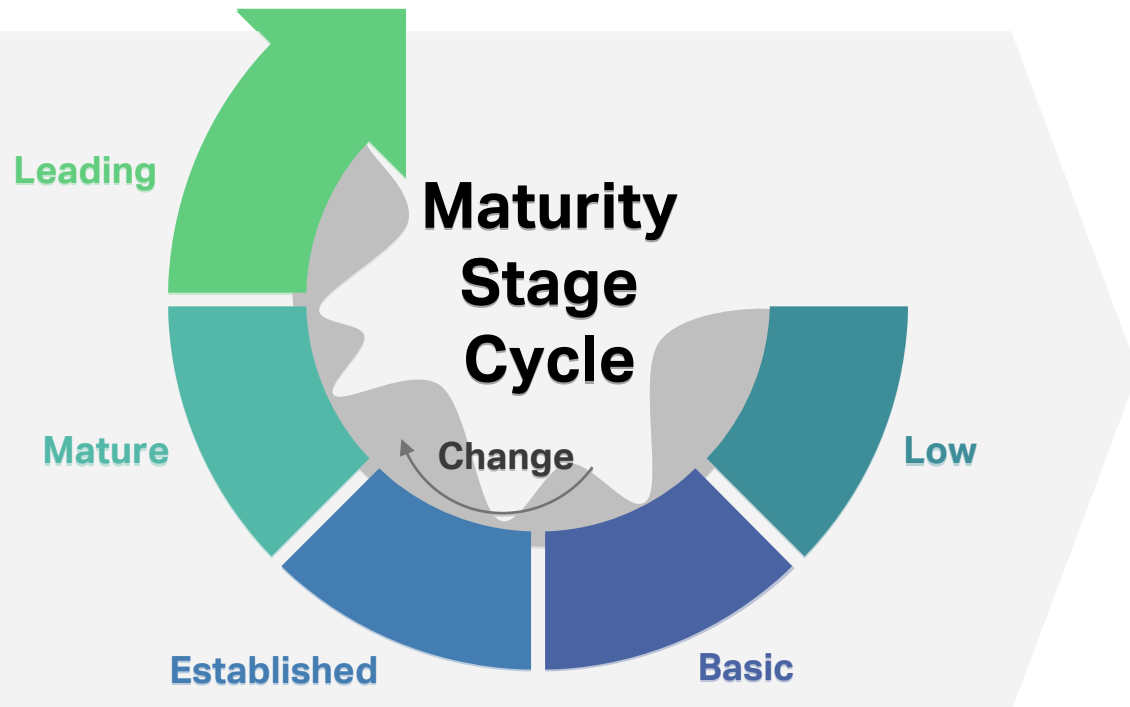
Risk-based Audit Scoping

Away from the one-size fits all approach

Audit Scoping 	IOSA	Risk-Based IOSA
<ul style="list-style-type: none">Worldwide runway excursion rate has been increasing.	<ul style="list-style-type: none">All ISARPs are audited regardless of their universal criticality.	<ul style="list-style-type: none">ISARPs prioritized in regular intervals. In this example, ISARPs related to runway excursions are identified as high priority and audited in-depth.
<ul style="list-style-type: none">Operator has been demonstrating conformity with a non-critical ISARP for several consecutive audits.	<ul style="list-style-type: none">All ISARPs are audited regardless of their criticality for the operator.	<ul style="list-style-type: none">Audit scope tailored to Operator's operating profile and audit history.ISARPs with low criticality may be audited at lower frequency to allow focus on high-criticality ISARPs.

Maturity Assessment

A deeper evaluation of relevant safety systems and programs



Assessment beyond conformity through maturity levels



Deeper assessment of SMS and operational activities



Recommendations for operators

Maturity Assessment of following areas

SMS



- Management & Control
- Safety Assurance & Monitoring
- Safety Risk Management
- SMS Training & Communication

Operating Safety Maturity

- Crew Training
- Flight Data Analysis
- Operation Control

Maturity Assessment

Example

Maturity Assessment 	IOSA	Risk-Based IOSA
<p>FLT 2.2.14 The Operator shall ensure flight crew members complete training and, when applicable, an evaluation in crew resource management (CRM), including Threat and Error Management, using facilitators that have been trained in human performance and human factors principles.</p>	<p>Assessment Method (on each ISARP)</p> <p>Conformity <input checked="" type="checkbox"/></p> <p>Nonconformity <input type="checkbox"/></p>	<p>Assessment Method (on selected ISARPs and Programs)</p> <p>Basic 2.7 Mature</p>  <p>Low Established Leading</p>

Benefits of Risk-based IOSA

Tailored and reduced Audit scope focusing efforts where needed the most

Improved audit methods through maturity evaluation

Improved management and standardization of Auditors

Safety insights captured to deliver safety improvements and reduction of global accident rates

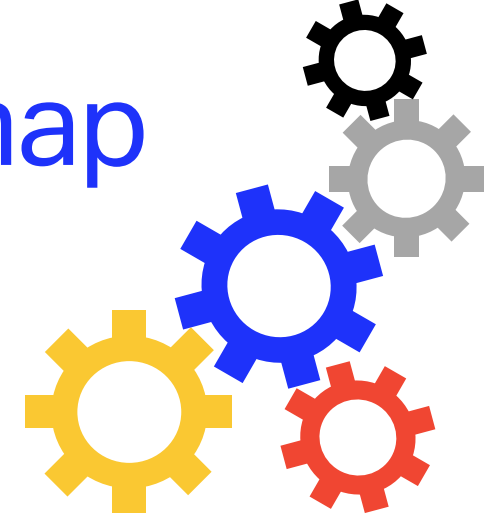
New insights through improved audit report

Long term sustainability of IOSA program through direct management of insourced products



Risk-based Approach – Project Roadmap

Comprehensive project approach to ensure successful delivery



Q1 2022

- Project plan and organization
- Transition & communication plan
- Validation of concept (internal/external)
- Finalize operator questionnaire with IOC

Q2 2022

- Develop business requirements and taxonomy
- Adjust Program's legal and insurance frameworks
- Conduct RFPs
- Draft test standards manual

Q3 2022

- Design beta-test audits and train auditors
- Onboard airlines for test
- Onboard IT vendors

Q4 2022

- Launch 3-5 beta-test audits
- Develop required IT infrastructure
- Develop Program SOPs

2023

- Refine and validate concept through feedback from beta-test audits
- Roll out Risk Based Audits to 20 operators

Thank you

