

# Qatar Airways:

## SMS IMPLEMENTATION

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25<sup>th</sup> May 2016



# Birth and Growth of Qatar Airways

Launched in 1994 as a regional airline with four aircraft and a handful of routes

1997	2015	2020's
Re-launched with a fleet of 5 aircraft and 0.5 M passengers	An ever expanding fleet of 158 aircraft and close to 21 M passengers	A fleet size of 250+ aircraft carrying more than 35 M passengers

- 40,000 Qatar Airways Group employees, representing 163 nationalities, speaking 160+ languages, serving more than 150 destinations.
- Pilots represent 119 nationalities;  
Cabin Crew represent 124 nationalities.

# One of the World's Youngest Fleet

- 184 aircraft in the fleet, with an average fleet age of 5 years
- Qatar Airways operates a mixed fleet of Airbus and Boeing aircraft
- Global launch customer of the A350 and first to fly it to the United States
- Middle East launch customer of the Boeing 787 Dreamliner
- A new aircraft delivered every 10 days



# More than 150 destinations world-wide



# Growth built on Strong Foundation



## Corporate Health

- Safety & Security
- Financial Strength



## Network

- Traffic rights
- Fleet



## Product

- Award-winning service
- Reliability

# First Airline to Achieve IOSA Accreditation in 2003

Over the last 10 years, Qatar Airways has successfully achieved the IOSA accreditation with NIL findings.



# QCAA Safety Management



## QATAR CIVIL AVIATION AUTHORITY SAFETY MANAGEMENT

(QCAR -PART - 19)

Version: 1.0  
Date: 19.08.2014

QATAR AIRWAYS القابضة  
QATAR AVIATION SERVICES  
QATAR AIRWAYS القابضة  
QATAR AIRWAYS القابضة  
CARGO  
QATAR EXECUTIVE  
QACC  
مطار الدوحة الدولي  
Doha International Airport  
ODI QATAR DUTY FREE

QRinfo Home  
Cabin Crew  
CMC  
Commercial  
Contracts  
Corporate Planning  
Duty Free  
Employee Discount  
e-Staff Travel  
Finance  
Flight Operations  
Ground Services  
**Group Safety & Security**  
HIA  
Human Resources  
Inflight Service  
Information Technology  
Marketing  
PCI-DSS

### Group Safety & Security

GS&S Home   Group Safety & Operations Quality   **Safety Management System**   Safety Policy & Manuals   Safety e-Reports

Occupational Health & Safety   Employee guide for reporting OHS & Hazard Reports

#### Welcome to Group Safety & Operations Quality

#### Group Safety

Safety is of the highest priority for Qatar Airways, as part of our corporate values and must never be compromised. Qatar Airways applies a policy of 'Safety First' throughout its business and believes in providing all employees and customers with a safe and healthy environment. Safety Management is a vital component of any business. This requires an organised approach to managing safety, including the necessary organisational structures, accountabilities, policies and procedures. The SMS Programme proactively identifies hazards and manages risks throughout the business.

Managers have the responsibility to make themselves familiar with the contents of the SMS Manual and to ensure members of their staff are appropriately trained to perform their duties correctly and consistently.

#### Operations Quality

Quality Assurance is derived from a number of sources, principally from independent audits. Independent audits are mandatory requirements of the QCAA as well as IOSA and are the means by which the company systematically checks its own level of conformance with the regulatory requirements and the standards set in company policy and procedures manuals. An audit is a systematic and independent comparison of the way in which an operation is being conducted against the way the published operational procedures say it should be conducted.

The Operations Quality department through its annual audits of all operational areas within Qatar Airways is responsible to ensure we operate in a safe environment and are fully compliant to the Qatar Civil Aviation Requirements.



# Group Safety & Security Policy

## QATAR AIRWAYS GROUP SAFETY & SECURITY POLICY

Safety & Security is our highest priority and is expressed in all of our Corporate Values. Therefore, it must never ~~be compromised~~. Qatar Airways believes in providing all employees and customers with a safe, secure and healthy environment and in return, all employees are obligated to comply with this policy.

→ HIGHEST PRIORITY

Qatar Airways is committed to the establishment and development of a companywide safety, security, and quality management system that achieves continued compliance with all current applicable legislation and company requirements and provides the highest standards of flight safety and airworthiness.

→ COMMITTED

It is our aim at Qatar Airways to integrate Safety, Security & Quality principles into everything we do. The procedures used by flight and cabin crews, technical and ground operations staff and all others involved in safety & security sensitive areas are fundamental to fulfilling this policy.

→ INTEGRATE

We are committed to ensuring that all our activities worldwide are conducted in accordance with applicable laws, regulations and industry best practice, thus ensuring the health, safety & security of our staff, customers and everyone affected by our operation.

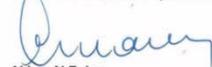
A positive safety & security culture must be generated from the 'top down' and relies on a high degree of trust, respect and communication between staff and management. All staff must believe without doubt that they will be supported in any decisions made in the interests of safety & security and that reporting unpremeditated or inadvertent errors will not result in disciplinary or punitive action being taken against the reporter or other individuals involved unless, of course, such errors stem from illegal activity, or willful misconduct which breaches safety or security standards. It is imperative that there is uninhibited reporting of all hazards, incidents and occurrences which compromise, or may compromise, the safe conduct of all Qatar Airways operations. To this end, every employee is responsible for communicating information that may affect safety & security.

→ POSITIVE

It is the responsibility of the Accountable Manager and Nominated Post Holders to maintain continued compliance with legislation and company standards. All Qatar Airways staff shall comply with all policies and processes set out in the Safety, Security & Quality Management System.

→ GCEO IS COMMITTED

As Group Chief Executive and Accountable Manager, I am committed to the continual improvement of the management system of our organisation and will ensure it is adequately financed, resourced, reviewed and revised as appropriate to ensure safe and secure operations.

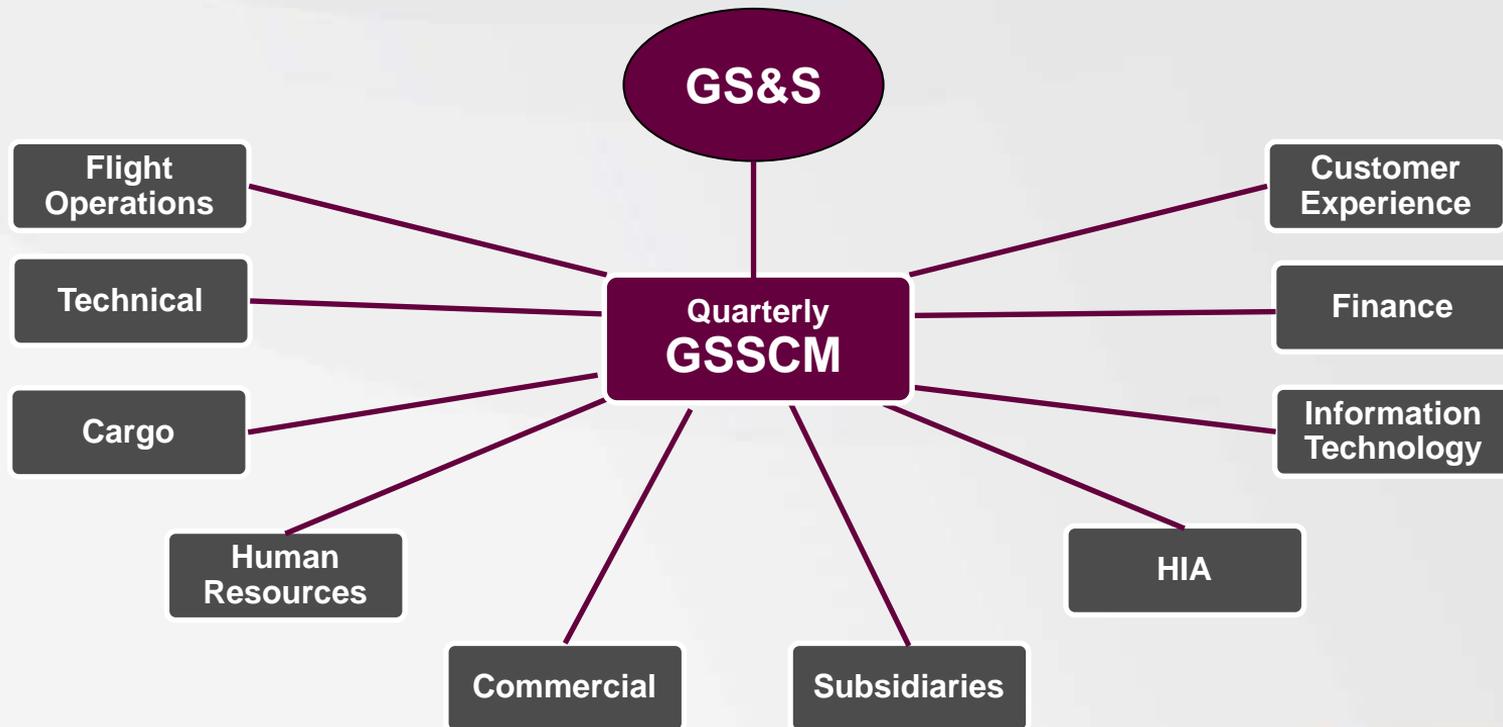


Akbar Al Baker  
Group Chief Executive and Accountable Manager

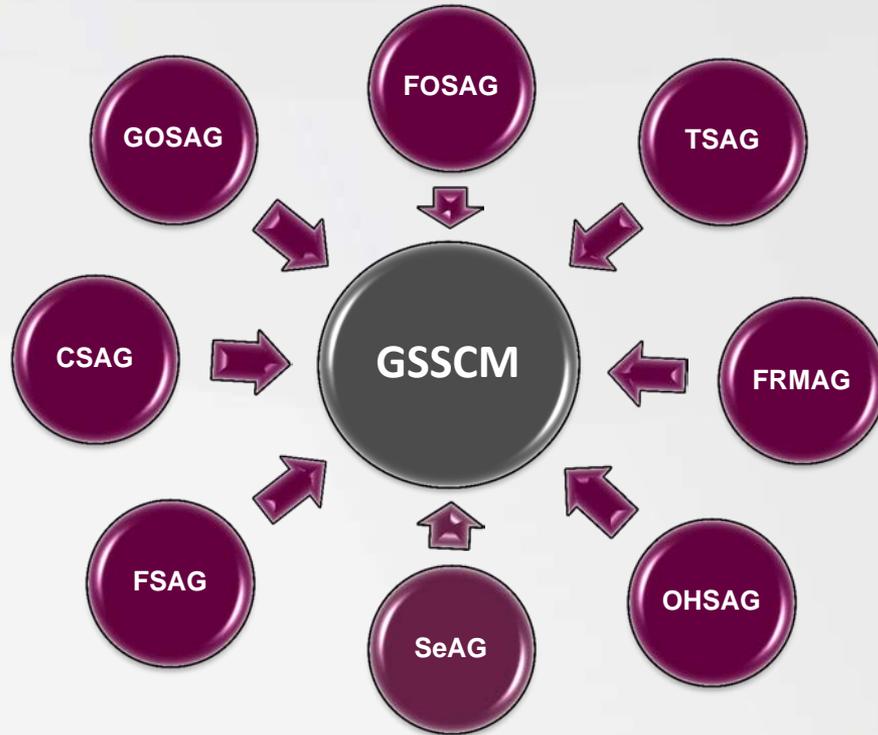


November 2015

# Group Safety & Security: Governance



# Monthly Safety Action Groups



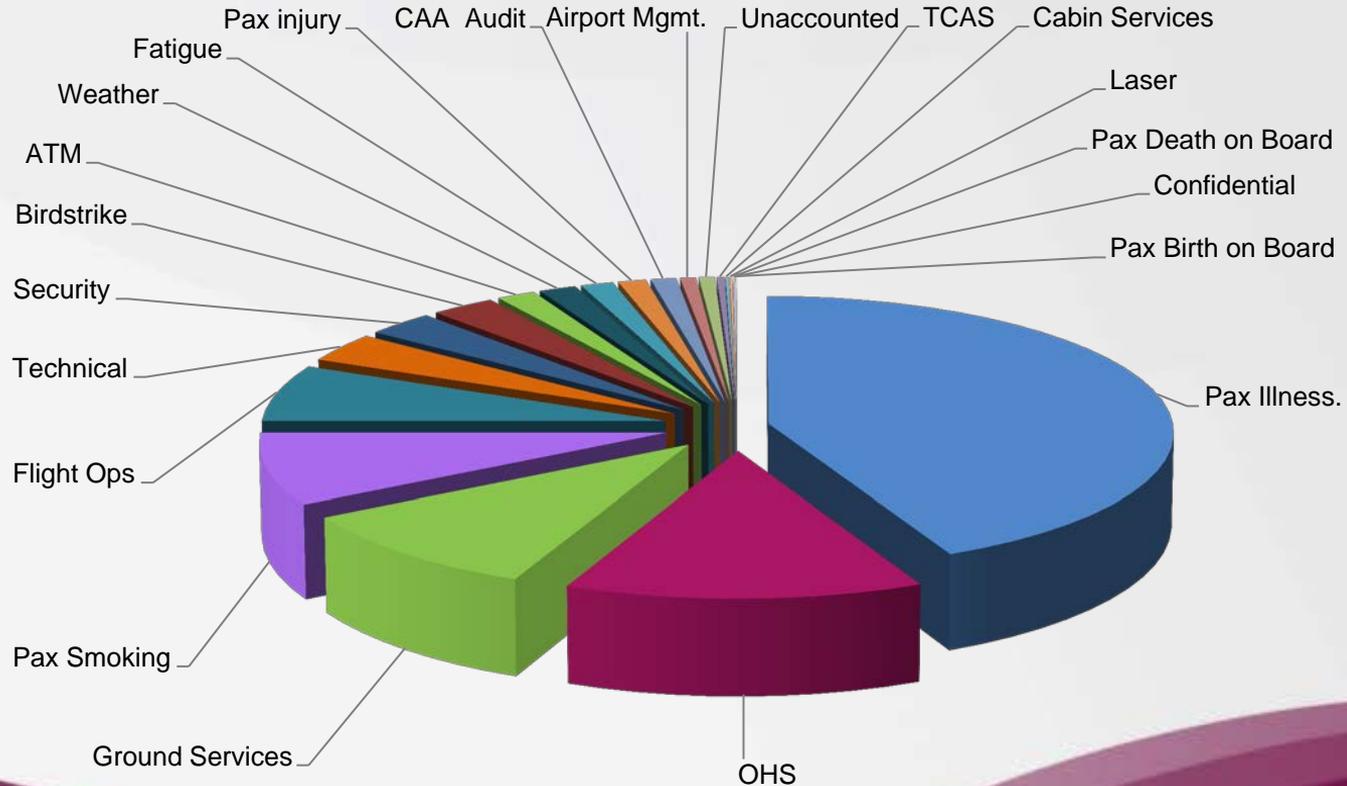
# How To Report

The screenshot displays the Qatar Airways Group Safety & Security website. At the top, there is a row of logos including Qatar Airways, Qatar Aviation Services, Qatar Airways Cargo, Qatar Executive, QACC, Doha International Airport, and ODI Qatar Duty Free. Below the logos is a navigation menu with the following items: QRinfo Home, Cabin Crew, CMC, Commercial, Contracts, Corporate Planning, Duty Free, Employee Discount, e-Staff Travel, Finance, Flight Operations, Ground Services, Group Safety & Security (highlighted with a red box), HIA, Human Resources, Inflight Service, Information Technology, Marketing, and PCI-DSS. The main content area is titled 'Group Safety & Security' and contains a sub-navigation bar with 'Group Safety & Operations Quality', 'Group Security', 'Contingency Planning & Emergency Response', and 'Business Continuity Planning'. Below this is another sub-navigation bar with 'Newsletters & Bulletins', 'Useful Links', and 'Occurrence E-reporting' (highlighted with a red box). The main text area is titled 'Welcome to Group Safety & Security' and includes an 'Introduction' section. The introduction text states: 'Safety is the highest priority for Qatar Airways. It is part of our corporate value and must never be compromised. Qatar Airways applies a policy of 'Safety First' throughout its business and believes in providing all employees and customers with a safe and healthy environment. In aviation, security and safety are inseparable. Both are vital elements of any successful airline's operation. Surveys carried out worldwide consistently show that airline passengers place considerations of safety and security very high on the list when selecting a carrier. Our customers are more likely to complain about too little security rather than too much, and they have the right to expect that QR will pay the utmost attention to safety and security. Lapses in security damage reputation, customer confidence, staff morale and - ultimately - the profitability of Qatar Airways. Therefore, high standards of security are a vital element to the success of our business. The role of Group Safety & Security is to ensure that Qatar Airways operates in compliance with the requirements and guidelines set out by the Qatar Civil Aviation Authority (QCAA), International Civil Aviation Organization (ICAO), International Air Transportation Association (IATA) and any specific legislation from the National Governments of countries that we operate to. Further information on each of the GS&S departments can be found by clicking the relevant links above.'



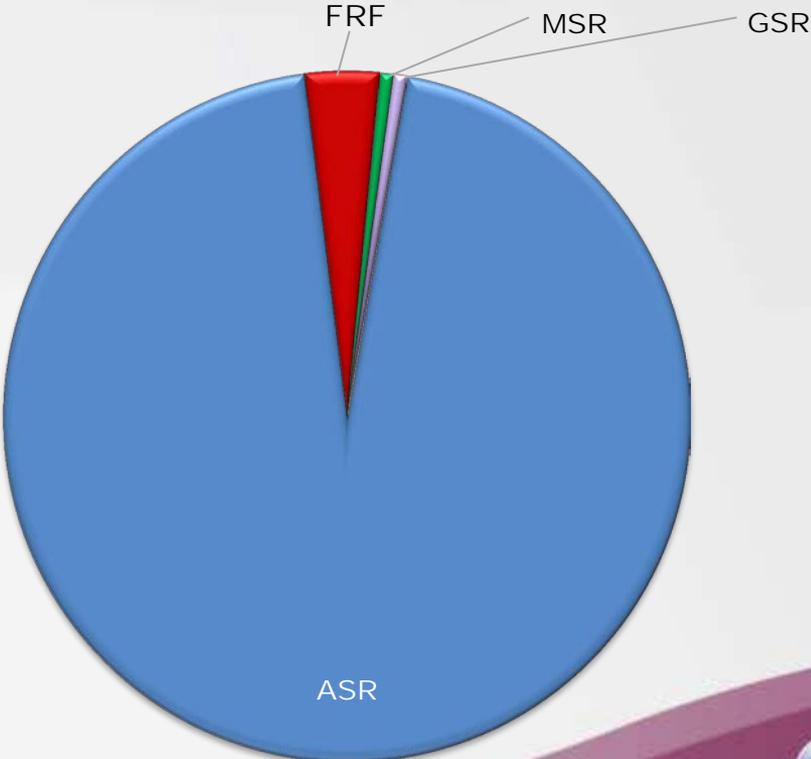
# Occurrence Types

## Distribution of Occurrences



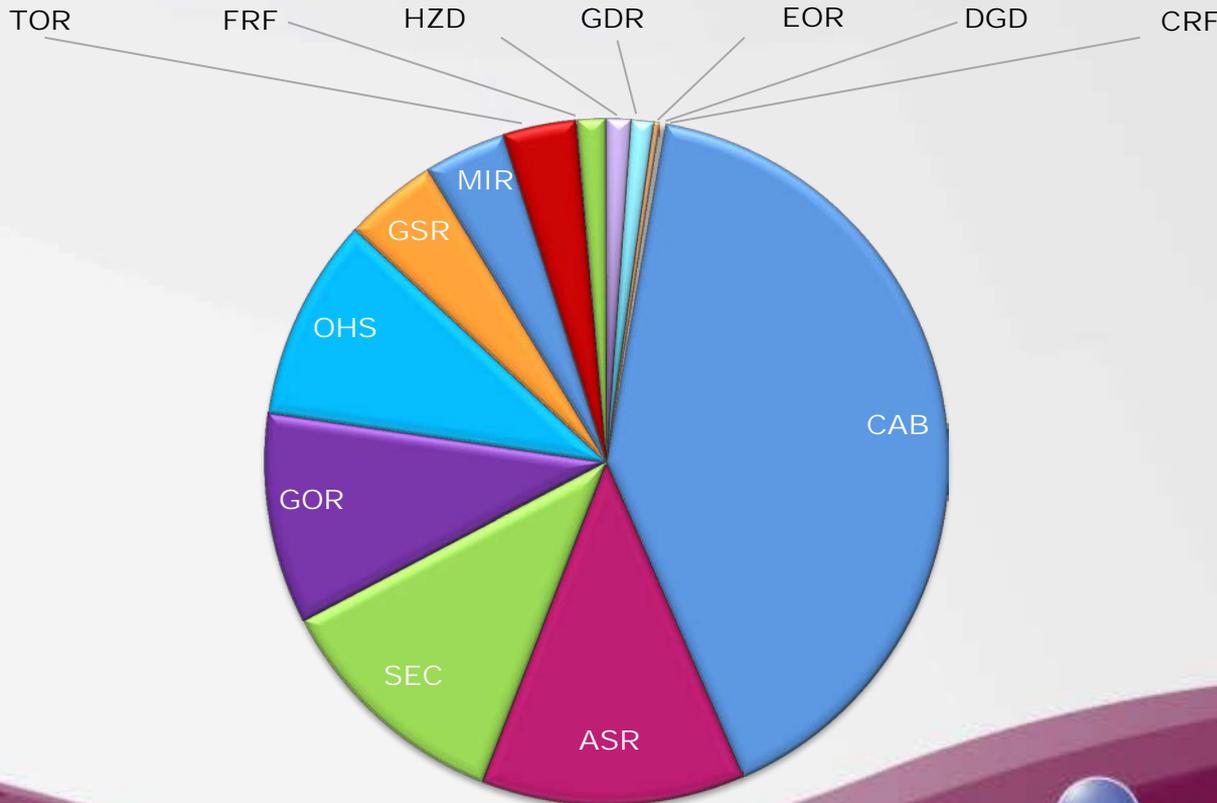
# Reporting Volumes

## Occurrence Summary 2009



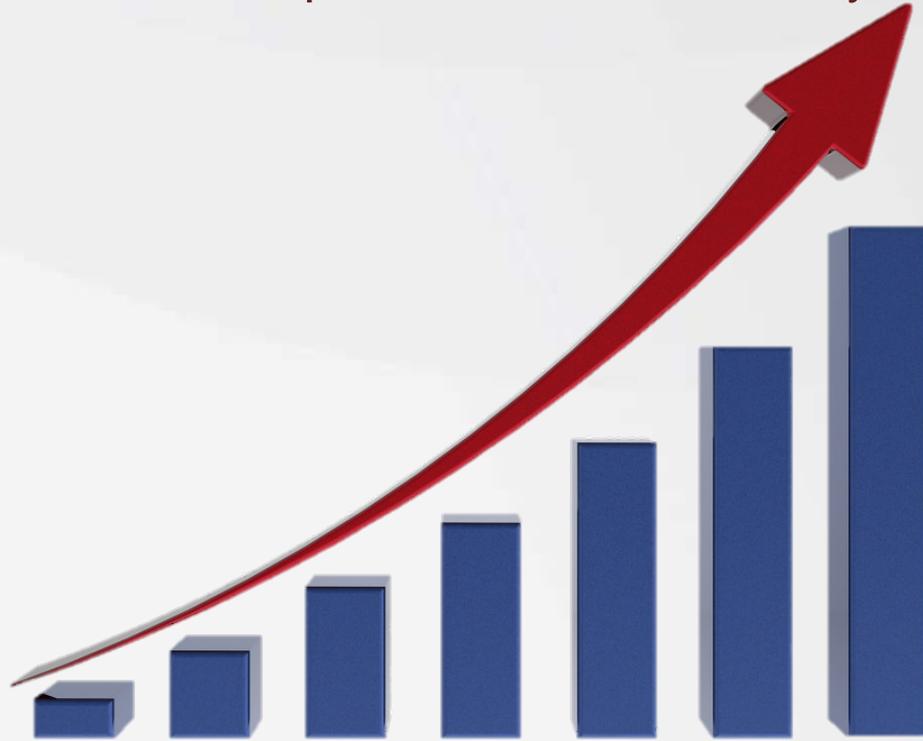
# Reporting Volumes

## Occurrence Summary 2015



# Reporting Volumes 2009-2015

The total occurrence reports have increased by 400% since Q1 of 2009



# Example of Risk Review

Generic Hazard	Specific components of Hazard	Hazard related consequences	Probability	Severity	Risk	Action to reduce Safety Risk	Resultant Risk
Flight Operations	Unstable Approach	Late Setting of Landing Flap, HROD, High Approach Speed, long landing	Z	C	Medium ZC	Flight Crew Training and Awareness	YC
Flight Operations	Crew Fatigue	Flight Crew Error	Z	C	Medium ZC	Introduction of FRMS and Boeing Alertness Module	YC
Ground Operations	Fuselage damage	Potential long term hull damage	B	C	Medium BC	Education through Training & Safety Alerts	AC
Ground Operations	Incompatible DG loading	Combustible possibility due mixed loads	N	B	Medium NB	Training / CLC, Loading Inspections	MB
Cabin Operations	Inadvertent Slide Deployment by Crew	Injury to staff and possible damage	B	D	Medium BD	Crew Training and Awareness	AD
Cabin Operations	Crew Injuries Due to Turbulence	Injury to staff/ pax and possible damage	B	C	Medium BC	CRM, Crew Training & Awareness	AC
Technical	Inflight Shutdown Rate (IFSD)	Declaration of Emergency and Diversion	Y	C	Medium YC	Maintenance Standards	XC
Security Operations	Intoxicated/ Unruly Pax	Disruption and possible injury to crew/ pax	V	D	Medium VD	Staff Awareness, Crew Air Restraint Training and New Disruptive Pax Law	UD
Occupational H & S	Staff Injury	Lost time	V	D	Medium VD	Staff Training & Awareness	UD

# Sample Safety Performance Indicators (SPIs) for 2016

Event	Target SPI 2015 / 1000 mvt	Actual SPI 2015 / 1000 mvt	Proposed SPI 2016
Unstable App	x	✓y	x
Communication	y	✓y	y
Level Bust	z	✓z	z
Ground Damages	x	✓ x	x
DG compliance	a%	X b%	b%
Inadvertent Slide deployment	c	X d	c
Crew Injury due turbulence	e	✓ d	d
ATB/Diversion All Technical Events	q	✓ p	Below Industry Standard Average

# Safety & Security: Risk Assessments

## GROUP SAFETY & SECURITY RISK AND THREAT MEETING 14 MAY 2015



Contents of the report provide a bi-weekly review of the significant political and security developments around the world and are shared among QR stakeholders, who form a part of the R&T Group

	Category	Name	ICAO/IATA (4/3)	Country
Aerodrome	B	Marrekach	GMMX/RAK	Morocco
Prepared By:		Gurwak Singh (Boeing Fleet Safety Manager)		Date: 31/03/2015
Checked by:		(VP Safety Quality and Standards)		Date: 31/03/2015
Approved by:		(Chief Operations Officer)		Date: 31/03/2015

Severity of occurrences		
Airline definition	Meaning	Value
Catastrophic	<ul style="list-style-type: none"> <li>Equipment destroyed</li> <li>Multiple deaths</li> </ul>	A
Hazardous	<ul style="list-style-type: none"> <li>A large reduction in safety margins, physical distress or a workload such that the operators cannot be relied upon to perform their tasks accurately or completely</li> <li>Serious injury</li> <li>Major equipment damage</li> </ul>	B
Major	<ul style="list-style-type: none"> <li>A significant reduction in safety margins, a reduction in the ability of the operators to cope with adverse operating conditions as a result of increase in workload, or as a result of conditions impairing their efficiency</li> <li>Serious incident</li> <li>Injury to persons</li> </ul>	C
Minor	<ul style="list-style-type: none"> <li>Nuisance</li> <li>Operating limitations</li> <li>Late of emergency procedures</li> <li>Minor incident</li> </ul>	D
Negligible	<ul style="list-style-type: none"> <li>Little consequences</li> </ul>	E

Probability of occurrence		
Qualitative definition	Meaning	Value
Frequent	Likely to occur many times (has occurred frequently)	5
Occasional	Likely to occur some times (has occurred infrequently)	4
Remote	Unlikely, but possible to occur (has occurred rarely)	3
Improbable	Very unlikely to occur (not known to have occurred)	2
Extremely improbable	Almost inconceivable that the event will occur	1

Risk probability	Risk severity				
	Catastrophic A	Hazardous B	Major C	Minor D	Negligible E
Frequent 5	5A	5B	5C	5D	5E
Occasional 4	4A	4B	4C	4D	4E
Remote 3	3A	3B	3C	3D	3E
Improbable 2	2A	2B	2C	2D	2E
Extremely improbable 1	1A	1B	1C	1D	1E



Specific Components of hazard	Hazard-related consequences	Current Mitigation Strategy	Probability	Severity	Risk	Action to reduce safety risk(s) and resulting safety risk index	Resulting Risk Index
High Terrain South of the Airfield	<ul style="list-style-type: none"> <li>CFIT</li> </ul>	<ul style="list-style-type: none"> <li>Jepesen Charts</li> <li>SOP/OM Part C</li> </ul>	3	A Catastrophic	3A HIGH	<ul style="list-style-type: none"> <li>SCB</li> <li>Crew Awareness</li> <li>Experienced Crew</li> </ul>	2A MED
Birds in the vicinity of the Airfield	<ul style="list-style-type: none"> <li>Damage to Aircraft</li> </ul>	<ul style="list-style-type: none"> <li>Jepesen Charts</li> </ul>	2	D Minor	2D LOW	<ul style="list-style-type: none"> <li>SCB</li> <li>Crew Awareness</li> <li>250K below 10000 feet</li> </ul>	1D LOW
Minimum Climb Gradient for SIDs	<ul style="list-style-type: none"> <li>T/O Performance</li> </ul>	<ul style="list-style-type: none"> <li>Jepesen Charts</li> </ul>	2	D Minor	2D LOW	<ul style="list-style-type: none"> <li>SCB</li> <li>FlySmart Perf Tool</li> <li>Crew Awareness</li> </ul>	1D LOW
Degumming and reflection of the RWY	<ul style="list-style-type: none"> <li>Risk to Man, Machinery and Aircraft</li> </ul>	<ul style="list-style-type: none"> <li>NOTAM</li> </ul>	2	D Minor	2D LOW	<ul style="list-style-type: none"> <li>SCB</li> <li>Crew Awareness</li> </ul>	2D LOW

# Safety Management System Training

## e-SMS

<b>01</b> Module 5 mins	SMS & Safety Culture COMPLETE	<b>05</b> Module 16 mins	Investigations, Reporting Systems & Quality Audits COMPLETE
<b>02</b> Module 8 mins	Safety Policy & Performance Monitoring COMPLETE	<b>06</b> Module 8 mins	Training, Education, & Communication COMPLETE
<b>03</b> Module 5 mins	Safety Roles & Responsibilities COMPLETE	<b>07</b> Module 14 mins	Security & Emergency Response COMPLETE
<b>04</b> Module 8 mins	Hazard Identification & Risk Management COMPLETE	<b>08</b> Module 16 mins	Assessment COMPLETE

# Safety Communication

Prioritizing training, communication and information sharing across internal and external stakeholders

e-SMS training



Regular Risk Assessments



Area/Region	Category	Name	ICOM/FIN/ISS	Country
Asia	Security	Threats	ICOM/FIN/ISS	Threats
Europe	Security	Threats	ICOM/FIN/ISS	Threats
North America	Security	Threats	ICOM/FIN/ISS	Threats
South America	Security	Threats	ICOM/FIN/ISS	Threats
Africa	Security	Threats	ICOM/FIN/ISS	Threats
Oceania	Security	Threats	ICOM/FIN/ISS	Threats

Bulletins:



Safety Promotions:

Ground Crew:



Cabin Crew:



Flight Crew:



# Safety Information Sharing

- IATA Operations Committee
- IATA Safety Group
- IATA Security Group
- IATA Cabin Safety Group
- IATA Safety Audit for Ground Operations (ISAGO)
- IATA Fuel Quality Pool (IFQP)
- IATA Airside Safety Group
- Oneworld Safety & Security Group
- Safety Trend Evaluation, Analysis & Data Exchange System (STEADES)
- Ground Damage Database (GDDB)
- Flight Data Exchange (FDX)
- De-Icing/Anti-Icing Quality Control Pool (DAQCP)
- AACO Security Advisory Group
- AACO ERP Steering Committee

# Challenges

- Reporting Culture
- Working in Silos
- What are the benefits of the change?
- Reactive vs Proactive & Predictive
- Communication & Promotion
- Data Sharing & Benchmarking

# Focus in 2016

- Safety / Security Promotion
- Centralised Documentation
- Flight Tracking
- New Regulations
- Enhanced Risk Assessments
- Evidence Based Training
- Environmental Framework



***Thank You***

Going places together

