

# Operational Safety, Security & Quality



## SMS Implementation

Segurança • Inteligência • Servir • Lowest-cost

# Agenda



- ✓ Two different scenarios
- ✓ SMS implementation timeline
- ✓ SMS structure
- ✓ Risk Management
- ✓ Risk Map
- ✓ Main difficulties ...
- ✓ Challenges



# Two different scenarios

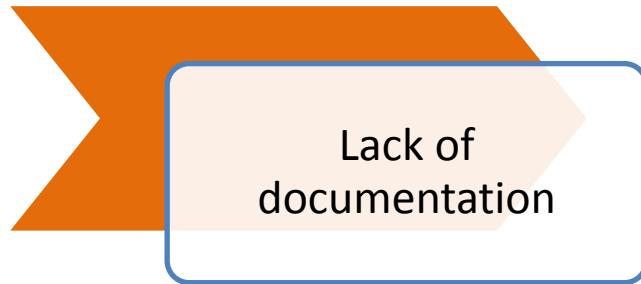
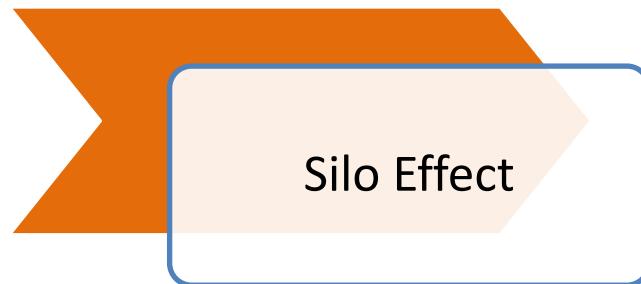
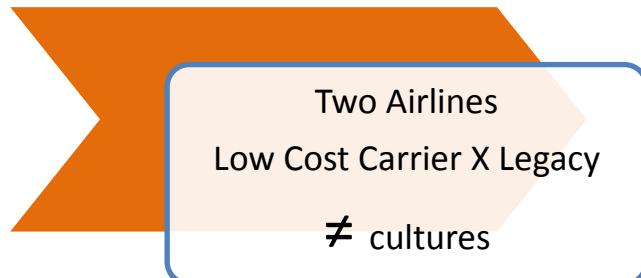


2008

2010

2012

2014



# SMS implementation process

Timeline	Actions
2009	SMS Gap Analysis required by regulator
2011	First phase: manual & policies accepted by ANAC
2012	Second Phase: Risk Management - Reactive Method implemented
2013	Third phase: Risk Management - Reactive, Preventive & Predictive Methods implemented
2014	Fourth phase: Safety Performance Indicators - Implementation process completed

\* IATA Workshop

SMSITP

SMS Internal Training  
Program - 2013

- Permanent Task Force



# SMS Structure



Strategic

CEO  
Accountable  
Manager

Safety, Quality and Security  
Executive Manager

CSO  
Safety Review Board

CASO  
Safety Action Council

GASO  
Safety Action Group

Tactic

Operational

GASO  
FLT

GASO  
DSP

GASO  
GRH

GASO  
MNT

GASO  
CAB

GASO  
CGO

Flight  
Operations

Dispatch  
Operations

Ground  
Handling Ops.

Maintenance  
Operations

Cabin  
Operations

Cargo  
Operations



# SMS Safety Policy & Objectives



- ✓ **Safety is our first priority;**
- ✓ **Any event that affects Safety must be reported;**
- ✓ **Safety Culture must be disseminated throughout the organization;**
- ✓ **Achieving the highest Safety standards is our primary goal;**



# SMS Risk Management



Reactive Method	Preventive Method	Predictive Method
Safety Investigations	Safety Reports	Flight Data Monitoring and Analysis
Internal Safety and Quality audits	Internal Safety and Quality audits	
Safety Reports	Safety Surveys - FMAQ, MCAS	
Safety Inspections	LOSA	

*This is the key function of SMS and involves:*

## **Safety assurance**

- *Safety performance Indicators;*
- *Effectiveness of the SMS (Safety and Quality Audits and Inspections);*
- *Compliance with the appropriate regulations and standards (Quality Audits);*



# Risk Map



PROBABILIDADE	SEVERIDADE				
	Catastrófico (A)	Perigoso (B)	Maior (C)	Menor (D)	Insignificante (E)
Frequente (5)	5A	5B	5C	5D	5E
Ocasional (4)	4A	4B	4C	4D	4E
Remoto (3)	3A	3B	3C	3D	3E
Improvável (2)	2A	2B	2C	2D	2E
Extremamente Improvável (1)	1A	1B	1C	1D	1E



1. Runway Excursion
2. Runway Collision
3. Hard Landing
4. Tail Strike
5. FOD
6. Mid-air collision
7. CFIT
8. Loss of control in flight
9. Bird Strike
10. Off airport landing / ditching
11. Despressurization
12. Fire / Smoke on board
13. Tail Tipping
14. Ground Damage
15. Fatigue
16. Material damage or injury in flight
17. Unlawful interference



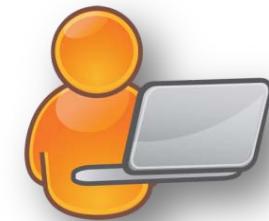
# SMS Safety Promotion



## Safety Communication



## Safety training and education



- Basic SMS training for new employees;
- SMS e-learning for flight crew members;
- SMS training for Senior Management;
- SMS seminars.



## Main difficulties ...

- “Finish off” the silo effect;
- “Bureaucracy”:

*some processes and too many documents...*



# Challenges

- Expand our communication structure: provide different channels with different public approaches in order to improve Safety Culture





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