United Arab Emirates

الهيئة العامة للطيران المدني
GENERAL CIVIL AVIATION AUTHORITY

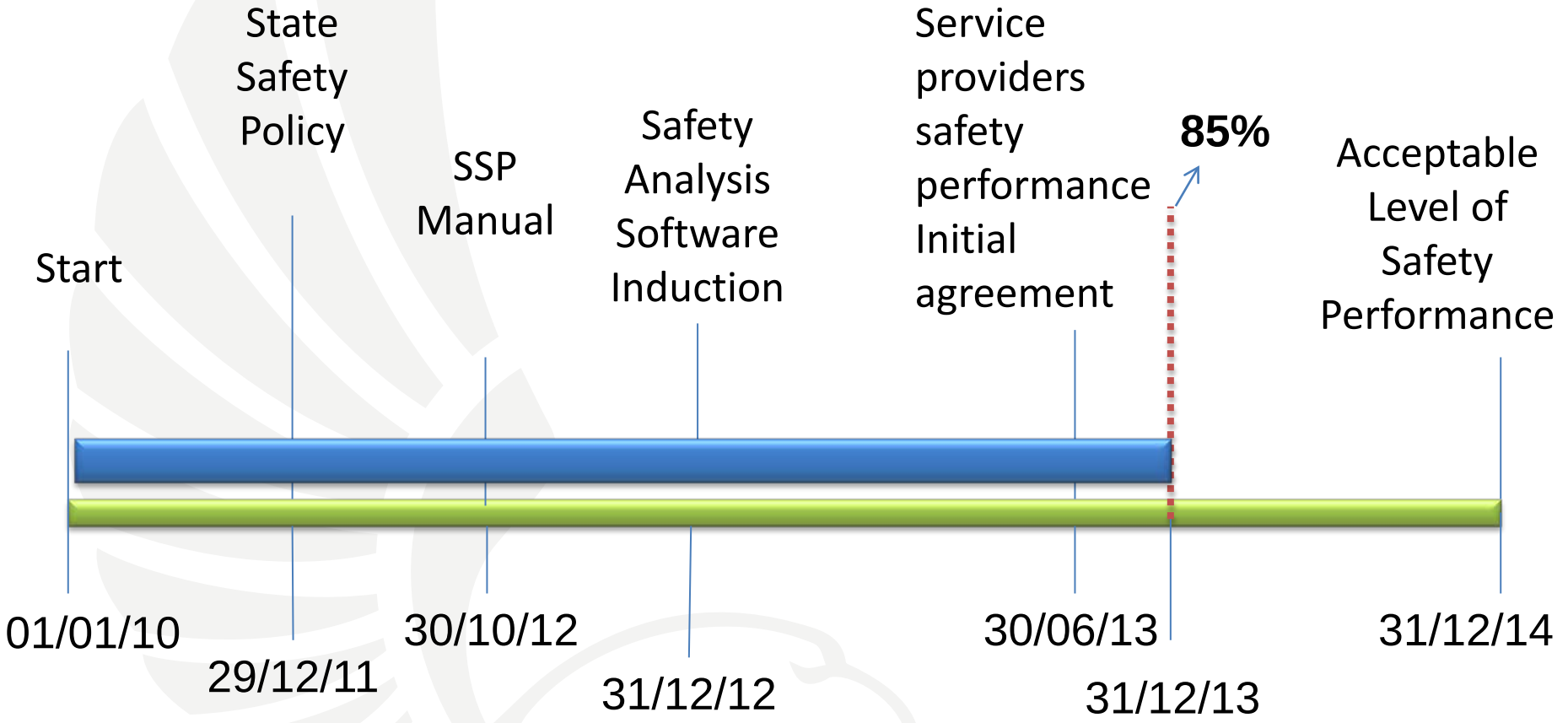
DEVELOPMENT OF STATE SAFETY PROGRAMME (SSP) IN UAE

Capt. Nasir Iqbal

SSP Development

- Development Started in 2010
- Phased Approach
- Elevated to “Project Status” in 2011 monitored by PMO
- Project completion Date – 31 Dec 2014

State Safety Program



SSP Components

- State Safety Policy and Objectives
- State Safety Risk Management
- State Safety Assurance
- State Safety Promotion

State Safety Policy & Objectives

- 1.1 State Safety Legislative Framework
  - CALs and CARs – Established
  - State Safety Policy – Developed in 2011
  - Search & Rescue Regulations – Completed in 2012
    - Certification of SAR Service Providers added in 2013
    - Operations shared between UAE Defence Forces & Dubai Police
    - UAE National Centre for SAR – Under UAE Supreme Council for National Security
    - Certification/Over-Sight/Audit - GCAA
  - Mechanism for Periodic Review of regulations– PRP Departments

State Safety Policy & Objectives

- 1.2 State Safety Responsibilities and Accountabilities
  - H.E. the DG of GCAA is Accountable Manager
  - SSP Gap Analysis – 2010
  - SSP Implementation Plan upgraded to Project in 2011
  - Development being monitored by PMO
  - Safety Management Panel (SMP) – 2011
  - SMP upgraded to Safety Management Committee (SMC) - 2012
  - SSP Manual – 2012
  - SSP Interdepartmental Procedure Manual - 2013

- 1.3 Accident and Incident Investigation
  - GCAA AAIS – An Independent Sector in GCAA
- 1.4 UAE Enforcement Standard
  - Enforcement Standard Established in 2013
  - Non Punitive

State Safety Risk Management

- 2.1 Safety Requirements for Service Provider's SMS
  - CAR Part – X issued in 2010
  - CAAP 50 Published as Guidance Material
  - CAR Part – X revision in process as part of periodic review

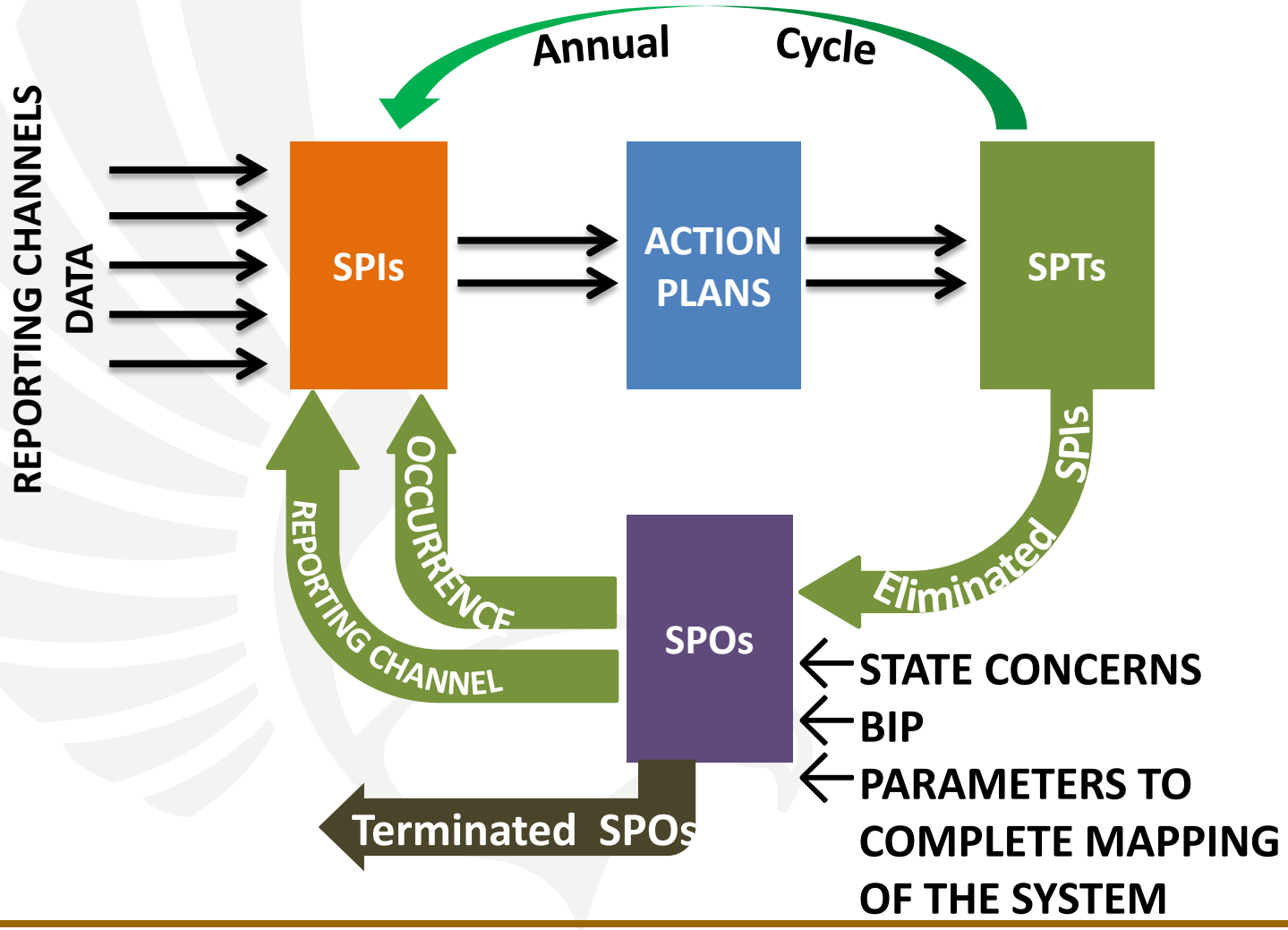
State Safety Risk Management

- 2.2 Agreement on Service Providers Safety Performance
  - SPM Model developed in 2012
    - Enhancement of ICAO guidelines as per SMM 9859

Foundations of GCAA SPM

- Safety Performance Indicators (SPIs)
- Safety Performance Targets (SPTs)
- Safety Performance Objectives (SPOs)
- Action Plans

GCAA SPM MODEL

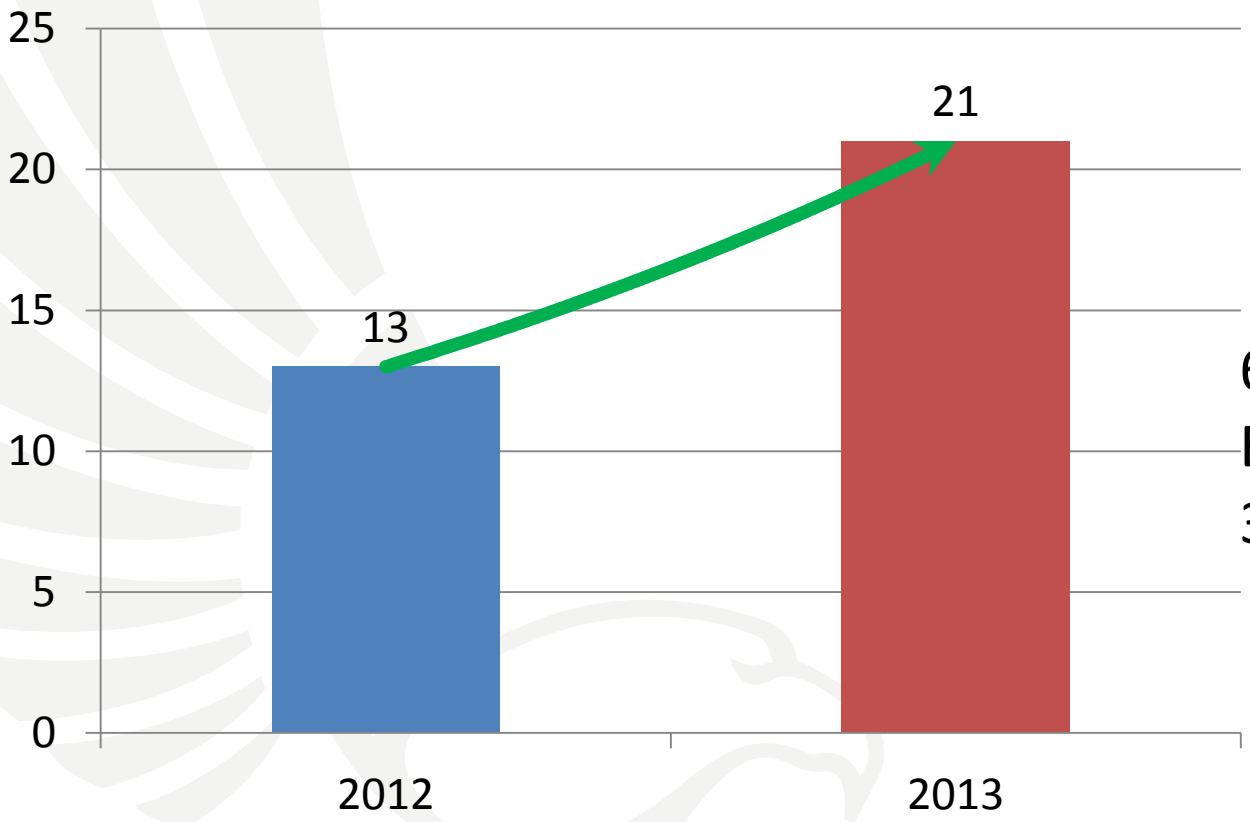


Initial Industry Engagement

SPM Development

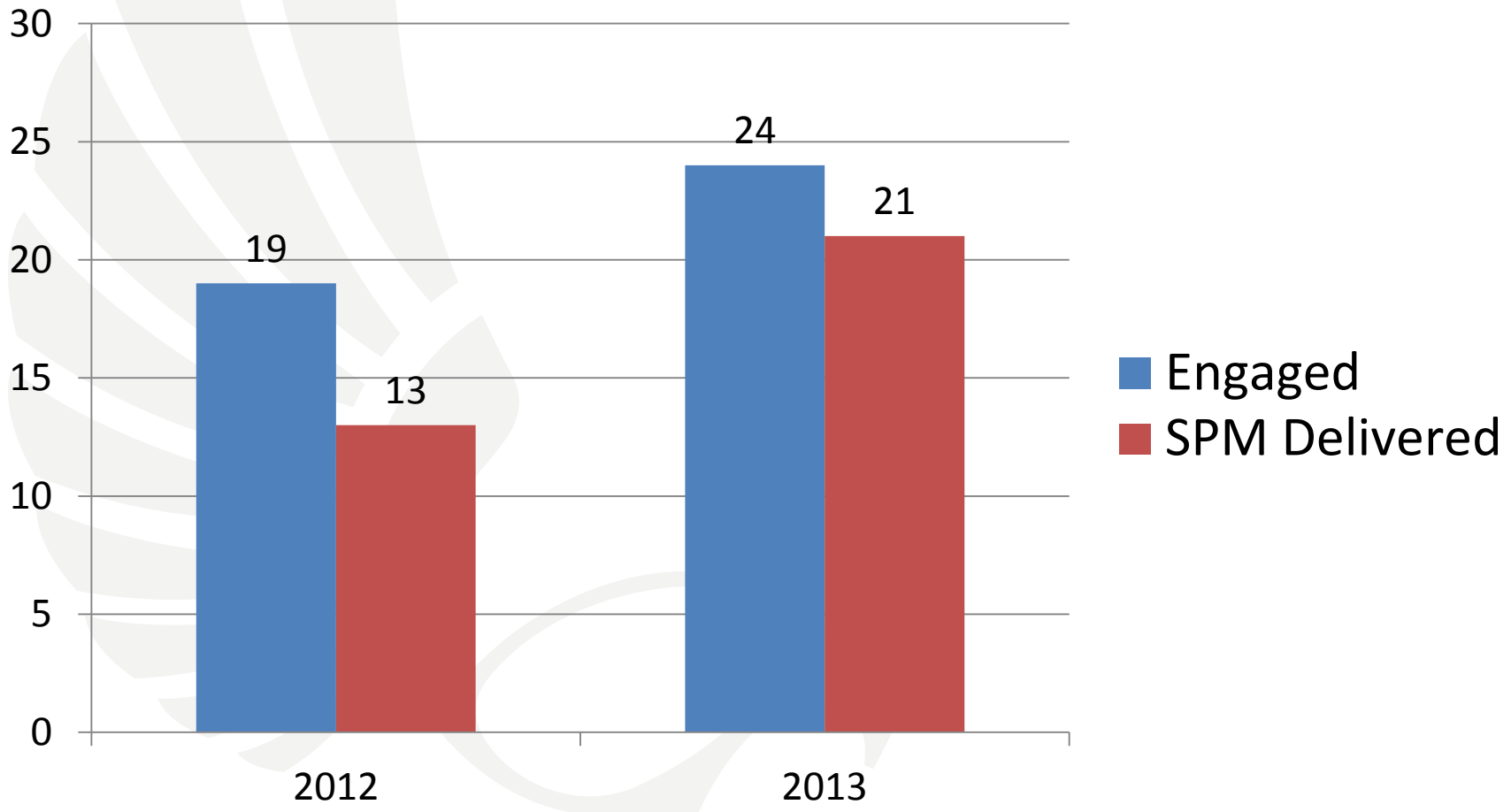
- National Seminars : 02
- Workshops held : 27
- Follow up meetings : 90+
- Inspector Trainings : 06
- Guidance Material : 2 + 1

SPM Implementation in UAE

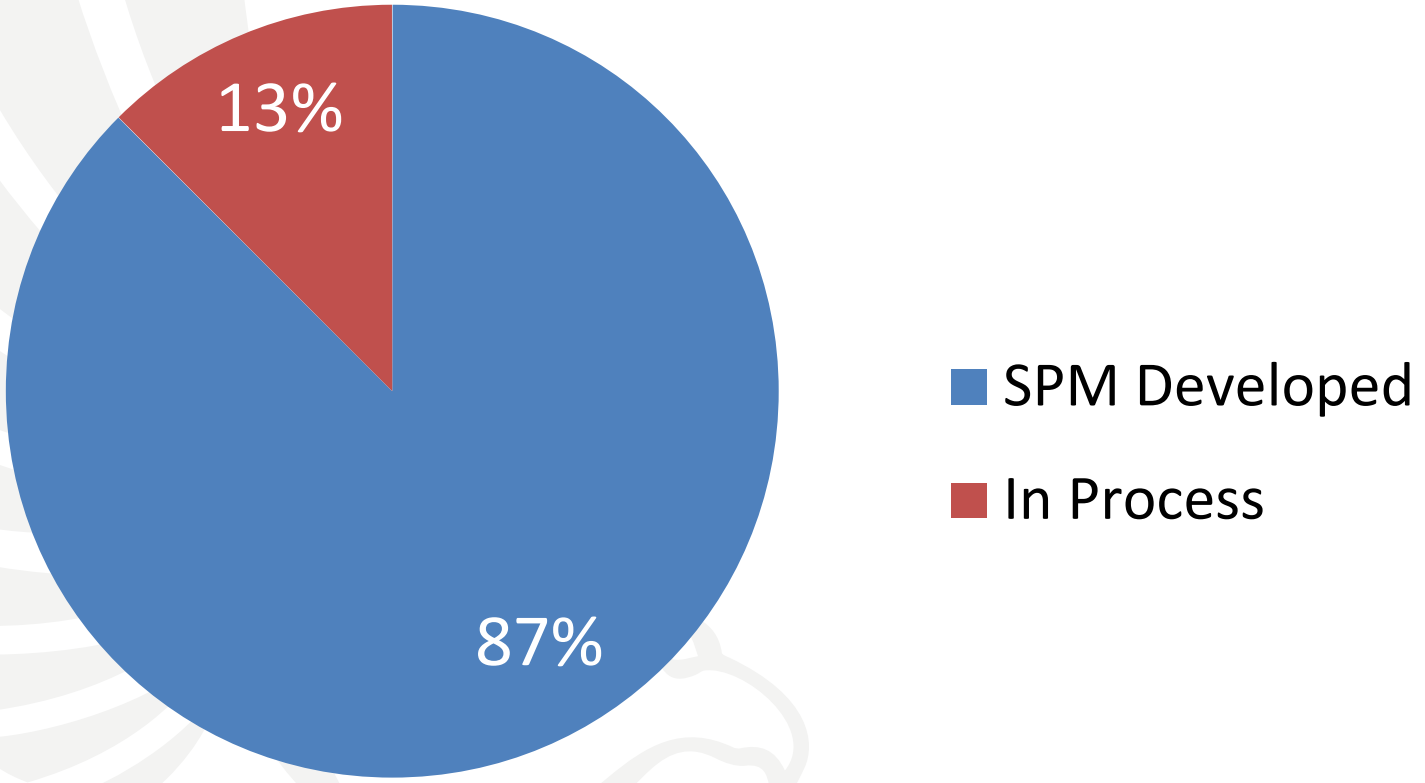


62% Increase
By
31 March 2014

SPM Development



SPM Development Through GCAA Model



- 2.2 Agreement on Service Providers Safety Performance
  - Industry education/ Assistance – Continues
  - Achievement being monitored by PMO
  - 2nd Cycle in process - Completion by Jun 2014
  - Soft ALoSP - June 2014
  - Initial ALoSP - 31 Dec 2014

State Safety Assurance

- 3.1 Safety Oversight
  - Annual Oversight Plan
  - Q Pulse for Audit Management
  - SMS Audit Criteria established in 2012
  - SMS Audits Completed by 2013
  - Detailed SMS Audit criteria development in process
  - SPMs incorporated in SMS Audits - 2014

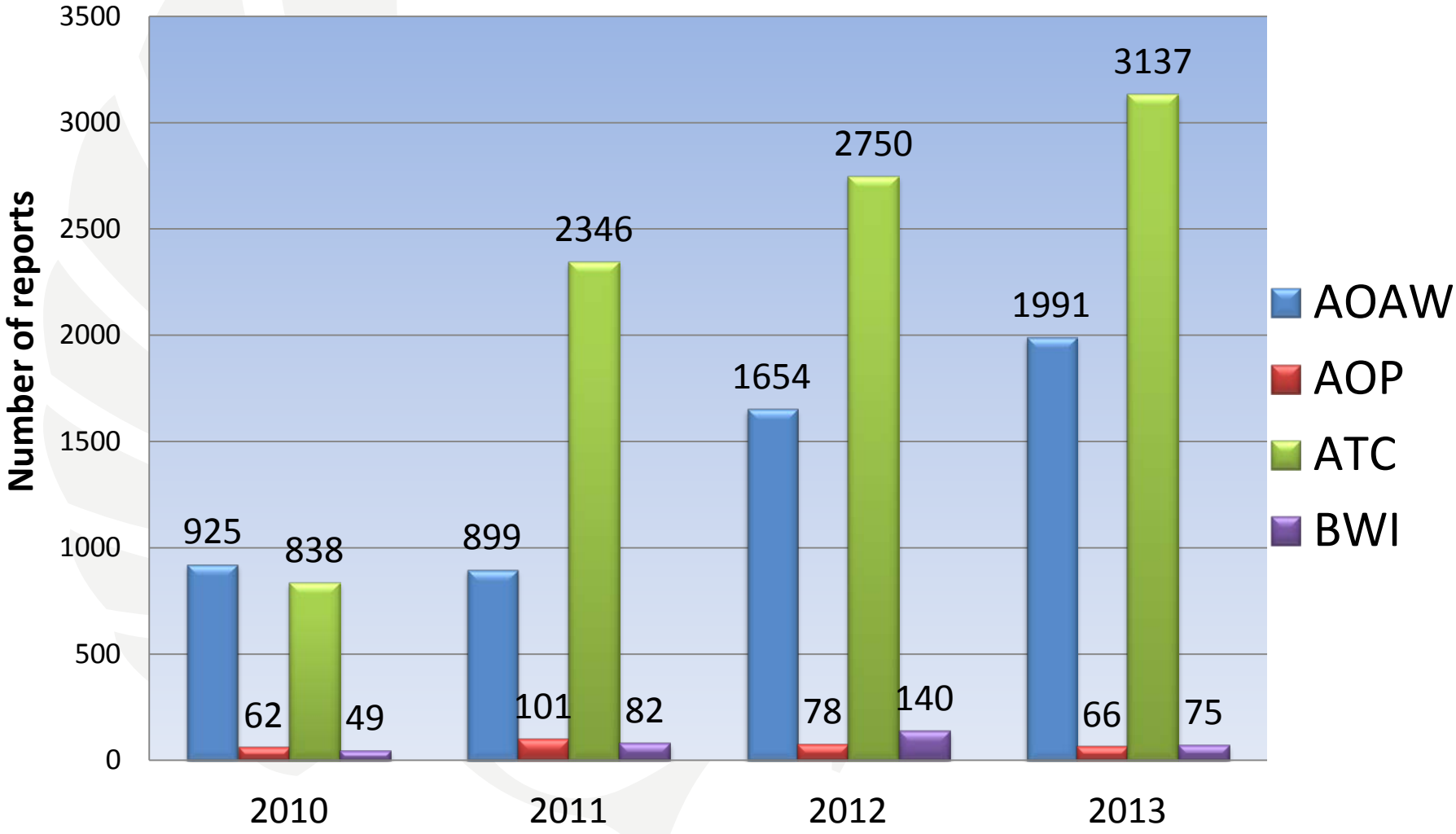
State Safety Assurance

- 3.2 Safety Data Collection, Analysis & Exchange
  - SDCPS
    - ROSI – 2010
    - VORSY – 2012
    - RODGO/ROSB – 2013
  - On line Reporting systems – Investigations/Inquiry
  - Data Analysis – 2013
  - Safety Information Protection Law – In process
  - Accident & Incident reporting to ICAO – In Place
  - Data Sharing & Information Exchange – Development in process
  - ALoSP – 31 Dec 2014

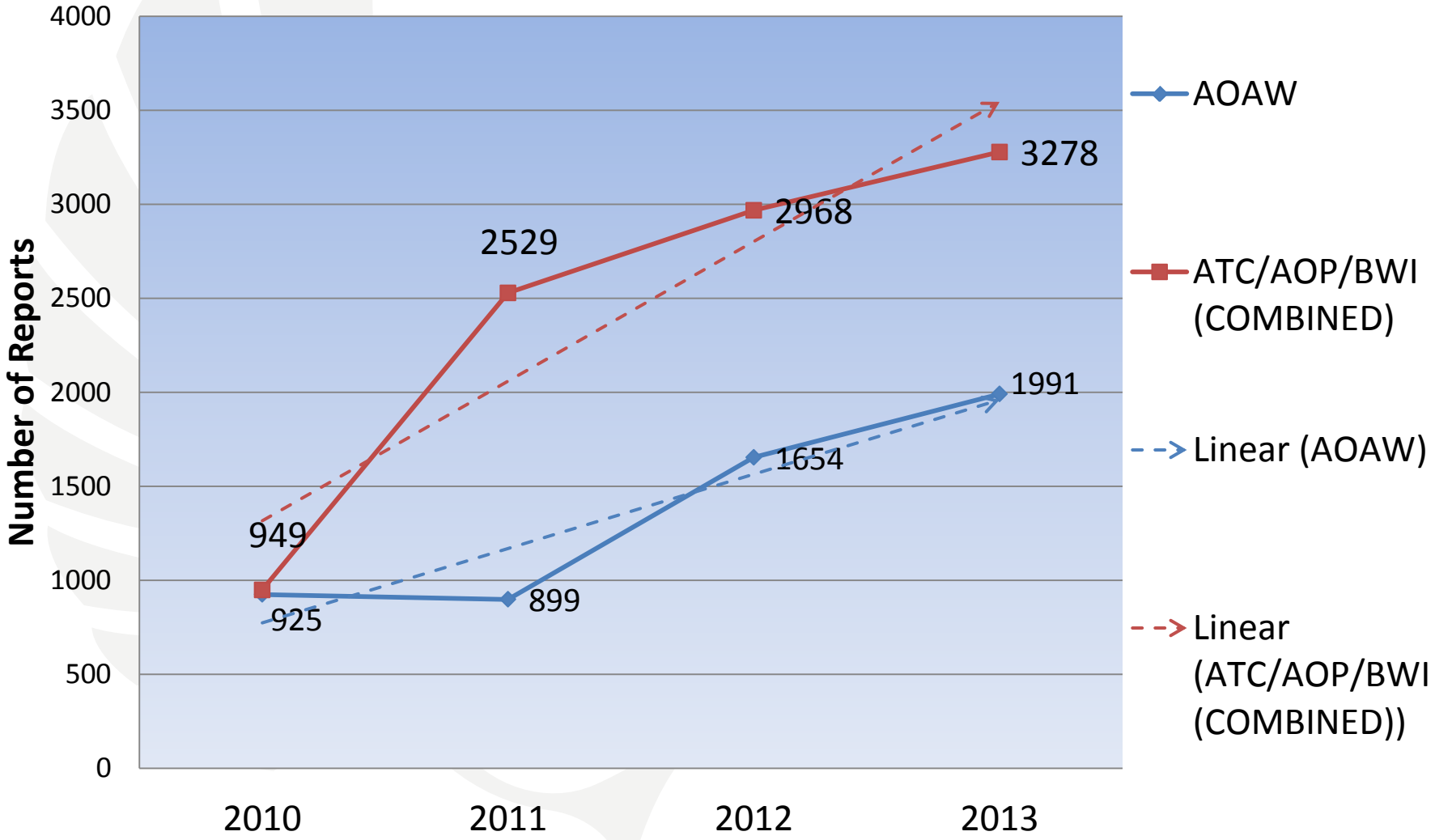
ROSI DATA

- PERIOD 1 JAN 2010 – 31 DEC 2013
  - TOTAL – 15193
  - OPS ROSI (AOAW) – 5469
  - ANA ROSI (ATC, AOP, BWI) – 9724

ANNUAL ROSI DATA



ANNUAL ROSI STATISTICS



SAFETY DATA ANALYSIS

Analysis

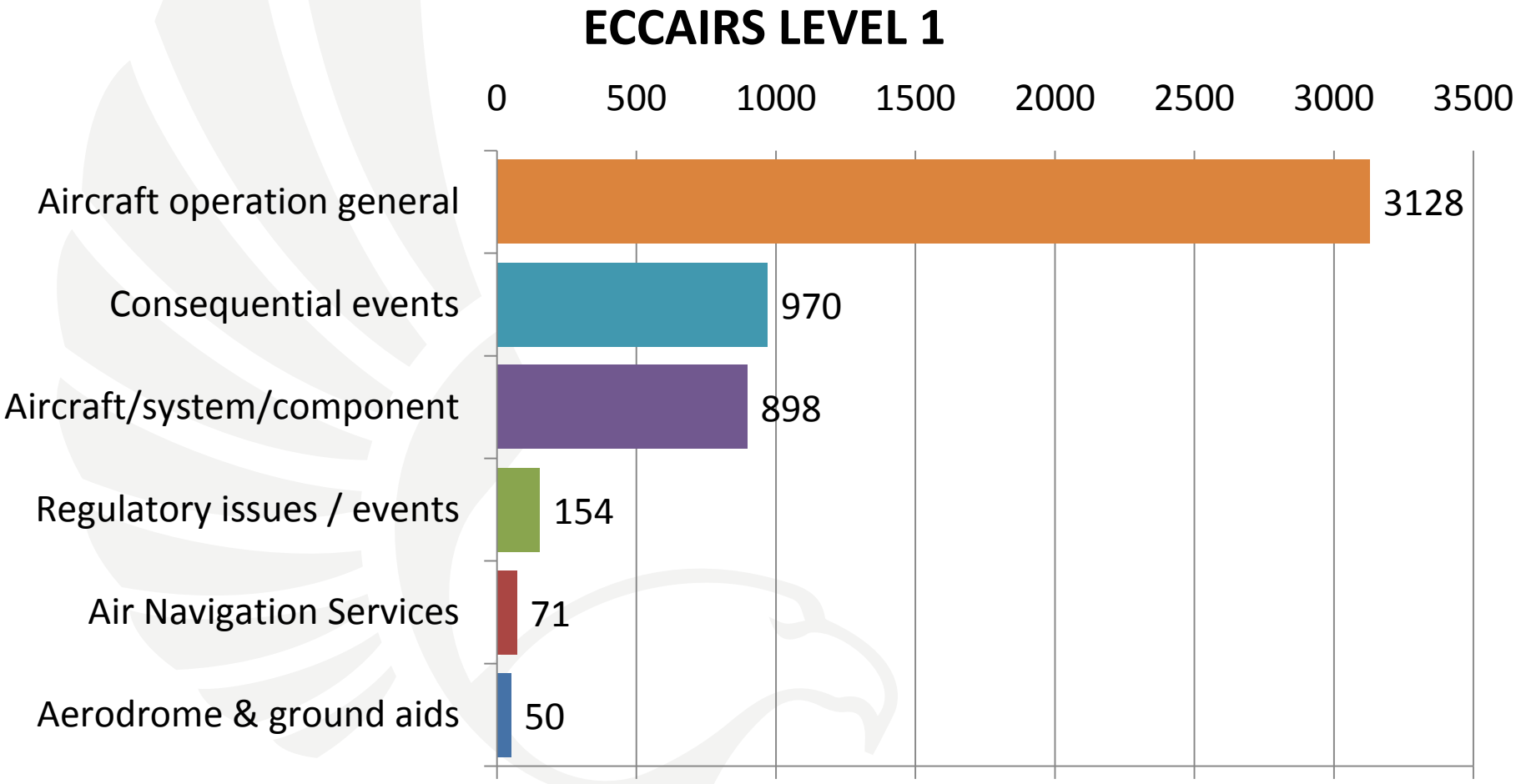
a. Exploratory data analysis (EDA) : Analyzing data sets to summarize their main characteristics

b. Descriptive statistics : Quantitatively describing the main features of a collection of information

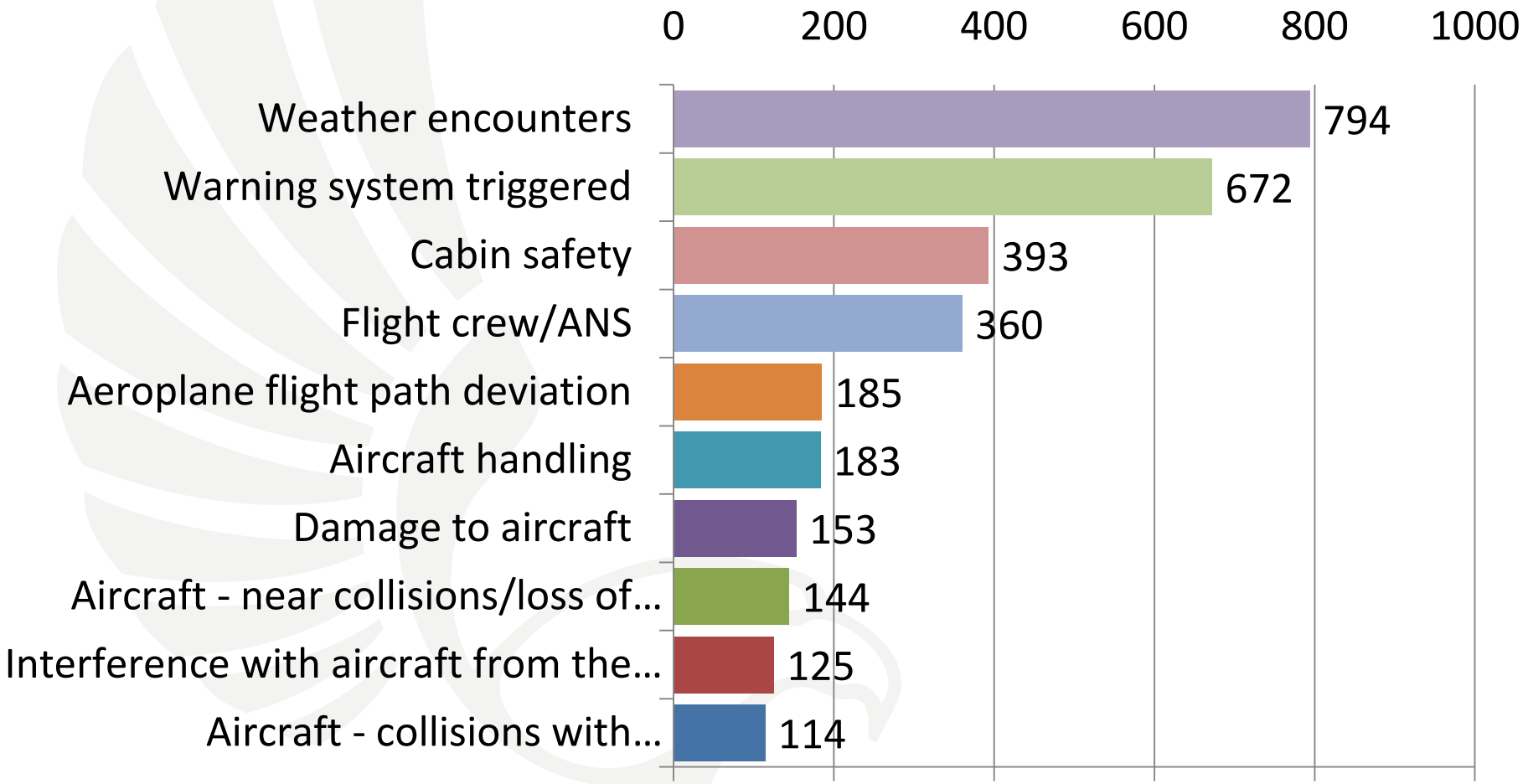
OPS ROSI DATA ANALYSIS - QLIKVIEW

United Arab Emirates

الهيئة العامة للطيران المدني
GENERAL CIVIL AVIATION AUTHORITY

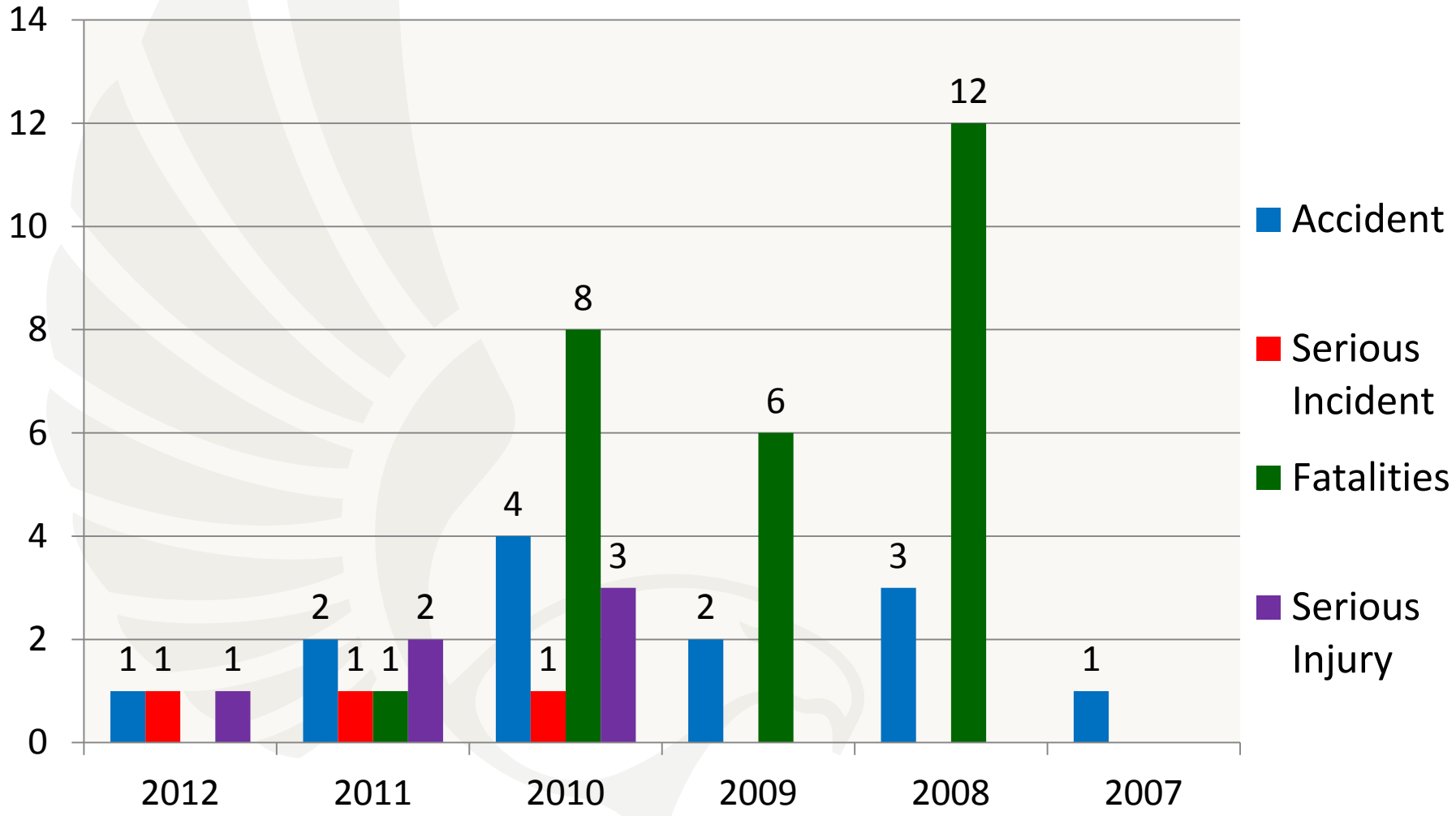


AIRCRAFT OPERATIONS LEVEL 2



SUPPORTING INFORMAITON FOR SAFETY ISSUE SELECTION PROCESS

ACCIDENTS STATISTICS
AAIS



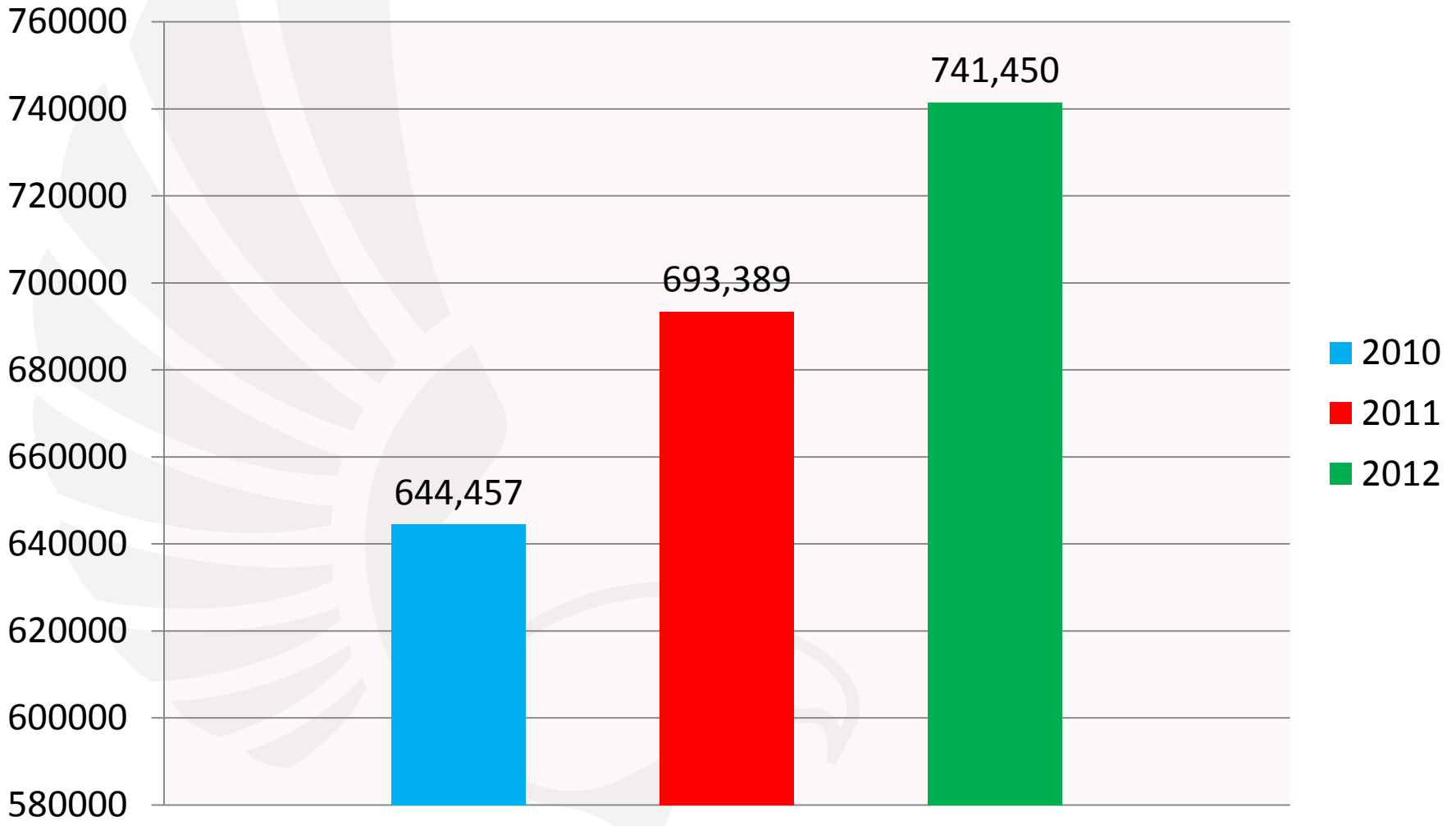
ACCIDENTS STATISTICS
AAIS

United Arab Emirates

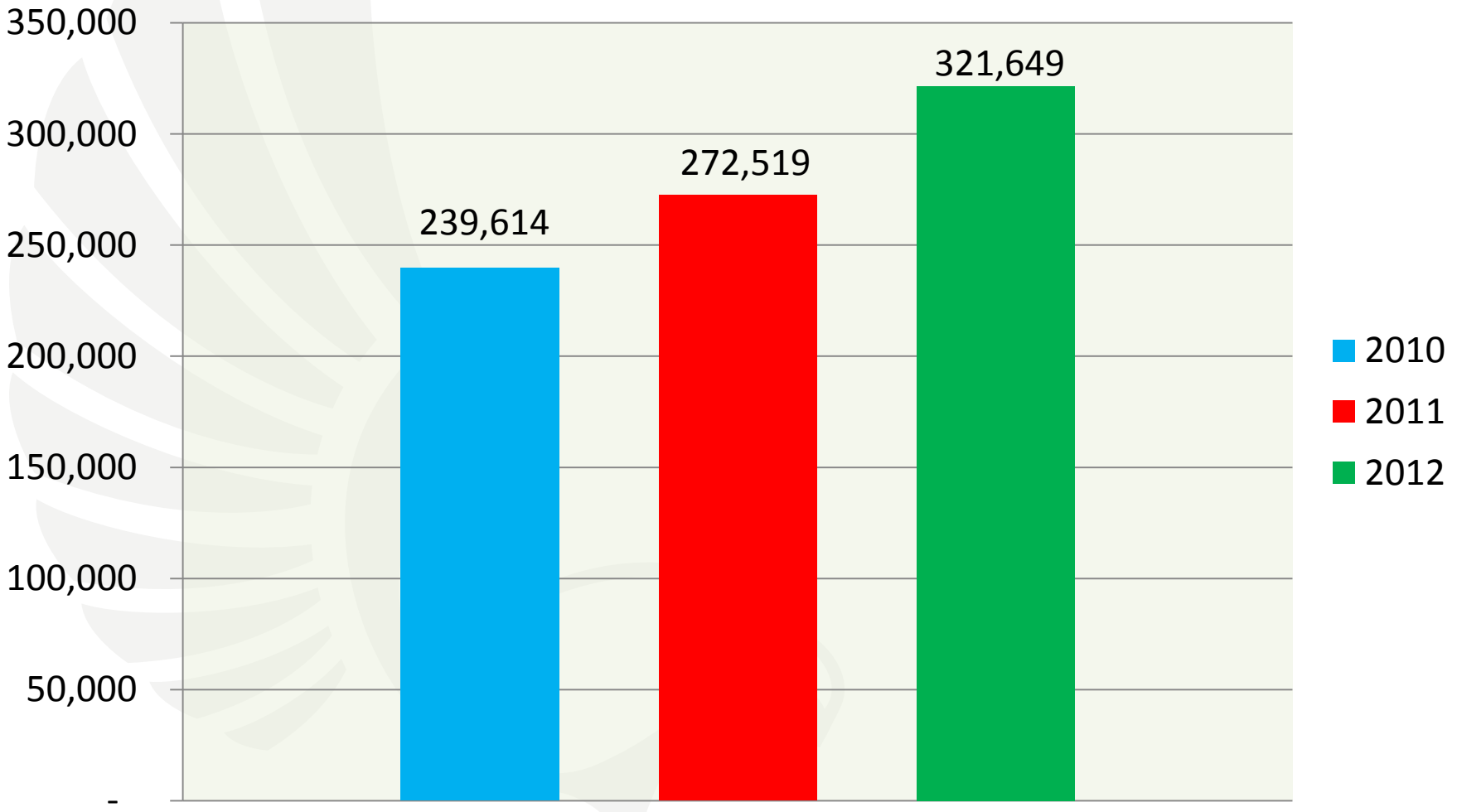
الهيئة العامة للطيران المدني
GENERAL CIVIL AVIATION AUTHORITY

Year	Category	Accident	Serious Incident	Incident	Fatalities	Serious Injury
2012		**1**	**1**			**1**
2011		**2**	**1**		**1**	**2**
2010		**4**	**1**	**2**	**8**	**3**
2009		2		5	6	
2008		3		2	12	
2007		1		1		
Total		13	3	10	27	6

TOTAL FLIGHT MOVEMENT DATA - SZC

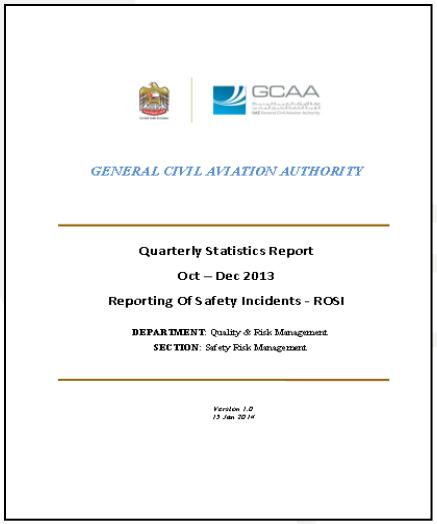


UAE AIRCRAFT FLIGHT MOVEMENT DATA - SZC



STATE LEVEL

- Airprox & Level Bust – Jul 13
- Inflight Injuries due turbulence – Nov 13
- ROSI Stat Reports
- Annual Report


GENERAL CIVIL AVIATION AUTHORITY

Quarterly Statistics Report

Oct – Dec 2013

Reporting Of Safety Incidents - ROSI

DEPARTMENT: Quality & Risk Management
SECTION: Safety Risk Management

Version 1.0
15 Jan 2014

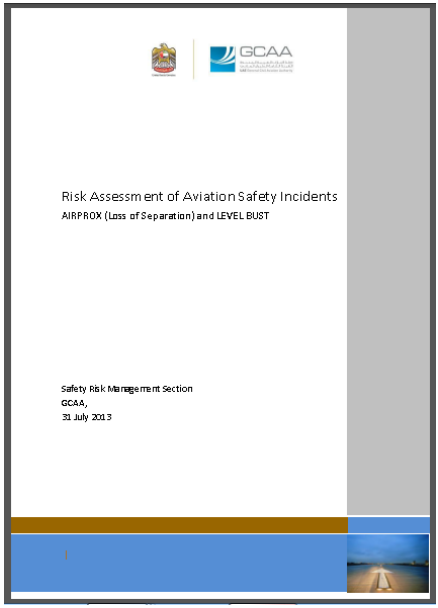
GENERAL CIVIL AVIATION AUTHORITY

Risk Assessment

In-flight Injuries Due Turbulence

SECTOR: Quality & Risk Management
SECTION: Safety Risk Management

Version 1.0
12 November 2013


Risk Assessment of Aviation Safety Incidents

AIRPROX (Loss of Separation) and LEVEL BUST

Safety Risk Management Section
GCAA,
31 July 2013

United Arab Emirates

الهيئة العامة للطيران المدني
GENERAL CIVIL AVIATION AUTHORITY

VOLUNTARY OCCURRENCE REPORTING SYSTEM

VOLUNTARY REPORTING SYSTEM (VORSY)

Launched 2012

Objective

- To capture hazards, incidents and errors which may not have been reported through mandatory reporting system
- Voluntary System
- Confidential

VORSY Reports

- 2012 – 20
- 2013 – 36
- 2014 – 04 (till 31 Jan 2014)

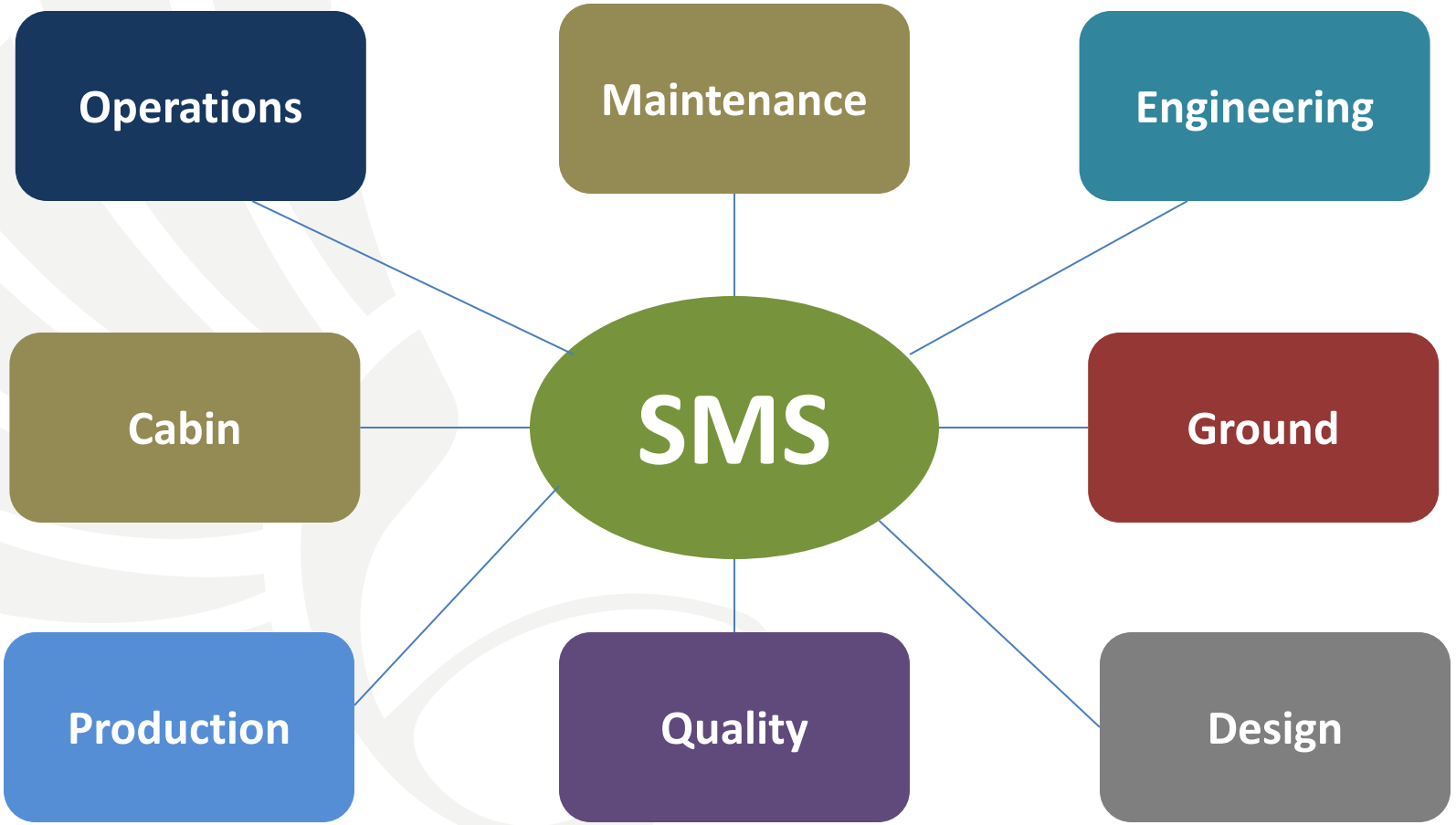
- 3.3 Safety Data Driven Targeting of Oversight of Areas of Greater Concern or Need
  - Initiated in 2013
  - Organization Risk Profiling Criteria – 2013
    - Developed from ICAO guidelines for UAE Air Operators

State Safety Promotion

- 4.1 Internal Training, Communication and Dissemination of Safety Information
- 4.2 External Training, Communication and Dissemination of Safety Information

- Ongoing & Continuous Process/Program
  - Conferences
  - Seminars
  - Workshops
  - Newsletters
  - Promotional Materials

SSP & SMS


Operations
Maintenance
Engineering
Cabin
SMS
Ground
Production
Quality
Design