ISAGO & IGOM & GDDB
Integrated solution for improved Ground Safety
What is IGOM?

Definition

IATA Ground Operations Manual:

- The *Single* industry manual

- Able to form the *Core* of airline and service provider Ground Ops Manuals

- Yet able to stand on its own as a *default* GOM when necessary
What is IGOM?

Objectives

- To standardize Airlines procedures
- Best recommended practices and procedures which ISAGO can audit
- Providing Standardization and consistency as the Industry would like to see a common standard of essential ground operations used globally.
What is IGOM?

Relation between IGOM & AHM

- **AHM**: What to do
  - Policies, standards and safety guideline for Managers

- **IGOM**: How to do it
  - Procedures, instruction, score card for the frontline personnel

- **ISAGO?**
  - ISAGO and IGOM are designed to work together
Standards and Procedures

Updates

- IGOM Ed.1 issued April 2012
  - As an attachment to AHM Ed 32
- IGOM Ed.2, effective Apr-2013
  - Publication date: Apr-2013 (attachment to AHM Ed 33)
- IGOM Ed.3, effective Jan-2014
  - Publication date: Oct-2013 (together with AHM Ed 34)
Task Forces Inside
IGOM

- Alignment of chapter 2, 3, 4 and 6 with AHM, DGR and LAR

- Development of State Variations
IATA Ground Operations

IGOM

- Gap analysis IGOM/ISAGO completed
- ISAGO audits against IGOM in 2015-2016
- GOC/PAG members are urged to do internal gap analysis between IGOM and GOM
- Report back to Ground Operations team
  IGOM@iata.org
IATA Safety Audit for Ground Operations

What is it?

- A standardized and structured audit program of Ground Service Providers
  - Internationally recognized operational standards
  - Highly trained and experienced auditors
- A model for operational risk & safety management
- A system for registration and sharing of audits
Main Target/stakeholders

- Airlines
- Ground Service providers (GSPs)
- Airports
- Regulators
**ISAGO Airline Audit Pool**

**Concept**

- **ISAGO Audit Pool Membership**
  - Membership is reserved to any IOSA registered airline
  - Pool members **MUST** conduct an allocated number of station audits each year
  - Pool members have unconditional access to audit reports through audit reports sharing

- **Pool members are responsible for nominating experienced and qualified airline auditors that conduct ISAGO Station Audits**
  - Airline auditors undergo an ISAGO training for auditors

- **IATA is responsible for:**
  - Pool management and administration
  - Audit allocations

**Airline EU** | **Airline US** | **Airline MENA**
---|---|---
**GSP in EU** | **GSP in ASPAC** | **GSP in MENA**
**GSP in NAM**

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ISAGO Audit Pool: 38 member airlines

Europe 14
- Adria
- Aegean
- Air France
- Alitalia
- Austrian
- BA
- Brussels
- Belleair
- CSA
- KLM
- LOT
- Bulgaria Air
- TAROM
- Turkish

Russia / CIS 4
- Aeroflot
- Air Astana
- UTAir
- Azerbaijan Air

Latin America & The Caribbean 5
- COPA
- GOL
- LAN
- Volaris
- TAM
- COPA
- GOL
- LAN
- Volaris
- TAM

North America 2
- Air Transat
- United / Continental

Middle East / North Africa 5
- Egyptair
- Qatar Airways
- Royal Jordanian
- Royal Air Maroc
- Saudi Arabian
- Egyptair
- Qatar Airways
- Royal Jordanian
- Royal Air Maroc
- Saudi Arabian

Africa 2
- Ethiopian
- Kenya Airways

Asia Pacific 4
- Air India
- Biman
- Garuda Indonesia
- Korean Air

China / North Asia 2
- Air China
- China Eastern

As of 1 April 2013
# ISAGO Audits

Two-level audits of Ground Service Providers (GSP)

<table>
<thead>
<tr>
<th></th>
<th>Corporate Audits</th>
<th>Station Audits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Who</strong></td>
<td>Conducted by an auditor from an <strong>Audit Organization (A.O.)</strong> accredited by IATA</td>
<td>Conducted by auditors from <strong>Pool Airlines</strong></td>
</tr>
<tr>
<td><strong>When</strong></td>
<td><strong>First</strong> audit activity for initial registration</td>
<td>Accomplished <strong>after</strong> the Corporate Audit for initial registration</td>
</tr>
<tr>
<td><strong>Cycle</strong></td>
<td><strong>Two-year audit cycle</strong></td>
<td><strong>Two-year audit cycle</strong> for all stations</td>
</tr>
<tr>
<td><strong>Duration</strong></td>
<td>Typically 2 days audit (1 auditor)</td>
<td>Typically 3 days audit (3 auditors – full scope)</td>
</tr>
<tr>
<td><strong>Manuals</strong></td>
<td>ISAGO Standards Manual (GOSM) and ISAGO Program Manual (IPM)</td>
<td></td>
</tr>
<tr>
<td><strong>Closure</strong></td>
<td>Findings must be addressed and closed within 6 months (initial audit)</td>
<td>Renewal audits: findings must be closed prior to expiry date</td>
</tr>
</tbody>
</table>

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# ISAGO Standards Manual

## Audit scope

<table>
<thead>
<tr>
<th>Section</th>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ORM - H</td>
<td>Organization and Management System (HQ)</td>
</tr>
<tr>
<td>1</td>
<td>ORM - S</td>
<td>Organization and Management System (ST)</td>
</tr>
<tr>
<td>1</td>
<td>ORM - HS</td>
<td>Organization and Management System (Combined HQ+ST)</td>
</tr>
<tr>
<td>2</td>
<td>LOD</td>
<td>Load Control</td>
</tr>
<tr>
<td>3</td>
<td>PAX</td>
<td>Passenger Handling</td>
</tr>
<tr>
<td>4</td>
<td>BAG</td>
<td>Baggage Handling</td>
</tr>
<tr>
<td>5</td>
<td>HDL</td>
<td>Aircraft Handling and Loading</td>
</tr>
<tr>
<td>6</td>
<td>AGM</td>
<td>Aircraft Ground Movement</td>
</tr>
<tr>
<td>7</td>
<td>CGM</td>
<td>Cargo and Mail Handling</td>
</tr>
</tbody>
</table>
IATA Safety Audit for Ground Operations

- Global audit program of ground service providers
  - To improve ground safety
  - To reduce redundant audits
- More than 550 audits conducted worldwide
- Global audit pool
  - 38 airlines
  - 250 approved ISAGO auditors
- More than 200 ISAGO registrations
  - In 130 airports worldwide
  - From 120 ground service providers
ISAGO Pool Members Market Share

ISAGO Pool Members
16%

Rest IATA Members
84%
ISAGO Pool Members Flight-Sectors Share

IATA Member Airlines sectors share

ISAGO Pool Members 31%

Rest IATA Members 69%
ISAGO Trend

Audits Evolution (including MHQ)

- 2008: 37
- 2009: 108 (+192%)
- 2010: 116 (+7%)
- 2011: 134 (+16%)
- 2012: 155 (+18%)
- 2013: 241 (+55%)

AFI, ASPAC, EUR, LATAM, MENA, NASIA, NATNAM, RUS/CIS
ISAGO Benefits

Based on Pool Members 2013 station network
ISAGOGO Penetration

2013 ISAGOGO Penetration in Pool Member's GSP Network (%)
ISAGO Penetration

ISAGO Representation in Pool Members Network

(*) Airports where at least 1 ISAGO-registered GSP exists
Regulators and airports

- 29 regulatory supports including ECAC
  - ECAC endorsed ISAGO and IGOM in January 2012
- 39 airports supporting the program including:
  - Seattle Tacoma – Mandate
  - Quiport (new airport) – Mandate
  - Montego Bay – Mandate
  - Schiphol – Applicable Means of Compliance
  - Hamburg – Acceptable source for safety measurement

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Regulatory Support

North America
- FAA
- Transport Canada

North Asia
- CAA Taiwan
- CAA Macau
- CAD Hong Kong

Latin America
- DGAC Guatemala
- DGAC Costa Rica
- DGAC Chile
- DGAC Peru
- Antigua and Barbuda Airport Authorities
- Autoridad Aeronautica Civil Panama

Europe
- CAA UK
- CAA NL
- CAA BE
- CAA LV
- DGAC FR
- DGAC TR
- HSE (UK)
- Ministry of Transport Austria

Africa
- CAA ET
- CAA NG

MENA
- CARC Jordan
- DGAC Lebanon
- DGAC Kuwait
- GCAA
- Ministry of Transport Oman

Asia Pacific
- CAA Singapore

ECAC

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ISAGO Risk Based approach

- SMS implementation by airlines and GSPs
- Risk assessment of station network
- Reduction of audits
- Efficient allocation of audit resources
- Not enough data available

Reporting GD data to IATA GDDB – essential element
Ground Damage Database
History

- Launched 2011, with limited membership
- Shift in IATA’s data management and analysis approach
- During 2011 and 2012 new reporting protocols and requirements were developed
  - Updated Contract
  - Launched Q1 2012
  - First useable data received from 10 members (with some manipulation)
  - Consistently receiving useable data from 14 participants
- 2013 focus on expanding participation
  - Any airline, ground service provider, and/or airport which provide ground services are eligible to participate in the program
Purpose

- Facilitate data driven improvements to effectively improve performance
- Gather and analyze global data with Industry partnership
  - Provide information not otherwise possible
  - Identify trends and contributing factors allowing for the development and assessment of effective mitigation actions
  - Establish a baseline of ground damage performance in which future comparisons can be made
GDDDB Coverage ~ As of May 1, 2013
GDDDB Coverage ~ As of May 1, 2013
Efforts to Support Growth

- Introduction of IOSA provision ~ ISM Ed. 7
- Introduction of ISAGO provision ~ GOSM Ed. 3

The Operator/Provider should have a process to ensure aircraft ground damages are reported to IATA for inclusion in the Ground Damage Database (GDDB). Such reports should be submitted in accordance with the formal IATA ground damage reporting structure. (GM)
Use of Data

- Conduct statistical analysis on clean defensible data
  - Statistical analysis produces more tangible information
  - Measures process performance
  - Identify and prioritize contributing factors to process performance
  - Measure and predict process performance improvements
  - Provides confidence interval
  - Measures the quality of the data

- Communicate findings to applicable WGs and TFs
Challenge ~ Data Quality

- Any airline, ground service provider, and/or airport which provide ground services are eligible to participate in the program
- Variance in data received
- Data integrity the utmost of importance
- Confidence in analysis and decisions derived from it is equal to the confidence in the data itself
Solution ~ Defined Fields

- GDDB TF developed reporting criteria
  - Representatives from Operators, GSP’s, Manufacturers and Industry groups
- Identified data to be consistently reported amongst ALL members
  - Includes definitions / assumptions
  - Minimize data variance
- Identify means in which data and analysis will feed ground operations working groups and vice versa
Definition

“Any occurrence / event associated with ground operations that results in aircraft damage”

In Scope

- While parked at Gate / Stand or other parked area
- During Marshaling or using Stand Guidance
- During Deicing
- While being Towed
- Near Miss
- Slide Deployments

Out of Scope

- FOD
- Wildlife Damage
- Lightning Strikes
- Environmental
Field Categories

- Mandatory
  - Incident details
  - Location details
  - Aircraft details
  - Ramp conditions
  - Phase of operation ~ definitions included
  - Activities
  - Type of damage
  - Damage to aircraft
  - Ground equipment
  - Severity ~ definitions included
Field Categories

Optional
- Causal factors
- Corrective actions
- Free text
Ground Damage Database

Ongoing Development
GDDDB Development

- Numerous requests to expand the database to include entire scope of AHM and ISAGO
- TF meetings planned for June (DOH) and Sep (YUL)
  - Establishment of a costing model
  - Identify reporting challenges / solutions
  - Development of a phased plan to expand scope
Integrated solution for Ground Operations
Strategy ~ Continuous Improvement Circle

- **Regulatory Environment and Framework**
  - Standards
  - Policies

- **Operational Procedures**
  - Procedures
  - Job cards

- **Hazard Identification**
  - Data analysis
  - Feedback

- **Verification**
  - Audit

AHM | IGOM
---|---
GDDB | ISAGO
ISAGO & IGOM & GDDB

- ISAGO – AMC to Operators Oversight
- ISAGO – AMC to Airports Oversight
- ISAGO – one of the condition to get operating licence
- ISAGO & IGOM – tools for reduction of ground damage
- IGOM – tool for ground operation standardization
- IGOM – tool for reduction of training cost for ground personnel
- GDDB – measurement tool of ISAGO and IGOM success