How SM ICG Materials Can Be Used/Integrated into an Airline's SMS Operation

SM ICG Industry Day
Cologne May 2015

Presented by Capt. Kremer Pascal

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- SM ICG Documents
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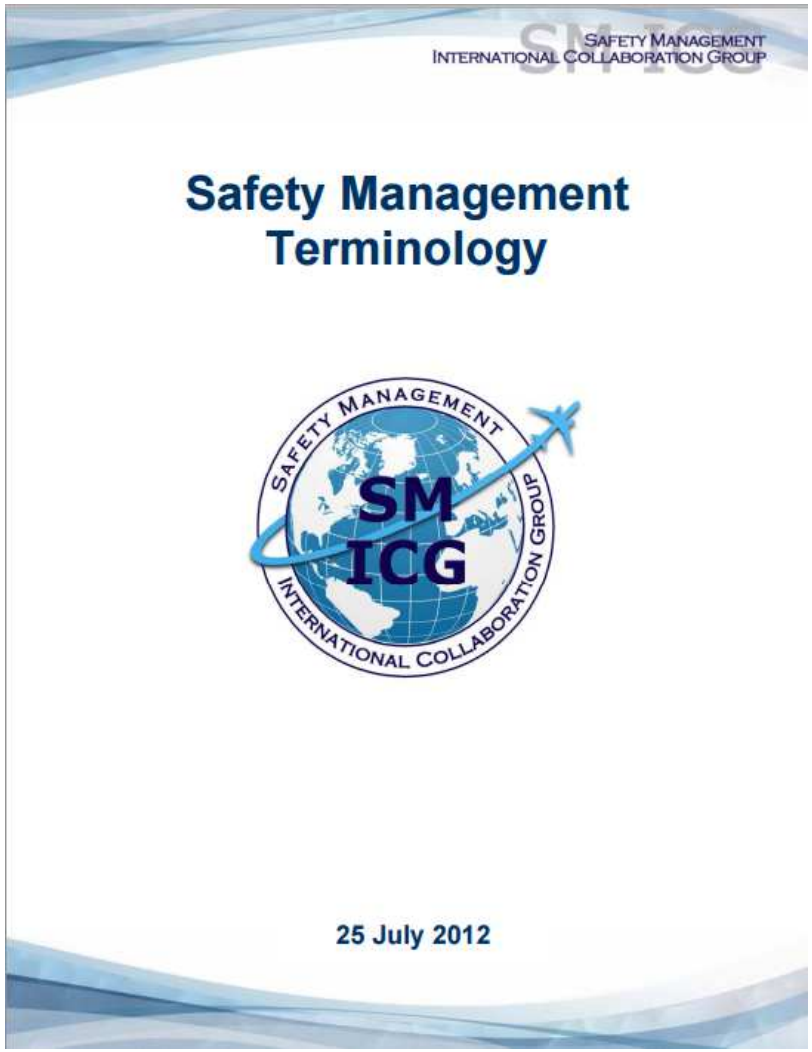
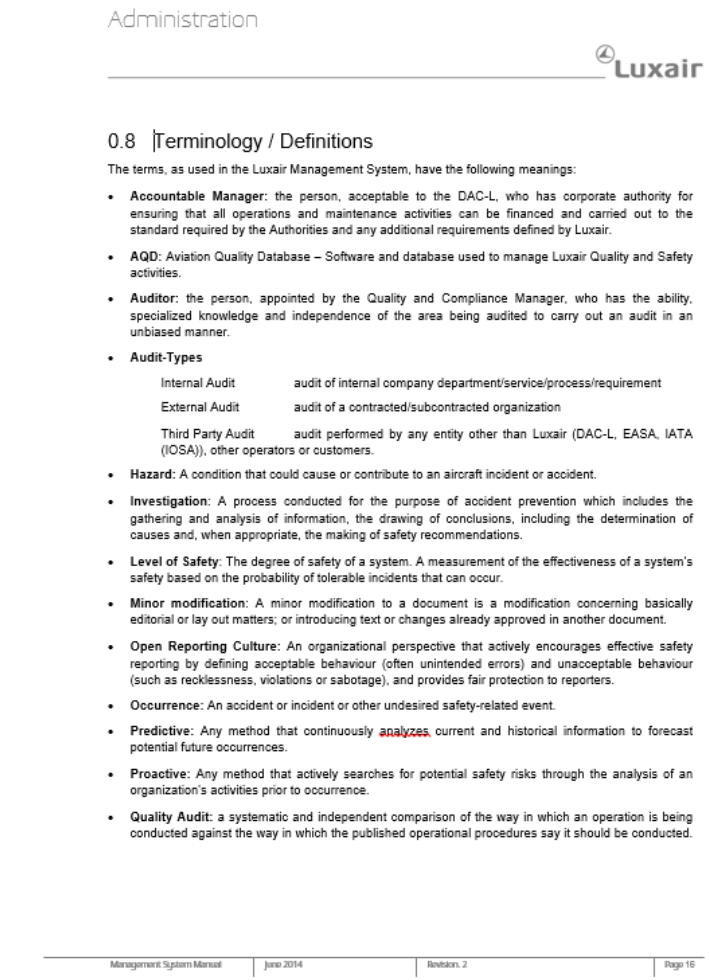
SMICG Document
Safety Management Terminology



- Provide a common set of safety management related terms and definitions to assist in effective communication and safety information sharing.

Luxair Implementation
Safety Management Terminology



Administration

Luxair

0.8 Terminology / Definitions

The terms, as used in the Luxair Management System, have the following meanings:

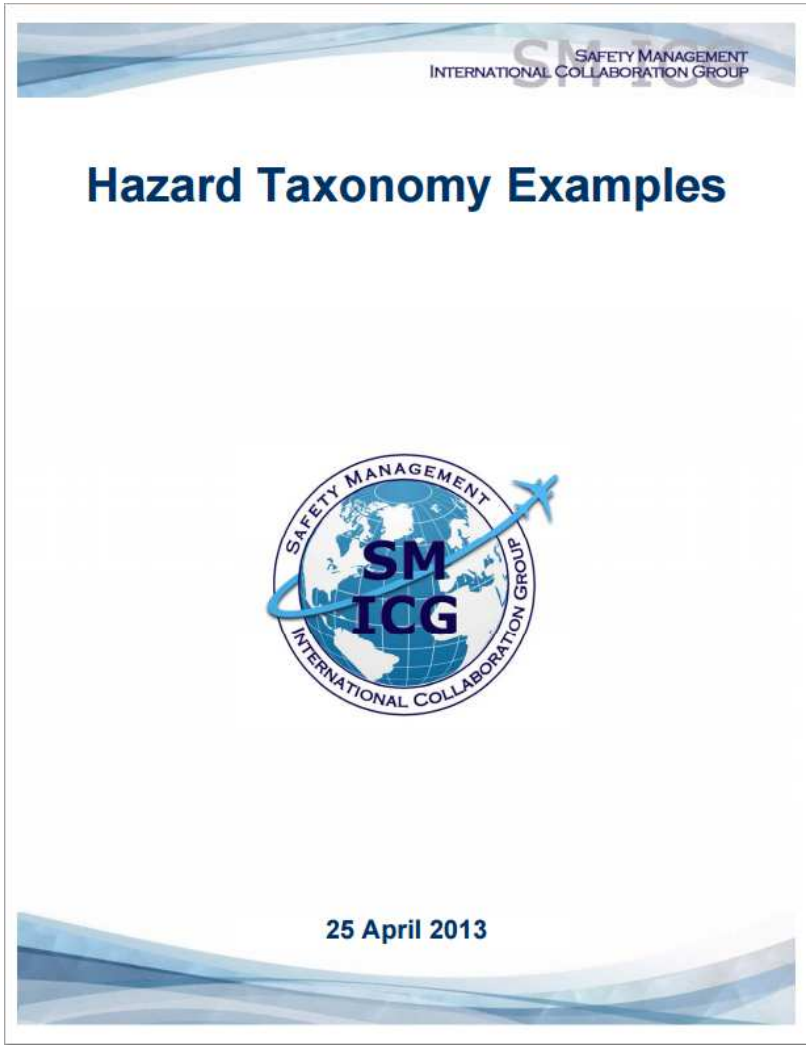
- **Accountable Manager:** the person, acceptable to the DAC-L, who has corporate authority for ensuring that all operations and maintenance activities can be financed and carried out to the standard required by the Authorities and any additional requirements defined by Luxair.
- **AQD:** Aviation Quality Database – Software and database used to manage Luxair Quality and Safety activities.
- **Auditor:** the person, appointed by the Quality and Compliance Manager, who has the ability, specialized knowledge and independence of the area being audited to carry out an audit in an unbiased manner.
- **Audit-Types**

Internal Audit	audit of internal company department/service/process/requirement
External Audit	audit of a contracted/subcontracted organization
Third Party Audit	audit performed by any entity other than Luxair (DAC-L, EASA, IATA (IOSA)), other operators or customers.

- **Hazard:** A condition that could cause or contribute to an aircraft incident or accident.
- **Investigation:** A process conducted for the purpose of accident prevention which includes the gathering and analysis of information, the drawing of conclusions, including the determination of causes and, when appropriate, the making of safety recommendations.
- **Level of Safety:** The degree of safety of a system. A measurement of the effectiveness of a system's safety based on the probability of tolerable incidents that can occur.
- **Minor modification:** A minor modification to a document is a modification concerning basically editorial or lay out matters; or introducing text or changes already approved in another document.
- **Open Reporting Culture:** An organizational perspective that actively encourages effective safety reporting by defining acceptable behaviour (often unintended errors) and unacceptable behaviour (such as recklessness, violations or sabotage), and provides fair protection to reporters.
- **Occurrence:** An accident or incident or other undesired safety-related event.
- **Predictive:** Any method that continuously analyzes current and historical information to forecast potential future occurrences.
- **Proactive:** Any method that actively searches for potential safety risks through the analysis of an organization's activities prior to occurrence.
- **Quality Audit:** a systematic and independent comparison of the way in which an operation is being conducted against the way in which the published operational procedures say it should be conducted.

- Introduced in our Management System Manual and other documents
- As far as practicable
- Important because we use other documents from SMICG
- Some terminology differs from SMICG document.

SMICG Document
Hazard Taxonomy Examples



- Introduce hazard taxonomy
- Provide examples of specific aviation sector hazards in each of the taxonomy categories.

SMICG Document
Hazard Taxonomy Examples

Organizational

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Aerodrome, Air Navigation Service Provider, Air Operation, Maintenance Organization, Design & Manufacturing Organization (continued)	Management (continued)	Incorrect or incomplete or lack of training and knowledge transfer. *Note: Training should reflect the needs of the organization. Accidents have shown that inadequate training is a hazard and may even lead to accidents.*
		Unofficial organizational structures *Note: These structures may be of a benefit but also may lead to a hazard.*
		Growth, strikes, recession or organizational financial distress
		Mergers or acquisition
		Changes, upgrades or new tools, equipment, processes or facilities
		Incorrect or ineffective shift/crew member change over procedures
		Changes or turnover in management or employees
		Informal processes (Standard Operating Procedures)
		Lack of or poor or inappropriate materials/equipment acquisition decisions
		Lack of, poor staffing recruitment/assignment *Note: Staff should be hired or assigned according to organizational needs but also according to their skills, qualifications and abilities. An employee with the wrong skill set can be a hazard. This includes management.*
	Documentation, Processes and Procedures	Incorrect, poor or lack of internal and external communication including language barriers
		Lack of, incorrect or incomplete manuals, or operating procedures (including maintenance)
		Lack of, incorrect or incomplete employee duty descriptions
		Lack of, incorrect, incomplete or complicated document update processes
		Lack of, incorrect or incomplete reports and records
		Lack of, incorrect or incomplete control of necessary documents for personnel (licenses, ratings, and certificates)

Technical - Air Operation and Maintenance

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Air Operation (continued)	Preflight Preparation (continued)	Lack of, incorrect or incomplete aircraft performance limitations verification
		Lack of, incorrect or incomplete flight planning
		Poor fueling processes
		Lack of or poor aircraft dispatch or release
		Lack of or poor maintenance release
	Aircraft Loading	Incorrect cargo loading and distribution
		Improper or unauthorized hazardous materials carriage
		Poor cargo and baggage stowage
		Incorrect information on cargo or baggage loaded
		Improper stowage of carry-on baggage
		Improper weight and balance calculations
	Flight Operation	Use of obsolete documents
		Absence of or incorrect flight and cabin crew manuals or charts on board
		Improper response to flight route changes
		Lack of, or poor crew resource management
		Lack of or poor flight following
		Improper execution of procedures in all flight phases (including taxiing and parking)
		Inadequate or complicated procedures
		Equipment and instruments necessary for a particular flight or operation not available or malfunctioning
		Lack of, or poor communication (ATC, ramp, maintenance, flight Ops, cabin, dispatch, etc)
		Language barriers (Multiple languages)
Maintenance	Facilities	Poor HVAC (heating, ventilation, and air conditioning)
		Noisy work environment
		Lack of, or poor Lighting
		Poor facilities (inadequate space, equipment or infrastructure)
	Maintenance Activity	Lack of, or poor maintenance release
		Lack of, or poor maintenance programs (Including imprecise maintenance data or transcription errors when creating job-cards)

Luxair Implementation
Hazard Taxonomy Examples

Luxair

Safety Department

Safety risk management

Identification number: FP P 25

ISSUE Nr 1

Effective date: 14th July 2014

WRITER(S)	REVIEW	VERIFY(S)	APPROVER(S)
Mr P. Kremer	Mr. M. Kerry	Mr. JM. Muller	Mr P. Kremer

Luxair

Safety Department

Safety risk management

(Guidance for contracted activities)

Identification number: FP P 32

ISSUE Nr 1

Effective date: 14 July 2014

WRITER(S)	REVIEW	VERIFY(S)	APPROVER(S)
Mr P. Kremer	Mr. M. Kerry	Mr. JM. Muller	Mr P. Kremer

Luxair Implementation
Hazard Taxonomy Examples

Luxair

Hazard taxonomy examples:

Organisational

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Aerodrome, Air Navigation Service Provider, Air Operator, Maintenance Organization, Design & Manufacturing Organization	Regulator	Lack of, poor or ineffective legislation and/or regulations
		Lack of or ineffective accident investigation capability
		Inadequate oversight capability
	Management	Limited or lack of management commitment – Management do not demonstrate support for the activity
		Lack of or incomplete description of roles, accountabilities and responsibilities
		Limited or lack of resource availability or planning, including staffing
		Lack of or ineffective policies
		Incorrect or incomplete procedures including instructions
		Lack of or poor management and labor relationships
		Lack of or ineffective organizational structure
		Poor organizational safety culture
		Lack of or ineffective safety management processes (including risk management, safety assurance, auditing, training and resource allocation)
		Lack or ineffective audit procedures
		Lack of or limited resource allocation

Luxair

Type of operation	Type of activity/ infrastructure/ system	Examples of Hazards
Aerodrome (continued)	Airfield Apron Operation Airfield Apron Operation (continued)	Jet blast
		Lack of, limited or incorrect type of aircraft parking
		Improper marshaling
		Lack of, or insufficient protective pylons around aircraft
		Lack of, or inadequate chalks when aircraft parks
		Lack of, or improper foreign object debris (FOD) control
		Lack of, or improper ramp control tie down procedures
		Improper fuel or hazardous material spill containment and cleanup
		Poor refueling procedures
	Airside Vehicle Operations	Vehicle failure during aerodrome services
		Poor mechanical condition
		Poor radio or communication equipment condition
		Oil spills on apron and/or in passenger areas
		Lack of vehicle maintenance
		Poor Emergency Response Planning
		Erratic driving or not complying with flight line driving regulations
		Driving too fast
		Improper parking
		Failure to chalk vehicles
		Leaving engine running while vehicle is unattended
		Lack of coordination between vehicles during aircraft servicing
	Action of Individuals	Pedestrians on apron areas
		Ignoring aircraft hazard beacons
		Improper checking around aircraft during departure marshaling
		Misinterpreting apron markings
		Smoking on the apron
		Passenger failure to follow guidance

Luxair Change Management Form

Change Management Luxair

Change Management - Preliminary Safety Assessment

Title:

The ***Preliminary Safety Assessment*** (***PSA)*** is made of 9 pre-defined questions which have to be answered with a Yes or No:

Does the change involve a **significant new procedure** or a **significant procedure update**?

☐ **YES** ☐ **NO**

Does the change involve introduction of **new equipment/software or a significant upgrade of equipment/software**?

☐ **YES** ☐ **NO**

Does the change require **undertaking training**?

☐ **YES** ☐ **NO**

Is the change a **new destination**?

☐ **YES** ☐ **NO**

Is the change a **charter flight to a previous unapproved airport**?

☐ **YES** ☐ **NO**

Is the change a **change of nominated person or manager**?

☐ **YES** ☐ **NO**

Is the change a **significant change in regulatory requirements**?

☐ **YES** ☐ **NO**

Does the accomplisher of the change lack **adequate knowledge or experience**?

☐ **YES** ☐ **NO**

Is the change an **external change which may have an impact on the safe operation**?

☐ **YES** ☐ **NO**

If all answers are "No", the questionnaire is sent to Safety and Quality Departments and if deemed necessary to the respective Post Holder who is also affected by the change. The document is stored in AQD by the Safety Department.

If there is at least one "**Yes**", a Safety Risk Management is to be done.

Safety Risk Management required: ☐ **YES** ☐ **NO**

Luxair Change Management Form

Change Management

1 Type of operation or activity	2 Generic hazard	3 Specific components of the hazard
If other, Specify		
4 Hazard related consequence		
5 Existing defenses to control safety risk, associated safety risk index and safety risk tolerability	1 2 3 4 5	Probability: Severity: Risk index: Safety risk tolerability:
6 Further actions to reduce the safety risks, associated safety risk index and safety risk tolerability	1 2 3 4 5	Probability: Severity: Risk index: Safety risk tolerability:

7 Time limit for implementation of further actions, person responsible and follow-up	Time limit	Person responsible	Tick when implemented	Implementation date
	1 2 3 4 5	1 2 3 4 5	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐	1 2 3 4 5

8 Remarks, risk acceptance and person who accepted the risk	Remarks	Risk accepted	Person who accepted the risk	Signature
		☐ Yes ☐ No		

SMICG Document
10 things you should know about SMS

Luxair Implementation
10 things you should know about SMS

1. What is a safety management system (SMS)?

A safety management system is a series of defined, organization-wide processes that provide for effective risk-based decision-making related to your daily business.

2. What does the SMS focus on?

SMS focuses on maximizing opportunities to continuously improve the overall safety of the aviation system.

3. What are the key processes of an SMS?

- ***Hazard Identification*** – a method for identifying hazards related to your organization;
- ***Occurrence Reporting*** – a process for the acquisition of safety data;
- ***Risk Management*** – a standard approach for assessing risks and for applying risk controls;
- ***Performance Measurement*** – management tools for analyzing whether the organization's safety goals are being achieved; and
- ***Quality/Safety Assurance*** – processes based on quality management principles that support continuous improvement of the organization's safety performance.

4. What are the roles and responsibilities within the SMS?

- The senior manager/accountable executive is accountable for establishing the SMS and allocating resources to support and maintain an effective SMS;
- Management is responsible for implementing, maintaining and adhering to SMS processes in their area; and
- Employees are responsible for identifying hazards and reporting them.

5. How will SMS benefit my organization?

- Provides for more informed decision-making;
- Improves safety by reducing risk of accidents;
- Provides for better resource allocation that will result in increased efficiencies and reduced costs;
- Strengthens corporate culture; and
- Demonstrates corporate due-diligence.

6. What key qualities are evident in organizations with an effective SMS?

- A top-down commitment from management and a personal commitment from all employees to achieve safety performance goals;
- A clear roadmap of what the SMS is and what it is supposed to accomplish;
- An established practice of open communication throughout the organization that is comprehensive and transparent, and where necessary, non-punitive; and
- An organizational culture that continuously strives to improve.

7. What SMS is not:

- Self-regulation / de-regulation;
- A stand alone department;
- A substitute for oversight; or
- An undue burden.

8. What SMS does:

- Builds on existing processes;
- Integrates with other management systems by tailoring a flexible regulatory framework to your organisation; and
- Demonstrates good business practice.

9. What's the difference between SMS and a flight safety program?

A safety management system is primarily proactive/predictive. It considers hazards and risks that impact the whole organization, as well as risk controls. A flight safety program is primarily reactive and typically focuses on only one part of the system - the airline operation.

10. What's the difference betwen SMS and quality management systems (QMS)?

- SMS focuses on the safety aspects of the organization.
- QMS focuses on the services and products of the organization.
- While QMS focuses on conformity, SMS focuses on hazards. Both non-conformities and hazards can impact safety.

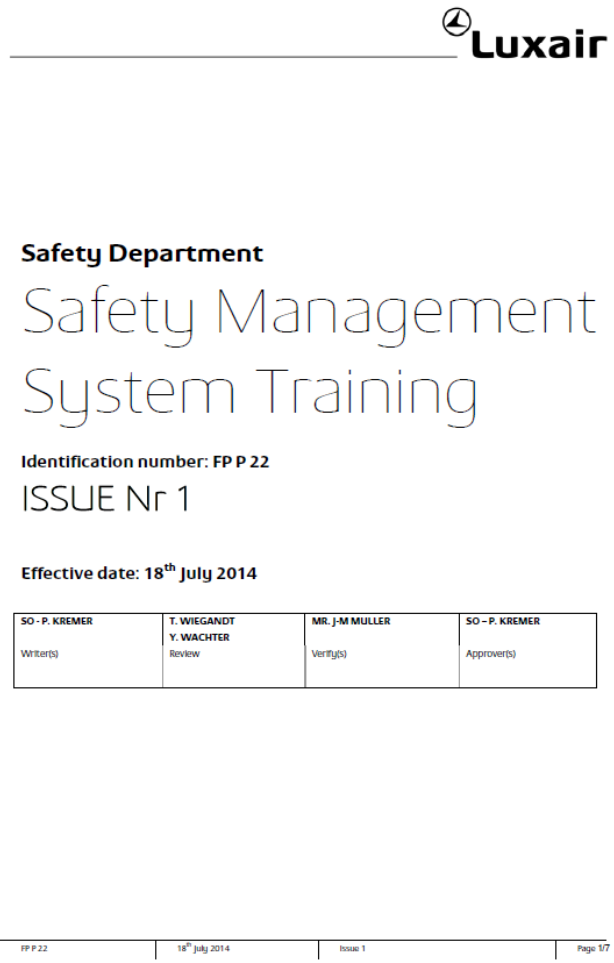
Both systems enhance safety and are essential and complimentary management tools. You cannot have an effective SMS without applying quality management principles.

Safety Management Systems

Safety Management Systems

Document is being used in training and distributed to staff after training

SMS Training



Luxair

Safety Department

Safety Management System Training

Identification number: FP P 22

ISSUE Nr 1

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SO - P. KREMER	T. WIEGANDT Y. WACHTER	MR. J-M MULLER	SO – P. KREMER
Writer(s)	Review	Verify(s)	Approver(s)

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- Not an 'off the shelve' training but developed in house
- Based on industry documentation
- Delivered via face to face training or self study briefing
- Safety mascot developed for better recognition
- Uses real examples from our operations
- Reviewed after 5 year period
- An integral part of company safety training
- Monitored by HR software.

SMS training

8 Initial training

The initial training is provided through a face to face course. The training is based on the individual's involvement in the SMS and covers the following:

Operational personnel (1 hour)

- Organisation safety policy
- SMS fundamentals and overview

Managers and supervisors (1h30 minutes)

All of the above plus

- The safety process
- Hazard identification and safety risk management
- The management of change.

Senior managers (2 hours)

All of the above plus

- Organisational safety standards and national regulations
- Safety assurance

SMS training

9 Refresher training

The refresher training is based on the following table.

Staff Duration	Year 1	Year 2	Year 3	Year 4	Year 5
Operational personnel **30 minutes**	Safety policy	Safety risk management fundamentals	Safety assurance fundamentals	Safety promotion fundamentals	SMS global review
Managers and supervisors **1h30 minutes**	Feedback from the safety process	Feedback from the safety process	Feedback from the safety process	Feedback from the safety process	SMS global review
Senior managers **1 hour**	Briefing	Briefing	Briefing	Briefing	SMS global review

Note: Year 1 first cycle reference is 2014

After a 5 year period all components and elements of the SMS will have been addressed.

Examples of actual day to day application of the SMS will be included in all trainings.

SMS training

Home | TheGroup | CSR | Documents | Procedures | Tools | Helpdesk | Useful Links

Airline Safety Page

Our mission is to support the maintenance, ground ops, crew training and flight ops post holders in their mission to ensure safe operations

Meet the team

search

Keff, Alexandre
Kerry, Matthew
Kremer, Pascal
Lammar, Isabelle
Wachter, Yolande
Wiegandt, Tim

Safety policy

Policy

It is LUXAIR's fundamental belief that safety is [illegible] core business, personal value and a source of our competitive advantage. Even though the purpose of our company is to generate commercial and financial value and benefit to Luxair stakeholders, safety always comes first. By making safety excellence an integral part of all our flight and ground activities we are strengthening our business.

This Safety Management System aims to continually improve the safety of LUXAIR by identifying, eliminating or mitigating any deficiencies in conditions, policies and procedures, and by ensuring that staff considers at all time the safety implications of their own actions, and those of their colleagues. Indeed all staff need to act to the best of their knowledge/training level and should seek the safest way of action when performing their duties.

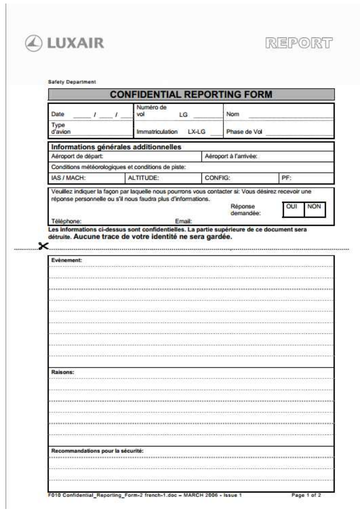
Documents

- Safety Info Page
- Cabin Safety Briefing
- DAC Feedback
- Industrie data
- Memos in force
- Minutes of meetings
- Monthly Occurrence Reports
- OFDM
- Safety Digest
- Safety Forms
- Safety Performance Indicators
- SFRP/SFRC feedback
- SMS training
- STEADES
- Surveys
- SMS terminology.pdf

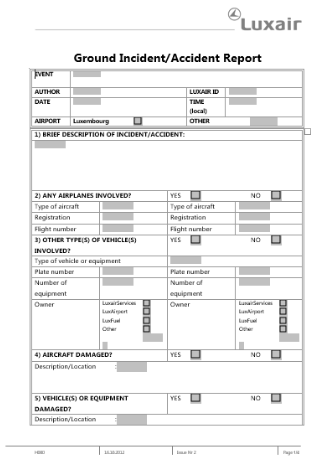
Records 1 to 15 of 15

Example of self briefing

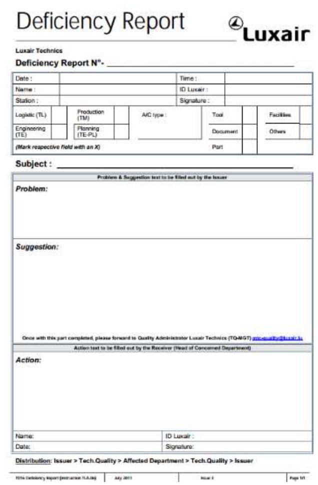
- **Ensure** that no action will be taken against any employee who discloses a safety concern through the hazard reporting system, unless such disclosure indicates, beyond any reasonable doubt, an illegal act, gross negligence, or a deliberate or wilful disregard of regulations or procedures;


LUXAIR REPORT

CONFIDENTIAL REPORTING FORM


Luxair

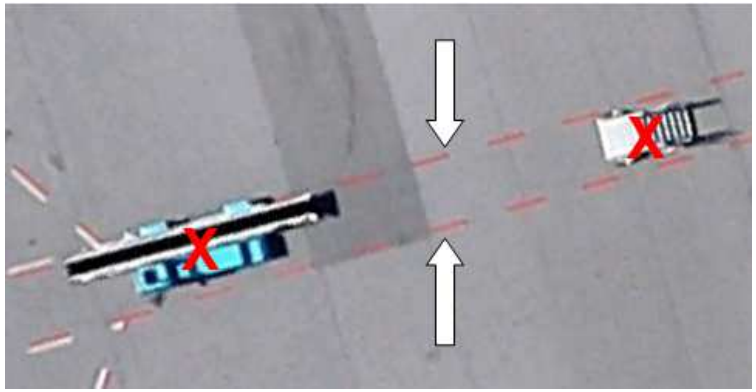
Ground Incident/Accident Report

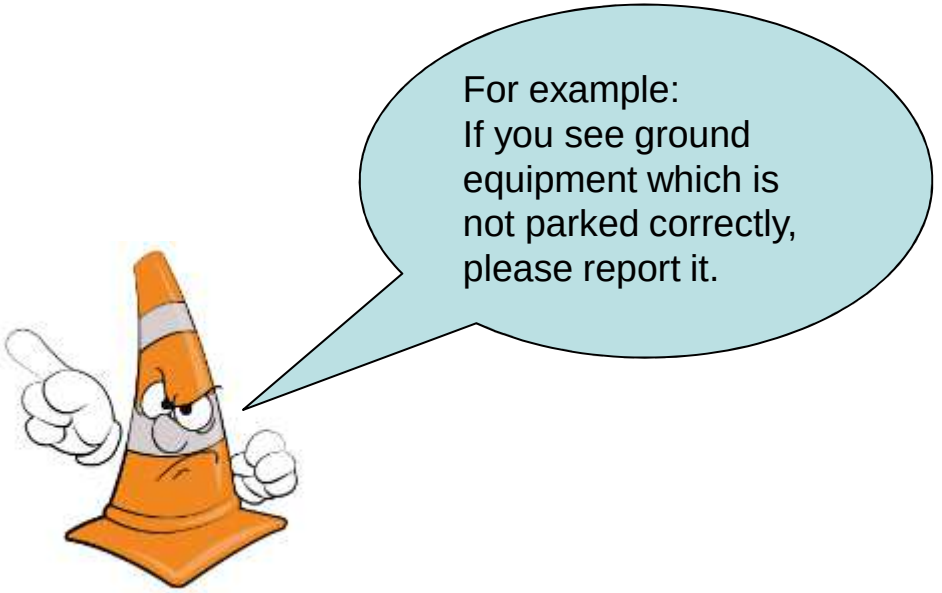

Deficiency Report Luxair

Deficiency Report N°-

Example of self briefing

- **Ensure** that no action will be taken against any employee who discloses a safety concern through the hazard reporting system, unless such disclosure indicates, beyond any reasonable doubt, an illegal act, gross negligence, or a deliberate or wilful disregard of regulations or procedures;



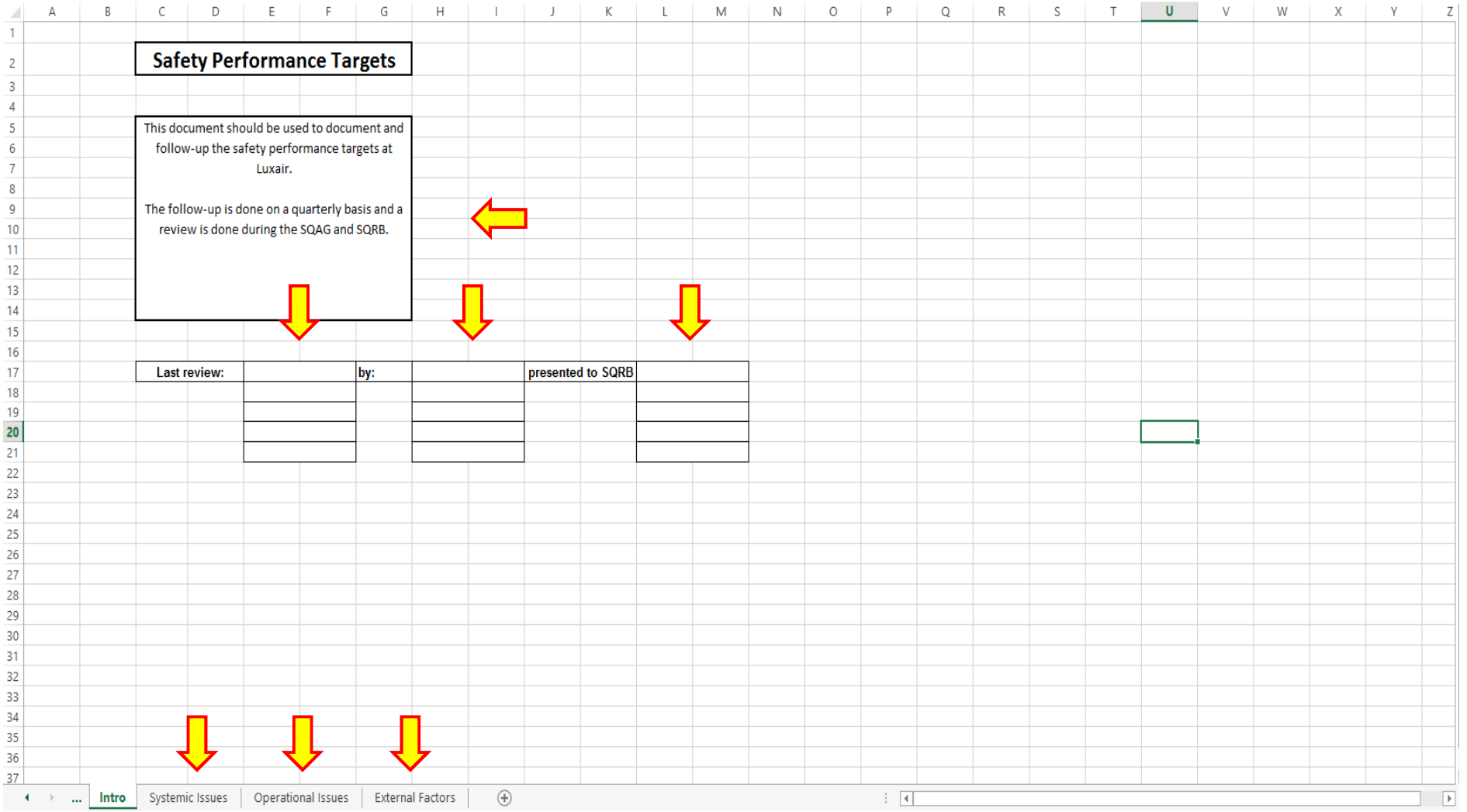


SMICG Document
Measuring Safety Performance
Guidelines for Service Providers

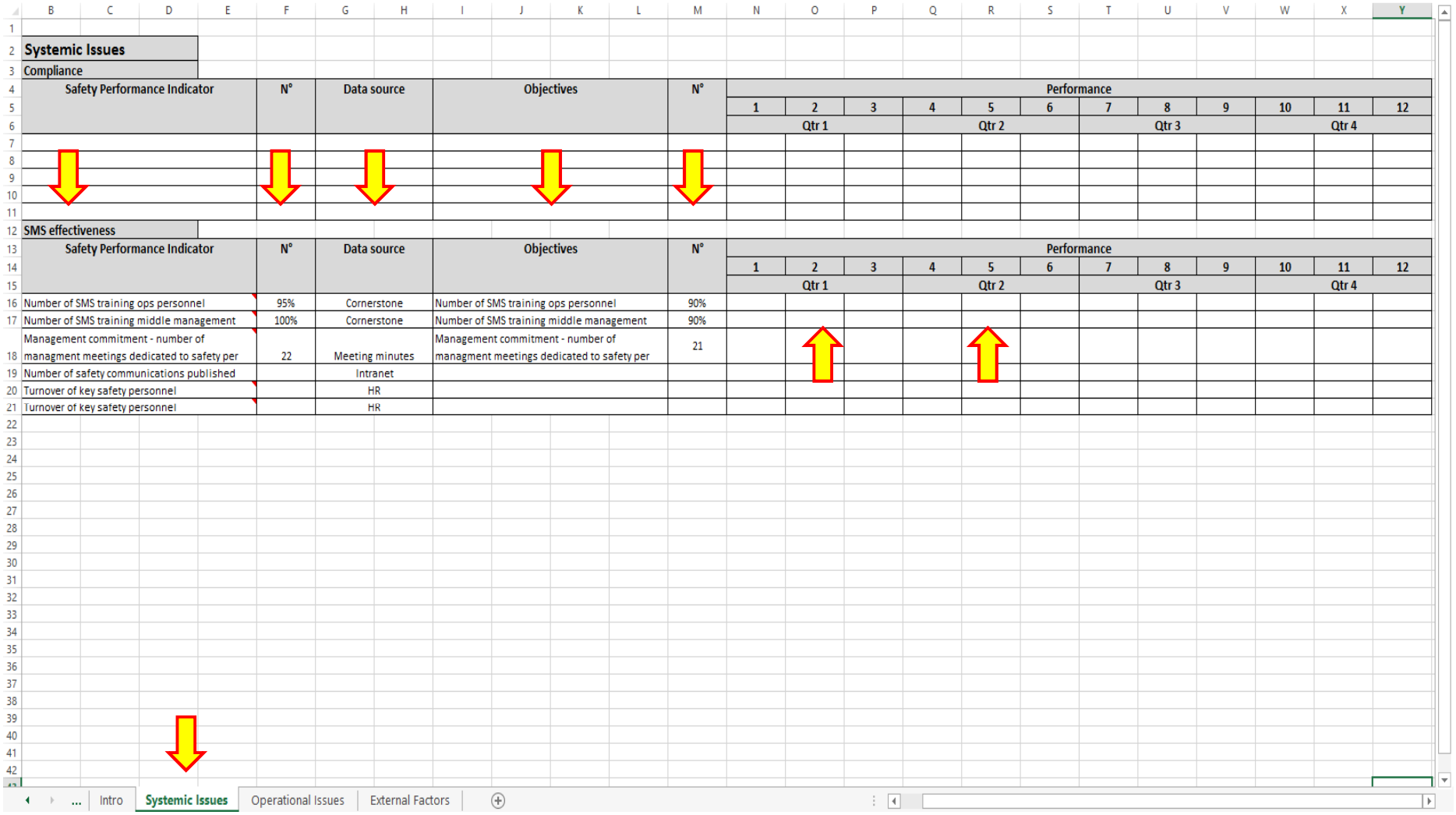
3.1. Indicators for systemic issues

Area	Focus of measurement	Metrics
Compliance	- internal audits/compliance monitoring: all non-compliances	- total number per audit planning cycle / trend - % of findings analyzed for their safety significance,
	- internal audits/ compliance monitoring: significant non-compliances	- number of significant findings versus total number of findings - number of repeat findings within audit planning cycle
	- internal audits/ compliance monitoring: responsiveness to corrective action requests	- average lead time for completing corrective actions per oversight planning cycle - trend
	- external audits/ compliance monitoring: all non-compliances	- total number per oversight planning cycle / trend - % of findings analyzed for their safety significance,
	- external audits: significant non-compliances	- number of significant findings versus total number of findings
	- external audits: responsiveness to corrective action requests	- average lead time for completing corrective actions per oversight planning cycle - trend
	- consistency of results between internal and external audits/compliance monitoring	- number of significant findings only revealed through external audits
SMS effectiveness	- strategic management	- the degree to which safety is considered in the organization's official plans and strategy documents - the frequency with which the organization's official plans and strategy documents are reviewed with regards to safety
	- management commitment	- number of management walk-arounds per month/quarter/year - number of management meetings dedicated to safety per month/quarter/year
	- turnover rate of key safety personnel	- length of term - number of cases where the reasons for departure of key personnel have been analyzed

Luxair Implementation
Measuring Safety Performance
Guidelines for Service Providers



Luxair Implementation
Measuring Safety Performance
Guidelines for Service Providers



Systemic Issues

Compliance

Safety Performance Indicator	N°	Data source	Objectives	N°	Performance											
					1	2	3	4	5	6	7	8	9	10	11	12
					Qtr 1			Qtr 2			Qtr 3			Qtr 4		

SMS effectiveness

Safety Performance Indicator	N°	Data source	Objectives	N°	Performance											
					1	2	3	4	5	6	7	8	9	10	11	12
					Qtr 1			Qtr 2			Qtr 3			Qtr 4		
Number of SMS training ops personnel	95%	Cornerstone	Number of SMS training ops personnel	90%												
Number of SMS training middle management	100%	Cornerstone	Number of SMS training middle management	90%												
Management commitment - number of managment meetings dedicated to safety per	22	Meeting minutes	Management commitment - number of managment meetings dedicated to safety per	21												
Number of safety communications published		Intranet														
Turnover of key safety personnel		HR														
Turnover of key safety personnel		HR														

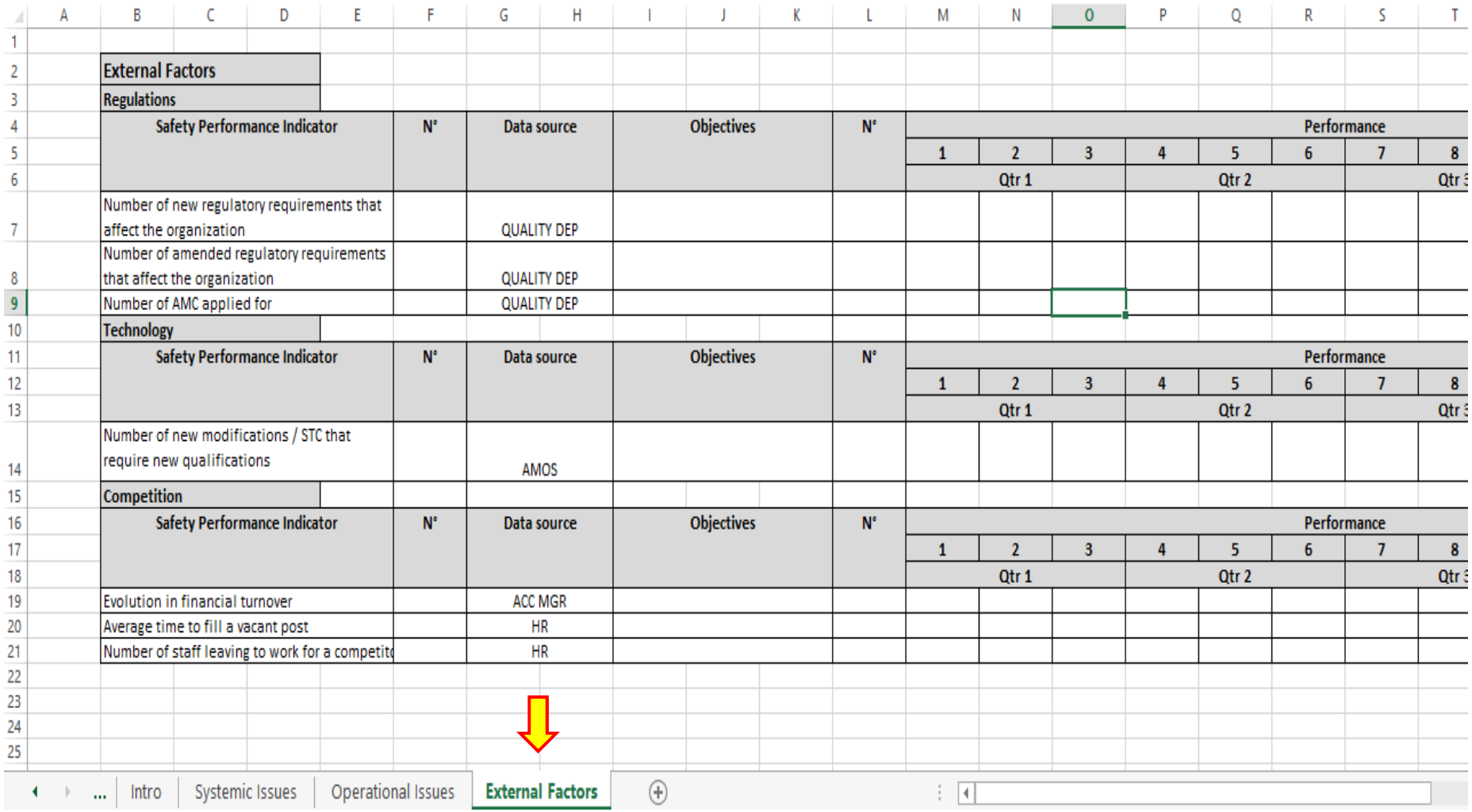
Intro | Systemic Issues | Operational Issues | External Factors

Luxair Implementation
Measuring Safety Performance
Guidelines for Service Providers

Luxair

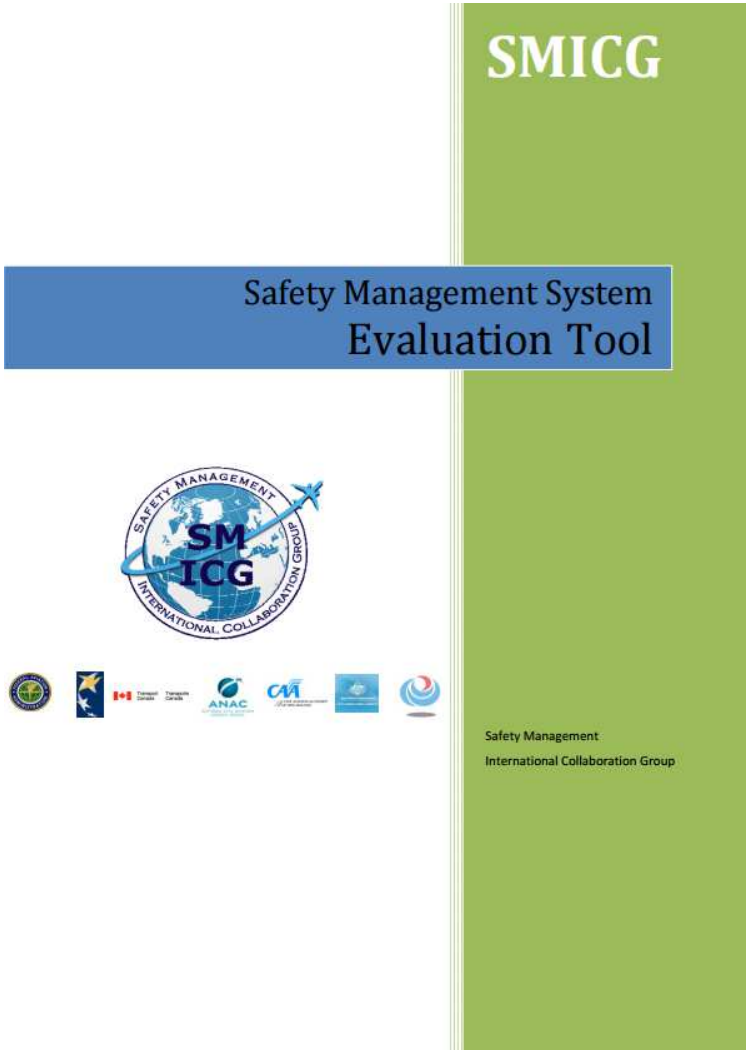
	B	F	G	I	M	N	O	P	Q	R	S	T
39	Number of cabin crew injury		AQD									
40	**Ground Operations**											
41	**Safety Performance Indicator**	**N°**	**Data source**	**Objectives**	**N°**					**Performance**		
42						**1**	**2**	**3**	**4**	**5**	**6**	**7**
43							**Qtr 1**			**Qtr 2**		**Q**
44	Risk cases		AQD	Risk cases								
45	Number of reports received		AQD	Number of reports received								
46	Number of reports for which a feedback to reporter was given		AQD	Number of reports for which a feedback to reporter was given								
47	Number of FOD found and reported		AQD	Number of FOD found and reported								
48	Number of wrong aircraft loading		AQD									
49	Number of dangerous goods incidents		AQD									
50	Number of incidents with ground handlers		AQD									
51	Number of incidents with ground vehicles		AQD									
52	Number of collisions with ground equipment		AQD									
53	**Outstations**											
54	**Safety Performance Indicator**	**N°**	**Data source**	**Objectives**	**N°**					**Performance**		
55						**1**	**2**	**3**	**4**	**5**	**6**	**7**
56							**Qtr 1**			**Qtr 2**		**Q**
57	Risk cases		AQD	Risk cases								
58	Number of reports received		AQD	Number of reports received								
59	Number of reports for which a feedback to reporter was given		AQD	Number of reports for which a feedback to reporter was given								
60	Number of FOD found and reported		AQD									
61	Number of wrong aircraft loading		AQD									
62	Number of dangerous goods incidents		AQD									
63	Number of incidents with ground handlers		AQD									
64	Number of incidents with ground vehicles		AQD									
65	Number of collisions with ground equipment		AQD									
66	**Flight Training Organisation**											
67	**Safety Performance Indicator**	**N°**	**Data source**	**Objectives**	**N°**					**Performance**		
68						**1**	**2**	**3**	**4**	**5**	**6**	**7**
69							**Qtr 1**			**Qtr 2**		**Q**
70	Risk cases		AQD	Risk cases								
71	Number of significant deviations fro verage pass rates		ATO									
72	Number of major changes to training programme		ATO									

... Intro | Systemic Issues | **Operational Issues** | External Factors



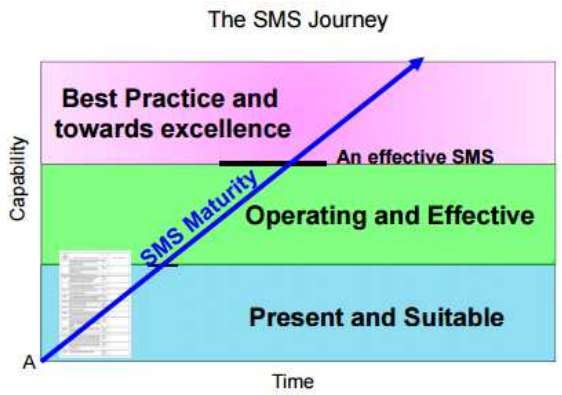
External Factors									
Regulations									
Safety Performance Indicator	N°	Data source	Objectives	N°	Performance				
					1	2	3	4	5	6	7	8
					Qtr 1			Qtr 2			Qtr 3	
Number of new regulatory requirements that affect the organization		QUALITY DEP										
Number of amended regulatory requirements that affect the organization		QUALITY DEP										
Number of AMC applied for		QUALITY DEP										
Technology												
Safety Performance Indicator	N°	Data source	Objectives	N°	Performance				
					1	2	3	4	5	6	7	8
					Qtr 1			Qtr 2			Qtr 3	
Number of new modifications / STC that require new qualifications		AMOS										
Competition												
Safety Performance Indicator	N°	Data source	Objectives	N°	Performance				
					1	2	3	4	5	6	7	8
					Qtr 1			Qtr 2			Qtr 3	
Evolution in financial turnover		ACC MGR										
Average time to fill a vacant post		HR										
Number of staff leaving to work for a competit		HR										

SMICG Document
SMS Evaluation Tool



- Evaluates compliance and effectiveness of the SMS
- Is set out using the 12 elements of the ICAO SMS Framework
- Indicators of compliance and performance first
- Then indicators of best practice
- Tool would normally be used by the regulator
- Alternatively it can be partially completed by the organisation to assess itself.

SMICG Document
SMS Evaluation Tool



Present

There is evidence that the 'indicator' is clearly visible and is documented within the organisation's SMS Documentation.

Suitable

The indicator is suitable based on the size, nature, complexity of the organisation and the inherent risk in the activity, including consideration of the industry sector.

Operating

There is evidence that the indicator is in use and an output is being produced.

Effective

There is evidence that the indicator is effective and achieving the desired outcome.

INDICATORS OF COMPLIANCE + PERFORMANCE		P	S	O	E	How it is achieved	Verification
1.1.1	There is a safety policy that includes a commitment towards achieving the highest safety standards signed by the Accountable Executive.						
1.1.2	The organisation has based its safety management system on the safety policy.						
1.1.3	The Accountable Executive and the senior management team promote and demonstrate their commitment to the Safety Policy through active and visible participation in the safety management system.						
1.1.4	The safety policy is communicated to all personnel with the intent that they are made aware of their individual contributions and obligations with regard to Safety.						
1.1.5	The safety policy includes a commitment to observe all applicable legal requirements, standards and best practice providing appropriate resources and defining safety as a primary responsibility of all Managers.						
1.1.6	The safety policy actively encourages safety reporting.						
1.1.7	The safety policy states the organisation's intentions, management principles and commitment to continuous improvement in the safety level.						
1.1.8	The safety policy is reviewed periodically to ensure it remains current.						

Luxair Implementation
SMS Evaluation Tool

SMS evaluation

This document should be used to evaluate the SMS at Luxair. It is based on the SMICG SMS Evaluation Tool.

This review should be done once per year as per procedure. It will provide an indication on the continuous improvement of our SMS as a system and will help us to move towards industry best practice.

Last review:		by:		presented to SQRB	

Present

There is evidence that the 'indicator' is clearly visible and is documented within the organisation's SMS Documentation.

Suitable

The indicator is suitable based on the size, nature, complexity of the organisation and the inherent risk in the activity, including consideration of the industry sector.

Operating

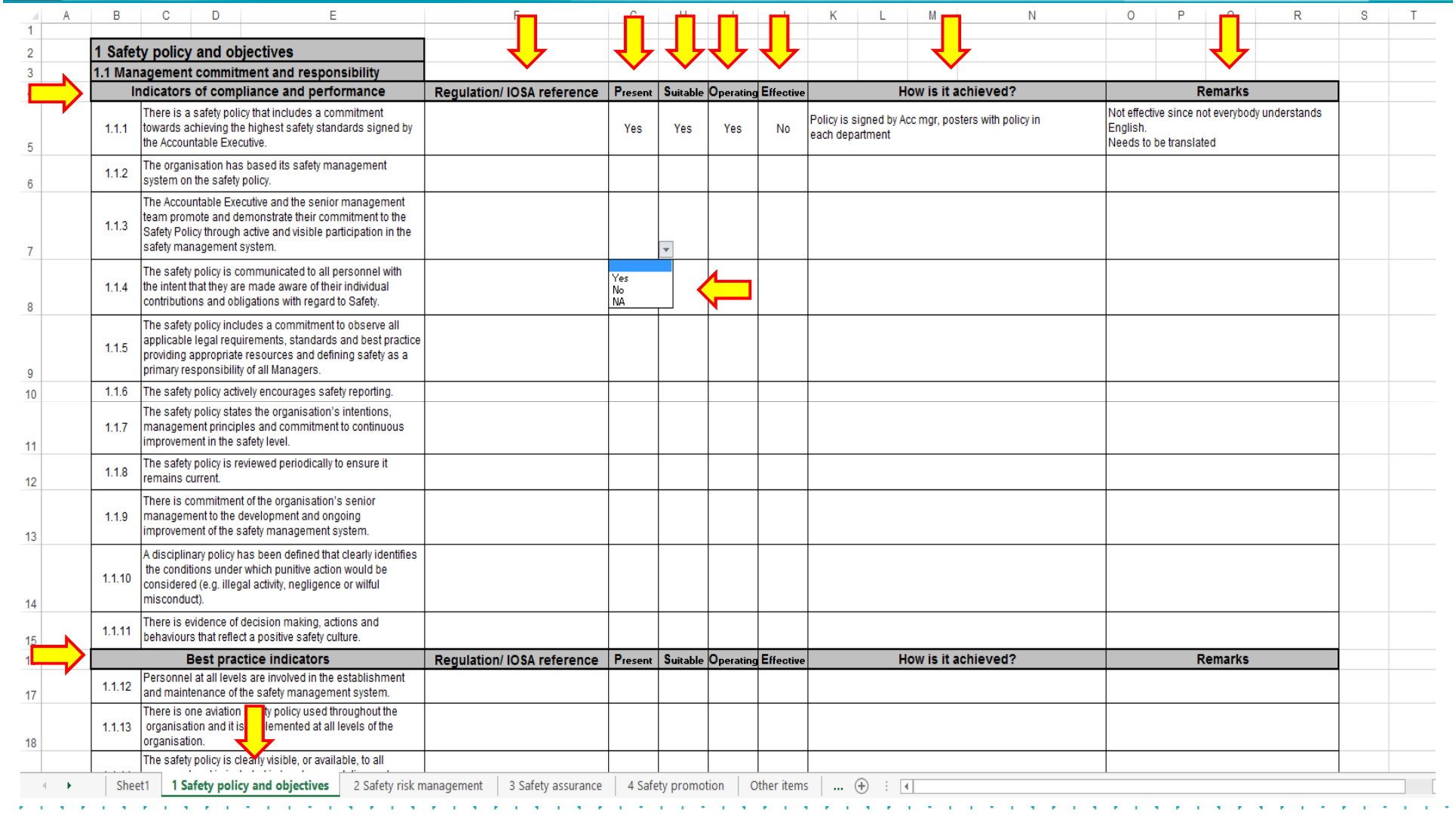
There is evidence that the indicator is in use and an output is being produced.

Effective

There is evidence that the indicator is effective and achieving the desired outcome.

Sheet1 | 1 Safety policy and objectives | 2 Safety risk management | 3 Safety assurance | 4 Safety promotion | Other items

Luxair implementation
SMS Evaluation Tool



1 Safety policy and objectives								
1.1 Management commitment and responsibility								
Indicators of compliance and performance		Regulation/ IOSA reference	Present	Suitable	Operating	Effective	How is it achieved?	Remarks
1.1.1	There is a safety policy that includes a commitment towards achieving the highest safety standards signed by the Accountable Executive.		Yes	Yes	Yes	No	Policy is signed by Acc mgr, posters with policy in each department	Not effective since not everybody understands English. Needs to be translated
1.1.2	The organisation has based its safety management system on the safety policy.							
1.1.3	The Accountable Executive and the senior management team promote and demonstrate their commitment to the Safety Policy through active and visible participation in the safety management system.							
1.1.4	The safety policy is communicated to all personnel with the intent that they are made aware of their individual contributions and obligations with regard to Safety.		Yes No NA					
1.1.5	The safety policy includes a commitment to observe all applicable legal requirements, standards and best practice providing appropriate resources and defining safety as a primary responsibility of all Managers.							
1.1.6	The safety policy actively encourages safety reporting.							
1.1.7	The safety policy states the organisation's intentions, management principles and commitment to continuous improvement in the safety level.							
1.1.8	The safety policy is reviewed periodically to ensure it remains current.							
1.1.9	There is commitment of the organisation's senior management to the development and ongoing improvement of the safety management system.							
1.1.10	A disciplinary policy has been defined that clearly identifies the conditions under which punitive action would be considered (e.g. illegal activity, negligence or wilful misconduct).							
1.1.11	There is evidence of decision making, actions and behaviours that reflect a positive safety culture.							
Best practice indicators		Regulation/ IOSA reference	Present	Suitable	Operating	Effective	How is it achieved?	Remarks
1.1.12	Personnel at all levels are involved in the establishment and maintenance of the safety management system.							
1.1.13	There is one aviation [illegible]ty policy used throughout the organisation and it is [illegible]lemented at all levels of the organisation.							
	The safety policy is clearly visible, or available, to all							

Sheet1 | 1 Safety policy and objectives | 2 Safety risk management | 3 Safety assurance | 4 Safety promotion | Other items | ...

Luxair implementation
SMS Evaluation Tool

4.2 Safety communication							
Indicators of compliance and performance		**Regulation/ IOSA reference**	**Present**	**Suitable**	**Operating**	**Effective**	**How is it achieved?**
4.2.1	Safety plans and strategies are communicated throughout the organisation to all personnel.						
4.2.2	Significant events and investigation outcomes associated with the organisation are communicated to all personnel, including contracted organisations where appropriate.						
Best practice indicators		**Regulation/ IOSA reference**	**Present**	**Suitable**	**Operating**	**Effective**	**How is it achieved?**
4.2.3	There is a safety communication strategy that includes electronic communication, frequent meetings, SMS award systems, employee recognition system, SMS bulletins etc.						
4.2.4	Significant events and investigation outcomes from external sources are communicated to all personnel including contracted organisations where appropriate.						
4.2.5	The effectiveness of safety communication is routinely assessed and the strategy revised as required.						
4.2.6	Safety-related information is proactively shared with other parties.						

TOTAL					
Number of "Yes"		0	0	0	0
Number of "No"		0	0	0	0
Number of "NA"		0	0	0	0
Number of questions		19	19	19	19
Completed		0	0	0	0
% of "Yes"		0	0	0	0

Compliance and performance					
Number of "Yes"		0	0	0	0
Number of "No"		0	0	0	0
Number of "NA"		0	0	0	0
Number of questions		7	7	7	7
Completed		0	0	0	0
% of "Yes"		0	0	0	0

Best practice					
Number of "Yes"		0	0	0	0
Number of "No"		0	0	0	0
Number of "NA"		0	0	0	0
Number of questions		12	12	12	12
Completed		0	0	0	0
% of "Yes"		0	0	0	0

Luxair implementation
SMS Evaluation Tool

4.2 Safety communication							
Indicators of compliance and performance		**Regulation/ IOSA reference**	**Present**	**Suitable**	**Operating**	**Effective**	**How is it achieved?**
4.2.1	Safety plans and strategies are communicated throughout the organisation to all personnel.		Yes				
4.2.2	Significant events and investigation outcomes associated with the organisation are communicated to all personnel, including contracted organisations where appropriate.						
Best practice indicators		**Regulation/ IOSA reference**	**Present**	**Suitable**	**Operating**	**Effective**	**How is it achieved?**
4.2.3	There is a safety communication strategy that includes electronic communication, frequent meetings, SMS award systems, employee recognition system, SMS bulletins etc.						
4.2.4	Significant events and investigation outcomes from external sources are communicated to all personnel including contracted organisations where appropriate.						
4.2.5	The effectiveness of safety communication is routinely assessed and the strategy revised as required.						
4.2.6	Safety-related information is proactively shared with other parties.						

TOTAL				
Number of "Yes"	1	0	0	0
Number of "No"	0	0	0	0
Number of "NA"	0	0	0	0
Number of questions	19	19	19	19
Completed	1	0	0	0
% of "Yes"	100	0	0	0

Compliance and performance				
Number of "Yes"	1	0	0	0
Number of "No"	0	0	0	0
Number of "NA"	0	0	0	0
Number of questions	7	7	7	7
Completed	1	0	0	0
% of "Yes"	100	0	0	0

Best practice				
Number of "Yes"	0	0	0	0
Number of "No"	0	0	0	0
Number of "NA"	0	0	0	0
Number of questions	12	12	12	12
Completed	0	0	0	0
% of "Yes"	0	0	0	0

Luxair implementation

Identification of substandard performance of the SMS – Continuous improvement of the SMS

Not reaching the defined targets is one part of the substandard performance of the SMS. Another part is identification of SMS processes which did not perform as intended. This identification is done through the formal SMS review and through the data collection process.
In order to ensure continuous improvement of the SMS the safety department has identified the following cases of substandard performance of the SMS, the relative causes and has issued the following recommendations to solve the issues.

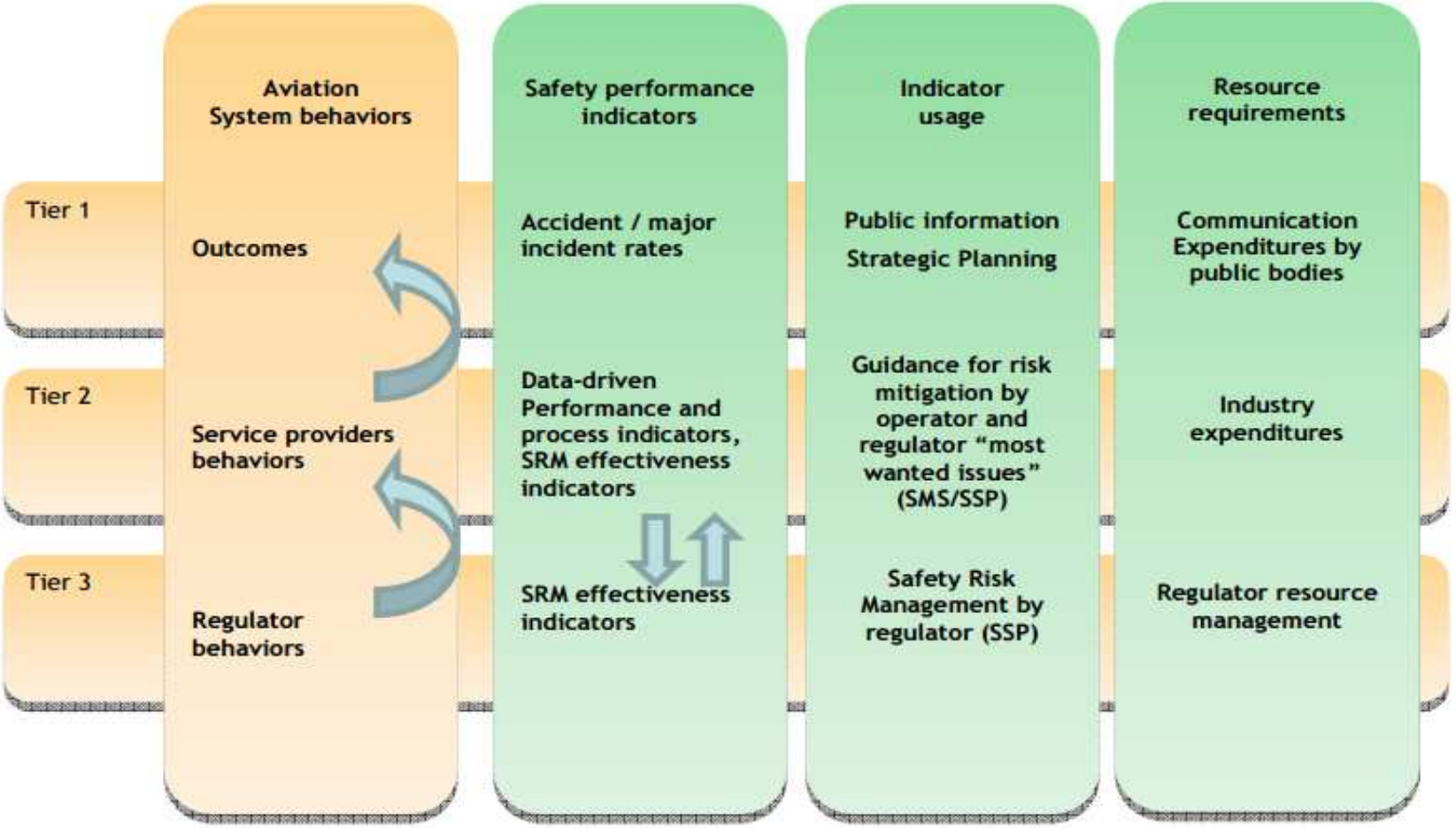
Substandard performance	Cause of substandard performance	Recommendation to solve the issue OR action already taken
Targets not reached		

- SMS Evaluation together with the safety performance measurement and safety performance target setting / follow-up is reviewed during the SQRB which includes the annual review
- This gives us a pretty good indicator whether our system is maturing and whether we are increasing our level of safety
- It allows us to address substandard performance of the system.

SMICG Document
A Common Approach to Safety Performance Measurement

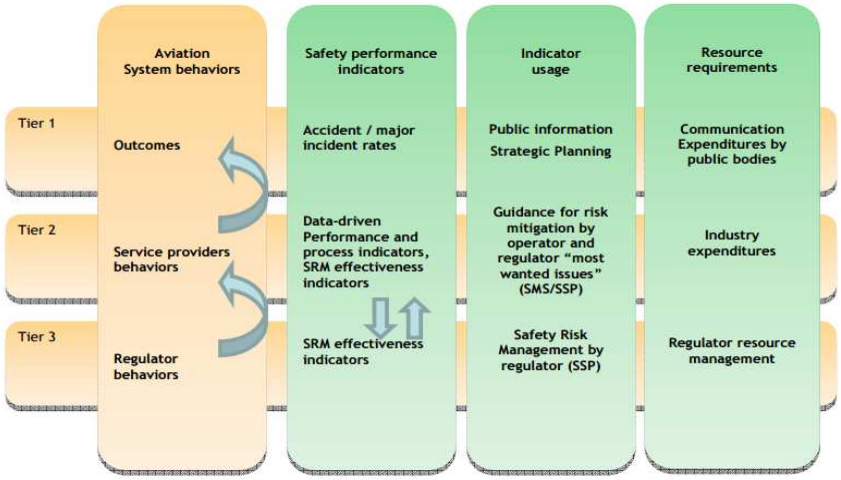
- Contribute to the discussion on a common approach to safety performance measurement
- Measurement of safety performance at the State Level and at the individual service provider level are essential for effective safety management
- In order to implement performance based regulation, SPI need to be defined.

SMICG Document
A Common Approach to Safety Performance Measurement



Safety Measurement Matrix

Luxair work done with DAC-L
A Common Approach to Safety Performance Measurement



- Workshop held with our national authority DAC-L
- Discussed the safety measurement matrix and the development of SPIs
- More work and coordination to come for the performance based oversight to work adequately.

Conclusions

SM ICG documents helped us:

- To get a better understanding of SMS
- To develop procedures in our SMS
- To add credibility to our work, with our management, auditors and the National Aviation Authority
- To avoid duplication in work, no need to re-invent the wheel
- To standardize the SMS procedures within the Luxair operations and with our contractors
- To start implementing industry best practice
- To avoid having to pay expensive consultants.

BUT CAUTION:

- There is no one size fits all
- You need to adapt the content of the documents to your operations, culture, regulations etc
- Some information might be too far ahead of your implementation status and lead to fear of change
- As a service provider, read the documents which are aimed at the Regulators – it will give you a better understanding of the complete system you are operating in.

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Questions?