



ECAR 19

Safety Management System

References

The following documents are referred to in this manual or provide additional guidance material.

ICAO DOCUMENTS

Annex 19 — Safety Management

Safety Management Manual (Doc 9859)

EASA Documents

EU 376-2014

EU 2015/2018

ECARs

Supporting Material

To address the needs of the diverse aviation community implementing safety management from (SMI) website (<https://www.icao.int/SMI>) has been developed to complement the SMM and serves as a repository for the sharing of best practices. Practical examples, tools, and supporting educational material will be collected, reviewed and posted on the website on an ongoing basis

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Applicability

- (a) Within the context of this part the term “operator and/or service provider entities in direct support to safe operations” must be understood to designate any organization providing aviation related services. The term encompasses:
- (b) Approved Training Organizations in accordance ECARs Part 141, Part142, Part143, Part 147 and Part 171 that are exposed to safety risks related to aircraft operations during the provision of their services.
- (c) Operators of aero planes or helicopters authorized to conduct international commercial air transport, in accordance with ECAR Part 121.
- (d) Approved Maintenance Organizations providing services to operators of aero planes or helicopters engaged in international commercial air transport, in accordance with ECAR Part 145.
- (e) Organizations responsible for the type design or manufacture of aircraft, engines or propellers, in accordance with ECAR Part 21
- (f) Air traffic services (ATS) providers in accordance with ECAR Part 172.
- (g) Operators of certified aerodromes in accordance with ECAR Part 139.
- (h) Organizations providing aeronautical information service in Egypt in accordance with ECAR Part 173.
- (i) Organizations providing aeronautical telecommunication services in accordance with ECAR 174.

(j) Organization providing ground handling services (Aircraft and Passengers services , Pushback , Catering , Cargo , Fueling)

- (1) Operators and/or service providers shall establish, maintain and adhere to a safety management system (SMS) that is appropriate to the size, nature and complexity of the operations authorized to be conducted under its operations certificate and the safety hazards and risks related to the operations.
- (2) This part addresses the formal and systematic approach to aviation safety and its related processes and activities rather than occupational safety, Environmental protection or customer service quality.
- (3) The operator and/or service provider is responsible for the safety of services, subcontracted services, products contracted and purchased from other organizations.

DEFINITIONS

When the following terms are used in the manual, they have the meanings indicated below

Acceptable level of safety performance (ALOSP): The level of safety performance agreed by State authorities to be achieved for the civil aviation system in a State, as defined in its State safety program, expressed in terms of safety performance targets and safety performance indicators.

Accident: An occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

- (a) A person is fatally or seriously injured as a result of:
 - (1) Being in the aircraft, or
 - (2) Direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
 - (3) Direct exposure to jet blast,

Except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

- (b) The aircraft sustains damage or structural failure which:
 - (1) Adversely affects the structural strength, performance or flight characteristics of the aircraft, and
 - (2) Would normally require major repair or replacement of the affected component,

Except for engine failure or damage, when the damage is limited to a single engine, (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the Radom); or

- (c) The aircraft is missing or is completely inaccessible.

Note1. — For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified, by ICAO, as a fatal injury.

Note2. — An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

Note3. — The type of unmanned aircraft system to be investigated is addressed in 5.1 of Annex 13.

Note4. — Guidance for the determination of aircraft damage can be found in Attachment F of Annex 13.

Accountable executive: A single, identifiable person having responsibility for the effective and efficient performance of the service provider's SMS.

Aeroplane: A power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight.

Aircraft: Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface

Anonymization: The removal from occurrence reports of all personal details relating to the reporter and to the persons mentioned in occurrence reports and any details, including the name of the organization(s) involved in the occurrence, which may reveal the identity of the reporter or of a third party or lead to that information being inferred from the occurrence report

Change management: A formal process to manage changes within an organization in a systematic manner, so that changes which may impact identified hazards and risk mitigation strategies are accounted for, before the implementation of such changes.

Defenses: Specific mitigating actions, preventive controls or recovery measures put in place to prevent the realization of a hazard or its escalation into an undesirable consequence.

Errors: An action or inaction by an operational person that leads to deviations from organizational or the operational person's intentions or expectations.

Hazard. A condition or an object with the potential to cause or contribute to an aircraft incident or accident.

Helicopter. A heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power-driven rotors on substantially vertical axes.

Note.— Some States use the term “rotorcraft” as an alternative to “helicopter”.

Incident: An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

Note. — The types of incidents which are of interest for safety-related studies include the incidents listed in Annex 13, Attachment C.

Industry codes of practice. Guidance material developed by an industry body, for a particular sector of the aviation industry to comply with the requirements of the International Civil Aviation Organization's Standards and Recommended Practices, other aviation safety requirements and the best practices deemed appropriate.

Just culture: a culture in which front-line operators or other persons are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training, but in which gross negligence, willful violations and destructive acts are not tolerated

Misidentified information: information arising from occurrence reports from which all personal data such as names or addresses of natural persons have been removed

Occurrence: any safety-related event which endangers or which, if not corrected or addressed, could endanger an aircraft, its occupants or any other person and includes in particular an accident or serious incident

Operational personnel. Personnel involved in aviation activities who are in a position to report safety information.

Note.— Such personnel include, but are not limited to: flight crews; air traffic controllers; aeronautical station operators; maintenance technicians; personnel of aircraft design and manufacturing organizations; cabin crews; flight dispatchers, apron personnel and ground handling personnel.

Organization: any organization providing aviation products and/or which employs, contracts or uses the services of persons required to report occurrences

Reporter: A natural person who reports an occurrence or other safety-related information pursuant to this Regulation

Risk mitigation: The process of incorporating defenses, preventive controls or recovery measures to lower the severity and/or likelihood of a hazard's projected consequence.

Safety: The state in which risks associated with aviation activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level.

Safety data: A defined set of facts or set of safety values collected from various aviation-related sources, which is used to maintain or improve safety

Note. — Such safety data is collected from proactive or reactive safety-related activities, including but not limited to:

- (a) Accident or incident investigations;
- (b) Safety reporting;
- (c) Continuing airworthiness reporting;
- (d) Operational performance monitoring;
- (e) Inspections, audits, surveys; or
- (f) Safety studies and reviews.

Safety information: Safety data processed, organized or analyzed in a given context so as to make it useful for safety management purposes.

Safety management system: A systematic approach to managing safety, including the necessary organizational structures, accountability, responsibilities, policies and procedures.

Safety objective: A brief, high-level statement of safety achievement or desired outcome to be accomplished by the State safety program or service provider's safety management systems.

Note. — Safety objectives are developed from the organization's top safety risks and should be taken into consideration during subsequent development of safety performance indicators and targets.

Safety oversight: A function performed by a State to ensure that individuals and organizations performing an aviation activity comply with safety-related national laws and regulations.

Safety performance: A State's or service provider's safety achievement as defined by its safety performance targets and safety performance indicators.

Safety performance indicator: A data-based parameter used for monitoring and assessing safety performance.

Safety performance target: The State or service provider's planned or intended target for a safety performance indicator over a given period that aligns with the safety objectives.

Safety risk: The predicted probability and severity of the consequences or outcomes of a hazard.

Serious incident: An incident involving circumstances indicating that an accident nearly occurred.

Note1. — The difference between an accident and a serious incident lies only in the result.

***Serious injury.* An injury which is sustained by a person in an accident and which:**

- (a) Requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received; or
- (b) Results in a fracture of any bone (except simple fractures of fingers, toes or nose); or
- (c) Involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage; or

- (d) Involves injury to any internal organ; or
- (e) Involves second or third degree burns, or any burns affecting more than 5 per cent of the body surface; or
- (f) Involves verified exposure to infectious substances or injurious radiation.

State of Design. The State having jurisdiction over the organization responsible for the type design.

State of Manufacture. The State having jurisdiction over the organization responsible for the final assembly of the aircraft.

State of the Operator. The State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

State safety program (SSP): An integrated set of regulations and activities aimed at improving safety.

Surveillance: The State activities through which the State proactively verifies through inspections and audits that aviation license, certificate, and authorization or approval holders continue to meet the established requirements and function at the level of competency and safety required by the State.

System: An organized, purposeful structure that consists of interrelated and interdependent elements and components, and related policies, procedures and practices created to carry out a specific activity or solve a problem.

Trigger. An established level or criteria value for a particular safety performance indicator that serves to initiate an action required, (e.g., an evaluation, adjustment or remedial action).

ABBREVIATIONS AND ACRONYMS

- ADREP accident/incident data reporting
ADRM: Aerodrome
AIA accident investigation authority
ALOSP acceptable level of safety performance
AMAN: Abrupt Maneuver
AOC air operator certificate
ARC Abnormal runway contact
ATM: ATM/CNS: ATM/CNS - Occurrences involving Air traffic management (ATM) or communications, navigation, or surveillance (CNS) service issues.
ATS air traffic service(s)
BIRDBird strike
CAA civil aviation authority
CABIN: Cabin Safety Events
CFIT Controlled flight into or toward terrain
Cir circular
CTOL: Collision with obstacle(s) during take-off and landing
CVR cockpit voice recorder
D3M data-driven decision-making
Doc document
ERP emergency response plan
EVAC: Evacuation
EXTL: External load related occurrences
FDR flight data recorder
FMS financial management system
F-NI: Fire/smoke (non-impact)
F-POST: Fire/smoke (post-impact)
FRMS fatigue risk management systems
Fuel: Fuel related
GASP Global Aviation Safety Plan
GCOL: Ground Collision
GTOW: Glider towing related events
HF human factors
IAW in accordance with
ICAO International Civil Aviation Organization
ICE: Icing
ISTARS Integrated Safety Trend Analysis and Reporting System
LALT: Low altitude operations
LDG: Landing
LOC-G: Loss of control - ground
LOC-I: Loss of control - inflight

LOLI: Loss of lifting conditions En-route
LOSA line operations safety audit
OHSMS occupational health and safety management system
OSHE occupational safety, health and environment
PIRG Planning and Implementation Regional Group
QM quality management
QMS quality management system
RAMP: Ground Handing
RASG Regional Aviation Safety Group
RE.: Runway excursion
RI-A: Runway incursion animal
RI-VAP: Runway incursion vehicle, aircraft or person
RSOO Regional safety oversight organization
SAG Safety Action Group
SARPs Standards and Recommended Practices
SCF-NP: System/component failure or malfunction (non-power plant)
SCF-PP: Power plant failure or malfunction
SD standard deviation
SDCPS safety data collection and processing system
SEC: Security related
SEMS security management system
SM safety management
SMM Safety Management Manual
SMP Safety Management Panel
SMS safety management system(s)
SPI safety performance indicator
SPT safety performance targets
SRB safety review board
SRBS safety risk-based surveillance
SRM safety risk management
SSO State safety oversight
SSP State safety program
STDEVP population standard deviation
TNA training needs analysis
TURB: Turbulence encounter
UIMC: Unintended flight in IMC - Unintended flight in Instrument Meteorological Conditions (IMC).
UNK: Unknown
USOAP Universal Safety Oversight Audit Program
USOS: Undershoot/overshoot
WSTRW: Wind shear or thunderstorm

Safety Management System (SMS) Framework

The framework for the implementation and maintenance of an SMS comprises four components and twelve elements as the minimum requirements for SMS implementation:

A. Safety policy and objectives

1. Management commitment

- 1.1. The service provider shall define its safety policy in accordance with international and national requirements. The safety policy shall:
 - (a) Reflect organizational commitment regarding safety, including the promotion of a positive safety culture
 - (b) Include a clear statement about the provision of the necessary resources for the implementation of the safety policy
 - (c) Include safety reporting procedures
 - (d) Clearly indicate which types of behaviors are unacceptable related to the service provider's aviation activities and include the circumstances under which disciplinary action would not apply
 - (e) Be signed by the accountable executive of the organization
 - (f) Be communicated, with visible endorsement, throughout the organization
 - (g) Be periodically reviewed to ensure it remains relevant and appropriate to the service provider.
 - (h)
- 1.2. Taking due account of its safety policy, the service provider shall define safety objectives. The safety objectives shall:
 - (a) Form the basis for safety performance monitoring and measurement as required by ECAA
 - (b) Reflect the service provider's commitment to maintain or continuously improve the overall effectiveness of the SMS;
 - (c) Be communicated throughout the organization; and
 - (d) Be periodically reviewed to ensure they remain relevant and appropriate to the service provider.

2. Safety accountability and responsibilities

- 2.1. The service provider shall:
 - (a) Identify the accountable executive who, irrespective of other functions, is accountable on behalf of the organization for the implementation and maintenance of an effective SMS
 - (b) Clearly define lines of safety accountability throughout the organization, including a direct accountability for safety on the part of senior management
 - (c) Identify the responsibilities of all members of management, irrespective of other functions, as well as of employees, with respect to the safety performance of the organization
 - (d) Document and communicate safety accountability, responsibilities and authorities throughout the organization
 - (e) Define the levels of management with authority to make decisions regarding safety risk tolerability.

3. Appointment of key safety personnel

3.1. The service provider shall appoint a safety manager who is responsible for the implementation and maintenance of the SMS.

Note. — Depending on the size of the service provider and the complexity of its aviation products or services, the responsibilities for the implementation and maintenance of the SMS may be assigned to one or more persons, fulfilling the role of safety manager, as their sole function or combined with other duties, provided these do not result in any conflicts of interest.

3.2. The requirements to serve as safety manager under this part are divided into two phases, initial Approval and final approval. The ECAA approves the safety manager at the service provider initially for six month and to be evaluated after this period before obtaining the final approval.

(a) Initial Approval, to serve as a safety manager

- (1) Safety/ Quality management system experience (5 years or more)
- (2) Proven operational experience in the relevant area (5 years or more)
- (3) The completion of recognized courses in Safety Management Systems and Safety Risk Management.

(b) Final approval, after six month from initial approval, the ECAA evaluates the service providers` SMS to get the final approval of safety manager by evaluation tool (EAC 19-12).

3.3. To serve as a Safety Management System Instructor

- (a) Holds a high academic degree
- (b) Work in aviation Safety/Quality field at least 2 years.
- (c) Work in aviation operational area at least 5 years

Training: as stated in the following

Phase one:

- (a) Successfully Completed Safety Fundamentals Course
- (b) Successfully Completed SMS implementation and control Course
- (c) Successfully Completed Safety Risk management Course

Phase two:

- (a) Successfully Completed Train the Trainers Course.
- (b) Instructs at least one approved Safety Fundamentals Course (SMS for All Staff) under the supervision of an approved SMS instructor from the ECAA.

Recurrent Training

- (a) Required Recurrent Courses Each 24 Months or working in SMS field or instructs any two SMS courses each year.

4. Coordination of Emergency Response Planning

The service provider required to establish and maintain an emergency response plan for accidents and incidents in aircraft operations and other aviation emergencies shall ensure that the emergency response plan is properly coordinated with the emergency response plans of those organizations it must interface with during the provision of its products and services.

5. SMS documentation

- 5.1. The service provider shall develop and maintain an SMS manual that describes its:
 - a. Safety policy and objectives
 - b. SMS requirements
 - c. SMS processes and procedures
 - d. Accountability, responsibilities and authorities for SMS processes and procedures.
- 5.2. The service provider shall develop and maintain SMS operational records as part of its SMS documentation.

Note. — Depending on the size of the service provider and the complexity of its aviation products or services, the SMS manual and SMS operational records may be in the form of stand-alone documents or may be integrated with other organizational documents (or documentation) maintained by the service provider.

B. Safety risk management

1. Hazard Identification

- 1.1. The service provider shall develop and maintain a process to identify hazards associated with its aviation products or services.
- 1.2. Hazard identification shall be based on a combination of reactive and proactive methods.
- 1.3. The service provider shall ensure compliance with the *Mandatory and Voluntary* reporting system in of ECAR 39.
- 1.4. The service provider shall ensure that protection is accorded to safety data captured by, and safety information derived from, mandatory and voluntary safety reporting systems and related sources. Protection of safety data and safety information should be applied in accordance with the principles of protection and exemption laid out in appendix A.
- 1.5. The service provider shall use the standard taxonomy in ECAR 39 for the purpose of reporting and aggregating safety data and safety information in order to facilitate the process of data processing and analysis.

2. Safety risk assessment and mitigation

The service provider shall develop and maintain a process that ensures analysis, assessment and control of the safety risk associated with identified hazards.

Note. — The process may include predictive methods of safety data analysis.

C. Safety assurance

1. Safety performance monitoring and measurement

- 1.1. The service provider shall develop and maintain the means to verify the safety performance of the organization and to validate the effectiveness of safety risk controls.

Note. —an internal audit process is one means to monitor compliance with safety regulations, the foundation upon which SMS is built, and assess the effectiveness of these safety risk controls and the SMS.

- 1.2. The service provider's safety performance shall be verified in reference to the safety performance indicators and safety performance targets of the SMS in support of the organization's safety objectives.
- 1.3. The actual performance shall be regularly provided to the ECAA in a form and manner established by the ECAA for monitoring purposes. The collected data will be processed under the Egyptian State Safety Program (SSP) Safety Data Collection and Processing System (SDCPS) in order to establish and monitor the Acceptable Level of Safety Performance (ALOSP).
- 1.4. If an alert level has been breached, the organization shall immediately report it to the ECAA and submit a corrective plan accordingly.

2. The management of change

The service provider shall develop and maintain a process to identify changes which may affect the level of safety risk associated with its aviation products or services and to identify and manage the safety risks that may arise from those changes.

3. Continuous improvement of the SMS

- I. The service provider shall monitor and assess its SMS processes to maintain or continuously improve the overall effectiveness of the SMS.

D. Safety promotion

1. Training and education

- 1.1. The service provider shall develop and maintain an initial safety training program that ensures that personnel are trained and competent to perform their SMS duties .
- 1.2. The service provider shall conduct recurrent training at least once per 36 months in case of the recurrent training intervals is not stated at other operational regulations.
- 1.3. The scope of the safety training program shall be appropriate to each individual's involvement in the SMS.

2. Safety communication

- 2.1. The service provider shall develop and maintain a formal means for safety communication that:
 - (a) Ensures personnel are aware of the SMS to a degree commensurate with their positions
 - (b) Conveys safety-critical information
 - (c) Explains why particular actions are taken to improve safety
 - (d) Explains why safety procedures are introduced or changed

Appendix A

Protection of Safety Data & Safety Information

1-Scope

- 1.1 The Operators and service provider shall ensure that protection of safety data & safety information applied in accordance with the principles mentioned in this appendix of ECAR 19.
- 1.2 Safety data captured by and safety information derived from, mandatory and voluntary safety reporting systems and other related sources such as audit result.
- 1.3 Service provider shall implement protection policy to their employees as an element of their SMS

2- Objective

- 2.1 The objective of protecting safety data, information and other related sources is to maintain and improve safety by continued availability.
- 2.2 The purpose of preventive, corrective or remedial actions in basis of reports of safety data, information or other related sources; is to improve safety

3. Protection levels

- 3.1 Protecting safety data captured by, and information derived from Voluntary reporting system is a Standard, also from Mandatory reporting system is a Recommended to ensure contained availability
- 3.2 In certain jurisdictions, safety data and safety information captured by mandatory and voluntary safety reporting systems are subject to different levels of protection, offering greater protection to safety data and safety information from voluntary systems compared to safety data and safety information from mandatory ones. This distinction can be justified by the need to incentivize the voluntary provision of safety data or safety information in ways that are not seen to be necessary in the case of a mandatory reporting system.
- 3.3 Protection of sensitive safety data and information available on public domain for instance through a leak to the media, ECAA should refrain from further disclosure of the leaked data and information

4- Protection Principles

- 4.1 The principles of protection apply to safety data, safety information and related sources
- 4.2 It's important to protect reporters as well as the safety data and information, by not punishing them on reporting basis
- 4.3 The protections are not intended to relieve sources of their safety related obligations or interfere with the proper administration of justice
- 4.4 Protective data, information and other related sources are not prevented ECAA from using it and take the necessary actions which support maintaining or improving safety
- 4.5 Preventive, corrective or remedial actions should avoid possible adverse impacts (such as financial or reputational) on the source of safety data, information or other related sources
- 4.6 This protection provides also ensures the clarity and transparency
- 4.7 The confidence to report errors and experiences with relevant data and information is necessary to address existing and potential safety deficiencies and hazards for effective safety management system
- 4.8 Protective data, information and other related sources allow ECAA, operators and service providers to take the appropriate steps for:

- (a) Guard against the potential for immediate harm or injury as a result of a safety risk until that risk can be identified and mitigated
- (b) Ensure that appropriate actions are taken to minimize the likelihood that such a risk might occur again in the future
- (c) Prevent exposure to an unmitigated safety risk
- (d) Ensure the integrity of the reporting system itself and the larger system of which the reporting system is a part.

4.9 Encouraging people to report relevant data or safety information requiring trusted reporting environment which means that “employees and operational personnel trust their actions will not be punished, and those actions are appropriate with their trainings and experiences”, this trusted environment is the fundamental of effective and efficient reporting

4.10 Appropriate actions with person’s trainings and experiences will be reasonable if their other person with the same level of this qualifications might do or fail to do, the same action had been taken

5- Application

5.1 All involved service providers and operators should know ECAA protection principles and formalized process

5.2 ECAA require effective protection through certification, approval and continuing surveillance processes

5.3 Service providers and operators implement an effective SMS based on data collection, analysis and protection

5.4 Protection may involve reporter de-identification and it shall use for the purpose of maintaining or improving safety, to avoid the disclosure of safety data and information other than improving safety; the service providers and operators shall ensure mitigate the negative consequences in such potential disclosures:

- (a) De-identification may however be difficult where the sources providing the safety data or safety information may be readily ascertainable from the substance of the data or information reported. For example, the report of an occurrence involving a type of aircraft that is used only by a single operator within a particular jurisdiction may immediately point to that operator (or even to an individual employee) simply by identifying the type of aircraft involved. In such cases, how and where the safety data or safety information is proposed to be disclosed or used, and the nature of the information involved, would be of especial significance.
- (b) If the safety data or safety information is proposed to be used in a forum where knowledge of the persons or organizations connected to the data or information is limited. Similarly, if the nature of the information is primarily technical, then there may not be much identifying information in the safety data or safety information that needs to be removed or redacted, making the protective task more easily achievable. ECAA \, Service providers and operators should also consider whether the forum of the proposed disclosure or use of the data or information and the nature of the information, will affect the degree to which the sources can be identified, and whether removing identifying information would be enough.

- (c) Protective orders, closed proceedings, in camera review and summaries are examples of preventive disclosure where the de-identification of the safety data and safety information will not be appropriate because it may prevent the intended or otherwise permissible use of safety data or safety information
- (d) ECAA shall ensure the secure of how data and information collected, stored, processed and transmitted for the purpose of improving safety

5.3 In Formal proceedings, ECAA provide the necessary action taken for protected data and information in accordance with what evidence is allowed to be presented.

5.3 In Civil proceedings against service provider, ECAA applied the principle of exception

5.4 In administrative proceedings, prevent adverse or prejudicial consequences on data or information source and should be compliance with fairness fundamental

6- Exception Principles

Exceptions to the protection of safety data, safety information and related sources shall only be granted when (ECAA):

- (a) determines that there are facts and circumstances reasonably indicating that the occurrence may have been caused by an act or omission considered, in accordance with national laws, to be conduct constituting gross negligence, willful misconduct or criminal activity;
- (b) after reviewing the safety data or safety information, determines that its release is necessary for the proper administration of justice, and that the benefits of its release outweigh the adverse domestic and international impact such release is likely to have on the future collection and availability of safety data and safety information; or
- (c) After reviewing the safety data or safety information, determines that its release is necessary for maintaining or improving safety, and that the benefits of its release outweigh the adverse domestic and international impact such release is likely to have on the future collection and availability of safety data and safety information.

Appendix B

Emergency Response Plan

- Coordination of the emergency response plan.

- (a) An operator and /or service provider shall develop and maintain, or coordinate, as appropriate, an Emergency Response Plan (ERP) that shall ensure:
 - (1) Orderly and efficient transition from normal to emergency operations;
 - (2) Designation of emergency entities;
 - (3) Assignment of emergency responsibilities;
 - (4) Coordination of efforts to cope with the emergency; and

Safe continuation of operations, or return to normal operations as soon as possible

Coordination of emergency response planning

- By definition, an emergency is a sudden, unplanned situation or event requiring immediate action. Coordination of emergency response planning refers to planning for activities that take place within a limited period of time during an unplanned aviation operational emergency situation. An emergency response plan (ERP) is an integral component of a service provider's SRM process to address aviation related emergencies, crises or events. Where

There is a possibility of a service provider's aviation operations or activities being compromised by emergencies such as a public health emergency/pandemic, these scenarios should also be addressed in its ERP as appropriate. The ERP should address foreseeable emergencies as identified through the SMS and include mitigating actions, processes and controls to effectively manage aviation-related emergencies.

The overall objective of the ERP is the safe continuation of operations and the return to normal operations as soon as possible. This should ensure an orderly and efficient transition from normal to emergency operations, including assignment of emergency responsibilities and delegation of authority. It includes the period of time required to re-establish "normal" operations following the emergency. The ERP identifies actions to be taken by responsible personnel during an emergency. Most emergencies will require coordinated action between different organizations, possibly with other service providers and with other external organizations such as non-aviation related emergency services. The ERP should be easily accessible to the appropriate key personnel as well as to the coordinating external organizations

An ERP would normally be documented in the format of a manual that should set out the responsibilities, roles and actions of the various agencies and personnel involved in dealing with specific emergencies. An ERP should take account of such considerations as:

- (a) Governing policies. The ERP should provide direction for responding to emergencies, such as governing laws and regulations for investigations, agreements with local authorities, company policies and priorities.
- (b) Organization. The ERP should outline management's inter organizations by:
 - (1) designating who will lead and who will be assigned to the response teams;

- (2) defining the roles and responsibilities of personnel assigned to the response teams;
- (3) clarifying the reporting lines of authority;
- (4) setting up an Emergency Management Centre (EMC);
- (5) establishing procedures for receiving a large number of requests for information, especially during the first few days after a major accident;
- (6) designating the corporate spokesperson for dealing with the media;
- (7) defining what resources will be available, including financial authorities for immediate activities;
- (8) designating the company representative to any formal investigations undertaken by State officials;
- (9) Defining a call-out plan for key personnel.

An organizational chart could be used to show organizational functions and communication relationships.

- (c) Notifications. The plan should specify who in the organization should be notified of an emergency, who will make external notifications and by what means. The notification needs of the following should be considered:
 - (1) management;
 - (2) State authorities (search and rescue, the regulatory authority, the accident investigation board, etc.);
 - (3) Local emergency response services (aerodrome authorities, fire fighters, police, ambulance, medical agencies, etc.);
 - (4) relatives of victims (a sensitive issue that, in many States, is handled by the police);
 - (5) company personnel;
 - (6) media; and
 - (7) Legal, accounting, insurers, etc.
- (d) Initial response. Depending on the circumstances, an initial response team may be dispatched to the accident or crisis site to augment local resources and oversee the organization's interest Factors to be considered for such a team include:
 - (1) Who should lead the initial response team?
 - (2) Who should be included on the initial response team?
 - (3) Who should speak for the organization at the accident site?
 - (4) What would be required by way of special equipment, clothing, documentation, transportation, accommodation, etc.?
- (e) Additional assistance. Employees with appropriate training and experience can provide useful support during the preparation, exercising and updating of an organization's ERP. Their e may be useful in planning and executing such tasks as:
 - (1) acting as passengers or customers in exercises;
 - (2) handling survivors or external parties;
 - (3) Dealing with next of kin, authorities, etc.
- (f) Emergency Management Centre (EMC). An EMC (normally on standby mode) may be established at the organization's headquarters once the activation criteria have been met. In

addition, a command post (CP) may be established at or near the crisis site. The ERP should address how the following requirements are to be met:

- (1) staffing (perhaps for 24 hours a day, 7 days per week, during the initial response period);
- (2) Communications equipment (telephones, facsimile, Internet, etc.);
- (3) documentation requirements, maintenance of emergency activity logs;
- (4) impounding related company records;
- (5) office furnishings and supplies; and
- (6) Reference documents (such as emergency response checklists and procedures, company manuals, aerodrome emergency plans and telephone lists).

The services of a crisis center may be contracted from an airline or other specialist organization to look after the Organization's crisis away from home base. Company personnel would normally supplement such a contracted center as soon as possible.

(g) Records. In addition to the organization's need to maintain logs of organization will also be required to provide information to any State investigation team. The ERP should address the following types of information required by investigators:

- (1) all relevant records about the product or service concerned;
- (2) lists of points of contact and any personnel associated with the occurrence;
- (3) notes of any interviews (and statements) with anyone associated with the event;
- (4) Any photographic or other evidence.

(h) Accident site. For a major accident, representatives from many jurisdictions have legitimate reasons for accessing the site: for example, police; fire fighters; medics; aerodrome authorities; coroners (medical examining officers) to deal with fatalities; State accident investigators; relief agencies such as the Red Crescent and even the media. Although coordination of the activities of these stakeholders is the responsibility of the State's police

Organization should clarify the following aspects of activities at the accident site:

- (1) nominating a senior company representative at the accident site if:
 - (i) at home base;
 - (ii) away from home base;
 - (iii) offshore or in a foreign State;
 - (2) management of surviving victims;
 - (3) the needs of the relatives of victims;
 - (4) security of the wreckage;
 - (5) handling of human remains and personal property of the deceased;
 - (6) preservation of evidence;
 - (7) provision of assistance (as required) to the investigation authorities;
 - (8) Removal and disposal of the wreckage; etc.
- (i) News media. How the company responds to the media may affect how well the company recovers from the event. Clear direction is required regarding, for example:
- (1) What information is protected by statute (FDR data, CVR and ATC recordings, witness statements, etc.);
 - (2) who may speak on behalf of the parent organization at head office and at the accident site (public relations manager, chief executive officer or other senior

- executive, manager, owner);
- (3) prepared statements for immediate response to media queries;
 - (4) what information may be released (what should be avoided);
 - (5) the timing and content of the company's
 - (6) Provisions for regular updates to the media.
- (j) Formal investigations. Guidance for company personnel dealing with State accident investigators and police should be provided.
- (k) Family assistance. The ERP should also include guidance on the organization's approach to assisting crisis victims or customer organizations. This guidance may include such things as:
- (1) State requirements for the provision of assistance services;
 - (2) travel and accommodation arrangements to visit the crisis site; program coordinator and point(s) of contact for victims/customers;
 - (3) provision of up-to-date information;
 - (4) temporary assistance to victims or customers.

Post-occurrence review. Direction should be provided to ensure that, following the emergency, key personnel carry out a full debrief and record all significant lessons learned which may result in amendments to the ERP and associated