



EASPG EUR SAFETY ADVISORY-03

(ESA-03)

August 2024

GUIDANCE MATERIAL ON ESTABLISHMENT OF REGULATORY FRAMEWORK ON OCCURRENCE REPORTING

Date of Issue:	August 2024
Revision No:	Second Edition
Document Ref. No.:	EASPG/ESA/03
Owner:	European Aviation System Planning Group (EASPG)

The first edition of the guidelines were developed as part of SEI IE-REST/TS/02 deliverables, based on the work performed by the IE-REST Taxonomy and Safety Data Analysis Group (IE-TSG) in collaboration with the ICAO EUR/NET Regional Office and the European Regional Aviation Safety Group (RASG-EUR).

Georgian CAA agreed to champion the effort and developed the “Guidance material: Regulatory Framework on Occurrence Reporting”.

The second edition represents further enhancements to the guidelines (in particular, Chapters 1 and 2) suggested by IFALPA as adopted by the EASPG Regional Expert Safety Group (RESG) and approved by EASPG via correspondence.

Disclaimer

This document is intended to provide guidance for civil aviation regulators, aerodrome operators, air traffic service providers and aircraft operators regarding implementation of mandatory and voluntary reporting systems which forms an essential part of the State Safety Program as per Annex 19 requirements.

It is not intended to supersede or replace existing materials produced by the Civil Aviation Authorities (CAA) or in ICAO SARPs. The distribution or publication of this document does not prejudice the CAA’s ability to enforce existing National regulations. To the extent of any inconsistency between this document and the National/International regulations, standards, recommendations or advisory publications, the content of the National/International regulations, standards, recommendations and advisory publications shall prevail.

1. Background

1.1 The sole objective of occurrence reporting is the prevention of accidents and incidents and not to attribute blame or liability. Any person may report to the safety investigation authority and/or civil aviation authority any occurrence in which he or she was involved, or witnessed, and which he or she believes posed a potential hazard to flight safety or compromised the ability to provide safe air traffic management services.

1.2 Accurate and timely reporting of relevant information related to hazards, incidents or accidents is a fundamental activity of safety management.

1.3 States shall establish a mechanism to independently collect, evaluate process, analyze and store details of occurrences reported.

1.4 Data-based decision making is one of the most important facets of any management system. The type of safety data to be collected may include accidents and incidents, events, non-conformance or deviations and hazard reports. The quality of the data that are used to enable effective decision making must be considered throughout SSP and SMS development and implementation.

2. Discussion

2.1 Each State shall establish a mandatory incident reporting system to facilitate collection of information on actual or potential safety deficiencies and also a voluntary incident reporting system for the data which may not be captured by the mandatory incident reporting system, in accordance with ICAO Annex 13 and 19.

3. Recommended Action

3.1 EASPG encourages the States to promulgate national regulation relevant to the establishments of roles and responsibilities in the State for collection, investigation/assessment of occurrence reports, in accordance with ICAO Annex 13 and 19.

3.2 EASPG recommends the document attached below to provide guidance for civil aviation regulators regarding establishment of Occurrence Reporting System in the State.

Attachment to EASPG
ESA-02 Guidance material
- Regulatory Framework
on Occurrence Reporting,
edition 2

Second Edition

RESG

02-May-24

Table of Contents

INTRODUCTION	2
1. PRIMARY REGULATION	3
1.1 Application	3
1.2 Model Regulation	3
2. SUPPORTING REGULATION	9
2.1 Application	9
2.2 Model Regulation	9
Annex 1. List of occurrences in civil aviation to be mandatorily reported	14
Annex 2. Mandatory occurrence reporting forms	28
3. Procedure on Processing of information coming from Mandatory and Voluntary Occurrence reporting for Civil Aviation Authority	31
3.1 Application	31
3.2 Model Procedure	31
List of used Documents	35

INTRODUCTION

This guidance material is developed by Georgian Civil Aviation Agency under IE-REST as a Champion Organization.

This document is intended to provide guidance for civil aviation regulators regarding establishment of Occurrence Reporting System in the State in IE-REST Region.

This document has been compiled by members of aviation industry to enhance occurrence reporting. It is not intended to supersede or replace existing materials produced by the National Regulator or in ICAO SARPs. The distribution or publication of this document does not prejudice the National Regulator's ability to enforce existing National regulations. To the extent of any inconsistency between this document and the National/International regulations, standards, recommendations or advisory publications, the content of the National/International regulations, standards, recommendations and advisory publications shall prevail.

1. PRIMARY REGULATION

1.1 Application

It is recommended the below model regulation to be included in the high level national regulation relevant to the establishments of roles and responsibilities in the State for collection, investigation/assessment of occurrence reports. In this example this is one of the chapters of high level document (depending on National set up of legal system for example Air Code, Government Decree etc) which describes who is doing what in the State.

1.2 Model Regulation

Article 1

Terms and definitions

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:

- being in the aircraft, or
- direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
- 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:

- adversely affects the structural strength, performance or flight characteristics of the aircraft, and
- 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 radome); or

c) the aircraft is missing or is completely inaccessible.

Note 1.— 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.

Note 2.— An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

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

Occurrence - means 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;

Organisation - means any organisation providing aviation products and/or which employs, contracts or uses the services of persons required to report occurrences.

Safety data - A defined set of facts or set of safety values collected from various aviation related sources, which when analyzed 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 investigation - a process conducted by a safety investigation authority for the purpose of accident and incident prevention which includes the gathering and analysis of information, the drawing of conclusions, including the determination of cause(s) and/or contributing factors and, when appropriate, the making of safety recommendations.

Safety investigation authority – the permanent national civil aviation safety investigation authority conducting or supervising safety investigations. The safety investigation authority shall be functionally independent in particular of aviation authorities responsible for airworthiness, certification, flight operation, maintenance, licensing, air traffic control or aerodrome operation and, in general, of any other party or entity the interests or missions of which could conflict with the task entrusted to the safety investigation authority or influence its objectivity.

Article 2

Investigation of accidents, serious incidents and incidents

1. Accident or serious incident which have occurred on the territory of the [State] or involving aircraft registered in [State] or operated by an undertaking established in [State] shall be investigated by [Aviation Investigation Authority]
2. Accident, serious incident and incident in which a [State] registered military aircraft was involved on the territory of the [State] are investigated by [Safety investigation authorities or Joint Committee involving Military Authority]

3. Incidents are investigated by the organization under Safety Management System that was involved in that event.
4. Incidents in which more than one organization was involved are investigated by Joint Committee of the organizations involved in that case.
5. Detailed Rules for investigation of Accident and Serious Incident shall be established by [Safety investigation authorities] with coordination with [Aviation Military Authority]
6. Detailed Rules for investigation of incidents shall be established by organizations which require having Safety Management System in place.
7. Guidance material for investigation of incidents shall be established by [Civil Aviation Authority]

Article 3

Occurrence Reporting

1. The sole objective of occurrence reporting is the prevention of accidents and incidents and not to attribute blame or liability.
2. Any person who becomes aware of an accident shall as soon as possible notify the [Safety investigation authorities] and relevant [Authority responsible for Search and Rescue].
3. Any person who becomes aware of serious incident shall as soon as reasonable notify the [Safety investigation authorities].
4. Accidents, serious incident and incidents shall also be reported to [Civil Aviation Authority].

Article 4

Mandatory and Voluntary Occurrence Reporting System

1. [Civil Aviation Authority] shall establish a mandatory safety reporting system to facilitate the collection of details of occurrences.
2. [Civil Aviation Authority] shall establish a voluntary safety reporting system to facilitate the collection of:
 - a) details of occurrences that may not be captured by the mandatory reporting system;
 - b) other safety-related information which is perceived by the reporter as an actual or potential hazard to aviation safety.
3. Detailed Rules on mandatory and voluntary occurrence reporting shall be established by [Civil Aviation Authority].

Article 5

Collection and storage of information

1. [Civil Aviation Authority] shall establish a mechanism to independently collect, evaluate, process, analyse and store details of occurrences reported pursuant to Article 4 on Mandatory and Voluntary Occurrence Reporting System.
2. The handling of the reports shall be done with a view to preventing the use of information for purposes other than safety, and shall appropriately safeguard the confidentiality of the identity of the reporter and of the persons mentioned in occurrence reports, with a view to promoting a 'positive safety culture'.
3. Relevant information on accidents and serious incidents collected or issued by safety investigation authorities shall also be stored in the national database.

Article 6

Occurrence analysis and follow-up

1. [Civil Aviation Authority] shall develop a process to analyse the information relating to occurrences which are reported to them in order to identify the safety hazards associated with those occurrences. Based on that analysis, they shall determine any appropriate corrective or preventive action required to improve aviation safety.
2. When, following the analysis referred to in paragraph 1, [Civil Aviation Authority] identifies any appropriate corrective or preventive action required to address actual or potential aviation safety deficiencies, it shall:
 - a) implement that action in a timely manner; and
 - b) establish a process to monitor the implementation and effectiveness of the action.
3. For each occurrence or group of occurrences monitored in accordance with paragraph 2 b) of this article [Civil Aviation Authority] shall appropriately monitor action taken by the organisations for which it is respectively responsible. If [Civil Aviation Authority] concludes that the implementation and the effectiveness of the reported action is inappropriate to address actual or potential safety deficiencies, it shall ensure that additional appropriate action is taken and implemented by the relevant organisation.
4. [Civil Aviation Authority] shall use information obtained from the analysis of occurrence reports to identify remedial action to be taken, if any, within the State Safety Programme.
5. In order to inform the public of the level of safety in civil aviation, [Civil Aviation Authority] shall publish a safety review at least once a year. The safety review shall:
 - a) contain aggregated and anonymized information on the type of occurrences and safety-related information reported through its mandatory and voluntary reporting systems;
 - b) identify trends;
 - c) identify the action it has taken.

Article 7

Safety Database

1. All data contained in the safety database shall be deidentified and protected.
2. [Civil Aviation Authority] shall establish and maintain a national safety database to facilitate the effective analysis of information on actual or potential safety deficiencies obtained, including that

from its occurrence reporting systems, and to determine any actions required for the enhancement of safety.

3. [Safety investigation authorities] and Authority responsible for the implementation of the SSP shall have access to national database.
4. The National database shall use formats which are:
 - a) standardized to facilitate information exchange; and
 - b) compatible with the ECCAIRS software and the ADREP taxonomy.
5. The point of contact for exchange of information on Accidents and serious incidents with ICAO is [Safety investigation authority].
6. The point of contact for exchange of information on occurrences with other States and national and international organizations is [Civil Aviation Authority].

Article 8

Safety data protection

1. All safety data, however obtained, shall be protected in accordance with the provisions of ICAO Annexes 13 and 19.
2. Safety information shall not be used in a way different from the purposes for which it was collected.

Article 9

Safety data information exchange

1. [Civil Aviation Authority], shall forward all pertinent safety-related information to the relevant authority of the State involved in occurrence as soon as possible if, while collecting details of occurrences or when storing occurrence reports or carrying out an analysis, it identifies safety matters which it considers either:
 - a) to be of interest to other States; or
 - b) to possibly require safety action to be taken by other States.
2. Upon receipt of an occurrence report, the [Civil Aviation Authority] shall enter it into database and notify, whenever necessary, the authority of the State where the occurrence took place, where the aircraft is registered and/or where the operator is certified, as applicable.
3. [Aviation Investigation Authority] shall transfer information related to accidents and serious incidents to the ICAO as follows:
 - a) during the course of the investigation: preliminary factual information on accidents and serious incidents;
 - b) when the investigation is completed:
 - i) the final investigation report; and
 - ii) a summary in English of the final investigation report.

4. The [Civil Aviation Authority], may participate in an exchange of information between the competent Authorities of other States with the objective of getting a comprehensive overview of typical hazards and related contributing factors, as well as for an insight into safety trends in different areas of civil aviation.

Article 10

Safety Promotion

1. States shall promote safety awareness and the sharing and exchange of safety information to support, within the State aviation organizations, the development of a positive safety culture that fosters an effective SSP.
2. States shall promote safety awareness and the sharing and exchange of safety information with the aviation community to foster the maintenance and improvement of safety and to support the development of a positive safety culture.

Article 11

Protection of the information source

1. [Civil Aviation Authority], shall ensure that no personal details are ever recorded in the national database.
2. Without prejudice to applicable national criminal law, [Civil Aviation Authority] shall refrain from instituting proceedings in respect of unpremeditated or inadvertent infringements of the law which have been reported under the Mandatory and Voluntary Reporting Scheme, except in cases involving dereliction of duty amounting to gross negligence or recklessness.

Article 12

Penalties

[Civil Aviation Authority], shall lay down the rules on penalties applicable to infringements of Mandatory Occurrence Reporting System. The penalties provided for shall be effective, proportionate and dissuasive.

2. SUPPORTING REGULATION

2.1 Application

It is recommended that the following model regulation be issued by relevant Authority who is responsible for maintenance of occurrence reporting system in the State.

The model regulation is included as part of the supporting stakeholder's safety management system requirements. It is preferable to implement any safety initiative under the framework of the safety management system.

2.2 Model Regulation

Article 1 Objective

1. This Regulation aims to improve aviation safety by ensuring that relevant safety information relating to civil aviation is reported, collected, stored, protected, exchanged, disseminated and analysed.
2. The sole objective of occurrence reporting is the prevention of accidents and incidents and not to attribute blame or liability.

Article 2 Terms and Definitions

Terms used in this Regulation shall have the following meaning:

Organisation - means any organisation providing aviation products and/or which employs, contracts or uses the services of persons required to report occurrences;

Disidentification - means removing from reports submitted all personal details pertaining to the reporter and technical details which might lead to the identity of the reporter, or of third parties, being inferred from the information.

Flight recorder- means any type of recorder installed in the aircraft for the purpose of complementing occurrence analysis process.

Positive safety culture - means 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, wilful violations and destructive acts are not tolerated;

Article 3 Scope

1. This Regulation lays down rules on:
 - a) the reporting of occurrences which endanger or which, if not corrected or addressed, would endanger an aircraft, its occupants, any other person, equipment or installation affecting aircraft operations; and the reporting of other relevant safety-related information in that context;

- b) analysis and follow-up action in respect of reported occurrences and other safety-related information;
- c) the protection of aviation professionals;
- d) appropriate use collected safety information; and
- e) the dissemination of anonymised information to interested parties for the purpose of providing such parties with the information they need in order to improve aviation safety.

2. This Regulation applies to occurrences and other safety-related information involving civil aircraft operating in [Name of Airspace] or which are on [Name of the country] register.

Article 4 **Mandatory reporting**

1. Occurrences which may represent a significant risk to aviation safety which are described in Annex 1 to this regulation shall be reported to [Civil Aviation Authority/*Name of accident investigation authority*] using form in Annex 2 to this regulation by the following persons:
 - a. the pilot in command, or any operating crew member of an aircraft registered in a [Name of State] or an aircraft registered outside the [Name of State] but used by an operator for which a [Name of State] ensures oversight of operations;
 - b. a person engaged in designing, manufacturing, continuous airworthiness monitoring, maintaining or modifying an aircraft, or any equipment or part thereof, under the oversight of a [Name of State];
 - c. a person who signs an airworthiness review certificate, or a release to service in respect of an aircraft or any equipment or part thereof, under the oversight of a [Name of State];
 - d. a person who signs a certificate of maintenance review, or of release to service in respect of a turbine-powered or a public transport aircraft, or any equipment or part thereof, under the oversight of [Name of authority];
 - e. a person who performs a function of Air traffic Controller, Flight Information Officer, Flight Data Processing operator, Meteorological Officer and Aeronautical Information Services Officer;
 - f. a person who performs a function connected with the safety management of an airport;
 - g. a person who performs a function connected with the installation, modification, maintenance, repair, overhaul, flight-checking or inspection of air navigation facilities;
 - h. a person who performs a function connected with the ground handling of aircraft, including fuelling, servicing, loadsheet preparation, loading, unloading, de-icing and towing at an airport located on the territory of [Name of State] .
2. The persons listed in paragraph 1 of this article shall report occurrences within 72 hours of becoming aware of the occurrence, unless exceptional circumstances prevent this.
3. The persons listed in paragraph 1 shall use Mandatory occurrence reporting forms of Annex 2 of this regulation while reporting.

4. When the circumstances of an occurrence are considered to be safety significant, *[Name of accident investigation authority]* shall be advised immediately of the essential details by the fastest possible means. The written report shall follow within 72 hours.
5. Each organization established in a [State] and is required to have Safety management System shall establish a mandatory reporting system.

Article 5 **Voluntary reporting**

1. Any person may report voluntarily to *[Civil Aviation Authority]* any occurrence in which he or she was involved, or witnessed, and which he or she believes posed a potential hazard to flight safety or compromised the ability to provide safe air traffic management services.
2. The name of the reporting individual or the person(s) mentioned in the report shall not be disclosed by the *[Civil Aviation Authority]*, unless otherwise required by law.
3. Safety information deriving from the analysis of voluntary reporting shall be disidentified, stored and made available to all relevant parties so that it can be used for improving safety in aviation.
4. Voluntary reports can be submitted using established means such as the form available on the following *[website Link]*. The reporting process shall contain provisions for the reporter to receive official acknowledgment that the report has been received and appropriate feedback.
5. Each organisation established in a [State] and is required to have Safety management System shall establish a voluntary reporting system to facilitate the collection of:
 - a) details of occurrences that may not be captured by the mandatory reporting system;
 - b) other safety-related information which is perceived by the reporter as an actual or potential hazard to aviation safety.

Article 6 **Collection and storage of information**

1. Each organisation established in a [State] shall designate one or more persons to handle independently the collection, evaluation, processing, analysis and storage of details of occurrences reported pursuant to Articles 4 and 5.
2. The handling of the reports shall be done with a view to preventing the use of information for purposes other than safety, and shall appropriately safeguard the confidentiality of the identity of the reporter and of the persons mentioned in occurrence reports, with a view to promoting a 'positive safety culture'.

Article 7 **Occurrence analysis and follow-up within an organization**

1. All occurrences which are not of interest of [Safety investigation authorities] shall be analysed by the organization involved in occurrence under its Safety Management System in order to identify the safety hazards associated with identified occurrences or groups of occurrences.
2. Based on that analysis, each organisation shall determine any appropriate corrective or preventive action, required to improve aviation safety.
3. When, following the analysis referred to in paragraph 1 to this article, an organisation identifies any appropriate corrective or preventive action required to address actual or potential aviation safety deficiencies, it shall:
 - a) implement that action in a timely manner; and
 - b) establish a process to monitor the implementation and effectiveness of the action.
4. Analysis of those occurrences that are considered to have significant implications on flight safety shall take place immediately, and any necessary remedial action taken by organization involved.
5. Analysis of occurrences shall be done by a person or a team with the relevant competence.
6. Safety recommendations and corrective actions shall be developed, recorded, and their implementation monitored.
7. The organisation shall transmit within 30 days from the date of notification of the occurrence by the reporter, preliminary results of the analysis and action taken to [Civil Aviation Authority].
8. The organisation shall report the final results of the analysis to [Civil Aviation Authority], as soon as they are available and, in principle, no later than 90 days from the date of notification of the occurrence by reporter.
9. The final analysis report shall at least contain the following information:
 - a) Factual Information
 - b) Analysis
 - c) Conclusions
 - a. Findings:
 - b. Contributing factors
 - d) Safety recommendations
10. Records concerning a particular occurrence shall be forwarded to [Civil Aviation Authority] on request.
11. Records shall be retained for a defined period of time, unless otherwise specified by [Civil Aviation Authority], after which they shall be destroyed.
12. Aircraft operators shall retain the data from a Flight Recorder which is relevant to a reportable occurrence for a period of 30 days from the date of the occurrence being reported, or a longer period if requested by the Safety Investigation Authority.
13. Each organisation established in a Member State shall regularly provide its employees and contracted personnel with information concerning the analysis of, and follow-up on occurrences for which preventive or corrective action is taken.
14. Each organisation shall send at the beginning of each year a safety review of previous year to [Civil Aviation Authority]. The safety review shall:
 - e) contain information on the type of occurrences and safety-related information reported through its national mandatory and voluntary reporting systems;

- f) identify trends;
- g) identify the action it has taken.

Article 8
Confidentiality and appropriate use of information

1. Organisations shall not make available or use the information on occurrences:
 - a) in order to attribute blame or liability; or
 - b) for any purpose other than the maintenance or improvement of aviation safety.
2. *[Name of authority]* shall, use the information received through the Mandatory and Voluntary Occurrence Reporting systems solely for the objective of this Regulation
3. Regardless of the type or classification of occurrence including accident or serious incident, names or addresses of individual persons shall not be recorded in the database of the organization.

Article 9
Penalty provisions

1. In case that any organization fails to act in accordance with the provisions of this Regulation, the provisions of *[Name of Administrative legal Act or just list penalties]* of shall apply.
2. The *Organizations* shall refrain from instituting proceedings in respect of unpremeditated or inadvertent infringements of the law which come to their attention only because they have been reported under the occurrence-reporting scheme, except in cases of gross negligence and wilful misconduct.

Article 16
Coming into force

1. The Regulation shall be published in the '*[Official Gazette]*'.
2. This Regulation shall come into force on the xxxx date.

Annex 1. List of occurrences in civil aviation to be mandatorily reported

Remark: This Annex is structured in such a way that the pertinent occurrences are linked with categories of activities during which they are normally observed, according to experience, in order to facilitate the reporting of those occurrences. However, this presentation must not be understood as meaning that occurrences must not be reported in case they take place outside the category of activities to which they are linked in the list.

Occurrences Related To the Operation of the Aircraft

1. AIR OPERATIONS

1.1. Flight preparation

- 1) Use of incorrect data or erroneous entries into equipment used for navigation or performance calculations which has or could have endangered the aircraft, its occupants or any other person.
- 2) Carriage or attempted carriage of dangerous goods in contravention of applicable legislations including incorrect labelling, packaging and handling of dangerous goods.

1.2. Aircraft preparation

- 1) Incorrect fuel type or contaminated fuel.
- 2) Missing, incorrect or inadequate De-icing/Anti-icing treatment.

1.3. Take-off and landing

- 1) Taxiway or runway excursion.
- 2) Actual or potential taxiway or runway incursion.
- 3) Final Approach and Take-off Area (FATO) incursion.
- 4) Any rejected take-off.
- 5) Inability to achieve required or expected performance during take-off, go-around or landing.
- 6) Actual or attempted take-off, approach or landing with incorrect configuration setting.
- 7) Tail, blade/wingtip or nacelle strike during take-off or landing.
- 8) Approach continued against air operator stabilised approach criteria.
- 9) Continuation of an instrument approach below published minimums with inadequate visual references.
- 10) Precautionary or forced landing.
- 11) Short and long landing.
- 12) Hard landing.

1.4. Any phase of flight

- 1) Loss of control.
- 2) Aircraft upset, exceeding normal pitch attitude, bank angle or airspeed inappropriate for the conditions.
- 3) Level bust.
- 4) Activation of any flight envelope protection, including stall warning, stick shaker, stick pusher and automatic protections.
- 5) Unintentional deviation from intended or assigned track of the lowest of twice the required navigation performance or 10 nautical miles.
- 6) Exceedance of aircraft flight manual limitation.
- 7) Operation with incorrect altimeter setting.
- 8) Jet blast or rotor and prop wash occurrences which have or could have endangered the aircraft, its occupants or any other person.
- 9) Misinterpretation of automation mode or of any flight deck information provided to the flight crew which has or could have endangered the aircraft, its occupants or any other person.

1.5. Other types of occurrences

- 1) Unintentional release of cargo or other externally carried equipment.
- 2) Loss of situational awareness (including environmental, mode and system awareness, spatial disorientation, and time horizon).
- 3) Any occurrence where the human performance has directly contributed to or could have contributed to an accident or a serious incident.

2. TECHNICAL OCCURRENCES

2.1. Structure and systems

- 1) Loss of any part of the aircraft structure in flight.
- 2) Loss of a system.
- 3) Loss of redundancy of a system.
- 4) Leakage of any fluid which resulted in a fire hazard or possible hazardous contamination of aircraft structure, systems or equipment, or which has or could have endangered the aircraft, its occupants or any other person.
- 5) Fuel system malfunctions or defects, which had an effect on fuel supply and/or distribution.

- 6) Malfunction or defect of any indication system when this results in misleading indications to the crew.
- 7) Abnormal functioning of flight controls such as asymmetric or stuck/jammed flight controls (for example: lift (flaps/slats), drag (spoilers), attitude control (ailerons, elevators, rudder) devices).

2.2. Propulsion (including engines, propellers and rotor systems) and auxiliary power units (APUs)

- 1) Failure or significant malfunction of any part or controlling of a propeller, rotor or powerplant.
- 2) Damage to or failure of main/tail rotor or transmission and/or equivalent systems.
- 3) Flameout, in-flight shutdown of any engine or APU when required (for example: ETOPS (Extended range Twin engine aircraft Operations), MEL (Minimum Equipment List)).
- 4) Engine operating limitation exceedance, including overspeed or inability to control the speed of any high-speed rotating component (for example: APU, air starter, air cycle machine, air turbine motor, propeller or rotor).
- 5) Failure or malfunction of any part of an engine, powerplant, APU or transmission resulting in any one or more of the following:
 - a) thrust-reversing system failing to operate as commanded;
 - b) inability to control power, thrust or rpm (revolutions per minute);
 - c) non-containment of components/debris.

3. INTERACTION WITH AIR NAVIGATION SERVICES (ANS) AND AIR TRAFFIC MANAGEMENT (ATM)

- 1) Unsafe ATC (Air Traffic Control) clearance.
- 2) Prolonged loss of communication with ATS (Air Traffic Service) or ATM Unit.
- 3) Conflicting instructions from different ATS Units potentially leading to a loss of separation.
- 4) Misinterpretation of radio-communication which has or could have endangered the aircraft, its occupants or any other person.
- 5) Intentional deviation from ATC instruction which has or could have endangered the aircraft, its occupants or any other person.

4. EMERGENCIES AND OTHER CRITICAL SITUATIONS

- 1) Any event leading to the declaration of an emergency ('Mayday' or 'PAN call').
- 2) Any burning, melting, smoke, fumes, arcing, overheating, fire or explosion.
- 3) Contaminated air in the cockpit or in the passenger compartment which has or could have endangered the aircraft, its occupants or any other person.

- 4) Failure to apply the correct non-normal or emergency procedure by the flight or cabin crew to deal with an emergency.
- 5) Use of any emergency equipment or non-normal procedure affecting in-flight or landing performance.
- 6) Failure of any emergency or rescue system or equipment which has or could have endangered the aircraft, its occupants or any other person.
- 7) Uncontrollable cabin pressure.
- 8) Critically low fuel quantity or fuel quantity at destination below required final reserve fuel.
- 9) Any use of crew oxygen system by the crew.
- 10) Incapacitation of any member of the flight or cabin crew that results in the reduction below the minimum certified crew complement.
- 11) Crew fatigue impacting or potentially impacting their ability to perform safely their flight duties.

5. EXTERNAL ENVIRONMENT AND METEOROLOGY

- 1) A collision or a near collision on the ground or in the air, with another aircraft, terrain or obstacle.
- 2) ACAS RA (Airborne Collision Avoidance System, Resolution Advisory).
- 3) Activation of genuine ground collision system such as GPWS (Ground Proximity Warning System)/TAWS (Terrain Awareness and Warning System) 'warning'.
- 4) Wildlife strike including bird strike.
- 5) Foreign object damage/debris (FOD).
- 6) Unexpected encounter of poor runway surface conditions.
- 7) Wake-turbulence encounters.
- 8) Interference with the aircraft by firearms, fireworks, flying kites, laser illumination, high powered lights, lasers, Remotely Piloted Aircraft Systems, model aircraft or by similar means.
- 9) A lightning strike which resulted in damage to the aircraft or loss or malfunction of any aircraft system.
- 10) A hail encounter which resulted in damage to the aircraft or loss or malfunction of any aircraft system.
- 11) Severe turbulence encounter or any encounter resulting in injury to occupants or deemed to require a 'turbulence check' of the aircraft.
- 12) A significant wind shear or thunderstorm encounters which has or could have endangered the aircraft, its occupants or any other person.

- 13) Icing encounter resulting in handling difficulties, damage to the aircraft or loss or malfunction of any aircraft system.
- 14) Volcanic ash encounter.

6. SECURITY

- 1) Bomb threat or hijack.
- 2) Difficulty in controlling intoxicated, violent or unruly passengers.
- 3) Discovery of a stowaway.

OCCURRENCES RELATED TO TECHNICAL CONDITIONS, MAINTENANCE AND REPAIR OF THE AIRCRAFT

1. MANUFACTURING Products, parts or appliances released from the production organisation with deviations from applicable design data that could lead to a potential unsafe condition as identified with the holder of the type-certificate or design approval.

2. DESIGN any failure, malfunction, defect or other occurrence related to a product, part, or appliance which has resulted in or may result in an unsafe condition.

3. MAINTENANCE AND CONTINUING AIRWORTHINESS MANAGEMENT

1) Serious structural damage (for example: cracks, permanent deformation, delamination, debonding, burning, excessive wear, or corrosion) found during maintenance of the aircraft or component.

2) Serious leakage or contamination of fluids (for example: hydraulic, fuel, oil, gas or other fluids).

3) Failure or malfunction of any part of an engine or powerplant and/or transmission resulting in any one or more of the following:

- a) non-containment of components/debris;
- b) failure of the engine mount structure.

4) Damage, failure or defect of propeller, which could lead to in-flight separation of the propeller or any major portion of the propeller and/or malfunctions of the propeller control.

5) Damage, failure or defect of main rotor gearbox/attachment, which could lead to in-flight separation of the rotor assembly and/or malfunctions of the rotor control.

6) Significant malfunction of a safety-critical system or equipment including emergency system or equipment during maintenance testing or failure to activate these systems after maintenance.

7) Incorrect assembly or installation of components of the aircraft found during an inspection or test procedure not intended for that specific purpose.

8) Wrong assessment of a serious defect, or serious non-compliance with MEL and Technical logbook procedures.

9) Serious damage to Electrical Wiring Interconnection System (EWIS).

- 10) Any defect in a life-controlled critical part causing retirement before completion of its full life.
- 11) The use of products, components or materials, from unknown, suspect origin, or unserviceable critical components.
- 12) Misleading, incorrect or insufficient applicable maintenance data or procedures that could lead to significant maintenance errors, including language issue.
- 13) Incorrect control or application of aircraft maintenance limitations or scheduled maintenance.
- 14) Releasing an aircraft to service from maintenance in case of any non-compliance which endangers the flight safety.
- 15) Serious damage caused to an aircraft during maintenance activities due to incorrect maintenance or use of inappropriate or unserviceable ground support equipment that requires additional maintenance actions.
- 16) Identified burning, melting, smoke, arcing, overheating or fire occurrences.
- 17) Any occurrence where the human performance, including fatigue of personnel, has directly contributed to or could have contributed to an accident or a serious incident.
- 18) Significant malfunction, reliability issue, or recurrent recording quality issue affecting a flight recorder system (such as a flight data recorder system, a data link recording system or a cockpit voice recorder system) or lack of information needed to ensure the serviceability of a flight recorder system.

OCCURRENCES RELATED TO AIR NAVIGATION SERVICES AND FACILITIES

1. AIRCRAFT-RELATED OCCURRENCES

- 1) A collision or a near collision on the ground or in the air, between an aircraft and another aircraft, terrain or obstacle, including near-controlled flight into terrain (near CFIT).
- 2) Separation minima infringement.
- 3) Inadequate separation.
- 4) ACAS RAs.
- 5) Wildlife strike including bird strike.
- 6) Taxiway or runway excursion.
- 7) Actual or potential taxiway or runway incursion.
- 8) Final Approach and Take-off Area (FATO) incursion.
- 9) Aircraft deviation from ATC clearance.
- 10) Aircraft deviation from applicable air traffic management (ATM) regulation:
 - a) aircraft deviation from applicable published ATM procedures;
 - b) airspace infringement including unauthorised penetration of airspace;

- c) deviation from aircraft ATM-related equipment carriage and operations, as mandated by applicable regulations.

11) Call sign confusion related occurrences.

2. DEGRADATION OR TOTAL LOSS OF SERVICES OR FUNCTIONS

1) Inability to provide ATM services or to execute ATM functions:

- a) inability to provide air traffic services or to execute air traffic services functions;
- b) inability to provide airspace management services or to execute airspace management functions;
- c) inability to provide air traffic flow management and capacity services or to execute air traffic flow management and capacity functions.

2) Missing or significantly incorrect, corrupted, inadequate or misleading information from any support service, including relating to poor runway surface conditions.

3) Failure of communication service.

4) Failure of surveillance service.

5) Failure of data processing and distribution function or service.

6) Failure of navigation service.

7) Failure of ATM system security which had or could have a direct negative impact on the safe provision of service.

8) Significant ATS sector/position overload leading to a potential deterioration in service provision.

9) Incorrect receipt or interpretation of significant communications, including lack of understanding of the language used, when this had or could have a direct negative impact on the safe provision of service.

10) Prolonged loss of communication with an aircraft or with other ATS unit.

3. OTHER OCCURRENCES

1) Declaration of an emergency ('Mayday' or 'PAN' call).

2) Significant external interference with Air Navigation Services (for example radio broadcast stations transmitting in the FM band, interfering with ILS (instrument landing system), VOR (VHF Omni Directional Radio Range) and communication).

3) Interference with an aircraft, an ATS unit or a radio communication transmission including by firearms, fireworks, flying kites, laser illumination, high-powered lights lasers, Remotely Piloted Aircraft Systems, model aircraft or by similar means.

4) Fuel dumping.

5) Bomb threat or hijack.

- 6) Fatigue impacting or potentially impacting the ability to perform safely the air navigation or air traffic duties.
- 7) Any occurrence where the human performance has directly contributed to or could have contributed to an accident or a serious incident.

OCCURRENCES RELATED TO AERODROMES AND GROUND SERVICES

1. SAFETY MANAGEMENT OF AN AERODROME

1.1. Aircraft- and obstacle-related occurrences

- 1) A collision or near collision, on the ground or in the air, between an aircraft and another aircraft, terrain or obstacle.
- 2) Wildlife strike including bird strike.
- 3) Taxiway or runway excursion.
- 4) Actual or potential taxiway or runway incursion.
- 5) Final Approach and Take-off Area (FATO) incursion or excursion.
- 6) Aircraft or vehicle failure to follow clearance, instruction or restriction while operating on the movement area of an aerodrome (for example: wrong runway, taxiway or restricted part of an aerodrome).
- 7) Foreign object on the aerodrome movement area which has or could have endangered the aircraft, its occupants or any other person.
- 8) Presence of obstacles on the aerodrome or in the vicinity of the aerodrome which are not published in the AIP (Aeronautical Information Publication) or by NOTAM (Notice to Airmen) and/or that are not marked or lighted properly.
- 9) Push-back, power-back or taxi interference by vehicle, equipment or person.
- 10) Passengers or unauthorised person left unsupervised on apron.
- 11) Jet blast, rotor down wash or propeller blast effect.
- 12) Declaration of an emergency ('Mayday' or 'PAN' call).

1.2. Degradation or total loss of services or functions

- 1) Loss or failure of communication between:
 - a) aerodrome, vehicle or other ground personnel and air traffic services unit or apron management service unit;
 - b) apron management service unit and aircraft, vehicle or air traffic services unit.

- 2) Significant failure, malfunction or defect of aerodrome equipment or system which has or could have endangered the aircraft or its occupants.
- 3) Significant deficiencies in aerodrome lighting, marking or signs.
- 4) Failure of the aerodrome emergency alerting system.
- 5) Rescue and firefighting services not available according to applicable requirements.

1.3. Other occurrences

- 1) Fire, smoke, explosions in aerodrome facilities, vicinities and equipment which has or could have endangered the aircraft, its occupants or any other person.
- 2) Aerodrome security related occurrences (for example: unlawful entry, sabotage, bomb threat).
- 3) Absence of reporting of a significant change in aerodrome operating conditions which has or could have endangered the aircraft, its occupants or any other person.
- 4) Missing, incorrect or inadequate de-icing/anti-icing treatment.
- 5) Significant spillage during fuelling operations.
- 6) Loading of contaminated or incorrect type of fuel or other essential fluids (including oxygen, nitrogen, oil and potable water).
- 7) Failure to handle poor runway surface conditions.
- 8) Any occurrence where the human performance has directly contributed to or could have contributed to an accident or a serious incident.

2. GROUND HANDLING OF AN AIRCRAFT

2.1. Aircraft- and aerodrome-related occurrences

- 1) A collision or near collision, on the ground or in the air, between an aircraft and another aircraft, terrain or obstacle.
- 2) Runway or taxiway incursion.
- 3) Runway or taxiway excursion.
- 4) Significant contamination of aircraft structure, systems and equipment arising from the carriage of baggage, mail or cargo.
- 5) Push-back, power-back or taxi interference by vehicle, equipment or person.
- 6) Foreign object on the aerodrome movement area which has or could have endangered the aircraft, its occupants or any other person.
- 7) Passengers or unauthorised person left unsupervised on apron.

- 8) Fire, smoke, explosions in aerodrome facilities, vicinities and equipment which has or could have endangered the aircraft, its occupants or any other person.
- 9) Aerodrome security-related occurrences (for example: unlawful entry, sabotage, bomb threat).

2.2. Degradation or total loss of services or functions

- 1) Loss or failure of communication with aircraft, vehicle, air traffic services unit or apron management service unit.
- 2) Significant failure, malfunction or defect of aerodrome equipment or system which has or could have endangered the aircraft or its occupants.
- 3) Significant deficiencies in aerodrome lighting, marking or signs.

2.3. Ground handling specific occurrences

- 1) Incorrect handling or loading of passengers, baggage, mail or cargo, likely to have a significant effect on aircraft mass and/or balance (including significant errors in loadsheet calculations).
- 2) Boarding equipment removed leading to endangerment of aircraft occupants.
- 3) Incorrect stowage or securing of baggage, mail or cargo likely in any way to endanger the aircraft, its equipment or occupants or to impede emergency evacuation.
- 4) Transport, attempted transport or handling of dangerous goods which resulted or could have resulted in the safety of the operation being endangered or led to an unsafe condition (for example: dangerous goods incident or accident as defined in the ICAO Technical Instructions).
- 5) Non-compliance on baggage or passenger reconciliation.
- 6) Non-compliance with required aircraft ground handling and servicing procedures, especially in de-icing, refuelling or loading procedures, including incorrect positioning or removal of equipment.
- 7) Significant spillage during fuelling operations.
- 8) Loading of incorrect fuel quantities likely to have a significant effect on aircraft endurance, performance, balance or structural strength.
- 9) Loading of contaminated or incorrect type of fuel or other essential fluids (including oxygen, nitrogen, oil and potable water).
- 10) Failure, malfunction or defect of ground equipment used for ground handling, resulting into damage or potential damage to the aircraft (for example: tow bar or GPU (Ground Power Unit)).
- 11) Missing, incorrect or inadequate de-icing/anti-icing treatment.
- 12) Damage to aircraft by ground handling equipment or vehicles including previously unreported damage.
- 13) Any occurrence where the human performance has directly contributed to or could have contributed to an accident or a serious incident.

OCCURRENCES RELATED TO AIRCRAFT OTHER THAN COMPLEX MOTOR-POWERED AIRCRAFT, INCLUDING SAILPLANES AND LIGHTER-THAN-AIR VEHICLES

1. AIRCRAFT OTHER THAN COMPLEX MOTOR-POWERED AIRCRAFT EXCLUDING SAILPLANES AND LIGHTER-THAN-AIR VEHICLES

1.1. Air operations

- 1) Unintentional loss of control.
- 2) Landing outside of intended landing area.
- 3) Inability or failure to achieve required aircraft performance expected in normal conditions during take-off, climb or landing.
- 4) Runway incursion
- 5) Runway excursion.
- 6) Any flight which has been performed with an aircraft which was not airworthy, or for which flight preparation was not completed, which has or could have endangered the aircraft, its occupants or any other person.
- 7) Unintended flight into IMC (Instrument Meteorological Conditions) conditions of aircraft not IFR (Instrument flight rules) certified, or a pilot not qualified for IFR, which has or could have endangered the aircraft, its occupants or any other person.
- 8) Unintentional release of cargo.

1.2. Technical occurrences

- 1) Abnormal severe vibration (for example: aileron or elevator 'flutter', or of propeller).
- 2) Any flight control not functioning correctly or disconnected.
- 3) A failure or substantial deterioration of the aircraft structure.
- 4) A loss of any part of the aircraft structure or installation in flight.
- 5) A failure of an engine, rotor, propeller, fuel system or other essential system.
- 6) Leakage of any fluid which resulted in a fire hazard or possible hazardous contamination of aircraft structure, systems or equipment, or risk to occupants.

1.3. Interaction with air navigation services and air traffic management

- 1) Interaction with air navigation services (for example: incorrect services provided, conflicting communications or deviation from clearance) which has or could have endangered the aircraft, its occupants or any other person.
- 2) Airspace infringement.

1.4. Emergencies and other critical situations

- 1) Any occurrence leading to an emergency call.
- 2) Fire, explosion, smoke, toxic gases or toxic fumes in the aircraft.
- 3) Incapacitation of the pilot leading to inability to perform any duty.

1.5. External environment and meteorology

- 1) A collision on the ground or in the air, with another aircraft, terrain or obstacle.
- 2) A near collision, on the ground or in the air, with another aircraft, terrain or obstacle requiring an emergency avoidance manoeuvre to avoid a collision.
- 3) Wildlife strike including bird strike which resulted in damage to the aircraft or loss or malfunction of any essential service.
- 4) Interference with the aircraft by firearms, fireworks, flying kites, laser illumination, high powered lights lasers, Remotely Piloted Aircraft Systems, model aircraft or by similar means.
- 5) A lightning strike resulting in damage to or loss of functions of the aircraft.
- 6) Severe turbulence encounter, which resulted in injury to aircraft occupants or in the need for a post-flight turbulence damage check of the aircraft.
- 7) Icing including carburettor icing which has or could have endangered the aircraft, its occupants or any other person.

2. SAILPLANES (GLIDERS)

2.1. Air operations

- 1) Unintentional loss of control.
- 2) An occurrence where the sailplane pilot was unable to release either the winch cable or the aerotow rope and had to do so using emergency procedures.
- 3) Any release of the winch cable or the aerotow rope if the release has or could have endangered the sailplane, its occupants or any other person.
- 4) In the case of a powered sailplane, an engine failure during take-off.
- 5) Any flight which has been performed with a sailplane which was not airworthy, or for which an incomplete

2.2. Technical occurrences

- 1) Abnormal severe vibration (for example: aileron or elevator 'flutter', or of propeller).

- 2) Any flight control not functioning correctly or disconnected.
- 3) A failure or substantial deterioration of the sailplane structure.
- 4) A loss of any part of the sailplane structure or installation in flight.

2.3. Interaction with air navigation services and air traffic management

- 1) Interaction with air navigation services (for example: incorrect services provided, conflicting communications or deviation from clearance) which has or could have endangered the sailplane, its occupants or any other person.
- 2) Airspace infringements.

2.4. Emergencies and other critical situations

- 1) Any occurrence leading to an emergency call.
- 2) Any situation where no safe landing area remains available.
- 3) Fire, explosion, smoke, or toxic gases or fumes in the sailplane.
- 4) Incapacitation of the pilot leading to inability to perform any duty.

2.5. External environment and meteorology

- 1) A collision on the ground or in the air, with an aircraft, terrain or obstacle.
- 2) A near collision, on the ground or in the air, with an aircraft, terrain or obstacle requiring an emergency avoidance manoeuvre to avoid a collision.
- 3) Interference with the sailplane by firearms, fireworks, flying kites, laser illumination, high powered lights lasers, Remotely Piloted Aircraft Systems, model aircraft or by similar means.
- 4) A lightning strike resulting in damage to the sailplane.

3. LIGHTER-THAN-AIR VEHICLES (BALLOONS AND AIRSHIPS)

3.1. Air operations

- 1) Any flight which has been performed with a lighter-than-air vehicle which was not airworthy, or for which an incomplete flight preparation has or could have endangered the lighter-than-air vehicle, its occupants or any other person.
- 2) Unintended permanent extinction of the pilot light.

3.2. Technical occurrences

- 1) Failure of any of the following parts or controls: dip tube on fuel cylinder, envelope pulley, control line, tether rope, valve seal leak on burner, valve seal leak on fuel cylinder, carabiner, damage to fuel line,

lifting gas valve, envelope or ballonnet, blower, pressure relief valve (gas balloon), winch (tethered gas balloons).

2) Significant leakage or loss of lifting gas (for example: porosity, unseated lifting gas valves).

3.3. Interaction with air navigation services and air traffic management

1) Interaction with air navigation services (for example: incorrect services provided, conflicting communications or deviation from clearance) which has or could have endangered the lighter-than-air vehicle, its occupants or any other person.

2) Airspace infringement.

3.4. Emergencies and other critical situations

1) Any occurrence leading to an emergency call.

2) Fire, explosion, smoke or toxic fumes in the lighter-than-air vehicle (beyond the normal operation of the burner).

3) Lighter-than-air vehicle's occupants ejected from basket or gondola.

4) Incapacitation of the pilot leading to inability to perform any duty.

5) Unintended lift or drag of ground crew, leading to fatality or injury of a person.

3.5. External environment and meteorology

1) A collision or near collision on the ground or in the air, with an aircraft, terrain or obstacle

1) which has or could have endangered the lighter-than-air vehicle, its occupants or any other person.

2) Interference with the lighter-than-air vehicle by firearms, fireworks, flying kites, laser illumination, high powered lights lasers, Remotely Piloted Aircraft Systems, model aircraft or by similar means.

3) Unexpected encounter of adverse weather conditions which has or could have endangered the lighter-than-air vehicle, its occupants or any other person.

Annex 2. Mandatory occurrence reporting forms

In order to facilitate consistent reporting and subsequent storage and analysis of data, standard Occurrence Reporting Forms may be designed by the [Civil Aviation Authority]. The format to be used by aviation professional to report an occurrence to his/her organisation may be defined by the state or by organisation as part of its safety management system.

In general, it is encouraged to develop reporting forms with the means to report that are user-friendly, that do not discourage potential reporters to report occurrences. The aim should be to facilitate the collection of information from the front-line individuals into the management system of the organisation or into the system of the competent authority.

While developing Reporting Forms for different target audience the following minimum fields shall be taken into account.

Each report should at least contain the following elements, as applicable:

1. Common Data fields

- a) Headline
- b) UTC Date
- c) Location of Occurrence
- d) Narrative
- e) Contact information (optional depends on system used)

2. Specific mandatory fields

2.1. Aircraft-related data fields

- a) Aircraft Call sign
- b) Aircraft Make/Model/Series
- c) Aircraft Registration
- d) Last Departure Point
- e) Planned Destination
- f) Flight Phase
- g) Weather relevant

2.2. Data fields relating to air navigation services

- a) Service affected
- b) ATS Unit Name
- c) Airspace type
- d) Airspace class
- e) In case of separation breakdown minimum distance

2.3. Aerodrome-related data fields

- a) ICAO indicator of the airport

States also can use standard ICAO Airprox, Bird strike reporting forms.

Example of one occurrence reporting form which is designed to be used by air traffic controllers is presented below.

Example for ATS occurrence reporting Form.

Logo		ATS Occurrence Report						
		Tel: Fax: E-mail:						
Headline:								
Date:		Time:		Sector:			Frequency:	
Callsign	Type	Speed	Reg. No	Cruising	Cleared	Actual	FR	SSR
a.								
b.								
c.								
SID/STAR	RNY	Route				QNH	NM Separation FT	
a.								
b.								
c.								
Weather			Automated Warning Systems			Working Environment		
Workload		Start Time of Shift		Time on Duty		Time of Last break		
						From till		
Description								
Executive Controller		Assistant / Planner Controller			Supervisor		Date/Time	

Definition of Boxes of ATC Occurrence Reporting Form

Complete **ALL** boxes. If **Not Applicable** use **N/A** or if **Not Known** use **N/K**. Avoid use of technical jargon, hieroglyphics and abbreviations. It is important that this form is completed in as much detail as possible

Headline	Name of occurrence (Runway excursion, com failure, etc)
Date	Date of occurrence (Day Month Year)
Time	UTC Time of occurrence (Hour Minutes)
Sector	Working position where occurrence occurred (if more than one, specify)
Frequency	At time of occurrence frequency in use and others in case of frequency change
Callsign	Call sign /vehicle involved in occurrence
Type	Aircraft type according to ICAO (example B735)
Speed	Speed of Aircraft TAS, IAS, Mach number and then figures (example M 0.78)
Reg. No	Registration number of aircraft involved or plate number of vehicle involved
QNH	QNH given to a,b,c aircraft or if en-route 1013
FL/Altitude	Flight Level or Altitude of aircraft put in boxes instead of flight level letters – (FL) and instead of Altitude letter- (A) and then figures (example FL340,A7500)
FR	Flight Rules. Put one of the following : IFR-Instrumental Flight Rules, VFR-Visual Flight Rules, and SVFR-Special Flight Rules
SSR Code	SSR Code
a. b. c.	Aircraft/vehicle involved
SID/STAR	Standard Instrumental Departure Route, Standard Arrival Route for IFR traffic or entry/exit point to/from CTR for VFR traffic given to a,b,c aircraft
RNY	Runway in use for a,b,c aircraft
Route	Part of Route where occurrence occurred and Departure and Destination Airport of a,b,c aircraft
Distance	Minimum horizontal and vertical distance between aircraft involved
Weather	Weather given by ATCO to Pilot or weather information at that time
Automated Warning Systems	System Warnings (if any) Ground based (STCA, MSAW, APW, etc.)and/or Airborne(TCAS, GPWS, etc) which were activated at time of occurrence
Working Environment	Methods or techniques either, Normal – ATM Unit operates under normal conditions without any degraded mode or contingency; Degraded Mode – ATM Unit is working at reduced level of service invoked by equipment outage or malfunctions, staff shortage or procedures become as a knock-on effect of one or several deficient system element; Contingency – Contingency measures are in place and the ATM unit is operating under exceptional conditions e.g. Industrial action, pandemics, closure of airspace for major military exercises, war operations, etc.
Workload	Traffic situation at time of his duty (Very heavy, Heavy, Medium, Light) and number of ACFT on frequency
Start Time of Shift	Start time of shift (UTC time)
Time on Duty	Time when ATC took over the duty and handed it over (During the occurrence)
Time of Last break	Period of Time when ATCO had last break
Description	In simple words describe occurrence
Executive Controller	Name of Executive Controller on duty at time of occurrence
Assistant / Planner	Name of Assistant/planner Controller on duty at time of occurrence
Controller	
Date/Time	Date and time when occurrence report was filled
Supervisor	Name of Supervisor

3. Procedure on Processing of information coming from Mandatory and Voluntary Occurrence reporting for Civil Aviation Authority

3.1 Application

It is recommended that the following procedure is taken as a basis and be used by relevant Civil Aviation Authority who is responsible for maintenance of occurrence reporting system in State.

3.2 Model Procedure

Document Approval

The following table identifies the management authorities who approved the initial issue of this document.

Authority	Name/Position	Date	Signature
Prepared by	Name and position of persons who prepared document		
Revised by	Name and position of persons who revised document		
Reviewed by	Name and position of persons who reviewed document		
Approved by	Director of Civil Aviation Authority		

Document Revision History

Edition	Date	Description	Pages
0.1	Xx/xx/xx		All

Table of Contents

1.	Introduction	X
2.	Legal Framework	X
3.	Qualification requirements	X
4.	Notification of occurrences.....	X
5.	Confidentiality of reports	X
6.	Processing of occurrence reports	X
7.	Exchange of information with Regional Monitoring Agency (RMA)	X
8.	Feedback mechanism.....	X

1. Introduction

The purpose of this document is to define the actions necessary for the collection and processing occurrences within Civil Aviation Authority and working instructions for relevant personnel.

This manual refers to all employees of the Civil Aviation Authority who are involved in the process of the collection, processing and notification aviation occurrences.

2. Legal Framework

[Provide all relevant Regulations which are linked to occurrence reporting within State]

3. Qualification requirements

Persons responsible for maintenance of occurrence reporting database shall be selected based on the following criteria:

- a) Knowledge of relevant Language (it depends what language is used in database)
- b) Must have experience in the field of Informational Technologies.
- c) Must have satisfactorily completed [e.g. ECCAIRS] technical training course. (put those database which will be used in organization)

Persons responsible for the collection, processing and notification of occurrences shall be selected based on the following criteria:

- a) Knowledge of English Language
- b) Must have experience in the field of Informational Technologies.
- c) Must have satisfactorily completed [e.g. ECCAIRS] End user training course. (put those database which will be used in organization)

4. Notification of occurrences

The Civil Aviation Authority is getting occurrence reports through the following means:

- a) By Phone
- b) Specific E-mail
- c) Web Page application
- d) Notification box
- e) Etc

Receiving the information through Phone

The notification of occurrences can be obtained through telephone by 24 in service officers. The officer shall try to get from reporter the following information:

- what happened;
- when(time and date)
- Where did the event occurred
- The detailed description of the aviation occurrence;
- The name and contact number of the person giving information;
- The issue of confidentiality (Does the reporter wish to disclose his personal data).

The officer shall then forward information on occurrence to person responsible for collection of occurrences.

Receiving the information through Web Page

Information on occurrences can be obtained through an official web-page that is intended for voluntary notification of aviation occurrences. This information is directly received by person responsible for collection of occurrences.

Receiving the information through email

Information on occurrences can be obtained via special e-mail [email address]. This information is directly received by person responsible for collection of occurrences.

Receiving the information through notification box

Information on occurrences can be obtained via notification box, which are located [specify location]. Person responsible for collection of occurrences shall on regular basis check notification boxes.

5. Confidentiality of reports

The personnel involved in collection of occurrence reports shall not disclose the name of the person submitting the report or of a person to whom it relates.

Should any safety follow-up action arising from a report be necessary, the Civil Aviation Authority will take all reasonable steps to avoid disclosing the identity of the reporter or of those individuals involved in any reportable occurrence.

6. Processing of occurrence reports

- 6.1 In relation to all reported occurrences the person responsible for collection of occurrences shall:
- a) evaluate on relevance each occurrence report received;
 - b) if needed gets additional information from reporter (if indicated) in order to understand what happened;
 - c) assigns a reference number and enters the de-identified data into database;

Note: For feedback purposes, personal data of the reporter is accessible only by the person responsible for collection of occurrences. Personal data will be destroyed after closure of report.

- d) send confirmation note to the reporter, stating the assigned reference number of occurrence (if not done automatically by the system)

Note: this cannot be done in case of voluntary reporting when reporter did not indicate contact details.

- e) send the de-identified information;
 - a. to relevant inspector within Civil Aviation Authority responsible for the organization involved;
Note: this is done if the organization involved in the occurrence registered in [State]
 - b. to Civil Aviation Authorities where aircraft is registered and exchange information with them all available information as applicable in relation to reported occurrences;
- f) updates and closes the database record after receiving investigation/analysis report from organization involved.
- g) informs the reporter about the outcome of the investigation (if requested by reporter).
- h) prepare at the beginning of each year annual safety report concerning reported occurrences, which includes statistics and trend analyses .

6.2 The relevant safety inspector shall make such checks as it considers necessary to ensure that relevant organization is taking any necessary remedial and preventative action in relation to reported occurrences in a timely manner and monitor the implementation and effectiveness of the action;

6.3 The civil Aviation Authority publishes a safety review at least once a year in order to inform the public of the level of safety in civil aviation.

7. Exchange of information with Regional Monitoring Agency (RMA).

Data on Large Height Deviations shall be presented to the RMA twice a year, in March and September, by the person responsible for collection of occurrences. All these are performed in accordance ICAO procedure.

8. Feedback mechanism

Civil Aviation Authority in order to keep reporters as well as personnel involved in a safety occurrence processing will organize on yearly basis seminars concerning the progress and the outcome of the occurrence reporting in the State.

List of used Documents

- ICAO Annex 19 to the Convention on International Civil Aviation, Safety Management
- ICAO Doc 9332, Manual on ICAO Bird Strike Information Systems (IBIS)
- ICAO Doc 9859 Safety Management Manual
- Regulation (EU) No 376/2014 of the European Parliament and of the Council on the reporting, analysis and follow-up of occurrences in civil aviation.
- Regulation (EU) 2015/1018 Laying Down A List Classifying Occurrences In Civil Aviation To Be Mandatorily Reported.
- Guidance Material - Regulation (EU) No 376/2014 and its implementing rules - Version 1 (December 2015)