United Nations
Department of Field Support
Logistics Support Division

Guidelines

Aviation Safety Assurance

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Effective Date: 25 October 2017
Contact: Aviation Safety Section, LSD/DFS
Review Date: 25 October 2019

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A. PURPOSE

1. The Aviation Safety Assurance Guidelines (GL) has been developed in response to the requirements of the United Nations Aviation Safety Policy[1] and Office of Internal Oversight Services (OIOS) Internal Audit Division, Report 2016/112.

2. The information provided in this document aim at enhancing aviation safety in United Nations while assisting Logistics Support Division/ Department of Field Support (LSD/DFS) and supported field missions and offices[2] in establishing a suitable aviation safety assurance process. The purpose of GL is twofold:

   a) For Aviation Safety Section LSD/DFS, safety guidance is provided on critical elements of a system responsible for aviation safety assurance at UNHQ and for oversight in all Missions.

   b) For Missions, guidance is provided for the implementation and maintenance of the required aviation safety assurance activities.

B. SCOPE

3. The GL are applicable to all United Nations personnel involved in DFS aviation activities and stakeholders who have a potential impact on the United Nation's aviation safety performance, comprising all commercial and military, manned and unmanned/remotely piloted United Nations DFS flight operations and related services.

4. The LSD/DFS aviation safety assurance include:

   a) Safety oversight functions;

   b) Safety data collection, analysis and exchange procedures, and

   c) Risk-based assessment concept.

5. The Missions structure for safety assurance, as minimum, should include the following:

   a) Safety performance monitoring and measurement;

   b) The management of change, and

   c) Continuous improvement of the Mission's system of safety management.

6. Both safety assurance elements stipulated above together form the United Nations aviation safety assurance process providing confidence that the United Nations DFS system of safety management is effective and operating as designed.

[1] DPKO and DFS Policy of Aviation Safety Ref. 2016.13

[2] For ease of reference and understanding, hereafter United Nations DFS supported field missions and offices as "Missions".

C. RATIONALE

7. The International Civil Aviation Organization (ICAO) defines "Standard" and "Recommended Practices" (SARPS) as any specification for physical characteristics, configuration, material, performance, personnel or procedure, the uniform application of which is recognised as desirable in the interest of safety. The GL are influenced with the approach of ICAO Annex 19 and associated guidance material from the industry. With the full understanding that the United Nations is not a State nor a National Aviation Authority (NAA), airline, or air operator, the relevant ICAO SARPS are adapted to suit the unique needs of United Nations air transport services. Additionally, all ground-breaking United Nations aviation regulatory framework such as United Nations AVSTADS, United Nations Aviation Manual and Aviation Safety Manual are mostly based on the relevant ICAO SARPS[3] and the Aviation Manual.

8. The comparison of Quality Management System (QMS) with Safety Management System (SMS) is important to cover here. Both QMS and SMS promote a systems approach and continual improvement in flight operation services provided, using at times similar tools and techniques, e.g. performance monitoring, process analysis, and auditing/ assessments, however, objectives to be established though QMS and SMS completely differ. QMS is geared towards customer expectations and contractual/regulatory obligations while SMS is about identifying hazards and managing risks. Quality Assurance cannot, by itself, as proposed by quality dogma, "assure safety". It rather ensures the necessary standardisation of the systems within the organization and the appropriate level of compliance with the policies, guidance documents and procedures, which in turn may reduce the risk of accidents and incidents. The Safety Assurance component assists in ensuring the necessary standardisation of processes to achieve the overarching safety goal of managing the safety risks of the consequences of the hazards the organization must confront during its activities related to the delivery of services.

9. While the elimination of accidents and/or serious incidents[4] and the achievement of absolute aviation safety are certainly desirable, they are globally accepted as unachievable goals. Safety is a concept that must encompass relatives rather than absolutes. As long as safety risks are kept under an appropriate level, a system as open and dynamic as aviation can still be managed to maintain the appropriate balance between production and protection[5].

10. Once aviation safety risk controls are developed and implemented, it is the organization's responsibility to assure that they continue to be in place and that they work as intended. Safety risk management requires feedback on safety performance to complete the safety management cycle through safety assurance. Safety assurance can simply be defined as "something that gives confidence in" the effectiveness of DFS aviation safety risk management by demonstrating that organisational arrangements and processes for safety achievement are properly applied and continue to achieve their intended objectives as per DPKO and DFS Aviation Safety Policy.

11. The overall objective of the Safety Assurance process is to provide a business-like approach to aviation safety in a systematic and objective manner focusing on continuous improvement. Its success will depend on the positive attitude, behaviour and inter-personal skills of safety assessors who in turn needs to remain up-to-date with industry developments and recurrent training. It is of utmost importance that safety assessors are considered and regarded as safety facilitators only.

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[3] DPKO Aviation Manual, Section II Chapter 2 considers standards and regulations from different sources such as ICAO, IATA and National Aviation Authorities among others as part of the DFS aviation regulatory regime and to provide acceptable complementary guidance for additional requirements that reflect industry best practices.

[4] The Safety Assurance Guidelines do not deal with Occupational Safety and Health as separate offices/organizations are responsible for their function in DFS.

[5] ICAO Doc 9859, Safety Management Manual (SMM), Edition 3, 2013.

D. CONCEPT

12. On behalf of DFS Management, the LSD/DFS Aviation Safety Section accomplishes safety assurance through continuous safety oversight of Missions' aviation safety programs and safety reviews of the suitability and adequacy of the United Nations aviation framework related to aviation safety. The important role of safety data and collection, analysis and sharing of that data are also addressed.

13. The LSD/DFS Aviation Safety Section establishes mechanisms to ensure effective safety monitoring to warrant that the identification of hazards and the management of safety risks by the Missions follow established United Nations aviation safety requirements. These mechanisms include inspections, assessments and surveys to safeguard that United Nations required safety risk controls are appropriately integrated into the Missions' System of Safety Management, that they are being practised as designed, and that the controls have the intended effect on aviation safety risks.

14. The implementation of LSD/DFS aviation safety assurance involves two control loops (Figure 1): the "outer safety assurance loop in blue text colour" that is driven by LSD/DFS through Aviation Safety Section at UNHQ and the "inner in orange text colour" that is managed by the respective Mission.

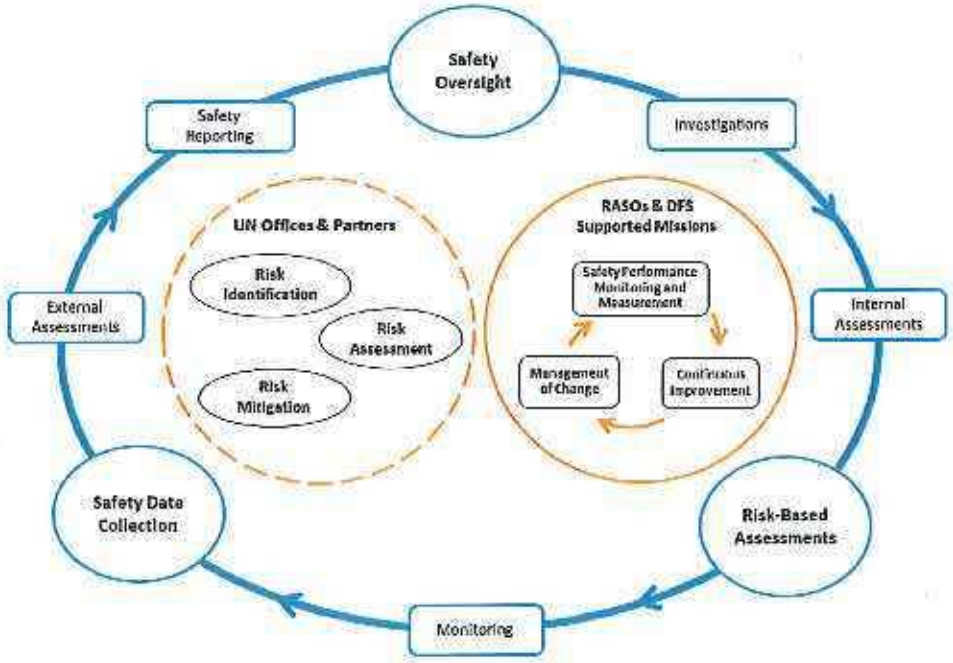

Figure 1 - DFS safety assurance interaction process

○ - Safety Assurance element □ - Data collection activity

15. The objective of the outer aviation safety assurance loop is to exercise safety assurance oversight functions of Missions. This is to verify the Missions':

a) Adherence to established United Nations aviation risk controls and the DFS aviation framework;

b) Confirmation of safety performance measures, and

c) Efforts of continuous improvement of aviation safety processes and procedures in the Mission while providing guidance and assistance to Missions in support of such activities.

16. The objective of the inner safety assurance loop is to ascertain:

a) Safety performance monitoring and measurement - This is achieved through monitoring and measuring the outcomes of activities.

b) Management of change - The management of change should ensure that reducing or eliminating the safety risks resulting from the changes in the organisation, the provision of services or in the operational environment, achieves required safety performance.

c) Continuous improvement of Missions' aviation activities.[6]

D.1. SAFETY ACCOUNTABILITIES AND RESPONSIBILITIES

17. Aviation safety is one of the DFS' highest priorities. All United Nations aviation related personnel are required to demonstrate a high level of safety awareness at all times. They must know and adhere to the DFS aviation safety related policies, processes and procedures. All aviation related personnel have the duty and responsibility to openly report events and hazards in an effort to continuously improve aviation safety in DFS aviation operations.

D.1.A At UNHQ

18. Director LSD/DFS is accountable and responsible to ensure that all aspects of these GL are fulfilled. An Acceptable Level of Safety (ALoS) for DFS flight services is defined, and resources necessary (manpower, hard- and software) are available to drive an effective and efficient DFS aviation safety assurance process.

19. Chief Aviation Safety Section LSD/DFS is responsible to ensure that a workable and functioning aviation safety assurance process is designed, documented and implemented in DFS air transport operations to include the United Nations Flight Service Vendor Registration process (manned and unmanned aircraft), conforming with the UN AVSTADS and the DPKO and DFS Policy on Aviation Safety.

20. United Nations LSD/DFS Safety Review Board – The Safety Review Board meeting is chaired by the Director LSD/DFS which meets twice per calendar year. It is organized and administered by the Chief Aviation Safety Section LSD/DFS who also invites participants and produces meeting minutes. Board members are aviation safety stakeholders who provide strategic inputs on the objectives listed below.

21. The objectives of the Safety Review Board are to define and pass the following:

a) DFS Aviation Safety Objectives: The safety objective is a qualitative or quantitative statement that defines the aspirations and strategic goal of the DFS relating to aviation safety of services provided, and

b) DFS Aviation ALoSP[7]: It expresses the DFS minimum level of safety performance expressed in terms of safety performance targets and safety performance indicators.

22. Outcomes of the Safety Review Board are communicated to Missions and other DPKO/ DFS parties effected through an Aviation Safety Directive.

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[6] This GL contain several annexes with templates, examples, and information directly linked to the implementation and maintenance of aviation safety assurance. The annexes should be adapted to the Mission's specific environment and needs as required.

[7] ICAO Doc 9859, Safety Management Manual (SMM), Edition 3 "Acceptable level of safety performance (ALoSP)."

23. DFS Aviation Safety Committee – It is a DFS aviation safety body, to act proactively, analyse and review safety concerns, discusses and shares safety relevant information in an open atmosphere to maximize the learning and development of aviation safety related ideas. The DFS Aviation Safety Committee is chaired by Aviation Safety Section LSD/DFS that organizes and administers the Committee, on a case by case basis. DFS Aviation Safety Committee members include but are not limited to staff members from ATS, MOVCON. Other DPKO and DFS staff members may be invited to attend, as required.

24. Typical topics of the DFS Aviation Safety Committee meeting are, but will not be limited to:

a) Establishment and discussion of safety procedures and guidelines;

b) Mitigation of identified risks;

c) Assessing the impact on safety of operational changes, new Missions etc.;

d) Accident, incident and near-miss report and investigation, subsequent data analysis and dissemination of trends, common causes etc.;

e) Generation and evaluation of safety suggestions;

f) Promotion of safety awareness;

g) Definition of aviation safety standards; and

h) Mission's safety performance monitoring and measurement.

D.1.B Missions

25. The Director/Chief of Mission Support (DMS/CMS) is responsible for ensuring that:

a) The Aviation Safety Policy is adhered to and Missions' objectives are defined and implemented accordingly;

b) Aviation risk assessment processes are implemented and adhered to;

c) Safety assurance activities are included in the Mission's ASP and implemented in accordance with these GL and do not contravene to the Aviation Safety Policy;

d) Necessary funds for aviation safety related staff to conduct aviation safety assurance and training activities are allocated;

e) The United Nations aviation framework is complied with, and

f) The impact on aviation safety of operational changes is assessed.

26. Regional Aviation Safety Officers (RASO) and Mission Aviation Safety Officers (MASO) are responsible for managing the aviation safety assurance activities in the affiliated Missions, in accordance with the GL.

27. Mission aviation safety council - The Mission Aviation Safety Council (MASC) is a forum for discussing and resolving aviation safety related issues in Missions and meets on a quarterly basis. The MASC is a vital part of safety assurance and ASP. The management of safety is a managerial function like any other business process. Active participation and involvement of the Mission's management in the MASC shall serve as an effective tool in determining and achieving the acceptable levels of safety and safety goals. The MASC objectives, members and management are described in the DPKO and DFS Aviation Safety Manual.

D.2. IMPLEMENTATION

D.2.A. The LSD/DFS Safety Assurance Process

28. The safety assurance process of the Aviation Safety Section LSD/DFS holds procedures for monitoring and conducting evaluations of DFS aviation safety operations in the Missions. The LSD/DFS safety assurance process aims to identify aviation safety deficiencies, their causes,

and methods to improve or modify procedures before they have a negative effect on DFS operational aviation safety performance.

29. The Aviation Safety Section LSD/DFS therefore maintains an aviation safety assurance oversight tool containing a schedule and status indication of the Aviation Safety Section LSD/DFS safety oversight functions[8] like Missions' assessments and onsite evaluations. The schedule must stay flexible to allow for additional evaluations when unsatisfactory trends are identified, or major changes occurred affecting DFS aviation operations.

30. Aviation Safety Section LSD/DFS monitors the Missions' safety performance as described in Annex 5. Monitoring aspects include as a minimum, but are not limited to:

a) Documentation and implementation of procedures;

b) Inspection methods;

c) Monitoring of equipment and operations;

d) Internal and external safety assessments;

e) Monitoring of corrective actions taken;

f) Providing of guidance in safety related topics where requested;

g) Disseminating aviation safety assurance related information to senior management; and

h) Use of appropriate statistical analysis, when required.

31. Additionally, Aviation Safety Section LSD/DFS performs according to the aviation safety assurance oversight tool Mission on-site safety assessments. The procedure hereto to be followed is documented in Annex 4.

32. Emphasis should be placed on Corrective Action Plans (CAPs) in the aftermath of aviation safety oversight functions, like aforementioned safety assessments. CAPs are conducted according to Annex 7.

33. The United Nations flight service vendor registration process technical aspects are part of the Aviation Safety Section LSD/DFS safety assurance process.

D.2.B. The Missions Safety Assurance Process

34. Mission aviation safety must document and implement safety assurance procedures as described in these GL forming an integral part of its aviation safety program.

35. Mission aviation safety must qualify and train Mission staff involved in safety assurance to ensure proper execution and adherence to the GL[9].

36. The Mission must define its safety goals and objectives.

37. The Mission must monitor the performance and effectiveness of the implemented risk control strategies to detect changes, new hazards or deviations that may introduce emerging safety risks or the degradation of existing mitigation actions. Such changes or deviations must be addressed then together with the aviation risk management process (Figure 2).

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[8] DPKO and DFS Aviation Safety Manual - 26.1- The Aviation Safety Section, LSD/DFS is responsible for the continuous safety oversight of all Missions with air assets, through the establishment and management of the DFS Aviation Safety Programme.

[9] Neither organizational changes nor additional staff is envisaged for conducting Safety Assurance activities. Qualification and training guidelines for Mission aviation safety staff involved in Aviation Safety Assurance will be provided with the next revision of the Aviation Safety Manual. Neither organizational changes nor additional staff is envisaged for conducting Safety Assurance activities.

38. Mission aviation safety must monitor and measure the Mission's aviation safety performance, and its progress towards meeting these targets.

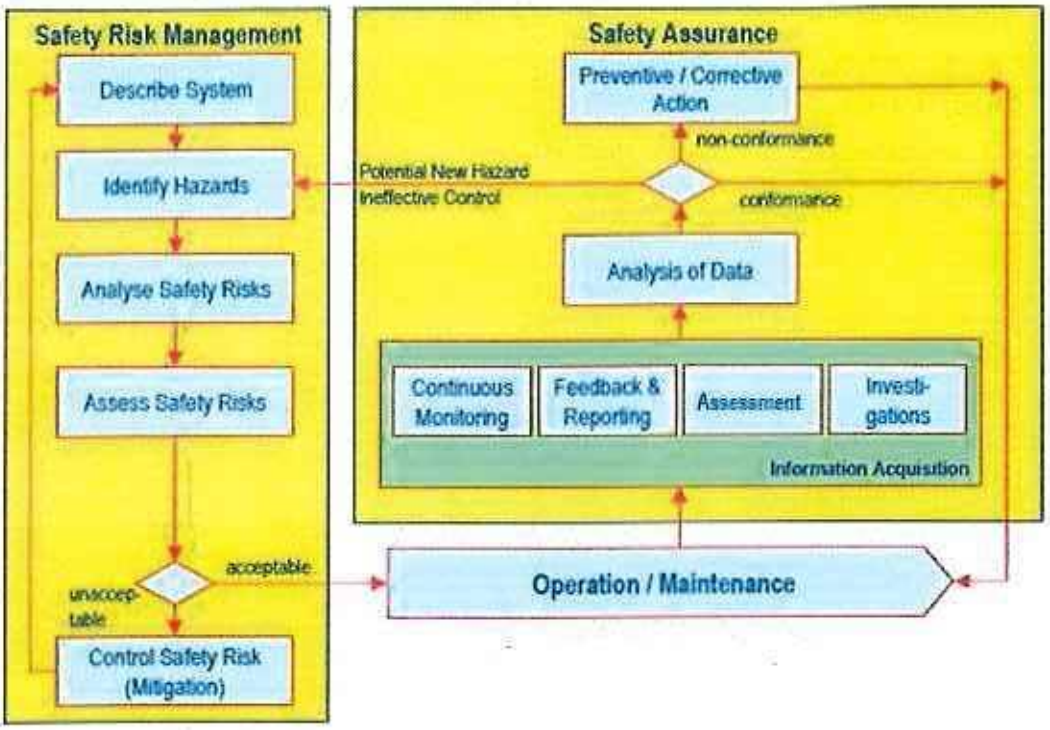

Figure 2 – Relationship: risk management – safety assurance

39. Mission aviation safety reporting procedures related to safety performance and monitoring shall clearly indicate which types of operational behaviours are acceptable or unacceptable, and include the conditions under which immunity from disciplinary action would be considered[10].

40. Mission aviation safety shall develop and maintain a process to identify the causes of sub-standard performance of aviation safety related activates, determine its implications, and eliminate such causes.

41. The Missions' safety assurance procedures should include the following three (3) elements:

a) Safety performance monitoring;

b) The management of change, and

c) Continuous improvement.

42. Safety performance monitoring. The primary task of safety assurance is to establish control. This is achieved through safety performance monitoring and measurement, the process by which the safety performance is verified in comparison with the safety policy and approved safety objectives.

[10] DPKO and DFS Policy on Aviation Safety 2016 – All involved in aviation operations must be confident that the United Nations will not use information on committed errors or mistakes against them, but will also not tolerate actions such as the deliberate violation of established procedures, rules and regulations or willful misconduct compromising the safety of aviation operations.

43. The information obtained on safety performance monitoring obtained from a variety of sources, including; the continuous monitoring of the day-to-day activities related to deliver flight services, safety assessments and inspections, the aviation risk management process, and the inputs from the DFS aviation safety reporting system (Technical Reports, Occurrence- and Hazard Reports and investigations).

44. The safety performance monitoring process must encompass procedures for measuring the DFS safety performance indicators and accident prevention effort. Self-Assessment templates for these activities are described in the Annexes (9 &10) of this document.

45. The safety performance indicators provide a value that measures the continuity of the ASP and the effectiveness of the risk control strategies. The safety performance indicators include measurable safety activities and targets (Annex 9).

46. The Accident Prevention Effort (APE) provides management with a value (APE Index) that quantifies the ASP status and the current Mission effort by assessing, projecting, and improving the APE (Annex 10).

47. The safety performance indicators and Accident Prevention Effort of all Missions provide values that serve as snapshot of the "safety health" of Missions and a reference for the Missions' safety performance.

48. Management of change - The management of change is a systematic and documented approach to managing and monitoring changes and is part of the risk management process. There is inevitably a possibility of increased risk whenever any significant changes occur. An ad-hoc approach is unacceptable, as it may fail to provide for every element affected by the change process.

49. Changes may include but not limited to:

a) The introduction of a new aircraft or equipment;

b) Significant changes in the nature of the operation (e.g., new operating environment such as night or NVG operations, systems/IT, procedures etc.);

c) Changes in scheduling practices;

d) Changes to the organizational structure;

e) Significant change in maintenance arrangements; and

f) Significant change in facilities, locations, capabilities etc.

50. As soon as it has been determined that the change event will occur, the management of change process should be initiated by the DMS/CMS and involve the relevant Mission staff.

51. As part of the process steps, conduct reviews and analysis of the planned change and identification of associated hazards from changes to items such as:

a) Operating and maintenance procedures;

b) Staff training and competency certification;

c) Mission documentation;

d) Identification and analysis of the associated risks as a result of the change and development and approval of mitigating and implementation action plan;

e) Review of actions taken, to verify the effectiveness of the changes implemented.

52. Dependant on complexity and scale of the change and as determined during the review safety assessment might be performed before the change is implemented.

53. After implementation of the change, any gradual departure from an intended course due to external influences should be reviewed.

54. Annex 11 provides a template to be used by the Mission when planning to introduce changes in DFS aviation operations or environment.

55. Continuous improvement of the Mission ASP aims at determining the immediate causes of below standard performance and their implications on the Mission's ASP processes. Such findings of below standard performance identified through safety assurance activities should be rectified immediately. Continuous improvement is achieved through internal evaluations, internal and external assessments and it applies to:

a) Proactive evaluation of facilities, equipment, documentation and procedures, through internal evaluations;

b) Proactive evaluation of safety responsibilities, and

c) Reactive evaluations in order to verify the effectiveness of the system for control and mitigation of safety risks, for example, through internal and external safety assessments.

56 All evaluations, assessments and inspections should be planned and state clearly the objective of the activity. All findings and associated corrective actions should be documented and tracked in response to findings of the safety assurance activities.

57. Corrective actions must include a root-cause analysis to prevent re-occurrence of such non-conformity/ risk. The responsibility for the development and implementation and documentation of corrective actions reside with the process owner assessed (not the assessor) and be documented in the corrective action plan.

58. Information obtained from safety performance indicators and Accident Prevention Effort forms should be recorded at the end of every Quarter in the safety assurance performance monitoring section of the aviation safety electronic platform.

E. TERMS AND DEFINITIONS

59. The terminology used in these Guidelines is based on the ICAO SARPS, United Nations AVSTADS, other United Nations DFS policies/manuals, and/or derived from documents of internationally recognized aviation organizations. The male gender is used in a generic sense to designate both sexes. No discrimination is intended or implied.

Acceptable Level of Safety Performance (ALoSP): The minimum level of safety performance expressed in terms of safety performance targets and safety performance indicators.

Accident Prevention Effort (APE): Is a performance based indicator, that uses a numeric scale which quantifies organizational level of accident prevention effort by assessing, projecting and improving the Mission aviation accident prevention effort thus reducing the probability of an occurrence.

Assessment: A systematic, independent and documented process for obtaining assessment evidence and evaluating it objectively to determine the extent to which the assessment criteria are fulfilled.

Aviation safety electronic platform: A platform capable of integrating and managing the overall array of the aviation safety processes and activities, while sharing in real time the gathered information.

Aviation Risk Management: A logical and systematic method of establishing the context, identifying, analysing, evaluating, treating, monitoring and communicating risk associated to aviation related activities in a way that will enable organizations to minimize losses to an acceptable level and maximize opportunities.

Aviation Safety Program: An integrated set of activities aimed at improving safety of aviation operations.

Continuous Improvement: A safety assurance element that suggests the need for system change to maintain effective risk control or the development of new safety controls. It further requires that the organization provide training and information about risk controls and lessons learned.

External Assessments: External assessments include those generally termed second- and third-party assessments. Second-party assessments are conducted by parties having an interest in the organization, such as customers, or by other persons on their behalf. Third-party assessments are conducted by external, independent assessing organizations.

Hazard: A condition or an object with the potential to cause death, injury, illness to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function.

ICAO: The International Civil Aviation Organization, a specialized agency of the United Nations. It codifies the principles and techniques of international air navigation and fosters the planning and development of international air transport to ensure safe and orderly growth. ICAO publishes SARPs Standards and Recommended Practices in the form of Annexes to Chicago Convention.

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

Internal Assessments: Internal assessments, sometimes called first-party assessments, are conducted by, or on behalf of, the organization itself for management review and other internal purposes, and may form the basis for an organization's self-declaration of conformity.

Management of Change: A process in aviation related activities aimed at identifying changes within the organization, which may affect established processes, procedures, products, and services or cause the degradation of existing mitigation actions.

May: The word "may" is used in a permissive sense to state authority or permission. Conformity is not mandatory.

Occurrence: An operational interruption, defect, fault or other irregular circumstance that has or may have influenced flight Safety. There are several categories of safety occurrences: accidents, serious incidents, incidents and other safety occurrences which are not serious enough to require reporting under a mandatory incident reporting system, but which are nevertheless important.

Risk: Is the effect of uncertainty on objectives, expressed in terms of a combination of the consequences of a hazard and the associated likelihood of occurrence

Risk Assessment: The systematic process of identifying hazards and evaluating their associated risk levels within a particular task or activity.

Risk Mitigation: The process of incorporating defences or preventing controls to lower the severity and/or likelihood of hazards projected consequences.

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 Assurance (SA): Planned and systematic actions necessary to afford adequate confidence that aviation related activities achieve acceptable or tolerable level of Safety. Safety assurance activities include safety performance monitoring and measurement, management of change and continuous improvement of safety management.

Safety Management: An organizational function, which ensures that all safety risks have been identified, assessed and satisfactorily mitigated.

Safety Management System (SMS): A systematic approach to managing Safety, including the necessary organizational structures, accountabilities, policies and procedures.

Safety Oversight: Part of the safety regulatory process dedicated to ensuring that applicable safety regulatory requirements are met, and to the monitoring of the safe provision of services.

Safety Performance: An organization's safety achievement as defined by its safety performance targets and safety performance indicators.

Safety Performance Monitoring: The process by which the safety performance of the organization is verified in comparison with the safety policy, aviation risk management and approved objectives.

Safety Performance Target: The planned or intended objective for safety performance indicator(s) over a given period.

Should: The word "should" is used in a permissive sense to state authority or permission. Conformity is recommended, but is not mandatory.

Will, Shall, and Must: The words "will," "shall," and "must" are used in an imperative sense to state the necessity to accomplish the requirement prescribed. Conformity is mandatory.

F. REFERENCES

a) ICAO SARPS;

b) ICAO Safety Management Manual, Doc. 9859 (3rd Edition 2013);

c) United Nations Aviation Standards for Peacekeeping and Humanitarian Air Transport Operations (United Nations AVSTADS), (2012);

d) Norms and Standards for Evaluation. New York: UNEG (2016), United Nations Evaluation Group (2016);

e) DPKO and DFS Policy of Aviation Safety (2016.13);

f) Office of Internal Oversight Services (OIOS), Internal Assessment Division, Report 2016/112 dated 30 September 2016;

g) DPKO and DFS Policy of Aviation Risk Management (2014.02);

h) DPKO and DFS Aviation Safety Program (2016);

i) DPKO and DFS Aviation Safety Manual (2012);

j) United Nations Peacekeeping Missions Military Aviation Unit Manual (2015);

k) DPKO Aviation Manual (2005);

l) DPKO and DFS Movement Control Manual (2014.21), and

m) FAA Circular 120-92.

G. MONITORING AND COMPLIANCE

Director LSD/DFS shall monitor the implementation of these GL by ensuring that regular aviation safety assessment visits are conducted to the Missions with DFS contracted aircraft, air operator assessment visits, and National Civil Aviation Authorities. Further, that all recommendations are implemented that might arise from such visits.

The Aviation Safety Section LSD/DFS as part of its safety oversight activities shall assess Missions' compliance with these GL on behalf of LSD/DFS.

H. DATES

The effective date of these GL is the approval date by Director LSD/DFS.

Review Date is two (2) years from the effective date.

I. CONTACT

The Aviation Safety Section LSD/DFS is the contact office for these GL.

Suggestions for improvement are welcome and should be addressed to the Aviation Safety Section LSD/DFS (aviationsafety@un.org).

J. HISTORY

This is the first copy of DFS Aviation Safety Assurance Guidelines, authored by the Aviation Safety Section LSD/DFS.

K. SIGNATURE

Date:

AnneMarie van den Berg
Director LSD/DFS

L. ANNEXES

Annex 1. Safety Statement Sample

Safety is one of the highest priorities in all United Nations aviation activities. We are committed to implementing, developing and improving strategies, management systems and processes to ensure that all our aviation activities uphold the highest level of safety performance and meet international standards.

Our commitment is to:

a. Develop and embed a safety culture in all our aviation activities that recognizes the importance and value of effective aviation safety management and acknowledges at all times that safety is paramount;

b. Clearly define for all staff their accountabilities and responsibilities for the development and delivery of aviation safety strategy and performance;

c) Minimize the risks associated with aircraft operations to a point that is as low as reasonably practicable/achievable;

d) Ensure that externally supplied systems and services that impact upon the safety of our operations meet appropriate safety standards;

e) Actively develop and improve our safety processes to conform to world-class standards;

f) Comply with and, wherever possible, exceed the United Nations regulatory framework;

g) Adhere to the DPKO and DFS Policy on Aviation Safety and associated documentation to progress towards defined safety objectives as set out in this chapter;

g) Ensure that all staff are provided with adequate and appropriate aviation safety information and training, are competent in safety matters and are only allocated tasks commensurate with their skills;

h) Ensure that sufficient skilled and trained resources are available to implement safety strategy and policy;

i) Establish and measure our safety performance against realistic objectives and/or targets;

j) Achieve the highest levels of safety standards and performance in all our aviation activities;

k) Continually improve our safety performance;

l) Conduct safety and management reviews and ensure that relevant action is taken; and

m) Ensure that the application of effective aviation safety management systems is integral to all our aviation activities, with the objective of achieving the highest levels of safety standards and performance.

Annex 2. Safety Goals and Objectives - Samples

Aviation safety performance measures can be broadly classified as aviation safety goals and aviation safety objectives. In any system, it is necessary to set and measure safety performance outcomes in order to determine whether the system is operating in accordance with expectations, and to identify where action may be required to enhance safety performance levels to meet these expectations.
Goals are rather long term than objectives and must not be necessarily quantitatively measurable, while objectives cover a shorter term and must be measurable, as defined by safety indicators/ targets.

1. Guidance for setting aviation safety goals and objectives are as follows:
2. Set goals and objectives as part of the planning process.
3. Word the goals and objectives clearly.
4. Goals and objectives must be realistic.
5. Accomplishing goals and objectives must be under the responsible person's influence or control.
6. Objectives must be assigned to someone.
7. Completion dates must be established for each objective.

Correlation between the safety goals and objectives described below and the safety indicators and targets should be adjusted per Mission requirements and needs.

Safety Goal # 1
Seek senior management and staff member commitment to sustain a strong safety culture.
Objectives:
a. Implement reliable and robust aviation safety processes and procedures as the cornerstone of DFS flight operation services;
b. Implement the DPKO and DFS Policy on Aviation Safety and safety program;
c. Create a proactive aviation safety culture within DFS where the focus is on addressing issues and concerns, and not on imposing punitive measures;
d. Build constructive relationships with all stakeholders to promote aviation safety.

Safety Goal # 2:
Establish trust" and confidence of stakeholders in the aviation safety assurance system.
Objectives:
a. Establish a confidence-building process;
b. Adapt and coordinate communications to enhance the transparency of the aviation safety assurance;
c. Continually improve the aviation safety assurance framework;
d. Integrate risk management and safety performance measurement in support of continuous safety performance improvement.

Safety Indicators and Targets – Samples

ID	Performance Indicator	Target
1	Approval of aviation safety assurance	Receive approval by <target date>
2	Completion of aviation safety assurance introduction training course(s)	<Target date>
3	Completion of aviation safety assurance recurrent training course(s)	Annually
4	Safety case study	1 per year
5	United Nations LSD/DFS Safety Review Board	2 per year

Annex 3. Safety Implementation Tools

An electronic platform is vital for the support of Safety Assurance activities capable of recording, integrating and interfacing aviation safety processes and activities, while sharing in real time gathered information. This tool will facilitate the visibility of aviation safety performance through business intelligence dash boards. At present a global solution is under study for adoption.

Currently an Aviation Safety Programme Integrated Data (ASPID) is utilized in Regional Aviation Safety Office affiliated Missions as a project pilot and provides aviation safety performance data.

Figure 3: Aviation Safety Program Integrated Data (ASPID)

It allows integration and synchronisation of gathered data from Mission aviation safety program (MASP) e.g. SA performance monitoring guides, risk register, aircraft inspection, performance evaluation, carrier assessment, etc. Gathered data connects directly to Share Point 2013, creating a risk register, enabling users to visualise information through dashboards (Figure 4).

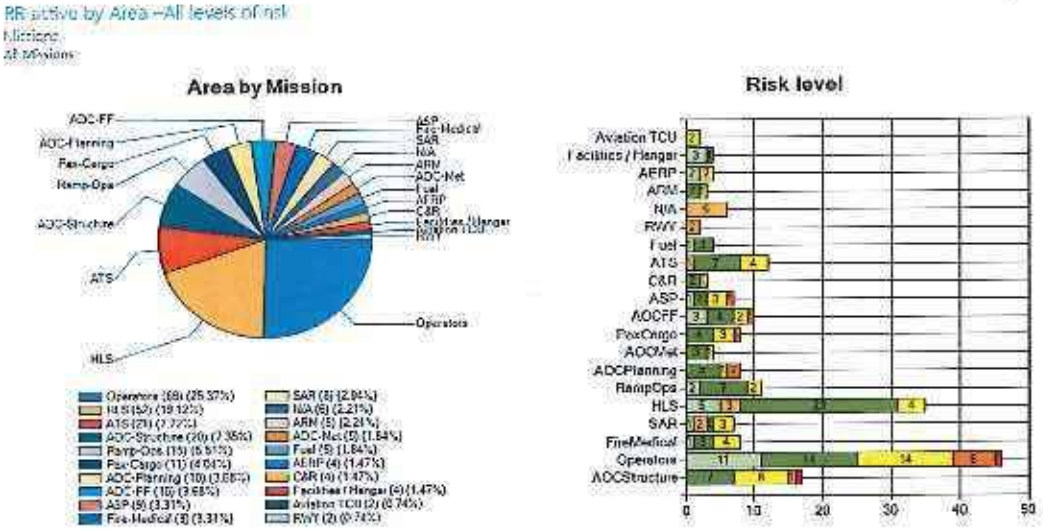

Figure 4: ASPID Dash Board Sample: Risk Register (RR) by Flight Operations Areas.

Annex 4. Safety Assessments

Process approach
Any activity or set of activities that use resources to transform inputs to outputs shall be considered as a process. Often, the output from one process will directly form the input into the next process. The systematic identification and management of the processes employed within United Nations Aviation Safety Section LSD/DFS and particularly the interactions between such processes is referred to as the "process approach".

The safety assurance system is one tool of DFS senior management in support of safe flight operations. If assessments and inspections show safety performances below the required safety level, management must be informed immediately to initiate corrective action in due time.

Safety assurance assessments
Safety assurance assessments are one of the principal methods for fulfilling safety performance monitoring functions.

Safety assurance includes all systematic measures to ensure that DFS aviation processes and procedures are controlled, well planned, organized, operated, maintained, and supported in accordance with the DFS aviation framework.

Safety assurance objectives

Safety assessments are performed to establish facts rather than faults. Safety assurance assessments shall be conducted to ensure that:

- The structure of the aviation safety assurance is robust;
- Effective arrangements exist for promoting safety, monitoring safety performance and processing safety issues;
- Problems can be identified and inefficiencies deleted upfront rather than react to the effects of non-compliance;
- DFS's commitment to safety is unchanged;
- The effectiveness of the aviation safety assurance is monitored, analysed, evaluated and if necessary improved;
- Aviation processes and procedures' fitness for use; is verified;
- Hazards are identified;
- Risk mitigation measures initiated;
- The level of implementation and documentation of required policies, processes and procedures is determined, and
- Continuous Improvement Process (CIP) procedures are applied.

Safety performance monitoring and measurement
Aviation Safety Section LSD/DFS evaluates its overall safety performance by applying "Deming's Cycle of Continuous Improvement: Plan – Do – Study/ Check – Act".

Assessment techniques
To institute conformity with DFS aviation safety requirements, each safety standard/ criteria must be assessed and verified for its satisfactory level of documentation and implementation. The safety assessor shall use the following techniques:

- Interviews;
- Witnessing of activities;
- Review of documents;
- Tracing technique.

Safety assessment planning

All aspects of DFS aviation safety operations shall be reviewed within a period of 12 months. The schedule should be flexible to allow for additional unannounced inspections or additional assessments, when unsatisfactory trends are identified, major changes within DFS aviation operations took place, or United Nations aviation framework changes did occur, like for example release of new revisions. The aviation safety assurance responsible staff member shall publish the annual safety assessment schedule in December for the up-coming year.

Mission senior management must accept and approve this annual safety assessment schedule. The aviation safety assurance responsible staff member shall update the schedule accordingly.

Safety assessment language

During a safety assessment, the language used shall be English. All reports shall be documented in English language.

Safety assessment activities

Defining safety assessment objectives, scope and criteria

Safety assessments shall be based as a minimum on the verifiable documented safety assessment criteria: The United Nations aviation framework. For each assessment, the aviation safety assurance responsible staff member shall define and document:

- Safety assessment scope;
- Safety assessment objective(s);
- Safety assessment criteria and any reference documents;
- Dates and places where the on-site activities are to be conducted;
- The expected time and duration of the safety assessment;
- Allocation of appropriate resources to critical areas of the safety assessment.

Document Review

Part of the safety assessment is a document review. All criteria assessed shall be clearly and unmistakable documented in safety assurance records. The review shall take into account the size, nature and complexity of the assessed party, and the objectives and scope of the safety assessment.

On-Site safety assessment activities

Opening meeting

Each safety assessment shall start with an opening meeting held with the party assessed, to include for example, United Nations staff members, the responsible post holder, and staff members responsible for the functions or processes to be assessed from external parties.

Communication during the safety assessment

United Nations aviation safety assessors shall establish a friendly open-minded safety assessment atmosphere. Communication must be: specific, precise, and non-punishing.

Collecting and verifying information

Information relevant to the safety assessment objectives, scope, and criteria, including information relating to interfaces between functions, activities, and processes shall be established by:

- Determining sources of information;
- Sampling (interview, observation of activities);
- Information gathering;
- Verifying information, providing safety assessment evidence, to include the identification of hazards;
- Evaluating against assessment criteria, providing safety assessment findings, to include defining risks; and

- Reviewing all finding and categorizing them as per United Nations risk management process; providing safety assessment conclusions.

Closing meeting
A closing meeting shall be held to present the safety assessment findings in such manner that they are understood and acknowledged by the party assessed, and to agree, if appropriate, on the time period for corrective action plan items.

The participants of the closing meeting shall be at least the assessor(s) having conducted the safety assessment and the respective person responsible of the assessed activity.

The safety assessor or team leader – if applicable - is responsible for the preparation of the safety assessment report. The report should provide a complete, accurate, concise, and clear record of the safety assessment. The report shall include:

- The safety assessment objectives;
- The safety assessment scope;
- The identification of the party assessed;
- The identification of the safety assessment team;
- The dates and places of the safety assessment;
- The safety assessment criteria;
- The safety assessment findings including the level of findings, to include hazards identified;
- The safety assessment conclusions;
- Safety assessment process obstacles encountered during an assessment;
- Areas not covered, although within the safety assessment scope;
- Unresolved diverging opinions between the party assessed and the safety assessment team;
- Recommendations for improvement;
- Agreed follow-up action by raising corrective action requests; and
- The distribution list for the safety assessment report within the agreed time period.

Annex 5. Aviation Safety Assurance Oversight

The Aviation Safety Section LSD/DFS safety assurance oversight activities implement DPKO and DFS Policy on Aviation Safety by providing safety controls (i.e., United Nations aviation regulations and their application) of Missions and United Nations flight service vendors providing air transport services[11] to DFS that fall under the United Nations regulatory aviation framework.

Aviation Safety Section LSD/DFS safety assurance is accomplished through various oversight activities such as Aviation Safety Assessment Visits and Vendors Visits.

Aviation Safety Assessment Visits are performed with reference to the respective Mission's Aviation Safety Program (MASP) in line with the DPKO-DFS Policy on Aviation Safety.

Aviation Safety Section LSD/DFS	Safety Assurance Activities	Outcomes
Monitoring	• Hazard identification and risk management; • Aviation Risk Management (ARM) SOP of the Missions	• Identification of hazards newly identified based on MASP; • Compliance with the United Nations aviation regulatory framework; • Aviation safety recommendations, and • Continuous improvement of DFS air transport.
Assessments	• Aviation emergency response plan management, and • Aviation assessment visits and surveys.	• Compliance with the United Nations aviation framework; • CARs; • Aviation safety recommendations, and • Continuous improvement of DFS air transport.
Investigations	• Aviation occurrences and serious incidents.	• Compliance with the United Nations aviation regulatory framework; • CARs; • Aviation safety recommendations, and • Continuous improvement of DFS air transport.
Safety Reporting	• Safety reporting and investigations, and • Technical reports.	• Compliance with the United Nations aviation framework, and • CARs.
Corrective Actions	• Aviation safety counsel management; • Aviation meetings and briefings, and • Coordination with organisations and authorities.	• Compliance with the United Nations aviation regulatory framework; • Continuous improvement of DFS air transport.

[11] Encompass civil and military, manned and unmanned aviation operations.

Oversight objectives

- Completeness;
- Correctness;
- Validity;
- Applicability;
- Procedure robustness;
- Adherence to aviation safety assurance;
- Continuous improvement;
- Impact of change on United Nations documentation including United Nations aviation framework.

Potential areas for oversight

The assessment frequency must be determined by the Mission and adjusted as necessary.

- Annual safety assessment recommendations progress;
- Effectiveness of the Mission Air Operation Centre risk assessment procedures and activities;
- Effectiveness of the Air Terminal Unit risk assessment procedures and activities;
- Effectiveness of the Technical compliance risk assessment procedures and activities;
- Passenger and cargo handling procedures and activities;
- Effectiveness of the Aviation security related activities and procedures;
- DFS E-Learning for aviation personnel;
- Effectiveness of the Emergency Response Plan and drills;
- Aviation fuel procedures and facilities;
- Ground handling activities and equipment;
- Aviation fire-fighting training and equipment;
- Airfields emergency crash and rescue equipment;
- Carrier Assessment Reports monitoring;
- Effectiveness Crew induction briefings;
- Effectiveness Crew briefings to passengers;
- Alcohol breathalyser tests conducted to aircrew;
- NAV Data integrity inspection;
- A/C Data Base inspection;
- Trend monitoring (hazards, security, etc.);
- Safety reporting;
- New regional rules & regulation evaluation;
- NAV Data integrity;
- CAR monitoring;
- The safety aspect of Unmanned Aerial System operations, and
- The safety aspect of specialized operations.

Annex 6. Continuous Improvement Process, CIP

The Continuous Improvement Process is an on-going effort to improve all United Nations aviation services, processes and procedures. These efforts seek gradual improvement over time or breakthrough improvement by innovation. United Nations aviation processes shall be evaluated and improved regarding their efficiency, effectiveness, correctness and Safety.
The core principle of CIP is process analysis. The purpose of CIP is the identification, reduction, and elimination of suboptimal processes (efficiency). Improvements are based on many, small changes rather than the radical changes that might arise from research and development.

CIP remarks shall be documented in:

- Aviation safety assessment reports;
- Safety Board meeting minutes; or
- Safety reports.

Annex 7. Corrective Action Process

In response to non-conformities raised and documented during aviation safety assessments and other evaluation activities, corrective action procedures shall be followed to verify their timely and effective implementation and completion.

All non-conformities/ hazards identified shall be documented in a neutral and fact-base form, free from speculations or accusation of fault. A corrective action request shall be raised per non-conformity, including the request for root cause analysis and preventive action.

Root Cause Analysis
This is to identify the underlying cause of the failure or break down in a process or procedure that leads to the non-conformity.

Preventative Action
Preventive actions must be identified per non-conformity to prevent or to minimize the re-occurrence of the finding. Preventive actions must be appropriate to the impact of the potential hazard and include as a minimum:

- Determination of the steps needed to eliminate identified causes and completion of the preventive action implementation;
- Recording results of action taken;
- Review and evaluation of preventive action taken to assess its effectiveness;
- Ensuring that relevant information on actions taken, including changes to procedures, is subject to management review.

Closure of Findings
It is the responsibility of the assessed party/ process owner to determine and initiate the necessary corrective actions to close a finding. The safety assessor's responsibility is limited to the identification of the finding. It is the responsibility of the party assessed/ process owner that non-conformities are closed by the indicated due date.

Safety Assessment Closure
Only when all non-conformities observed during a safety assessment and the effectiveness of corrective actions taken have been verified, a safety assessment can be closed by the Chief Aviation Safety Section LSD/DFS and in Missions by the Chief Aviation Safety.

Annex 8. Aviation Safety Assurance System Evaluation

The aviation safety assurance system evaluation has the purpose of identifying safety trends, to ensure a safe and improving safety assurance system. Further the aviation safety assurance's suitability and appropriateness must be evaluated.

This comprehensive, systematic review of the aviation safety assurance and its results, the operational policies and procedures must be conducted annually, at Aviation Safety Section LSD/DFS and in Missions.

Information to be evaluated

- Safety assessment reports;
- Inspection reports;
- Safety relevant data;
- Safety policy;
- Safety goals and objectives;
- Aviation safety assurance KPIs;
- Aviation safety training feedback;

Management of Change

There is inevitably a possibility of increased risk whenever there are any significant changes introduced to DFS aviation operations. An ad hoc approach is unacceptable in that it may fail to provide for every element affected by the change process.

Changes may include, but are not limited to:

- The introduction of a new aircraft or equipment;
- Significant change in the nature of the operation (e.g., new Missions, new operating environment, systems/IT, procedures etc.);
- Changes in hiring aviation safety personnel;
- Changes in flight scheduling and tasking;
- Changes to the organizational structure as related to aviation safety; and
- Significant change in facilities, locations, and capabilities.

The Management of Change (MoC) program is a systematic and documented approach to managing and monitoring such change and is part of the risk management process. Safety issues associated with the change are identified and standards associated with the change are maintained throughout the change process. This is the cross over to aviation safety assurance.

General MoC process steps are as follows:

- Review and assessment of the planned change and identification of the associated hazards from changes;
- Identification and analysis of the associated risks as a result of the change and development and approval of mitigating and implementation action plan;
- A review of the actions taken, to verify the effectiveness of the changes implemented as part of aviation safety assurance activities.

Dependant on complexity and scale of the change and as determined during the MoC review initiated by DFS senior management, a safety assessment including a risk assessment may be conducted before the change is implemented.

After implementation of the change, changes and overall safety performance must be closely monitored. If there is any doubt of the effectiveness of the MoC process, a more comprehensive post-implementation review must be conducted.

Change to resource levels and competencies associated with risks are assessed as part of the change management procedure.

- Statistical safety performance monitoring – Statistical safety performance indicators illustrate historic safety achievements; they provide a "snapshot" of past events. Presented either numerically or graphically, they provide a simple, easily understood indication of the level of safety in terms of the number or rate of accidents, incidents or casualties over a given time frame. At the highest level, this could be the number of fatal accidents per year over the past ten years. At a lower (more specific) level, the safety performance indicators might include such factors as the rate of specific technical events (e.g. losses of separation, runway incursions, and military interventions).

  Statistical safety performance indicators can be focused on specific areas of the operation to monitor safety achievement, or on identifying areas of interest. This ***"retrospective"*** approach is useful in trend analysis, hazard identification, risk assessment, as well as in the choice of risk control measures.

  The information for statistical safety performance monitoring comes from a variety of sources, including the continuous process monitoring of the day-to-day aviation and related activities, the aviation risk management process, and the inputs from the DFS aviation safety reporting system (Technical Reports, OR and HR).

  The statistical safety performance monitoring process should be developed and maintained by each Mission, implementing DFS safety performance indicators and Accident Prevention Effort forms described in Annex 9 & 10 to these Guidelines.

  Safety key performance Indicators KPI's for Accident Prevention Effort may include:
  - Number (or %) of United Nations staff with Risk Management initial training;
  - Number (or %) of safety reports received;
  - Number of occurrence and hazard reports received;
  - Number of safety inspections per year/ month;
  - Number of safety assessments/assessments per year / month;
  - Crew perceived level of safety per survey/ score;
  - Number or % of corrective actions closed out within specified timeframe;
  - Number or % of safety recommendations adopted;
  - Safety attitudes scores (by surveys);
  - Number of dedicated safety meetings or workshops per year;
  - Number of safety related incidents per year.

  The safety performance Indicators[12] form will provide a value that will measure the continuity of the ASP and the effectiveness of the risk control strategies.

  The Accident Prevention Effort (APE)[13] provides management with a value (APE Index) that quantifies the ASP status and the current Mission effort by assessing, projecting, and improving the APE. Therefore, the more Mission accident prevention effort activities (higher APE score), the less are the probabilities of an accident.

[12] The safety performance indicators aim to measure the Missions' compliance with DFS aviation safety guidelines.

[13] The Mission Accident Prevention Effort Index (APE index) can be obtained from the result of the quantifiable effect multiplied by the Mission's type of activity factors of the current year.

Annex 9. Aviation Safety Performance Indicators

0= Non-Compliant; 1= Compliant

	Area of Assessment		Ideal Score	Total Score
1.0	**Mission Aviation Safety Program**		19	
	1.1	Is there an approved Aviation Safety Program that:	13	
	1.1.1	Includes a commitment to implement and maintain the ASP;		
	1.1.2	Includes a commitment to continuously improve in the level of safety;		
	1.1.3	Includes a commitment to the management of safety risk;		
	1.1.4	The definition of acceptable and unacceptable levels of risk;		
	1.1.5	Includes a commitment to comply with applicable regulatory requirements;		
	1.1.6	Includes a commitment to encourage staff to report safety issues without reprisal		
	1.1.7	Establishes clear standards for acceptable operational behaviour for all staff;		
	1.1.8	Provides management guidance for setting safety objectives;		
	1.1.9	Provides management guidance for reviewing safety objectives;		
	1.1.10	Requires to be documented;		
	1.1.11	Must be communicated with visible management endorsement to all staff and responsible parties;		
	1.1.12	Must be reviewed periodically to ensure it remains relevant and appropriate to the organization;		
	1.1.13	Identify clear responsibility and accountability of management and personnel with respect to safety performance.		
	1.2	Assess if the ASP include procedures to be followed in the event of an aircraft accident or incident or operational emergency (ERP) to mitigate the effects of these events, that:	3	
	1.2.1	Coordinate and plan the Mission's response to accidents, incidents or operational emergencies;		
	1.2.2	Include checklist for each responding entity / stakeholder / unit;		
	1.2.3	Executes periodic exercises (communications, desktop and live) of the Mission's response;		
	1.3	Assess if the ASP documentation and records management meet the following expectations and objectives:	3	
	1.3.1	Documentation is legible; dated (with dates of revisions); readily identifiable; maintained in an orderly manner and retained for 5 years;		

	1.3.2	Documentation control procedures ensure that they can be located; periodically reviewed, revised as needed and approved for adequacy by authorized personnel; available at all locations where ASP activities are performed; obsolete documents are promptly removed from all points of use or otherwise assured against unintended use;		
	1.3.3	Records management procedures ensure that they can be identified and maintained; are legible and traceable to the activity involved.		
2.0	**Aviation Risk Management (ARM)**		**14**	
	2.1	Assess if the Mission ARM processes are designed to understand the critical characteristics of the system and operational environment and to apply this knowledge to identify hazards, analyse and assess risk and design risk mitigation measures/controls.	4	
	2.1.1	ARM process includes: system description and task analysis; hazard identification; safety risk analysis; safety risk assessment; safety risk mitigation / controls and risk decision;		
	2.1.2	ARM process is applied to: initial design of systems, SOPs, operations, tasks, etc.; planning and dispatching of flights; planning of aviation activities; management of changes to operational process and operations; hazards that are identified in the Safety Assurance (SA) activities;		
	2.1.3	ARM process has a feedback loop between safety assurance activities while evaluating the effectiveness of safety risk mitigation / controls;		
	2.1.4	ARM process defines acceptable and unacceptable levels of safety risk; describes severity and likelihood levels; defines specific levels of management that can make safety risk acceptance decisions i.a.w. the Av. ARM SOP Decision making structure; defines acceptable risk for hazards that will exist in the short-term while safety risk control / mitigation plans are developed and implemented; defines when a hazard needs to be classified as permanent and how to treat it.		
	2.2	Assess if the ARM process is being applied as required.	10	
	2.2.1	Are occurrences and hazards identified and documented?		
	2.2.2	Are potential risks analysed for severity and likelihood of occurring?		
	2.2.3	Are risks traced, ranked and prioritized?		
	2.2.4	Does each risk have a mitigation plan?		
	2.2.5	Is verification accomplished that the risk mitigation plan is working?		
	2.2.6	Are risk analysed for root cause (including HFACS) and potential systemic failure?		
	2.2.7	Are documented risk categorized and archived for data analysis?		
	2.2.8	Are risk reported to Senior Management on a regular basis?		
	2.2.9	Are mitigated risk resolutions provided back to reporters?		
	2.2.10	Are mitigated risk resolutions integrated into the system for continuous improvement and shared with UNHQ?		

3	**Safety Assurance (SA)**		**14**	
	3.1	Assess if the Mission SA includes processes and activities designed to monitor, measure and evaluate the performance and effectiveness of risk controls.	2	
	3.1.1	SA component includes monitoring procedures / activities for the system and operations to: identify new hazards; measure the effectiveness of safety risk controls; ensure compliance with regulatory requirements applicable to the UN operations;		
	3.1.2	SA component includes data collecting procedures necessary to demonstrate the effectiveness of its operational processes and the performance of the ASP;		
	3.2	Assess if the SA procedures and activities are being applied / performed as required.	3	
	3.2.1	Is there a Mission evaluation process of the operational processes, including those performed by contractors, to verify safety performance, evaluate the effectiveness of safety risk controls and to ensure compliance with regulatory requirements?		
	3.2.2	Is there a Mission evaluation process of the safety procedures to determine if the ASP conforms to its objectives and expectations?		
	3.2.3	Is there a functioning aviation quality assurance programme?		
	3.3	Assess if the SA procedures include the collection of data and investigation of hazards, incidents, and accidents, to identify potential new hazards risk control failures.	5	
	3.3.1	Are occurrences and potential regulatory non-compliance issues reported?		
	3.3.2	Is there a confidential safety reporting and feedback system for the personnel to provide information on hazards?		
	3.3.3	Is the data obtained from the reporting system monitored to identify emerging hazards and to assess performance of risk controls in the operational systems?		
	3.3.4	Are personnel encouraged to use the safety reporting and feedback system without fear of reprisal and to submit solutions / safety improvements where possible?		
	3.3.5	Are relevant hazards, incidents, accidents investigated, and potential regulatory non-compliance issues investigated?		
	3.4	Assess if the SA component procedures for the analysis of the data obtained from the different activities, is used to assess the performance and effectiveness of risk controls in the organization's operational processes and the ASP, and to identify root causes of non-conformances, including human related factors, and potential new hazards.	2	

	3.4.1	Is there analysis of data to demonstrate performance and effectiveness of risk controls in the organization's operational processes and the ASP?		
	3.4.2	Are the data analysis used for the identification of root causes of non-conformance and potential new hazards, and to evaluate where improvements can be made to the organization?		
	3.5	Assess if the SA component include procedures to identify changes within the organization or its operational environment which may affect established processes and services and to describe the arrangements to assure safety performance before implementing changes.	1	
	3.5.1	Are the changes to existing systems, procedures and operations being analysed to assure safety performance before implementation?		
	3.6	Assess if the SA component include procedures to identify the causes of sub-standard safety performance, determine the implications of sub-standard safety performance, and eliminate or mitigate such causes.	3	
	3.6.1	Does the ASP include procedures for developing safety lessons learnt?		
	3.6.2	Are the safety lessons learnt used to promote continuous improvement of safety?		
	3.6.3	Are the safety lessons learnt shared with UNHQ and other Missions?		
	3.7	Assess if the SA component include procedures to take corrective and preventive action to eliminate the causes, or potential causes of non-conformance identified during analysis, to prevent reoccurrence.	3	
	3.7.1	Are corrective actions for identified non-conformities with risk controls developed?		
	3.7.2	Are preventive actions for identified potential non-conformities with risk controls developed?		
	3.7.3	Are the safety lessons learnt considered in the development of corrective and preventive actions?		
4.0	**Safety Promotion and Training**		8	
	4.1	Assess if the Safety Promotion and Training component include procedures / activities to promote the growth of a positive safety culture and communicating it throughout the Mission, and to ensure that personnel are trained and competent to perform the ARM activities.	8	
	4.1.1	Are the DFS safety policies and objectives directly communicated to staff?		
	4.1.2	Is Senior Management visibly demonstrating their commitment to the ASP objectives and activities?		

	4.1.3	Is top management clearly and regularly communicating safety standards and performance to all Mission's personnel?		
	4.1.4	Is adequate safety awareness regularly distributed to Mission staff?		
	4.1.5	Are sufficient resources available to support ASP activities?		
	4.1.6	Are specific safety procedures taught utilizing formal training?		
	4.1.7	Is aviation safety related training provided on a recurrent basis?		
	4.1.8	Does this training use past identified risk and lessons learned?		

Annex 10. Accident Prevention Effort (APE)

Activity Description[14]	QE	P	APE Score[15]
Aviation safety program revisions	2		
Aviation safety Council meetings conducted	4		
aviation related staff participation in aviation and aviation safety workshops	2		
Acquisition of aviation, MovCon and safety publications	12		
Staff participation in aviation related trainings	5		
Meetings with organizations and Local authorities	4		
Aviation safety occurrence/hazards reports	85		
Aviation safety occurrence/hazards investigation reports	85		
Aviation risk management activities	60		
Aircraft inspection reports signed off	12		
Carriers assessment reports signed off	14		
Air Operators performance evaluation reports signed off	12		
Aviation related SOPs revisions	3		
Emergency crash and rescue equipment inspections	6		
Cargo weighing scale inspections and calibrations	12		
Cargo procedures verification and inspections	30		
Airfields and HLS surveys and inspections	20		
Airfields and HLS FOD walks	24		
Aviation fuel equipment and facilities inspections	4		
APE Index			**0**

QE: Quantifiable Effects, i.e., number of people trained, number of hazards identified, activities and number of briefing/meetings held during the period.

P: Prevention effort activity planned or initiative

3 points = Activity was planned and budgeted
2 points = Activity planned or training provided by aviation or aviation safety staff
1 points = Not planned, initiative to enhance aviation safety

Formula : QE x P = APE Score
Base line (first year):
Target for next year (Base line + 10%):
Optimum for next year (Base line + 25%).

[14] The list of activities and their quantifiable effect will vary depending on the Mission size and complexity. The above listed APE activities are only samples and not an exhaustive list.

[15] The Accident Prevention Effort Score provides management with a value that quantifies the Aviation Safety Program status and the current Mission effort by assessing, projecting, and improving the APE. Therefore, more Mission accident prevention effort, less probability of an accident.

Annex 11. Management of Change

Safety Review Template

Introduction

Provide background of action to be reviewed.

Rationale

Link between changes required as a result of Mission's mandate, operational environment, Mission realigned objectives, etc.

Project Manager

This Section/Unit/Person leads the change project and is accountable for ensuring the project and change plan are implemented.

Project Objectives

Detail what the project will achieve.

Change Plan Elements

What are the main elements in the change plan? [E.g. people/culture, systems/technology, documentation, positions/roles, process, skills] Each of these elements may require a particular focus in the change plan.

Key Stakeholder Analysis (include risk assessment, if required)

Identify the key stakeholders [other Units and Sections, senior management, Mission Components, Organizations] and:

- Analyse their response to the change [e.g. what will be their main concerns/fear, where is there likely to be support for the change];
- Identify the preferred media for communicating or consulting with them about the change [e. g Inter Office Memorandums, briefings from project team members, senior Level meetings].

Develop Change Plan
Develop a change plan including performance measures [how will you know the change plan is effective?]. Ensure the plan is adequately resourced.

Actions	Who	When	Performance Measures

Consolidation
Ensure Mission procedures and performance measures reinforce the changes.
Ensure all stakeholders are aware of the change plan.
Ensure other existing mitigation actions will not be affected by the change or if the mitigation actions need to be replaced.

Evaluation
How will the change be evaluated in relation to the achievement of the planned objectives?
How will the change management processes be evaluated – consider summative as well as final evaluations, how can you assess your change management strategies as you implement them?
How will evaluation outcomes be used in other organizational processes?

Senior management and Stakeholders should always endorse change management as applicable.
Endorsement:

Date: Name and Function:

Signature:

Date: Name and Function:

Signature: