

**United Nations**  
**Department of Peacekeeping Operations /**  
**Department of Field Support**  
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## **Policy**

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# **Aviation Risk Management (ARM)**

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## **DPKOMDFS Policy on Aviation Risk Management**

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### **ANNEXURES**

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#### **A. PURPOSE**

1. The purpose of this policy is to establish the requirements to integrate and implement Aviation Risk Management (ARM) in all aviation activities within the United Nations Department of Field Support (DFS) and its supported missions.
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#### **B. SCOPE**

2. ARM is a decision-making process for management, supervisors, functional managers, and individuals, which must be integrated into the planning, decision-making and execution processes, to maximize operational capabilities while identifying and appropriately managing risks associated with aviation activities in DFS-supported missions.
  3. This Policy applies to all DPKO/DFS staff at United Nations Headquarters (UNHQ) involved in the above processes and all aviation related staff members, commercial contractors and military aviation units in DFS supported missions.
  4. ARM methodology is consistent with DPKO/DFS Enterprise Risk Management guidelines, UN DSS Security Management and International Civil Aviation Organization (ICAO) guidelines on the implementation of the Safety Management System.
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#### **C. RATIONALE**

5. The United Nations is obliged to mitigate the risks to which it exposes its personnel and resources while conducting aviation activities. To improve the effectiveness of accident prevention, a risk management based approach must be implemented. The integration of ARM into the aviation related processes will ensure that decisions are based on the assessment of risk inherent to the aviation related activities. ARM will enhance effectiveness of aviation related activities at all levels while also addressing the need to preserve human and material resources.

6. In line with DPKO/DFS Enterprise Risk Management guidelines, the ARM methodology provides a systemic approach to risk reduction that will enhance the safety of civilian and military aviation related activities in UN DFS supported missions, which are typically conducted in austere areas, lacking basic infrastructure and security.
7. The effective implementation of the ARM process requires commitment, support and clear accountability from all levels at UNHQ and in the field missions.
8. Decision makers at all levels are required to implement the ARM process to ensure the risks associated with all aviation related activities are systematically and formally identified, appropriately assessed and mitigated or controlled in accordance with this Policy, the guidelines and procedures established in the Aviation Safety and others manuals related to aviation activities.

#### **D. POLICY**

9. DFS supported missions must implement Aviation Risk Management and embed it as an integral part of the planning, decision-making and the execution processes of all aviation related activities. Four principles must govern the actions associated with risk management.
  - a. Each aviation activity will be subject to a phased analysis defining the requirements and conditions for the activity to be accomplished. A chronological and systemic approach, considering management, policies, human factors, environment, equipment, processes and procedures, experience, level of training will ensure all aspects of the activity are analysed, the associated hazards are identified and their consequences assessed in terms of likelihood of occurrence, severity and exposure, to ensure unnecessary risks are not accepted. Emphasis will be on planning and execution of any aviation activity, so that operational objectives can be achieved while eliminating or mitigating the risks to which personnel and resources are exposed.
  - b. Decisions regarding risk management will be taken in accordance with the respective Mission ARM decision making structure. Making risk decisions at the appropriate levels establishes clear accountability. Those accountable for the success or failure of the aviation activities must be included in the risk decision process.
  - c. Identified risks will be accepted only when benefits outweigh the potential or known costs. All identified risks that cannot be mitigated or eliminated from a planned aviation activity must be documented and reported to the next decision making level.
  - d. ARM must be embedded into planning and execution of aviation activities at all levels. Risk management is not a separate or discrete function. When ARM is effectively embedded, it quickly ceases to be consciously identifiable as a separate process. To effectively apply ARM, field managers will be required to dedicate time and resources to embed ARM principles into aviation planning and operational processes. Risk assessments of aviation activities are to become a routine aspect of operations planning and execution undertaken by managers and staff assigned to plan and conduct operations.
10. Senior management at UNHQ and in the field will:

- a. Require that every Mission develops and implements procedures to undertake the risk management processes in aviation related activities.
- b. Ensure that, to the extent feasible, all aviation activities in DFS supported missions are conducted in the 'low risk' regime. Appropriate risk mitigation measures are to be adopted to steer the activity from any higher to the low risk level.
- c. Ensure that, when the aviation activity cannot be conducted at the 'low risk' regime, the next level in the decision making structure should either assist with implementing required risk mitigation measures, modify or cancel the activity; or accept the identified risks based on a higher level of the risk-benefit equation i.e. determined by the criticality of the supported programme or operation. These risk decisions should be properly documented and based on the following questions:
  - (1) Which is greater, the risk of doing or the risk of not doing it?
  - (2) How important is the activity?
  - (3) Will the anticipated gains justify accepting a high level of risk?
  - (4) Has enough been done to lower the risk to a level that is reasonable to expect staff and or contractors to take?
  - (5) How the Mission's reputation and operations would be affected if the activity ends up in a catastrophic outcome?
- d. Ensure the establishment and functioning of:
  - (1) An 'Aviation Risk Assessment Team' (ARAT), to continue with the risk assessment process, including the full identification of all the risks, mitigation measures, and residual risks for the aviation activities with an assessed residual level of risk high or very high, and
  - (2) A 'Senior Level Committee' (SLC), to perform an overall review of the ARM process confirmed as 'High' or 'Very High' by the 'Aviation Risk Assessment Team', and to make a recommendation to the Head of the Mission on whether the proposed aviation activity should be conducted.
- e. Require that all personnel involved in risk management, especially decision makers, clearly understand that ARM is not an authorization to violate policy. ARM assessments, properly performed, will serve as a tool to seek necessary changes through established channels.
- f. Ensure a continuous safety performance monitoring of the aviation related activities in order to make sure that the risk mitigation measures / controls are being practiced as intended, and that they continue to achieve their intended objectives, or there is the need of new risk controls because of changes in the operational environment;
- g. Develop and implement a system for the sharing of technical and threat *related* information between DFS supported missions on ARM issues, to enhance harmonization of the process and gain benefit from lessons learned;
- h. Ensure, where appropriate, that systems are in place to enable sharing of information between DFS supported missions, DPKO/DFS Risk Management Office and other entities, such as WFP, NATO, EU or AU, operating in the missions areas;
- i. Ensure that a comprehensive ARM training programme, including initial and recurrent training, is budgeted and implemented to guarantee adequate training is provided to the respective staff at all levels of the decision-making process.

11. Field managers are to ensure that the ARM process described below is embedded into all aviation related processes:

- a. Step I: Hazard Identification. Each aviation activity will be subject to a phased analysis defining the requirements and conditions for the activity to be accomplished. A chronological and systemic approach, considering management, policies, human factors, environment, equipment, processes and procedures, experience, level of training will ensure all aspects of the activity are analysed in order to ensure that the associated hazards are identified and their possible consequences clearly determined. Experience, common sense, and specific risk management tools help identify real or potential hazards.
- b. Step II: Evaluation of risk. Risk is the effect of uncertainty on objectives and will be expressed in terms of a combination of the consequences of an event (severity) and the associated likelihood of the consequences of the hazard. Risk assessment is the application of quantitative and qualitative measures to determine the level of risk associated with a specific hazard. This process defines the likelihood and severity of an incident or an accident that could result from the hazard based upon the exposure of personnel or assets to that hazard.
- c. Step III: Analysis of risk mitigation (reduction) options. The purpose here is to investigate specific strategies and tools that reduce, mitigate, or eliminate the risk. Effective risk mitigation measures reduce or eliminate at least one of the three components (likelihood, severity, or exposure) of a risk.
- d. Step IV: Risk decision (choice of risk mitigation measures). Decision makers at the appropriate level in the field are to determine the best control or combination of control measures based on the analysis of overall costs and benefits (see paragraphs 9.b, c and d)
- e. Step V: Implementation of risk mitigation measures. Once risk control strategies have been selected, an implementation strategy needs to be developed and then applied by those managing the operations.
- f. Step VI: Supervision and feedback. Risk management is a process that continues throughout the duration of the aviation activities. Field managers at every level must fulfill their respective roles in assuring that risk control measures are effectively implemented and sustained throughout the operations. The risk management process must be periodically reevaluated to ensure effectiveness.

## **0.1. ROLES AND RESPONSIBILITIES**

12. The primary responsibility for the management of the aviation related risks rests with the Under-Secretary General for the Department of Field Support (USG/DFS). In this regard the USG DFS will approve and promulgate policies and guidelines related to ARM at UNHQ and in DFS supported missions.
13. The Director, Logistics Support Division, DFS, through the respective Section Chiefs (Aviation Safety, Air Transport and Movement Control Sections), is responsible for the development of the guidelines on ARM in the respective manuals and monitoring their implementation in DFS supported missions with aviation assets assigned to them.
14. Chief Aviation Safety Section, LSD/DFS will ensure that:

- a. ARM methodology is embedded into the DFS and Missions' Aviation Safety Programmes (ASPs);
  - b. Technical and risk analysis information is shared between DFS supported missions and constructive feedback provided to them.
15. The Head of Mission is responsible and accountable to the USG DFS for the implementation of ARM procedures in his/her mission and is ultimately responsible for decisions made in the risk management process associated with utilization of mission aviation resources.
16. The Head of Military Component is responsible for ensuring that the ARM process is effectively embedded in the military decision-making process regarding the use of military aviation assets under his/her tasking authority in military operations.
17. The Director/Chief of Mission Support (DMS/CMS) is responsible for ensuring that:
  - a. ARM standard operating procedures (SOPs) are developed in his/her mission and followed in accordance with the present policy, the Aviation Safety and other respective manuals related to aviation activities;
  - b. ARM methodology is systematically applied to the decision making process in order to reduce to an acceptable level the risks associated with mission aviation activities proactively and explicitly;
  - c. Adequate resources are allocated for the implementation of the required risk mitigation measures;
  - d. Personnel involved in ARM received adequate training.
18. The Chief Regional or Mission Aviation Safety Officer is responsible for:
  - a. Developing the Mission ARM SOP in coordination with Aviation, MOVCON Sections and any other applicable Mission component i.a.w. the Aviation Safety Manual;
  - b. Ensuring that ARM methodology is embedded into the respective Mission ASP;
  - c. Monitoring the effective implementation of the ARM methodology in all aviation related activities;
  - d. Providing advice and assistance to the respective Missions' Sections in the integration of the ARM methodology into their SOPs.
19. The Chief Aviation Officer, Chief MOVCON and Chief Fuel Unit in each mission are responsible for:
  - a. Embedding ARM methodology into their respective SOPs;
  - b. Supervising the ARM process in their respective areas;
  - c. Ensuring that respective personnel are trained on the utilization of the ARM procedures embedded in their SOPs.

20. All personnel involved directly or indirectly in aviation related activities must report any issue potentially affecting the levels of aviation risk to their respective supervisors and aviation safety office in each mission.
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## E. TERMS AND DEFINITIONS

Aviation related activity: any activity related to the process of transportation of personnel and cargo by air.

Exposure: The amount of time, number of people or equipment involved in a given event expressed in time, proximity, volume or repetition.

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.

Likelihood: The chance that an event will occur.

Aviation Risk Management: A logical and systematic method of establishing the context, identifying, analyzing, 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.

Risk: 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 defenses or preventing controls to lower the severity and/or likelihood of hazards projected consequences.

Severity: An event's potential consequences in terms of degree of damage, injury or impact on the operational objectives of a mission or activity.

Safety performance monitoring: The process by which the safety performance of the organization is verified in comparison with the safety policy and approved objectives.

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## F. REFERENCES

### Normative or Superior References

21. ICAO Annex 19 Safety Management
22. ICAO Safety Management Manual
23. ISO 31000 Risk Management

### Related DPKO/DFS Policy and Guidance documents

24. DPKO Aviation Manual, Version 1, May 2005
25. DPKO/DFS Policy Directive Aviation Safety, March 2009
26. UNDSS Security Management System, February 2011
27. DPKO/DFS Aviation Safety Manual, March 2012

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**G. MONITORING AND COMPLIANCE**

- 29. The Director, Logistics Support Division, DFS must monitor the implementation of this policy.
- 30. Mission compliance with this policy and associated guidelines will be assessed by the Aviation Safety Section LSD/DFS, through regular Aviation Safety Assessment Visits and follow up on the respective action plans.

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**H. DATES**

- 31. Effective date: This policy is effective from date of approval.
- 32. Review Date: This policy must be reviewed every 2 years or when the need arises depending on changes in DFS policies and strategic goals.

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**I. CONTACT**

- 33. The Chief Aviation Safety Section, LSD, DFS (x. 3-7307) is the contact person for this policy.

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**J. HISTORY**

- 34. This Policy supersedes the DPKO/DFS Policy Directive on ARM, May 2008 and any previous guidance on Aviation Risk Management e.g. DPKO Aviation Manual Version 1, May 2005.
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**APPROVAL SIGNATURE:**



**DATE OF APPROVAL:**

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