



Office of Internal Oversight Services

## **INTERNAL AUDIT DIVISION**

# **AUDIT REPORT**

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### **Management of peacekeeping air operations**

**Significant improvements are needed in the strategic planning, performance management, safety, quality assurance and control of peacekeeping air operations**

**28 August 2009**

**Assignment No. AP2008/600/03**

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United Nations  Nations Unies

INTEROFFICE MEMORANDUM

MEMORANDUM INTERIEUR

OFFICE OF INTERNAL OVERSIGHT SERVICES · BUREAU DES SERVICES DE CONTRÔLE INTERNE  
INTERNAL AUDIT DIVISION · DIVISION DE L'AUDIT INTERNE

TO: Ms. Susana Malcorra, Under-Secretary-General  
A: for Field Support

DATE: 28 August 2009

Ms. Angela Kane, Under-Secretary-General  
for Management

REFERENCE: IAD: 09- **02763**

  
FROM: Fatoumata Ndiaye, Acting Director  
DE: Internal Audit Division, OIOS

SUBJECT: **Assignment No. AP2008/600/03 - Audit of the management of peacekeeping air operations**  
OBJET:

1. I am pleased to present the report on the above-mentioned audit.
2. Based on your comments, we are pleased to inform you that we will close recommendations 4, 5, 11, 15, 16, 19 and 21 in the OIOS recommendations database as indicated in Annex 1. In order for us to close the remaining recommendations, we request that you provide us with the additional information as discussed in the text of the report and also summarized in Annex 1.
3. Please note that OIOS will report on the progress made to implement its recommendations, particularly those designated as high risk (i.e., recommendations 1, 2, 8, 9, 11, 12, 15, 16 and 20) in its annual report to the General Assembly and semi-annual report to the Secretary-General.

cc: Mr. Anthony Banbury, Assistant Secretary-General, DFS  
Mr. Xavier Devaulx de Chambord, Officer-in-Charge, Logistics Support Division, DFS  
Mr. Rakesh Malik, Officer-in-Charge, Transport and Movement Service, DFS  
Mr. Seth Adza, Chief, Audit Response Team, DFS  
Mr. Moses Bamuwamye, Chief, Oversight Support Unit, Department of Management  
Mr. Swatantra Goolsarran, Executive Secretary, UN Board of Auditors  
Ms. Susanne Frueh, Executive Secretary, Joint Inspection Unit Secretariat  
Mr. Byung-Kun Min, Programme Officer, OIOS  
Ms. Eleanor Burns, Chief, Peacekeeping Audit Service, OIOS

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## INTERNAL AUDIT DIVISION

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### **FUNCTION**

*“The Office shall, in accordance with the relevant provisions of the Financial Regulations and Rules of the United Nations examine, review and appraise the use of financial resources of the United Nations in order to guarantee the implementation of programmes and legislative mandates, ascertain compliance of programme managers with the financial and administrative regulations and rules, as well as with the approved recommendations of external oversight bodies, undertake management audits, reviews and surveys to improve the structure of the Organization and its responsiveness to the requirements of programmes and legislative mandates, and monitor the effectiveness of the systems of internal control of the Organization” (General Assembly Resolution 48/218 B).*

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### **CONTACT INFORMATION**

#### **ACTING DIRECTOR:**

Fatoumata Ndiaye: Tel: +1.212.963.5648, Fax: +1.212.963.3388,  
e-mail: [ndiaye@un.org](mailto:ndiaye@un.org)

#### **CHIEF, PEACEKEEPING AUDIT SERVICE:**

Eleanor Burns: Tel: +1.212.367.2792 Fax: +1.212.963.3388,  
e-mail: [burnse@un.org](mailto:burnse@un.org)

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## **EXECUTIVE SUMMARY**

### **Management of peacekeeping air operations**

OIOS conducted an audit of the management of peacekeeping air operations. The overall objective of the audit was to assess the adequacy and effectiveness of the management of air operations in peacekeeping missions. The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

The Department of Field Support (DFS) in recent years has made efforts to enhance the efficiency and effectiveness of air operations. However, improvement is still needed in the following areas:

- A formal integrated peacekeeping aviation strategy is needed to determine the strategic direction of peacekeeping aviation and to support decision-making;
- There is a need to implement a comprehensive performance management framework to effectively manage air operations and report on aviation performance to DFS senior management;
- Opportunities to increase aircraft utilization need to be pursued, including extending the strategic relationship with the United Nations Humanitarian Air Services of the World Food Programme;
- An air charter acquisition strategy needs to be developed;
- There were weaknesses in the procurement of air charter services including cases of narrow definition of requirements, insufficient time for effective bidding, unclear provisions in air charter agreements and improper vendor registration;
- Current staffing levels within the Air Transport Section appear to be insufficient;
- There was a lack of timely follow-up by DFS and the Department of Management on action taken by air carriers to address their non-compliance with contractual obligations; and
- The Air Safety Councils in field missions did not conduct regular meetings and the participation by senior management was inadequate.

OIOS is making a number of recommendations to address the weaknesses identified in the audit.

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## I. INTRODUCTION

1. The Office of Internal Oversight Services (OIOS) conducted an audit of the management of peacekeeping air operations. The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

2. The aviation programme of the Department of Field Support (DFS) represents approximately a \$1 billion per year operation at current activity levels, with nearly 300 aircraft on long-term charter and about 550 support staff deployed in field missions. After personnel, aviation represents the single largest cost in peacekeeping operations.

3. DFS runs an aviation operation quite unlike any other in the world. DFS aviation is subjected to significant variables that impact staffing, management, and operations, including:

(a) Highly dispersed theatres of operations in difficult operating environments, and variable conditions and regulatory regimes within host countries;

(b) A significant number of deployed fixed wing and rotary wing aircraft types that can change quickly based on evolving mandates and available aircraft from troop contributing countries;

(c) A wide range of aircraft registrations in terms of countries of origin; and

(d) Numerous different contracted aircraft operators.

4. The mission of the DFS aviation programme is to provide uninterrupted aviation services that are safe, effective and reliable anywhere and anytime. A primary challenge in accomplishing this mission, given the foregoing factors, is to provide aviation services in an efficient manner.

5. Within DFS, the management of the aviation operation is led by the Air Transport Section (ATS), which is a section within the Transport and Movement Service (TMS) of the Logistics Support Division (LSD), whose task is to provide logistics support to peacekeeping missions, including air operations.

6. Comments made by DFS and the Department of Management (DM) are shown in *italics*.

## II. AUDIT OBJECTIVES

7. The main objectives of the audit were to assess the:

(a) Adequacy and effectiveness of management controls, specifically the planning of air operations in peacekeeping missions; and

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- (b) Implementation of air operation plans and utilization of air assets, including ground operations.

### **III. AUDIT SCOPE AND METHODOLOGY**

8. The audit covered aviation activities at DFS and in three field missions, namely the United Nations Organization Mission in the Democratic Republic of the Congo (MONUC), the United Nations Mission in the Sudan (UNMIS) and the African Union-United Nations Hybrid Operation in Darfur (UNAMID), for the period July 2005 to June 2008. Specifically, OIOS reviewed the following elements relating to the management of peacekeeping air operations:

- Organization and planning;
- Implementation of air operations programme;
- Procurement;
- Quality assurance;
- Resource requirements and staff deployment; and
- Safety.

9. OIOS engaged a consultant to provide technical aviation subject matter expertise. The audit activities involved reviews of relevant documentation, including procurement documentation, interviews with staff involved in air operations, and data analysis.

### **IV. AUDIT FINDINGS AND RECOMMENDATIONS**

#### **A. Organization and planning**

##### Need for a formal integrated peacekeeping aviation strategy

10. The provision of aviation support to peacekeeping operations is a major undertaking of DFS and the Procurement Division (PD), DM. The current \$1 billion cost of peacekeeping air operations can be broken down, as follows: (a) \$600 million in charter costs; (b) \$200 million in fuel; (c) \$80 million in staff costs for approximately 550 staff; and (d) about \$100 million in other costs related to infrastructure upgrades and non-contract costs, such as landing fees. ATS estimates that costs and operational activity would continue to increase in the coming years.

11. The size of the peacekeeping aviation programme requires a strategic approach to decision making supported by detailed planning documentation concerning finance and budget, human resources, training, information technology, aircraft/charter acquisition and other related areas. Annual plans should include risk identification and performance targets. Collectively, the plans would provide a strategic management and operating framework that enable effective and efficient delivery of air operations.

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12. While components of an aviation strategy exist in various policy and operational documents used by DFS<sup>1</sup>, there is a need for a formal integrated strategic aviation plan to support United Nations peacekeeping operations. Although ATS has undertaken a number of initiatives to improve peacekeeping aviation, there is no evidence that these initiatives have been prioritized and undertaken and delivered in response to a coherent long-term strategy. The ATS management and staff are generally dealing with day-to-day operational issues and crisis planning, leaving little time or resources for the strategic planning that is needed at Headquarters. ATS identified several strategic challenges and risks, for which there is limited strategy or planning, including the following:

- Securing a competitive supply of commercial aircraft and crew;
- Addressing the escalating costs of support to air operations;
- Providing effective oversight and management, especially in the absence of complete and reliable information;
- Optimizing aircraft utilization; and
- Addressing staffing challenges, especially in light of increasing activity rates.

13. The significant size of the DFS aviation operations and the associated high risks demand the establishment of a strategic management framework for the peacekeeping aviation programme. The cornerstone of this framework should be an integrated, comprehensive peacekeeping aviation strategy, which would provide direction for all aviation management and mission planning activities.

#### **Recommendation 1**

**(1) DFS should consolidate its strategic initiatives that are included in various policy documents and in the Aviation Manual into an integrated, comprehensive peacekeeping aviation strategy.**

14. *DFS commented on recommendation 1 that the framework and strategic direction of aviation support to peacekeeping are contained in the United Nations Aviation Standards for Humanitarian and Peacekeeping Air Transport Operations, DFS Aviation Manual and the Strategic Goals of the Department. In addition, DFS is in the process of developing its global support strategy for all its functional areas in peacekeeping operations for which its aviation strategy will be included. Recommendation 1 remains open pending receipt of a copy of the formal comprehensive peacekeeping aviation strategy.*

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<sup>1</sup> ATS Strategic Initiatives, UN Aviation Standards for Humanitarian and Peacekeeping Air Transport Operations, DFS Aviation Manual, ATS annual work plans.

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### Aviation performance management framework needs improvement

15. Presently, ATS does not have a sufficient performance management framework to monitor and report on aviation performance. Although various tools such as aircraft inspection reports, performance evaluation reports and carrier assessment reports have been implemented in field missions, their use in performance management has been limited. An effective aviation performance management framework, if properly implemented, would go beyond the reporting mechanism currently used by ATS, which is primarily based on budget and quarterly air carrier performance reporting. A formal aviation performance management framework needs to flow from the goals contained in the aviation strategy.

16. In OIOS' opinion, DFS could benefit from the use of performance indicators that would generally be important to an aviation organization. There is also a need to establish a mechanism of reporting on aviation performance to DFS senior management, as part of the evaluation framework. DFS informed OIOS that they are in the process of procuring an electronic tool named Air Transport Management System (ATMS), which has been developed specifically for the purpose of performance management. ATMS will have the capability to assist in integrating aviation planning, controlling and monitoring data, requisitioning and invoicing, as well as contract management and performance reporting.

#### **Recommendation 2**

**(2) DFS should implement a comprehensive aviation performance management framework to ensure that air operations are effectively and efficiently managed and aviation performance is reported to DFS senior management on a regular basis.**

17. *DFS commented on recommendation 2 that acquisition of the ATMS, which is currently in progress, will provide a comprehensive framework for performance management.* Recommendation 2 remains open pending the implementation of a comprehensive aviation performance management framework by DFS.

### Mission aviation planning and implementation need improvement

18. The planning activities and the implementation of the resultant plans relating to air operations are disjointed. For example, a 2006 OIOS audit of the renovation of airfields in UNMIS highlighted the critical requirement to complete the infrastructure upgrades identified in the 2006 UNMIS Aviation Concept of Operations. However, at the time of the audit, UNMIS had yet to complete a single critical aviation infrastructure project since the establishment of the mission in 2003.

19. The Aviation Projects, Planning and Training Unit in ATS is responsible for planning and monitoring the implementation of aviation projects in

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accordance with missions Aviation Concept of Operations. In OIOS' opinion, there is a need to strengthen the ATS planning and monitoring function to ensure that critical aviation projects in field missions are implemented in accordance with the plan.

### **Recommendation 3**

**(3) DFS should strengthen the planning function within the Aviation Transport Section to improve the planning of air operations and the monitoring of related projects in field missions.**

20. *DFS accepted recommendation 3 stating that it has requested resources in the 2009/2010 Support Account budget for the establishment of the Airfield and Terminal Unit to strengthen its planning and monitoring function. Recommendation 3 remains open pending confirmation that the planning and monitoring functions within ATS are strengthened.*

### Need to strengthen collaboration with United Nations Humanitarian Air Services

21. The review of the United Nations Humanitarian Air Services (UNHAS) of the World Food Programme (WFP) conducted by the Joint Inspection Unit (JIU) in 2008 recognized that the establishment of the Strategic Aviation Operations Centre (SAOC) at the United Nations Logistics Base in Brindisi presented a strong advantage for the Department of Peacekeeping Operations (DPKO), DFS and the United Nations system at large. Both DPKO/DFS and UNHAS can mutually benefit from strengthening their relationship with respect to aviation infrastructure and operations management. The JIU review, while recognizing the difference in mandates between UNHAS and DPKO/DFS, concluded that the two organizations could identify pragmatic ways of sharing their capacities and avoid competitive use of limited facilities.

22. OIOS considers DFS' establishment of the SAOC as a valuable step towards a more centralized management of the UN fleet that might include in the future more collaborative air operations management with WFP. Moreover, due to increased risks associated with air charter services provided by vendors without air operation certificates [as experienced in one UN agency in the Democratic Republic of the Congo (DRC)], there is a need for improving cooperation among agencies and organizations of the United Nations system by sharing best practices and lessons learned in air operations, which could result in increased safety of air charter services and more economic use of resources.

### **Recommendation 4**

**(4) DFS should intensify collaboration with the World Food Programme through the Strategic Aviation Operations Centre and cooperate with other United Nations agencies and organizations operating in a country regarding the management of air operations to achieve greater benefits from sharing best practices and lessons learned.**

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23. DFS accepted recommendation 4 stating that the Aviation Technical Advisory Group (ATAG), comprising members from United Nations, WFP and International Civil Aviation Organization (ICAO), meets bi-annually to consider a wide collaborative agenda including the technical agreement on interoperability of United Nations air assets. Based on DFS' comments, recommendation 4 has been closed.

## **B. Implementation of the air operations programme**

### Aircraft utilization levels need to be enhanced

24. Aircraft utilization and load factor are prevalent industry measures used to assess the efficiency of air operations. The utilization level is a significant consideration for both fixed and rotary wing aircraft, while the load factor is always a significant consideration for medium and larger fixed wing aircraft, and large helicopters.

25. In fiscal year 2007/2008, the DFS air fleet included approximately 230 aircraft on long-term charter: 55 fixed wing (all commercial) and 175 rotary wing aircraft with roughly equal split between commercial charter and Letters of Assist (LOAs). ATS had forecasted the use of 300 aircraft (with 75 fixed wing and 225 rotary wing) on long-term charter in the fiscal year 2008/2009.

26. According to the data from the annual performance reports, total flight hours flown for aircraft under long-term charter during the fiscal periods from 2004/2005 to 2006/2007 ranged between approximately 90,000 and 110,000 hours for a fleet varying from 207 to 242 aircraft, corresponding to an average of 36 to 40 hours per month per aircraft and the average daily utilization of just over one hour. This "gross average" estimation of aircraft utilization suggests that the utilization rate was low. Also, while the number of aircraft increased by seven per cent (from 226 in the fiscal year 2005/2006 to 242 in the fiscal 2006/2007) and the cost per hour increased by 14 per cent, the utilization per aircraft decreased from 1.3 to 1.2 hours per day.<sup>2</sup>

27. Although DFS should generally not expect to achieve commercial levels of utilization, some actions to improve the aircraft utilization may be considered as discussed below:

- In 2006, ATS implemented the Eastern and Western Africa Reserve Fleet (EARF/WARF) concept whereby the large fixed wing, executive jets and Mi-26 heavy lift helicopters were retained within the missions but many of these assets (11 aircraft in total, including two Mi-26) may be tasked by the SAOC. The centre was established in Brindisi in July 2008 for the centralized tasking control of strategic assets to optimize asset utilization by facilitating the use of aircraft outside

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<sup>2</sup> Calculations are based on available data on the total flight hours flown for all types of aircraft including those specifically deployed for search and rescue duties, aero-medical evacuation and military aircrafts for specific military tasking such as Show of Force, Troop Insertion/Extraction and military close air support to UN ground forces.

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individual missions. The reserve fleet concept and the SAOC are positive steps toward monitoring and optimizing fleet utilization. In OIOS' opinion, where operationally feasible, ATS also may consider extending the EARF/WARF concept by centralizing the tasking authority for the remaining large fixed wing assets and unique rotary wing assets such as the heavy lift Mi-26; and

- The practice of setting utilization and load factor targets is ubiquitous in commercial operations and is in principle valid for peacekeeping operations. According to DFS, a large proportion of the UN contracted aircrafts were rotary wing for which utilization and load factor performance targets may not be applicable. While taking note that these targets may not apply to all types of aircraft, OIOS is of the view that their use is relevant to some of the UN contracted aircrafts.

28. An ATS analysis of air operations conducted in 2006 described the establishment of the EARF/WARF and SAOC as centerpieces of various efficiency initiatives. The broad intent of these initiatives was to establish capacity to deliver the same operational results with fewer aircraft and higher utilization. The combined financial savings projected by ATS from these related initiatives were \$118 million per year.

#### **Recommendations 5 and 6**

##### **DFS should:**

**(5) Consider extending the Eastern and Western Africa Reserve Fleet concept by centralizing the tasking authority for the remaining large fixed wing assets and unique rotary wing assets such as the heavy lift Mi-26 helicopters to optimize air asset utilization; and**

**(6) Establish the utilization and load factor performance measures for applicable aircrafts and report the performance results to senior management on a regular basis.**

29. *DFS accepted recommendation 5 stating that a broad range of initiatives encompassing the SAOC, optimal fleet configuration, utilization of current mission fleet, the global and regional concept of fleet utilization had been implemented. Accordingly, all aircraft earmarked for strategic airlift support and heavy cargo helicopters operations were now providing global strategic support with centralized command and control and decentralized execution for strategic and ad hoc requirements. Based on DFS' comments, recommendation 5 has been closed.*

30. *DFS accepted recommendation 6 stating that it will establish the utilization and load factor performance targets for applicable aircrafts. Recommendation 6 remains open pending receipt of evidence that the utilization and load factor performance targets are established.*

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### Fuel conservation programme needs to be developed

31. Fuel is a significant cost component within the DFS aviation operations, costing about \$200 million per year. Fuel is also a significant cost component within the airline industry. As a result, airlines have developed formal programmes to reduce fuel consumption.

32. The International Air Transport Association (IATA), the member association for the world's airlines, has developed a methodology for a fuel efficiency gap analysis for their member airlines. DFS personnel received training on IATA's fuel conservation methodology in November 2007. In the IATA experience, airlines can typically reduce fuel consumption by at least three to six per cent by implementing a fuel conservation programme.

33. Although the IATA methodology was developed for commercial fixed wing operations and may not be directly applicable to peacekeeping aviation, some of the IATA principles and practices could be applied in the creation of a United Nations fuel conservation programme, including, for example, the following:

- Creating awareness and incentives among staff and management;
- Developing procedures to reduce fuel consumption during operations;
- Considering fuel costs for the entire life cycle or contract period during aircraft selection; and
- Setting reduction targets for fuel consumption and monitoring and reporting actual performance against the targets set.

#### **Recommendation 7**

**(7) DFS should implement an aviation fuel conservation programme with established fuel consumption reduction targets for all types of aircraft.**

34. *DFS accepted recommendation 7 stating that it expected the implementation of the fuel aviation programme in the fourth quarter of 2009. Recommendation 7 remains open pending the implementation of a fuel conservation programme with fuel consumption reduction targets for all aircrafts.*

### Aviation infrastructure in the missions needs urgent attention

35. Many peacekeeping missions are operating in countries with inadequate aviation infrastructure. Aviation support to such missions becomes hazardous or impossible unless the aviation infrastructure is improved to at least the minimum ICAO standards.

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36. OIOS visited numerous airfields in MONUC, UNMIS and UNAMID and reviewed the ongoing efforts of these missions to improve aviation infrastructure. However, none of these three missions has managed to complete even basic aviation infrastructure projects. For example:

- Multiple airports used by UN aircraft in the DRC and the Sudan have runway lighting and markings which are inadequate and do not meet the criteria established by ICAO for airfields used by large passenger aircraft such as the Airbus 300, MD-83 or IL-76;
- Aviation infrastructure utilized by MONUC in the DRC is in poor condition. MONUC has made temporary repairs for the mission-essential aviation infrastructure over the past five years. Airfield surfaces, Air Traffic Control, ground support, communications, crash fire and rescue (CFR) and fuel storage systems have deteriorated to a critical level and require urgent improvement. MONUC CFR vehicles and equipment are frequently not serviceable due to lack of spare parts. The situation heightens a safety risk and impedes efficiency because larger aircraft are not permitted to use airfields with inadequate CFR coverage. MONUC has collaborated with ICAO infrastructure specialists to develop a minimum rectification plan, estimated in 2003 to cost approximately \$33 million. According to MONUC, this plan was not implemented due to the lack of funding and reluctance of qualified contractors to undertake the work; and
- Almost none of the essential aviation infrastructure projects identified in the 2006 UNMIS Aviation Concept of Operations have been started, a condition which extends five years back to the start of UNMIS. UNMIS has also lost the annual \$20 million savings identified in a 2006 OIOS audit by not completing the repair of the Kadugli airport. Only the Khartoum apron renovation is nearing completion. Most airfield surfaces, including runways, have continued to deteriorate. Short and deteriorating runways have progressively limited the capacity and route flexibility of aircraft such as the MD-83. There are frequent runway incursions by people, vehicles and animals because there is no continuous security fence in place at airfields outside Khartoum. Key airfields such as Kadugli can no longer accept larger aircraft. A comprehensive ICAO report dated 4 March 2008 identifies the deficiencies and offers recommendations for the airfields in the Sudan. Most infrastructure projects outside Khartoum have not advanced beyond initial concept stage. The Mission explained that the weak supply chain, lack of qualified contractors, late receipt of full budget allotment and delays in obtaining approvals for air infrastructure projects from the Sudan Civil Aviation Authority caused the delays in the renovation of airfields.

#### **Recommendation 8**

**(8) DFS should ensure that MONUC, UNMIS and UNAMID take urgent action on building or repairing all**

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**infrastructures necessary to support a safe and effective aviation programme.**

37. *DFS accepted recommendation 8 stating that an agreement between ICAO and the United Nations was concluded in March 2009 to serve as an umbrella agreement to address the infrastructure programmes in the field. Recommendation 8 remains open pending the commencement of key infrastructure projects in MONUC, UNMIS and UNAMID.*

### **C. Procurement**

#### Lack of an air charter acquisition strategy

38. The size and complexity of peacekeeping air charter services demand a strategic and systematic approach in their acquisition. However, PD has no formal acquisition strategy to meet this requirement. The acquisition strategy must be matched to the size and scope of the air charter or air resources requirements. Furthermore, the strategy must flow from an overall peacekeeping aviation strategy and, therefore, the development of the acquisition strategy requires active participation from ATS. Also, the acquisition strategy should include performance indicators to measure the effectiveness of the procurement process.

#### High number of air charter contracts and aircraft types poses significant challenges

39. The number of contracts and LOAs established to obtain charter support is significant. The number of aircraft types within the fleet is uniquely high when compared to any other aviation operation in the world. For long term charter services only, the situation can be illustrated as follows:

- In 2007, PD and ATS established 23 commercial contracts with 18 different commercial vendors and 22 LOAs with 12 countries for a total of 153 aircraft of 30 different types and a projected value of approximately \$351 million; and
- At the time of the audit, there were 23 fixed wing and 28 rotary wing types of aircraft, which included 10 variants of the Mi-8 helicopter and some fixed wing variants of similar aircraft type/model. ATS managed approximately 90 commercial contracts and LOAs.

40. The high number of contracts and variety of aircraft types poses significant administrative and contract management challenges for DFS, DM and field missions. Safety oversight of such a diverse fleet is also more difficult and costly compared to commercial carriers which tend to have standardized fleets and operations. ATS indicated that it intended to reduce the number of contracts, recognizing this as a problem area.

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## Recommendation 9

**(9) DM, in coordination with DFS, should develop an acquisition strategy that matches the size and scope of the requirements for peacekeeping air charter services, and address the risks and challenges associated with maintaining a high number of air charter contracts and aircraft types.**

41. *DM accepted recommendation 9 in principle stating that the acquisition strategy must flow down from an overall peacekeeping aviation strategy. Once the peacekeeping aviation strategy has been developed by DFS, PD will work closely with DFS to develop the corresponding acquisition strategy. Recommendation 9 remains open pending receipt of a copy of the acquisition strategy developed by DM.*

### Need to review the invitation to bid method of solicitation for air charter services

42. During the development of an acquisition strategy for air charter services, PD and ATS need to review the suitability of the Invitation to Bid (ITB) procurement method and the lowest cost source selection criterion to ensure that the strategy support the principle of best value. Section 9.4.2 of the Procurement Manual states that an ITB “shall be used for the procurement of goods and services of standard and firm specifications ...[and sent] ... to the qualified bidder whose bid substantially conforms to the requirements set forth in the solicitation document and is evaluated to be the lowest cost to the United Nations”. Due to the specialized nature of air charter agreements, PD uses a modified ITB for air charter services, specifically developed for all short-term and long-term aircraft charter and related services.

43. In OIOS’ opinion, the suitability of the ITB procurement method may be inadequate to support DFS’ long-term charter requirements because a long-term charter often does not represent standard and firm specifications. The service requirement to support remote peacekeeping operations is complex and technical proposals can differ in both service and quality levels. Also, the lowest cost source selection criterion will not ensure best value unless the goods and services are of standard specifications.

44. Although the Controller approved that PD undertake negotiations with air charter vendors as part of the contracting process, these negotiations, contrary to the Procurement Manual criteria, demonstrate the inability of the ITB solicitation method to meet air charter needs as a viable method of solicitation. OIOS is of the opinion that the use of the Request for Proposal (RFP) method would allow proposals to be differentiated in service and quality by weighing the non-financial elements, such as fuel consumption by vendor’s aircraft, permit negotiations with the vendors and provide more creative solutions to be offered in the vendor proposals.

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## Recommendation 10

**(10) DM should evaluate the suitability of the currently used invitation to bid solicitation method and assess the feasibility of using the request for proposal method for the procurement of air charter services.**

45. *DM accepted recommendation 10 stating that discussions were ongoing with ATS on the feasibility of using RFP method of solicitation instead of ITB. In addition, PD is currently developing the source selection plan, as well as model RFP document in close cooperation with WFP and DFS. Recommendation 10 remains open pending the outcome of the ongoing evaluation on the best method for solicitation of air charter services.*

### Procurement of air charter services needs improvement

46. OIOS' review of sample air charter case files maintained by PD identified the following weaknesses:

(a) Cases of narrowly defined specifications

47. Aircraft specifications in solicitation documents relating to all 12 long-term air charter procurement case files reviewed by OIOS were narrowly defined. In OIOS' opinion, the narrow definition of requirements seemed unwarranted and resulted in inefficiencies. For example, in response to ITB 1189, two vendors with lower financial proposals were disqualified because their aircraft had 13 seats (and some other technical reasons that were similar in nature to the awarded vendor's proposal), one seat less than the required 14 seats. Compared with the vendors' proposed cost for a 13-seat aircraft, the financial proposal for a 14-seat aircraft was \$3 million higher. OIOS reviewed the Aircraft Usage Report for April 2008 for the awarded vendor's aircraft, which showed that: one aircraft (UNO 522) carried on average ten passengers and the other one (UNO 523) carried seven passengers. Based on these utilization figures, the strict requirement for a 14-passenger aircraft appears to have been unnecessary.

(b) Insufficient time for bidding

48. Requests to procure long-term air charter services in all nine procurement case files reviewed by OIOS were provided by ATS to PD with insufficient time to permit on-time positioning. In order to make up for the lack of preparation time, the ITBs were often posted for a short duration, as the requests were submitted to PD, on average, 49 days before the required positioning date. According to PD, such requests should be provided four months in advance of the required positioning date. The aircraft requirements are normally included in the budgets of peacekeeping missions; therefore, the requirements of an existing peacekeeping mission should be known well in advance. The insufficient time provided to vendors to respond to ITBs, coupled with narrowly defined specifications, resulted in a low vendor response rate.

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49. DFS' requests to acquire short-term air charter services in 25 short-term charter procurement case files reviewed by OIOS, as was the case with the procurement of long-term air charter services, were often provided to PD with insufficient time to complete internal processing, resulting in the posting of the ITBs for a shorter than required duration. According to the Movement Control Section (MovCon) of DFS, bid requests for short-term charter services should normally be posted for at least 10 days. OIOS found that the posting duration ranged from 1 to 18 days. Eleven ITBs were posted for six days or less, and the average posting duration was seven days.

(c) Air charter contract provisions need to be revised

(i) Liquidated damages

50. The calculation of liquidated damages was subject to interpretation and was not uniformly applied to all vendors. The final calculation in seven air charter contracts where liquidated damages were sought for late positioning, after lengthy negotiations with vendors, tended to be on the value of the defaulting aircraft, rather than on the total contract value as stipulated in the contract. Also, the Office of Legal Affairs (OLA) opined that the liquidated damages should be based on the value of the defaulting aircraft.

51. Also, the liquidated damages provision for long-term air charter agreements was only applicable to late positioning. The provision does not consider other damages that the UN might incur, such as costs relating to long interruptions in services, for example, in providing substitute aircraft due to maintenance or accidents.

(ii) Insurance

52. The policy for the reimbursement of additional war risk insurance to vendors and the roles and responsibilities of various United Nations entities in handling such payments had not been clearly defined. OIOS' review of eight contracts and 35 invoices pertaining to insurance showed that not all vendors had claimed reimbursement for additional war risk insurance, and for those who claimed, the amounts charged varied significantly. In OIOS' opinion, the current war risk insurance policy and procedures may be open to abuse.

(d) Improper vendor registration process

53. There was no system in place to track and monitor the vendor registration process for air charter vendors. Although PD was not able to provide an accurate report on the number of new vendors registered in 2007 and 2008 for OIOS to evaluate the average vendor registration time, in one case, the total time for registration was 11 months.

54. Also, OIOS' analysis of the vendor database showed that some vendors had the same telephone or fax numbers, indicating that the vendors were related. However, the relationship was not disclosed in the vendor database. The vendor registration process requires that vendors disclose information concerning

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affiliations/partnerships with other vendors. Cases of non-compliance with this requirement should be reviewed by the Vendor Review Committee.

#### **Recommendation 11**

**(11) DFS, in coordination with DM, should ensure that specifications of requirements for air charter services are not narrowly defined by making the solicitation documents sufficiently generic (e.g., providing for an acceptable range of services or quantity of services) to enable additional potential vendors to offer innovative and cost-effective ways of meeting the requirements.**

55. *DFS accepted recommendation 11 stating that it was addressing the narrow definition of air charter requirements by including in the ITBs the related commercial market segment, which provides the range of aircraft capacity and captures a specific niche in the marketplace. Moreover, PD was of the opinion that a shift to the RFP solicitation method will facilitate the implementation of the recommendation, as the RFP would allow a broader definition of requirements and hence provide increased opportunities to potential vendors. Based on responses by DFS and DM, recommendation 11 has been closed.*

#### **Recommendation 12**

**(12) DFS should ensure that requests to procure air charter services are submitted in a timely manner to allow DM to implement an effective procurement process, and for more vendor participation.**

56. *DFS accepted recommendation 12 stating that it proactively responds to aviation support requirements from all field missions in keeping with the Security Council mandated objectives based on the strategic drivers such as airlift requirements, mission aviation concept of operations, mission phase and operational tempo. DFS further stated that it will work in consultation with DM to incorporate sufficient flexibility in the air requisition process in order to respond as required to critical operational needs. Recommendation 12 remains open pending DFS' confirmation that air charter procurement requests are submitted to DM in accordance with the procurement guidelines.*

#### **Recommendation 13**

**(13) DM, in consultation with DFS and OLA, should clarify the provisions in air charter agreements regarding: (a) the application of liquidated damages for prolonged interruptions of services, other than the late positioning of aircraft by the vendor; and (b) whether the calculation of liquidated damages for the late positioning of aircraft applies to all aircraft contracted with a single vendor or only to the specific aircraft that was positioned late.**

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57. *DM accepted recommendation 13 stating that a working group had been created to review several issues in the air charter agreement including liquidated damages and that consultations were ongoing with DFS and OLA to address this issue, amongst others. A draft of the revised air charter agreement is being finalized by PD and will be sent to DFS and OLA for final comments. Recommendation 13 remains open pending the finalization of the revised air charter agreement including a clear policy on application of liquidated damages.*

#### **Recommendation 14**

**(14) DM, in consultation with DFS, should clarify the policy for the reimbursement of additional war risk insurance to vendors to ensure consistency of application and reimbursement to vendors for such claims.**

58. *DM accepted recommendation 14 stating that the working group was reviewing additional war risk insurance provisions and related reimbursement policy. The revised provisions will be sent to the Insurance and Disbursement Service of DM, DFS and OLA for final comments prior to their incorporation in the revised air charter agreement. Recommendation 14 remains open pending completion of the revised air charter agreement including a clear policy on the additional war risk insurance.*

#### **Recommendation 15**

**(15) DM should ensure that vendors disclose information on their relationship with other companies and refer cases of non-compliance with this requirement to the Vendor Review Committee for review and appropriate action.**

59. *DM accepted recommendation 15 stating that the requirement to disclose vendor relationships had been built in the new vendor registration process and registered vendors have been advised to re-register through the UN Global Marketplace website by June 2009. Upon completion of the registration process, PD will have information regarding vendor relationships with other companies and in case of non-compliance, appropriate action will be taken. Based on the action taken by DM, recommendation 15 has been closed.*

### **D. Quality assurance**

#### Suspension of air charter services and monitoring vendors' compliance

60. According to DFS, procedures to enforce compliance with contractual agreements and to ensure air safety include: (a) reviewing of company registration documents; (b) ensuring adequate certification by the certifying authorities; (c) reviewing of bidding documents; (d) conducting arrival inspections; and (d) carrying out periodic performance evaluations. However, in OIOS' opinion, the procedures are not clear regarding the suspension of air charter services or the grounding of aircraft in case of a vendor's unacceptable air safety concerns or non-compliance to the air charter agreement.

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61. OIOS' review found that after a helicopter crash on 3 March 2008, the vendor was suspended and all its aircraft grounded on 13 May 2008, more than two months after the crash, upon the recommendation of the Vendor Review Committee (VRC). The VRC recommendation followed ATS' memorandum of 5 May 2008 advising PD to suspend the technical acceptance of the vendor from the list of LSD approved air carriers on the basis that:

- The air carrier had violated ICAO standards and recommended practices on the state of occurrence requirements by not producing to the country authorities investigating the accident the log book for the six months period prior to the loss of the aircraft;
- There was a series of non-compliance issues with the UN aviation regulatory regime and the terms and conditions of existing contracts; and
- The vendor failed to provide replacement aircraft after an unacceptably long and extended period and further failed to replace the existing air crew as required by the Mission following professional advice on human factor elements.

62. Explaining that the VRC had been approached to re-consider their decision regarding the immediate grounding of the vendor's helicopters due to potential disruption of field missions operations, ATS on 16 May 2009 requested ASU's opinion on whether aviation safety would be compromised if the vendor's contracts with the UN were continued. The ASU responded that it had not received any information or reports from field missions on any serious safety concerns with the vendor that would warrant the immediate grounding of its aircraft.

63. The Board of Inquiry, which was created to investigate the crash, concluded in its 9 September 2008 report that the primary cause of the accident was a hazardous meteorological condition with pilot's error being a contributing factor. The Board also noted certain weaknesses in the quality assurance and air safety functions in the Mission and recommended a number of remedial actions to rectify them.

64. In OIOS' opinion, the flow of procedures/actions by DFS and DM resulting in the Controller's decision to suspend the air carrier were not clear, as prior to the crash, there had been continued instances reported by the field missions where the vendor's helicopters were inadequately equipped and not compliant with UN aviation regulations and air charter agreements. For example, the missions' reports for the period from 2004 to 2008 indicated cases of incomplete first aid and survival kits, inappropriate tie-downs and straps for internal and external cargo, problems with insurance policies, uninstalled VHF/FM radio, improper air carrier certificates, uninstalled tracking devices, etc. PD had issued warnings of suspension to the vendor on various occasions to rectify the issues of non-compliance failure of which the air carrier would be suspended. However, OIOS did not find evidence that DFS or DM timely

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followed up with the vendor on action taken to rectify non-compliance issues within the prescribed period.

#### **Recommendation 16**

**(16) DFS, in coordination with DM, should ensure that cases of non-compliance with contractual obligations are regularly followed up until all cases are satisfactorily corrected.**

65. *DFS accepted recommendation 16 stating that all aircraft are subject to initial inspection and completion of an Aircraft Inspection Report by Aviation Safety and Aviation Section personnel prior to acceptance for operational tasking in field missions. DFS further stated that cases of non-compliance except those affecting the safe operation of the aircraft would be subject to rectification within a specified period under the DFS/DPKO Aviation Quality Assurance Programme. Based on assurance provided by DFS, recommendation 16 has been closed.*

#### Ineffective monitoring of missions' aircraft inspection and assessment reports

66. The ASU maintains the aviation inspections and recommendations database. By memorandum dated 30 March 2006, field missions with air operation components were asked to use this database for entering data on carrier inspections, assessments, incidents and accidents.

67. The Aviation Quality Assurance and Standards Unit (AQASU) is required to review the inspection reports and enter the data into the air carrier database (more commonly known as the QA database), which is an MS Excel spreadsheet with links to supporting files. AQASU is also responsible for following up actions taken to ensure compliance with the contract and correction of shortcomings identified during initial inspections.

68. A review of the QA database indicated that 46 commercial carriers and 13 LOAs were inspected in MONUC, and 74 commercial carriers and 11 LOAs were inspected in UNMIS since 2006. Of the 46 carriers inspected in MONUC and recorded in the database, the status of 17 inspections was shown as "pending" indicating that the inspection reports were not completed and, in some cases, required the submission of additional documents. This pending status goes back to September 2006.

69. AQASU is also required to complete a quality assurance trend analysis and disseminate information from surveillance and monitoring to all involved missions. OIOS, however, could not find any related documentation for this function.

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### Recommendation 17

**(17) DFS should ensure that incomplete or pending aircraft inspection and assessment reports are followed up by the Air Transport Section to effectively perform its responsibilities for noting non-compliance and shortcomings in vendor performance, following up on corrective actions taken, conducting a quality assurance trend analysis and disseminating the results thereof to all missions with air operations component.**

70. *DFS accepted recommendation 17 stating that the issues referred to in inspection and assessment reports are addressed by the aviation quality assurance programme and compliance is observed.* Recommendation 17 remains open pending receipt of evidence that ATS followed up with the field missions on all incomplete aircraft inspection and assessment reports.

### **E. Resource requirement and staff deployment**

#### Staffing levels

71. DFS' air operations are subject to significant variables that impact staffing, management and operations. Under the current support strategy, staff levels are in part a function of several factors including: aircraft, missions, vendors, ITBs, LOAs and contracts. The numbers associated with these factors are variable and are generally higher than recent history. The existing staffing process is not sufficiently dynamic to support changes to ATS staffing requirements, exacerbated by funding priorities and high levels of operational activity.

72. In OIOS' opinion, the workload within ATS appears unmanageable at current staffing levels. For example, ATS cited an inordinately high number of phone calls, e-mails, ITB requisitions/evaluations/contracts, vendor management activities, as well as the requirement to review routine documents for approval and indicated that collectively these activities require a high level of time commitment with insufficient number of staff to address the workload.

73. The authorized staffing level for peacekeeping aviation at Headquarters and in the missions was set at 557 positions. At the time of the audit, the actual staffing level was 511. Two of the vacancies were within ATS. Figure 1 shows the details of the authorized and actual staffing levels.

**Figure 1 - Staffing levels as of May 2008 for the peacekeeping aviation function**

Location	Category/Function	Authorized	Actual
Missions	International -- Professionals	69	57
Mission	International -- Field service	108	94
Mission	International -- General service	16	13
Mission	UNV	70	91
Mission	Local -- National professional officers	14	4
Mission	Local -- National	229	204
HQ	ATS Office of Chief (2 Professionals)	4	4
HQ	ATS QA & Standards (2 Professionals)	4	2
HQ	ATS Management & Contracts (5 Professionals)	7	7
HQ	ATS Planning & Training	3	3
HQ	MovCon* (5.6 Professionals)	8	8
HQ	Safety (5 Professionals)	6	5
HQ	Procurement -- Long-term (4 Professionals)	6	6
HQ	Procurement -- Short-term (3 Professionals)	5	5
Region	Safety (2 Professionals)	2	2
Region	SAOC (3 Professionals)	6	6
<b>Total</b>		<b>557</b>	<b>511</b>

Source: ATS.

\* It is assumed that 80 per cent of MovCon's activity is aviation-related.

74. OIOS obtained information on industry staffing and productivity measures by reviewing and interpreting largely publicly available data for: (a) a large airline; (b) a medium sized airline; and (c) four large helicopter operators. OIOS recognizes that the nature of DFS air operations does not permit direct comparisons with a scheduled airline or a large commercial operator. Where possible, the analysis was made relevant by separating ACMI (aircraft-crew-maintenance-insurance) and non-ACMI staff in order to facilitate comparison with the current ACMI-based charter approach taken by ATS. For example, a typical large fixed wing airline with wide body aircraft would have approximately 31 non-ACMI full-time-equivalent (FTE) staff per aircraft, with most of those staff at airports (29.2 staff per aircraft, as shown in Figure 2 below). The general, administration and finance staffing category is representative of the ATS, PD and some MovCon functions and includes strategic planning, finance, accounting, quality assurance, general/ground safety (not flight safety, as this function is included in flight operations), procurement, and other HQ functions. In this regard, the corresponding staffing level for general, administration and finance is 0.20 FTE per aircraft, or 50 staff for 250 aircraft (the approximate DFS fleet size), as compared to the current aviation staff of approximately 37 positions at UNHQ (ATS, PD and MovCon).

**Figure 2 – Number of staff per aircraft in aviation industry**

Non-ACMI staff category	FTE staff per aircraft
Flight Dispatch and System Operational Centre	1.42
General, administration and finance	0.20
Flight operations	0.14
Airports	29.20
<b>Total</b>	<b>31.00</b>

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75. The above observations and analysis suggest that ATS staffing levels are insufficient to support the current size, tempo and framework of operations. Specific staffing levels should not, however, be extrapolated from this analysis and may only be determined after the development of the peacekeeping aviation strategy with a more detailed analysis of staffing requirements.

#### **Recommendation 18**

**(18) DFS should develop an aviation human resources strategy, including a reassessment of the Air Transport Section's staffing levels, consistent with the peacekeeping aviation strategy.**

76. *DFS accepted recommendation 18 stating that the ATS staffing levels were less than optimal in a substantially increasing level of operations and that the necessary resources would be requested to enhance the efficiency of ATS. Recommendation 18 remains open pending receipt of a copy of the aviation human resources strategy.*

#### High turnover rate of missions' Chief Aviation Officers

77. Since the establishment of UNMIS in 2003, three Chief Aviation Officers (CAVOs) have been appointed to the position and three others served as officer-in-charge. The current CAVO took up his duties in October 2007.

78. The incumbent did not receive a comprehensive briefing or the key documents necessary to understand the history and ongoing tasks for which he is responsible. Consequently, he has had to search for key documents, some of which he missed. For example, he was unaware that a predecessor had prepared the UNMIS Aviation Concept of Operations.

79. The frequent turnover of CAVOs and the lack of control over the hand-over of responsibilities and relevant documentation could result in inefficiencies and lack of continuity in the management of air operations.

#### **Recommendation 19**

**(19) DFS should ensure that the transfer of responsibilities, including the hand-over of pertinent documentation from one Chief Aviation Officer (CAVO) to another, is properly performed to ensure programme continuity. In this regard, DFS should consider giving CAVOs employment contracts for no less than one year.**

80. *DFS accepted recommendation 19 stating that cases of improper handover were rare and all efforts will be made to further minimize their occurrence. Based on DFS' comments, recommendation 19 has been closed.*

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## **F. Safety**

### Need to improve the work of the Aviation Safety Councils

81. The MONUC, UNMIS and UNAMID Aviation Safety Councils (ASC) have not convened frequent meeting to the scope and schedule prescribed by the Aviation Safety Manual. Hence, there is no assurance that safety issues have been identified, recommendations developed or actions taken to mitigate or eliminate air safety risks and other operational issues. Also, OIOS found that senior management did not consistently participate in the ASC meetings.

82. All three missions visited by OIOS during the audit have long outstanding aviation infrastructure deficiencies. These deficiencies have not been solved despite the efforts by the concerned mission staff. In OIOS' opinion, the regular use of the ASC as a forum to discuss and resolve air operations and safety issues would help ensure that these aviation infrastructure deficiencies are regularly brought to the attention of senior managers at the mission and Headquarters.

#### **Recommendation 20**

**(20) DFS should ensure that MONUC, UNMIS and UNAMID organize the work of their Aviation Safety Councils (ASC) in accordance with the requirements of the Aviation Safety Manual, e.g., as regards the frequency of ASC meetings and the attendance of senior managers in these meetings.**

83. *DFS accepted recommendation 20 stating that similar observations on the frequency of the missions' ASC meetings were made during Aviation Safety Assistance visits to missions. Aviation Safety Section/LSD is currently in the process of reviewing and revising the DFS Aviation Safety Manual to address the required frequency of these meetings and include the possibility of conducting ASC meetings on specific issues. Recommendation 20 remains open pending the issuance of DFS' instructions on the conduct and frequency of ASC meetings.*

### Qualification of Aviation Safety Officers

84. The availability of appropriately qualified Aviation Safety Officers is an issue for all three missions visited by OIOS during the audit. The majority of the available Aviation Safety Officers are qualified as fixed wing pilots and few have a helicopter background despite the preponderance of rotary wing operations in all three missions.

85. MONUC currently utilizes 69 aircraft, of which 29 are fixed wing and 40 are rotary wing. More than 55 per cent of the flying hours were accomplished using helicopters. Of the eight Aviation Safety Officers currently serving in MONUC, there is only one who has significant rotary wing experience. During the field visit, one staff member was on emergency leave and two were on scheduled leave. Five Aviation Safety Officers were left to monitor operations of

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69 aircraft in a high risk operating area, the size of Europe. According to the MONUC's CAVO, the shortage of qualified Aviation Safety Officers was a typical situation since the inception of the mission. UNMIS has also a similar shortage of Aviation Safety Officers.

86. DFS informed OIOS that the Aviation Safety Officers did not require experience in either fixed or rotary wing as the role required specialists rather than technical staff as would have been the case in an airline industry. However, there was a need for recruitment of sufficient number of staff in aviation safety.

#### **Recommendation 21**

**(21) DFS should ensure that they recruit a sufficient number of appropriately qualified Aviation Safety Officers to ensure that air safety issues are adequately addressed.**

87. *DFS accepted recommendation 21 stating that a significant number of aviation safety vacancies were filled in 2008 and the remaining vacant posts were under recruitment. Based on assurance provided by DFS, recommendation 21 has been closed.*

#### Lack of emergency locator transmitters

88. Some LOA military helicopters were deployed in the mission operating area without a functioning emergency locator transmitter (ELT). For example, the military aircrafts Mi-17 helicopters located in Bukavu, DRC did not have a functioning ELT. In OIOS' opinion, lack of functioning ELT in aircraft makes it difficult to conduct search and rescue operations, if an aircraft crashes, increasing a risk for survivors, especially in a challenging environment such as in the DRC.

#### **Recommendation 22**

**(22) DFS should ensure that all troop contributing countries-operated aircrafts deployed in missions are equipped with functioning emergency locator transmitters.**

89. *DFS concurred with recommendation 22 in principle stating that the requirement for an ELT is clearly established in all DPKO/DFS contracts and aircraft are inspected for compliance upon their arrival in the missions. Member States are expected to equip the military aircrafts with ELT on the request of the Organization. However, some of these aircraft are acquired under LOAs after a process of negotiations and these provisions at times cannot be strictly enforced. Recommendation 22 remains open pending confirmation that all troop contributing countries-operated aircrafts are equipped with functioning ELTs.*

## **V. ACKNOWLEDGEMENT**

90. We wish to express our appreciation to the Management and staff of DFS, DM, MONUC, UNMIS and UNAMID for the assistance and cooperation extended to the auditors during this assignment.

**STATUS OF AUDIT RECOMMENDATIONS**  
**Assignment No. AP2008/600/03 – Audit of management of peacekeeping air operations**

Recom. no.	Recommendation	Risk category	Risk rating	C/O <sup>1</sup>	Actions needed to close recommendation	Implementation date <sup>2</sup>
1	DFS should consolidate its strategic initiatives that are included in various policy documents and in the Aviation Manual into an integrated, comprehensive peacekeeping aviation strategy.	Strategy	High	O	Provision by DFS of a copy of the formal integrated peacekeeping aviation strategy.	February 2010
2	DFS should implement a formal comprehensive aviation performance management framework to ensure that air operations are effectively and efficiently managed and aviation performance is reported to DFS senior management on a regular basis.	Governance	High	O	Pending the implementation of a comprehensive aviation performance management framework.	March 2010
3	DFS should strengthen the planning function within the Aviation Transport Section to improve the planning of air operations and the monitoring of related projects in field missions.	Strategy	Medium	O	Confirmation that the planning and monitoring functions within ATS are strengthened.	December 2009
4	DFS should intensify collaboration with the World Food Programme through the Strategic Aviation Operations Centre and cooperate with other United Nations agencies and organizations operating in a country regarding the management of air operations to achieve greater benefits from sharing best practices and lessons learned.	Operational	Medium	C	Action completed.	Implemented
5	DFS should consider extending the Eastern and Western Africa Reserve Fleet concept by centralizing the tasking authority for the remaining large fixed wing assets and unique rotary wing assets such as the heavy lift Mi-26 helicopters to optimize air asset utilization.	Operational	Medium	C	Action completed.	Implemented
6	DFS should establish the utilization and load factor performance measures for applicable aircrafts and report the performance results to	Operational	Medium	O	Receipt of evidence that the utilization and load factor performance targets are established.	December 2009

Recom. no.	Recommendation	Risk category	Risk rating	C/O <sup>1</sup>	Actions needed to close recommendation	Implementation date <sup>2</sup>
7	senior management on a regular basis. DFS should implement an aviation fuel conservation programme with established fuel consumption reduction targets for all types of aircraft.	Operational	Medium	O	Pending implementation of a fuel conservation programme with fuel consumption reduction targets for all aircrafts.	4 <sup>th</sup> Qtr 2009
8	DFS should ensure that MONUC, UNMIS and UNAMID take urgent action on building or repairing all infrastructures necessary to support a safe and effective aviation programme.	Compliance	High	O	Pending the commencement of key infrastructure projects in MONUC, UNMIS and UNAMID.	October 2009
9	DM, in coordination with DFS, should develop an acquisition strategy that matches the size and scope of the requirements for peacekeeping air charter services, and address the risks and challenges associated with maintaining a high number of air charter contracts and aircraft types.	Strategy	High	O	Receipt of a copy of the air charter acquisition strategy developed by DM.	Not provided
10	DM should evaluate the suitability of the currently used invitation to bid solicitation method and assess the feasibility of using the request for proposal method for the procurement of air charter services.	Operational	Medium	O	Provision of the outcome of the ongoing evaluation on the best method for solicitation of air charter services.	3 <sup>rd</sup> Qtr 2009
11	DFS, in coordination with DM, should ensure that specifications of requirements for air charter services are not narrowly defined by making the solicitation documents sufficiently generic (e.g., providing for an acceptable range of services or quantity of services) to enable additional potential vendors to offer innovative and cost-effective ways of meeting the requirements.	Operational	High	C	Action completed.	Implemented
12	DFS should ensure that requests to procure air charter services are submitted in a timely manner to allow DM to implement an effective procurement process, and for more vendor participation.	Operational	High	O	Pending confirmation that requests to DM for procurement of air charter services are submitted in accordance with procurement guidelines.	December 2009
13	DM, in consultation with DFS and OLA, should clarify the provisions in air charter agreements	Operational	Medium	O	Finalization of the revised air charter agreement including a clear policy on	August 2009

Recom. no.	Recommendation	Risk category	Risk rating	C/O <sup>1</sup>	Actions needed to close recommendation	Implementation date <sup>2</sup>
	regarding: (a) the application of liquidated damages for prolonged interruptions of services, other than the late positioning of aircraft by the vendor; and (b) whether the calculation of liquidated damages for the late positioning of aircraft applies to all aircraft contracted with a single vendor or only to the specific aircraft that was positioned late.				application of liquidated damages.	
14	DM, in consultation with DFS, should clarify the policy for the reimbursement of additional war risk insurance to vendors to ensure consistency of application and reimbursement to vendors for such claims.	Operational	Medium	O	Completion of the revised air charter agreement including a clear policy on the additional war risk insurance.	August 2009
15	DM should ensure that vendors disclose information on their relationship with other companies and refer cases of non-compliance with this requirement to the Vendor Review Committee for review and appropriate action.	Operational	High	C	Action completed.	Implemented
16	DFS, in coordination with DM, should ensure that cases of non-compliance with contractual obligations are regularly followed up until all cases are satisfactorily corrected.	Governance	High	C	Action completed.	Implemented
17	DFS should ensure that incomplete or pending aircraft inspection and assessment reports are followed up by the Air Transport Section to effectively perform its responsibilities for noting non-compliance and shortcomings in vendor performance, following up on corrective actions taken, conducting a quality assurance trend analysis and disseminating the results thereof to all missions with air operations component.	Operational	Medium	O	Pending receipt of evidence that ATS followed up with the field missions on all incomplete aircraft inspection and assessment reports.	December 2009
18	DFS should develop an aviation human resources strategy, including a reassessment of the Air Transport Section's staffing levels, consistent with the peacekeeping aviation strategy.	Human Resources	Medium	O	Pending receipt of a copy of the aviation human resources strategy.	October 2009

Recom. no.	Recommendation	Risk category	Risk rating	C/O <sup>1</sup>	Actions needed to close recommendation	Implementation date <sup>2</sup>
19	DFS should ensure that the transfer of responsibilities, including the hand-over of pertinent documentation from one Chief Aviation Officer (CAVO) to another, is properly performed to ensure programme continuity. In this regard, DFS should consider giving CAVOs employment contracts for no less than one year.	Operational	Medium	C	Action completed.	Implemented
20	DFS should ensure that MONUC, UNMIS and UNAMID organize the work of their Aviation Safety Councils (ASC) in accordance with the requirements of the Aviation Safety Manual, e.g., as regards the frequency of ASC meetings and the attendance of senior managers in these meetings.	Compliance	High	O	Issuance of DFS' instructions on the conduct and frequency of ASC meetings.	3 <sup>rd</sup> Qtr 2009
21	DFS should ensure that they recruit a sufficient number of appropriately qualified Aviation Safety Officers to ensure that air safety issues are adequately addressed.	Human Resources	Medium	C	Action completed.	Implemented
22	DFS should ensure that all troop contributing countries-operated aircrafts deployed in missions are equipped with functioning emergency locator transmitters.	Compliance	Medium	O	Confirmation that all troop contributing countries-operated aircrafts are equipped with ELT.	October 2009

1. C = closed, O = open

2. Date provided by DFS/ DM in response to recommendations.