

**ENVIRONMENTAL AND SOCIAL
MANAGEMENT PLAN
SUMMARY**

**DAC Aviation Group
(Multinational)**

14 May 2009

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Project Title: DAC Aviation Group
Project Number: P-Z1-DA0-005
Department: OPSM
Country: Multinational
Division: OPSM.3

a) Brief description of the project and key environmental and social components

The DAC Aviation Group (“DAC” or the “Group”) provides air charter services for the World Food Program (“WFP”) in Sudan and for the European Community Humanitarian Aid Office (“ECHO”) in the DRC, in support of their humanitarian relief operations.

Trident Enterprises Ltd. (“TEL”), a subsidiary of DAC, is the asset holding company of the Group. TEL leases Bombardier turboprop aircrafts to a subsidiary of the Group, CMC Aviation Ltd. (“CMC”), which has hangars and facilities at the Wilson Airport in Nairobi, Kenya.

Due to increased demand for passenger capacity by WFP, this has created an opportunity to increase the number of aircraft available to the Nairobi-based fleet. As such, the Project involves assisting TEL to finance 1) the purchase and operation of a single additional used aircraft (Bombardier Dash 8 Q400, a 76-seater turbo-prop aircraft) along with spares and ground support equipment. The acquisition of the 8-year-old aircraft would lower the average age of TEL’s Dash 8 fleet which is 16.6 years at present; 2) to improve the Group’s safety, maintenance and corporate governance standards to a level satisfactory to WFP and International Finance Corporation (IFC). The cost of acquiring the aircraft and equipment and associated trainings and checks is estimated at \$15.0 million.

CMC has existing hangars and maintenance facilities, hence there will be no additional physical footprint associated with the Project. The Group already owns and operates a fleet of other Dash 8 aircraft with known operating and safety risks.

Based on the due-diligence undertaken by IFC and its Environmental and Social Review Procedures, this project has been recommended as a Category B project since it is expected to result in a limited number of environmental and social impacts which can be avoided or mitigated by adhering to generally accepted industry standards and requirements. In the spirit of Paris Declaration and the alignment of ESIA process between lending institutions, it is suggested that the Bank’s, in accordance with its Environmental and Social Assessment Procedures, classify this project as Category 2.

b) Major environmental and social impacts

As indicated above, the Project is expected to result in a limited number of environmental and social impacts which can be avoided or mitigated by adhering to generally accepted industry standards and requirements.

The company commissions regular environmental, health and safety audits, as per Kenya’s Environmental Management and Coordination Act (EMCA, 1999) and the Environmental (Impact Assessment and Audit) Regulations of 2003, and has an Environmental Management Plan (EMP) which is updated after each annual audit. CMC is also subject to regular World Food Program (United Nations) Aviation Safety Group audits.

CMC has a staff complement of 164 persons based at Wilson Airport, and active union members (Transport and Allied Workers Union); no labor-related issues were identified. Wastes are generally well managed and few hazardous wastes are generated (mostly used oil and batteries); these are sold to vendors

for recycling. Noise has not been identified as a major issue. Since CMC has no engine test room and engine testing runs have been moved to the other side of the airport at a location removed from habitation. The company uses a small number of private security personnel, none of whom are armed.

The Dash Q400 series had encountered some issues with landing gear but the manufacturer, Bombardier, and the landing gear provider, B.F. Goodrich, have since upgraded the landing gear and replaced the necessary parts in all the aircrafts. Hence, there are no specific safety issues linked to the aircraft being financed, which will shortly undergo pre-purchase inspections.

Applicable Requirements. This Project is subject to the Bank's Environmental and Social Policies and cross-cutting issues (gender, poverty, public participation, HIV/AIDS, etc.) and the IFC's Performance Standards and applicable Environmental, Health and Safety (EHS) Guidelines.

Based on IFC's environmental and social due diligence, the proposed Project will have impacts which must be managed in a manner consistent with the following Performance Standards:

- PS 1: Social & Environmental Assessment and Management Systems
- PS 2: Labour & Working Conditions
- PS 3: Pollution Prevention & Abatement
- PS 4: Community Health, Safety & Security

PS 5: Land Acquisition and Involuntary Resettlement, does not apply because no land is being acquired as part of this project. As a result, there are no biodiversity impacts either (PS 6), nor cultural heritage impacts (PS 8). No indigenous people will be affected by this project, which involves the addition of a single aircraft to an existing fleet; hence PS 7 (Indigenous Peoples) does not apply.

c) **Enhancement and mitigation program**

PS 1: Social and Environmental Assessment and Management Systems

The purchase of the new aircraft does not require an Environmental Impact Assessment (EIA) under Kenyan law. However, CMC Aviation is *required to conduct annual environmental audits of its facilities at Wilson Airport* and submit these to the National Environment Management Agency (NEMA). The company has been commissioning a third part to do these audits since 2004, with the most recent audit having been compiled for 2008 and received by NEMA in March 2009. *Each audit contains a brief Environmental Management Plan (EMP), stipulating actions that need to be taken and associated timeframes.* In addition to conducting its own annual environmental audits, *CMC Aviation is subject to regular World Food Program (United Nations) Aviation Safety Group audits, which cover a range of issues such as safety, adequacy of manuals, staff training levels and experience of staff in dealing with high risk activities.* As part of this Project, CMC will *formalize the annual audit and environmental management plan process into a simple environmental management system* specifying impacts, management responsibilities, training, monitoring and reporting. The company has developed a series of manuals covering operational procedures, safety, security, emergency response, maintenance control, cabin crew procedures, survival, quality and aircraft operations and provides training to the relevant staff members on the content of these manuals.

- PS 2: Labor and Working Conditions

CMC Aviation has a comprehensive *Staff Policies and Procedures manual* which is provided to staff members on joining. This document covers company requirements and provisions relating to a range of human resources issues including company objectives, ethics, prohibition of sexual / psychological harassment, termination procedures, compensation processes, leave and vacation entitlements and

procedures and so forth. The company has a permanent workforce of 164 persons based at Wilson Airport in Nairobi. The company does not engage in child or forced labour. A proportion of the staff is unionized and belongs to the Transport and Allied Workers Union (TAWU).

Occupational health and safety management is guided by the *Safety Manual* and subject to regular audits by the World Food Program. Ground safety during aircraft servicing and cargo handling is the responsibility of the Hangar Floor Supervisor. An *Occupational Safety and Health Committee* has been formed recently to comply with Kenyan law and the recommendations of the most recent environmental audit. The company is required to ensure that staff members are provided with appropriate health and safety training, in accordance with the Directorate of Occupational Health & Safety Services in Kenya. This training needs to cover safety and health management, occupational safety and accidents, occupational hygiene, occupational health (diseases, first aid, stress and HIV-AIDS) and electrical, plant, fire & chemical safety. *Medical examinations are conducted annually* for certain categories of staff, i.e. those exposed to risks. Special training is provided to cargo handling staff in order to manage potentially dangerous cargos. Personnel protective equipment is provided to all staff working in occupations or locations requiring such protection.

- PS 3: Pollution Prevention and Abatement

CMC Aviation sources its water from a borehole at Wilson Airport. Power is sourced from the national electricity company. The main source of waste from aircraft servicing and maintenance is used oil, which is siphoned into drums and collected by a third party vendor for recycling. Sanitary waste and aircraft wash down are disposed of into the municipal sewerage system. Sulphuric acid is used for the filling and charging of lead-acid batteries. Acid is purchased in 20 L containers and stored in the battery shop; when a battery fails, it is tested and removed from service. Acid is not drained, and the battery is sold to vendors for recycling. No aviation fuel is stored on CMC Aviation's premises, and no organic solvents or glycols are in use. All significant aircraft maintenance and repair is carried out at Wilson Airport in Nairobi. Occasionally, when malfunctions occur in remote locations such as DRC, minor repairs are conducted on site (at local airports) in order to enable the aircraft to return to Nairobi. However this type of repair typically does not involve disposal of used oil or other potentially hazardous substances.

There is no engine test room at CMC Aviation. Full power engine runs used to be conducted on the apron in front of the aircraft hangars, but following the findings of an environmental audit relating to noise levels, these runs have been relocated to a designated area located on the southern end of Wilson Airport, far from habitation. The new Bombardier Dash 8 Q400 aircraft is viewed as a highly desirable aircraft in the 70-seater market, given its fuel efficiency (30% more fuel efficient compared to regional jets), quiet operation (which enables it to land in noise sensitive airports like London's City Airport), mid-range (2500 km) and relatively short take-off and landing requirements (1.4 km).

As mentioned previously, CMC Aviation has an *Emergency Preparedness and Response manual* stipulating what measures are required to be put in place in the case of various types of land-based and airborne emergencies. The company periodically conducts fire training for its staff, and holds fire drills annually. There is a *Fire Policy*, 'no smoking' signs are displayed in workshop areas, fire fighting equipment is installed and equipment points are clearly labeled, first aid kits are available in key locations, and eye wash points have been set up where appropriate (e.g. in the battery charging room).

- PS 4: Community Health, Safety and Security

The Group has a proven safety record and has been providing air charter services for the past 17 years without any loss of life or major injuries resulting from its operations. In addition, DAC Aviation is an authorized Maintenance Repair Overhaul (MRO) agency with facilities in Canada and Kenya. It is certified by Transport Canada and Kenyan Civil Aviation Authority; the Kenyan facility has recently

obtained certification to provide C-checks for Dash 8 aircraft. The results of the World Food Program Aviation Safety Group's most recent audit of CMC Aviation shows that there have been significant improvements in aircraft maintenance and safety scores, although the company has not yet reached maximum scores on these grounds (some of IFC's investment will be utilized to improve the scores). There have been no major accidents, injuries, fires or explosions associated with the company or its premises.

CMC Aviation will conduct a pre-purchase inspection of the Dash 8 Q400 aircraft to ensure that it meets the relevant ICAO, EASA, KCAA requirements. In addition, an independent technical consultant commissioned by the IFC will perform an appropriate desk review i.e. evaluations for three aircraft including a review of the maintenance records and the airports they fly to.

The company employs four unarmed security personnel at its premises at Wilson Airport, from a private firm (Security Guard Services Ltd). In DRC, unarmed guards from KK Security protect company property.

d) Monitoring program and complementary initiatives

In accordance with the Kenya Environmental Management and Coordination Act and the Environmental (Impact Assessment and Audit) Regulations of 2003, CMC Aviation is required to conduct annual environmental audits of its facilities at Wilson Airport and submit these to the National Environment Management Agency (NEMA). Each audit contains a brief Environmental Management Plan (EMP).

As part of this Project, CMC will formalize the annual audit and environmental management plan process into a simple environmental management system specifying impacts, management responsibilities, training, monitoring and reporting. The company has developed a series of manuals covering operational procedures, safety, security, emergency response, maintenance control, cabin crew procedures, survival, quality and aircraft operations and provides training to the relevant staff members on the content of these manuals.

e) Institutional arrangements and capacity building requirements

There are no specific institutional arrangements required for the effective implementation of the ESMP. CMC will be entirely accountable for its implementation under the Kenya's law. It will nevertheless receive Technical Assistance under this Project to better formalize the annual audit and EMP into a simple EMS.

Anticipated development impacts of the Project. Extraordinarily poor and unsafe road networks and highly inadequate rail transport systems have made it difficult, if not impossible for humanitarian aid organizations to get aid effectively to where it is most needed. In addition, in conflict-ridden regions such as Eastern DRC and DRC/Southern Sudan, organizations like WFP and ECHO have resorted to using air transportation for the movement of people and sometimes cargo in the region. Even though roads may exist in some areas, air transportation provides safety and efficiency, as well as quick response capabilities to these organizations in emergency situations. The proposed Project has a high development impact as it supports a private airline company in Kenya, an ADF country, which services humanitarian relief organizations in other AFD countries where they are critically needed. The greatest impact of the Project is that it allows some of the World's leading humanitarian organizations deliver aid where it is most needed.

WFP provides food, on average, to 90 million people per year, 58 million of whom are children. Since it was founded in 1963, WFP has fed more than 1.4 billion of the world's poorest people, including victims of conflict, natural disasters and economic failure and invested more than \$30 billion in development and emergency relief. In 2007, WFP fed 86.1 million people in 80 countries, including most of the world's refugees and internally displaced people in countries such as Sudan, Ethiopia and Kenya, which continue to be its largest recipient countries. In 2007, WFP's Sudan operation is estimated to have required \$685 million to provide food assistance to 5.5 million people (2.8 million in Darfur alone).

The European Community Humanitarian aid Office ("ECHO") focuses on getting much-needed goods and services to crisis zones fast. Goods may include essential supplies, specific foodstuffs, medical equipment, medicines and fuel. Services may include medical teams, water purification teams and logistical support. Since 1992, ECHO has funded humanitarian aid in more than 85 countries. Its grants (about €700 million per year) cover emergency aid, food aid and aid to refugees and displaced persons.

Alignment with Bank's Strategy. The proposed Project is a strong fit with the AfDB strategy as it allows the Bank to bring its private sector focus and experience to improve transportation infrastructure. OPSM's proposed financing of the Project will allow it to expand its logistic support to WFP and ECHO so that they can provide much-needed humanitarian relief in countries such as Sudan and DRC (also ADF countries).

IFC's and AfDB's role and additionality in this Project include:

1. Provision of long-term financing for the project which the company is finding difficulties to mobilize at the present time from commercial sources on reasonable terms given the tightness in financial markets in recent months;
2. Supporting global aid-providing institutions such as WFP and ECHO, allowing them to bring much-needed humanitarian relief into some of the most distressed and needy countries in the world;
3. Working with DAC so that it maintains WFP's highest safety classification (Category A) at all times.

Without IFC and AfDB's involvement, DAC has indicated that it would find it difficult to secure sufficient financing in a timely manner and potentially lose the opportunity to acquire the aircraft and thus expand its business. In addition, by helping DAC meet and maintain WFP Category A status, IFC and AfDB would create a situation where all parties, DAC, WFP, IFC, AfDB and the needy recipients of aid in desperate countries like Sudan and DRC, would benefit.

f) Public consultations and disclosure requirements

There has not been any specific consultation process for this Project. However, as stated above, public concerns are being systematically mainstreamed into the EMP of the DAC Aviation Group (e.g. following the findings of an environmental audit relating to noise levels, the full power engine runs have been relocated to a designed area located on the southern end of Wilson Airport, far from any habitation).

IFC's project appraisal team visited the CMC Aviation (operating company) site at Wilson Airport in Nairobi and met with management representatives.

g) Estimated costs

The financial resources required for the undertaking of the annual audit under Kenya's law and the implementation of the EMP is covered within the operational budget of the Client. The costs for CMC to formalize the annual audit and environmental management plan process into a simple environmental management system specifying impacts, management responsibilities, training, monitoring and reporting will be initially be covered by the Project and then by CMC's operational budget.

h) Implementation schedule and reporting

The implementation of the corporate EMS will be throughout the Project's duration and company's on-going operations.

Reference:

The scope of the project review against IFC's Performance Standards included assessment of Sponsor's management capacity and review of the following documentation:

- Safety trends 2005-April 2008
- Incident reports 2005-2008
- CMC Aviation – DAC Group Staff Policies and Procedures, August 2007
- Operations manual
- Safety manual
- Security manual
- World Food Program Aviation Safety Group Operator Risk Evaluation Audit Report, May-June 2008
- Internal Safety Department Audit Report, August 2008
- Report on Self Environmental Audit of CMC Workshop Operations at Wilson Airport, December 2007
- Response to an IFC questionnaire on environmental, social, safety and personnel issues

Note: the preparation of this AfDB's Environmental and Social Management Plan's Summary has been entirely developed using IFC's published Summary of Proposed Investment and IFC's published Environmental and Social Review Summary.