


**ETHIOPIAN CIVIL AVIATION AUTHORITY
AEROFROME SAFETY AND STANDARD
DIRECTORET**

**ENVIRONMENTAL IMPACT ASSESSMENT for
AIRPORT DEVELOPMENT PROJECT**

2/23/2015

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	ETHIOPIAN CIVIL AVIATION AUTHORITY AERODROME SAFETY AND STANDARDS DIRECTORATE	REF.ECAA-AC-AGA032/2015
	Environmental Impact Assessment for Airport Development Project	Rev. 0 Date: April, 2015

PREAMBLE

WHEREAS, it is desirable to consolidate and modernize the aviation Advisory Circular to bring them to international standards,

WHEREAS, it is important to set the Advisory Circular as to how the regulatory, administrative, technical and supervisory activities of the Authority shall be performed in the one hand and setting the duties, obligations and standards that shall be respected by operators and aviation personnel,

WHEREAS, it is necessary, to provide detailed Advisory Circular for the administration of license, certification, investigation and enforcement of aviation laws.

NOW THEREBY, The Authority under its power given by Article 92/2 of the Civil Aviation Proclamation No. 616/2008 issued the following Advisory Circular.

1. SHORT TITLE

This Advisory Circular may be cited as "Advisory Circular for Environmental Impact Assessment for Airport Development Project.NO.ECAA-AC-AGA032/2015

2. REPEAL AND INAPPLICABLE LAWS

No law, directive, order or practice shall, in so far as it is inconsistent with this Advisory Circular, be applicable with respect to matters provided for by this Advisory Circular.

3. EFFECTIVE DATE

This Advisory Circular shall come into force as of April/ 2015.



Done at Addis Ababa, April, 2015


Wosenyetch Hunegnaw (Col.)
Director General

CHAPTER ONE

ENVIRONMENTAL IMPACT ASSESSMENT

SCOPE

This document is applicable to any civil aerodrome development projects in Ethiopia.

Purpose

The aim of Environmental Impact Assessment is to protect the environment by ensuring that a local planning authority when deciding whether to grant planning permission for a project, which is likely to have significant effects on the environment, does so in the full knowledge of the likely significant effects, and takes this into account in the decision making process. The regulations set out a procedure for identifying those projects, which should be subject to an Environmental Impact Assessment, and for assessing, consulting and coming to a decision on those projects, which are likely to have significant environmental effects.

ENVIRONMENTAL IMPACT ASSESSMENT

An environmental impact assessment provides a systematic approach for identifying the environmental effects of proposed projects in order to allow for, where necessary, the modification of plans and incorporation of measures to minimize or eliminate any potential adverse effects on the environment.

The environmental impact assessment report should contain the details that are needed to make informed decisions with respect to the environment. This is achieved by:

- a) Identifying all project components for refining the scope of the project and the scope of the environmental assessment;
- b) Carrying out a detailed and organized environmental screening of the project based on specific terms of reference and any approved modification/additions; and
- c) Presenting the process and results in a screening report suitable for public scrutiny and decision making.

The environmental assessment process should include project description, environmental description, project/environment interaction analysis and its impact, and mitigation measures. A final report should be prepared which details all the phases and results of the environmental

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assessment. The environmental impact assessment report must be clear, concise and suitable for public Scrutiny, if required.

It is necessary to develop a description of both the physical and social environment, which includes:

- a) Context, study area, and site plan;
- b) Definition of the items in which are to be addressed in the assessment;
- c) Physical environment:
 - Physiographic and local topography
 - soil
 - landscaping
 - surface water/drainage basins
 - groundwater/aquifer
 - air quality
 - atmosphere/weather
 - vegetation/crops
 - Terrestrial species/habitat
 - Aquatic species/habitat
 - Avifauna migration routes, and
 - Ecological systems
- d) Social environment:
 - land use
 - light emissions
 - impact on the community
 - Recreational uses
 - Aesthetics
 - Employment
 - Economic
 - Municipal services
 - noise
 - Archaeological factors/heritage, and
 - planning framework

Project-environment interaction analysis requires identification of the environmental components listed in which may be affected by each of the project Construction and/or operational activities. A level one matrix should be used to identify the interaction between activities and general categories of environmental components involved.

The identification of possible impact points is followed by an impact analysis. This will require a general description of each potential impact, the determination of Valued ecosystem components, and the prediction and evaluation of impacts.

Specifically, the potential effects of the proposed activities on the environmental components should be described. Any particular concerns of the public should be Noted. Through further detailed analysis and consideration of mitigation measures, impact predictions regarding specific project-environment interactions should be developed.

Ultimately, the environmental assessment should provide clear projections regarding the nature and type of impact. The assessment should conclude by summarizing decisions regarding the environmental impacts of the project, the specific mitigating measures and monitoring requirements. A recommended environmental assessment decision should be provided, reflecting the options selected among those presented.

The environmental assessment report should be organized in such a manner that information (procedures, findings, etc.) for each of the key stages of the assessment is presented. A table of contents with major headings similar to the following would be appropriate:

- Name of the proposal
- Description of project activities
- Description of the environment
- Environmental effects (including any cumulative environmental effects)
- Proposed mitigation measures
- Determination of significance
- Expert government agencies consulted (expert help, if required)
- Public consultation (including methods and results, if required)
- Approximate date of implementation
- Decision and rationale
- Consultant/expert contact (name, title, and address)

✓ EPA LICENSE

A follow-up programme should detail the monitoring programmes required to evaluate the effectiveness of the mitigation measures as well as to determine the accuracy of the environmental assessment. This programme is not always required for every project. The decision maker should identify and implement a follow-up programme if one of the following situations occurs:

- The project involves new or unproven technology;
- The project involves new or unproven mitigation measures;
- The assessment was based on a new assessment technique or model, or there is some uncertainty about the assessment's conclusion.

CHAPTER TWO

ENVIRONMENTAL MANAGEMENT

Environmental Management Activities

The environmental management activities of an airport can be divided into three basic categories:

- Environmental awareness,
- Planning and monitoring, and
- Remedial measures.

The objective of the *environmental awareness* programme is to promote increased environmental consciousness and to make individuals aware of their own environmental protection responsibilities, both in decision-making and in the day-to-day work of the airport. This is accomplished primarily through employee education, training and incentives.

Most of the environmental activities at airports involve *planning and monitoring*, including:

- Environmental assessments;
- Monitoring and compliance;
- Environmental audits, where necessary; and
- Environmental emergency contingency plans.

The environmental assessment process has proven to be an important part of the project design procedures. Potential environmental impacts can be identified before they occur and before irrevocable decisions on the design of a project are made. Mitigation of environmental impacts can and should be made an integral part of the planning process.

Monitoring and compliance programmes assess air quality, water quality, soil and ground water quality, noise levels, etc. These programmes are designed to detect developing problems in the early stage before environmental impacts become significant and to identify the source of the problem.

Periodic inspections should be undertaken in order to provide a thorough assessment of the environmental implications of operations and management practices at a given point in time and to determine the degree of compliance with applicable regulations, guidelines and codes of practice. The inspections are used to assess whether or not the monitoring and compliance programmes are functioning properly and to identify any problems not previously detected. They

provide the basis for action plans. In addition, such inspections are valuable tools for identifying opportunities for enhancing environmental management practices as a whole.

Although the ultimate goal of a proactive environmental strategy is to minimize the creation of environmental problems, in the interim, there is a need for *remedial measures* to correct situations resulting from material handling and management practices of the past.

Environmental Management System ISO 14000 and EMS

Organizations like airports are becoming more concerned about achieving and demonstrating sound environmental performance by controlling the impact of their activities, products or services on the environment, taking into account their environmental policy and objectives. Meanwhile, legislation is more stringent, economic policies are developed to foster environmental protection, and there is a growing awareness of environmental matters among the public and stakeholders.

These changing conditions have led several organizations to carry out environmental reviews or audits to assess their environmental performance. To be effective, these reviews have to be conducted within a structured management system. For this purpose, the ISO 14000 Standard provides organizations with the elements of an effective environmental management system, which can be integrated with other management requirements, to assist them in achieving their environmental and economic goals.

The Environmental Management System known as EMS (ISO 14001, 1996) is part of the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy. EMS is seen as the best method to incorporate environmental management into all levels of corporate operations and decision-making processes.

Some of the benefits of implementing an EMS programme include:

- The long-term economic benefit of balancing and integrating economic and environmental interests;
- Reduced costs associated with third party audits;
- enhanced compliance with environmental legislation;
- Competitive advantage with customers who prefer or require ISO 14001 certification;
- Consolidation of all environmental programmes into one coherent system; and
- increased flexibility to changing circumstances.

Airports in general have an obligation to protect the physical environment by evaluating the impacts of their policies and regulatory decisions on the environment and by promoting and

meeting environmental standards while serving the public to optimal satisfaction and safety. By adopting ISO 14000 Standards and Implementing an EMS, it is expected that airports will make a major push towards achieving environmental standards and objectives.