



ICAO

Circular 351

Community Engagement for Aviation Environmental Management



Approved by and published under the authority of the Secretary General

INTERNATIONAL CIVIL AVIATION ORGANIZATION



Documents

Document Sharing Hub



| ICAO

Circular 351

Community Engagement for Aviation Environmental Management

Approved by and published under the authority of the Secretary General

INTERNATIONAL CIVIL AVIATION ORGANIZATION



Documents

Document Sharing Hub

Published in separate English, Arabic, Chinese, French, Russian
and Spanish editions by the
INTERNATIONAL CIVIL AVIATION ORGANIZATION
999 Robert-Bourassa Boulevard, Montréal, Quebec, Canada H3C 5H7

For ordering information and for a complete listing of sales agents
and booksellers, please go to the ICAO website at www.icao.int

Cir 351, *Community Engagement for Aviation Environmental Management*

Order Number: CIR 351

ISBN 978-92-9258-264-7

© ICAO 2017

All rights reserved. No part of this publication may be reproduced, stored in a
retrieval system or transmitted in any form or by any means, without prior
permission in writing from the International Civil Aviation Organization.



FOREWORD

This circular provides an overview of current and recent practices in the work of aviation stakeholders in engaging both with communities near airports and with the wider community.

The target audience for the circular includes States and aviation stakeholders such as airport operators, air navigation service providers, aircraft operators, environmental agencies and other government bodies, and other interested parties.

The circular is not intended to be the basis for regulatory action. It describes the case studies that were submitted and summarizes some of the lessons learned and good practices.

This circular was developed by the ICAO Committee on Aviation Environmental Protection (CAEP), and was based on responses to a survey questionnaire. Most of the case studies were submitted by airport operators, although in almost every case many other aviation stakeholders were also involved. Most of the engagement directly addressed community concerns about environmental matters, especially noise near airports.

The Executive Summary that follows provides a brief summary of the contents of this circular.

Comments from States, particularly regarding the application and usefulness of the circular, would be appreciated. These comments will be taken into account in the preparation of subsequent editions and should be addressed to:

The Secretary General
International Civil Aviation Organization
999 Robert-Bourassa Boulevard
Montréal, Québec, Canada H3C 5H7

Downloaded from ICAO Circular 351 2017

TABLE OF CONTENTS

	<i>Page</i>
Executive Summary.....	(vi)
Abbreviations.....	(viii)
Chapter 1. Introduction	1
1.1 Purpose	1
1.2 Background	1
1.3 Methodology.....	2
Chapter 2. Communities and aviation stakeholders	3
2.1 Communities	3
2.2 Aviation stakeholders	3
2.3 Survey respondents.....	5
Chapter 3. Topics and methods of engagement.....	6
3.1 Environmental concerns reported by survey respondents.....	6
3.2 Aviation issues	6
3.3 Engagement activities	7
Chapter 4. Lessons learned.....	9
Chapter 5. Good practices	11
5.1 Overview.....	11
5.2 Strategic approaches.....	11
5.3 Technology approaches	13
5.4 Face-to-face meetings.....	13
5.5 Print and other media	14
5.6 Community relationship building.....	15
Appendix 1. List of case studies	16
Appendix 2. Summary of data from the case studies	21
Appendix 3. Summaries of 15 selected case studies.....	29

EXECUTIVE SUMMARY

PURPOSE

This circular provides a snapshot of lessons learned and good practices drawn from recent case studies on community engagement by aviation stakeholders. It has been developed to assist States and the aviation industry, in particular airports, airlines and Air Navigation Service Providers (ANSPs), to engage local communities and to mainly address environmental matters.

STRUCTURE OF CIRCULAR

The circular begins with an outline of the background to community engagement and how an approach, using a survey questionnaire to collect case studies, was taken to develop the circular. Chapter 2 describes the different communities and aviation stakeholders, and provides some information on the responses to the questionnaire.

Chapter 3 describes the kinds of community engagement activities that took place and the main issues of concern.

Chapters 4 and 5 discuss the lessons learned and good practices as gleaned from the case studies.

Appendix 1 contains a full list of the case studies collected and a very short description of each, including a link to a website or report, when available. Appendix 2 summarizes the main statistics on the data collected. Appendix 3 contains a brief summary of a selection of 15 case studies that provides more information on the scope of submissions.

COMMUNITY ENGAGEMENT

The most common form of community engagement consists of the aviation industry providing information to community groups and individuals on aviation operations and development plans, and communicating the current and future environmental, social and economic benefits and impacts. Community members may provide feedback and express their views by means such as mail, telephone, email, websites and meetings.

Public consultation is often required as part of the process to gain consent or approval for infrastructure development including both on airport projects and airspace changes. The communities' views may be taken into consideration in the decision-making processes.

Environmental matters usually dominate community engagement and often it is the impact of aircraft noise that is the issue of most concern. However, other environmental aspects such as air quality, greenhouse gas emissions, land use and waste management also increasingly need to be addressed.

Many airport operators and other aviation stakeholders have taken their community engagement efforts beyond communications and consultations on environmental topics. Recognizing that the three pillars of sustainability are commonly considered to be environmental, social and economic, aviation stakeholders are increasingly implementing social programmes, often as a part of their corporate social responsibility or similar initiatives.

LESSONS LEARNED AND GOOD PRACTICES

Some important lessons learned and good practices contained within the circular can be summarized as follows:

- Being proactive using a well-planned strategic approach that includes continuing engagement in the long term, not just when a planning application is in process.
- Starting early and continuing the engagement into the long-term, with engagement not just restricted to a specific project and the planning application process.
- Providing an open and transparent exchange of information as the basis for building long-term trust.
- Ensuring the process is as inclusive and collaborative as possible, informing and seeking input from as many stakeholders as appropriate and practicable, taking into consideration the scale and scope of the project.
- Using new technologies provides different ways to present information and interact with community members. Even though social media are a crucial means for reaching a wide audience, traditional print and broadcast media should also be used.
- As community engagement cannot guarantee that all parties will be pleased with the outcome, it is important to manage the expectations of all the stakeholders.

ABBREVIATIONS

ACAC	Arab Civil Aviation Commission
ACI	Airports Council International
ANSP	Air navigation service provider
ATAG	Air Transport Action Group
CAA	Civil aviation authority
CAEP	Committee on Aviation Environmental Protection
CANSO	Civil Air Navigation Services Organisation
CEM	Collaborative environmental management
CSR	Corporate social responsibility
EMAT	(Heathrow) Early Morning Arrivals Trial
EUROCONTROL	European Organisation for the Safety of Air Navigation
GHG	Greenhouse gas
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ISO	International Organization for Standardization
LAQ	Local air quality
NGO	Non-governmental organization
RNAV	Area navigation
RNP	Required navigation performance
US FAA	United States Federal Aviation Administration

Chapter 1

INTRODUCTION

1.1 PURPOSE

1.1.1 While many aviation organizations have conducted successful community engagement efforts, including providing information and consulting on development projects, publicly available information to help aviation organizations engage effectively with communities is limited.

1.1.2 This circular has therefore been developed to share lessons learned and good practices to assist States and the aviation industry, in particular airports, aircraft operators and air navigation service providers (ANSPs), in engaging communities and in addressing environmental issues.

1.2 BACKGROUND

1.2.1 The aviation sector provides significant benefits for local and global economies, including social benefits such as mobility and enhanced connectivity. Enabling aviation growth is critical to meeting future demand for air transport and to ensuring that the full economic and social potential of aviation is realized.

1.2.2 The environmental aspects relating to aviation include noise, air quality and greenhouse gas emissions, water, waste, land use, habitat and wildlife. While the aviation sector strives to reduce or limit these impacts, the growth of aviation makes these mitigation efforts ever more important.

1.2.3 Communities near airports are usually principally concerned with the issues of noise and local air quality. Certain environmental aspects such as air quality, water quality, waste management, soil contamination and wildlife management can be subject to local regulations. In some regions, greenhouse gas emissions from aviation are an increasing concern.

1.2.4 Some communities submit complaints and influence policymakers and regulators against existing aviation activities and proposals for airport and airspace improvements. This pressure has the potential to constrain development and limit the benefits of aviation. However, many in the communities also acknowledge the economic and social benefits of aviation, and within environmental limits, may support the growth of aviation. Pressure on the aviation sector to be environmentally sustainable is at an all-time high.

1.2.5 For aviation to grow sustainably, the associated environmental impacts must be mitigated and aviation stakeholders must engage with the community to address these concerns. Community engagement can be conducted proactively, preferably within an aviation stakeholder's corporate social responsibility programme, rather than as a reaction to community complaints, criticism and other pressure.

1.2.6 Community engagement, through open and transparent dialogue, can build trust and a willingness to collaborate. This can enable airports, airlines, ANSPs, other stakeholders and the surrounding communities to identify and implement collaborative ways of improving the environmental performance of the aviation industry while striving for sustainable growth.

1.2.7 Some States require public consultation or community engagement when considering changes to an airport or airspace. Often an airport operator or other aviation stakeholder (see Chapter 2, 2.2) recognizes the importance of its relation with the public and will engage local communities on a proactive and voluntary basis.

1.3 Methodology

1.3.1 At its ninth meeting, the ICAO Committee on Aviation Environmental Protection (CAEP), recognizing the importance of community engagement, agreed to investigate the issue and develop a circular with case studies. The work was to cover “best practice case studies and lessons learned to assist States and the aviation industry, in particular airports, airlines and ANSPs, to engage local communities and address their concerns regarding aircraft operational noise and emissions, and aviation operations in general”.

1.3.2 To collect this information, a survey was conducted to gather case studies on community engagement from aviation organizations worldwide, including airport operators, ANSPs, aircraft operators and other stakeholders. The main survey period was from June 2014 to March 2015, and a total of 48 completed survey responses were received.

1.3.3 This circular summarizes these case studies, including the reasons for aviation community engagement, the most common community engagement practices and what the survey respondents viewed as the most valuable lessons learned and good practice from their experiences.

Chapter 2

COMMUNITIES AND AVIATION STAKEHOLDERS

2.1 COMMUNITIES

2.1.1 Having different characteristics, resources and interests, communities will also have different concerns about the environmental impacts associated with aviation. Community characteristics may determine how and to what extent the community becomes involved. Aviation organizations, therefore, may need to use different methods of engagement according to the concerns of the particular community.

2.1.2 For the purpose of this circular, the following categories of communities have been identified. This list is not exhaustive and may vary by location. In addition, the groupings are not mutually exclusive; some individuals may belong to some or all of the groups.

- a) *Local community.* Local communities are those living or working in the immediate vicinity of the airport. In many countries, these local communities have grown as cities have expanded and urban development has begun to encroach on the airport boundary. In general, the primary environmental concern of these communities is aircraft noise and overflights, and the majority are usually located within or near traditional airport noise contours maps.
- b) *Broader community.* The broader community is generally located further away from the airport and can include the members of the general public who have an interest in environmental topics associated with aviation. The primary environmental concern of these communities tends to be growth and in some areas, GHG emissions.
- c) *Action groups.* This category includes organized groups such as non-governmental organizations (NGOs) that are established to reduce specific aviation environmental issues; for instance, noise. These groups may focus on a specific organization, region, or nationally, responding to where they believe the greatest priority to be. Focus groups might address issues such as wildlife, new airspace flight tracks, or airport growth in general.

2.2 AVIATION STAKEHOLDERS

2.2.1 This section describes aviation stakeholders (excluding the communities previously described) and the types of activities for which stakeholder collaboration on environmental topics may be required. While there are many different types of stakeholders, this section covers those most prominently involved in community and environmental concerns.

2.2.2 The aviation sector includes a broad spectrum of stakeholder groups. There are those related to the industry itself, such as airport operators, airspace users, ANSPs and manufacturers. In addition, the sector interacts with a wide range of other business and government entities.

a) Aviation industry:

- 1) *ANSPs*. These hold responsibility for managing the airspace over a given geographical area. This includes responsibility for changing and improving air traffic management services and flight procedures when necessary. These changes can have environmental effects directly relevant to communities (e.g. change the nature of noise exposure) or more general effects (e.g. increase or decrease carbon emissions).
- 2) *Airport operators*. Airports serve as the connection point between passengers, cargo and air transportation. Because of their proximity to communities, they are often the focal point for community concern regarding aviation operations, local transportation-related issues and resource management (noise, water, etc.).
- 3) *Aircraft operators*. Aircraft operators or carriers, including airlines, transport both goods and people. As a result, they interact most closely with the flying public. However, they may also be affected by local community or broader public concerns. For example, local community noise concerns may restrict the times aircraft operators can arrive or depart at an airport or they may require less fuel-efficient routes (increasing flying time and costs). Broader public concerns could include issues regarding climate or fuel efficiency.
- 4) *Manufacturers*. Manufacturers design and build the airframes, engines and other technologies for aircraft. They provide support to other parts of the aviation community and can explain advanced technology concepts that help reduce environmental impacts to other stakeholders, including local community groups. This helps the public better understand the reasons behind the choice of particular pathways, the challenges involved and the trade-offs that have to be made in new designs. They also have a responsibility to address the concerns of their own local communities (e.g. waste, emissions), as well as community or public concerns in countries where their suppliers operate that may have supply chain impacts (trace metals, etc).

b) Government:

- 1) *Regulators*. Regulators, including civil aviation authorities (CAA), are responsible for overseeing, and, in some cases, regulating the aviation industry. They must balance the concerns of all stakeholders, including communities. They may be responsible for establishing and overseeing regulatory standards for noise, emissions, etc., as well as the growth and development of the aviation sector.
 - 2) *Other government authorities*. A range of other government organizations could have stakes in the aviation sector (e.g. international, national, regional, local). Many States have agencies responsible for regulating environmental issues such as water, clean air, endangered species, or land use. Local governments or municipalities may also have jurisdiction over certain issues and could have a role to play in community engagement efforts.
- c) *Passengers*. Primarily concerned with safety and efficient transportation, passengers have become increasingly knowledgeable about and concerned with environmental topics. For example, interest in air carriers' GHG emissions has grown in prominence with several carriers and independent organizations enabling passengers to track and offset their carbon footprint.
- d) *Other*. Many other groups have a stake in aviation, ranging from airport vendors to the tourism industry. Although they might not have a direct role in community-related environmental concerns, they are often interested in further growth and development of the aviation industry and can become involved in community engagement initiatives.

2.3 SURVEY RESPONDENTS

The questionnaire for collecting case studies on community engagement was sent to airport operators, aircraft operators, ANSPs, civil aviation authorities and other aviation stakeholders. There were a total of 48 responses. Of these, 63 per cent were international airports (including groupings of airports), with ANSPs representing another 8 per cent (see Table 2.1). The category “other” includes a university, industry and regional associations such as Air Transport Action Group (ATAG) and EUROCONTROL.

Table 2-1. Organization type of survey respondents

<i>Organization</i>	<i>Number of responses</i>	<i>Percentage of total respondents</i>
International airport(s)	30	63
Aircraft operator(s)	3	6
Airframe manufacturer	1	2
Engine manufacturer	1	2
ANSP	4	8
Civil aviation authority	1	2
Department/Ministry of Transport/Aviation	2	4
Regional or city council	1	2
Non-governmental organization	1	2
Other	4	8

Chapter 3

TOPICS AND METHODS OF ENGAGEMENT

3.1 ENVIRONMENTAL CONCERNS REPORTED BY SURVEY RESPONDENTS

Participants were asked to identify their communities' main environmental concerns. The responses showed that communities have a wide range of environmental concerns, which can vary based on many factors. These include the local conditions, proximity of residential areas, the nature of operations (e.g. the time of day, the volume of air traffic), and local resources (e.g. water availability, endangered species). Figure 3-1 describes the community concerns that were identified through the survey and indicates that the most common environmental issues were noise, air quality, greenhouse gas emissions and climate change, and land use.

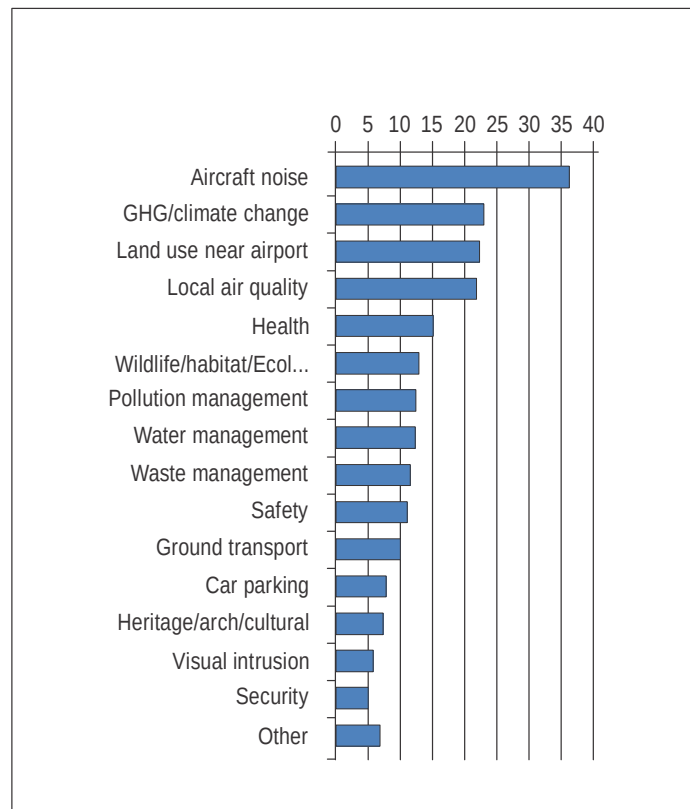


Figure 3-1. Environmental concerns

3.2 AVIATION ISSUES

Engagement can be important for many types of aviation activities or projects. One question in the survey asked about the primary aviation issues of concern. Over 70 per cent of respondents' case studies referred to current aviation

activities; projected growth and capacity expansion needs; changes to airport infrastructure; and airspace changes represented (Figure 3-2). While the survey results represent only a sample of global engagement efforts, they nevertheless illustrate the types of activities on which aviation organizations are engaging with their communities. Respondents could choose more than one category.

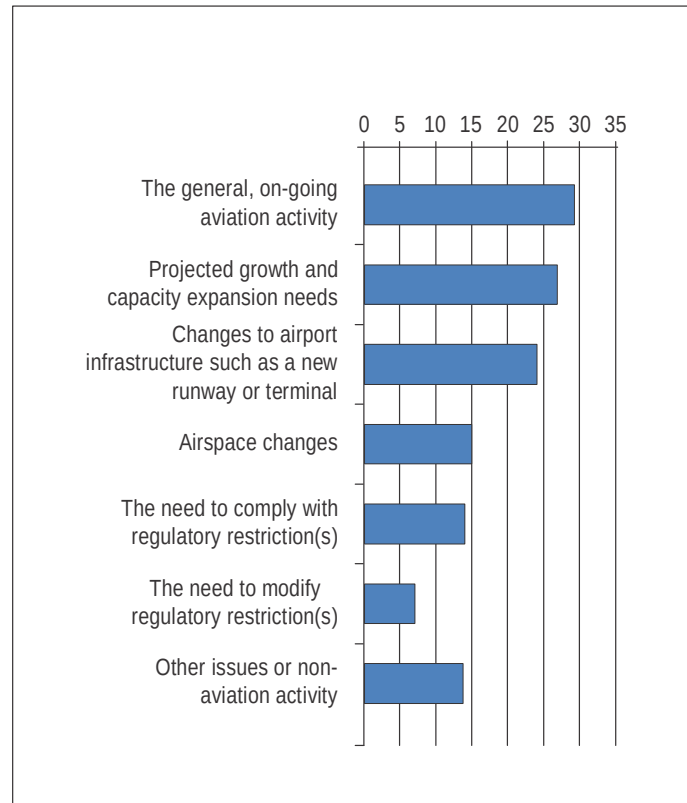


Figure 3-2. Aviation issues

3.3 ENGAGEMENT ACTIVITIES

3.3.1 The survey included a question on whether community engagement was required by law or was voluntary. Since out of the 48 responses, only 14, (29 per cent), indicated that it was a legal requirement, it would seem that many aviation stakeholders are conducting community engagement on a *voluntary* basis.

3.3.2 The term “community engagement” can encompass a wide range of activities, which mainly include exchanging information with and receiving feedback from the community. The process often involves open public meetings where the community can discuss the aviation goals, ask questions, and offer opinions or express concerns about operations or airport development. Such public meetings are an opportunity to explain airport development plans and designs, how decisions are made, and to foster understanding what trade-offs are involved in planning and operations. This type of process – providing information and consulting with communities on environmental management and development proposals – can be considered to be the traditional form of engagement.

3.3.3 The survey asked respondents to characterize the types of activities that took place based on the following methods of communication: