



WORKING PAPER

ASSEMBLY — 39TH SESSION

TECHNICAL COMMISSION

Agenda Item 36: Aviation safety and air navigation implementation support

**REGIONAL APPROACH FOR THE MANAGEMENT OF
OBSTACLE LIMITATION SURFACES**

(Presented by Egypt)

EXECUTIVE SUMMARY

There is an increasing need to establish a regional approach to ensure the development of a regime for the management of obstacle limitation surfaces, in compliance with all safety requirements and according to the customs and regulations of the countries of the region.

The Egyptian regime adopted to manage obstacle limitation surfaces aims at addressing gaps in construction codes in areas surrounding Egyptian airports. It should be noted that the components of this regime, including products, airports, air traffic management and air navigation services, relevant administrative bodies responsible for construction works and other bodies undertaking work in the vicinity of airports, constitute a framework aimed at limiting the risks created by such gaps or any other overlap that might affect safety, in accordance with the responsibilities of each entity.

Action: The Assembly is invited to:

- a) confirm and support its request to the Council to ensure that the benefits of regional cooperation, through Regional Safety Oversight Organizations (RSOOs), to manage obstacle limitation surfaces are fully reflected in ICAO's provisions, particularly in its Continuous Monitoring Approach (CMA) and the various Amendments to Annex 14 and the *Procedures for Air Navigation Services – Aerodromes* (PANS-Aerodromes);
- b) support the need to develop clear and effective guidance material on how to implement the regime for obstacle control and management (Annex 14, chapter 4 – Obstacle Limitation Surfaces); and
- c) recognize the positive real or potential impact of cooperating among States of the region to establish and implement a common regime for the management of obstacle limitation surfaces within regional organizations.

<i>Strategic Objectives:</i>	This working paper relates to the Safety Strategic Objective.
<i>Financial implications:</i>	

¹ Arabic version provided by Egypt

<i>References:</i>	Doc 9317. Annex 14, Chapter 4. Recommendation by 4/6 of RASG-MID/4 – “Additional RGS SEIs as follows: TGS/4 on Aerodrome Safeguarding with Egypt as Champion supported by Sudan”.
--------------------	---

1. INTRODUCTION

1.1 The regional approach towards safety management has been recognized in Part B of ICAO’s Doc 9734, *Safety Oversight Manual* and constitutes an important part of the safety management functions performed by regional safety organizations. It has also been recognized in various ICAO fora and in ICAO Assembly Resolutions adopted at its 37th and 38th Sessions in 2010 and 2013, respectively.

1.2 One of the most important foundations to enhance civil aviation safety has been the recent development and promotion of the Obstacle Clearance and Management System (aerial services areas) as a continuous process. For the achievement of safety in terms of managing obstacle limitation surfaces, it is necessary to duly take into consideration the various components of the aviation system. This includes the various products, organizations, airports, air navigation systems on the ground and in the air, and relevant administrative organizations or entities carrying out construction work. These entities represent one whole network where they are linked with one another at different levels. Thus, measures that may be taken in one area may affect the safety performance in another area.

1.3 Egypt, being one of the first countries to sign the Chicago Convention, has developed and implemented by the late eighties a regime for the management of obstacle limitation surfaces. This regime is continuously updated to address new safety requirements.

1.4 Through continuous coordination with the ICAO Regional Office for the Middle East and the Working Group on Runway Safety, Egypt has developed a manual on how to implement the requirements of Annex 14, Chapter 4, based on the Egyptian regime. This manual can be used by any State to establish a similar regime in accordance with the regulations in effect in each country of the region.

2. EXPERIENCE OF EGYPT IN THE MANAGEMENT AND ASSESSMENT OF OBSTACLES

2.1 Annex 14 Standards provide for the establishment of a continuous protection regime for aerial services areas to ensure civil aviation safety. But these Standards are generally difficult to apply on all airports, specially that they have been developed so as to apply to existing airports, which could at times prove to be an arduous task.

2.2 Thus, Egypt has developed a simplified specific regime for obstacle limitation surfaces. This is a regime that depends on continuous follow-up and coordination between the Civil Aviation Authority and airport operators, as well as the administrative entities responsible for the regulation of construction and any other entities undertaking construction activities in these zones. In this process, the Civil Aviation Authority performs a clear and pivotal role in coordinating between all these entities.

2.3 The legal foundations were established. These have been supported by ministerial laws and decisions to sanction the establishment of buildings without prior approval from the Civil Aviation Authority, which might affect the safety of civil aviation, or if they exceeded the permissible heights.

2.4 To achieve the required safety levels, the ministerial laws and decisions covered not only the requirements of Annex 14, but also those pertaining to navigational equipment and aids. A Permanent Obstacles Panel was thus established at the State level. It includes all technical specializations to review and study the applications and the sites, in terms of their impact on routes and navigational equipment.

2.5 Technical material, considered the first of its kind, was also developed in 2010 for the management of obstacles. It is presented as part of a training course to train administrative staff on obstacle management at Egyptian airports. It highlights the international and domestic requirements in this area and how they can be implemented locally, as well as the problems that may be encountered and some of the proposed solutions.

2.6 In view of the continuous and rapid building encroachment and the difficulty of carrying out follow-up activities with simple traditional methods, satellite images are used to determine the areas requiring field monitoring and also to enhance the position of Egyptian airports.

2.7 As Regional Safety Oversight Organizations (RSOOs) play a fundamental role in helping participating States and exert efforts to maintain organizational efficiency to perform their safety management and oversight responsibilities, and considering that management of obstacle limitation surfaces is one of the safety elements that must be assured, Egypt, through the Working Group on Runway Safety at the Regional Office for the Middle East, has issued guidance material on the establishment of the required protection regime, including clear rules for dealing with this subject as a whole.

2.8 It has also offered technical support to a number of States of the region, through its memberships of the MID Go Team. This was primarily done through workshops that shed light on the various elements of how to manage obstacle limitation surfaces, as specified in Annex 14, and the relationship with the protection of air navigation facilities, together with some examples and sample problems that staff had to face and how to deal with them.

— END —