



**WORKING PAPER**

**ASSEMBLY — 39TH SESSION**

**EXECUTIVE COMMITTEE**

**Agenda Item 16: Aviation Security – Policy**

**HARMONIZATION OF THE SCREENING TECHNOLOGY FOR  
LIQUIDS, AEROSOLS AND GELS**

(Presented by Nigeria)

**EXECUTIVE SUMMARY**

This working paper calls for harmonization of a screening policy for liquids, aerosols and gels (LAGs), and also stresses the need to share information on screening technology used for LAGs.

**Action:** The Assembly is invited to:

- a) take note of this working paper;
- b) urge the Council to develop guidance material on best practices and risk-based approach to LAGs screening to assist uniform implementation leading to a harmonized approach to the lifting of LAGs restrictions; and
- c) encourage Member States to share information on their evaluation of comparatively effective means of screening LAGs, including the technology being used.

<i>Strategic Objectives:</i>	This working paper relates to ICAO's Strategic Objective C – <i>Security and Facilitation</i> .
<i>Financial implications:</i>	
<i>References:</i>	AVSECP/27-WP/33, Liquids, Aerosols and Gels AVSECP/27 Yellow Cover Report

## 1. INTRODUCTION

1.1 The International Civil Aviation Organization (ICAO) in collaboration with Member States and the industry has continued to intensify its efforts in ensuring the safety and security of civil aviation everywhere in the world. Part of these efforts includes the development of Standards and Recommended Practices (SARPs) and guidance materials for implementation and use by Member States and the industry.

1.2 This leadership role of ICAO has allowed Member States and the industry to effectively curtail the ever-increasing security threats which continue to demand proactive action from all stakeholders. These proactive and at times reactive measures require the use of new technology and changes in security processes at airports.

1.3 ICAO and the Member States are conscious of the fact that while ensuring the security of civil aviation all over the world is of high priority, the progress of achieving this should not have too much negative impact on the convenience of the travelling public and the inherent advantage of air travel over other competing modes of transportation.

## 2. DISCUSSION

2.1 In August, 2006, there was an incident of a passenger who attempted to destroy an aircraft destined for the United States of America using homemade explosive liquids carried on board the aircraft in cabin baggage. This incident led to the placement of restrictions on carriage of liquids, aerosols, and gels (LAGs).

2.2 The use of liquid explosives, however, dates back to January 1987 with the seizure of bottles of methyl nitrate at Frankfurt Airport, followed by the destruction of Korean Airlines flight 858 using PLX (Picatinny Liquid Explosive) and the use of a small liquid explosive charge on Philippines Airline flight 434 by Ramzi Yousef in December 1994.

2.3 There is evidence that terrorists have successfully used cans or bottles containing common articles of commerce including bottled drinks, personal care products and other similar items to smuggle liquid explosives aboard commercial aircraft. The aviation community today seems to lack efficient, non-intrusive and unified technology to effectively determine whether or not the contents of bottles or cans carried by passengers every day in their carry-on baggage contain liquid substances that constitute threats to safety and security of aircraft.

## 3. EFFECT OF RESTRICTIONS OF LAGS

3.1 Many States presently do not allow the carriage of any form of Liquid, Aerosol, and Gel irrespective of the quantity (even less than 100ml) in cabin baggage because they lack the necessary equipment to detect whether the LAGs are safe or not. The process of enforcing the restrictions has had significant impacts on airport operations, convenience of the travelling public, and airport retail activities.

3.2 Some LAGs carried by passengers in their carry-on baggage vary depending on their potential destinations, transit airports and the availability of duty free shops. Some of these items are at times religious or spiritual items, which do not pose any form of threat. These items could ordinarily have

had smooth clearance for carriage if there were harmonized screening equipment at airports to assure that they can safely be carried on board an aircraft in passengers carry-on bags.

3.3 The use of screening equipment to screen LAGs at airports would promote facilitation and increase substantially the non-aeronautical revenue of most airports, especially from last minute purchases of perfumes, creams, ointments by passengers from the duty free shops prior to boarding.

#### 4. **CONCLUSION**

4.1 One of the challenges of the current aviation security threats is the use of containers or bottles of common products to package explosives which can be smuggled on board aircraft with the collusion of an insider to commit sabotage. The challenges posed by the use of these bottles to conceal explosives or flammable liquids need to be further researched to ease detection.

4.2 Non harmonization of the screening methods of liquids, aerosols and gels is thus one of the areas which need to be addressed by ICAO for uniform implementation.

4.3 There is no doubt that various manufacturers in different States have developed some screening equipment for the detection of LAGs, but the equipment have not been comparatively evaluated for effectiveness and where evaluated, the information has not been shared.

4.4 The introduction of new screening equipment or technology for LAGs at airports should be effectively integrated with the existing security procedures and other technologies designed to detect different types of threats to the safety of aircraft.

4.5 LAGs screening policy should enhance uniform implementation of the one stop security concept being promoted by ICAO

—END—