



ICAO

The Fourth Meeting of the Aerodromes Operations and Planning Sub-Group (AOP/SG/4)*Video Teleconference, 10 to 13 November 2020***Agenda Item 7: Airport Environmental Initiatives****WATER MANAGEMENT AT AIRPORTS**

(Presented by Airports Council International)

SUMMARY

This paper presents the global water stress issues and what ACI is doing to promote best practices in water management through policy, airports recognition and publication.

1. INTRODUCTION

1.1 The World Resources Institute (WRI) in 2019 warned that forty-four countries, home to one-third of the world's population, would face "high" levels of water stress. In these countries on average more than 40% of available supply is withdrawn every year. Some of them are in Asia-Pacific, e.g., Afghanistan, India, Nepal and Pakistan, and will be facing serious shortages in fresh water supply.

1.2 The ACI Asia-Pacific Environmental Survey 2019 results show that water management continues to be one of the top three management priorities. Water and wastewater management systems and measures such as reducing the flow setting of taps at the airports, water meters and leak detection system are implemented to save scarce water resources at airports in the region. Our airport members' efforts are consistent with the United Nations, who in 2015 established 17 Sustainable Development Goals (SDGs) to promote more sustainable development around the world. Goal 6 of the SDGs calls for action by all countries to ensure availability and sustainable management of water and sanitation for all.

2. DISCUSSIONWater Management at airports

2.1 Secure and reliable water resources are essential to the operation of any airport. Water is needed to maintain food and hospitality concessions within the airport complex, operating cooling towers and basic amenities within the terminal area, cleaning and maintaining aircraft and maintaining grassed areas and landscapes. The substantial growth of aviation, especially in the Asia-Pacific Region, has led to a significant increase in water usage by airports. Airports also generate large volumes of wastewater that may contain contaminants. Hence, understanding sustainable water management practices is essential to the aviation industry.

2.2 The Airports Council International's (ACI) Policy Handbook provides directions on how airports should protect scarce water resources by minimizing usage and reducing the negative impacts from wastewater. The handbook states that "airports should work to minimize the use of potable water, to process wastewater (de-icing and sewage) in the most efficient way possible, to reuse treated water and to manage the quantity and quality of storm water run-off."

ACI Asia-Pacific Green Airports Recognition 2020 – Water Management

2.3 ACI Asia-Pacific has been organizing annual Green Airports Recognition awards. The 2020 edition promotes the theme of Water Management. The Green Airports Recognition programme promotes environmental best practices to minimize aviation's impact on the environment and recognizes ACI Asia-Pacific's members for outstanding accomplishments in their environmental projects.

2.4 Sixteen eligible submissions were received from member airports, representing 16% of the total passenger traffic in Asia-Pacific and the Middle East region. These submissions showcase innovative best practices for wastewater treatment, water harvesting, water recycling and water reduction, e.g. dry washing of aircraft and waterless urinals and using technology such as Internet of Things and cloud to enable prompt leak detection and notification for maintenance to save water in the airport.

2.5 All submissions are available in the [Green Airports Recognition 2020 – Water Management publication](#), housed on the ACI Asia-Pacific website.

2.6 Nine airports were recognized for their outstanding efforts in water management on World Environment Day on 5th June and six airport case studies have been nominated for the [ICAO Eco-Airport Toolkit e-collection](#) – Water Management.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note that airports can contribute to the alleviation of the shortage of water globally and in the region and that the report on Green Airports Recognition 2020 is a public domain reference on good practices in water management; and
- b) discuss how water management can become an integral part of aerodrome operations and planning.

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