

Airport Disaster Preparedness and Resilience

ACI World Program

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ACI Strategy

ACI: Global to Local Reach

The only organization working at every level of the airport industry

ACI's Mission

Champion the transformation of airports and aviation globally to better connect the world; promoting sustainable growth and capacity optimization, operational and commercial excellence, safety, security, and an exceptional travel experience – all in collaboration with the ACI regions.

As of January 2026, ACI serves 811 members, operating over 2,200 airports in more than 160 countries worldwide.



Airport Emergency Plan

Managing known challenges

Airports have well established plans to deal with aircraft accidents and operational disruptions.

They have sufficient and regularly updated SARPS and guidance material on this topic.

They have been practicing using multiple scenarios for decades.

Resources for continuous improvement are available.

But there are no ICAO provisions for the management of a major natural disaster requires other types of response mechanism.



Airport Emergency Plan

ICAO Update

To address this gap, ICAO has created the Emergency Response Planning Expert Group (ERPEG).

The ERPEG works with mandate under Job Card 009, with one of the deliverables to develop provisions in the **ICAO Doc. 9137, Part 7** (Airport Emergency Planning) to address:

- Preparedness and response to disaster preparedness and response, and
- Preparedness and response to public health emergencies

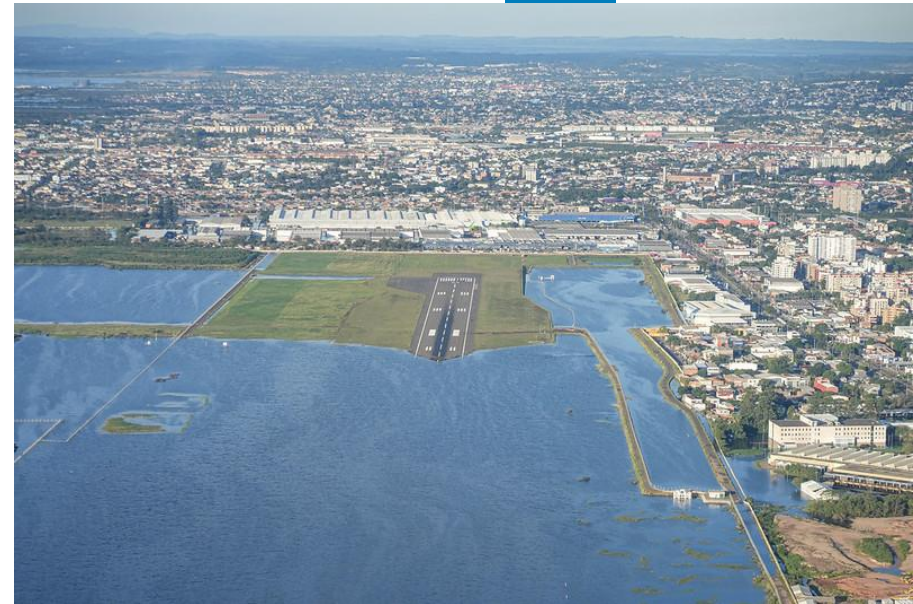
. This work has not started, but it is expected to **commence in Q4 2026**.



Disaster Management

Not the same as an aircraft accident

- Being able to cope with multiple support governments and humanitarian agencies sending aid to an airport with limited capabilities is a challenge.
- Airports in distressed cities/countries may quickly become an essential hub for receiving international aid and humanitarian support.
- It requires a multi-agency coordinated approach.
- Airports must prepare for worst-case scenarios and **to take a leadership role**, maximizing the use of available and limited resources.



ICAO HADRA

Humanitarian Assistance and Disaster Response in Aviation

ICAO provisions on disaster response are limited:

- The HADRA Expert Group membership is comprised of ICAO, Airports Council International (ACI), Civil Air Navigation Services Organization (CANSO), Deutsche Post DHL (DP-DHL), Global Logistics Cluster (GCL), International Air Transport Association (IATA), OCHA, United Nations Development Programme (UNDP) and the World Food Programme (WFP).
- In 2022, HARA delivered a free guidance material on airport preparedness for effective humanitarian assistance and disaster response.
- For the last few years, HADRA has been silenced.



GUIDANCE MATERIAL ON AIRPORT PREPAREDNESS FOR EFFECTIVE HUMANITARIAN ASSISTANCE AND DISASTER RESPONSE

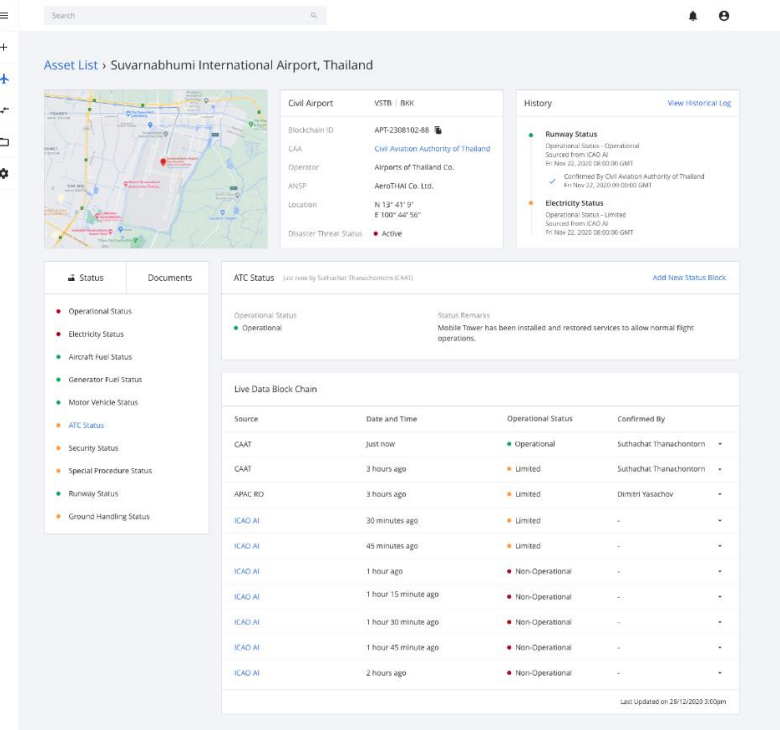


Airport Status Information Tool (ASIT)

The HADRA Expert Group will continue to implement its work plan, which will incorporate the development and implementation of the blockchain tool and associated guidance material, by the end of 2021. In the coming weeks, the blockchain tool will be tested in the ICAO Regional Office for Latin America and the Caribbean and we are looking forward to collecting the lessons learned.

After that, the Airport Status Information Tool (ASIT) was being developed, and it was tested at some airports.

<https://unitingaviation.com/news/capacity-efficiency/a-more-coordinated-use-of-aviation-in-disaster-response/>



The screenshot displays the ASIT interface for Suvarnabhumi International Airport, Thailand. The interface includes a search bar, a map of the airport, and a detailed status overview. The status overview is divided into two main sections: 'Civil Airport' and 'Runway Status'.

Civil Airport Status:

- Blockchain ID: APF-23081802-88
- CAA: Civil Aviation Authority of Thailand
- Operator: Airports of Thailand Co.
- ANSP: AeroTHAI Co. Ltd.
- Location: N 13° 43' 19" E 100° 44' 56"
- Disaster Threat Status: Active

Runway Status:

- Runway Status:** Operational Status - Operational. Sourced from CAA AI. At Nov 22, 2020 18:03:06 GMT. Confirmed By Civil Aviation Authority of Thailand. At Nov 22, 2020 18:03:06 GMT.
- Electricity Status:** Operational Status - Limited. Sourced from CAA AI. At Nov 22, 2020 18:03:06 GMT.

ATC Status: (Just now by Suthachai Thanachontorn (CAAT))

Operational Status: Operational. Status Remarks: Mobile Tower has been installed and restored services to allow normal flight operations.

Live Data Block Chain:

Source	Date and Time	Operational Status	Confirmed By
CAAT	Just now	Operational	Suthachai Thanachontorn
CAAT	3 hours ago	Limited	Suthachai Thanachontorn
APAC ID	3 hours ago	Limited	Dimitri Vasachov
ICAO AI	30 minutes ago	Limited	-
ICAO AI	45 minutes ago	Limited	-
ICAO AI	1 hour ago	Non-Operational	-
ICAO AI	1 hour 15 minute ago	Non-Operational	-
ICAO AI	1 hour 30 minute ago	Non-Operational	-
ICAO AI	1 hour 45 minute ago	Non-Operational	-
ICAO AI	2 hours ago	Non-Operational	-

Last Updated on 28/12/2020 3:03pm

Coalition for Disaster Resilience Infrastructure (CDRI)

CDRI is a global coalition committed to strengthening infrastructure resilience against climate and disaster risks.

With 58 member countries and 12 partner organizations, it includes national governments, international bodies, and businesses collaborating to exchange knowledge, drive research, and invest in disaster resilient infrastructure. Members gain access to global expertise, funding, technical support, research opportunities, innovative solutions, and international best practices.

ACI and many of its member airports collaborate and provide support to CDRI.

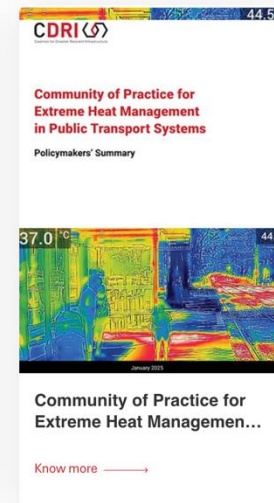
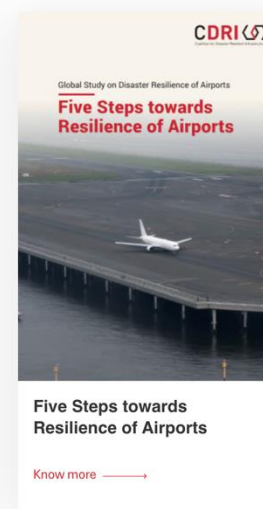
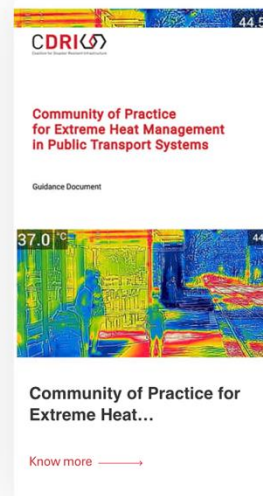
They provide a variety of documents and reports for free.

<https://cdri.world/transport/#resources>

Resources

Documents

Reports



Load More

Disaster Management and Climate Change Resilience

ACI's objective

Ensure airports are **resilient**
and **prepared** for major
disruptive events



Climate Change Adaptation & Resilience

ACI's position

Summary of ACI's position on climate adaptation:

1. Conduct airport-specific climate risk assessments and integrate resilience into planning
2. Embed climate resilience into infrastructure and operations
3. Strengthen collaboration with governments and external stakeholders
4. Build capability through data, training, and implementation support
5. Secure sustainable financing for resilience projects

Airports should move from reacting to climate events toward systematically planning for climate resilience.



ACI Initiatives

Climate Change Initiatives

ACI Initiatives



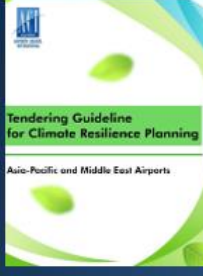
ACI AIRPORTS COUNCIL INTERNATIONAL

AIRPORTS' RESILIENCE AND ADAPTATION TO A CHANGING CLIMATE



ACI AIRPORTS COUNCIL INTERNATIONAL

CLIMATE CHANGE RESILIENCE AND ADAPTATION SURVEY REPORT



Tendering Guideline for Climate Resilience Planning

Asia-Pacific and Middle East Airports



Airport Business Continuity Management HANDBOOK

First Edition 2019

Version 2.0 (2020)



Adapting Aviation to a Changing Climate

Effects and impacts of climate change for aviation



Adapting Airports in Latin America and the Caribbean to a Changing Climate

The voice of Latin American & Caribbean Airports

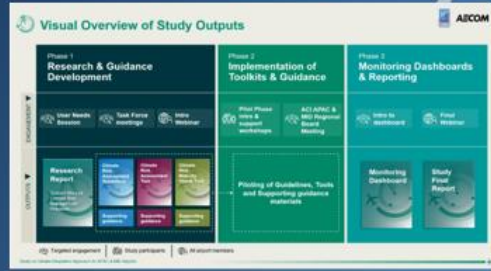


Green Airports Recognition 2025

CLIMATE CHANGE ADAPTATION

Over 40 million passengers per annum: **Hong Kong International Airport**, **Taipei International Airport**, **King Abdul Aziz International Airport**

Between 15-40 million passengers per annum: **Auckland International Airport**, **Melbourne Airport**, **Ramath International Airport**



Visual Overview of Study Outputs

Phase 1: Research & Guidance Development

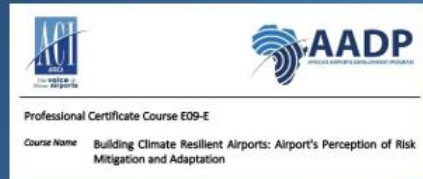
- Year 1: Research, Task Force Meetings, Yearly Meetings
- Research Report, Year 2: Research, Year 3: Research

Phase 2: Implementation of Toolkits & Guidance

- Pilot Phase: ACI APAC & Year 1: Research, Year 2: Research
- Planning of Guidelines, Tools and Supporting guidance documents

Phase 3: Monitoring Dashboards & Reporting

- Year 1: Research, Year 2: Research, Year 3: Research
- Monitoring Dashboard, Study Final Report



ACI AIRPORTS COUNCIL INTERNATIONAL

AADP AIRPORTS ADAPTATION AND RESILIENCE DEVELOPMENT PROGRAM

Professional Certificate Course E09-E

Course Name: Building Climate Resilient Airports: Airport's Perception of Risk Mitigation and Adaptation

ACI Initiatives

Climate Change Initiatives

**Adapting European Aviation
to a Changing Climate:**
Guidance on Risk Assessment
and Adaptation



[Link to document](#)

Disaster Management and Climate Change Resilience

Strategic initiatives



Establish aviation ecosystem collaboration

Provide cross-industry training and guidance material

Provide tactical support to the aviation community during major events

Establish aviation ecosystem collaboration

Focus area 1



Requirements for support can vary per region and per individual situations.

There are a multitude of players working to improve the preparedness and response to disruptive events.

There is currently no unified platform able to provide support to all airports affected by major natural events.

Many airports do not know where to go to get support on the topic of disaster preparedness and resilience.

Objective

- ACI to provide a platform to **facilitate collaboration** between airports and key aviation and humanitarian stakeholders.

Provide adequate cross-industry training and guidance material

Focus area 2



Requirements for support can vary per region and per individual situations.

There are a multitude of players working to improve the preparedness and response to disruptive events.

There is currently no unified platform able to provide support to all airports affected by major natural events.

Many airports do not know where to go to get support on the topic of disaster preparedness and resilience.

Objective

- ACI to provide a platform to **facilitate collaboration** between airports and key aviation and humanitarian stakeholders.

Tactical Support to the aviation community during major events

Focus area 3

As major disruptive events differ from each other, depending on the type of event, expert advice during such an event can be critical.

Not all airports have access to a network of peers that can virtually assist and provide advice at no cost.

Objectives

- Develop expert groups per event type (volcanos, hurricanes, earthquakes, floods, etc.) with focal contact points.
- Establish ad-hoc task force to support members following events.
- Annual event to share best practices and raise awareness.



Where do we go from here?

Thank you!