

Hazard Weather Information Service (HWIS): An ICAO initiative to achieve global phenomenon-based warnings for en-route hazardous meteorological conditions

Ashwin Naidu, Bureau of Meteorology

The aviation community has highlighted several issues with current aviation hazardous weather warnings, including gaps in services, inconsistent data across service boundaries, lack of phenomena-based coverage, insufficient forecast granularity, and excessive forecast latencies. These deficiencies affect many parts of the world, creating a pressing need for a globally consistent, phenomena-based hazardous weather information service for en-route meteorological conditions.

In response, the International Civil Aviation Organization (ICAO) and the World Meteorological Organization (WMO) are developing the Hazardous Weather Information Service (HWIS). This initiative aims to establish a global system that provides consistent and phenomena-based hazardous weather information, addressing the issues identified by aviation users.

This presentation will outline the HWIS initiative, detailing how users will access timely, high temporal and spatial frequency hazard information, leading to safer and more efficient air travel. The presentation will describe the scientific challenges and the opportunity for Australia to provide services beyond Australian borders, possibly for the Asia Pacific region and the globe. This capability will also benefit a range of other sectors, including Defence, energy and resources, and agriculture.