**OPPORTUNITIES**

Reception of MET data from data sparse oceanic, polar air space

Real time data acquisition from over flying aircraft over the area of MET concern.

Usages of ADS-B equipped aircrafts for forewarning the trailing aircraft.

**NON-UNIFORM MESSAGES**

UAE McL. 210101
ARP AAI18 210101 10515W 0012 F430 MS46 154/064 TB/S1=1

As coded in accordance with WMO-1995

In AMDAR heights are reported in hundreds of feet, with the inherent uncertainty ~ 200 ft

In AIREP, the altitude information is in flight level only.

**Humidity Measurement & Reporting**

Humidity information is not required for on board navigational purposes, hence the aircraft are not equipped with humidity sensors, except being AMDAR enabled AD/C.

Humidity sensor requires retrofitting, which is an expensive proposition.

Not sufficient incentives for the aircraft manufacturers and operators to invest in such technology.

This create an opportunty for development of humidity based decision support system for Intelligent Flight Management System.

Once the economical benefit of such algorithm is established, it will logically encourage the manufacturer and operators to opt for humidity sensors in their aircrafts.

**Aircraft using ADS/CPDLC Service over Indian Airspace**

The full resolution of wind vector using the on board inertial navigation system requires the measurements of aircraft pitch, roll and yaw and vertical angle of attack with respect to the airstream.

**Opportunities**

- Selectable time & space domain
- Rapid data acquisition
- Turbulence & Icing forewarning to training aircraft in broadcast mode
- Assimilation of onboard Wx radar data in model
- Auto dissemination of breaking action coefficient to trailing aircraft

**Potential use of ADS-Contract**

- The range and resolution of the time interval parameter in the periodic contract allows for an interval to be specified between 1 second and 68 minutes
- With S/W modification, the facility can be used for rapid data acquisition for potenially serious or significant weather events.