

### Agenda

- Selected Use case
- SWIM Technical Infrastructure
- SWIM Information Service
- The way Forward
- Filling the Gaps through ICAO SWIM TF

### Selected Use Case

Digital NOTAM for airspace restriction notification



# Current challenges

- Potential of errors due to Manual entry.
- Inefficient flight planning due to lack of real time information.
- Traffic Flow / slot management issues

## ADDRESSING THE PROBLEM THROUGH SWIM

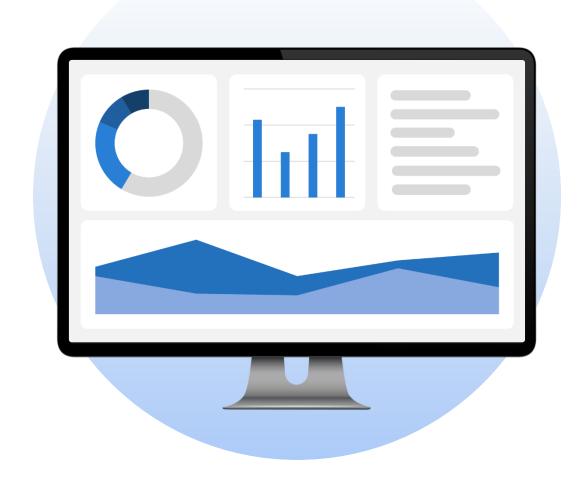
- Real-time flow of information to all users at the same time through Digital NOTAM.
- Automated update of airspace management in ATM systems.
- Enhanced traffic flow / slot management due to continuous flow of information.



Photo credits: Honeywell Anthem

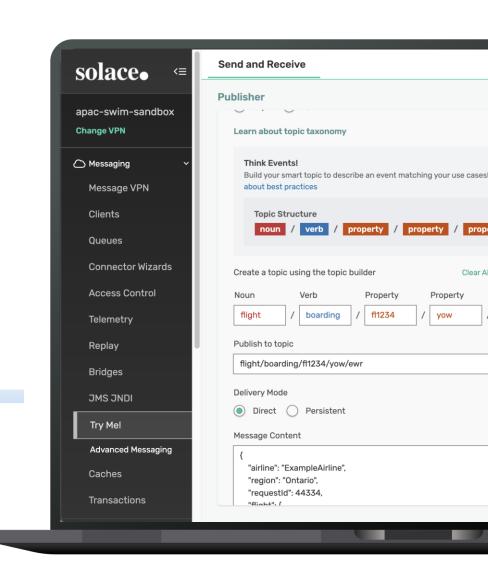
### The SWIM solution - Benefits

- Operational Efficiency through:
  - Reduced Workload
  - Informed decision making
  - Enhanced safety and situational awareness
  - Increased cost efficiency through improved service provision



### Digital NOTAM for airspace restriction notification

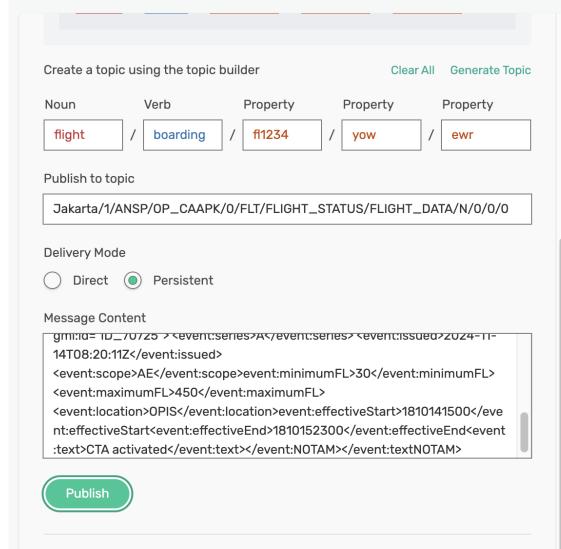




Messages Published

0 Direct 1 Persistent

#### **Publisher**



#### Subscriber

#### Start Consume

#### Messages (Most Recent 20)

Clear Stats

Clear Messages

1 Direct 0 Persistent 0 Non-Persistent

2024-11-07 22:27:07:141 [Topic Jakarta/1/ANSP/OP\_CAAPK/0/FLT/FLIGHT\_ STATUS/FLIGHT\_DATA/N/0/0/0]

×

Delivery Mode: Direct

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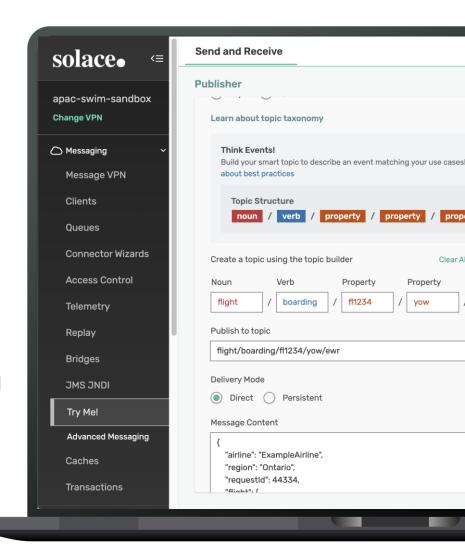
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Clear Stats

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## SWIM IN OUR UNDERSTANDING



### SWIM IN OUR UNDERSTANDING

# WHAT IS SWIM?

Seamless information access and interchange between all providers and users of ATM information and services.

# SWIM Technical Infrastructure

The SWIM TI is an aggregate of software and hardware components allowing the provision of information services among stake holders.

### SWIM IN OUR UNDERSTANDING

### SWIM Information Service

Information services are the means by which ANSPs or other airspace users exchange information, or make their information available.

### NEXT STEPS FOR IMPLEMENTATION OF SWIM IN PAKISTAN

# PAKISTAN – NEXT STEPS

- Strive to identify SWIM use cases at National level
- Build / buy SWIM technical infrastructure
- National / Regional test implementation

# GAPS / ISSUES - ICAO SWIM TF ROLE

- Closer coordination between ICAO SWIM TF and member state TF to track progress.
- SWIM TF may establish an online central information resource center for educational / training material and share regional level progress.
- SWIM implementation Training program for states

### Thank you