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TBO IMPLEMENTATION IN THE ASIA PACIFIC

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SCOPE

Why — Opportunities

What — Enablers Required

How — Readiness Level in the Asia Pacific

When — Transition is Now

SHAPING OUR FUTURE SKIES

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Benefits

Efficiency

Sustainability

Capacity

Due to predictability
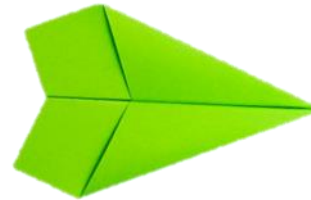
Quality of information

Timeliness

All stakeholders

Beneficiaries

Everyone

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FF-ICE

o replace FPL 2012

SWIM

o Aviation intranet using internet technology

o From point-to-point to system wide

o Service orientation

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Physical comms links

o New applications on links – ADS-C with EPP and CPDLC Baseline 2

o HF/VHD data links limited bandwidth - INMARSAT Iris and Iridium NEXT constellation (Iridium Certus service) ready for TBO

Platforms

o Aircraft FMS

o ATM Automated System - different flight data processor (FDP) and controller working position (CWP) human machine interface

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AIDC

- o Only 49% implementation of AIDC in APAC
- o Only 42% of the implemented links meet all the required message types

FRA and ATFM

- o TBO - flown flight path close to the user-preferred flight path and reduce potential conflicts and resolve demand/capacity imbalances earlier
- o Not prevalent and systematic in region

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EU IR CP-1 mandates the the following ATM functionalities by a certain time

o AF1. Extended Arrival Management and integrated AMAN/DMAN in high density TMAs

o AF2. Airport Integration and Throughput

o AF3. Flexible Airspace Management and Free Route Airspace

o AF4. Network Collaborative Management

o AF5. System Wide Information Management

o AF6. Initial Trajectory Information Sharing

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Trickle down implementation

vs

decisive new direction

Connect to SWIM now

○ UAE SWIM Gateway connected to EUROCONTROL Network Manager B2B Services

○ MET products in SWIM format

○ ATFM/ A-CDM over SWIM

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Fixed equipage environment

- Use trajectory predictions from other sources
- SWIM hybrid mode

Community of interest

- In lieu of regional mandate
- Collective interests of ANSPs, airlines, airports, industry
- Industry partnership – reuse technology and share services

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Thank You