



ATFM & AIRPORT OPERATIONS

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TOPICS TO ADDRESS



**INFORMATION NEEDED –
WHAT & WHEN?**



**HOW DO WE
DO IT?**



**QUALITY &
PERFORMANCE?**

EUROCONTROL BENEFITS STUDY AT 17 AIRPORTS

Based on 2.2 million annual departures...



34,400 Tonnes of Fuel Burn (-7.7%)

102,700 Tonnes of CO₂
28,700 kg of SO₂
(-7.7%)

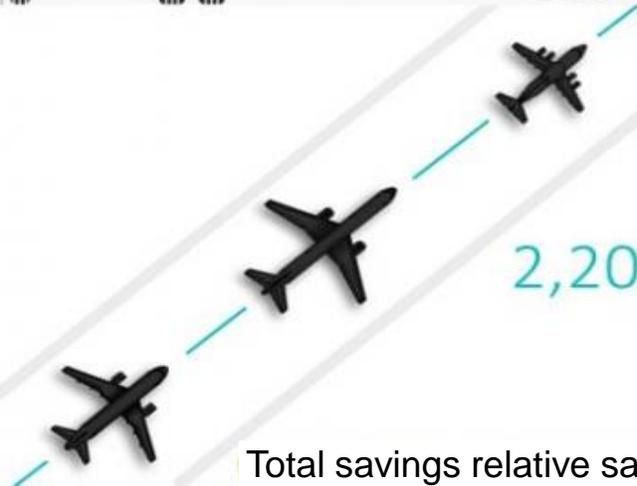


238,000 ATFM Delay
Minutes (-10.3%)



26.7 M in Fuel (-7.7%)
15.5 M in ATFM Delay
(-9.8%)

2,200,000 Taxi Minutes
(-7.0%)



Total savings relative savings across the 17 CDM airports in 2015 when compared to pre A-CDM performance

source A-CDM Impact
Assessment Eurocontrol

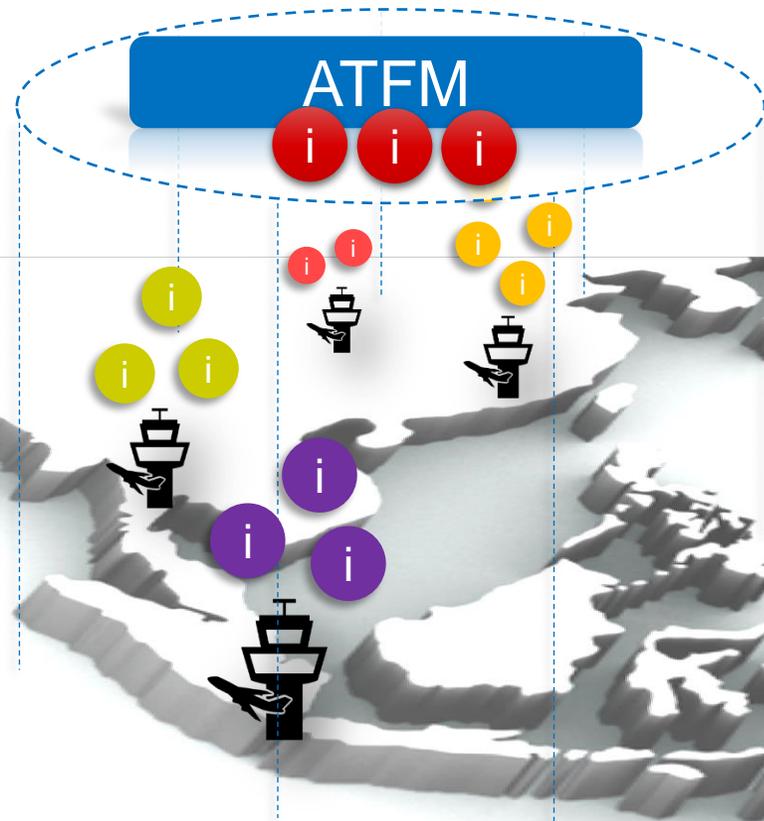
A-CDM IN APAC

ICAO & A-CDM in APAC

- ICAO recommends states in APAC to implement A-CDM in accordance with the Seamless ATM Plan.
- The Plan prioritizes the implementation of the Global Air Navigation Plan Aviation System Block Upgrades (ASBUs)
- Recommended ASBU are:
 - **B0-ACDM** Airport CDM
 - **B1-ACDM** Enhanced Airport CDM
- Specific airports mentioned by ICAO are:
 - Australia (Sydney, Melbourne, Brisbane)
 - China (Beijing, Shanghai Pudong and Hong Jiao, Guangzhou, Hong Kong, Xi'an, Shenzhen, Chengdu, Kunming, Hangzhou, Chongqing, Xiamen, Wuhan, Zhengzhou, Changsha, Nanjing, Qingdao, Urumqi, Dalian, Guiyang, Tianjin, Haikou, Sanya)
 - India (New Delhi, Mumbai, Chennai, Bangalore)
 - Indonesia (Jakarta, Surabaya, Bali, Makassar)
 - Japan (Haneda, Narita, Fukuoka, Osaka, Sapporo, Naha)
 - Malaysia (Kuala Lumpur)
 - New Zealand (Auckland)
 - Philippines (Manila)
 - Republic of Korea (Incheon, Jeju, Seoul)
 - Singapore (Changi)
 - Thailand (Suvarnabhumi, Don Mueang)
 - United States (Honolulu)
 - Viet Nam (Ho Chi Minh, Hanoi)



INTEGRATION WITH FLOW MANAGEMENT

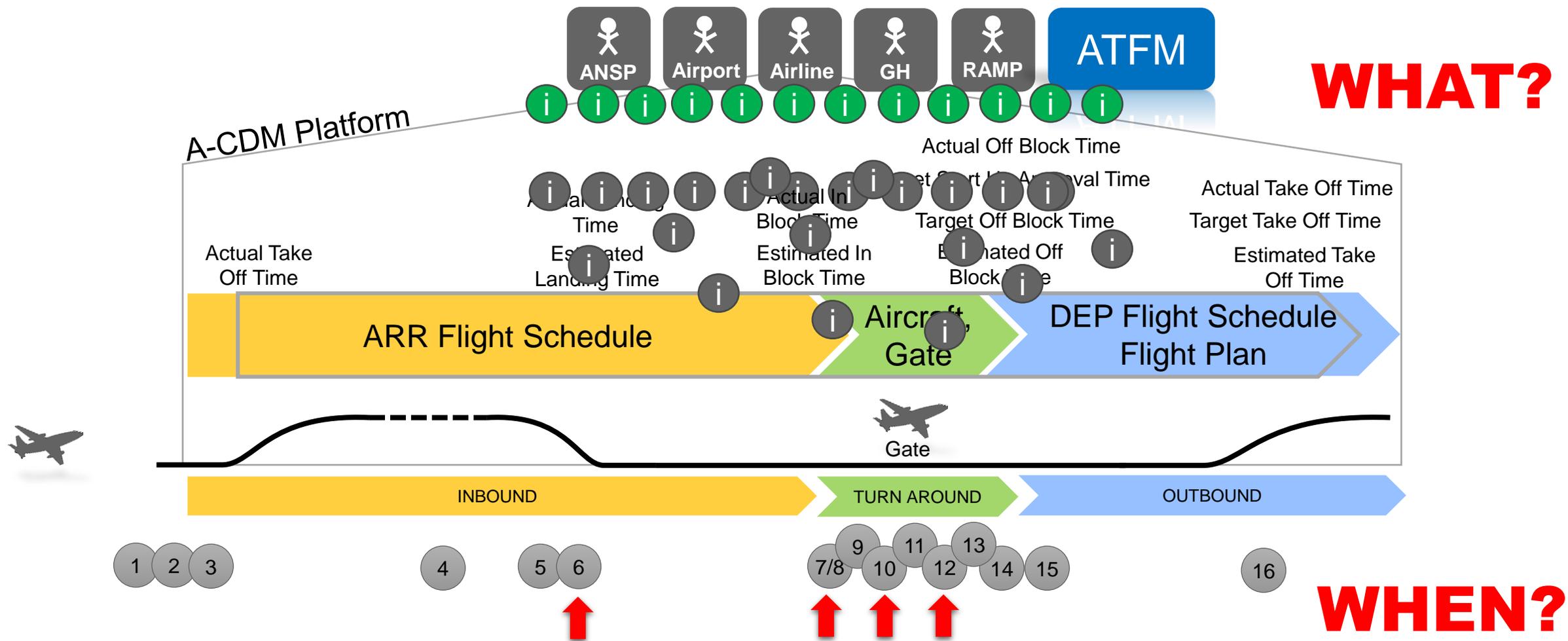


ATFM Information is important to enhance the predictability in the A-CDM procedures, i.e. by using Calculated Take Off Times (CTOT).



Airport information is critical to enhance ATFM and A-CDM is generating the information that is needed

WE NEED A COMMON APPROACH...



TOPICS TO ADDRESS



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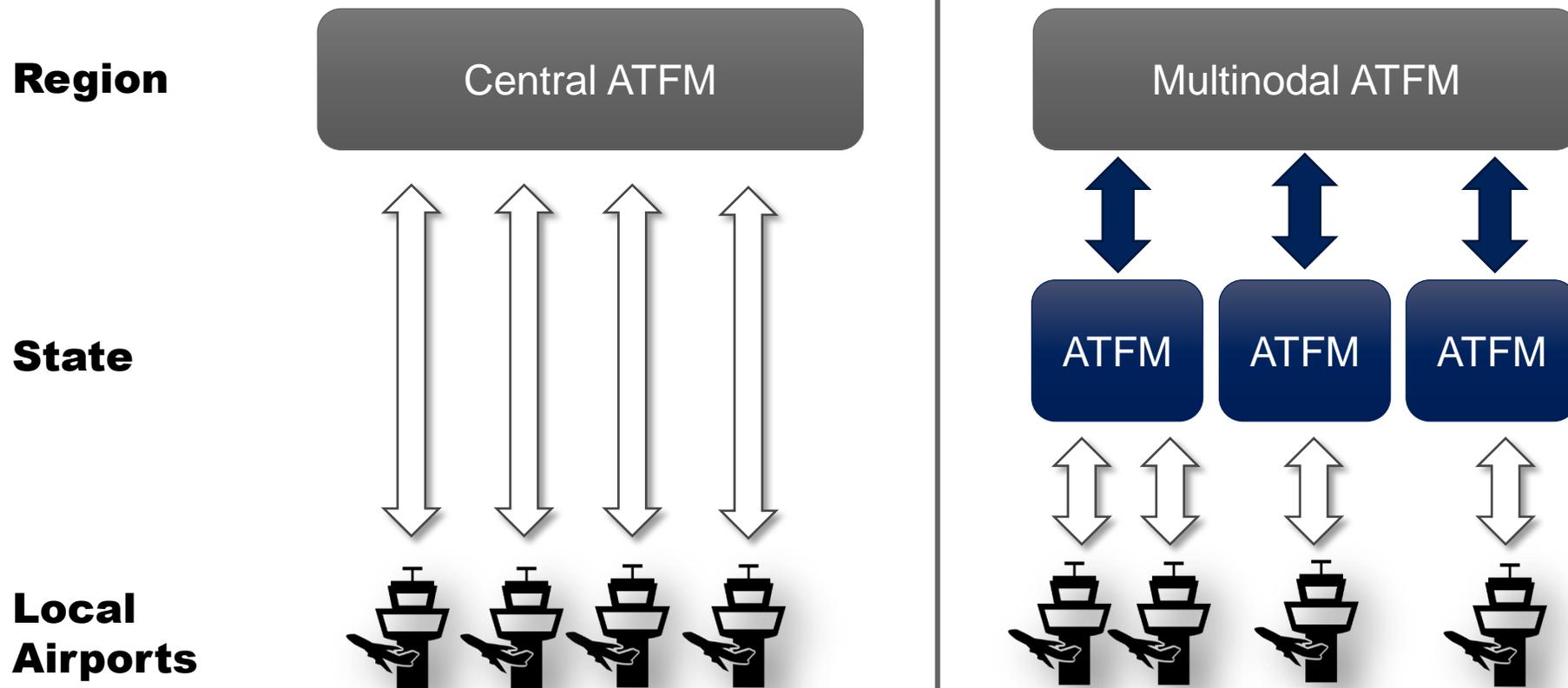


**HOW DO WE
DO IT?**



**QUALITY &
PERFORMANCE?**

HOW DO WE DO IT?



SWIM SERVICE(S) FOR A-CDM & ATFM INTEGRATION IS KEY

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source A-CDM Impact Assessment Eurocontrol

QUALITY & PERFORMANCE?

- ✓ No matter what data is being shared its **quality has to be ensured** in order to **achieve desired performance**
- ✓ Today there are **no common guidelines or minimum performance requirements** for sharing data between ATFM and A-CDM – **this will be needed!**
- ✓ **Common quality procedures** to ensure that:
 - ✓ All A-CDM airports that connect to ATFM has established certain level of performance, e.g. in relation to TOBT, TSAT etc.
 - ✓ AFTM is providing CTOT that are predicable and reliable.





**THANK YOU FOR
YOUR ATTENTION!**

Fredrik Lindblom
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Sales Director Asia Pacific

