CHINA INITIAL SWIM PROJECT OVERVIEW

ATMB, CAAC

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Bangkok, Thailand

Content

- Growth of Air traffic in North China

- North China regional TFM
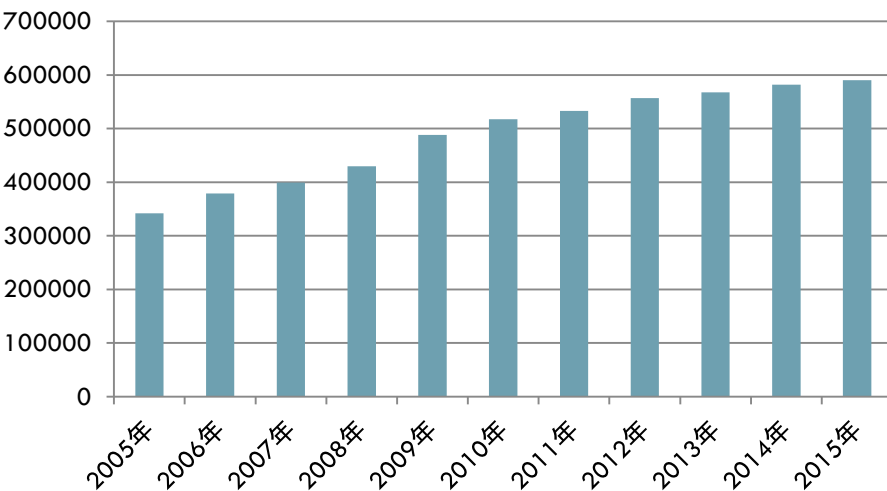
- Initial SWIM project
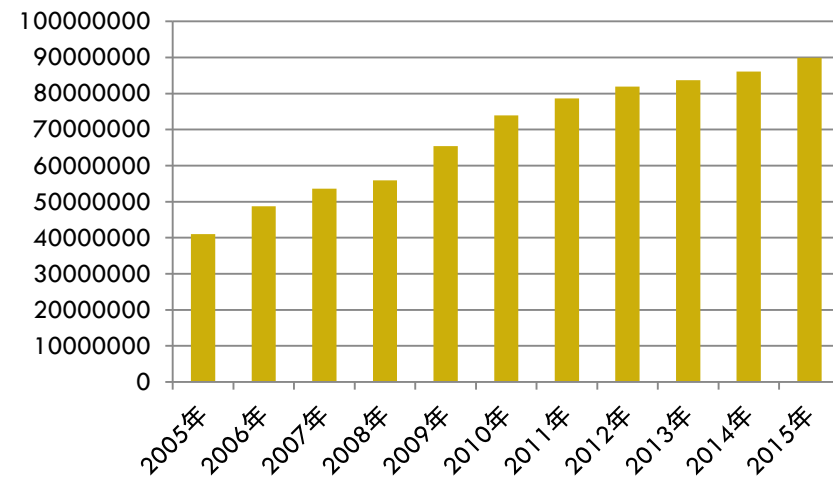
Background

- Growth of Air Traffic in China
  - 1,785,613 flights in Beijing FIR in 2013
  - Beijing Capital International Airport(ZBAA)

飞行起降架次
**Total Movements
ZBAA**

旅客吞吐量
**Passengers
ZBAA**

North China Regional TFM System

integrated CDM process

North China Regional TFM System

North China Regional TFM System

- Point-to-Point Information exchange
- Various Interfaces
  - Telecom
  - High layer protocol
  - Message type
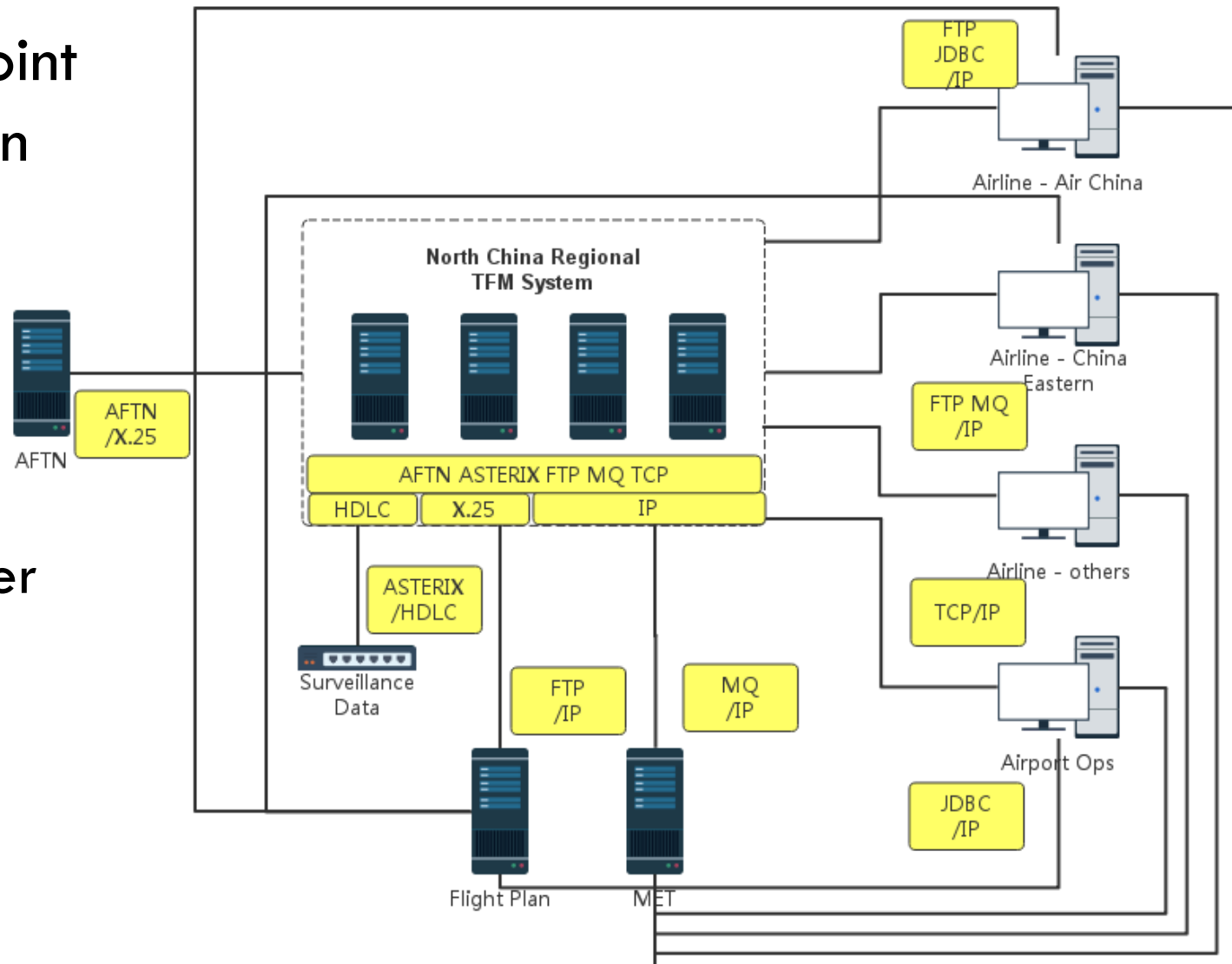
Initial SWIM Project

- Demonstrate the capabilities of the initial SWIM platform
- Utilize near real time ATS/A-CDM messages, weather information and simulated position reports
- Phase 1
  - 2013-2015
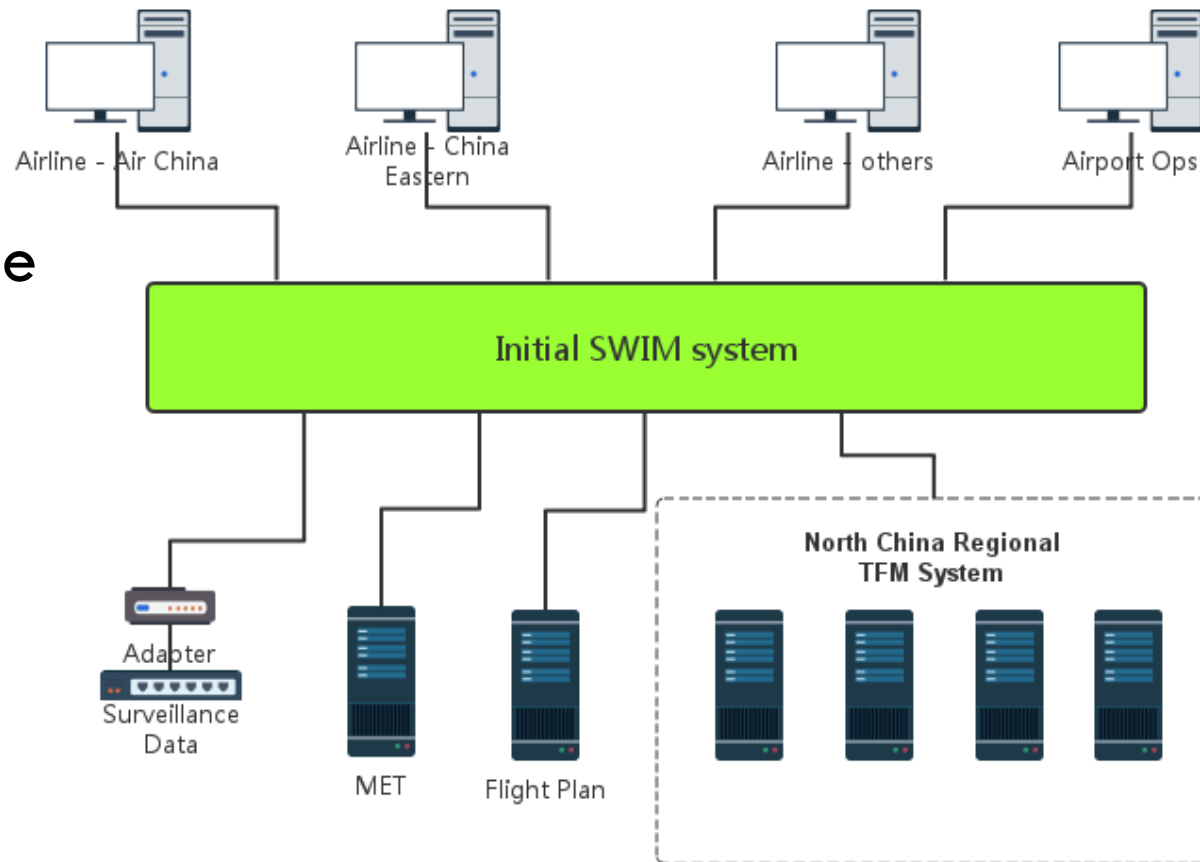
Initial SWIM Project

- Current SWIM Services
  - Publish Flight information
    - Flight Plan in FPL2012 and FIXM 2.0 format
    - Surveillance information
    - A-CDM times in FIXM 2.0 format
      - EOBT TOBT COBT CTOT
      - TSAT ASAT ATOT
      - ELDT ALDT
      - SIBT EIBT
  - Provide Traffic Flow Information
    - Constrains
    - ATFM measures applied

Initial SWIM Project

- Current SWIM Services
  - Provide weather information
    - Radar echo composite map
   - Thunderstorm forecast
  - Provide Gate/Spot allocation information
    - Gate/Spot allocation info
    - Boarding time/Gate closure time

Initial SWIM Project

- Messaging service pattern
  - Publish-subscribe
  - JMS messaging API
- Message type
  - Traditional message type
    - FPLS - Doc 4444
  - XML based message type
    - FIXM 2.0 – Flight data and A-CDM data
  - Image
    - Weather information

Initial SWIM Project

- System Architecture
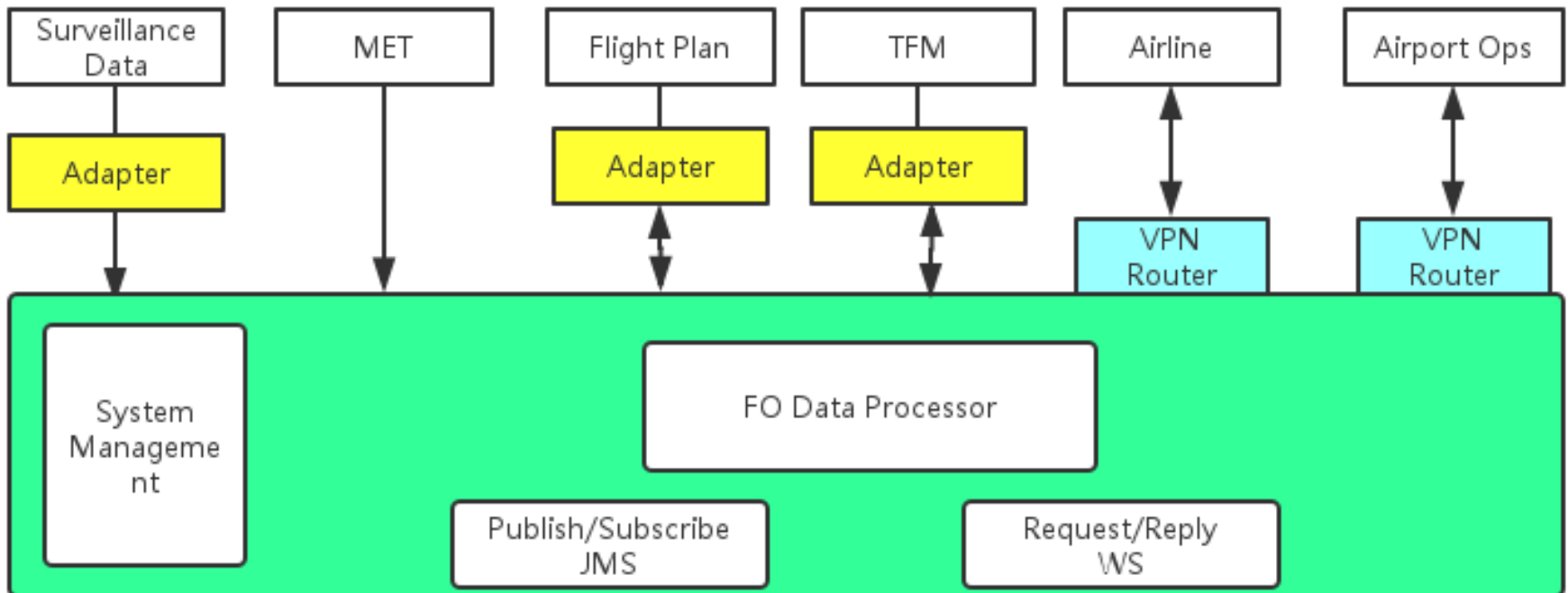
Initial SWIM Project

- Study on Globally Unified Flight Identifier (GUFI)
  - Requirements
  - Format
    - URN and UUID
  - Assignment
    - ANSP
  - Transition plan

Initial SWIM Project

- Phase 2 (2016 ~)
  - New services
    - Request-Reply messaging pattern
      - Web Service
    - Enhanced Flight and Flow data services
  - Adopt FIXM 4.0
    - GUFI
  - Study on IWXXM 1.0

Thank you !