

ATFM

An Aircrew's Perspective



**ATFM
SG/2**

30 Sept 2013

- Why ATFM is good**
- Some Flight Issues**
- Impact on Crew Training**
- Improving Safety**
- Minimizing Costs**

WHY ATFM IS GOOD





- **Improves Capacity and Operational Efficiency** – provides better FL availability and airline Delay Management
- **Predictability** – Fuel, Time and Operations – impact crew scheduling & operational costs
- **Harmonized Airspace Design and Streamlined ATM Procedures** - Improved Flight Performance, ATM Compliance and better Environmental Sustainability.
- **Seamless Transition** from one FIR to another – less operational errors and improved efficiency
- **Wholistic approach** – Departure to Destination consideration – improve safety



Some Flight Issues

Pre-Flight

Takeoff

CLIMB

CRUISE

DESCENT

LANDING



- **Better predictability** – accurate real-time information - improved Fuel and better Flight Time management
- **Compliance** to Crew Flight Time Limitations
- **Better anticipation** and handling of ground delays
- **Support** airport's A-CDM



- **Better on time performance** – accurate gate pushback and airborne time
- **Predictable** Runway usage and SID compliance
- **Less ground delays** and passenger rage incidents
- Climb to **optimum FL**



- **Better Cruise FL options** – flight at/close to Optimum cruise FL
- **Seamless transition** from FIR to FIR
- **Focused communications** between ATC/pilots
- **Improved situational awareness** overall
- **Less en-route Holdings**



- **Easier interface** with CDOs
- Minimal **ATC vectors**
- Less arrival **Holdings**
- **Early advice** on STAR and landing runway
- **More crew preparation time** for contingencies – weather, approach aids unserviceability, malfunctions, etc
>>>improved safety



- **Lesser delays** on arrivals
- **Earlier landing runway notification** and better pilot preparation for landing and weather interface – less landing incidents
- **Better on-time performance** at gate
- **Lesser passenger rage** incidents due delays
- Improved **passenger onward connections** on arrival

IMPACT ON CREW TRAINING



- **More focused crew training** wrt to CNS/ATM
- **Less Fragmented** and more Streamlined training
- **Minimizes unnecessary crew interface** with aircraft equipage – reduce cockpit workload
- Minimizes overall initial training and recency **training costs**



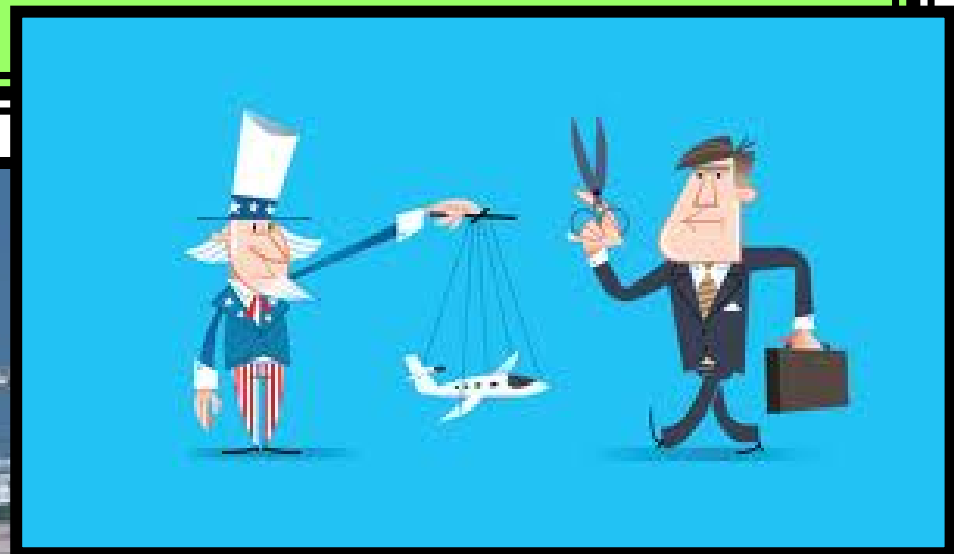
IMPACT ON FLIGHT SAFETY





- **Better understanding** of system constraints and operational limitations
- **Collaborative approach** to decision making – with stakeholders participation
- **Streamlined and focused** operations
>>>improve safety
- Lesser unnecessary **tactical intervention**
>>>better safety
- **Less uncertainty** >>> less pilot/ATC errors in communications, compliance and coordination

COST IMPACT



- **Capacity & Efficiency** – reduces fuel, time and operational costs
- **Regional ATM harmonization** - reduces unnecessary CNS equipage investment costs
- **Less in-flight diversions**
- **Predictability** – impacts crew scheduling costs
- **Focused training** – minimizes training costs
- Reduce unnecessary **Ground & Passenger handling costs**
- Reduced **passenger compensation**
- Improved **aircraft and passenger opportunity earnings**
- **Better safety** – saves money for everyone

- Don't rush in into ATFM – **existing capacity has to be optimized** to ensure continuing efficiency
- Flow management is **more than just reducing on ground delays**
- **Users and all stakeholders must be involved** – collaborative decision making – IATA, IFALPA, AAPA, IBAC etc
- **ATFM should address Multi FIRs** – to realize a wider benefit



THANK YOU

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