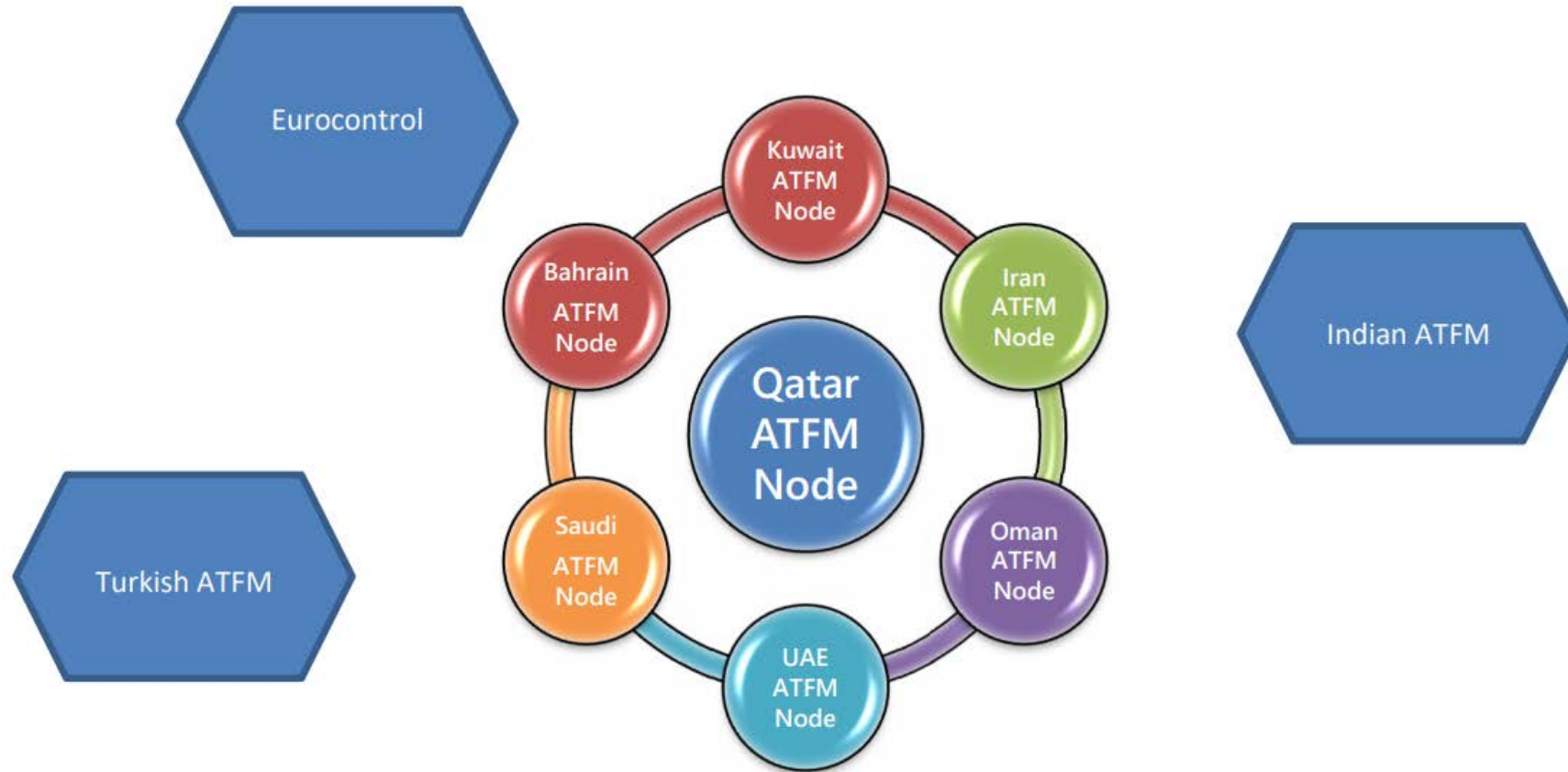


ATFM draft CONOPS



Air Traffic Flow Management

Multi Nodal ATFM



Key Concept of ATFM

ATFM is a **SERVICE** to

- Contribute to a **safe, orderly flow** of traffic
- Ensure **Maximum use** of ATC capacity
- Facilitate **balance** between **traffic demand and declared capacities**

CDM and ATFM

Collaborative Decision Making



Open exchange of operational information among stakeholders and ATFM Units



Common and accurate view of demand and system constraints



Improved ATM performance, while balancing the needs of ATM members



ATFM Phases

Strategic ATFM → Pre-Tactical ATFM → Tactical ATFM

Why	To forecast situation and create long-term plan	To update traffic demand and update ATFM plan	To balance traffic demand and capacity with ATFM measures
When	Months before operations	Greater than 1 day(s) before operation	Day of operation
What	Strategic / Initial ATFM Plan	ATFM Daily Plan (ADP)	Executed ATFM measures and balanced demand/capacity

Post-Operations: Common and Agreed Definition of Delay

- Common delay definitions must be agreed
- Delay classifications:
 - Actual take-off time (ATOT) minus estimated take-off time (ETOT)
 - Actual off-block time (AOBT) minus estimated off-block time (EOBT)
 - Arrival delay (actual versus planned arrival time)
 - ATFM delay - first calculated take-off time (CTOT) minus ETOT;
 - Time spent waiting in queue for take-off
 - Airborne holding minutes
 - Route extension in time and distance

Airspace and Airport Capacity

Capacities must be set for all sectors and airports before ATFM can be effectively implemented

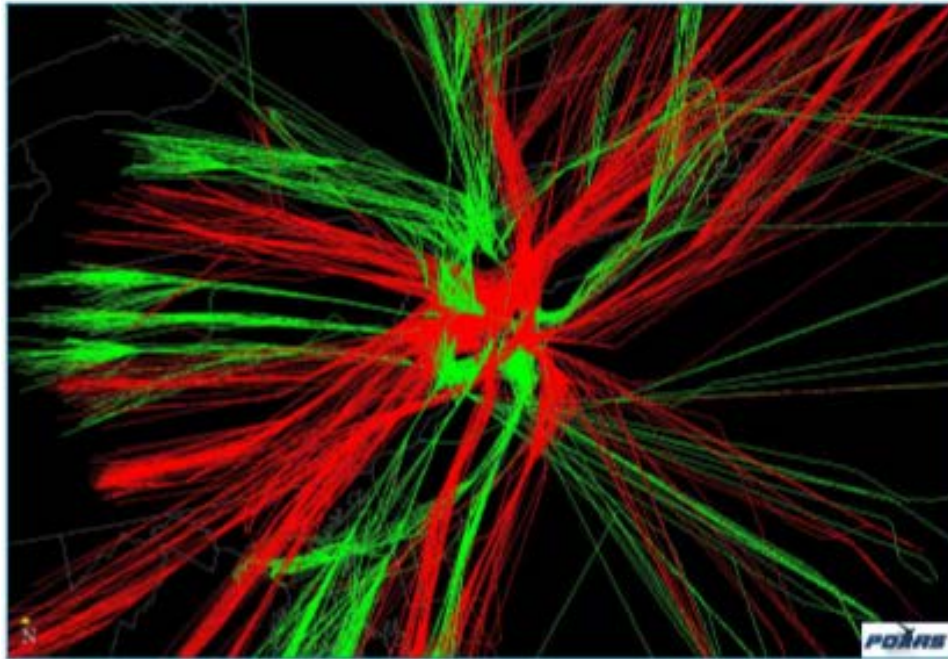
Two different capacity determinations:

- Nominal Capacity
 - Starting point for DCB
- Dynamic Operational Capacity
 - Continually determined as conditions change

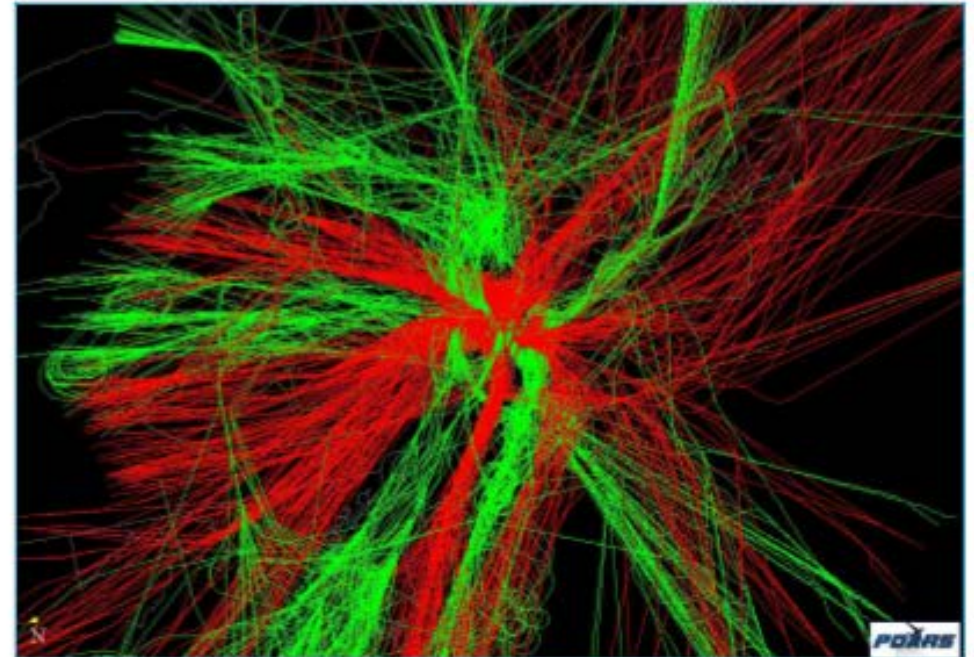


Dynamic Capacity Declaration

Clear Weather traffic flows



Severe Weather traffic flows



Steps in a ATFM Measure

- Monitor Capacity and Demand
- Assess Situation
- Collaborate Solution
- Coordinate Plan
- Implement Measure
- Monitor and Validate
- Modify as Necessary
- Cancel and Exit



Post Event Analysis



Q1: What did you run the ATFM program for?



Q2: What did we “DO” to the flights?

Impact Analysis



Q3: How did the flights REACT”?

Compliance Assessment



Q4: And was it “HELPFUL”?

ATFM Effectiveness Analysis

Action of the meeting

- The meeting is invited to note the progress made by Qatar for the FWC 2022 in development of the Operational Plan and roadmap along with ATFM CONOPS.
- The meeting is invited to review and comment on the FWC 2022 Operation plan, in order to provide an update to the ATM SG to start the implementation phase.
- The MID State are invited to support the implementation of the FWC 2022 Operation plan and the tasks of the operational committee.