AATIP
ASEAN Air Transport Integration Project

Regional ATFM in Europe

Cross-Border ATFM Workshop
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Presentation prepared in conjunction with EUROCONTROL

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Regional ATFM in Europe

➧ **Local to regional collaboration**

➧ **The Network Operations Concept**

➧ **From regional to global**

A Historical perspective

Based on the ICAO Centralised Traffic Management Organisation (CTMO) concept

Initial database of schedules and other pre-flight information

From Local to Regional ATFM

PRETACT: 6 days before real time ops

Centralised flight planning service – IFPS

STRATEGIC, PRETACT, TACTICAL ATFM operations

A Historical perspective

Airspace management – FUA, CDR

ATFM to ATFCM

From CFMU to Network Manager

Receipt and distribution of real-time surveillance information

Integrating airports and network

Network Operations
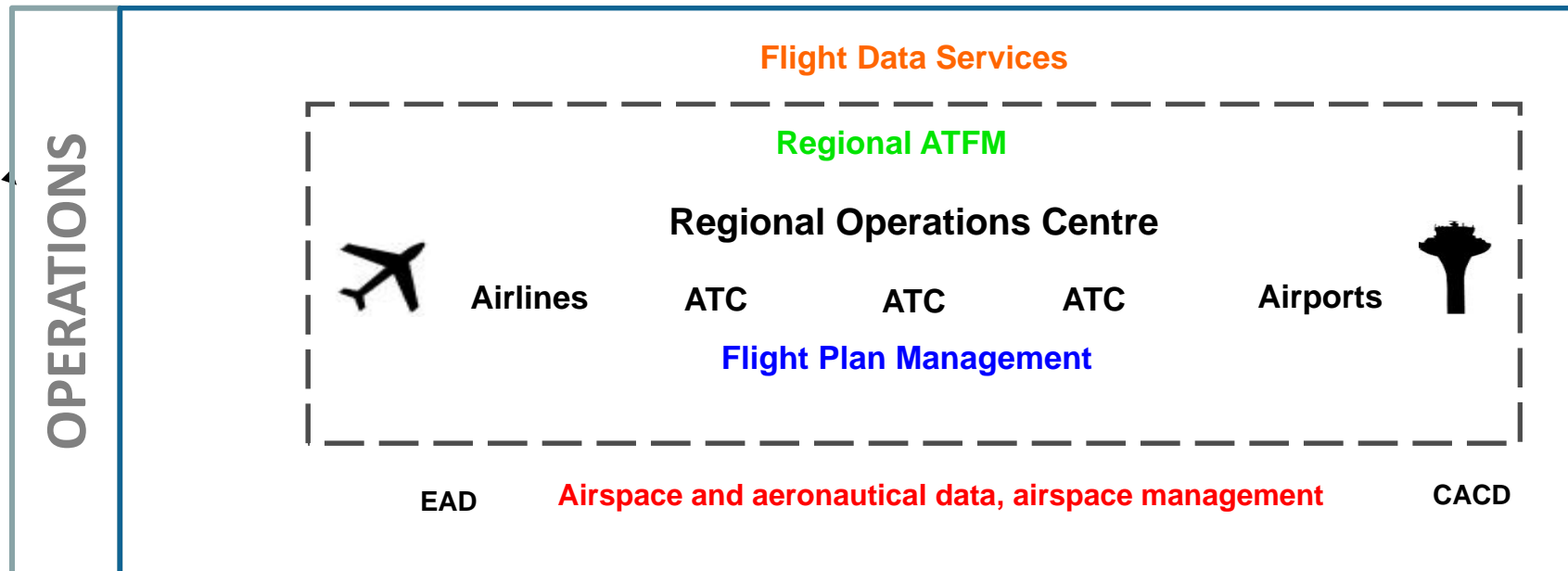
Unique collaboration of all ATM stakeholders

Regional ATFM in Europe

➤ **Local to regional collaboration**

➤ **The Network Operations Concept**

➤ **From regional to global**

The Network Operations Concept

OPERATIONS

Flight Data Services

Regional ATFM

Regional Operations Centre

Airlines   ATC   ATC   ATC   Airports

Flight Plan Management

EAD   **Airspace and aeronautical data, airspace management**   CACD
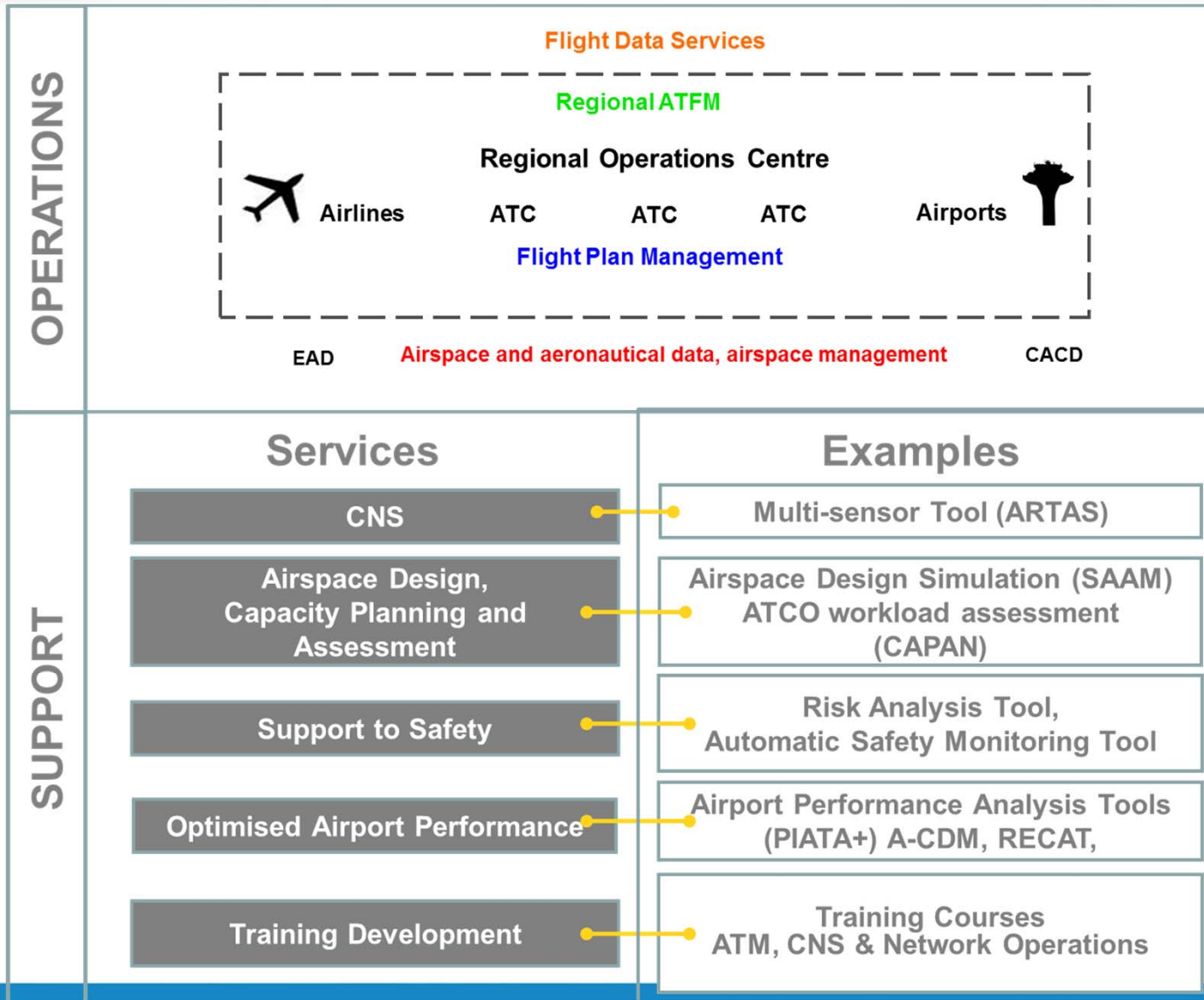
In addition to regional ATFM functions

Support Services & Products

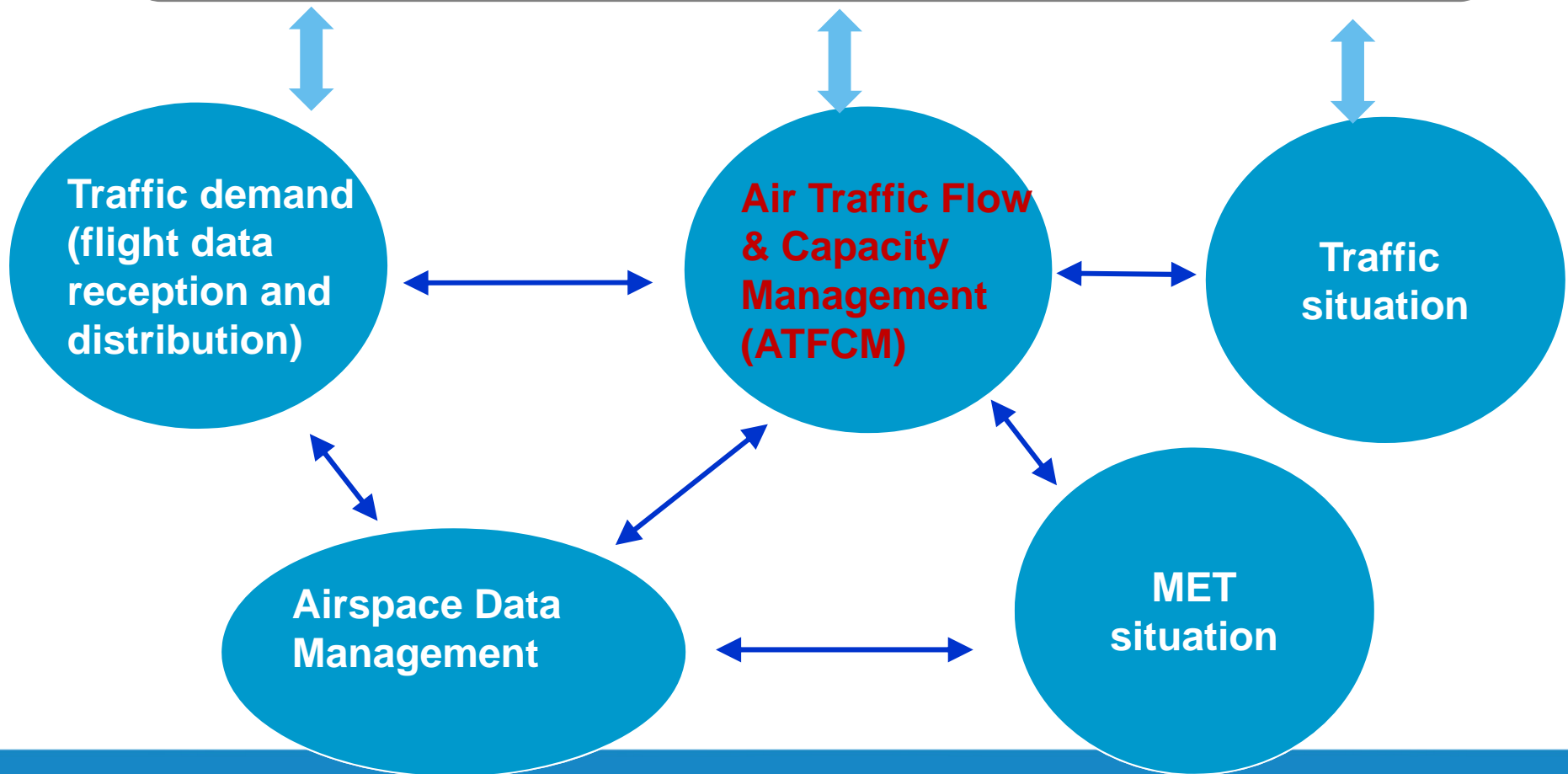- Achieve safe, efficient and environmentally friendly air traffic operations

The Network Operations Concept

Network Operations Services

Partners : ANSP, Airport, AO, MIL, CFSP
Institutional arrangements
Shared tools and data interoperability

Traffic demand (flight data reception and distribution)

Air Traffic Flow & Capacity Management (ATFCM)

Traffic situation

Airspace Data Management

MET situation

**One single
Flow Management
System over
Europe**

42 States

60 En-route centres = 1750 Sectors

1400 Aircraft Operators

450 Airports

60 FMPs

Network Operations

4000+ connected end-users

Peaks 34 400+ flights a day

10 000 000 flights a year

The partnership

- Legal basis – ICAO Doc 7030
- EUROCONTROL Convention
- Common Operations Manual (central unit, local units, AOs)
- Clear governance
- Contacts at all levels, strategic management, ops management, OPS

BENEFITS OF ATFM

➤ Joint Network Management adds value to Europe's ATM system by:

➢ helping partners enhance the Europe-wide network performance;

➢ jointly drawing up strategy, plans and priorities;

➢ helping to make routes more efficient;

➢ balancing demand and capacity;

➢ consolidating information into centralised ATM databases;

➢ forecasting, monitoring and analysing network performance;

➢ dealing with network challenges centrally – weather, major events, hotspots, crises.

Much more than an ATFM system

- **OPTICON** : optimum sector configuration application

- **PATHFINDER** : easy to find alternative route using the Map

- **NIA**: Network Impact assessment - analyses the potential impact of any ATFM measure.

- **FE GRRT**: group rerouting tool offering latest available more efficient routes

- **E-Helpdesk**: pc to pc help desk allowing much better and faster management of the queries from customers.

- **SIMEX**: Stand alone simulation tool.

- **ATFCM situation display**: shows at any moment ATFM situation in Europe.

- **GLANCE**: enables users to see different profiles of a flight

- **METEO updates**: 4 times in 24 hrs

- **NOP portal**: interactive information tool

- **Flight List**: all partners can retrieve and display detailed information on any flight

- Performance targets
  - European SES targets, Safety, Capacity, Flight Efficiency, Cost efficiency
- Weather / risk assessment tools
- Disruption and crisis management
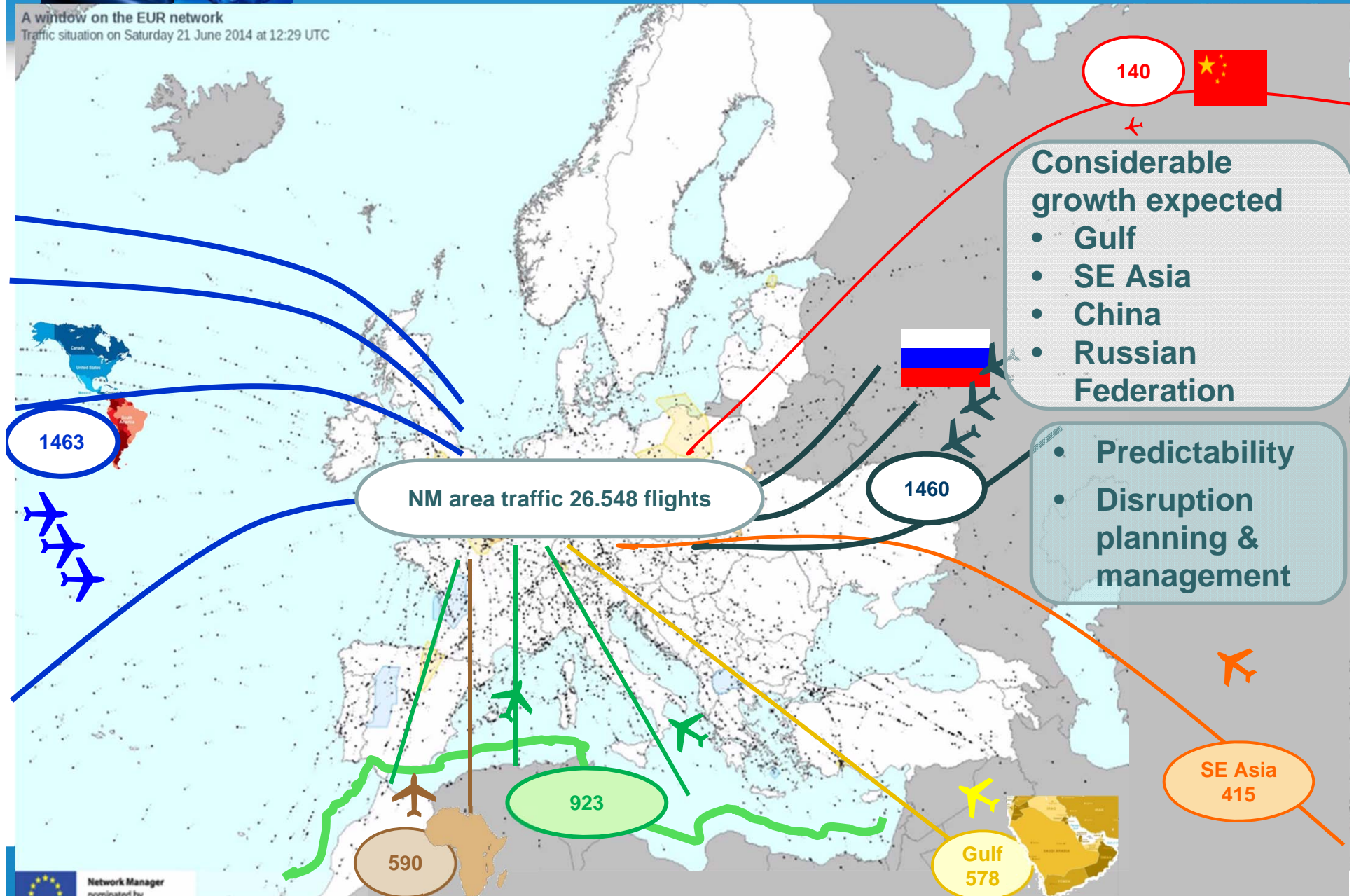- STAM
- Inter regional Flight Data Updates

Regional ATFM in Europe

- Local to regional collaboration

- The Network Operations Concept

- From regional to global

The Global dimension

140

Considerable growth expected
- **Gulf**
- **SE Asia**
- **China**
- **Russian Federation**

1463

- **Predictability**
- **Disruption planning & management**

1460

NM area traffic 26.548 flights

923

590

Gulf 578

SE Asia 415

Network Manager
nominated by

The vision for Global ATFM
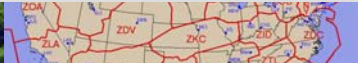## A set of interlinked operational ATFM regions

The key to predictability
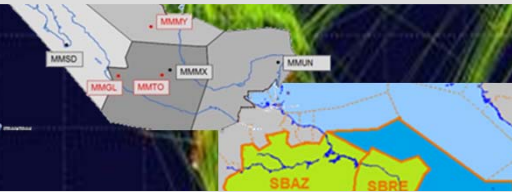Local to Regional to Global – Interoperable - Sharing

Surveillance and flight data updates – Radar, ADSB, ACARS….
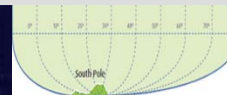
Local, regional and cross regional ATFM Measures

Traffic Demand – Schedules, flight plans

"Supply" information: Capacities, Events, Weather, Disruptions

Airspace Digital Infrastructure: Airports, points, routes, FIR, ACC, sectors

➤ Goals of a global system:

To create, to the maximum extent possible, a single continuum of airspace where boundaries are transparent to users.

➤ The main enabler:

The full exchange and interoperability of all relevant information, from planning to tactical phase.

AATIP
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Thank you.

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