



Network Manager
nominated by
the European Commission



Keeping Commercial Air Travel and Airspace Safe

European problems are global issues

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Head Medical Service EUROCONTROL

November 2018

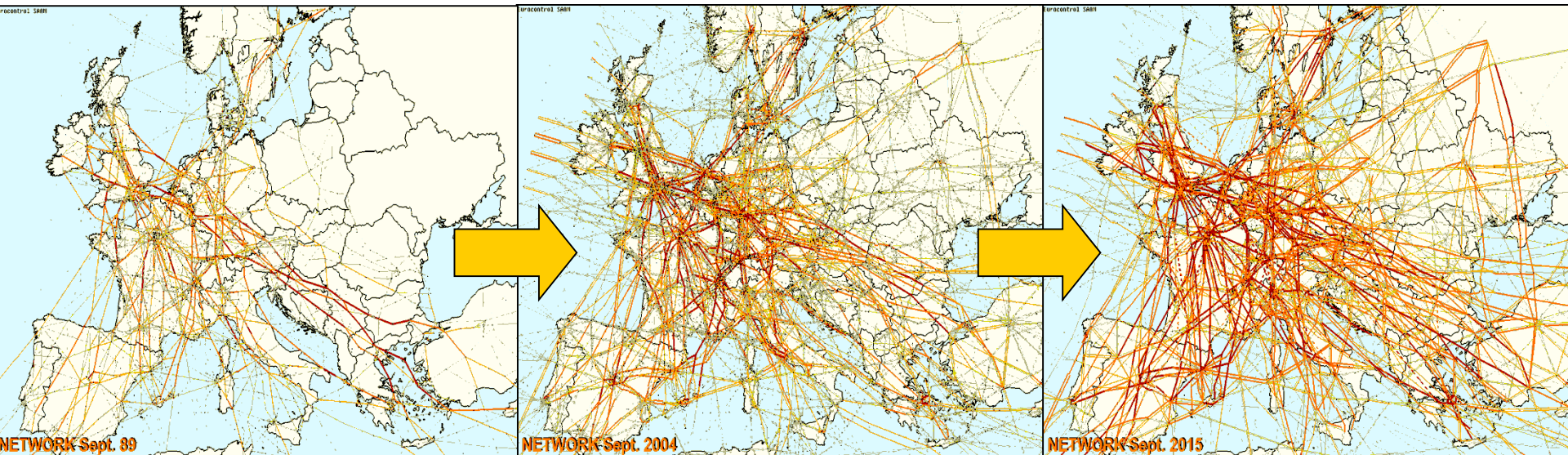


Future: Capacity remains a challenge

2000: 8 million

2007: 10 million

2030: 17 million



THE EU NETWORK MANAGER IN 2018

CONNECTING THE NETWORK TO DELIVER IMPROVED PERFORMANCE

ATFM EN-ROUTE DELAY TARGET SET FOR REFERENCE PERIOD (RP)2:

0.5 MINUTE PER FLIGHT
YTD delay
2.04 MINUTE PER FLIGHT

37,101
 flights on
Friday 7th
September

37,101 flights
 on **Friday 7th**
September

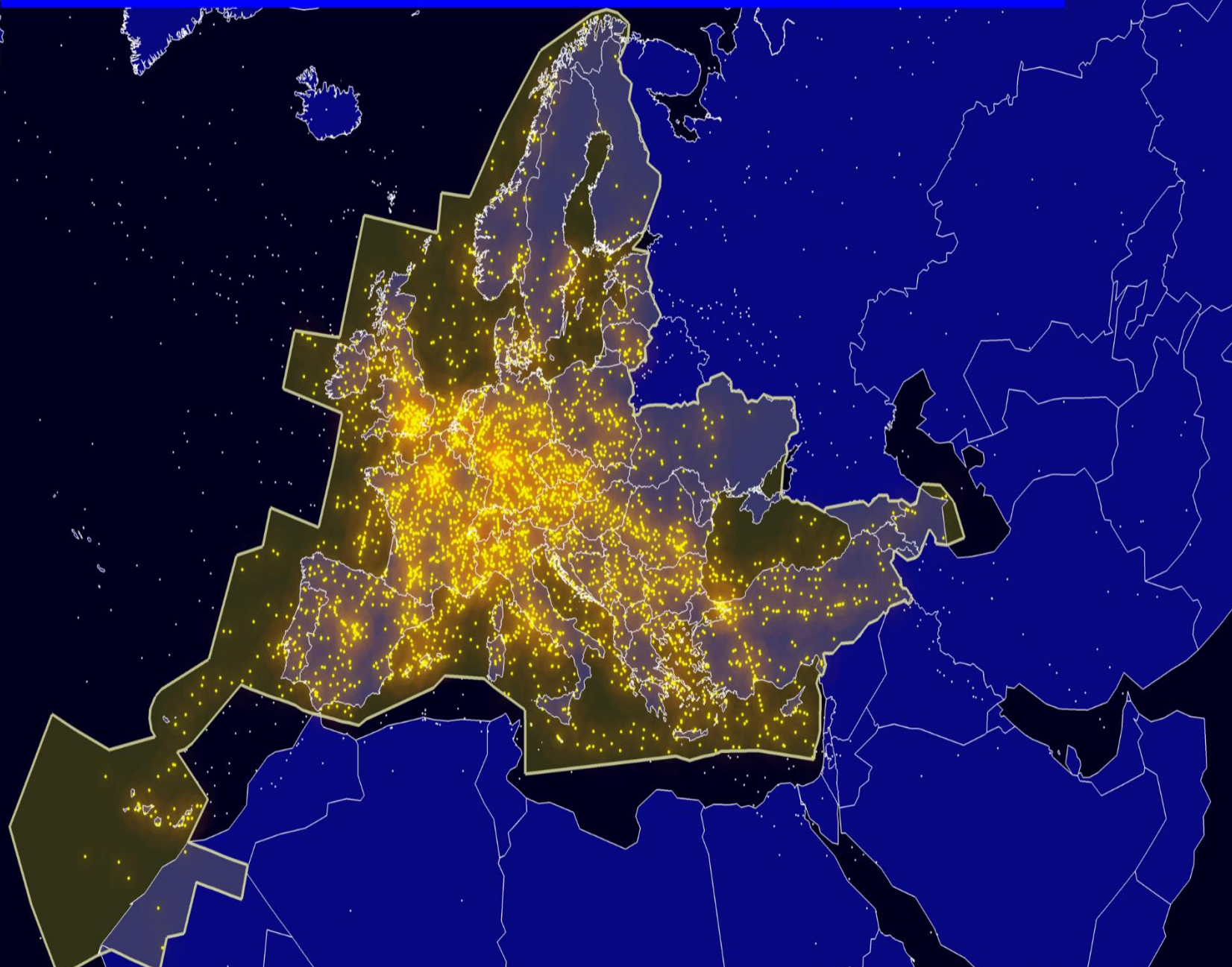
THE NETWORK

- 3.49  MILLION PASSENGERS PER DAY
- 29,057  FLIGHTS PER DAY
- 4,500  AIRSPACE USERS
- 530  AIRPORTS
- 68  CONTROL CENTRES
- 43  EU / NON-EU STATES





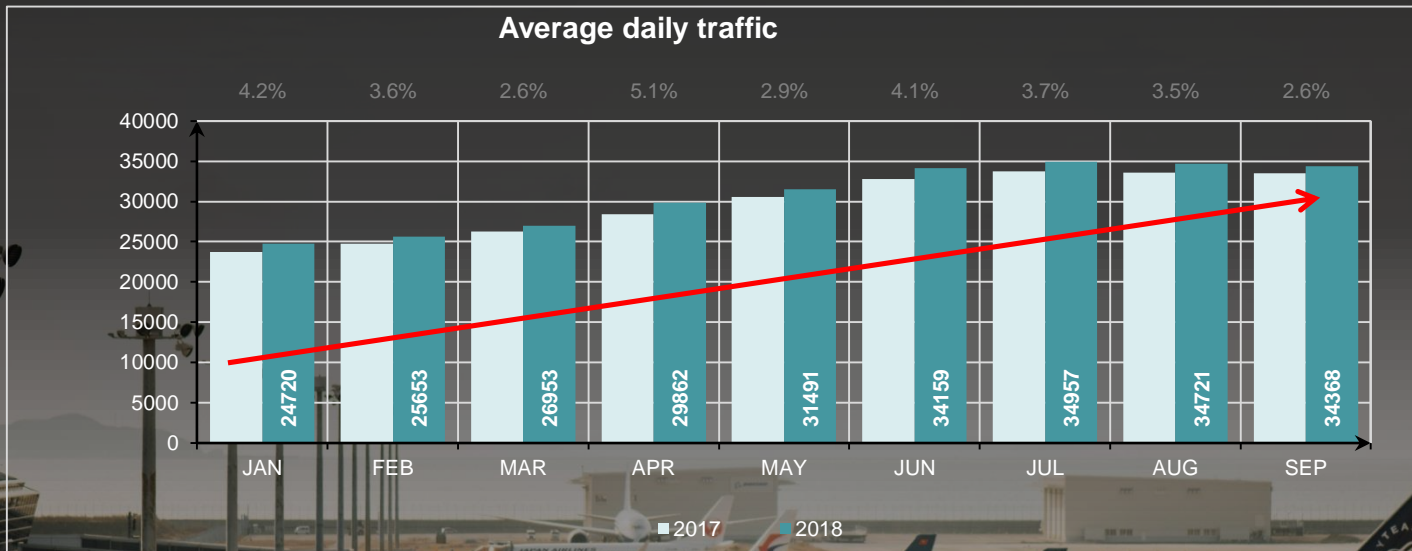
All-time record 37,101 flights on Friday, 7th of September 2018



Clock: 09:45:30 Nb 3677 flights



TRAFFIC



3.7%
Traffic
Increase
(summer and
YTD)

18 days
with traffic
above
36.000
flights

Top
contributors:
Turkey
Greece
Germany

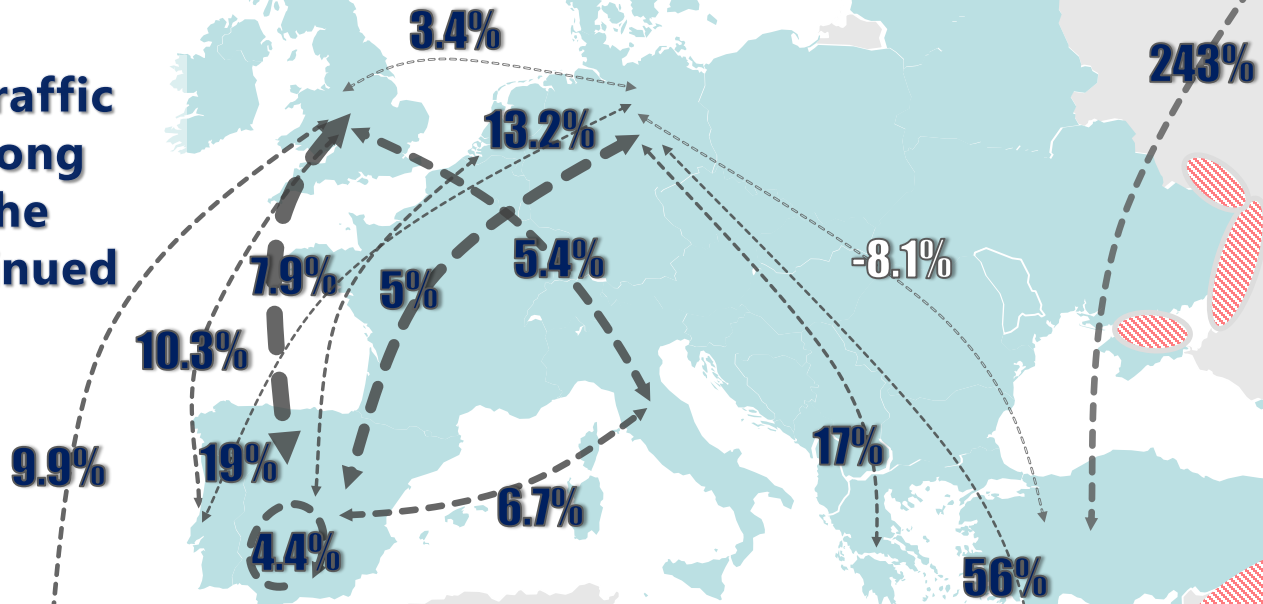
Biggest changes in 2017

(in absolute number of flights added vs 2016)

2. Additional traffic leading to strong growth on the West axis continued

1. Flows between the Russian Federation and Turkey recovered

3. Flows from/to Egypt recovered



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9.3%

Note: schematic routing only

Middle East

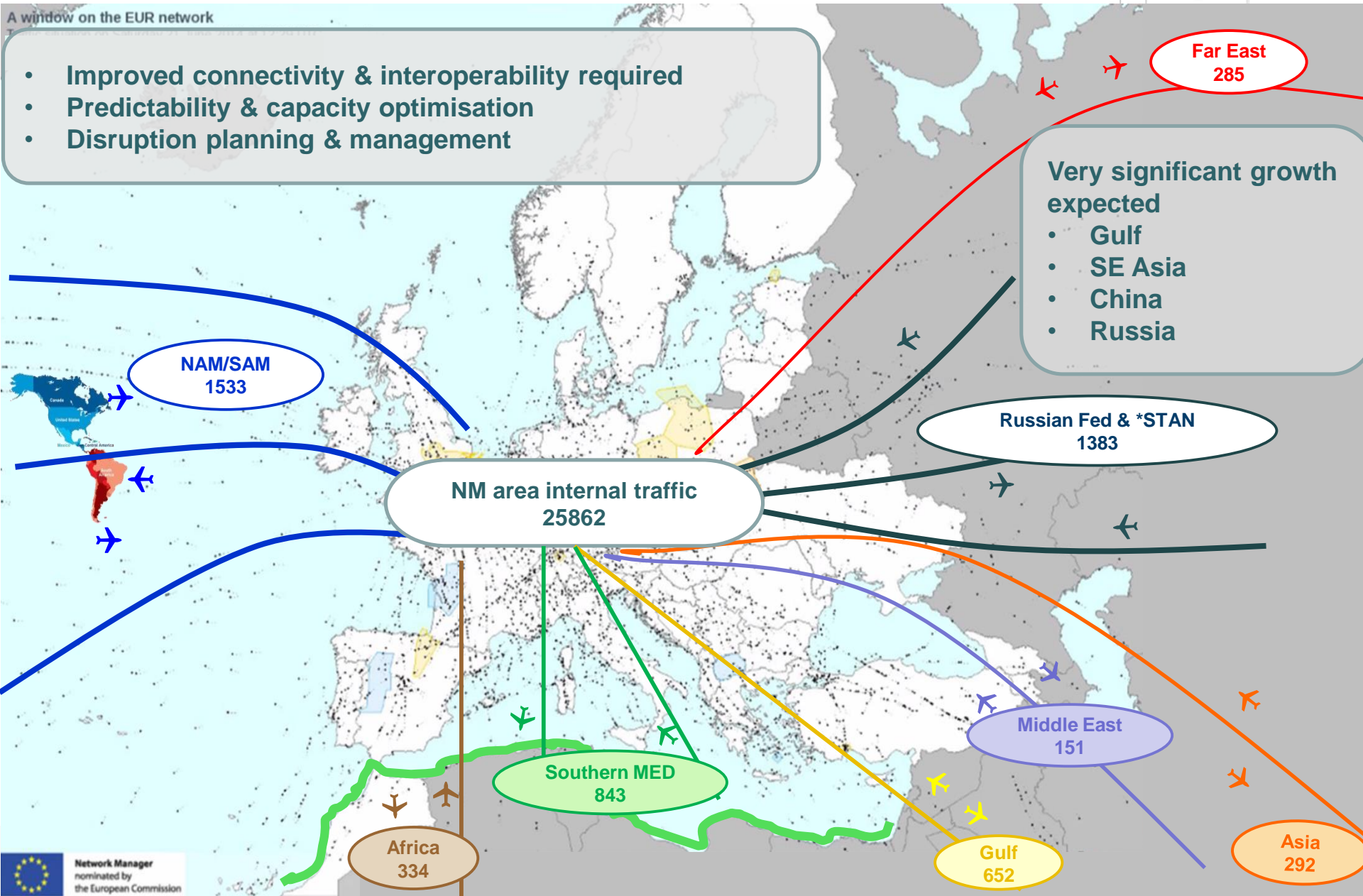
Increasing importance of external traffic flows

2015 - Daily Flights in European NM Area



A window on the EUR network

- Improved connectivity & interoperability required
- Predictability & capacity optimisation
- Disruption planning & management



Very significant growth expected

- Gulf
- SE Asia
- China
- Russia

Russian Fed & *STAN
1383

NM area internal traffic
25862

NAM/SAM
1533

Middle East
151

Southern MED
843

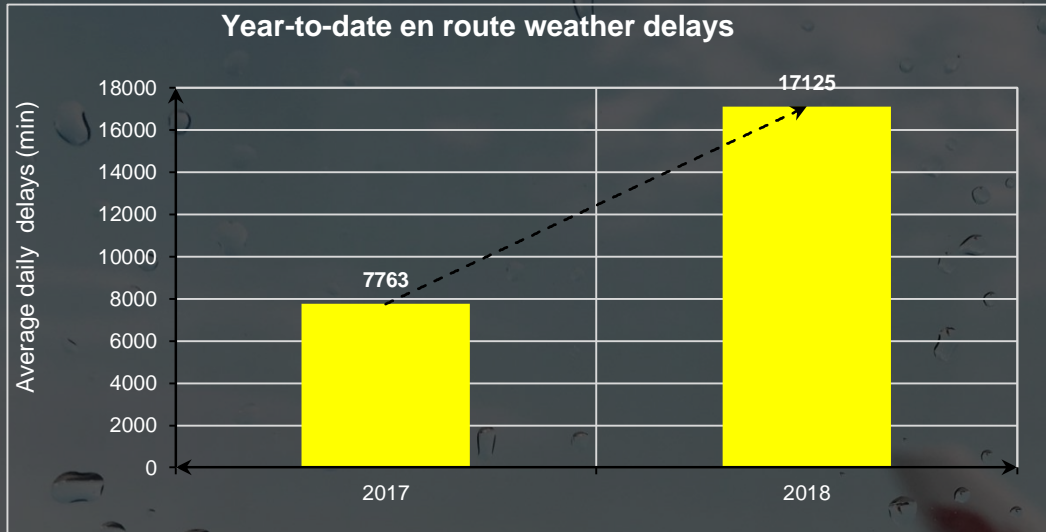
Africa
334

Gulf
652

Asia
292

- **SOMETHING IS ALWAYS HAPPENING SOMEWHERE**
- **Meteo** problems
- **Human** resources problems
- **Technical** problems
- **Airport** problems

WEATHER



CLIMATE CHANGE HAS BEEN HAPPENING!

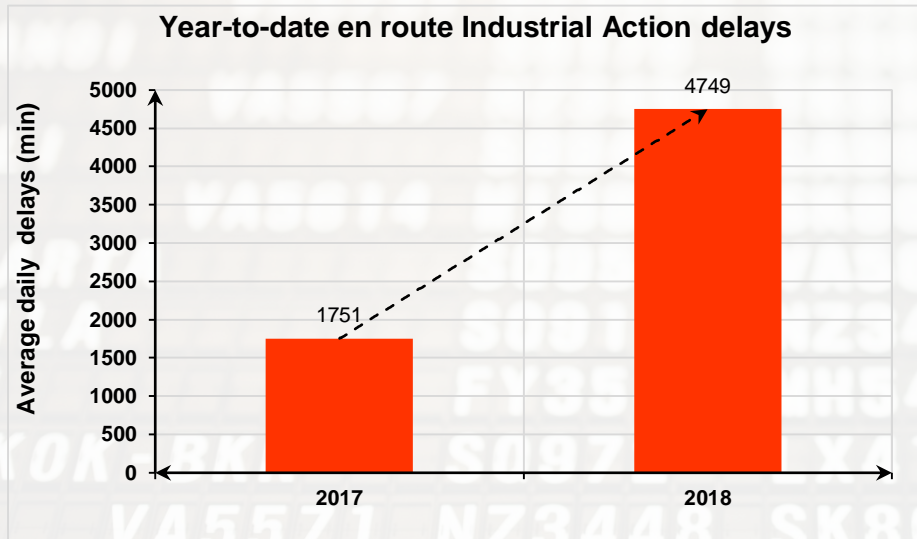
28.5% of
ATFM delay
in AUGUST

**Maastricht
Karlsruhe
Vienna**
the most
affected
areas





INDUSTRIAL ACTIONS

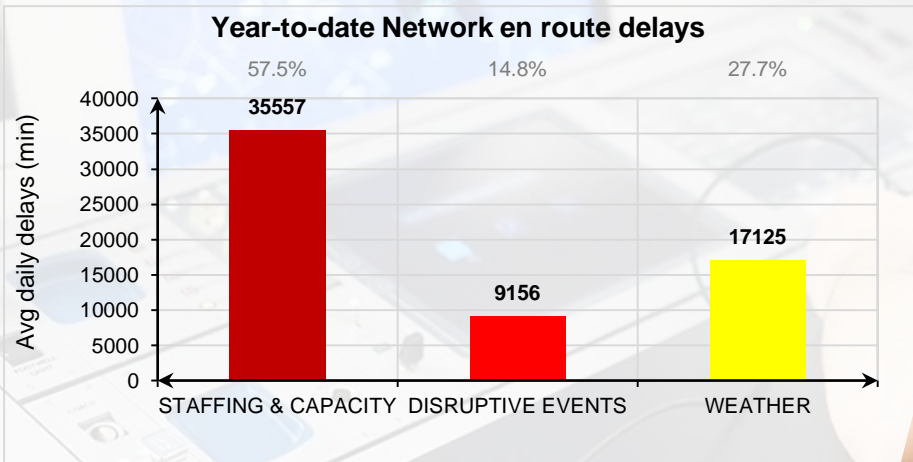
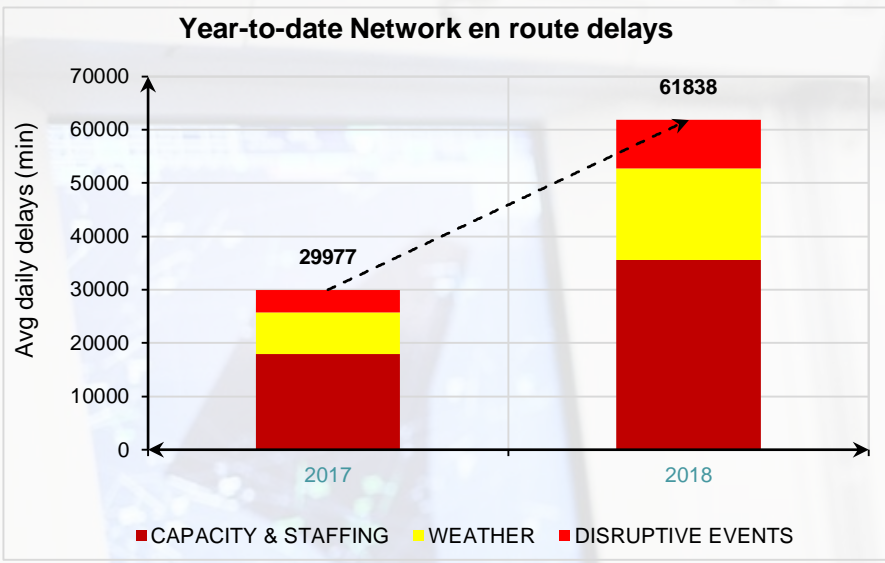


19

**strikes days
with severe
ATFM impact
during the
Summer**

**The most
impacted-
Marseille
ACC**

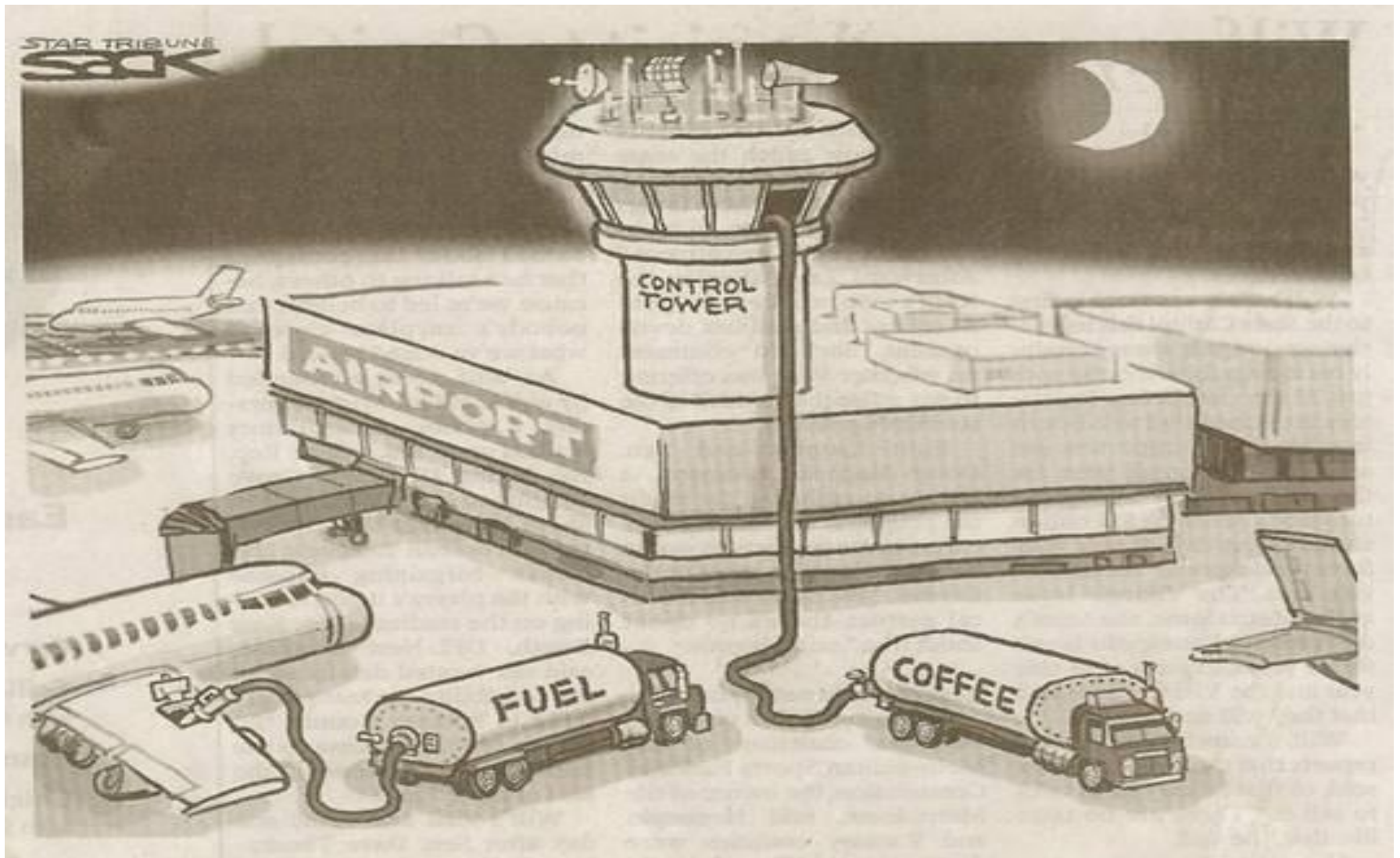
STAFFING AND CAPACITY



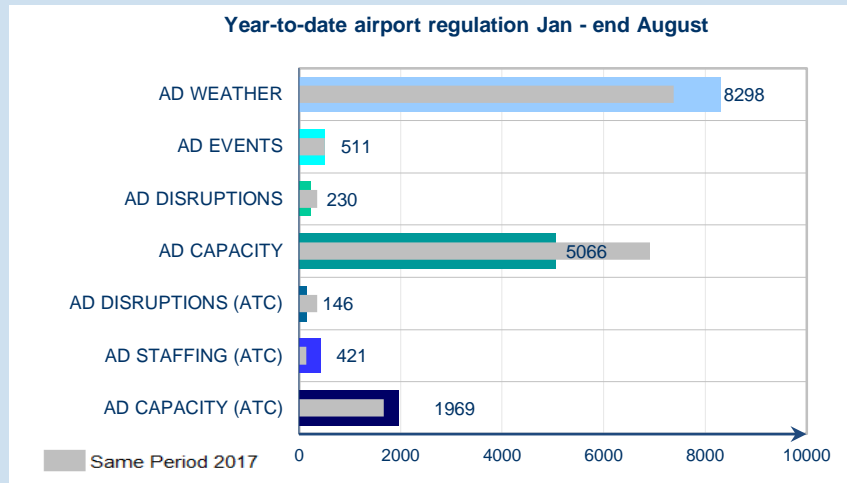
29.8%
ATC
capacity
delays in
AUGUST

20.1%
ATC
staffing
delays in
AUGUST

**MORE
CAPACITY
NEEDED!**



AIRPORTS



0.58 min/fit
ATFM
airport
delay

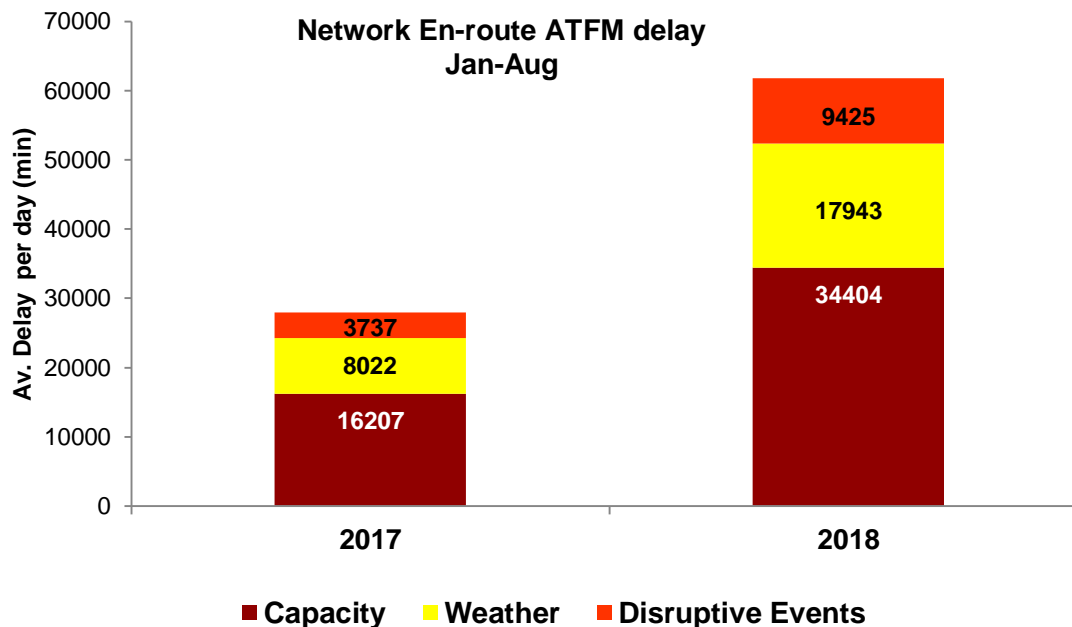
Weather
delay:
**50% of
total delay**

27%
decrease
of
Airport
Capacity

Amsterdam/
Schipol AD
Barcelona AD
Lisbon AD



En-route



- **Weather:** More than double of last year, 30 % of en-route delays
- **Capacity and Staffing:** 112% more than 2017
- **Disruptions and Events:** Highest increase, 150% more than 2017

ATM Structure in Europe

**One single
Flow Management
System over
Europe**

43 States

68 En-route centres = 1750 Sectors

1940 Aircraft Operators

500 Airports

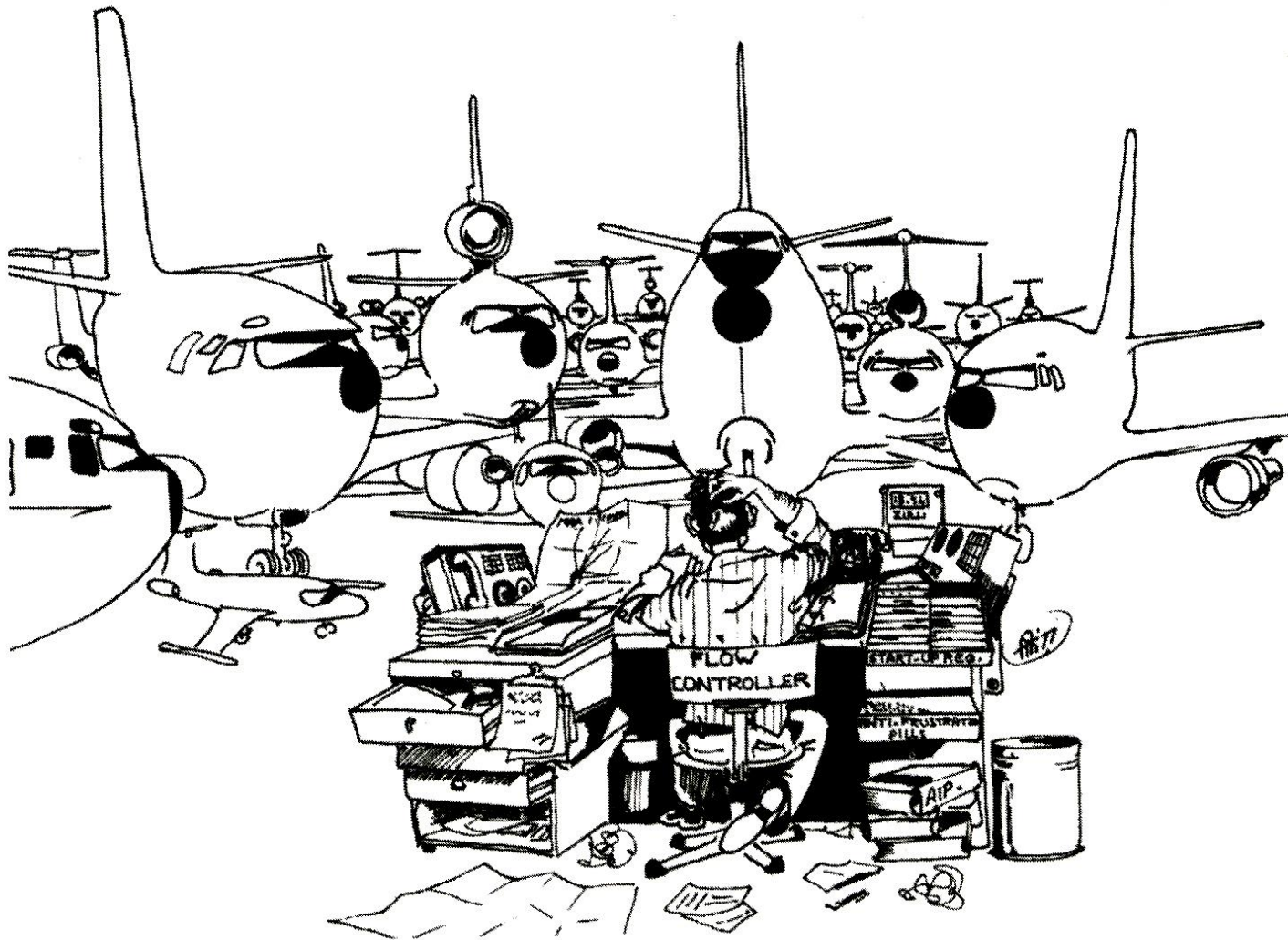
60 FMPs

Network Operations

4500 airspace users

Peaks 36 825 flights a day

~11 000 000 flights a year

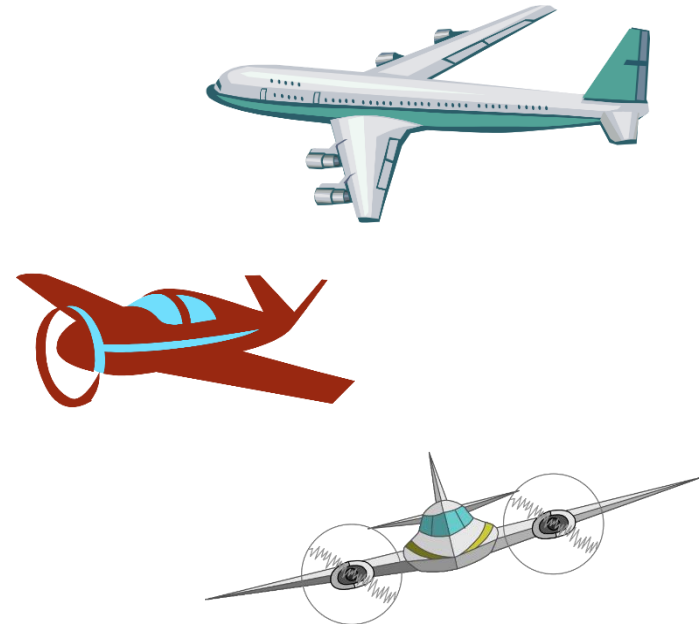


Capacity

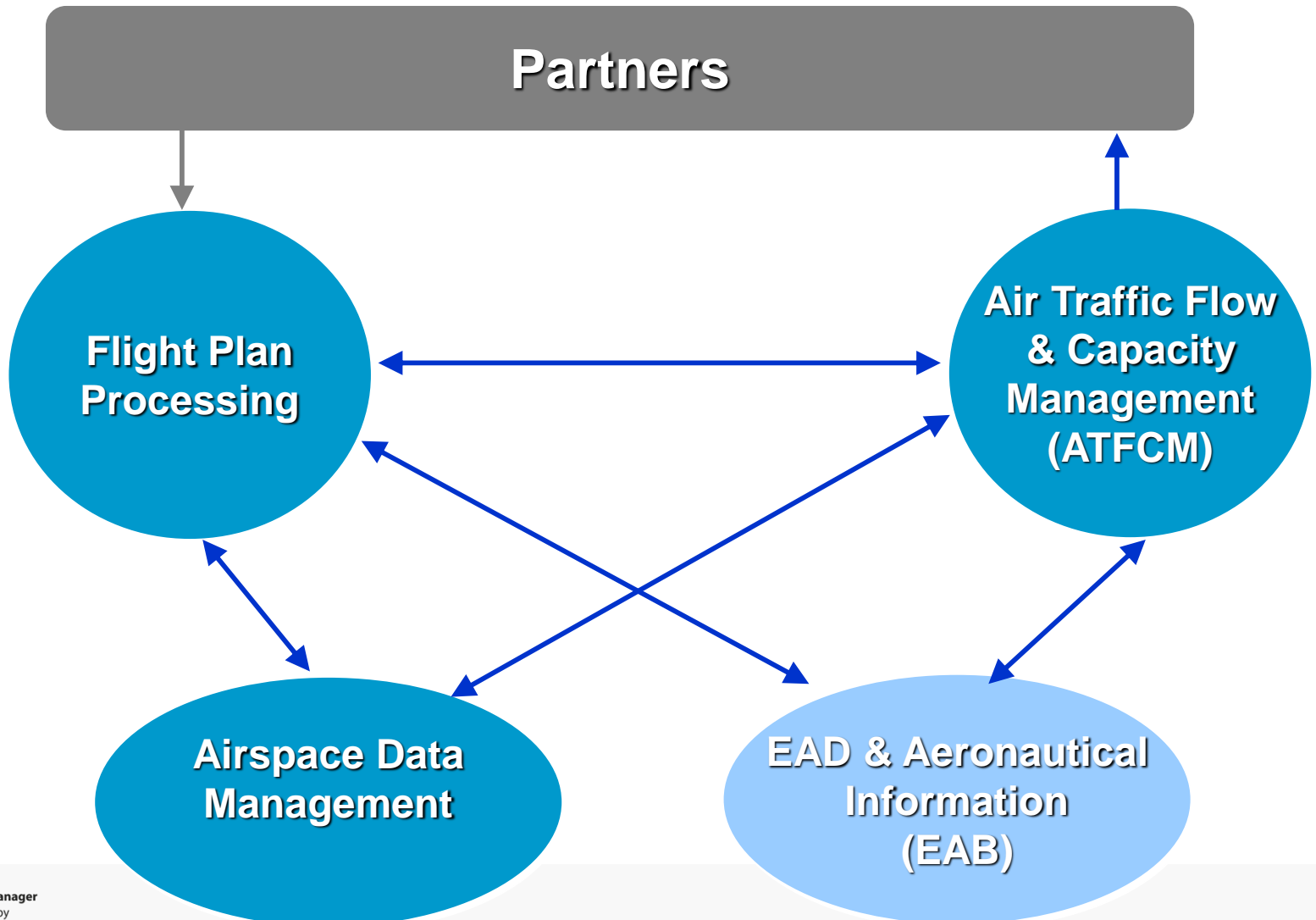
Supply



Demand

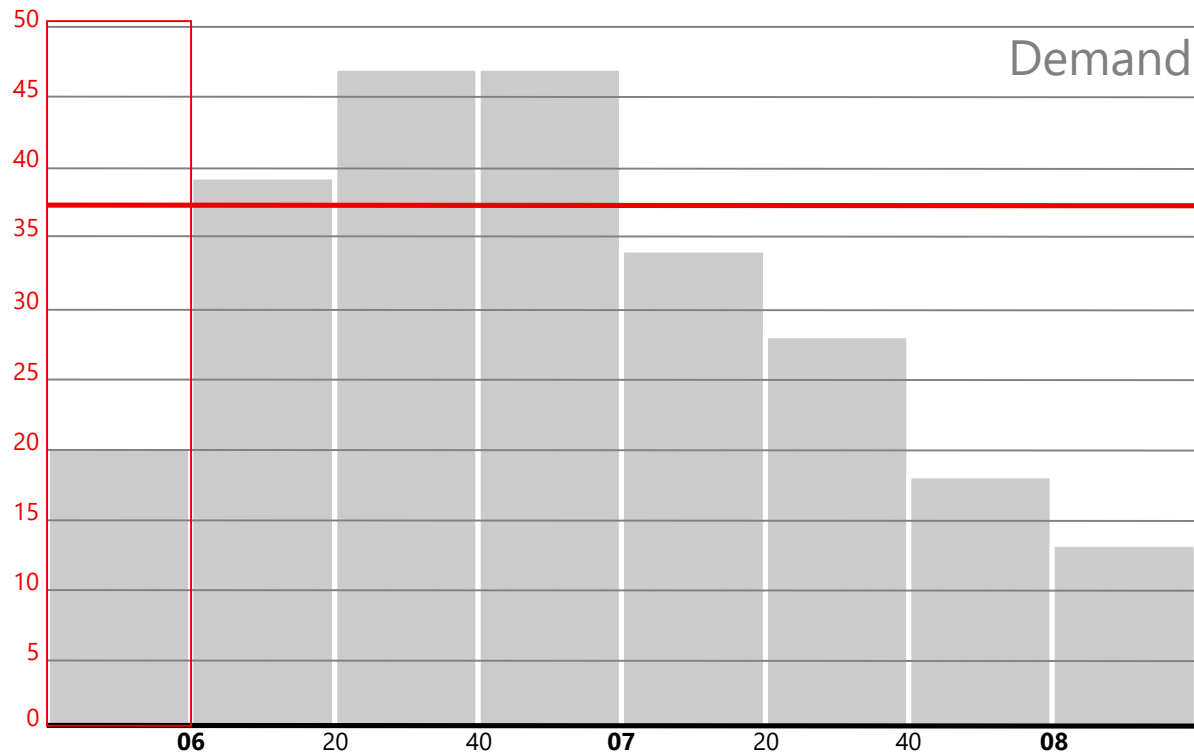


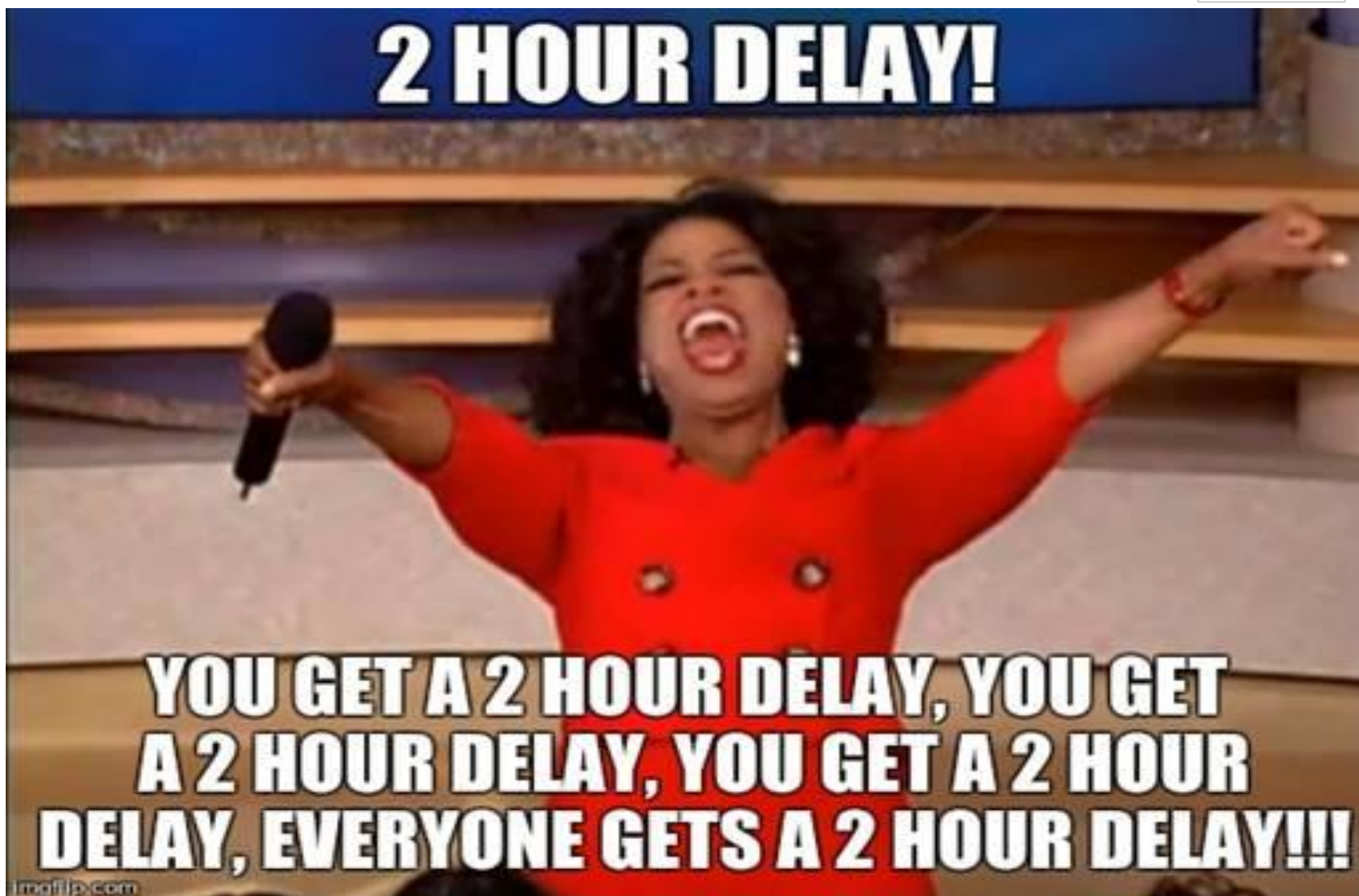
Network Operations Services



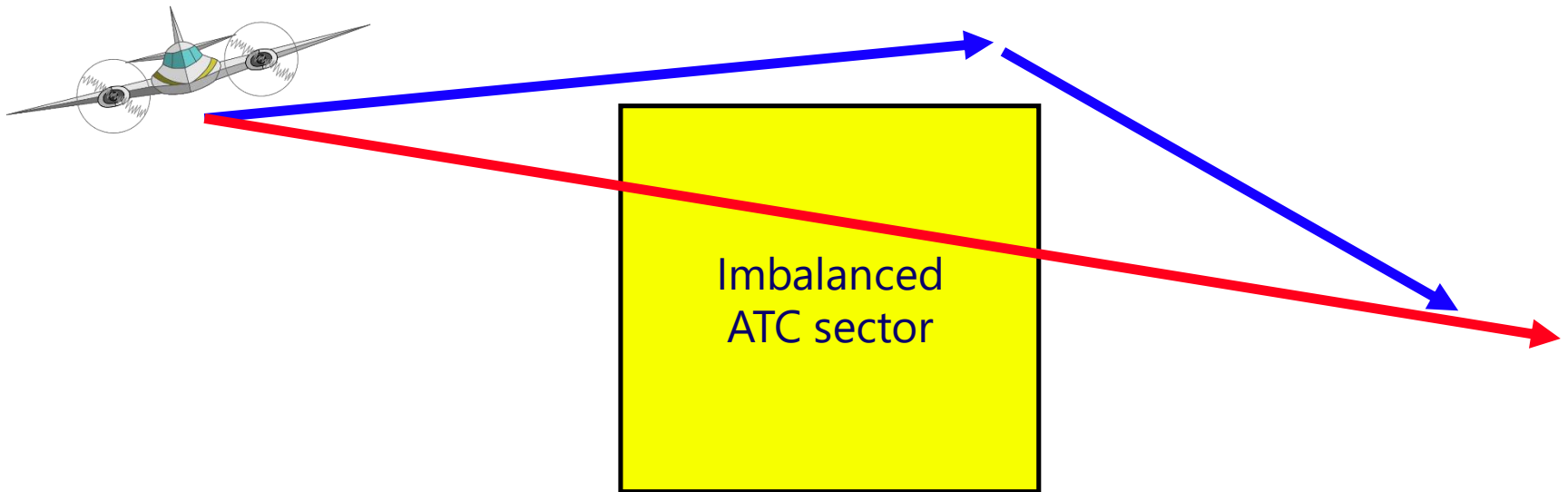
Imbalance

Supply/
Capacity

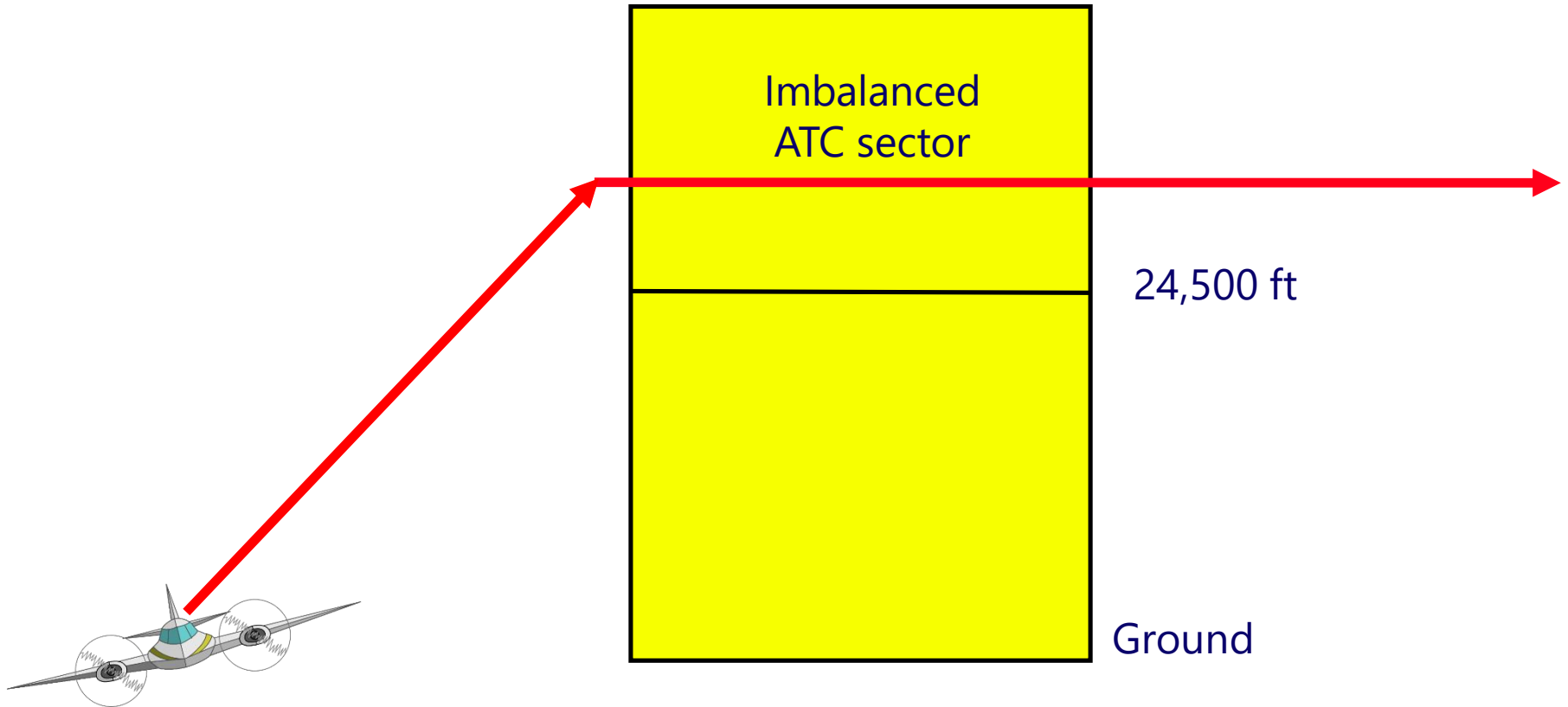




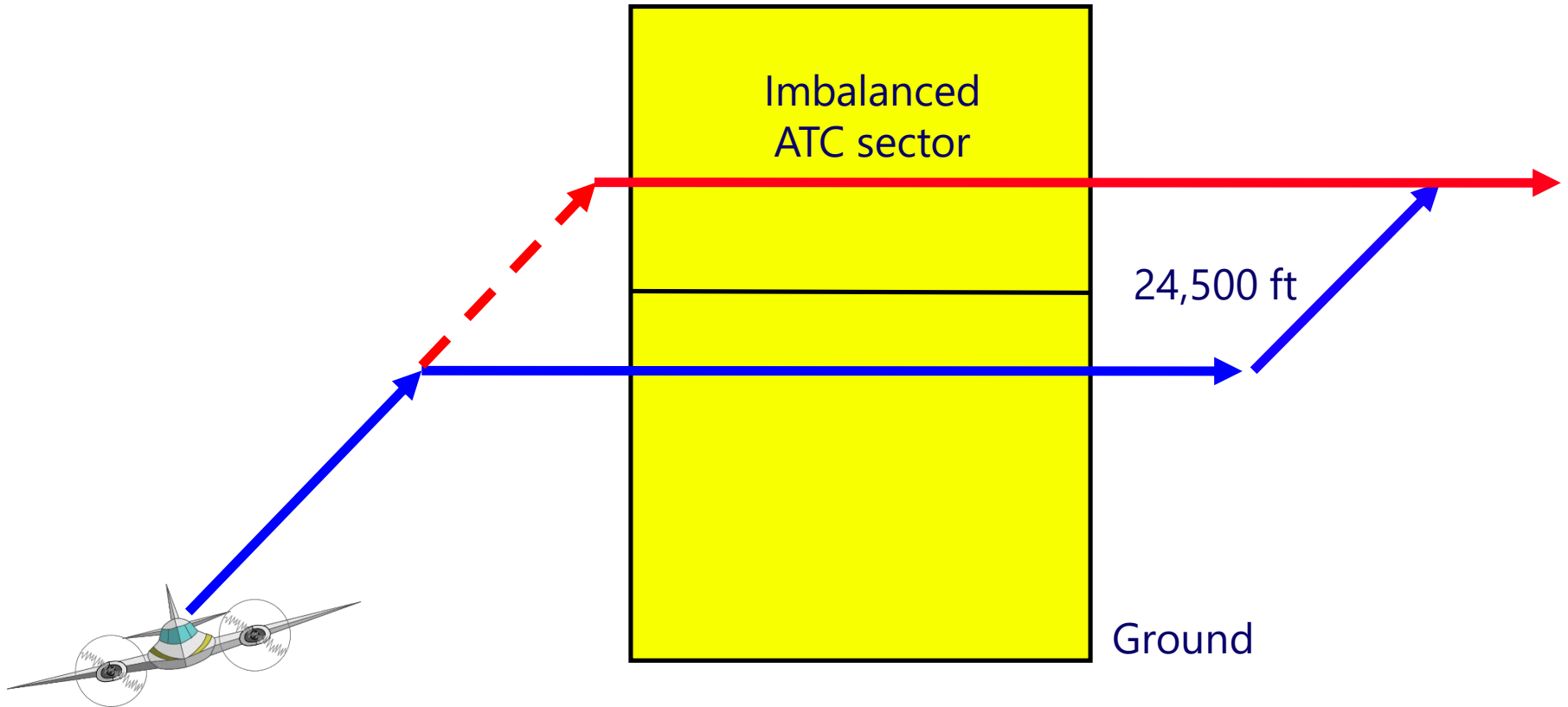
Rerouting



Level Capping



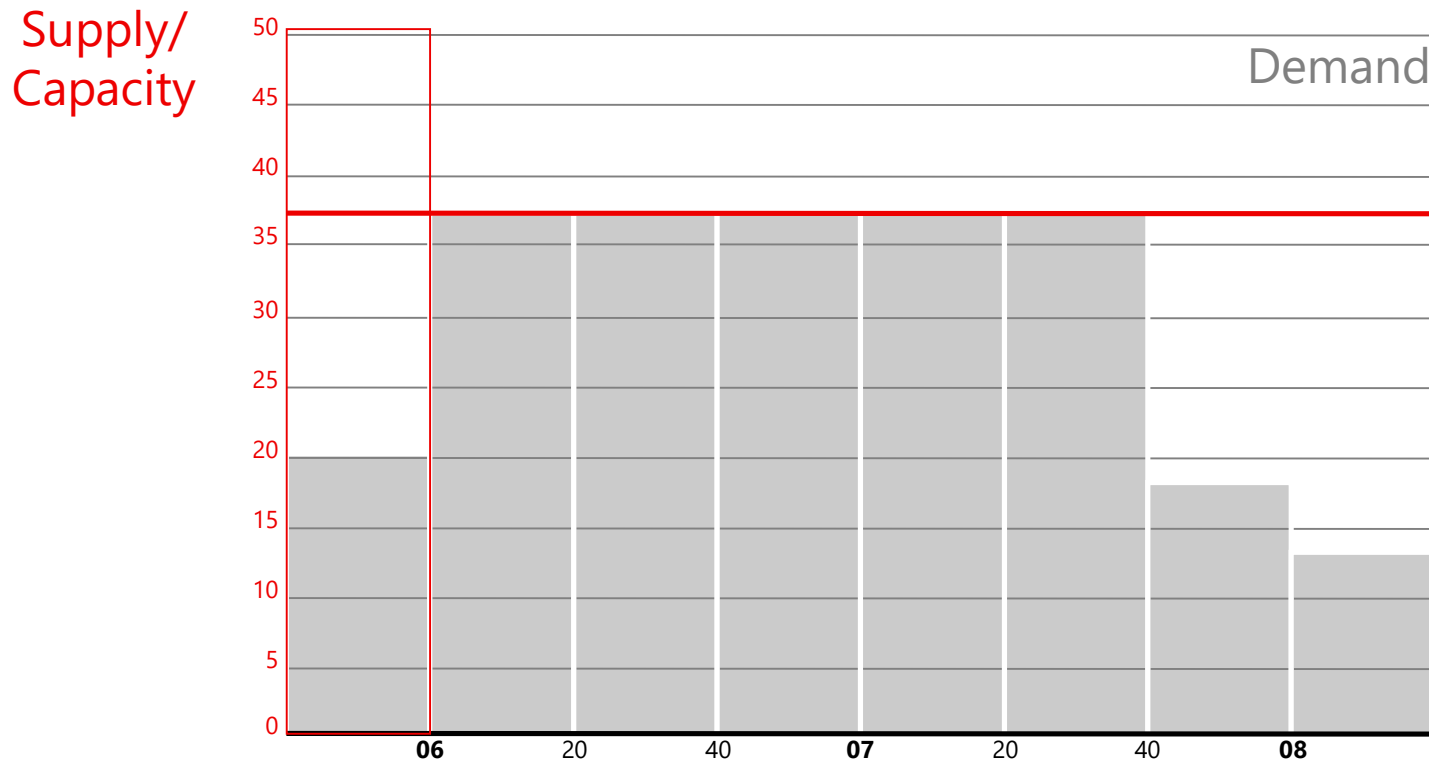
Level Capping



“Regulation”



RE-BALANCE between capacity and demand



Delays



Brussels Airport - Departures - Netscape

File Edit View Go Communicator Help

Back Forward Reload Home Search Guide Print Security Stop Netscape

Bookmarks Netsite http://www.brusselsairport.be/departures/

CFMU Intranet CFMU Web Site EUROCONTROL Inz EUROCONTROL Web DRBITE - The EU

Nederlands Français

BRUSSELS AIRPORT OFFICIAL WEBSITE

- Arrivals
- Departures
- Timetables
- Traveller's Info
- Brussels Airport
- Shopping & Services
- News
- Airport Jobs
- About Belgium
- Cargo
- Contact Us

17/11 12:00	Copenhagen	UA 9318	AIRBORNE	12:14
17/11 12:05	Nice	SN 3619	AIRBORNE	12:11
17/11 12:15	Milan MXP	AZ 351	AIRBORNE	12:41
17/11 12:15	Edinburgh	SN 2065	AIRBORNE	12:44
17/11 12:15	Florence	SN 3337	AIRBORNE	12:49
17/11 12:15	Lisbon	SN 4121	AIRBORNE	12:28
17/11 12:15	Barcelona	SN 5957	AIRBORNE	12:42
17/11 12:15	Florence	TP 501	AIRBORNE	12:49
17/11 12:15	Lisbon	TP 5005	AIRBORNE	12:28
17/11 12:15	Barcelona	TV 5957	AIRBORNE	12:42
17/11 12:20	Rome FCO	AZ 159	AIRBORNE	12:29
17/11 12:20	Madrid	IB 3203	AIRBORNE	12:40
17/11 12:25	London LHR	BA 393	AIRBORNE	12:38
17/11 12:25	Istanbul	TK 1938	AIRBORNE	12:43
17/11 12:30	Dhaka	BG 012		
	via Delhi			
17/11 12:30	Athens	OA 146	AIRBORNE	13:10
	via Strasbourg			
17/11 12:30	Verona	SN 3213	AIRBORNE	12:46
17/11 12:40	Rome FCO	SN 5871	AIRBORNE	13:16
17/11 12:40	Rome FCO	TV 5871	AIRBORNE	13:16
17/11 12:50	Munich	LH 4491	CANCELLED	
17/11 12:55	Algiers	AR 2061	AIRBORNE	13:22
17/11 13:00	Copenhagen	OV 6402	AIRBORNE	13:05
17/11 13:00	Copenhagen	SE 2592	AIRBORNE	13:05
17/11 13:05	Santiago Comp	IB 4219	AIRBORNE	13:16
	via Barcelona			
17/11 13:05	Moscow SVO	SU 232	CANCELLED	
17/11 13:50	Bilbao	SN 3713		
17/11 13:55	Gdansk	LO 240	DELAYED	14:45
17/11 13:55	Belfast Int	SN 2033		
17/11 13:55	Toulouse	SN 3669	DELAYED	14:45
17/11 13:55	Gdansk	SN 4151	DELAYED	14:45
17/11 13:55	Belfast Int	SR 9315		
17/11 14:00	Zurich	AA 6363		
17/11 14:00	Bologna	SN 3125	ESTIMATED	14:10
17/11 14:00	Florence	SN 3139		
17/11 14:00	Turin	SN 3193	DELAYED	14:50
17/11 14:00	Zurich	SN 4057		
17/11 14:00	Zurich	SR 897		

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Start C:\WINNT\Profile... Microsoft Power... Microsoft Office... 101-04 07 - CD Inbox - Microsoft... File Manager Brussels Airport... 13:39







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Challenges for the future

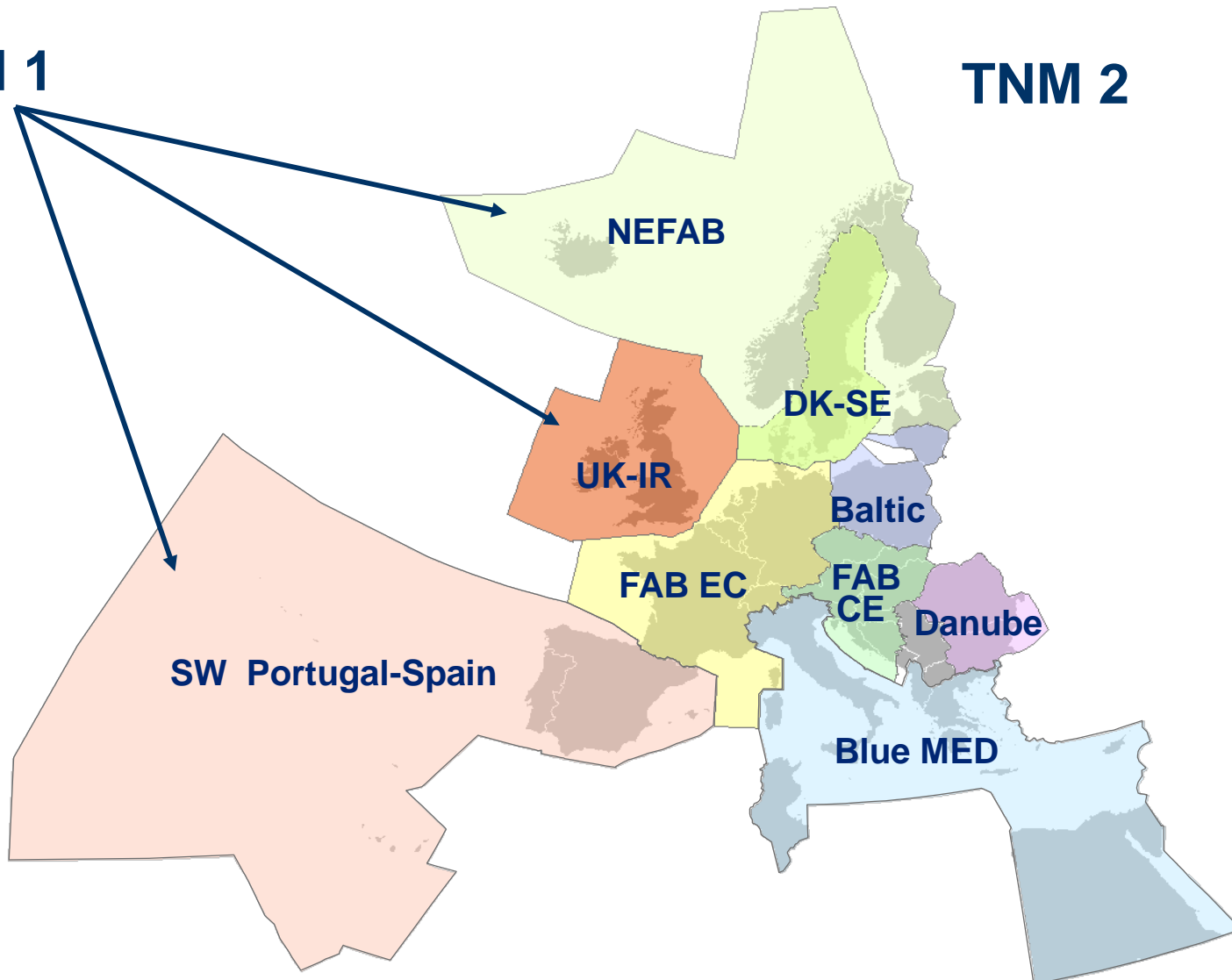
The vision for Global ATFM – A set of interlinked operational ATFM regions

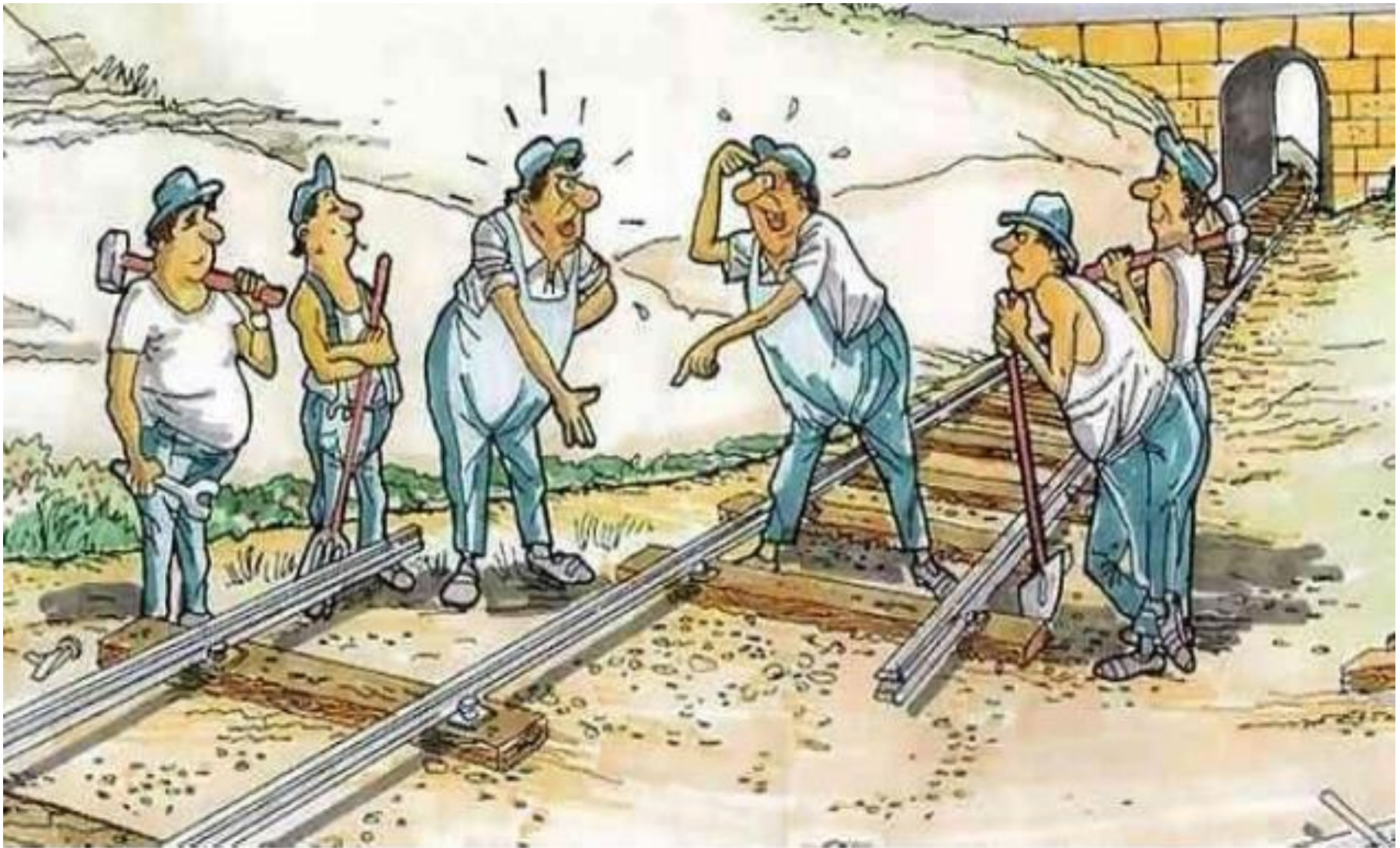


European Coordination based on FABs

TNM 1

TNM 2





Issues to be addressed

- Staffing situation and opening schemes
- Weather impact in areas with limited capacity delivery
- Airspace saturation in some parts of the core area
- High number of un-necessary “regulations”
 - A new network-orientated approach required
- Commitment to deliver the Network Operational Plans
- More commitment to the Single European Sky (SES) Network targets :
we will not be below 1 min/flight delay in next 5 years!

EU Network Manager - SES Orchestra



- No commitment as to how many/enough orchestra members turn up on the day
- Each member has own ideas as to what to play, how loud, what tempo
- Conductor still has to guarantee performance is delivered each and every day

2018 : audience has started to complain !





PATIENCE

Will Get You Nowhere

BreakingNews.com



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