

# AVOID ABERRANT FLIGHT PLAN ROUTES

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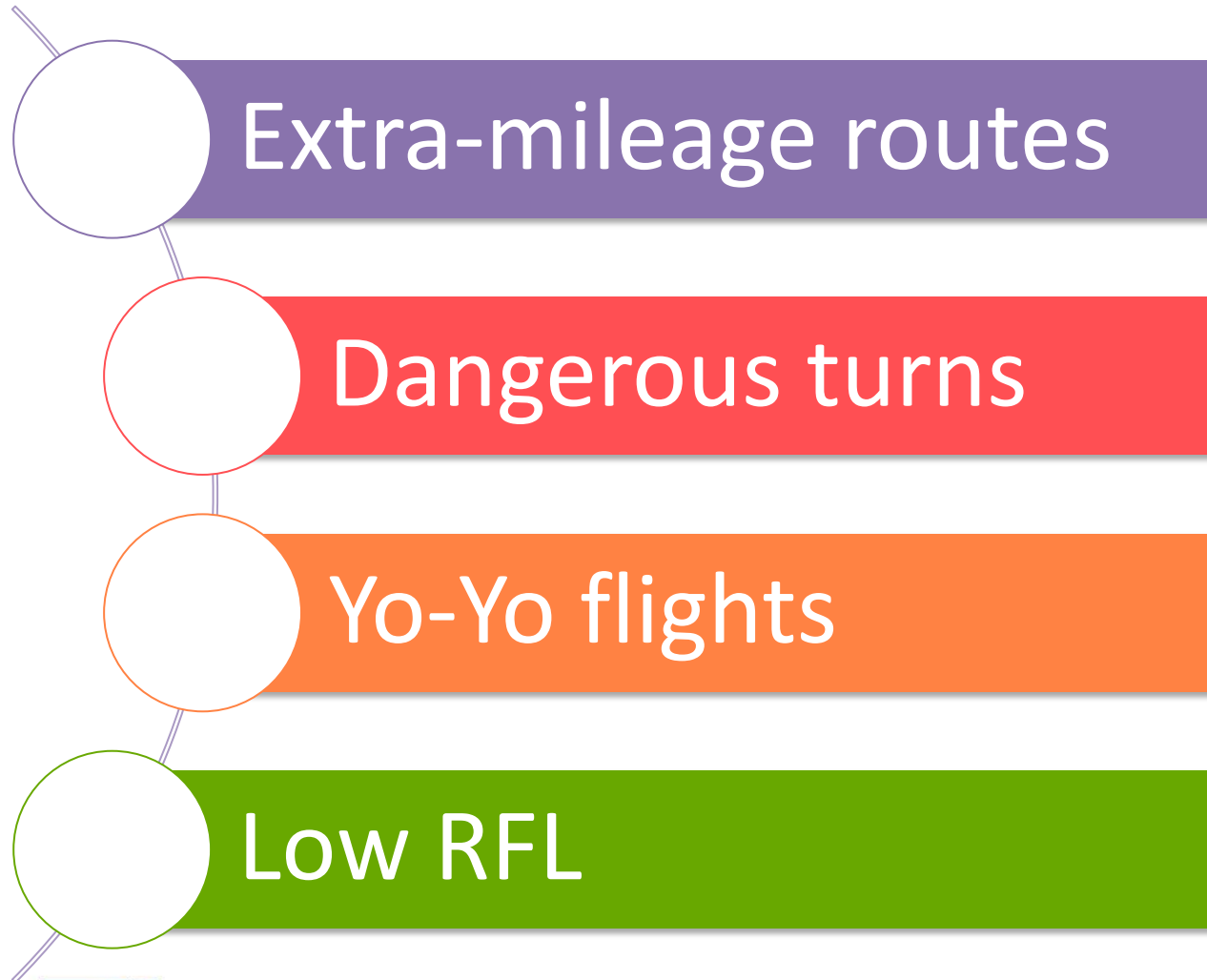
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*LFMM ACC RAD Manager and FMP Deputy  
Manager*



# AGENDA

- What are aberrant routes?
- What is done today to avoid them?
- How can you help avoiding them?

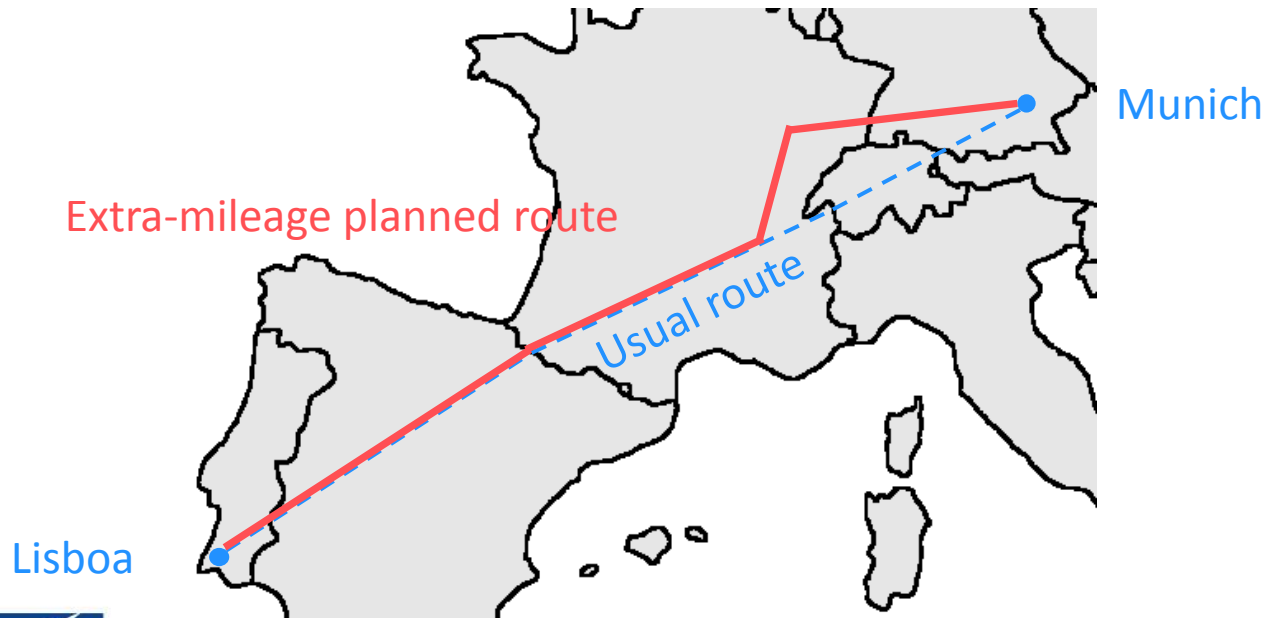
# WHAT ARE ABERRANT ROUTES?



# Extra-mileage routes

*Definition: inexplicably longer route than the usual ones*

*Example:*

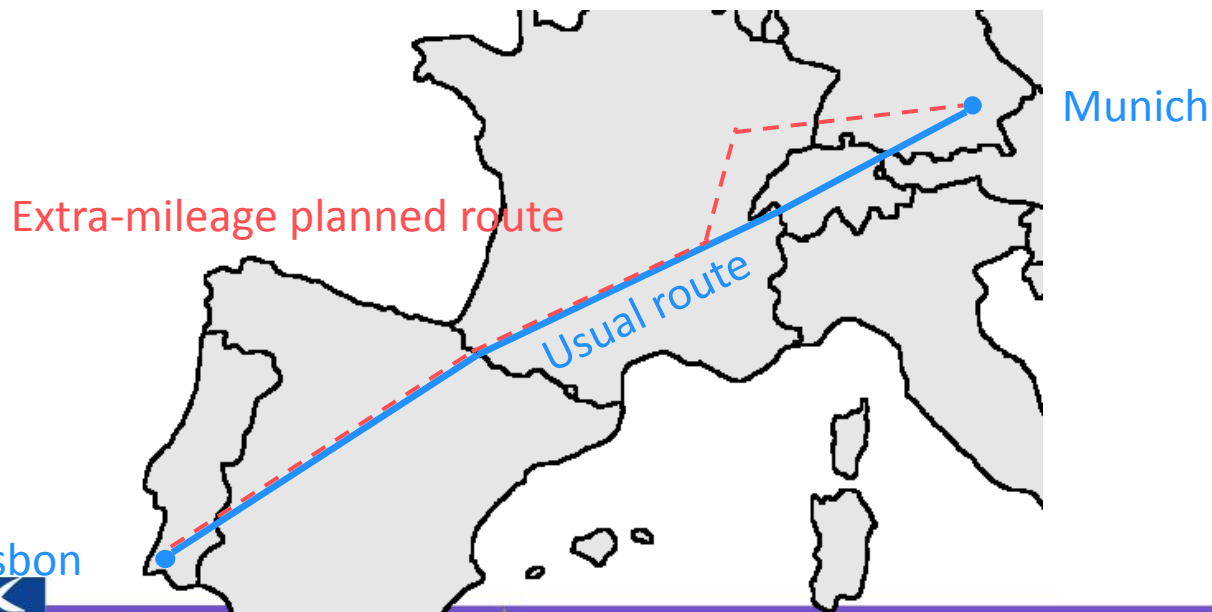




# Extra-mileage routes

Consequences for aircrews

We prefer the most direct route, we ask for it on the frequency





# Extra-mileage routes

## Consequences for ATCs

I have to check all  
new **conflict points**

I have to find and  
coordinate a **new  
route** with all  
involved sectors.



**WORK OVERLOAD +  
SECTORS LOAD CHANGED LATELY**



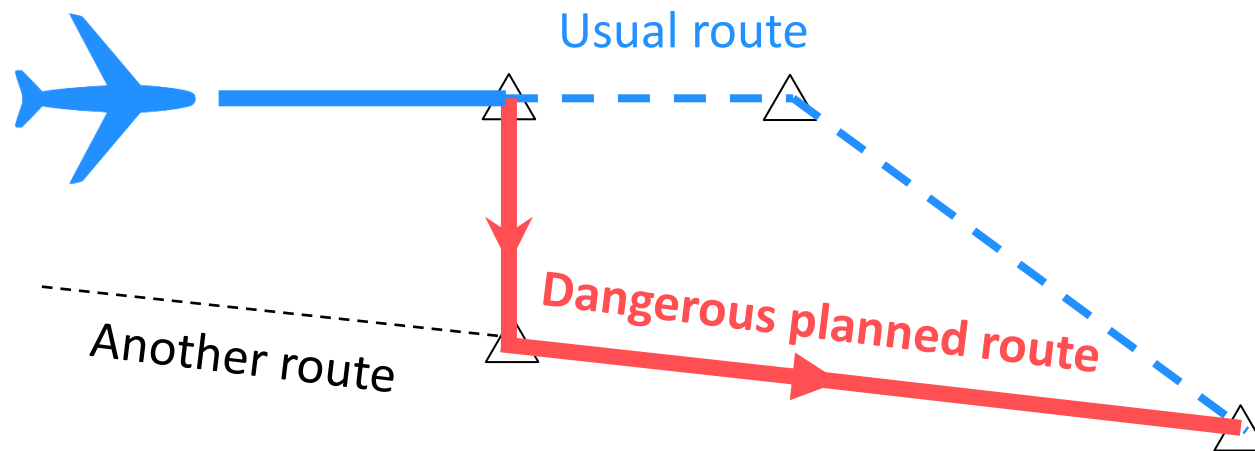
MINISTÈRE  
DE LA TRANSITION  
ÉCOLOGIQUE  
ET SOLIDAIRE



# Dangerous turns

*Definition: Route containing an unusual turn potentially leading to a critical situation*

*Example:*

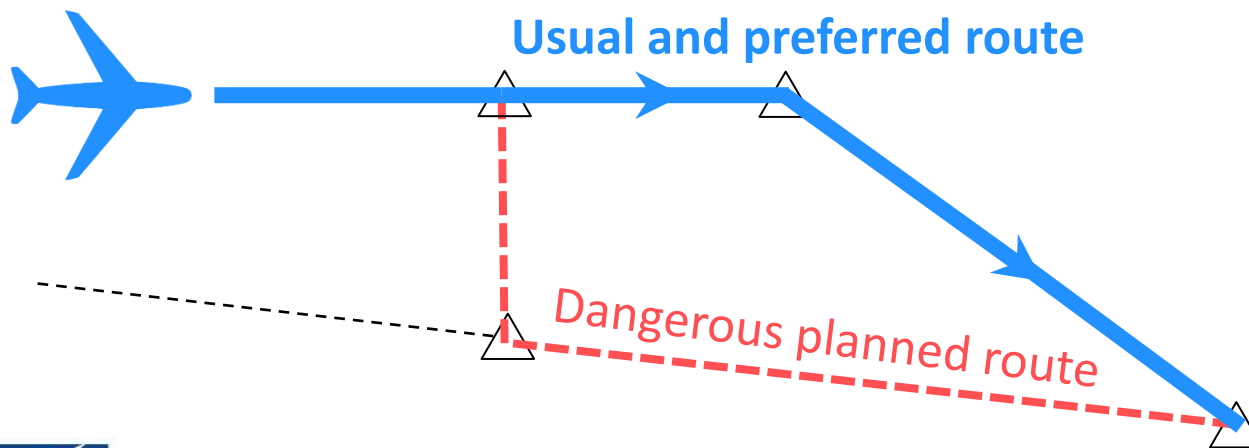




# Dangerous turns

Consequences for aircrews

We prefer the most direct route, we ask for it on the frequency **if** we have detected this anomaly





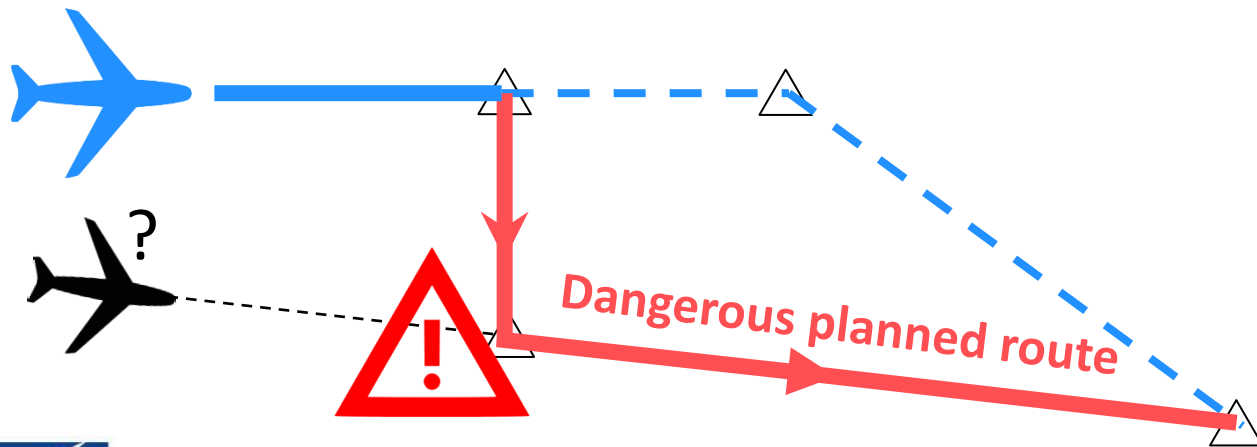


# Dangerous turns

Consequences for ATCs

We have to deal with:

- unexpected and critical trajectory
- unexpected conflict points

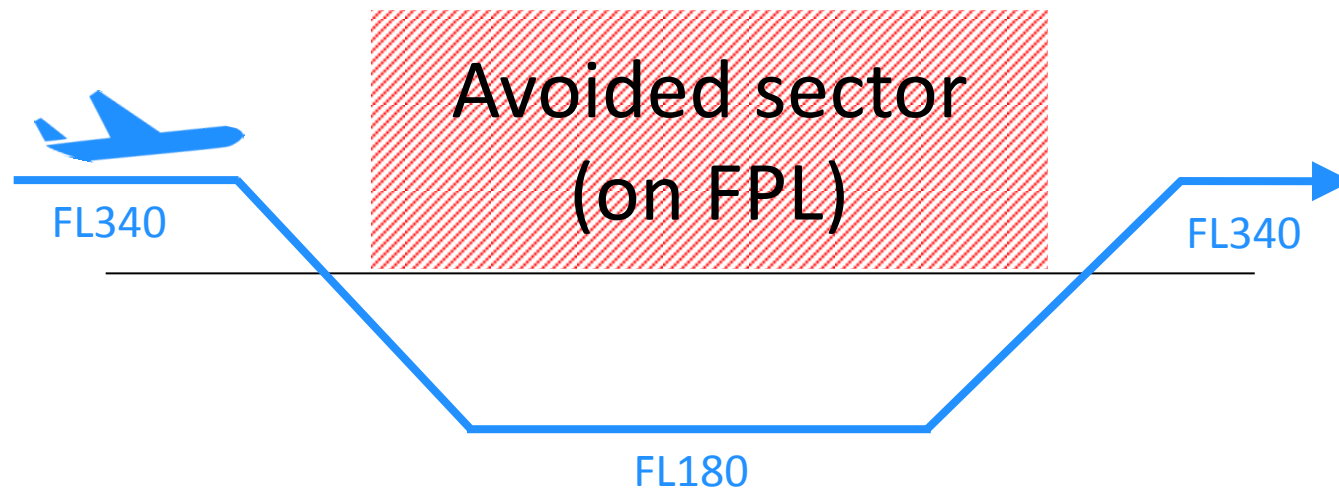


# Yo-Yo flights

## Definition:

*Planned flight profile descends then climbs back to avoid a non-regulated sector*

## Example:

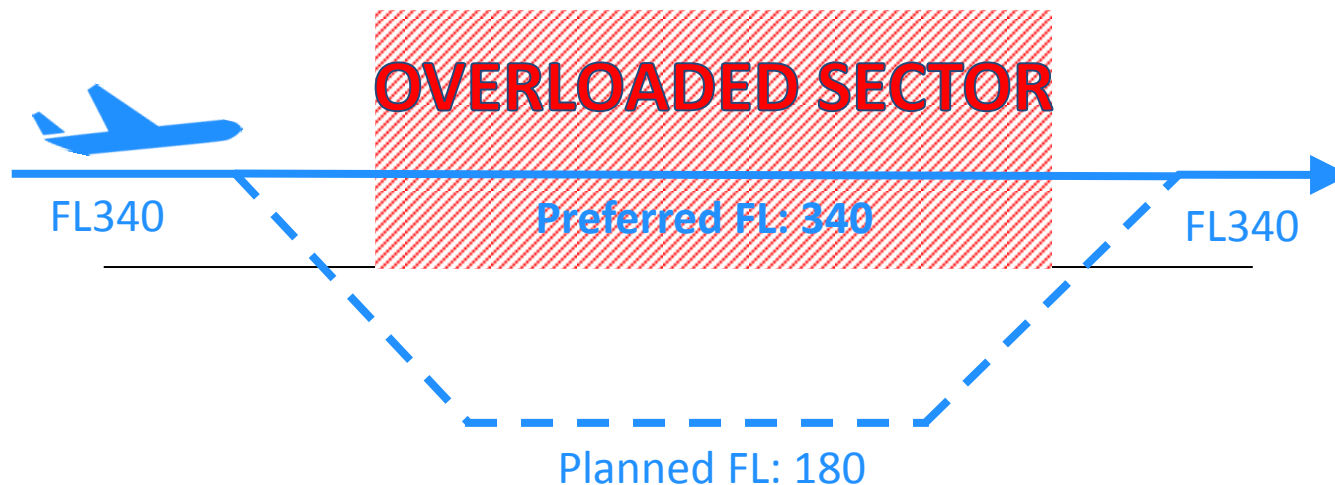




# Yo-Yo flights

Consequences for aircrews

We prefer to fly at the highest FL, we ask for it on the frequency



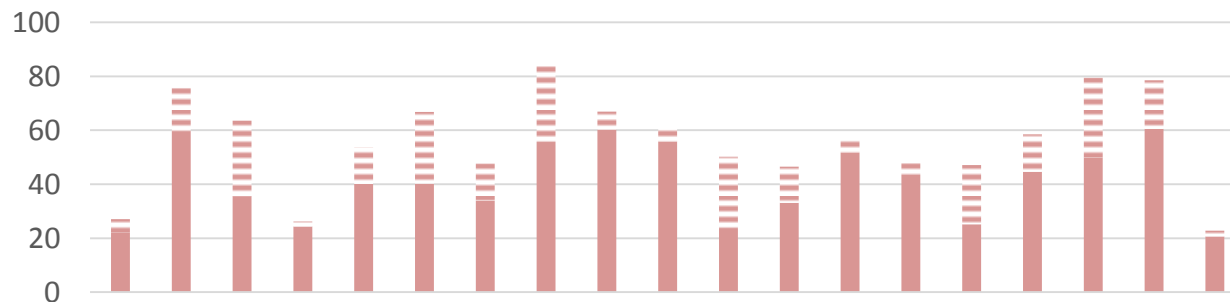


# Yo-Yo flights

Consequences for ATCs

Unexpected flight profile.  
Sector loads modified at the last moment => unpredictable

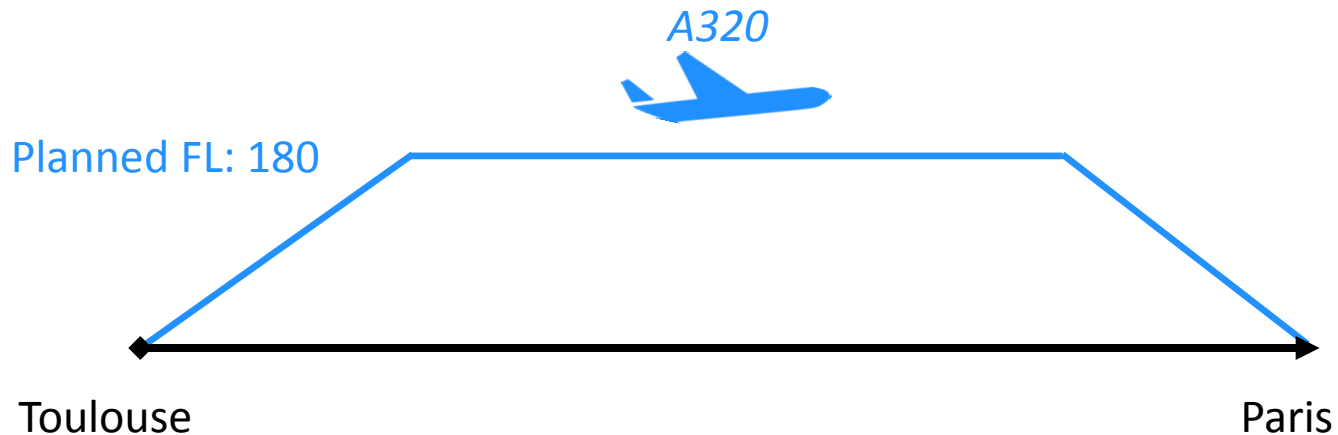
Sector load



# Low RFL

*Definition: inexplicable lower route than the usual ones*

*Example:*

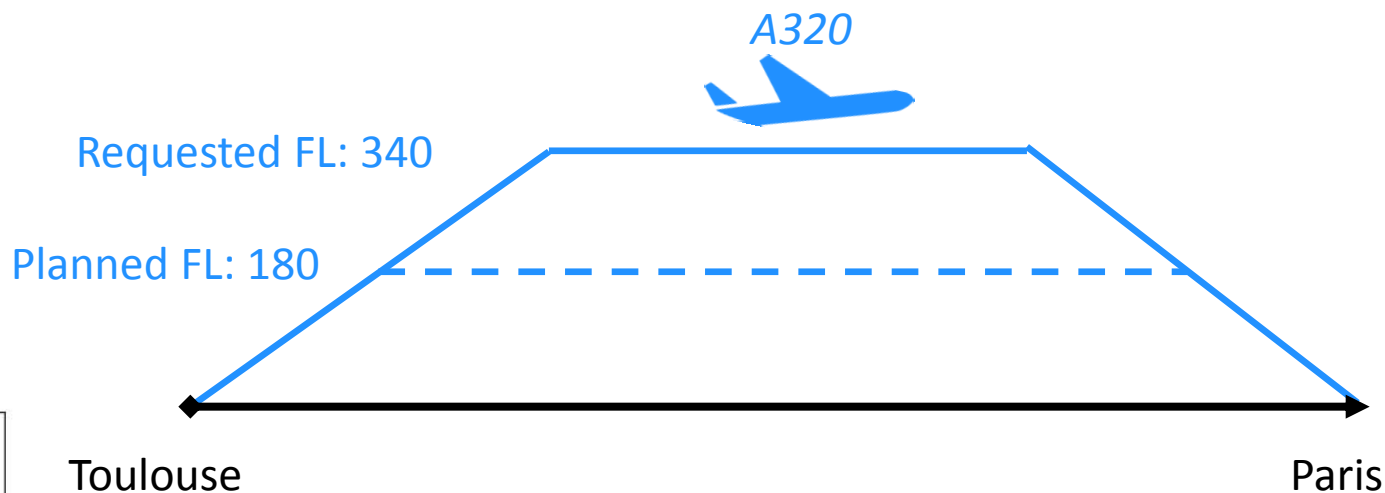




# Low RFL

## Consequences for aircrews

We prefer to fly at the highest FL possible given by our FMS, we ask for it on the frequency





# Low RFL

## Consequences for ATCs



Keep this  
highspeed  
aircraft at a  
low and  
inadequate FL

OR  
?

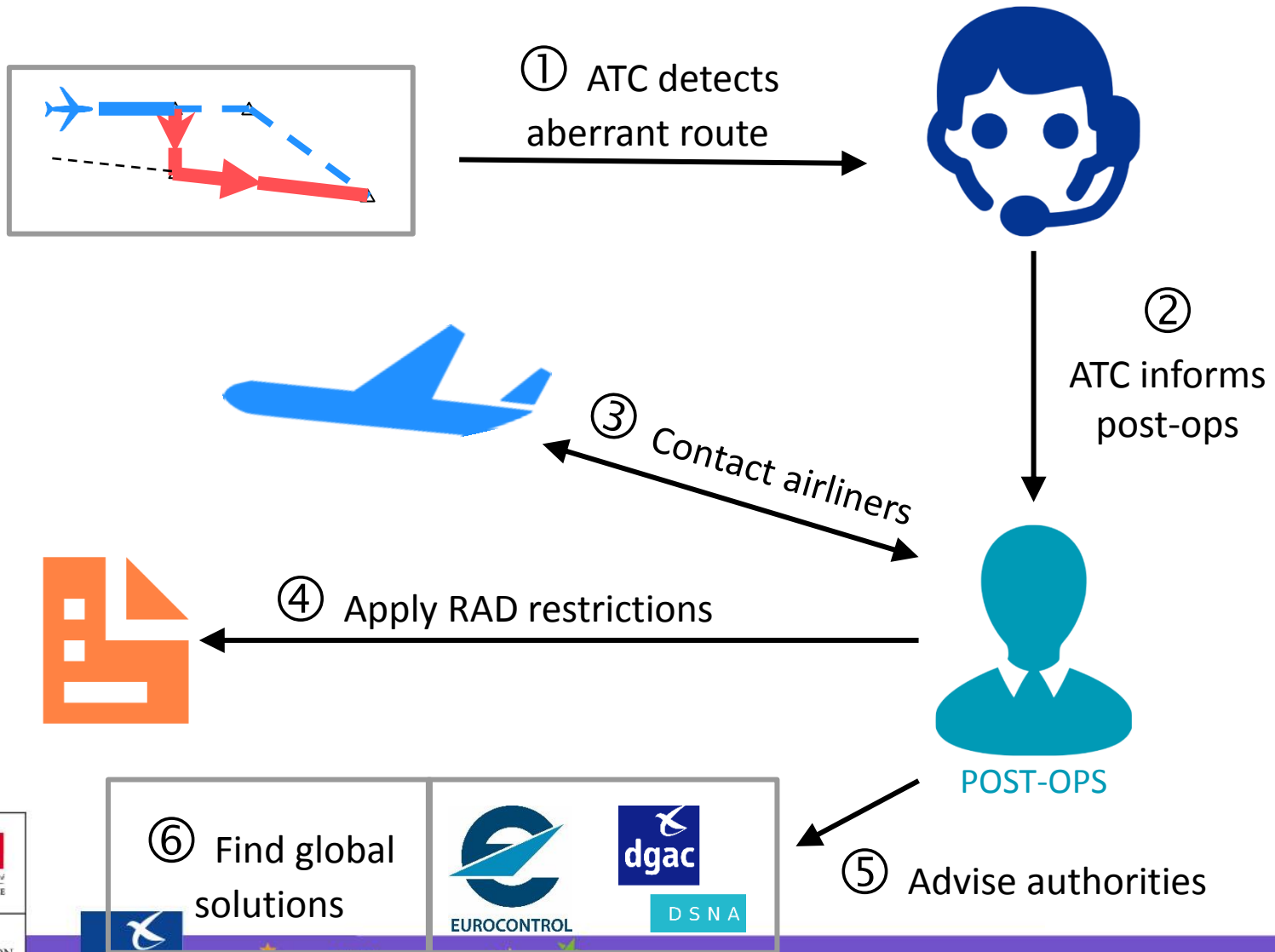
Coordinate a  
climb,  
implying a late  
sector load  
modification

**WORK OVERLOAD**

**Aberrant routes lead to  
safety issues and flight  
inefficiencies ,  
you should avoid them**



# WHAT IS DONE TODAY TO AVOID THEM?



# HOW CAN YOU HELP AVOIDING THEM?

Do not deliberately create aberrant routes

Configure your CFSP software

Raise awareness among your aircrews

Communicate with ANSPs

[dsna-flight.planning-bf@aviation-civile.gouv.fr](mailto:dsna-flight.planning-bf@aviation-civile.gouv.fr)

# HOW CAN YOU HELP AVOIDING THEM?

## Do not deliberately create aberrant routes

Aircrews usually don't want to use these routes.

They also cause problems to ATCOs.

Changing the route of an airborne flight spoils the whole ATS system.

## Safety and ATFCM issues are raised

# HOW CAN YOU HELP AVOIDING THEM?

## Configure your CFSP software

Do not have blind trust in your CFSP software.

Here are some clues:

- Forbid FL change if the lower segment is shorter than 200 NM (to avoid yo-yo flights)
- Use pre-determined route that your software could pick in case of flight planning difficulties

# HOW CAN YOU HELP AVOIDING THEM?

Raise awareness among your aircrews

Aircrews can still change their route, but the earlier the better.

Otherwise, they should be prepared to deal with an aberrant route.

# HOW CAN YOU HELP AVOIDING THEM?

## Communicate with ANSPs

For any question or comment regarding the ATS network.

Let's improve it together, but not *via* inefficient communications on frequency.

# GLOSSARY

<b>ATCO</b>	Air Traffic Controller
<b>ATFCM</b>	Air Traffic Flow and Capacity Management
<b>CFSP</b>	Computer Flight plan Software Provider
<b>DSNA</b>	Direction de Services de la Navigation Aérienne (French ANSP)
<b>FPL</b>	Flight Plan
<b>IFPS</b>	Integrated Initial Flight Plan Processing System
<b>RAD</b>	Route Availability Document
<b>RFL</b>	Requested Flight Level

# Thank you



D S N A