



Demand Capacity Balancer

NATS

Our Portfolio

Innovative technology. Operational expertise. Smarter operations.

Technology, data and AI are changing the way airports grow and operate. Air traffic control and aerodrome operations are coming together as one connected system.

Our airport solutions enable teams to automate, predict and simulate to make every flight safer, greener, and more efficient.

■ PRODUCT

Airport Capacity Enhancement

■ PRODUCT

Demand Capacity Balancer

■ PRODUCT

Strategic Airport Capacity Manager

■ PRODUCT

Digital Towers

■ PRODUCT

Intelligent Stand Manager

■ PRODUCT

Clarity

■ PRODUCT

Drones and AAM Operations

■ SERVICE

Air Traffic Services

■ SERVICE

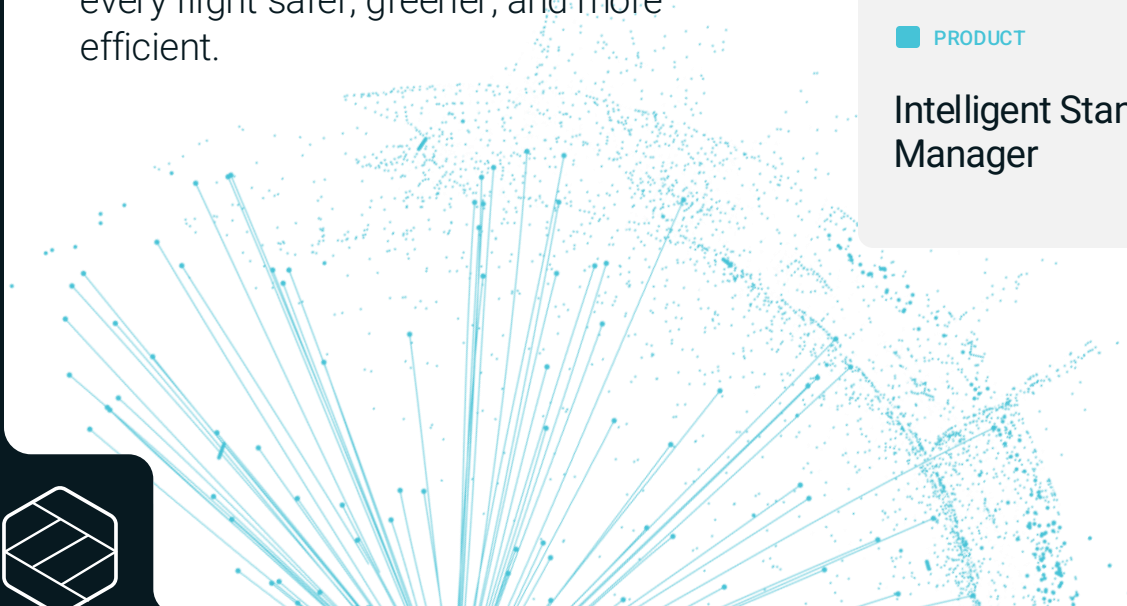
Engineering Services

■ SERVICE

Training

■ SERVICE

Instrument Flight Procedure Design



Key Features

Predict demand. Balance capacity. Optimise performance.



What-if Scenarios

Enables rapid simulation of multiple 'what-if' scenarios. Users can plan based on operational outcomes (e.g. punctuality), and data (e.g. arrival times).



Target Time of Arrival

Target Time of Arrival (TTA) capability keeps holding delay below the identified threshold to improve punctuality and maintain maximum throughput.



'Green' Button

Creates an airport operating plan that is focused on reducing fuel burn and CO₂ emissions.



Planning Horizon

Compare multiple operational plans up to 180 days in advance; with tactical accuracy at >24 hours notice.



Key Performance Metrics

Provision of single-flight and airport wide metrics such as punctuality, delays.



Key Benefits

Predict demand. Balance capacity. Optimise performance.



Resilience

Smooths delivery of aircraft during periods of high demand.



Decision Making

Provides ability to distribute the collaboratively agreed plan across airport systems, reducing queues.



Passenger Experience

Improved punctuality and consistency elevates the passenger experience while strengthening the airport's reputation.



Airline Efficiency

Operating plan can be focused on reducing fuel burn, lowering airline operating costs.



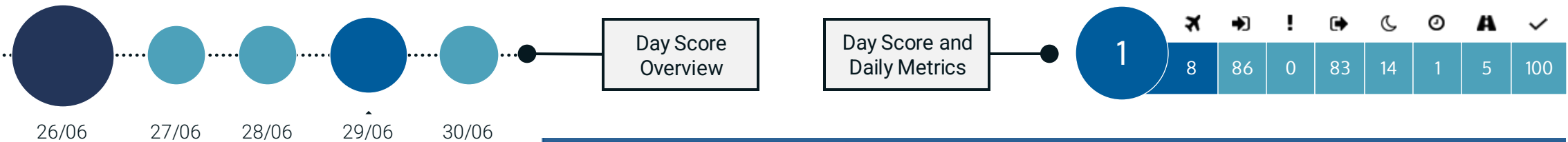
Environment

Increased predictability allows airports to pro-actively mitigate ground and airborne delays and therefore decrease CO₂ emissions.

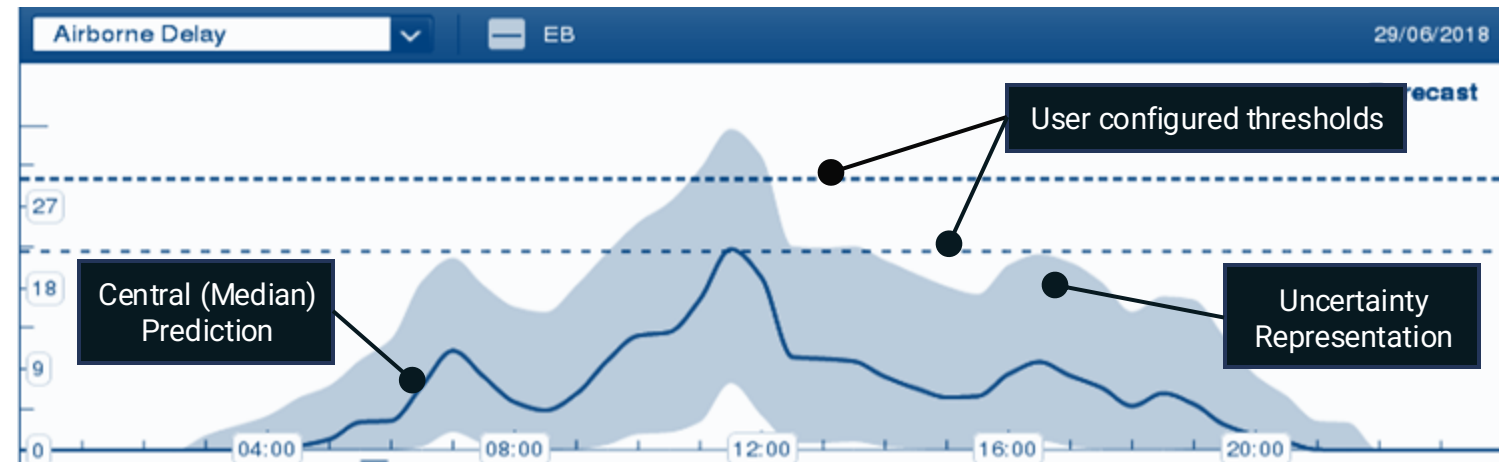


Translating to Airport Metrics (KPIs)

Predict demand. Balance capacity. Optimise performance.



KPI Selection	
› Airborne Delay	› Start-Up Delay
› Arrival Punctuality	› Runway Holding
› Departure Punctuality	› Terminal Utilisation
› Cancellations	



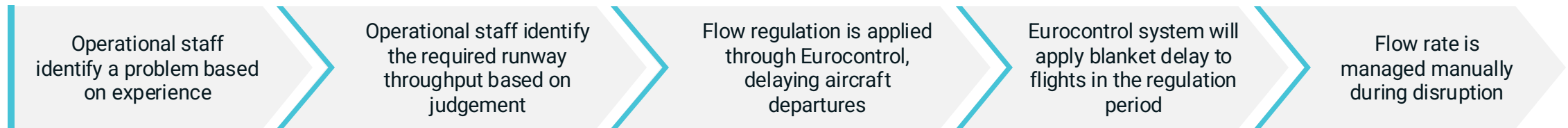
DCB's unique ability is to translate **predicted aircraft times** into a set of **metrics** for the airport to make **operational decisions** by using **complex simulation capabilities**.



ATFM Regulations Today

Predict demand. Balance capacity. Optimise performance.

The existing situation for airport regulations (in Europe):

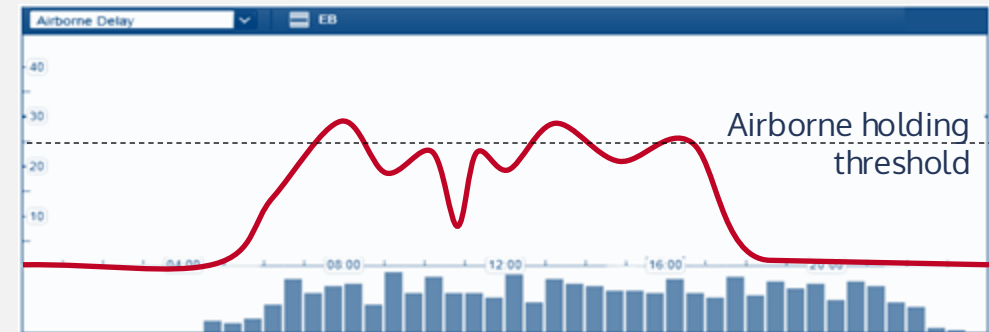


Potential Results:



Over-Regulation, Under-delivery:

i.e. where a regulation was not actually needed, but was still applied, causing unnecessary ATFM delay



Under-Regulation, Over-delivery:

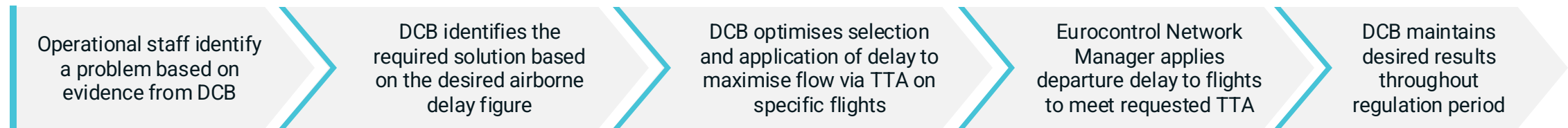
i.e. where airborne holding was still higher than expected, resulting in additional measures needing to be applied



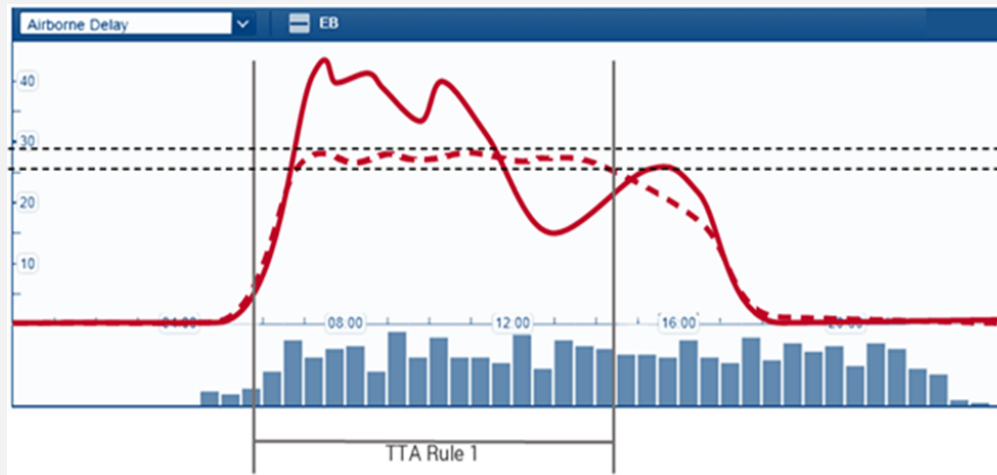
ATFM Regulations with Heathrow TTA

Predict demand. Balance capacity. Optimise performance.

How DCB TTAs will improve European regulations:



Benefits:



Target Times of Arrival (TTAs) have been trialled at Heathrow as part of SESAR project PJ24 and SESAR Island providing:

- › Significant reduction of ATFM delay
- › Better account for local airport requirements
- › Capability to enable TTAs for long-haul flights



How can we
help you?

To find out more or arrange a
demo, get in touch by emailing
us at products@nats.co.uk , or
by scanning the QR



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