L3HARRIS™
FAST. FORWARD.

DEMAND CAPACITY BALANCING (DCB)

A tool built for airport operational centers (APOCS)

DCB extends an airport's operational look-ahead time from 90 minutes to six months. The solution is part of a rolling airport operations plan (AOP) and bridges the gap between pre-tactical and tactical planning so an airport can have the best possible performance.

REDUCES COSTS AND IMPROVES AIRLINE AND PASSENGER EXPERIENCES

Operating to plan is an increasing challenge for airports because flights sometimes don't arrive or depart on schedule. As a result, airports are rethinking how they plan for day-of operations.

DCB uses state-of-the-art simulation and analytics to predict how weather, network congestion, airport maintenance and operational use of infrastructure impact airport performance. The solution forecasts demand and balances it with available capacity to improve operational readiness.

COMBINES INSIGHT AND PLANNING FOR AIRPORT OPERATIONS

DCB focuses on an expanded time horizon so users can create an AOP for each day with several additional 'what-if' plans. It predicts on/off block times for all flights and the resulting delays contained in the AOP.

The solution combines with real-time data sources like flight plans and arrival and departure managers. This determines the operational outcomes with an advanced, cloud-based simulation in less than 30 seconds, taking into account the uncertainty in the input data.

Improves flight punctuality and services

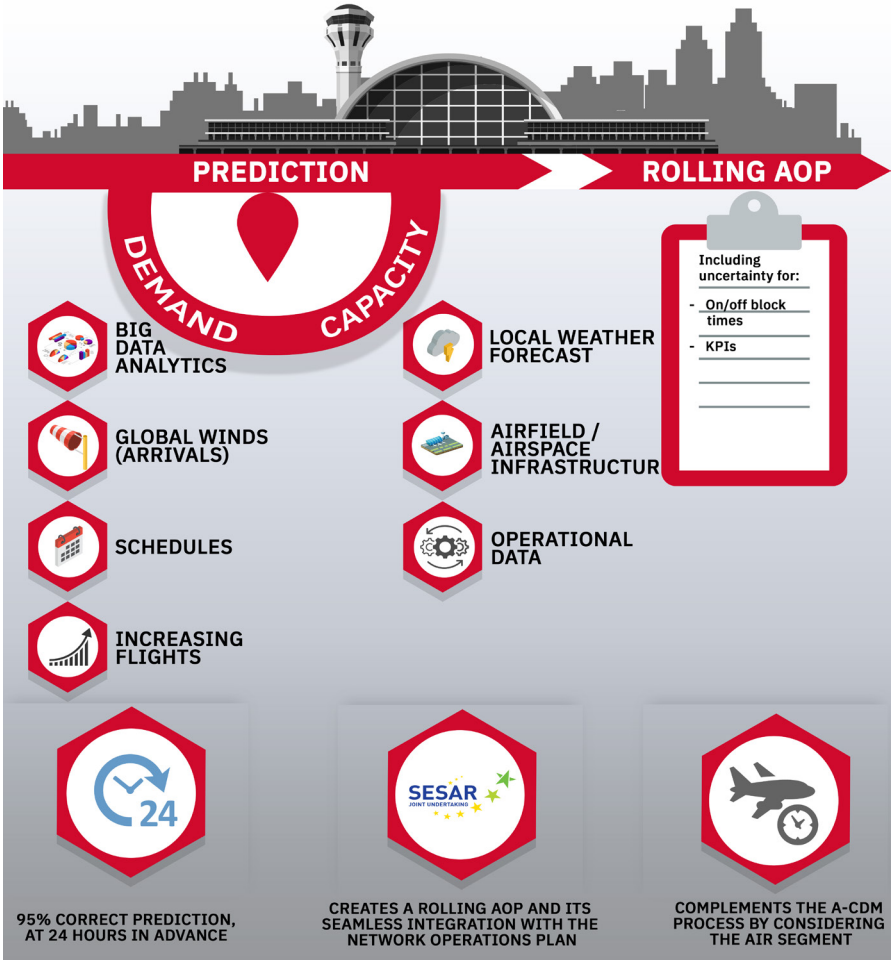
BENEFITS

- Provides better planning by detecting hotspots where demand exceeds capacity
- Plans for optimal runway closure and outstation impact
- Improves passenger experiences by reducing missed connections
- Lowers airline operating costs through improved punctuality
- Proactively responds to increased regional hub pressures
- Enables pre-tactical decision making with alternative AOPs and enhanced Airport Collaborative Decision Making (A-CDM)

PROVIDING A BETTER PASSENGER EXPERIENCE

DCB allows the airport to create plans that model and minimize negative impacts from a pre-tactical vantage point by using the data from an AOP. The solution improves flight punctuality and positively impacts affected connections and transfers. It enables timely decision making for reduced airport disruptions.

INTEGRATED AIRPORT FLOW MANAGEMENT TOOL



DCB is operational at Heathrow Airport and was developed through NATS UK, the air navigation service provider (ANSP) for the United Kingdom.

FEATURES

- Combined data science, analytics and advanced simulations puts the airport in control of pre-tactical decisions
- Rolling AOP creates and maintains key performance indicators (KPIs)
- A-CDM enhancement integrates into existing A-CDM solutions
- Operational outcome simulation maintains KPI's on a selected day (e.g. punctuality, delays, etc.)
- What-if planning tests the effects of alternative operational decisions
- Demand and capacity modeling uses a range of aviation data and carefully configured simulations
- Expected disruption modeling for plan development to minimize impacts

Orthogon Demand Capacity Balancing (DCB)

Non-Export Controlled Information

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.

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