NATS

AiQ CONSULTING

Growing Bristol Airport to welcome 12 million passengers by 2026

Airside and landside expertise for airports to optimise day to day operations and provide confidence and certainty in growth plans.

The eight million passengers Bristol Airport looks after each year makes it the ninth busiest Airport in the UK. With exciting and ambitious plans for growth backed by significant infrastructural investment, the Airport wants footfall to increase by half, to welcome 12 million passengers a year by 2026.

End-to-end airport capacity assessment

Looking after these new passengers will require the airport to understand how it operates now, against how it will operate with and without new capital investment.

Andrew Goodenough, Development Director Bristol Airport:

"To support our ambitious expansion plans, we instructed NATS and AiQ Consulting to assess the current and future capacity of the whole Bristol Airport operation, focusing on the experience from our passengers' perspective. The result was an independent report that helped to validate our investment plans and identified some immediate opportunities for us to improve, and ensuring the safe and efficient growth of the operation.

"Thanks to the report we are satisfied that the airport's growth targets are on track and are equipped to work on the areas that really need it. Working with an experienced third party has enabled us to affirm our future investment decisions. The collaboration between NATS and AIQ Consulting provided us with a integrated airside and landside view of our airport, highlighting the strong connections between the different areas of airport operations."

"We are delighted with the work NATS and AiQ have undertaken and look forward to working with them on more projects in the future."

Governmental master planning and interconnected travel

The UK Government is encouraging airports to produce Master Plans towards 2050 to enable future development and growth. For this, and to validate their ambitions, Bristol Airport implemented an Airport Capacity Assessment to look closely at every stage of the passenger journey all within a safety critical environment.

NATS in collaboration with AiQ Consulting

This work is a collaboration between NATS and AiQ Consulting to provide full airport capacity and operational efficiency analysis and simulation of the passenger journey.

Customer focused approach

This collaboration recognised the strong connections between the different areas of airport operations. By bringing together experts from ATC, Airport Operations, Stand Planning, Baggage Management, and Passenger Flow, NATS and AIQ have delivered a completely integrated assessment of the whole airport operation.

Combining this expertise enabled us to produce an analysis of the whole passenger experience at the airport, validate plans for growth, and provide recommendations on key investments through the lens of passenger experience, and aeronautical and non-aeronautical revenues. Together with Bristol Airport we developed a range of immediate actions and longer term investments to secure the safe and efficient growth of the operation.
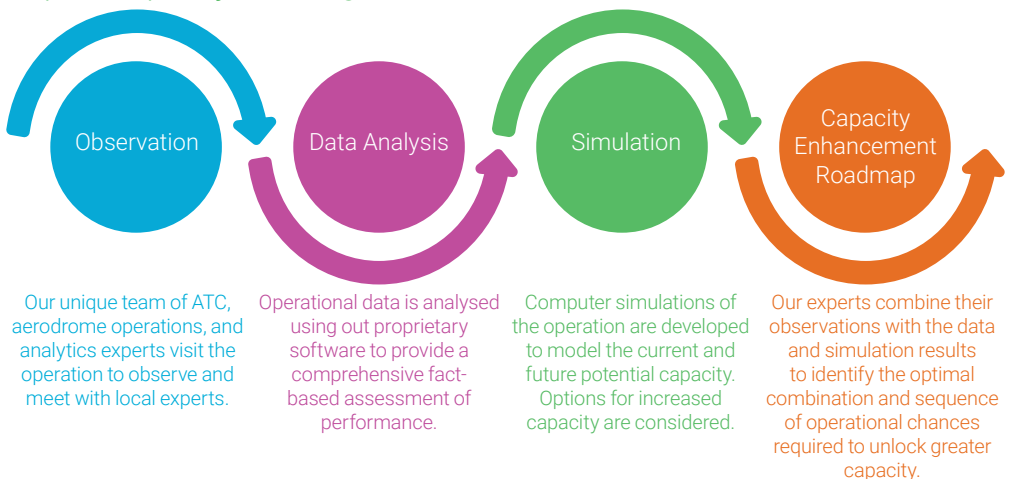
A clearly defined assessment programme

Three outcomes formed the basis of the assessment that included utilising data from the operations' peak seasonal day against considered growth profiles:

- We assessed current operational efficiency utilising a seasonal baseline

- We assessed the ability of the current infrastructure to achieve 12 million passengers per annum

- We assessed the ability of the proposed infrastructure plans to achieve 12 million passengers per annum

As a result, we identified the key future operational bottlenecks, their root causes and the benefits of development options to deliver the desired passenger experience with 12 million passengers per annum.

Airport Capacity Planning

Observation	Data Analysis	Simulation	Capacity Enhancement Roadmap
Our unique team of ATC, aerodrome operations, and analytics experts visit the operation to observe and meet with local experts.	Operational data is analysed using out proprietary software to provide a comprehensive fact-based assessment of performance.	Computer simulations of the operation are developed to model the current and future potential capacity. Options for increased capacity are considered.	Our experts combine their observations with the data and simulation results to identify the optimal combination and sequence of operational chances required to unlock greater capacity.

Clarity on a change programme to support growth

The result for Bristol Airport is a validated actionable roadmap that will enable the Airport to achieve the ambition of welcoming 12 million passengers by 2026. Highlighted here, from the Airport Capacity Assessment Programme, are five of the key recommendations to improve:

- **Airside**—New capacity for airspace and aircraft ground movements

- **Stand allocation**—Aircraft stand allocation planning to optimise aircraft and passenger flows, improving key dependencies including baggage wait times

- **Immigration**—Plan for the Airport to engage with the Airlines to provide additional information on timely and efficient management of Immigration Procedures for passengers

- **Kerbside**—Circulation in and out of the airport with a focus on days with scheduled delays through a plan including additional remote parking and a new meet and greet waiting area

- **Check-in and Security**—Free flow of passengers from the departure lounge with a technology and process roadmap through to advice on signage.

Summary

Bristol Airport is now confidently on track to achieve growth targets having now validated the Airport infrastructural investment plans that will see passenger numbers increase to 12 million per year, by 2026.

NATS in collaboration with AiQ Consulting continue to work with Bristol Airport to identify further efficiencies in the future.

Find out more

To discuss how we can help enhance capacity and efficiency at your airport please contact gary.conroy@nats.co.uk or call 07881 665962.