





UK AIRPORT SECURITY CHECKPOINT C3-CT SCREENING UPGRADE

-  UK Airport
-  United Kingdom
-  Process optimisation, 3D fast-time simulation
-  2020



KEY OUTCOMES:

- Validation of proposed designs
- Definition of operational requirements
- Identification of risks in proposed phasing programme

THE NEED:



- A UK Airport required concept designs for the new security checkpoint including 100% body scanning requirements, and the introduction CT X-Rays for cabin baggage.
- Millar Management tasked EBEA Consulting with the operational validation of the proposed designs, and support planning the transition period between current and new equipment.
- The main project objectives included maintaining compliance with regulations, enabling passenger growth, minimising queueing, enhancing customer experience.

THE APPROACH:

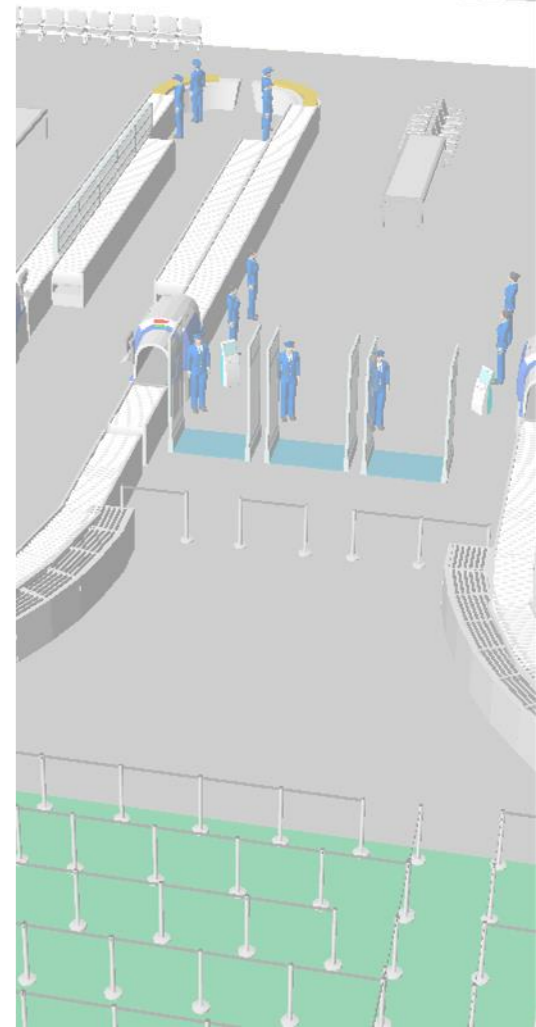
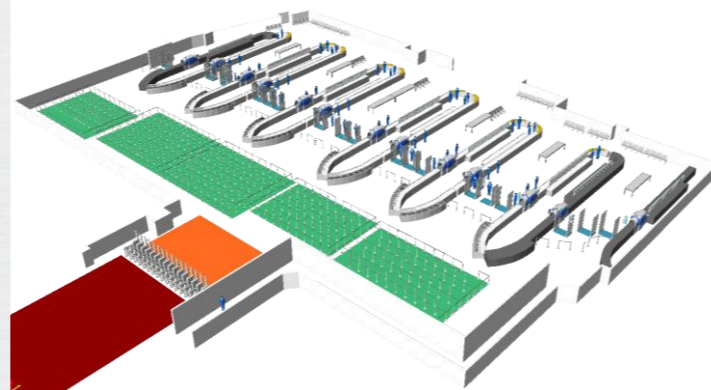


- Comprehensive benchmark analysis of CT technology performance at airport security checkpoints to ensure alignment with customer's needs.
- Development of static tools and 3D fast-time simulation models following industry best practices for efficient and detailed data-driven decision-making.
- Analysis covered assessment of expected throughput, queue times and lengths, and system resiliency, factoring in passenger seasonality and construction phasing program.

THE SOLUTION:



- Validated proposed lane designs and passenger throughput for summer and winter seasons.
- Identified system bottlenecks and recommended minimum lane manning, security scanner provisions, and operational requirements.
- Validated final design options for demand, resiliency, and growth, and identified risks in proposed phasing programs.



EBEA's knowledge of airport operations played an important role in delivering a Security Development project for our client. The team has helped us to identify improvement and resource saving opportunities throughout the Project focusing on deploying new security infrastructure into the airport's operation. EBEA made sure that the solution they proposed covered commercial, business, and operational needs of the customer. We are looking forward to working with the EBEA Team in the future and would recommend them for airport development projects.

Richard Emery
Director
Millar Management