

Balancing the Demands and Constraints



Atkins is the largest multi-disciplinary consultancy in Europe assisting clients across the globe in both the private and public sectors in the delivery of complex capital programmes.

An important strategic issue for all Air Navigation Service Providers is the ability to achieve a balance between:

Recently, the aviation industry has seen increasing pressure from political, societal and regulatory bodies to reduce its impact on the environment. Aviation currently accounts for 1.6% of all carbon dioxide emissions in the UK, it is predicted that this will rise to 5% by 2050. Noise, despite significant improvements in the last 30 years, remains a highly contentious issue amongst communities.

Aviation has grown, on average, by 4 to 5% each year for over 30 years and this is forecast to continue for the foreseeable future. European airspace capacity has grown over the decades but it increasingly lags behind the demand, resulting in costly delays.

Safety has been paramount in aviation for many decades, delivering a safety record that is envied by many.

Can we continue to deliver the necessary development of the aviation industry, whilst delivering profitable business, environmental improvements and maintaining the highest level of safety?

- Holding flights to prevent aircraft landing before 06:00 might meet societal concerns on night noise, but it is unsustainable from an environmental emissions perspective and has safety implications due to the increase in workload for controllers and pilots as their shifts come to an end.
- Continuous descent approaches are the subject of significant work currently, but do the benefits in fuel usage and noise off-set the inefficient use of airspace due to variability in descent and time profiles which dictates larger in-trail separations on approach.
- In the UK, the Sustainable Aviation cross-industry group has set a commitment to improve fuel efficiency by 50% per seat kilometre by 2020 including 10% from ATM system efficiencies. A further commitment has been made to develop and promote low-noise flight procedures. However, what impacts will there be on business or safety in achieving these commitments?

Atkins brings a multi-disciplined team of ATM safety specialist, environmental management professionals, aerospace engineers together with an experienced team of operational analysts to be able to understand, analyse and answer the complex multi-criteria questions that face the aviation industry.

For further information on how Atkins can assist you please contact: andy.whitehead@atkinsglobal.com +44(0)7775 997086