



Department for Transport: Horizon Scanning on “Noise abatement or mitigation technologies for aviation”

Tender Specification

Introduction

The Department for Transport (DfT) works with its agencies and partners to support the transport network that helps the UK’s businesses, and gets people and goods travelling around the country and internationally. They plan and invest in transport infrastructure to support the economy and keep the UK on the move.

DfT is in the process of building its horizon scanning capability. As part of this they have commissioned SAMI Consulting to undertake a regular Horizon Scanning and Technology Watch function to help decision-makers understand how technology development could influence the strategies, policies and delivery approaches that they are creating.

The review process has highlighted key issues that would benefit from further research – ‘deep dive’ projects – to better understand the possible implications for transport. SAMI Consulting has been commissioned to manage these ‘deep dive’ research projects.

This ‘deep dives’ contract is open to both public and private sector bidders. The procurement procedures will conform to Government standards. All data provide as part of these procurements will be “ring fenced” to ensure commercial confidentiality is maintained.

This ‘deep dive’ is on noise abatement or mitigation technologies for aviation. The report will be an internal resource for dissemination around DfT and its partners. The specification and bidding arranged are in the following sections.

Procurement Timescale

Description	Date
Issue tender specification	17 December 2014
Receipt of Proposals by	23 January 2015
Award of Contract	2 February 2015

Scope

Significant progress has been made on reducing the level of noise from aircraft. This deep dive is to review the potential benefits of future noise abatement or mitigation technologies for aviation. It includes the opportunities for reducing noise pollution for both people on the aircraft and on the ground. The horizon scanning should cover all phases of flight and manoeuvring on the ground.

All types of civil aircraft, except light aircraft and helicopters, are to be considered. Military aircraft are outside the scope of this project, but the civil application of military technology, such as noise reduction for stealth, should be included. The report should make clear whether the technologies are applicable to the current aircraft fleet and/or for future generations of aircraft.

While propulsion is generally the major source of noise, other aircraft systems and aerodynamic noise generation at low altitudes are also within the scope of this project. The areas of interest are likely to include propulsion, airframes, coatings and active and passive noise reduction systems.

Ground based systems (active and passive) to reduce noise pollution should also be addressed. This should include innovative solutions such as the proposal for pyramids to reduce noise at Schipol Airport. <http://www.eikongraphia.com/?p=1999>

The main focus should be on technologies that will start to have implications for Government in the period up to 2030, including innovative technologies that can be trialled on the existing aircraft fleet over the next few years. The scanning should also consider longer term technology developments that could have impacts over the timescale 2030 to about 2050. It is important that disruptive technologies and potential 'game changers' are considered.

The scanning should note any available economic data associated with noise abatement or mitigation but it is not expected that additional economic analysis will be conducted as part of the project.

The main intended audience for the report is government officials engaged in policy work. The objective is to identify the technologies that they need to take into account when assessing future policies and research priorities. Brief descriptions of the technologies should be included in the report.

It is estimated that to complete this review should cost no more than £10,000, excluding vat.

Implementation and Deliverables

Milestones

The proposed key milestones for the project are in the table below:

Mile stone	Date
Project initiation meeting	On or before 13 February 2015
Draft report	27 March 2015
Final report	30 April 2015

Project Initiation

At the project initiation meeting the following will be agreed:

1. Scope of the research
2. Project plan and project management arrangements
3. Structure of the report

Report

The deliverable will be a report for DfT. This should be around 20 pages and include the following:

1. Executive summary of approximately two pages. This should be suitable for use as a briefing paper for circulation within DfT.
2. The methodology used for the project
3. Description of the noise abatement or mitigation technologies for aviation, including:
 - a. Potential timescales for development and exploitation
 - b. Opportunities and challenges
 - c. Policy implication; principally for DfT but also taking into account other government departments
4. Conclusions
5. Appendices for more detailed information and list of scanning sources

Data and quotes in the report should be referenced.

Tenders and Evaluation

The tendering and the management of the contract will be conducted by John Reynolds, who is a Director of SAMI Consulting and a former senior civil servant. All information supplied as part of the tendering process and under the contract will be strictly 'ring fenced' and only be available to John Reynolds and to relevant officials in DfT. The following dedicated e-mail address has been established for this procurement aviation.tender@samiconsulting.co.uk

This procurement is an open tender and will be conducted following public procurement guidelines.

Tenders

Tenders must be submitted electronically to aviation.tender@samiconsulting.co.uk by 12.00 on Friday 23 January 2015. Tenders sent after this time will not be accepted.

Tenders can be submitted in word or pdf formats. They should be around 5 pages and include the following:

1. Your understanding of the requirement
2. Proposed methodology for scanning and analysis
3. Proposed deliverables
4. The experience of those engaged on the project, including short c.v.
5. Two reference projects
6. Resources, including a breakdown of the proposed days and costs.

Additional information can be provided as appendices but this may not be included in the scoring.

Evaluation

Tenders will be evaluated by John Reynolds and DfT officials. Selection will be based on the evaluation criteria encompassing the most economically advantageous tender, which demonstrates a high degree of overall value for money, competence, credibility and ability to deliver.

This tender will be evaluated using the following weightings to obtain the optimal balance of quality and value for money:

Evaluation Criteria	Weighting
Methodology	30%
Experience	30%
Financial/price factors	40%

For both the methodology and experience the evaluation will use the following scoring methodology:

Evaluation	Score
The tender demonstrates fully that they can meet the requirement as detailed in the specification	5
Meets all critical requirements but with minor issues	4
Meets some requirements but with a few major gaps or issues	3
Meets some requirements; major concerns	2
Meets few requirements; serious concerns	1
The method of fulfilling the stated requirement is inadequate / not addressed	0

For price, the lowest tender price will be given a score of 5. All other tenders will be base lined against this score; so a tender that is 20% more expensive will be scored at 5 times 80%, giving a score of 4.

The weighted methodology, experience and price scores will be added together to calculate a total evaluation score for each tender.

Points of Contact

All correspondence on this tender should be with:

- John Reynolds (SAMI Consulting)
- e-mail aviation.tender@samiconsulting.co.uk
- Tel: 07764 391284