

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

<b>Participant organisation names</b>	<b>Project title</b>	<b>Proposed project costs</b>	<b>Proposed project grant</b>
Rolls-Royce PLC University of Bristol Imperial College London	CTI Composite Fan Technology	£18,365,706	£9,182,868
<b>Project description - provided by applicants</b>			
The forecasted doubling of aircraft in service over the next 20 years has led to long term challenging environmental emissions goals being set for the aviation industry. Combining this with airline operators' requirements for reduced operating costs generates the need for a step change in fuel burn and hence CO2 emissions. This can be achieved by moving to engines with lower specific thrust that utilise larger diameter fans. The weight of these fans must be minimised to avoid losing the fuel burn advantage. The purpose of this project is to complete the development of carbon fibre composite materials for use in a lightweight fan system for high bypass ratio direct drive turbofans for the wide-body civil aircraft market. It will focus on modelling the propagation of damage, the effect on material properties of inclusions of manufacturing features and defects, general damage tolerance and environmental effects of moisture and temperature variation. Work will also attempt to optimise the key components to maximise the weight reduction potential. The project includes the manufacture and testing of sub-elements and components to validate the resulting methods and principles.			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

<b>Participant organisation names</b>	<b>Project title</b>	<b>Proposed project costs</b>	<b>Proposed project grant</b>
Rolls-Royce PLC University of Southampton	ACAPELLA	£6,499,988	£3,249,994
<b>Project description - provided by applicants</b>			
Building on the success of the Trent family of three shaft engines Rolls-Royce has announced its intent to develop UltraFan, a novel Very High Bypass Ratio (VHBR) geared architecture. This provides a significant improvement in propulsive efficiency and will be available for the next generation of aircraft 2025 and beyond. ACAPELLA will provide Rolls-Royce with aero acoustic prediction capabilities for use in multi-disciplinary optimisation design techniques. The target is to achieve a -5dB reduction cumulatively relative to the Trent XWB and Trent 1000 engines which is a very significant step towards the interim 2035 goal on the way to the ARARE 2050 target. Through increased collaboration between UK aircraft noise research teams at the Universities of Southampton, Cambridge, Loughborough and Imperial College, this project will provide a step change in aero acoustic modelling capability within the aircraft installed environment validated by high fidelity measured data.			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

<b>Participant organisation names</b>	<b>Project title</b>	<b>Proposed project costs</b>	<b>Proposed project grant</b>
University of Sheffield - AMRC	CastFast	£4,100,000	£4,100,000
<b>Project description - provided by applicants</b>			
<p>The Aerospace Technology Institute (ATI) has made a major investment in UK aerospace and its supply chain. New facilities funded by the ATI at the Advanced Manufacturing Research Centre (AMRC) Casting Centre, in Rotherham, will be used to develop and promote new technologies to UK foundries and tool manufacturers, which could help them to win big contracts with major aerospace companies. This investment in the 'Northern Powerhouse', will benefit the entire UK, as the AMRC Castings Centre is part of the High Value Manufacturing Catapult whose mission is to revitalise UK manufacturing. The Catapult provides a gateway to some of the best manufacturing talent and facilities in the country. The project will develop advanced world-class wing tooling and fast-make aerostructures and engine parts that will help UK aerospace manufacturers to grow production rapidly. The project proposes solutions that will enable the full benefits of 3D printing and sand and investment casting to be achieved, enabling aerospace components to be produced at lower cost, with shorter lead times, at higher quality, and with less environmental impact than current processes, strengthening the competitiveness of the UK aerospace sector. The project aims to deliver component weight savings of 23%, cost savings of 38%, and an 89% reduction in lead-times compared to conventional processes. The project will help the ATI to achieve its goal of ensuring that the UK remains Europe's number one aerospace manufacturer, second only to the US globally. The project will help protect and grow the number of jobs in UK aerospace and its supply chain.</p>			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

<b>Participant organisation names</b>	<b>Project title</b>	<b>Proposed project costs</b>	<b>Proposed project grant</b>
<b>Rolls-Royce PLC</b> Aircraft Research Association Ltd BAE Systems (Operations) Ltd Cambridge Flow Solutions Ltd Imperial College London International TechneGroup Ltd MBDA UK Ltd Queens University Belfast	GEMinIDS	£18,221,422	£9,110,711

### **Project description - provided by applicants**

Geometry is at the heart of all aerodynamic and mechanical design processes and tools. The creation, manipulation and discretisation of geometry has become the bottle neck in design-simulation iteration time and therefore is a limiting factor in our ability to reduce time to market. Increasing competitive, environmental and commercial pressures are demanding ever higher performing products which in turn need more design iterations and simulation which means that the importance of geometry and its integration with the design process and simulation is increasing. GEMinIDS will deliver geometry handling and meshing technology that builds upon the GHandI (Geometry Handling and Integration) project whilst also extending its scope to Integrated Design Systems. GEMinIDS brings together the technology and consortium established in GHandI, with leading SMEs and academics in the field, to produce a project with a scale, breadth and level of synergy that will enable a step change in UK competitiveness in this important enabling technology.

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> **Use the Competition Code given above to search for this competition's results**

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

<b>Participant organisation names</b>	<b>Project title</b>	<b>Proposed project costs</b>	<b>Proposed project grant</b>
Rolls-Royce PLC Loughborough University Rolls-Royce Controls and Data Services Ltd	Enhanced Low Emission Combustion Technology (ELECT)	£13,998,440	£6,999,220
<b>Project description - provided by applicants</b>			
The continuous drive of the airline industry to achieve ever more stringent fuel burn, noise, emissions and lifecycle cost requires a step change in combustion system design. To address this, Rolls-Royce is investing heavily into lean burn combustion technology. The ELECT programme aims to improve lean burn system design rules and fundamental understanding. This will enable significant simplifications to the current fuel system for civil large engine application circa 2020. Additionally this programme aims to further improve the lean burn system architecture, by incorporating the latest technologies within the control and combustion communities, to provide a more robust system with reduced complexity for civil medium and large engine applications circa 2025.			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

Participant organisation names	Project title	Proposed project costs	Proposed project grant
<b>Safran Electrical &amp; Power UK Ltd</b> Ferranti Technologies Ltd The Barden Corporation UK Ltd 3T RPD Ltd 3D Systems Europe Ltd Tyco Electronics Ltd	MEGCAP	£9,866,089	£4,933,044
<b>Project description - provided by applicants</b>			
MEGCAP will re-invent the thermal management of the interior of aircraft starter-generator electrical machines. Project outputs will be equipment and products with higher efficiency, lower self-heating 'leading to cooler and smaller equipment. The project will also advance the control electronics. Safran will conduct the R&T work jointly with UK based supply chain partners. Ferranti already undertake build to print work for Safran on flight standard electrical controls. Barden manufacture many of Safran's specialised rolling element bearing for electrical machines. TE Connectivity supply electrical interconnects for data and power. All of these areas ' and some that are technologically adjacent ' will be addressed by the MEGCAP partnership. Two suppliers new to aerospace will use the advanced technologies they work on develop their future business. Both specialists in Additive Manufacturing (AM), 3T and CRDM ' will undertake work on new materials and on the manufacture of conventional materials in novel new shapes. MEGCAP will deliver a strong and distinct cluster of technological capability in the supply chain for both electrical machines and their electrical controls.			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

Participant organisation names	Project title	Proposed project costs	Proposed project grant
<b>Rolls-Royce PLC</b> The Manufacturing Technology Centre University of Sheffield - AMRC University Of Birmingham	Manufacturing Project 4 - Fast Make and Design for Advanced Forming	£6,911,239	£3,455,211
<b>Project description - provided by applicants</b>			
(Draft - content may be revised)This project will develop technologies that will allow rapid manufacture of components for future developmentrig and engine tests. This project will address the development of a range of manufacturing technologies thatcurrently have long production lead times.The work packages will be developed by Rolls-Royce working in partnership with the Manufacturing TechnologyCentre the Advanced Manufacturing Research Centre and the University of Birmingham and using a UK supplychain.			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results



# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

<b>Participant organisation names</b>	<b>Project title</b>	<b>Proposed project costs</b>	<b>Proposed project grant</b>
<b>Airbus Operations Ltd</b> Airbus Group Ltd CFMS Services Ltd GKN Aerospace Services Ltd IHS Global Ltd MSC Software Ltd Rolls-Royce PLC University of Cambridge Cranfield University	APROCONE	£19,249,670	£9,626,735

### **Project description - provided by applicants**

Forecasts indicate the need for over 30,000 new commercial aircraft by 2034. Securing market success depends on delivering products that meet customer demands and ensuring the long term viability of those engaged in developing and producing them. Innovative product architectures and novel technologies will be needed to achieve the demanding performance targets. The design environment used to develop and evaluate such products will also require transformation to meet the crucial development time and cost reduction ambitions. APROCONE, is a key step towards delivering the next generation aviation products and associated advanced design environment. It will deliver capabilities needed to transform the conceptual definition and evaluation of complex products thus providing the foundation on which to achieve significant improvements in development cost and product performance. The consortium of software specialists, industrial end users/suppliers and academic experts, will collaborate to investigate innovative aircraft wings & turbofan engines concepts, whilst developing and demonstrating the capability of the enhanced Design Environment.

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

<b>Participant organisation names</b>	<b>Project title</b>	<b>Proposed project costs</b>	<b>Proposed project grant</b>
Rolls-Royce PLC NCC Operations Ltd	Manufacturing Project 8 - High Performance Composites	£7,397,986	£3,698,993
<b>Project description - provided by applicants</b>			
(Draft content - revision may be required)This project will develop competitive product capability and high manufacturing productivity for CompositeStructures. The development of composite moulding and composite curing processes will enable cost andweight reduction on static composite components for future engines.The work packages will be developed by Rolls-Royce working in partnership with the National CompositesCentre and utilising the UK manufacturing services supply chain			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Rolls-Royce PLC University of Birmingham University of Oxford	Dual Wall Turbine Technology Development (DualWallTurb)	£14,544,582	£7,272,291
<b>Project description - provided by applicants</b>			
<p>The next generation of Large Civil turbofans will feature higher bypass ratios and LeanBurn Combustion technology to improve propulsive efficiency and hence reduce fuel-burn, CO2 and NOx emissions. They are likely to be driven by a geared LP system, as per the Rolls-Royce UltraFan engine concept. Key enablers for this overall engine concept are hotter, smaller and durable core turbine technologies. DualWallTurb will address this requirement by developing novel design and manufacturing technologies for high temperature materials towards advanced levels of technology readiness (MCRL4/TRL4), thereby enabling a step change in cooling flow reductions in the High Pressure Turbine (HPT). The project will achieve this by bringing together existing and further advancing UK based know how on manufacturing, advanced design knowledge as well as the UK based research infrastructure whilst focusing on the fastest possible technology delivery in support of upcoming engine programmes. As a result a strategic key design and manufacturing capability will be developed in the UK and secured for future exploitation in the UK.</p>			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Rolls-Royce Controls and Data Services Ltd University of Sheffield Cranfield University Artesis LLP Oxsensis Ltd	End-to-End Equipment Health Management (E2EEHM)	£8,970,367	£4,485,118
<b>Project description - provided by applicants</b>			
Future civil aerospace technology advancement and improvement is going to be increasingly based on the use of real-time aircraft and engine data to predict performance, adapt control and manage maintenance. E2EEHM (End-to-End Equipment Health Management) is a four year project that will develop and link together future Equipment Health Management (EHM) technologies to create future value for products and services. Capability will be created in the areas of advanced sensing, communications, data mining and analytics. As they are developed, these technologies will be joined together in end-to-end demonstrations to illustrate their use in aerospace operations to reduce: 1) Operational disruption 2); Maintenance cost and 3) Design conservatism. Specific applications of particular importance for this project are: revolutionising LRU (Line Replaceable Unit) monitoring, which is currently unavailable, and support to the embodiment of more Electrical Machines in aerospace.			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

Participant organisation names	Project title	Proposed project costs	Proposed project grant
University of Strathclyde - AFRC	HIVES	£6,594,642	£6,594,642
<b>Project description - provided by applicants</b>			
<p>This project will purchase and install an industrially representative experimental capability for temperature and environment controlled open and closed die hydraulic forging at the Advanced Forming Research Centre. The investment opens up several opportunities for research, including mass data capture during the early stages of metallic processing, allowing component eDNA to be defined recorded and documented. This will radically improve component life and integrity, with TS P002005 1 Page 2 of 10 Date Saved 10022016 090522 Date Printed 10022016 105414 Proposal original proforma document Impact Summary Impact Summary please refer to the help for guidance on what to consider when completing this section up to 4000 chars major advantages in terms of both safety and lifecycle cost. The capability will also support the development of improved alloys for high temperature and other high demand applications in a full range of high integrity metal alloys. It will address the requirement during the development of new alloys for representative subscale trials to establish the process window and characterise the alloy in order to determine the viability of launching production forgings. Perhaps most importantly it will provide the ability to validate models as part of the ongoing mission to clarify the black art of forging. As such it will be of direct benefit to material suppliers as the AFRC will be able to conduct highly controlled and monitored experiments without impacting production. The HIVES Forge will have three primary usage scenarios 1. Physical process development 2. Moving from indicative to predictive process models 3. Supporting the wider UK metals innovation landscape The programme will have an Industrial Steering Committee, chaired by the AFRCs Technical Director. The Steering committee will help shape the requirements and provide advice to the centre on the procurement of the equipment. A stakeholders collaborators group will also be established to develop programmes of work to use the equipment once it is installed.</p>			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

<b>Participant organisation names</b>	<b>Project title</b>	<b>Proposed project costs</b>	<b>Proposed project grant</b>
<b>Rolls-Royce PLC</b> The Manufacturing Technology Centre University of Sheffield - AMRC	Manufacturing Project 3 - Complex Fabrication Systems	£9,601,496	£4,800,605
<b>Project description - provided by applicants</b>			
This project will develop competitive capabilities to manufacture complex, high-functionality components by advanced joining and fabrication methods. Replacement of outdated welding processes and a systems engineering based approach to structures fabrication will deliver step-change improvements in component and assembly cost, quality and supply chain productivity. The technologies developed will enable cost and weight reduction on current and future engines. The work packages will be developed by Rolls-Royce working in partnership with the Manufacturing Technology Centre, the Advanced Manufacturing Research Centre and using the UK manufacturing services supply chain.			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

Participant organisation names	Project title	Proposed project costs	Proposed project grant
<b>Goodrich Actuation Systems Ltd</b> Crompton Technology Group Ltd NCC Operations Ltd University of Manchester Texkimp Ltd	Advanced Nacelle System	£5,779,200	£2,889,577
<b>Project description - provided by applicants</b>			
(can be expanded and further detail provided if proposal successful)UTC Aerospace Systems is a leader in the provision of advanced systems to the aerospace market and is delighted to have been included in this investment. The funding opportunity will allow the company to develop new technology for advanced engine and nacelle systems to support future aircraft programmes which directly benefit the UK.The investment will allow UK based engineers to be directly employed working on this important R&D programme. It also links UK industry with other UK based research partners.The lessons learnt will be transferred to other areas of the UTC Aerospace systems global market business.			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results



# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

<b>Participant organisation names</b>	<b>Project title</b>	<b>Proposed project costs</b>	<b>Proposed project grant</b>
<b>Rolls-Royce Controls and Data Services Ltd</b> Altran UK Ltd BAE Systems Operations Ltd D-RisQ Ltd Flight Refuelling Ltd GE Aviation Systems Ltd MBDA UK Ltd Rapita Systems Ltd Safran Electrical & Power UK Ltd Selex ES Ltd Ultra Electronics Holdings PLC University of Oxford University of Southampton University of York	SECT-AIR	£10,253,004	£5,135,089

### **Project description - provided by applicants**

SECT-AIR's aims are to develop strategies for the UK high integrity software industry to significantly lower development costs and to scope a UK aerospace software centre-of excellence to maintain these strategies in the future. SECT-AIR plans to define processes and technologies that will make a step change reduction to software development costs; gain adoption of these through certification authorities and wider industry engagement and to ensure a better flow of technology between academia and industry in these areas in the future.

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Queen's University Belfast	SCENIC	£4,992,305	£4,992,305
<b>Project description - provided by applicants</b>			
SCENIC is a proposal aimed at increasing the competitiveness of the UK supply chain for aerospace metalstructural components. The investment in capital will establish an open access manufacturing technologyfactory encouraging and enabling increased research and development by UK industry SMEs in particular.OEMs will participate providing leadership and the market need while technology providers will supportprojects providing latest technical know how. The capital investment will empower industry to pursueadditional RD project funding through Invest NIs grant for RD and Competency Centre programsInnovate UK ATI and Horizon 2020. The project has a regional focus aimed at creating a platform forincreased engagement with the wider research community in the UK and in particular the HVM Catapultfacilitating wider interaction with leading OEMs and dissemination to the wider UK industrial community.The investment in appropriate and affordable technologies with regional access will help overcome arecognised barrier to SMEs increasing investment in higher value RD and involvement with the HVMCatapult infrastructure.			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

<b>Participant organisation names</b>	<b>Project title</b>	<b>Proposed project costs</b>	<b>Proposed project grant</b>
Safran Nachelles Limited Rolls-Royce PLC	ANTELOPE	£5,210,363	£2,605,181
<b>Project description - provided by applicants</b>			
The ANTELOPE project aims to investigate key technologies within a civil nacelle for Long range aircraft designed to reduce the impact of moving to future engine architectures, such as Ultra High Bypass Ratio engines. Through this project, the consortium will examine technologies aiming to reduce Fuel burn from an Integrated Powerplant System through examining topics impacting weight and drag. The project also aims to develop technologies to increase the functionality of the nacelle such that it may support the engine in producing a better optimised solution, leading to improved propulsion efficiency from the Powerplant.			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

# Innovate UK

**Results of Competition: Aerospace Technology Institute - Strategic R&D Projects - Batch 16**  
**Competition Code: 1309\_SPEC\_TRA\_ATI\_batch16**

**Total available funding for this competition was £98M from Innovate UK (on behalf of BIS)**

**Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.**

<b>Participant organisation names</b>	<b>Project title</b>	<b>Proposed project costs</b>	<b>Proposed project grant</b>
GKN Aerospace Services Ltd Short Brothers PLC	DATAS	£8,000,000	£4,000,000
<b>Project description - provided by applicants</b>			
DAITAS (Developing Automated Assembly & Inspection Technologies for Aircraft Structures) is an initiative led by GKN Aerospace; aimed at advancing current technologies and knowledge in Automated Assembly and Inspection for current and future aerospace platforms. This important topic has been identified as critical for the intermediate future operations across GKN Industrial Group, given the potential gains in productivity-efficiency-repeatability and quality are compelling. GKN Aerospace, global Tier 1 supplier for the Aerospace and Automotive industries, brings a wealth of experience and background managing research & technology initiatives. Partnering in this project is Bombardier Aerospace, one of the largest Aerospace organisations in the world, with years of experience leading successful Research & Technology initiatives.			

**Note: you can see all Innovate UK-funded projects here**

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results