Aerospace Technology Institute

The Road to innovation in Aerospace

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Aerospace Technology Institute

ATI is a single, coherent national aerospace technology development programme which aims to strengthen the links between industry and academia and to maximise opportunities for UK industry to gain access to European R&D programmes.

UK Aerospace

Our world class capabilities in the manufacture of some of the most sophisticated and high value parts of modern aircraft has created a high-tech and high-skill industry of 3,000 companies and 230,000 employees in the UK that creates massive UK economic benefits

UK Aerospace

The UK designs, manufactures and assembles some of the most technologically complex and valuable parts of today's airliners, including the wings, engines, aerostructures and advanced aircraft systems.

ATI has 4 streams of focus

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The ATI has the scale to deliver the new technology capabilities that will be needed for the UK to retain its strong position globally, utilising these skills and capabilities.

It is one of the major outputs of the Aerospace Growth Partnership (AGP)

ATI Projects

ATI is responsible for a portfolio of 60-80 projects critical to anchoring future design, development and manufacturing in the UK.

Projects carried out by UK aerospace companies in collaboration with academic institutions

ATI Projects

The tasks and aims for all of the collaborative R&D projects aim to:

Meet demanding ACARE targets via

- Reduction in fuel burn (e.g. optimisation of wing shape, novel techniques for powerplant integration)
- Reduction in external noise (e.g. engine optimisation, novel landing gear)

Make UK designed and manufactured aircraft more competitive via

- Enhancement of performance (e.g. laminar flow wings, optimised propeller)
- Reduction of time-to-market and cost for both acquisition and operating costs (e.g. manufacturing, faster meshing techniques, faster prediction methods)

R&D

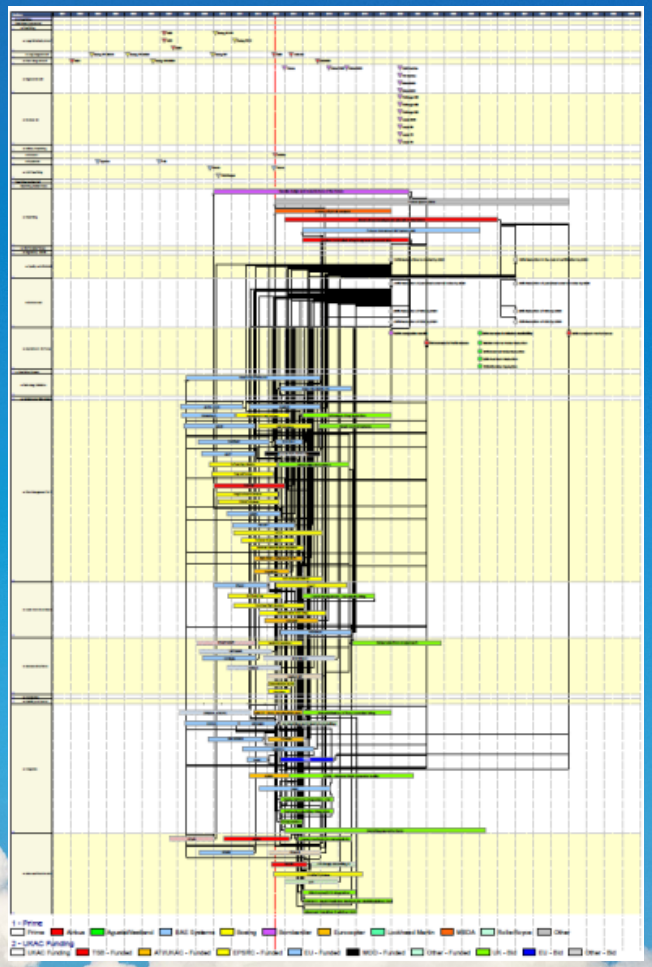
The ATI provides better alignment between early research (such as that supported by the Engineering and Physical Sciences Research Council) and cross-sectoral R&D innovation, delivered through the Technology Strategy Board. It will also provide the foundation for large-scale technology demonstration – currently a gap in terms of available public support.

EPSRC
Engineering and Physical Sciences Research Council

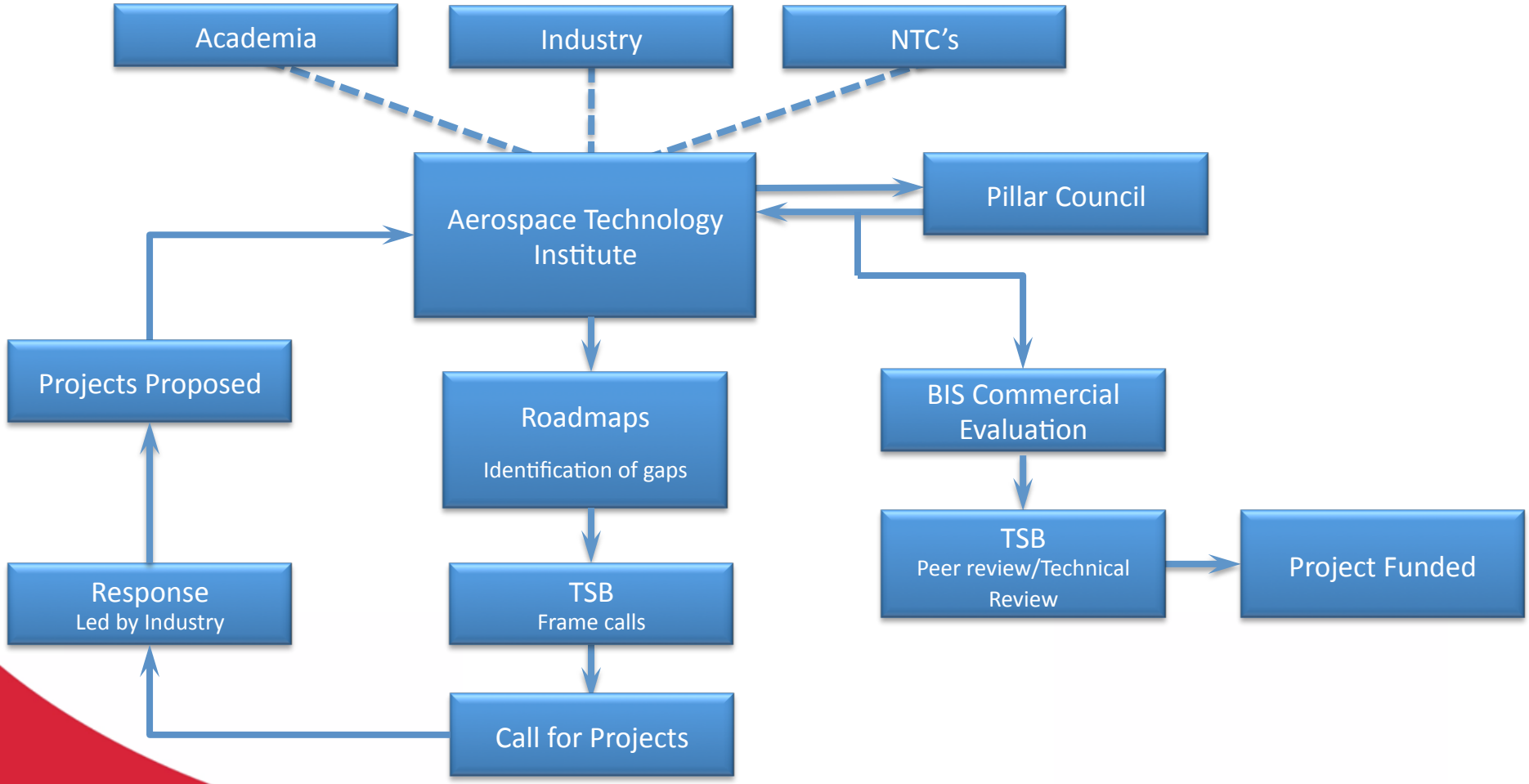
Technology Strategy Board
Driving Innovation

Roadmapping

ATI will also refresh roadmaps for areas of expertise, in order to continue the UK's development of leading edge technologies and research.



ATI Projects Approval



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Based on the UK's potential to develop technology to sustain and grow its future market share in aerospace the ATI aims to secure up to 115,000 industry specific jobs in the sector and its supply chains in the long term.

Capability Mapping

This will be linked in with Capability mapping, where the ATI will maintain an inventory of the people and facilities available to the UK