

Investing in the Future of Aerospace in the U

Dr Simon Weeks, Chief Technology Officer, Aerospace Technology Institute
Glasgow University Aerospace Symposium 2015, November 2015

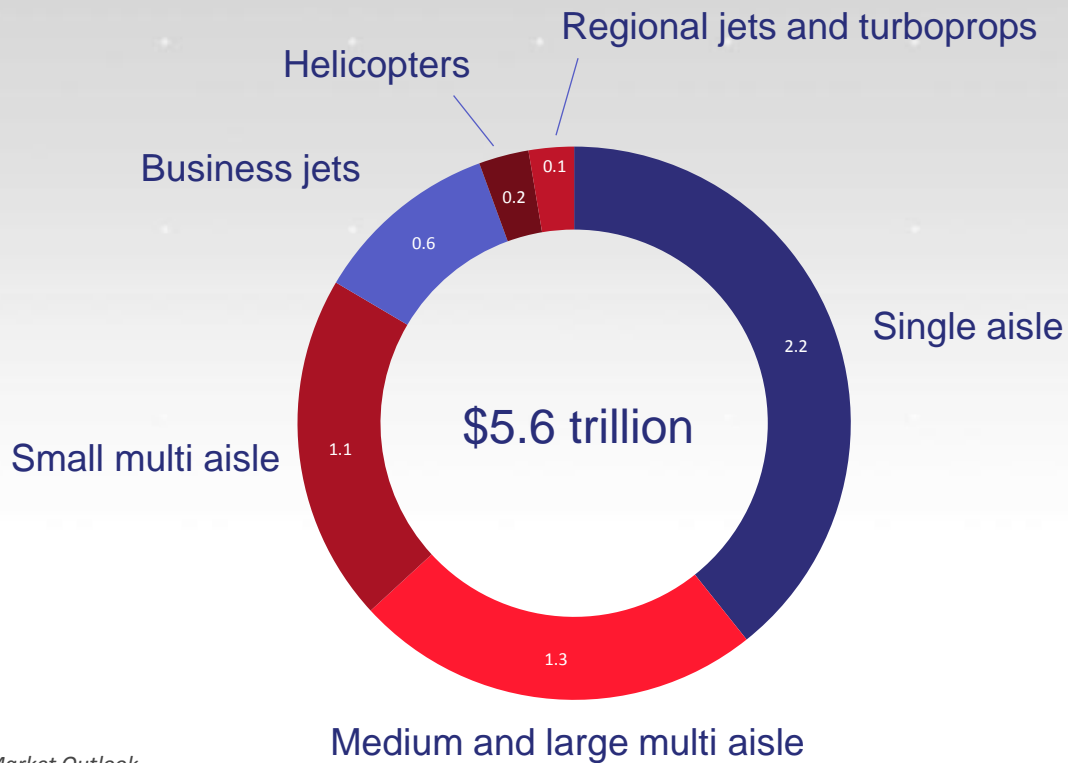




Background to the ATI story so far

A large and growing market...

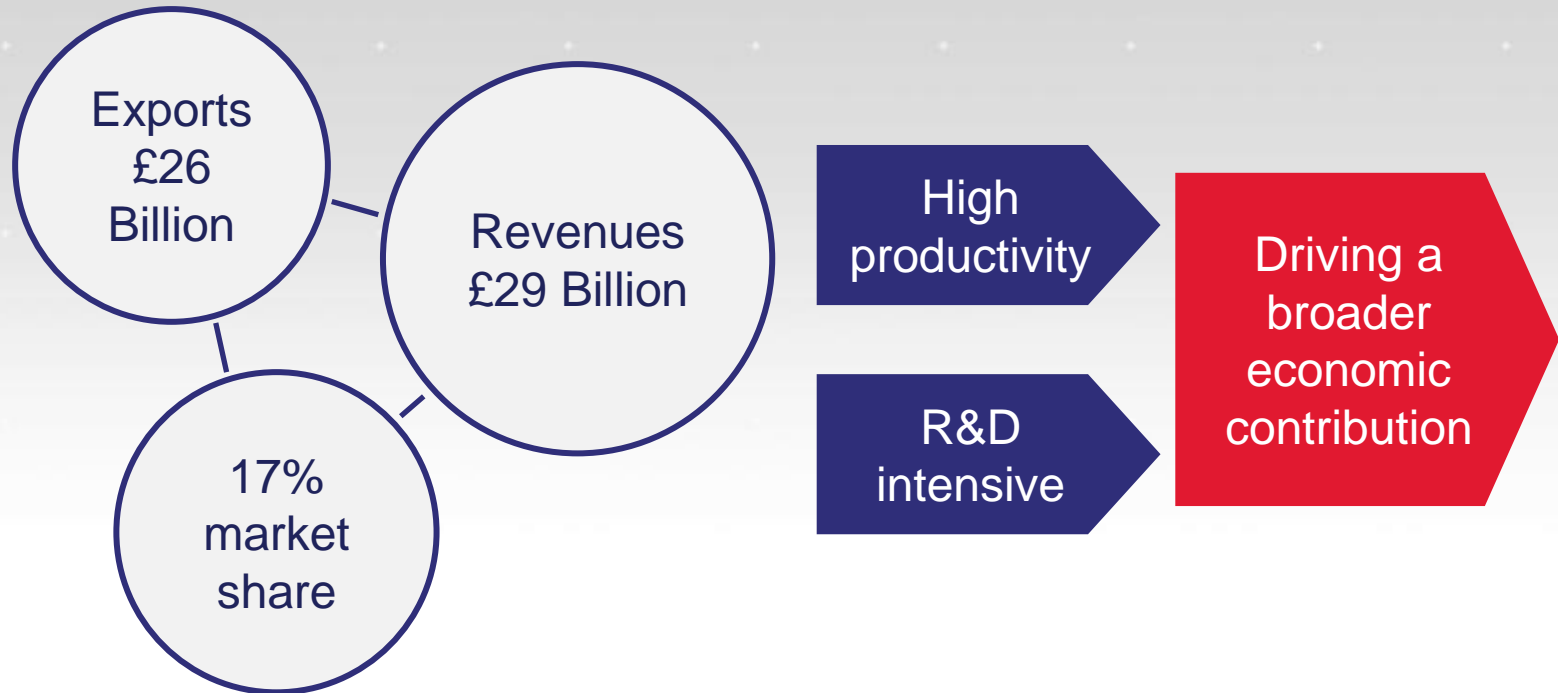
Share of forecast deliveries by segment in \$ trillions (2013 – 2033)



Source: UKTI 2015 Market Outlook

...and delivering broader economic impact

UK civil aerospace facts 2015



Source: ADS 2015 Industry facts and figures

Establishing the Institute – looking back



2012

Global opportunity & strategic areas:

- Skills
- Supply chain
- Technology
- Access to finance
- Engagement



2013

Mechanisms

- NATEP
- MSc Bursaries
- ATI & £2.1bn



2014

Company established

- CEO/Chair by Q2
- EMT in September
- ~10 staff



July 2015

- 1st published strategy
- Institute embedded in strategic leadership of programme
- ~25 staff



January 2015

Technology strategy framework

- Coherent market-aligned
- Focused on economic impact
- Initial technology themes



The Institute's mission

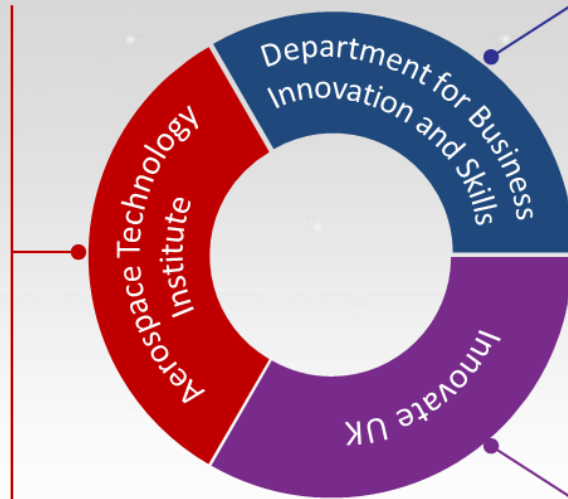
“ ...through £2.1bn **R&T investment** grow the **UK's competitive position**, ultimately safeguarding and enabling **new jobs and value creation** ”

The ATI is....

- An independent institute and a not for profit company that sees the bigger picture
- Funded and governed jointly by UK Government and Industry
- Responsible for the UK's Aerospace technology strategy
- Working with UK Government and Industry to deliver a technology programme, aligned with our strategy, to secure the future competitiveness of the UK's national aerospace industry
- A strategic advisor to government and industry
- Representing the UK in international aerospace technology forums and is planning to develop collaborative research relationships

Aerospace Technology – In Partnership

- Owner of the technology strategy
- Manages the project portfolio, driven by the strategy
- Works with Innovate UK and BIS to stimulate collaborative projects
- Leads initial industry engagement on the development of projects



- Custodian of the governments funding commitment
 - Provides assurance and reporting to treasury and ministers
 - Owns the relationship with EU on state funding issues
 - With the AGP, shapes the aerospace industrial strategy
- Runs the independent assessment process
 - Manages and contracts the grant funding
 - Ensures projects are managed and run appropriately
 - Manages and controls project reporting



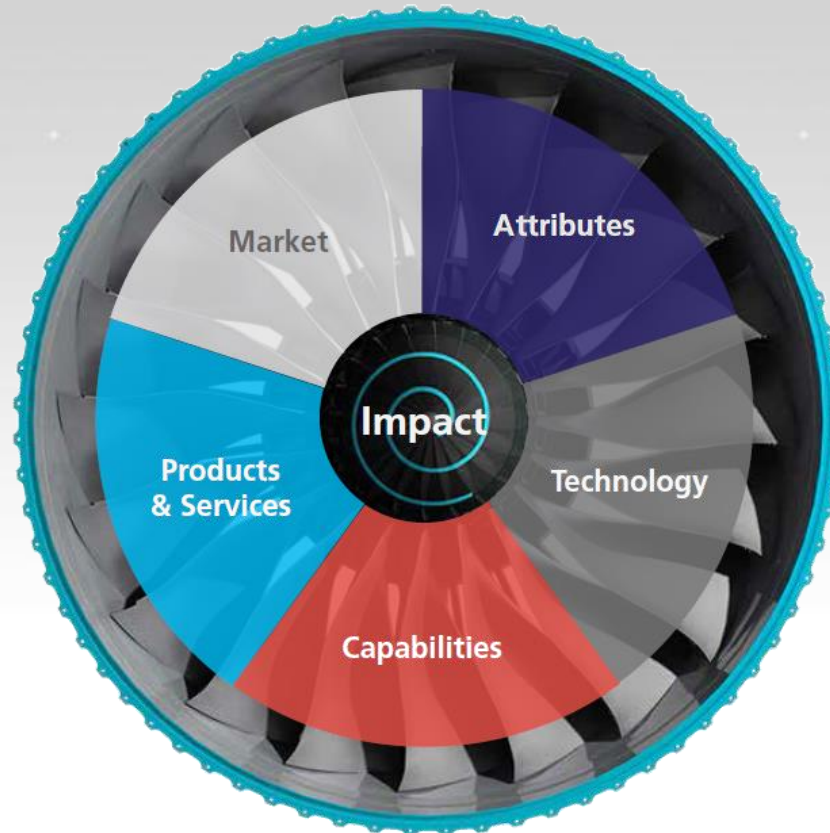
Strategy

Strategic goals for technology

To ensure the UK...

- Is a global leader in:
 - + civil aircraft **wings**
 - + large civil aircraft **engines**
 - + complex aircraft **systems**
 - + civil **helicopters**
- Is providing **differentiated technologies** and **competitive supply** for associated sub-systems and components
- Is **positioned to lead** new architectures and technologies in civil aviation

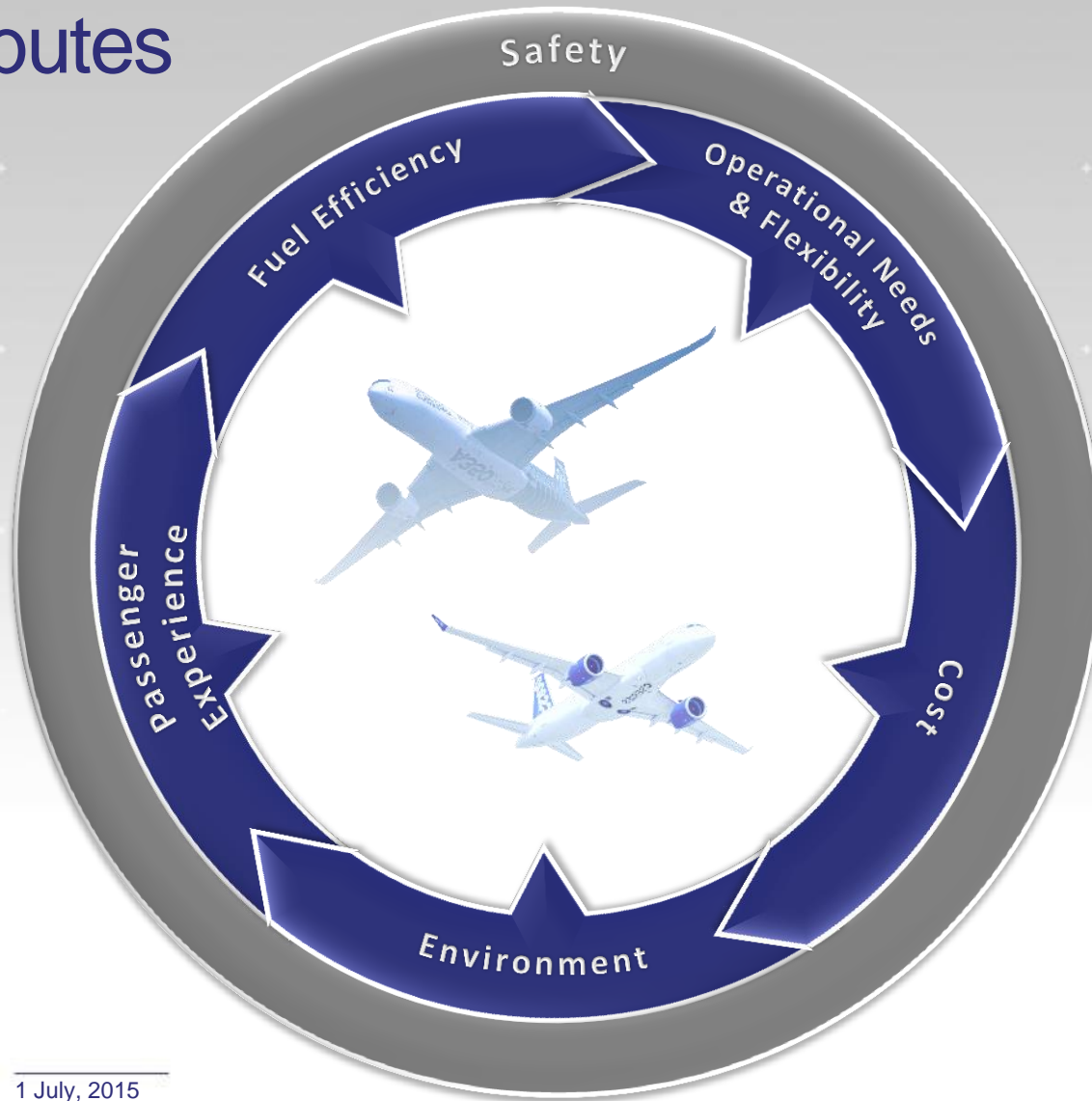
Strategic principles anchoring the strategy



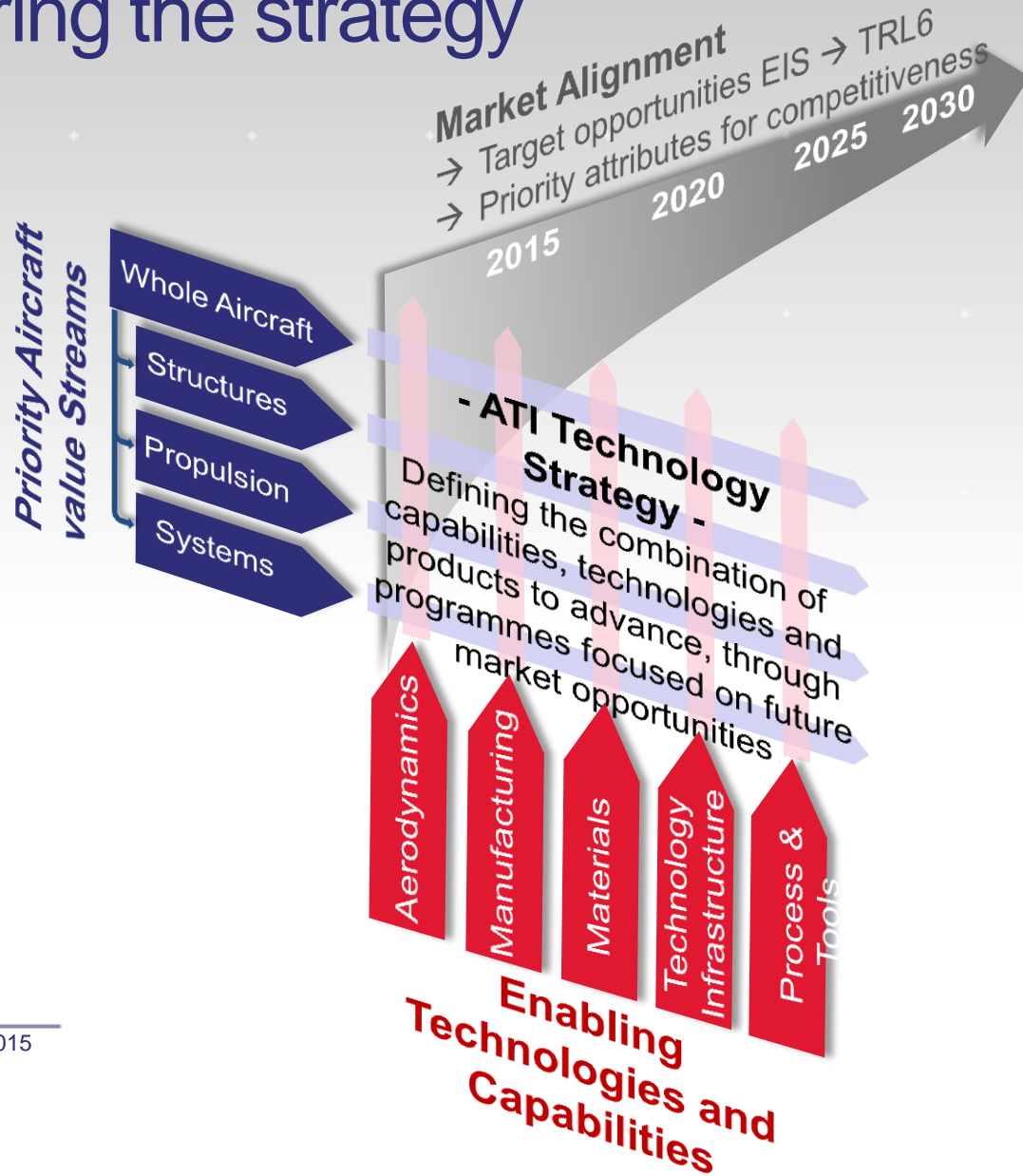
Focused on high probability opportunities

	2015	2020	2025	2030+
Wide body	Current <ul style="list-style-type: none"> • A330 NEO • A350-9/8/1000 • B777X • B787-10 	Updates / derivatives (new engine options)	Updates (new engine options and major structure/aero improvement)	New wide body aircraft / New entrant
Narrow body	Current <ul style="list-style-type: none"> • A320 NEO • B737 MAX • C-Series • C919 	Moderate updates (structure/aero improvement)	Major updates / derivatives (engines and major structure/aero improvement)	New narrow body aircraft

Attributes



Structuring the strategy



Delivered through four technology themes

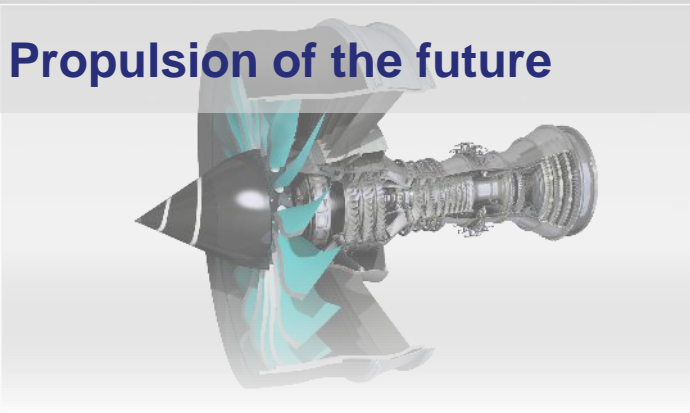
Aircraft of the future



Aerostructures of the future



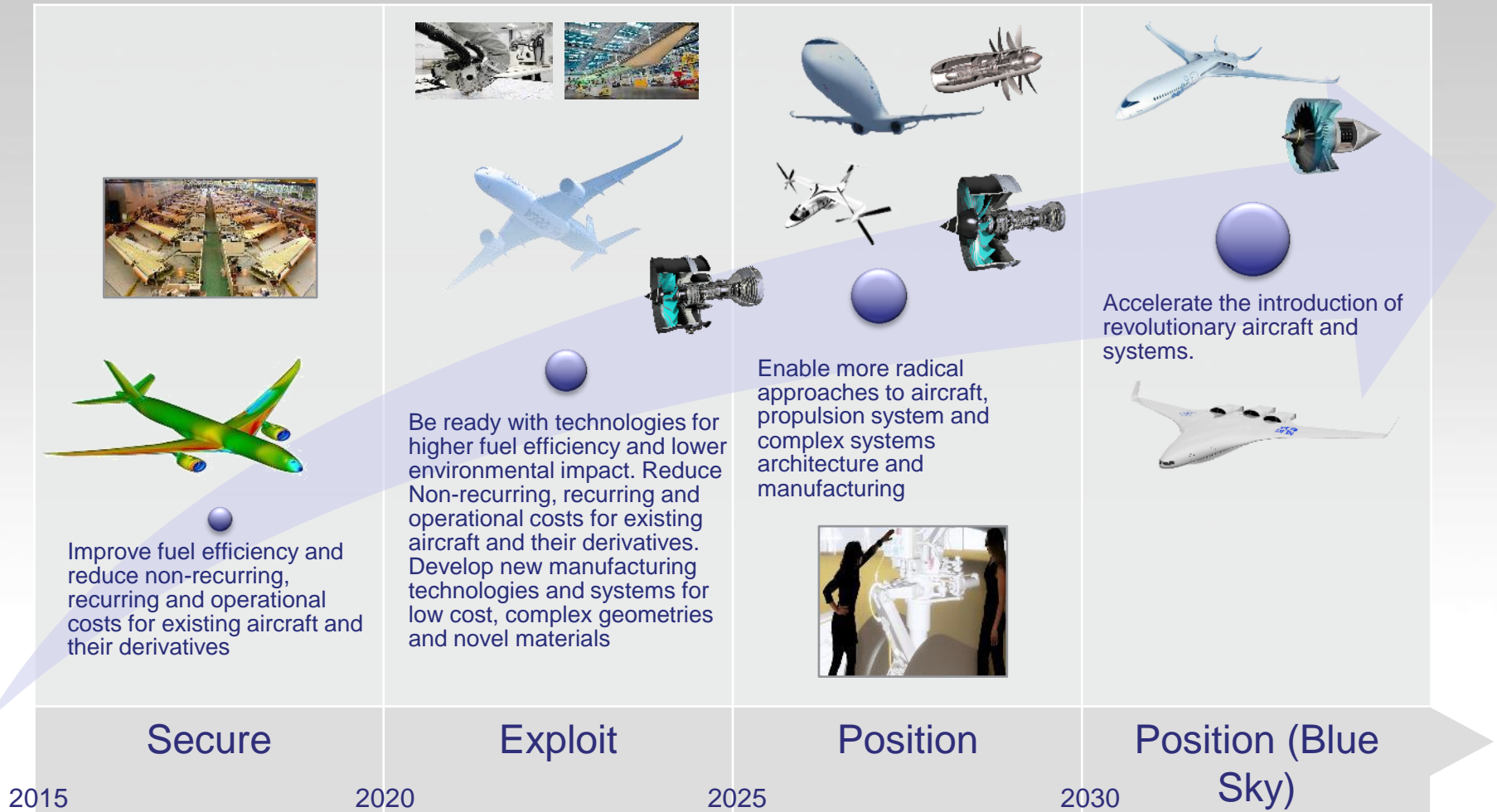
Propulsion of the future



Smart, connected and more electric aircraft



A future Aerospace Roadmap



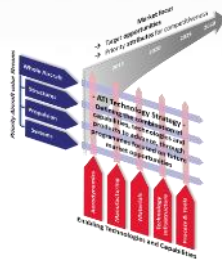
Articulating the technology strategy

External publication
Fully public



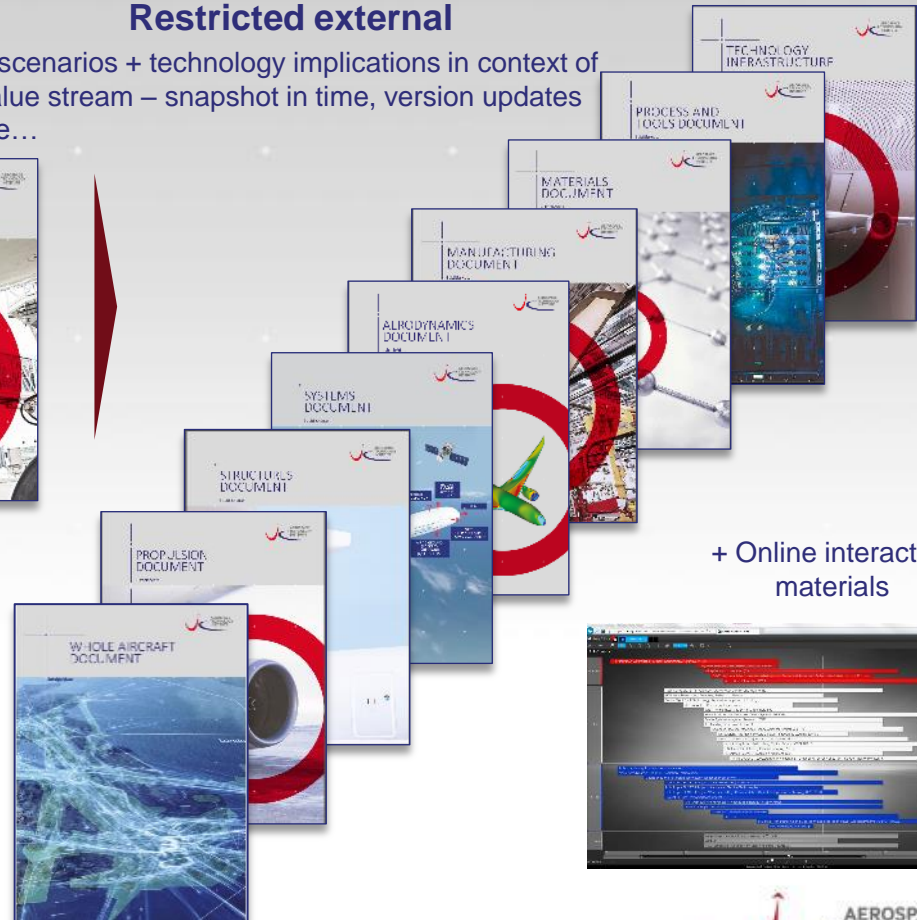
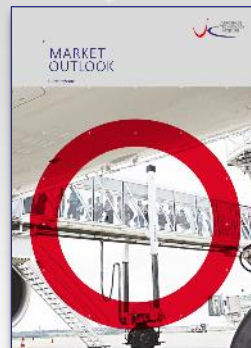
Outlines the strategic themes and how these fulfil strategic aims to protect, exploit and position

Published July 1st 2015



Detailed technology sections
Restricted external

Market scenarios + technology implications in context of each value stream – snapshot in time, version updates continue...

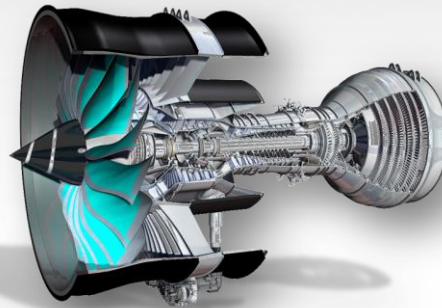
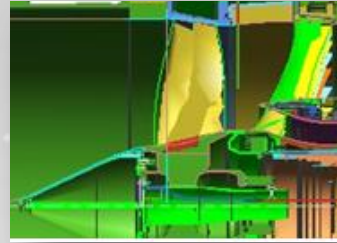


+ Online interactive materials



Delivering the Programme

Examples of ATI Projects – over £1Bn now in flight





Any Questions?

Find out more:
Visit our website www.ati.org.uk