

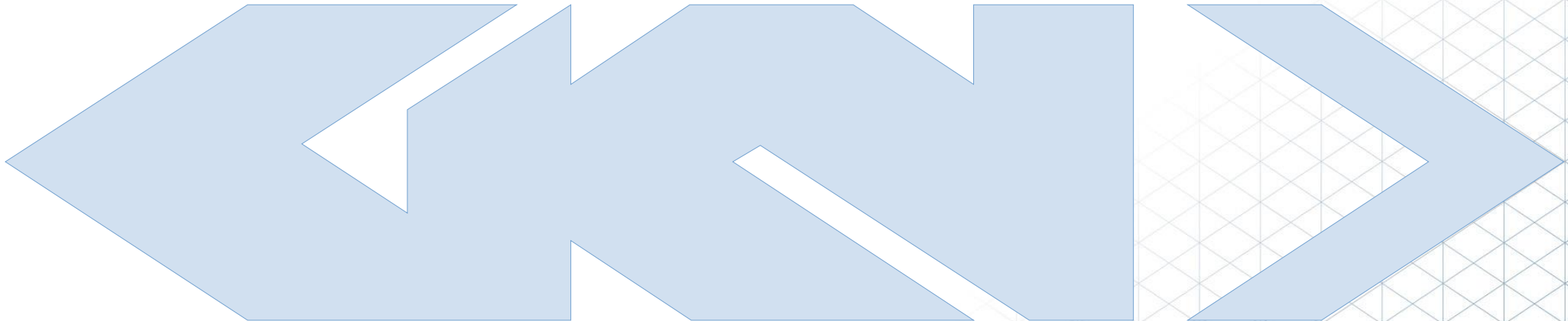


Industrial strategy and UK manufacturing: GKN perspective

Anna Keeling

Senior Vice President, Business Transformation

Cranfield National Manufacturing Debate, May 23rd 2018



GKN Aerospace & the UK

World's leading multi-technology tier 1 aerospace supplier

- > Technology onboard 100,000 flights a day
- > Major products: aerostructures and engine systems
- > Global presence, strong UK history and presence
- > 17,000 people globally with 4,000 in the UK
- > £3.6bn sales (2017)



GKN Aerospace in the UK

Significant sales, production and R&D presence

Bristol



Cowes



Luton



GKN is active in UK's industrial strategy and research ecosystem

Strategic partnership is vital for aerospace

- > Aerospace sector requires long-term approach
- > GKN involved from outset in 2013
- > Direction set by Aerospace Growth Partnership & technology strategy by Aerospace Technology Institute

UK is centre of excellence for GKN R&D

- > Strong network with academia
- > ATI helps anchor investment
- > Significant joint investment since 2014



UK competitiveness – the prediction

Competitiveness is key challenge for UK manufacturing

Daily reality for all companies

- > Landscape of competitiveness is changing
- > Major challenge for both winning new work and executing existing contracts

31% global manufacturers
say growth is 'extremely high
priority' for 2017/18

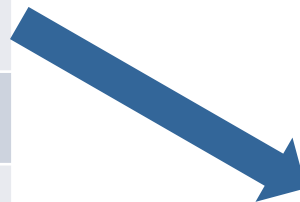
Up from **18%** in 2015/16

Source: KPMG global manufacturing outlook

UK retains strengths but faces challenges

Global manufacturing competitiveness index (Deloitte)

2016
1. China
2. USA
3. Germany
4. Japan
5. South Korea
6. United Kingdom
7. Taiwan
8. Mexico
9. Canada
10. Singapore



2020
1. USA
2. China
3. Germany
4. Japan
5. India
6. South Korea
7. Mexico
8. United Kingdom
9. Taiwan
10. Canada

Labour costs

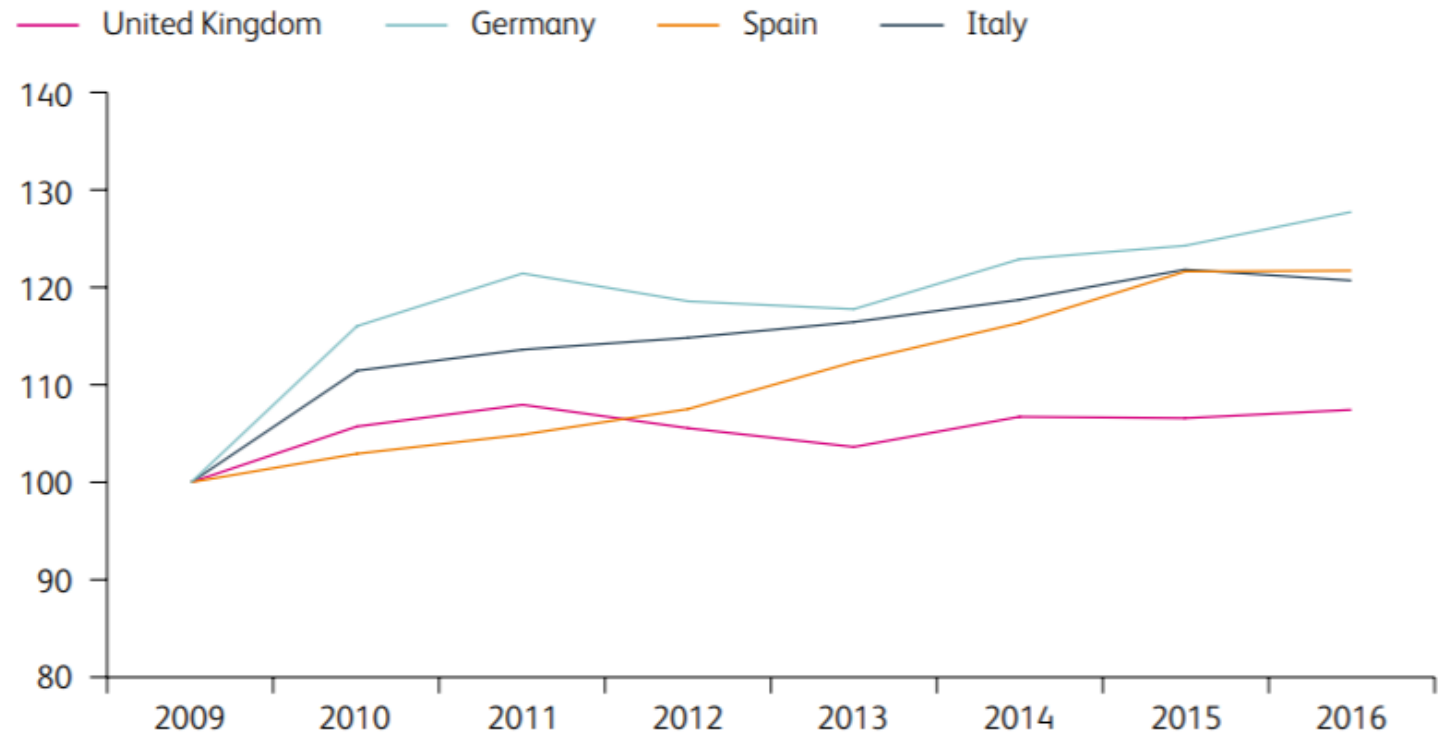
**UK \$31.2 (per head per hour)
compared with peer
average \$18.7**

*Source: Deloitte, Global
Manufacturing Outlook 2016.*

The UK's productivity puzzle

- > Generally, UK manufacturing productivity lags other international locations
- > Variations across UK manufacturing companies, impacted by:
 - labour content
 - R&D
 - economies of scale
 - Diversity of business operations

Manufacturing productivity growth – UK vs. European competitors (real GVA per hour)



Source: Eurostat, OECD, EEF analysis

The voice of the customer

Today's requirements:

- > **Reliable delivery** throughout the supply chain
- > **Quality** drives reliability & value
- > **Value** of product allows for investment elsewhere
- > **Strong relationship** to understand customer needs

And for tomorrow:

- > **Technology** exploited to support growth
- > **Innovation** to improve the product

*Boeing wins
American Airlines'
widebody jet
orders*

Reuters news, April 6th 2018

*China set to
order over 180
Airbus jets*

Flight Global Jan 10th 2018

Innovation & Supply Chain development - solutions to competitiveness

Innovation & Supply Chain development as solutions to competitiveness

Giving companies and countries a leading edge

- > Collaboration within business, with other companies and academia reaps benefits
- > Catapult centres play valuable role

UK overall spend lags our competitors

- > Positive increase to 2.4% by 2027 but UK remains behind

GKN Aerospace technology ecosystem



Case Study: Additive Manufacturing – innovation to address competitiveness

Reducing time, waste, cost and weight

Dr Rob Sharman, Global Head of Additive Manufacturing:

“...it was all about the timing. We had a window of opportunity in which to fly that demonstrator on the research aircraft, and that window was very short.

AM had a lead-time advantage compared to the other processes, and we were able to get the final part in a way that traditional manufacturing technology just couldn't.”



22 UK-based R&D jobs

Further 25 commercial jobs exploiting technology

Supporting & developing UK-based supply chains

- Quality, cost and flexibility are priorities – proximity often less of a factor
- Aerospace prime & tier 1 companies spend 13.5% with UK suppliers (source: UK aerospace supply chain study, Department for Business)

£410m

spent by GKN Aerospace with UK suppliers (2017)

~20% suppliers are UK-based

UK's top export and import destinations for manufactured goods

Import origins	Export destinations
1. Germany	1. USA
2. China	2. Germany
3. USA	3. France
4. Netherlands	4. Irish Republic
5. France	5. Netherlands
6. Belgium	6. China
7. Italy	7. Belgium
8. Spain	8. Italy
9. Irish Republic	9. Spain
10. Switzerland	10. UAE

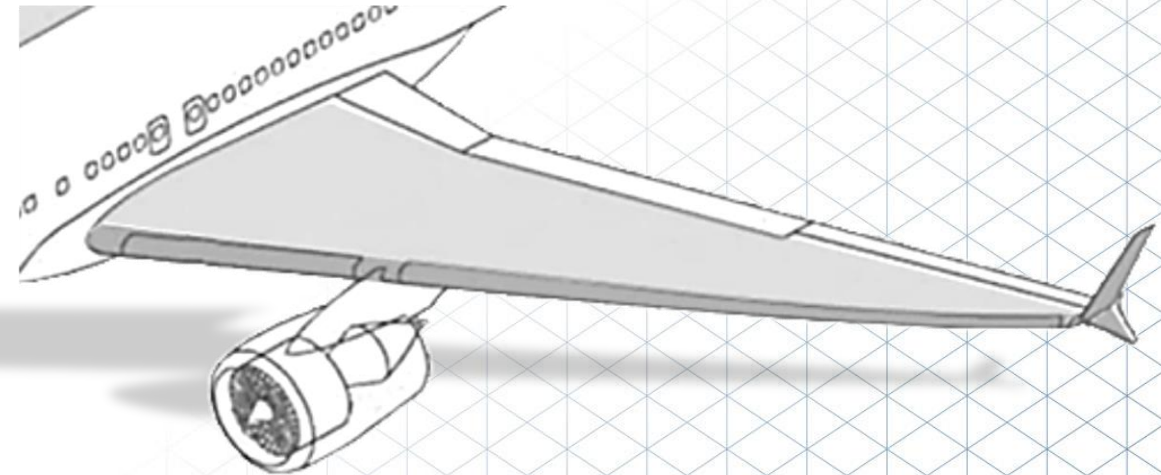
Source: EEF

Wing of Tomorrow – innovation to help the UK compete for future work

Next generation single aisle aircraft is potential prize

- > Strong sector collaboration through ATI
- > Positioning UK to win work on new aircraft platforms
- > Performance and production rates pushing new design and manufacturing
- > £130m Airbus-led ATI programme 'Wing of tomorrow'

AIRBUS

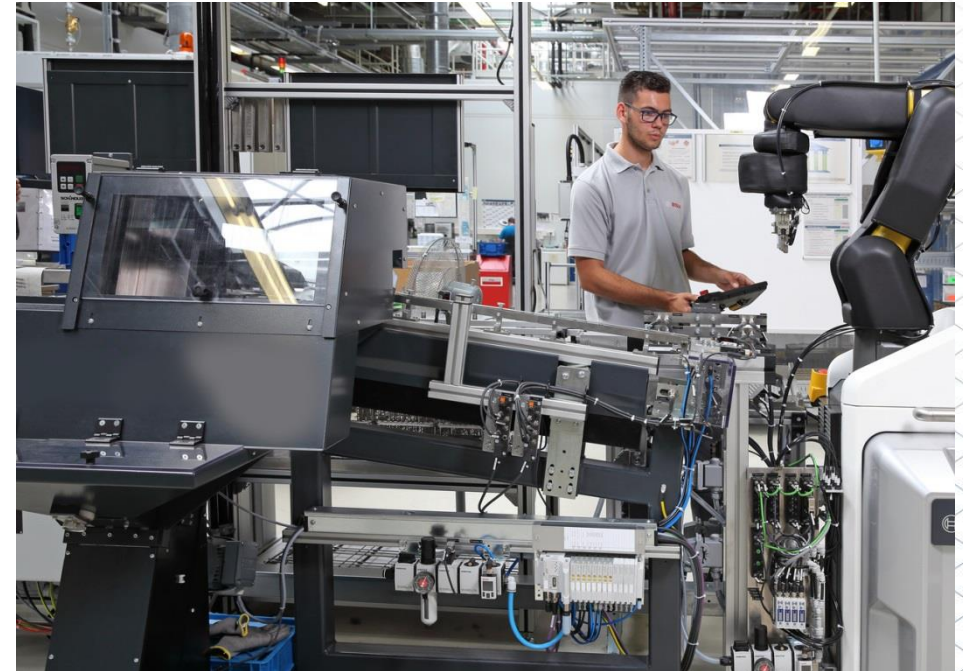


What more can be done to support UK manufacturing?

Market dynamics mean business urgency is needed

Speed of change only set to increase

- > Closer industry-government working has fostered understanding
- > Could targets be more ambitious?
 - R&D spend 3% of GDP
- > Maintaining momentum will be vital
 - measures and clear process is needed
- > Communication should be ongoing so it is up to date



Doing business across borders must be smooth

Brexit deal must secure access to customers, suppliers, skills and R&D

- Manufacturing has a close trading relationship with the EU and opportunities in markets targeted for future trade deals
- Need swift and simple customs arrangements, access to EU programmes and talent
- New, non-EU trading relationships will require support to gain access to markets



Government must appreciate global nature of business

Focus needed on global positioning

- > Understanding of the global marketplace for companies
- > The strategy must be robust enough to support global and domestic businesses
 - Supply Chain security & development
 - UK as a proving ground for new technology & entry to new markets
- > Support for companies at all levels – with larger businesses playing a role



In conclusion

- > Industrial Strategy a good start
- > Competitiveness challenges constantly increasing
- > Innovation & Supply Chain development will continue to be important vehicles
- > Markets are dynamic, constant dialogue & collaboration needed

