SC21 ACHIEVING SUPPLY CHAIN EXCELLENCE EVENT







31ST JANUARY 2018 TITANIC CENTRE, BELFAST

Agenda



09:10 Opening Keynote Speech

09:30 Bombardier Supplier Development Update

09:50 Airbus SC21 Supplier Development Programme



Neil Barnett

Aerospace Director ADS Group

Alastair Hamilton Chief Executive Invest Northern Ireland

Nichola Robinson Procurement Director Bombardier

Stephen Gregory

Senior Supplier Development Mgr. Airbus





 10:10
 SC21 Competitiveness + Growth
 Chris Owen

 Programme Launch
 Chief Executive

 SMMT Industry Forum

- 10:30 Refreshments Visit company stands
- 11:00Breakout session no. 1All
- 11:30 Breakout session no. 2
- 12:00 Cash Returns from R&D Tax Credits

Dave Stewart Head of NI Corporate Tax Office HM Revenue & Customs

All







12:20 Preparing for Brexit

Jeegar Kakkad

Chief Economist & Director of Policy ADS Group

12:40 Rockwell Collins Supplier Development Programme

David Quin

Supply Chain Director Rockwell Collins

13:00 SC21 Programme Update

Colin Hart

Head of SC21 ADS Group



Agenda



- 14:00The Winner's ExperienceSC21 Case Study
- 14:15 SC21 Award Presentation
- 14:45 Panel and Closing Remarks

Steve Savage

Strategic Operations Manager Abbey Forged Products Ltd

All

All





Breakout sessions 1 & 2

NEW TECHNOLOGIES (NATEP) – OLYMPIC SUITE

- Harriet Wollerton
 ADS Group
 NATEP Programme Director
- *Michael Curran* Bombardier *Director Engineering*
- Peter Quigley CCP Gransden Engineering Manager
- Pat Doyle
 Invest NI
 Innovative Procurement Specialist

BUSINESS ETHICS – BRITANNIC SUITE

John Burbidge-King
 Interchange Solutions
 CEO

BEST PRACTICES – TITANIC SUITE

• John Irwin Denroy Plastics General Manager

COUNTERFEIT AVOIDANCE - THE BRIDGE

Alan Ovens
 Leonardo MW
 Supply Chain Development Manager





Welcome

Neil Barnett

Aerospace Director ADS Group





Opening Keynote Speech

Alastair Hamilton

Chief Executive Invest Northern Ireland







Bombardier Supplier Development Update

Nichola Robinson Procurement Director Bombardier





Bombardier Aerostructures and Engineering Services

Nichola Robinson Procurement Director Belfast

Agenda

Bombardier Business Update
Transformation Plan
Supplier Performance and Requirements
SC21 Engagement, the future



A GLOBAL LEADER WITH SCALE AND DIVERSIFIED REVENUES



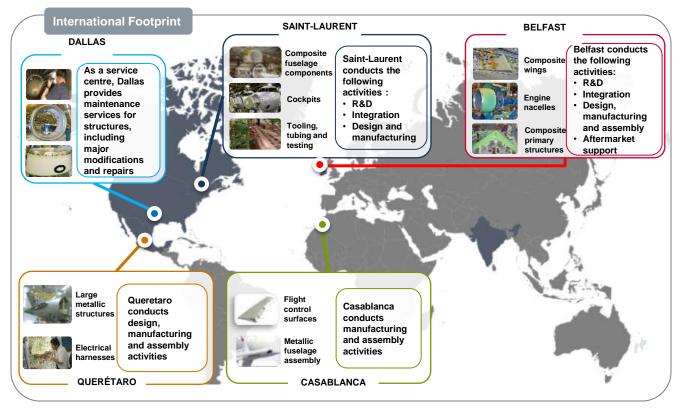
DRIVING TO >\$20B REVENUES BY 20201

2020 objectives reflect deconsolidation of the C Series program.

Note: Refer to our disclosure on forward-looking statements and assumptions at the beginning of this presentation.

BOMBARDIER

Bombardier Aerostructures & Engineering Services has a global presence





Belfast – who we are and what we do

- ✓ Largest manufacturer in Northern Ireland c4000 people c10% of NI's manufacturing exports
- ✓ Investment of over £2.7bn since 1989
- ✓ Centre of excellence for design & manufacture of wings, fuselages, and nacelles in metal and advanced composites
- Growing MRO/aftermarket support business
 1. Queen's Island complex
 Engineering
 Chemi-mill/metal bond
 Machine shop/fuselage assembly
 New wing facility
 2. Dunmurry
 Composites fabrication and assembly



3. Newtownabbey

Composites fabrication and assembly

4. Aerostructures & Services

- Nacelles
- Maintenance, Repair
 & Overhaul
- 5. Hawlmark, Newtownards
 - Sheet metal component fabrication



... PRODUCES ENGINE NACELLES FOR OTHER MANUFACTURERS...

- More than 40 years' experience in design, development, manufacture and after-market support of aircraft engine nacelles
- Supplies complete nacelles, nose cowls, fan cowl doors and Engine Build Units (EBUs)
- Customers include Airbus, Rolls-Royce, Rolls-Royce Deutschland, General Electric, IAE, Pratt & Whitney and Irkut
- MRO/aftermarket function supports more than 20 aircraft types:
 - spare parts supply
 - component repair: engine nacelles, flight control surfaces, landing gear and electrical harnessing
 - technical support









... investment in products... Belfast is involved in all Bombardier's families of aircraft



CRJ100/200 (1989)





Challenger 604 (1993)



Global Express (1993)

Q400 (1995)



CRJ700 (1997)



Challenger 300 (1999)



CRJ900 (2000)

Learjet 45 (1992)

Global 5000 (2001)



Learjet 45 XR (2002)



Learjet 40 (2002)



Global XRS (2003)



(Launch year)



CRJ700 NextGen (2007)



CRJ900 NextGen (2007)



CRJ1000 NextGen (2007)



Global Vision (2007)













Learjet 40 XR (2004)



C Series CS100/CS300 (2008) Global 7000/8000 (2010)



Learjet 70 (2012)





Learjet 75 (2012)

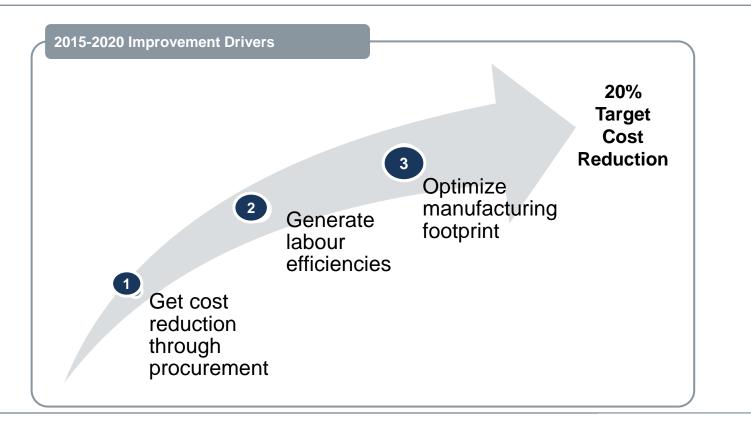




Bombardier Business Market Outlook

Unleashing Value with Solid Execution

FIVE YEAR TURNAROUND PLAN BOMBARDIER 2015 2016 2017 2018 2019 2020 **DE-RISK** LIQUIDITY AND PROGRAMS **BUILD THROUGH TRANSFORMATION** EARNINGS AND CASH FLOW **DE-LEVERAGE BALANCE SHEET** MIDWAY THROUGH THE PLAN | CLEAR PATH TO 2020

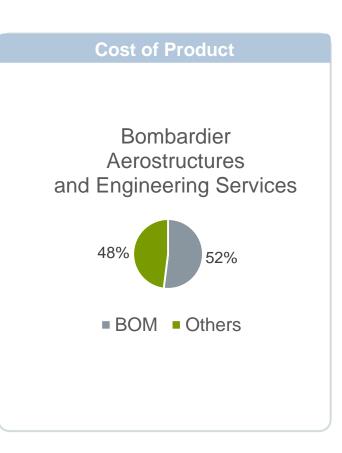






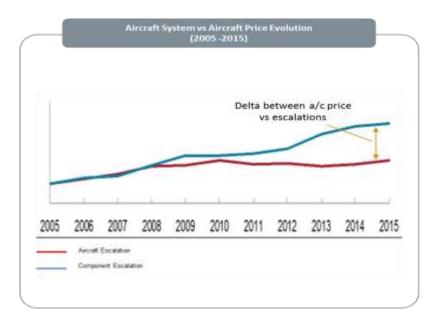
Supply Chain's Impact







Market Dynamics are Challenging



- The price of our aircraft remains flat
- The cost of acquisition of our products still goes up

Supply Chain Partners not aligned

Strong Revenue Growth for Bombardier

GROWTH ACROSS ALL BUSINESS SEGMENTS



SUPERIOR PRODUCTS AND SOLID BACKLOG DRIVING REVENUE GROWTH

Backing He at September 30, 2011

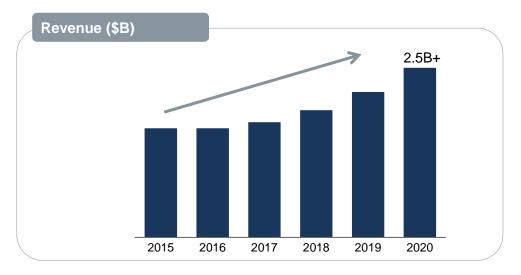
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* Sharting in FY 2018, financial guidance and adjactives are under IRS15. Guidance for 2018 assumes the complete Complete Sources program for the Complete 2018 final year, 2020 disectives reflect deconsolidation of the Communications at the beginning of the Company of the Complete 2018 final year, 2020 disectives reflect deconsolidation of the Communication of the Company of the



Strong Revenue Growth BAES

8% Annual Growth Driven by New Platforms







Bombardier C Series Aircraft



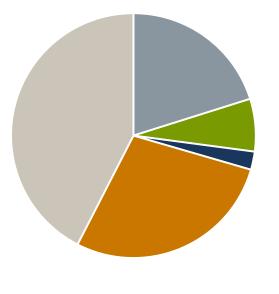


Supplier Performance and Requirements

Key Characteristics of our Suppliers



Geographical Distribution of Supply Chain by projected 2018 VOB



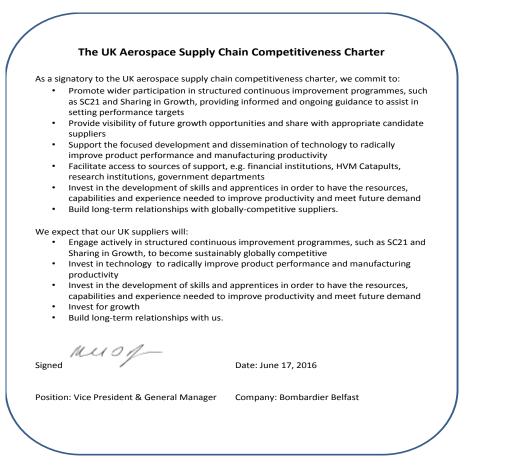
UK NI Rol USA RoW



SC21 Engagement



Competitiveness challenge





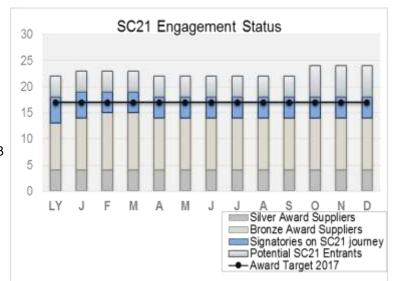
BOMBARDIER

□ 24 sponsored suppliers on SC21 Journey

- 4 Silver Awards
- 10 Bronze Awards
- 1 Recertification underway (was Silver)
- 3 SC21 Signatories in progress towards Bronze
- 6 Potential new entrants engagement u/way with target 2018 certification
- □ Target is to have 1 Gold by end of 2017
 - Commodity Breakdown of 15 certified
 - 10 FMP
 - 4 Raw Material

25

I IG&S



SC21 AWARDS PIPELINE



Bombardier Performance of Supply Base

Based on "On Time In Full" deliveries

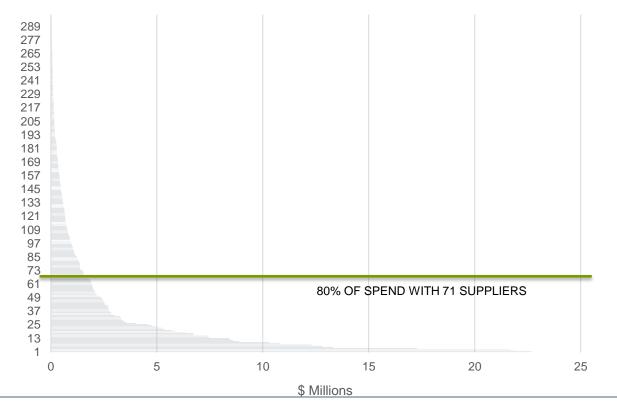
□ 62% of NI Suppliers OTIF

□ 78% of ROI Suppliers OTIF

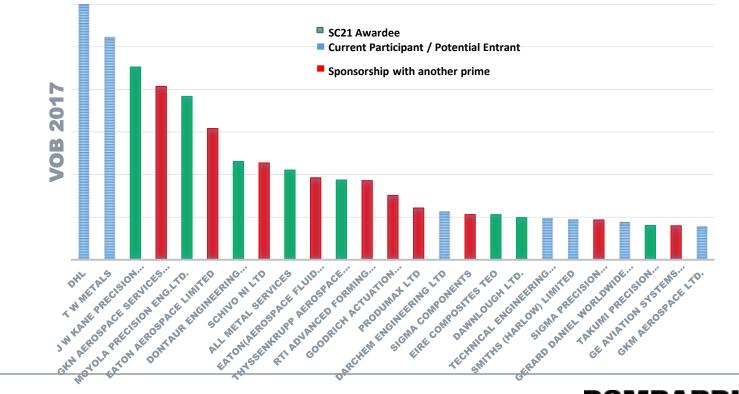
99% of SC21 Suppliers OTIF (required for certification)



2018 VOB FOR SUPPLY BASE 440 SUPPLIERS



UK/ROI SUPPLIERS VOB 2017 (TOP 25)



BOMBARDIER

BOMBAR

Our 2018 journey has begun

- Globalisation of our footprint and commodity strategy
- Commodity sourcing strategy eRFQ strategic sourcing tool
 - Outcomes seeing shift in supply base
- Airbus Partnership will unlock CSeries potential
- A320neo success
 - Leverage opportunity for Bombardier and supply base
 - Sourcing strategy influenced by production rate
 - Opportunity that must be grasped by the supply base
 - Flexibility in the way we do business e.g. Dual/multiple sourcing
- Commercial momentum LOI for further CSeries aircraft
- Suppliers must support us in "derisking" our business in this environment

Global 7000 Aircraft



In Summary

1.Bombardier is on track to meet its turnaround plan objectives

2. The market is challenging for customers and suppliers

3. Growth will come from competitiveness

4. Innovation, collaboration, performance improvement are key to success

Our future, your future



BOMBARDIER the evolution of mobility



Airbus SC21 Supplier Development Programme

Stephen Gregory Senior Supplier Development Manager Airbus

SC21 – Delivering Supply Chain Excellence

New Beginnings SC21 Achieving Supply Chain Excellence - Belfast

Stephen Gregory Senior Supplier Development Manager 31st January 2018



Welcome to a New Year



A year full of:

- Challenge
- Risk &
- Opportunity

The Challenge affecting us all:





What could possibly go wrong?







How do I ensure my business remains competitive in an uncertain and everchanging world?

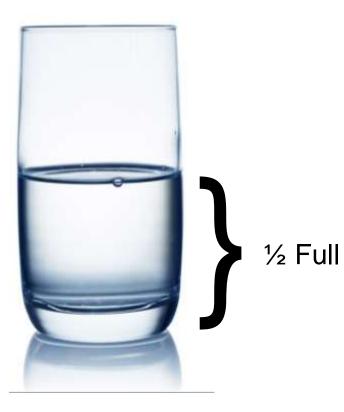


What do you see?



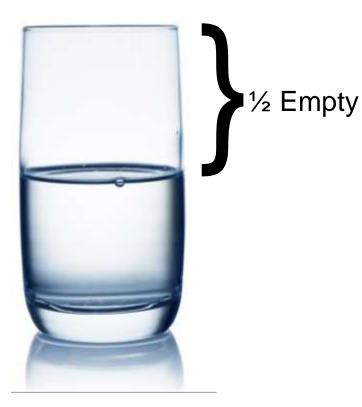


What an Optimist sees...



AIRBUS

What a Pessimist sees...





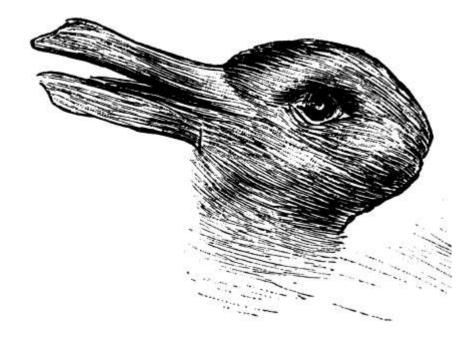
What a Realist sees...



A 'glass' of unknown size and an undetermined volume of a colourless liquid...



Do you see a Duck or a Rabbit?



The fact is the picture depicts both

What you see depends on your perspective and interpretation...

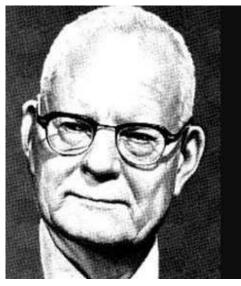
It's difficult to see both simultaneously.

To decrease Risk, we must face facts...



"In God we trust. All others must bring data."

- Dr. W. Edwards Deming



"Without data you're just another person with an opinion."

> - W. Edwards Deming, Data Scientist

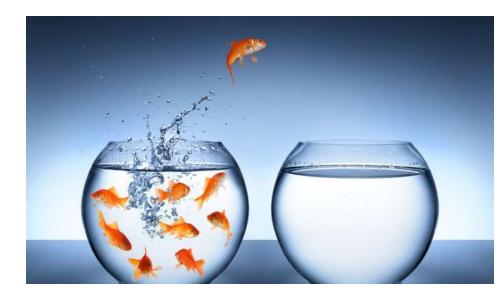
BEWARE of (social) media hype: there is a lot of misleading information available:

- Ask yourself what is the agenda behind the story?
- Remember there are always (at least) 2 different sides to every story... (duck / rabbit)
 BEWARE of assumptions, summations, personal perspective and opinion!

New Beginnings – New Opportunities

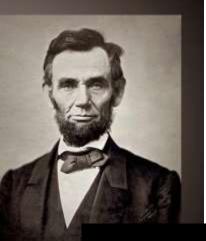
- An opportunity to reinvent ourselves
 - Whether you voted to 'Remain' or 'Leave' we must make the best of the current situation...
- Avoid and / or beware of leaps of faith
- Assess all available facts to
 make the best decisions
 - Talk to many sources e.g:
 - -Trade bodies
 - -Compatriots
 - -Contemporaries
 - -Government bodies
 - -MP's

-Etc.





"The problem with Internet quotes is that you can't always depend on their accuracy." —Abraham Lincoln, 1864



Don't rely on (social) media for your facts...

Assume nothing. Question everything. And start thinking.





Be prepared



Plan and prepare for your future

Worst Case Scenario planning



What do we know?

2 Known facts:

- Worst case position is WTO rules with no preferred nation status
- Worst case date = 29th March 2019 (422 days from today)



Jeegar Kakkad Chief Economist & Director of Policy at ADS Group

will provide a more detailed update later today



Make your business future proof - Invest in your future

• Ensure you make the most of your Business Development opportunities – Sharing in Growth

-SC21

-NMCL (SC21 Competitiveness + Growth)

-Or any other development programme

• Seek out new opportunities...



NMCL (SC21 C+G) - an opportunity...



Dr Chris Owen Chief Executive of SMMT Industry Forum

Will provide more detail on NMCL later in today's agenda



Airbus is preparing – Are you?

- Multi functional, multi discipline team (I am a member)
- We have a plan
 - Fail to plan, Plan to fail
- Questionnaire to prompt ideas / assess readiness and risk (under development)
- Mapped our supply chain
 - -We know what moves where down to tier 6 / 7
- Assessed cost impact and risk from supply chain to customers
- Review customs requirements assuming worst case scenarios
- Reviewed delivery and shipping mechanisms to decrease impact
- Anticipate increase in stock / WIP and raw materials
- Reviewing / altering MRP master data to allow for increased lead time
- Etc...
- Don't delay there is lots you can do to prepare today



AIRBUS

Just remember...

It is not necessary to change. Survival is not mandatory. -W. Edwards Deming

You don't I have to listen to me; It's all been said before! None of this is new; It's your choice, It's your money, It's your business, It's your job...

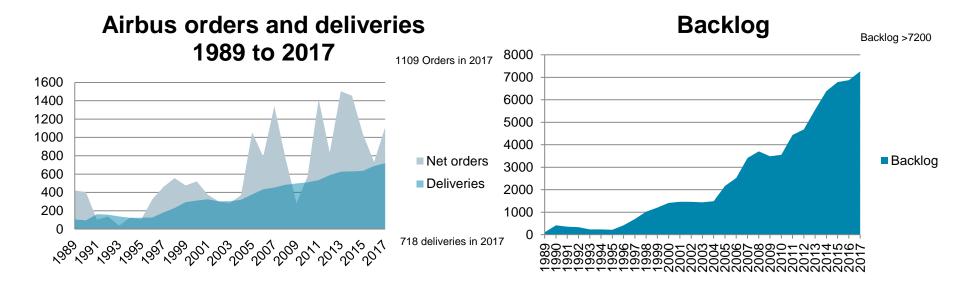


Miracles might happen – but I'd rather rely on planning and preparation!





What are we fighting for?



Airbus spends over €7 Billion in the UK each year

Let's keep it that way...







SC21 Competitiveness + Growth Programme Launch

Chris Owen

Chief Executive

SMMT Industry Forum

SC21 – Delivering Supply Chain Excellence









SC21 Competitiveness + Growth (C+G)

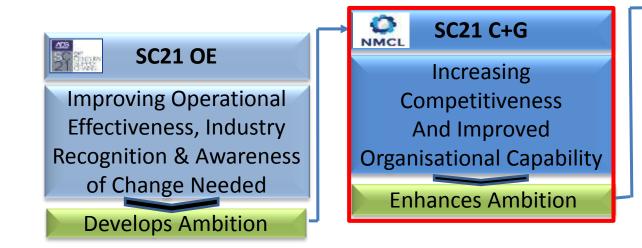
NMCL (National Manufacturing Competitiveness Levels) Programme Launch

Wednesday 31st January 2018

Dr. Chris Owen, CEO, SMMT IF



Increasing investment in people to address future market challenge and to meet increasing ambition for growth and capability



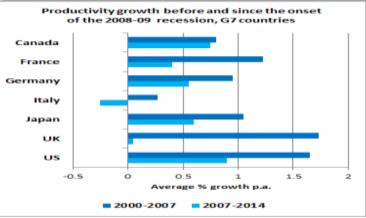
Sharing in Growth

Strategy, leadership and operational capability development to achieve sustainable accelerated growth

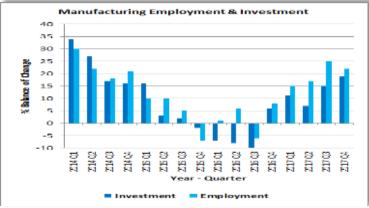
The need



- National productivity still faltering Biggest opportunity in the supply chain
- Automotive, Aerospace, Rail & Nuclear sectors growth must be underpinned by competitive domestic supply chains
- "Match Fit" to capitalise on new export opportunities
 post-Brexit
- Size of investment in capex in decline from 7.5% to 6.5% 2017
- Consistent, long-term roadmap for growth through competitiveness needed for manufacturers
- Brexit uncertainty Trade tariffs, Customs, FX, Labour
- Removal of Government support mechanisms AMSCI, MAS....



Source: ONS International Comparisons of Productivity, 2014



Source: EEF Employment & Investment Trends Data

The opportunity





Automotive

- 1.7m vehicles assembled in UK 2017 vs. 2011 1.35m
- £71.6bn industry turnover and £19bn GVA ^[1]
- Increase in UK domestic sourcing 36% to 44% ^[2] Aspiration of 50%
- Willingness to source from UK suppliers if competitive



Aerospace

- 33,070 new aircraft required in next 20 years. Doubling of fleet 2016 to 2035 ^[3]
- £31.8bn industry turnover and £8.9bn GVA
- UK order backlog 9 years worth £195bn ^[4]
- 60% of companies expect growth > 10% ^[4]



Rail

- NTFL 250 trains c. 2,500 carriages carriages c. £2.5bn. First delivery 2022
- JNAT 27 trains, 170 cars, Contract award Q3 2017
- NTFD c. 45 Trains, contract award Q1 2018
- HS2 First phase, contract award end 2019



Nuclear

- Domestic market size £75bn
- Current UK industry size £18.5bn
- Global Market £1.2tn
- UK Supply chain £6.1bn
- UK workforce 87,500

Ref. 1 SMMT Industry facts , Ref 2. The upstream supply chain – Auto Council, Ref. 3 Airbus Global Outlook , Ref. 4 ADS Aerospace Industry Report 2017

What is NMCL - The proposal



Overall Aim

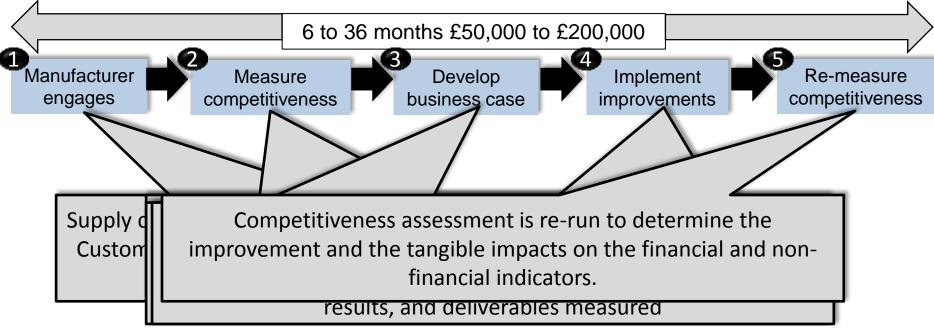
To have a single, national, quality assured, approach to improving the productivity and competitiveness of manufacturing supply chain companies to raise workforce capability, boost economic growth and export

The Proposition

- Strong cross sector collaboration Auto Council, Aerospace Growth Partnership, Nuclear Industry Council, Rail Delivery Group
- Nationally consistent and recognised framework for identifying **priority** improvements and providing structured help to deliver measurable results for manufacturers
- Leading manufacturers shape and approve the support tools and resources made available to their supply base
- Manufacturers programmes ranging from 6 month focussed improvements, to 3 year business transformations
- Sector Boards will take ownership for managing their sector's programme
- Best practices leveraged cross-sector nationally where it makes practical sense Yet allowing sector autonomy
- Industry working in partnership with their suppliers to boost competitiveness

Process outline







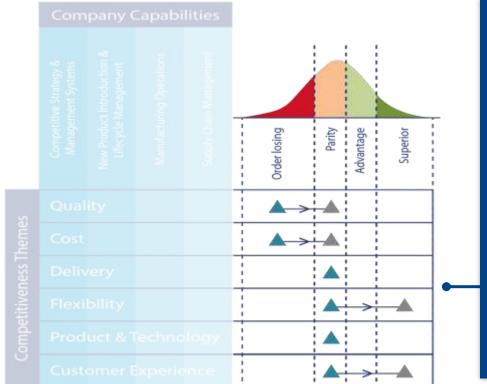
What do we mean by competitiveness?



Six themes of competitiveness



Why competitiveness?



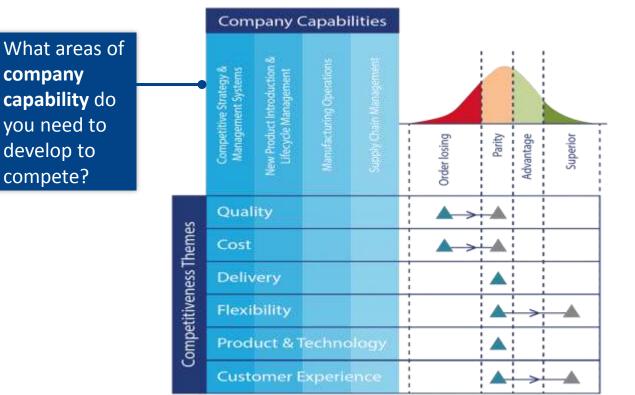
Why do your customers choose to buy from you?

What is the basis of competition of your company, for the products you make, and the markets you serve?

How could I be "order winning?"

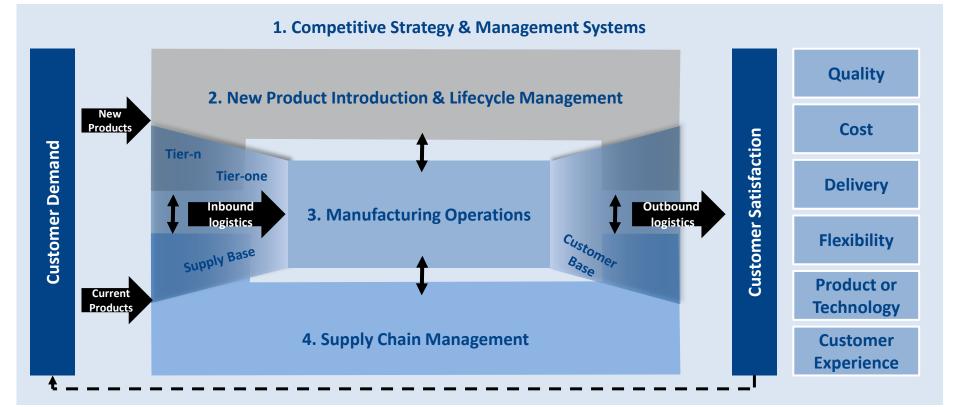


Building capability to compete



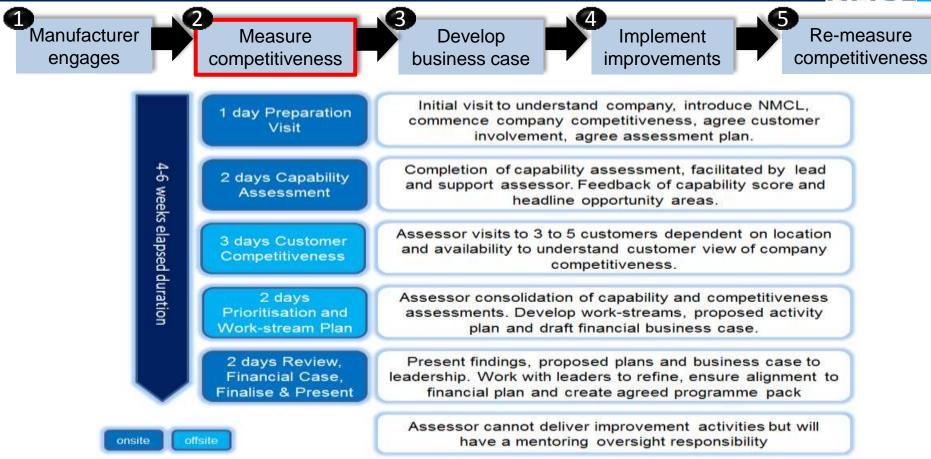
Building competitive performance



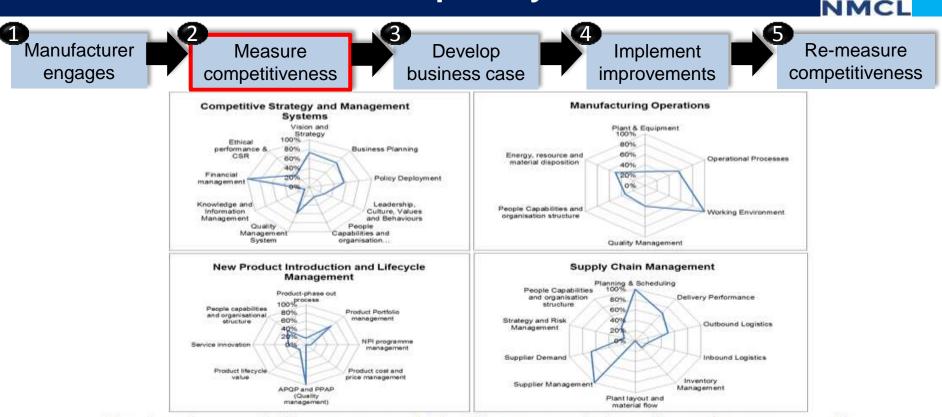


NMCL Assessment Timeline



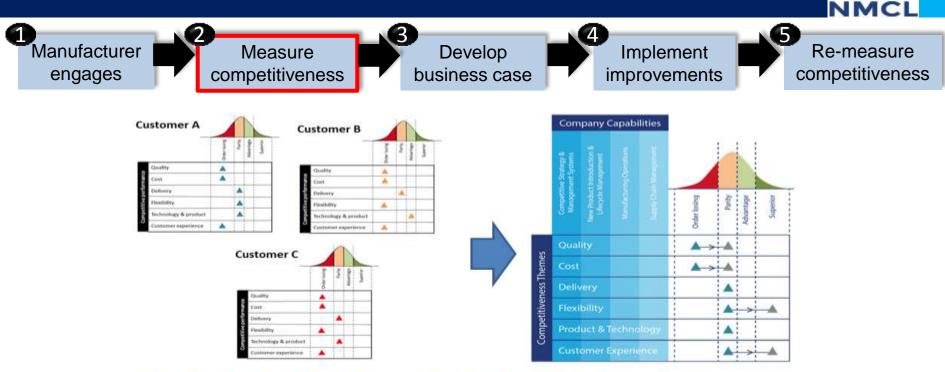


NMCL Assessment – Capability assessment



The two day capability assessment identifies areas of strengths and gaps across the four capability dimensions. It focuses on ensuring 'foundation' capabilities are in place so that 'progressive' areas of capability can deliver real benefit.

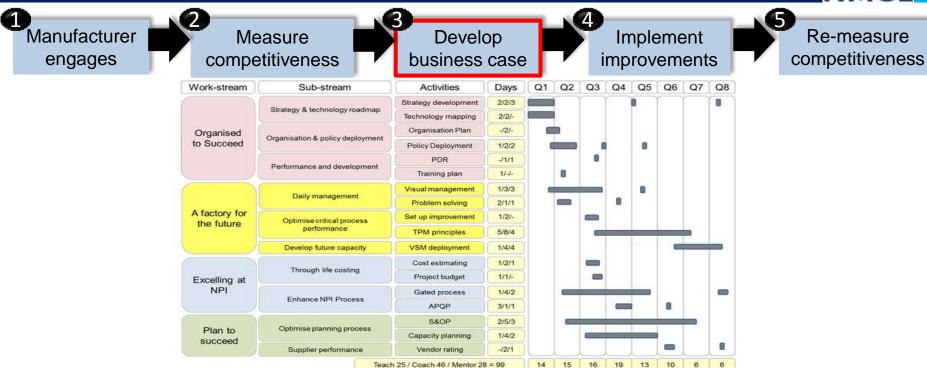
NMCL Assessment – Customer benchmark



Strategic customers are nominated and visited to discuss where they rate the company's competitiveness against their peer group currently and where they need to be to be winning work in the future. The company receives aggregated scores and anonymised feedback. The company self-assesses their current and target competitiveness by product market group.

NMCL – Improvement planning





The competitiveness views and capability gaps are used to identify work-streams, activities and improvement modules blending teaching, coaching and mentoring support. Timing and intensity is scoped to ensure the company can adequately resource activity and gain full value from every activity day.

NMCL – Business case development

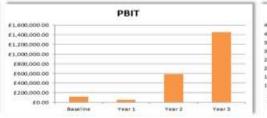
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NMCL – Business case development

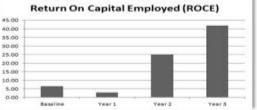


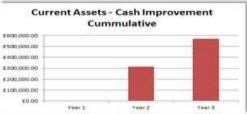




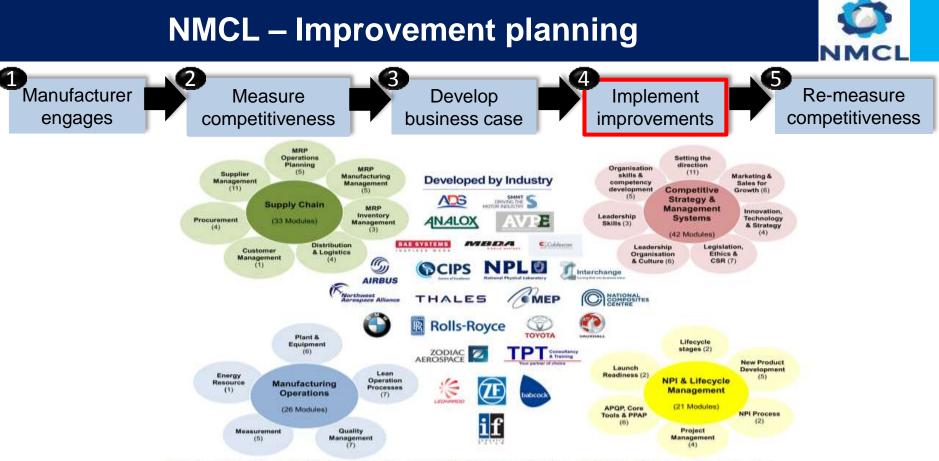




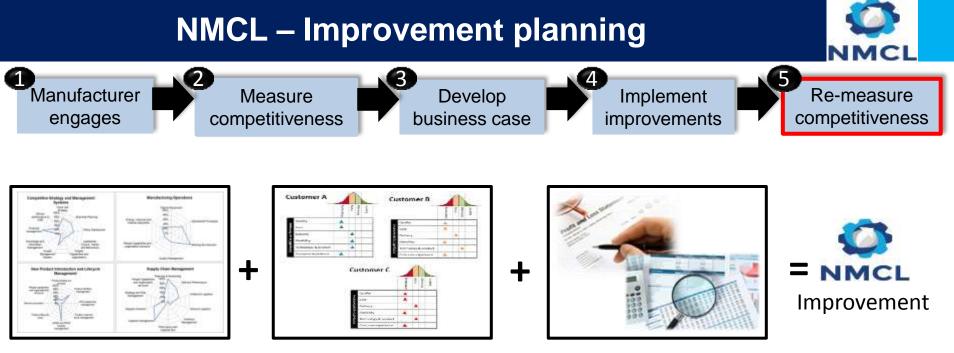








Improvement activities align to module themes to be delivered by sector board approve providers. The modules have been defined and approved through workshops with multi-sector representation from Primes to SME's.



Have the right internal capabilities of the company measurably improved?



Have these improvements pulled through to customers to increase performance vs. competition?

What has been the impact on sales and margin? More products to current customers, new customers, new products?

NMCL Pilot progress











Rail



Automotive NMCL

- 3 completed
- 4 In process
- 6 ready to start

Aerospace SC21 C&G

- 2 completed
- 6 In process
- 20 ready to start

• 3 In process

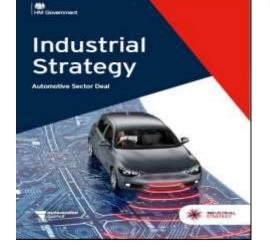
- Nuclear
- 3 In process

47 companies engaged across four sectors

Automotive Sector Deal – Ready for launch



Business Environment



Supply chain competitiveness and productivity improvement

£16m funding subject to business case for an industry-led national supplier competitiveness and productivity improvement programme to support a sustainable and internationally competitive UK supply chain for future volume vehicle production. A robust monitoring and evaluation framework will be set up to measure the success of this programme.

Business Environment

Supply chain competitiveness and productivity improvement

In order to support the industry's ambition to increase the value of UK content in domestically produced vehicles to 50 per cent by 2022, industry will:

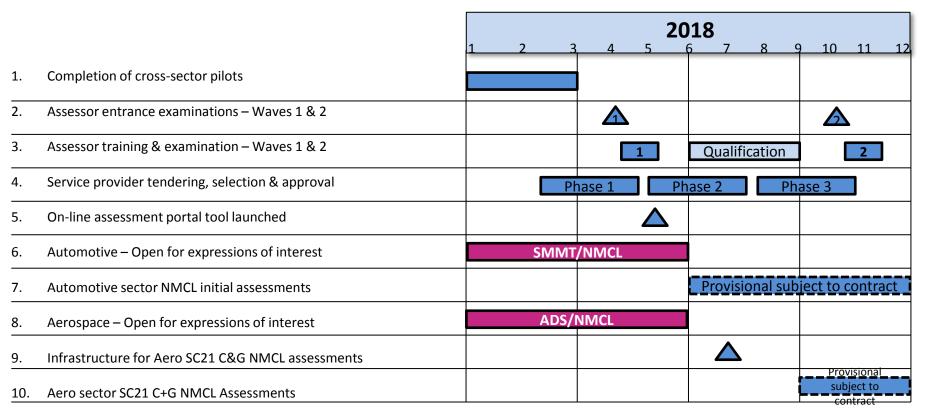
- Implement a single scalable productivity improvement programme; and
- Match fund at least £16m (contribution in kind) from supply

chain companies participating in the competitiveness and productivity improvement programme.

Vehicle manufacturers and Tier one suppliers will take a leading role in identifying key strategic suppliers and take part in the governance of programme.

NMCL – Launch activity and timeline





Conclusions



Reflective Points

Q1. Are you confident of your current performance vs. your competitors – order winning or order losing?

Q2. Are you developing your organisations capabilities to be able to compete in the future?

Q3. What potential does your business have – what could it become?

What SC21 C+G NMCL offers

- A unique approach focussed on increasing your competitive performance
- Access to high quality support and resources to deliver results
- A nationally accepted and recognised best practice approach to developing your business and getting ahead

Want to know more?



IS SC21 C+G NMCL RIGHT FOR YOU?

OPEN FOR EXPRESSIONS INTEREST NOW

Contact ADS team directly, visit the NMCL website or email Info@nmcl.co.uk



Refreshments

Visit company stands

SC21 – Delivering Supply Chain Excellence





Breakout sessions 1 & 2

NEW TECHNOLOGIES (NATEP) – OLYMPIC SUITE

- Harriet Wollerton
 ADS Group
 NATEP Programme Director
- *Michael Curran* Bombardier *Director Engineering*
- Peter Quigley CCP Gransden Engineering Manager
- Pat Doyle
 Invest NI
 Innovative Procurement Specialist

BUSINESS ETHICS – BRITANNIC SUITE

John Burbidge-King
 Interchange Solutions
 CEO

BEST PRACTICES – TITANIC SUITE

• John Irwin Denroy Plastics General Manager

COUNTERFEIT AVOIDANCE - THE BRIDGE

Alan Ovens
 Leonardo MW
 Supply Chain Development Manager

SC21 – Delivering Supply Chain Excellence





Cash Returns from R&D Tax Credits

David Stewart Head of NI Corporate Tax Office HM Revenue & Customs

SC21 – Delivering Supply Chain Excellence





The Northern Ireland Corporate Tax Office (NIrCTO)

David Stewart



Aims

To help promote NI:

- Inward investment
- Local expansions
- HMRC Incentives and reliefs

Including: R&D Tax Relief Patent Box Creative industry reliefs





R&D Tax Relief – Brief overview

- Relief for qualifying *revenue* expenditure on R&D.
- Where a *project* seeks to achieve an advance in *science* or *technology*
- Which is not readily available or deducible by a *competent professional* working in the field.
- Must be an advance in overall knowledge or capability in the field – not just the company's own state of knowledge or capability.
- Pure product development in itself will not qualify.
- (100% RDA's are available for *capital* expenditure).

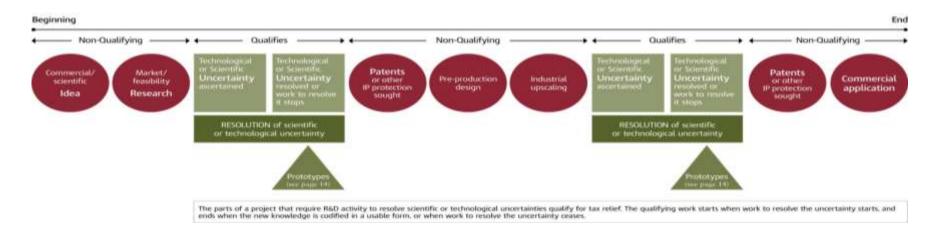


Further considerations

- Focus on the advance being achieved and not the industry or product aspiration, specification or design.
- It's not enough that a product is commercially innovative.
- What was the actual 'uncertainty' and what did you do to overcome it?
- What failures did you have?
- Involve the R&D staff in the process e.g. research manager.



Possible commercial project time line – defining R&D for tax purposes





R&D tax Relief - How the relief works

The level of relief available depends upon which R&D relief scheme a company falls within:

 The small or medium company (SME) scheme - enhanced deduction of 230% of the company's qualifying expenditure from 1 April 2015.

14.5% repayable credit for R&D losses.

• **11% research & development expenditure credit (RDEC)**. Autumn Budget 2017 announced an increase to 12% from 1 January 2018.

Payable to loss making companies subject to certain restrictions.



SME or Large

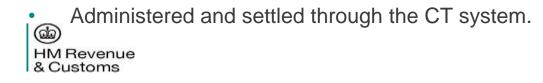


This extended post 1 August 2008 definition is for R&D Tax Relief purposes only.



Research & Development Expenditure Credit (RDEC)

- Available for large companies and SMEs in receipt of an Invest NI grant or carrying out subcontract R&D for a large company.
- Relief given as a taxable credit calculated as a percentage of the qualifying expenditure for the relevant accounting period.
- 11% from 1 April 2015, 12% from 1 January 2018.
- Payable credit limited to company's PAYE/NIC liabilities of staff engaged in qualifying R&D activities in the accounting period.
- Fully payable (net of tax at full rate) to companies with no CT liability.



SME and RDEC Worked Examples

SME Worked Example

RDEC Worked Example

Profit & Loss Account	£(000)	Profit & Loss Account	£(000)
Sales	1000	Sales	1000
Cost of sales	(500)	Cost of sales	(500)
Gross profit	500	Gross profit	500
Qualifying R&D expenditure	(100)	Qualifying R&D expenditure	(100)
Other expenses	(150)	11% RDEC on expenditure	11
Total operating costs	(250)	Other expenses	(150)
		Total operating costs	(239)
Net profit before Tax	250	Net profit before tax	261
Tax due (see below)	22.80	Tax due	49.59
Profit after tax	227.20	Profit after tax	244.41
Corporation Tax Computation	£(000)	Corporation Tax Computation	£(000)
Net profit before tax	250	Net profit before tax	261
Less R&D relief (additional 130%)	(130)	Corporation tax due at 19%	49.59
Adjusted profit before tax	120		
		Tax payable	
Corporation Tax due at 19%	22.80	Corporation Tax due	49.59
Corporation Tax payable	22.80	Less tax credit	(11)
		Corporation Tax payable	38.59



Qualifying R&D expenditure

Is expenditure on:

- Direct R&D Staffing costs (CIRD83000/83200) (includes salary costs, bonuses, employers NIC, pension contributions, but no benefits in kind).
- **Consumable items** (CIRD82300/82400) (Includes water, fuel, power). Costs of materials incorporated in products that are sold aren't eligible for relief.
- **Software** (CIRD82500) (revenue expenditure on software directly employed in R&D activity)
- Externally provided R&D workers (CIRD84000/84100) (If unconnected, 65% of the expenditure qualifies)
- **Subcontracted R&D** (CIRD84200) (If unconnected, 65% of the expenditure qualifies)
- **Contributions to independent research** (Large companies) (CIRD82200)



Grants & Subsidies (Main Principles)

SME Scheme

- Grants & subsidies <u>are deducted</u> and the R&D claim is made on <u>net</u> allowable expenditure.
- If grants are <u>Notified State Aids</u>, no claim possible under the SME scheme, but you may still make a claim under the *RDEC Scheme*.

RDEC Scheme

Grants & subsidies are not deducted and the R&D claim is made on gross allowable

expenditure.

- NB Company's responsibility not to exceed either de minimis limits of €200k in a 3 year period, or overall state aid intensity levels.
 - The grant receipt is taxed under the normal taxing provisions.
 - Grant receipts are not conclusive evidence of R&D for tax purposes and don't necessarily correlate to qualifying R&D expenditure for tax.



Grants – practical examples

A Ltd a **SME** spends £100k on qualifying R&D with a £40k subsidy which **is a notified state aid** (to include 'Invest NI Grant for R&D' etc):

R&D Costs			£100,000
 Less grant funding 			£ 40,000
 Net project cost 			£ 60,000
No Claim Under SME scheme BUT ca	n claim under RDEC	scheme	
RDEC Credit (against CT payable)	£100,000	@ 11% =	£ 11,000
Tax saved			
RDEC credit (against CT payable)			£ 11,000



Grants – practical examples

A Ltd a **SME** spends £100k on qualifying R&D with a £40k subsidy which **is not a notified state** aid (e.g. Horizon 20:20):

R&D Costs			£100,000
 Less grant funding 			£ 40,000
Net project cost			£ 60,000
Claim under both SME and RDEC Schemes			
R&D SME tax relief	£ 60,000	@ 130% =	£ 78,000 Plus
RDEC Credit	£ 40,000	@ 11% =	£ 4400
Tax saved (using 19% tax rate)			
Enhanced expenditure	£78,000	@ 19% =	£ 14,820 Plus
RDEC Credit (against CT payable)			£ 4400
HM Revenue & Customs			Northern Ireland Corporate Tax Office 100

How R&D Relief is claimed

- In full company tax return at end of accounting period or an amended return.
- Outline the project and determine the start and end dates.
- Outline the scientific or technological uncertainties to be resolved.
- Describe the successes and failures.
- Quantify the allowable costs under each qualifying activity.
- Backdated claims possible

(generally 2 years after the end of the accounting period).



Record Keeping

It is recommended that a company keeps the following records in support of a claim:

Staffing Costs	PAYE records	
	Contracts of employment for R&D staff	
	Records of pension payments	
	List of R&D staff / time recording	
Consumables	List of items used	
	Details of apportionments, evidence of costs	
Software	Receipts / contracts for software purchased, lice	ensed or
commissioned		
	Copies of marketing literature	
	Evidence showing it was properly charged to the	e R&D activity
Subcontract Costs	Invoices from subcontractors	
6	Evidence of the nature of the work and terms	
HM Revenue & Customs	Evidence of payments e.g. bank records	Northern Ireland Corporate Tax Office 102

Advance Assurance Scheme

- Voluntary scheme available for small businesses making their *first* claim to R&D tax relief.
- Annual turnover £2m or less and
- Less than 50 employees.
- If accepted, HMRC will allow the R&D claim without further enquiries for the first 3 accounting periods claimed.



Autumn Budget 2017

- Autumn Budget 2017 announced:
 - a pilot programme to evaluate an advance assurance service for RDEC claimants
 - a sector based SME support campaign to ensure SMEs can access maximum support from R&D tax credits.

 An overview of how R&D tax relief works is available on various HMRC YouTube videos on the gov.uk website: <u>https://www.gov.uk/government/collections/research-and-development-rd-tax-relief</u>.



Help and Further Information

• R&D – GOV.UK website at:

www.gov.uk/guidance/corporation-tax-research-and-development-rd-relief

- The HMRC Corporate Intangibles and Research & Development (CIRD) Manual at: https://www.gov.uk/hmrc-internal-manuals/corporate-intangiblesresearch-and-development-manual/cird80000
- Manchester R&D Specialist Unit

Tel 03000 510190

Email: randd.manchester@hmrc.gsi.gov.uk

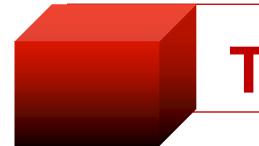






https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/ 673628/NIrCTO_Booklet.pdf





The Patent Box

- Overview of main conditions
- What profits qualify?
- Recent changes







Patents and R&D



The parts of a project that require R&D activity to resolve scientific or technological uncertainties qualify for tax relief. The qualifying work starts when work to resolve the uncertainty starts, and ends when the new knowledge is codified in a unable form, or when work to resolve the uncertainty ceases.



What is it?

- Allows limited companies to tax qualifying *profits* earned from its qualifying patents or patented inventions at 10%.
- Company must hold a qualifying UK or EPO patent or an exclusive licence to develop such rights. Limited other EEA jurisdictions also apply.
- <u>Development Condition</u> the company must have created or significantly developed the patented invention.
- <u>Active Ownership Condition</u> for groups, the company must have either developed the IP itself or be actively managing it.



What profits qualify?

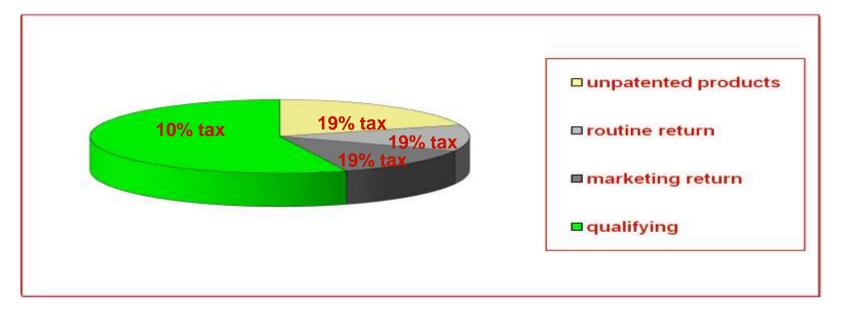
- Sales of the patented item or items incorporating it
- Royalties from licensing
- Sales of qualifying patented rights
- Infringement Income

And a *notional royalty* for:

- Using a patented process to produce non-patented items
- Using patented items to provide a service



The Patent Box Profits





New Rules from 1 July 2016

- Any new IP acquired or applied for after 1 July 2016 can only receive Patent Box benefits under new rules (modified Nexus).
- The amount of profit which can qualify is restricted to reflect *proportion of R&D* activity on the asset undertaken by the company itself.



Help and Further Information

- Website: https://www.gov.uk/corporation-tax-the-patent-box
- The HMRC Corporate Intangibles and Research & Development (CIRD) Manual at: https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-anddevelopment-manual/cird200000
- The Manchester R&D Specialist Unit Tel 03000 510190
 Email: randd.manchester@hmrc.gsi.gov.uk
- And finally...





Northern Ireland CT







The Northern Ireland Corporate Tax Office (NIrCTO)

www.gov.uk/guidance/northern-ireland-corporate-tax-office-nircto

03000 599 000





Preparing for Brexit

Jeegar Kakkad

Chief Economist & Director of Policy ADS Group

SC21 – Delivering Supply Chain Excellence





A running commentary

BREXIT MEANS...

The UK's position



Redlines for the UK Government

- Discretionary control over immigration
- Discretionary control over lawmaking
- No compulsory contributions to EU budget
- Ability to negotiate own trade deals

The EU's position

Council & Commission directives:

- Protect EU political & economic project
- To guarantee UK financial obligations
- Legal certainty; rules and citizens
- To settle the 'divorce' before discussing the 'relationship'





ADS' priorities



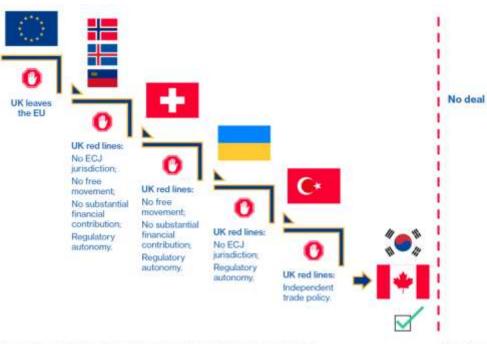
- No deal is worst possible commercial and security outcome
- Bad deal is one that leads to regulatory & economic divergence
-but a good deal delivers:
 - Transitional arrangements agreed by March 2018
 - Access to and influence in EASA, EU REACH
 - Burden-free access to European markets (a customs union with EU?)
 - Access to and influence in EU space and R&D programmes.
 - Access to skilled labour

Where are we now?



- Timetable:
 - **2017, Jun- Dec:** 1st phase of negotiations
 - 22nd March 2018: EU Council & UK complete transition talks and begin 2nd phase of negotiations
 - End-October: Withdrawal Agreement sent to UK & European Parliaments for ratification
 - UK leaves EU at 23.00, 29th March 2019
- Politics
 - **Real battles:** Transition, Brexit end-state and cherry picking
 - **Fake battles:** Brexit bill, sector impact assessments and striking 3rd country FTAs

What are the options?



- UK's redlines would means hard UK-EU27 borders
- May's Cabinet yet to decide on shape of Brexit
- EU taking a legal approach to negotiations

Source: European Commission; slide presented by Michel Barnier to EU leaders

Bloomberg

PREPARING FOR THE BORDER

Exporting to the EU now



Check if you need a licence or to follow special rules to export restricted goods from the UK Your courier or freight forwarder will ask you to complete a proforma invoice and attach to the consignment.

Charge VAT if you'd do the same for customers in the UK If you move goods anywhere within the EU worth over £250,000 in the last calendar year, make an Intrastat declaration.

You don't need to do this if you're not registered for VAT in the UK.

Exporting Post-Brexit: No Deal

0	2		3	4	5
Get ready	make it		send it	declare it	clear EU customs
1. Get an EORI #		1.Fill out and attach commercial invoice	Road transport 1hr before arrival in 1 st EU customs office	Arrival Notification Present goods to Customs	
2. Find an AEO(C) and/or AEO(S) certified shipper		(and licence if needed) to consignment	Rail 2hrs before arrival in 1st EU customs office	 (eg via a C1600 form & a manifest) Declare goods for customs via an electronic customs declaration, including: 	
3. Identify	15	2.Courier or freight forwarder makes an official export declaration to	Air Transport (less than 4hrs)	 Commodity code Customs Procedure code General Valuation Statement 	~
Commodity Code for tax & regulations		HMRC 3.Shipper provides	Actual departure	 Goods either assigned approved treatment or put in to temporary storage (up to 90 days) Approved Treatment includes placing under a 	44
4. Check if you need a licence or to		detailed Electronic Summary Documentation (ENS) to EU	Air Transport (more than 4hrs) 4hrs before arrival in 1 st airport in EU	Customs Procedure (eg release for free circulation, transit, customs warehousing, inward processing, etc)	
follow special rules to export restricted goods		Customs Authority prior to arrival at 1 st EU customs	Ahrs before arrival in 1st EU port	 High risk of regulatory compliance, licencing & security checks 	
-		office/port	Containerised cargo 24hrs before loading on vessel	Pay import charges	

On the white cliffs of Dover

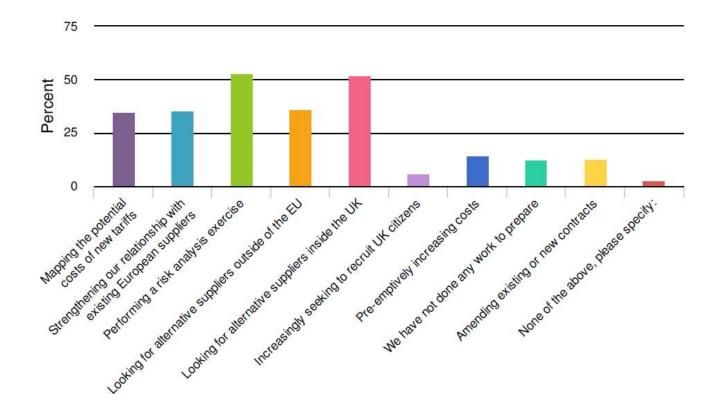
- 10,000 lorries per day
- ~500 checked
- Lorries on ferries
 in less than 2 min
- 50% of lorries that pass through UK ports pass through Dover



Brexit is coming

WHAT CAN COMPANIES DO?

How are companies preparing?



How are companies preparing?

UK businesses who use EU suppliers are looking for British replacements



UK businesses plan to respond to Brexit by beating down supplier prices



32%

European businesses expect to reduce their use of UK suppliers 44% Risk high are a rise exe

Risk analysis is high priority – 44% are performing a risk analysis exercise

Actions for companies

1. Understand your workforce

- What % of your UK workforce is from the EU27? Are they in critical roles? What's their status post-Brexit?

2. Assess dependence on EU regulatory regime

- Can you, your suppliers, and your customers continue to operate without EASA certification?

3. Assess exposure to customs checks & delays at UK/EU border

- How resilient is your supply chain to border delays? Do you have contracts with penalties for late delivery?

4. Prepare for EU/UK customs compliance & costs

What customs procedures do you comply with in non-EU markets? Can you afford to scale these up for EU exports? Can you afford cash flow cost of paying import VAT?

5. Invest in your competitiveness



Rockwell Collins Supplier Development Programme

David Quin Supply Chain Director Rockwell Collins

SC21 – Delivering Supply Chain Excellence





Rockwell Collins Interior Systems Kilkeel





Our Vision Roadmap



Vision

.

Be the most trusted

source of aviation and high-integrity solutions *in the world*



Purpose

We keep people safe, connected and informed

Values

- R Relationships C – Commitment
- I'- Innovation and Integrity

Where we're going

Objectives

Deliver superior customer value Attract and engage talented people Drive profitable growth

Behaviors

Think big Take action Help others succeed





Interior Systems - Seating

Group Locations







- Oak Plaza Headquarters & Engineering Development Lab (500+ Personnel)
- Executive management, Sales, R&D, Engineering, Program Management, Strategic Supply Chain, Product Support
- West Point (400+ Personnel)
- Focused Factory Seat Assembly
- 12 assembly lines Ops Management, Logistics, Supply Chain, Assembly, LEAN, QA
- Kilkeel UK (800+ personnel)
- Focused Factory Seat Assembly
- 13 assembly lines , Composite "Factory Within A Factory"
- Ops Management, Logistics, Supply Chain, Assembly, LEAN, QA





Kilkeel Facility

0

















الخطوط الجوية العربية السعودية SAUDI ARABIAN AIRLINES

















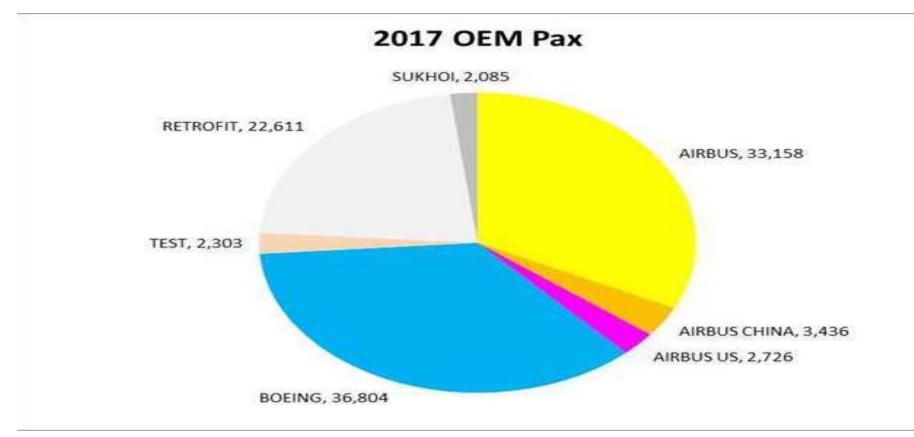
Kilkeel by numbers







2017 Kilkeel PAX by Customer







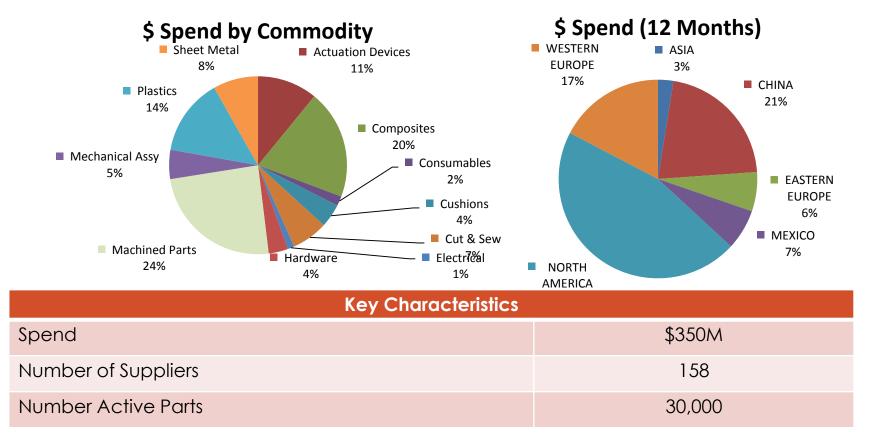
	2016	2017	2018	
Main Cabin				
Pax	93,000	98,000	100,000	
New product launches	28	29	40	
Premium Cabin				
Pax	5,500	7,000	8,800	
New product launches	10	22	27	

Key Product Launches				
Super Business Lounge	B777, A350			
Super Diamond	A330			
MIQ	A350, A321, A320, B737-8 MAX			
Meridian	B737-8 MAX, A320			
Aspire	A350, B777, B787			
Pinnacle B	A320, A321, B737			





Kilkeel Commodity Spend & Part Count







Supply Chain Expectations

Every production day our facility consumes...





Plan For Every Part (PFEP)

- Most efficient transport
- Adequate packaging
- Lead-time reduction
- Flexibility

Therefore to remain successful we must ensure...

Quality

- 0 defects!
- Implementation of source inspection
- Paperwork right first time

Cost

• Maintaining our competitive edge





Why SC21?

- A requirement for a supply base that strives on continuous improvement
- Increase in demand for competitive local suppliers
- SC21 is a proven vehicle for driving Improved scorecard performance of our suppliers through quality and on time delivery
- Active adoption of the SC21 programme is a potential consideration in new business award decisions





What SC21 Means to Rockwell Collins

- Improve communication between the companies and enable joint performance improvement.
- Share capabilities & knowledge to fulfil customer requirements in the most cost effective way.
- Drive continuous improvement processes between companies to remove waste.
- Aspire to improve delivery and quality to enable JIT deliveries.





SC21 Programme Update

Colin Hart Head of SC21 ADS Group

SC21 – Delivering Supply Chain Excellence



Introduction



Colin Hart

Head of SC21 ADS Group



Achieving Supply Chain Excellence





Achieving Supply Chain Excellence

Why Supply Chain Excellence?



Competitive and sustainable supply chains are vital to the future growth and success of our industries; through the SC21 programme, companies benefit from a clear and practical framework that enables greater efficiency and productivity.

Paul Everitt - Chief Executive

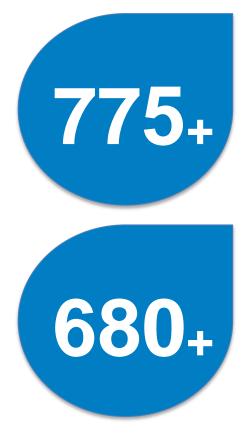


Over 11 years of SC21...



Number of companies that have participated:

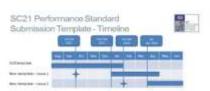
Bronze, Silver or Gold standards achieved:



What changed in 2017?

ACS SC 25" CENTURY SUPPLY CHAINS

- Improved data collection revised Submission
 Template
- Programme Performance Improved benchmarking analysis
- Partners and Practitioners Workshops
- Development & launch of SC21 C+G (NMCL)
- Re energised communication enhanced monthly bulletin, Defence Growth Partnership, LEPs





What new for 2018?



- SC21 5 year Development Roadmap established
- Refine roles and responsibilities of Stakeholders to ensure they are "fit for purpose" to effectively deploy SC21
- Further improve data capture and information sharing
 - Version 2 of Submission Template will be launched 1st Feb 2018
 - More data based decisions and Information capture & analysis
- Further deployment of SC21 Competitiveness + Growth (incorporating NMCL).
- Refine & refresh SC21 syllabus (Cyber, Ethics, i4.0, etc.)
- Advance the deployment of Competitiveness Charter

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Make 2018 your year of Supply Chain Excellence





What's your recipe for success ?

Delivery your Supply Chain Improvement Plan

Become more competitive

Further improve your productivity

Invest in the right capabilities & skills to add value to your customers

Commit to the Competitiveness Charter

Achieving Supply Chain Excellence



SC21 Next "Achieving Supply Chain Excellence" event Thursday 19th July 2018



SC21 – Achieving Supply Chain Excellence



SC21 Steering Board meetings

Date	Time	Location
Thu 22/03/2018	10:00 to 14:30	ADS London
Tue 12/06/2018	10:00 to 14:30	Thales Reading
Tue 18/09/2018	10:00 to 14:30	MBDA Stevenage
Wed 05/12/2018	10:00 to 14:30	ADS London

SC21 P&P Meetings

Date	Time	Location
Wed 16 th May 2018	9:30 to 16:00	ADS London
Tue 2 nd October 2018	9:30 to 16:00	твс

• SC21 PDQ SIG meetings

Date	Time	Location
Wed 18/04/2018	10:00 to 14:30	ADS London
Tue 26/06/2018	10:00 to 14:30	ADS London
Tue 25/09/2018	10:00 to 14:30	ADS London

SC21 – Achieving Supply Chain Excellence

Questions?

Colin Hart Head of SC21 Tel: +44 (0) 7702 867863 Email: <u>Colin.Hart@adsgroup.org.uk</u>

Marika De Rosa Quality, Standards and SC21 Executive Tel: +44 (0) 7717 173746 Email: <u>marika.derosa@adsgroup.org.uk</u>



Achieving Supply Chain Excellence



Lunch & Networking

SC21 – Delivering Supply Chain Excellence





The Winner's Experience SC21 Case Study

Steve Savage

Strategic Operations Manager Abbey Forged Products Ltd

SC21 – Delivering Supply Chain Excellence







"The Winner's Experience: SC21 Case Study"



About us

Abbey Forged Products Limited is one of the UK's leading forge-masters specialising in the manufacture of bespoke components for the Oil & Gas, Nuclear and Aerospace markets.

The company has a six-acre manufacturing facility based in Sheffield, on site capabilities include sawing, forging, heat treatment, machining and both destructive and non-destructive testing.

By having all processes at one location, the company can offer short lead times, starting from 5 days which is unparalleled for this industry.





































nationalgrid



















Abbey Forged Products Limited, Sheffield

Developing our Road-Map from our 5-year Business Plan

Having recognised the decline in the Oil and Gas sectors our 5 year plan identified the 2 key value streams we wanted to penetrate, these being Aerospace and Nuclear.

Our Journey to Process Excellence core values were established and the necessary required approvals engaged to support the journey.

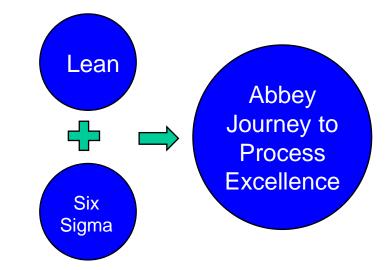


Abbey Journey to Process Excellence

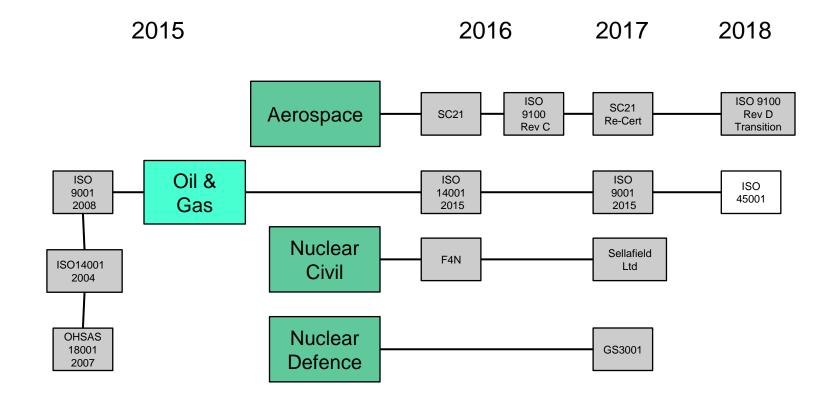
Customers – keeping them at the centre of our thinking about what we deliver

Compliance – with the process and with the quality standard for what we produce

Continuous, Controlled Improvement – through the engagement of everyone, we relentlessly seek continuous improvement, in a controlled way.











Abbey Journey to Process Excellence

SC21 Why we got involved

For the Aerospace value stream identified, we wanted a program to enable us to benchmark ourselves against our supply chain peers, and from that develop improvement activities where any weaknesses had been identified.

Our initial scores for the Man Ex, Bus Ex and Rel Ex were extremely positive, and the findings were used to enhance our Improvement Journey.





Abbey Journey to Process Excellence

SC21 Benefits

We have to this date put through over 60% of the entire workforce through Lean Learning activities, including PFMEA's, CSIP activities, FOD training.

Developed a "Customer Perception Module", where we track our "Perception Score" and work more closely with our customers to enhance and grow the business. This now has been encompassed to our supplier network.

And most importantly we have won new business in both the Nuclear Civil and Defence Sectors, and the Aerospace Sector.



VISION FOR THE FUTURE



The company's vision is to become a market leader in the supply of forgings to the Oil, Gas Aerospace and Nuclear. Growth will be organic with a planned and very closely managed increase in the companies size and resources whilst maintaining its core values and family ethos. We will compete on quality and service and not cost leadership

A big part of the growth strategy will be increased levels of employee engagement, encouraged through individual learning and development plans to actively be engaged in key areas throughout the company.

This philosophy will not only see improvements in the overall expertise but will help staff to grow into senior positions for long term careers and is drawn directly from the companies Values; Integrity, Respect Passion, Excellence, Teamwork, Service and Empowerment

Continual reinvestment has been the company's practice over the years, a policy that will continue into the future by ploughing back profits year on year, leading to growth of production capabilities and sales revenues of the business through modernisation and continuous investment in the latest technology, plant and machinery maximising our operational efficiency.

Pushing past a traditional relationship with our clients we will go further by working with our customers, developing improved manufacturing techniques, investing and building our business around the customer's needs

A MARKET LEADER IN THE SUPPLY OF FORGINGS TO THE OIL & GAS, AEROSPACE AND NUCLEAR MARKET





SC21 Award Presentation

SC21 – Delivering Supply Chain Excellence



Re-Awarded Bronze







Bronze Awarded





Portsmouth Royal Navy Dockyard

Sponsor: Presenter:

BAE SYSTEMS

INSPIRED WORK

Claire Malone





Re-Awarded Bronze







Sponsor: Presenter:





Silver Awarded

Presenter:











Sponsor: Presenter:















Sponsor: Presenter:





Re-Awarded Bronze





"The Future of Innovative Machining"



Sponsor: Presenter:

Rockwell Collins

Building trust every day



Re-Awarded Bronze







Sponsor: Presenter:

Rockwell, Collins

Building trust every day









Sponsor: Presenter:

Rockwell, Collins

Building trust every day







MOULDINGS



Sponsor: Presenter:

Rockwell. Collins

Building trust every day



Bronze Awarded







Bronze Awarded

















Sponsor: Presenter:

THALES







Sponsor: Presenter:

THALES







Sponsor: Presenter:

THALES







Sponsor: Presenter:

THALES



Bronze Awarded













Sponsor: Presenter:







Sponsor: Presenter:







Sponsor: Presenter:



























Silver Awarded





Sponsor: Presenter:







Sponsor: Presenter:







Sponsor: Presenter:

















Sponsor: Presenter:

Self Starter Skin AEROSPACE Stephen Cowan

Silver Award



Re-Awarded Gold





Sponsor: Presenter:





Questions to Panel and Closing Remarks

SC21 – Achieving Supply Chain Excellence





End of the event

Thank you for your attendance

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