BAE Systems Naval Ships T26 Programme

Irshad Booly – Supplier Development Manager

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BAE Systems Naval Ships T26 Programme

- **Manufacturing contract for Type 26**
- BAE Systems have been awarded a contract by the UK Ministry of Defence **worth c£3.7 billion** to manufacture the first three ships for the Type 26 Global Combat Ship programme, with steel being cut on the first ship in Glasgow in the coming weeks.

- This provides a strong foundation for the next two decades of shipbuilding in Scotland, securing more than 3,400 jobs across BAE Systems and the wider UK maritime supply chain.

- UK Defence Secretary Sir Michael Fallon said: "The Type 26 Frigate is a cutting-edge warship, combining the expertise of the British shipbuilding industry with the excellence of the Royal Navy.

BAE SYSTEMS NAVAL SHIPS T26 PROGRAMME

11TH JULY 2017

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Type 26
Global Combat Ship

A highly capable multi mission warship optimised for Anti-Submarine Warfare and designed to deliver the full range of complex combat operations and contribute to global security.

Range
In excess of
7000 nautical miles

Speed
26+ knots

Beam
20.8 metres

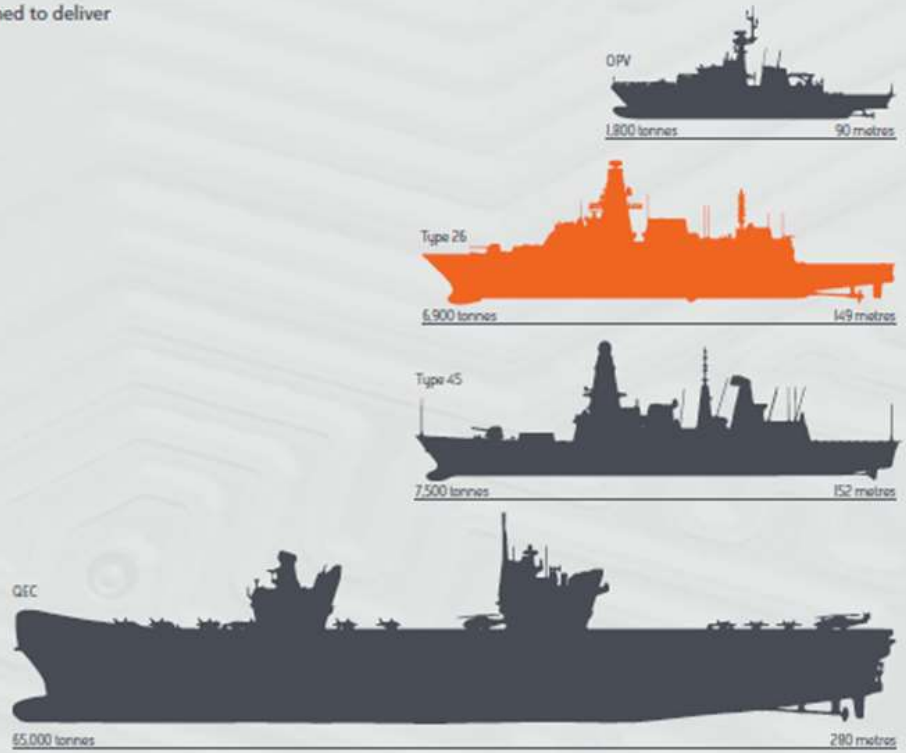
Crew
157

Accommodation
Up to 208,
including Embarked Forces

Propulsion
2 electric motors
4 high speed diesel generators
1 gas turbine

Flexible mission bay
Space for 10 x 20ft
ISO containers
or boats and
unmanned vehicles

Flight deck
Capable of landing
a Chinook helicopter



ROYAL NAVY

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BAE Systems Naval Ships T26 Programme

- The Type 26 programme currently employs more than 1,200 people in the UK supply chain, with a number of contracts already in place for the manufacture of major equipment for the first three ships. In total, there are already 33 UK and international companies working in the supply chain to deliver the Type 26 ships – with further announcements to be made shortly.

Suppliers – Team 26

Marine Systems Technology Ltd
a PaR Systems company

BEYNON
REFRIGERATION SPECIALISTS FOR OVER 100 YEARS

MEP PELLEGRINI MARINE EQUIPMENTS

AGC AEROSPACE & DEFENSE

Score Group plc

babcock

hertel

Lloyd's Register

DAVID BROWN

Brüel & Kjær
BEYOND MEASURE

DCNS

Sauer Compressors

LOCKHEED MARTIN

DESMI MARINE PUMPS

MACTAGGART SCOTT
Innovators since 1898

mtu

Raytheon

Imtech

L3

tyco

Johnson Controls

THALES

ROHDE&SCHWARZ

Rolls-Royce

DETEGASA

Salt Separation Services

PPG

Davis

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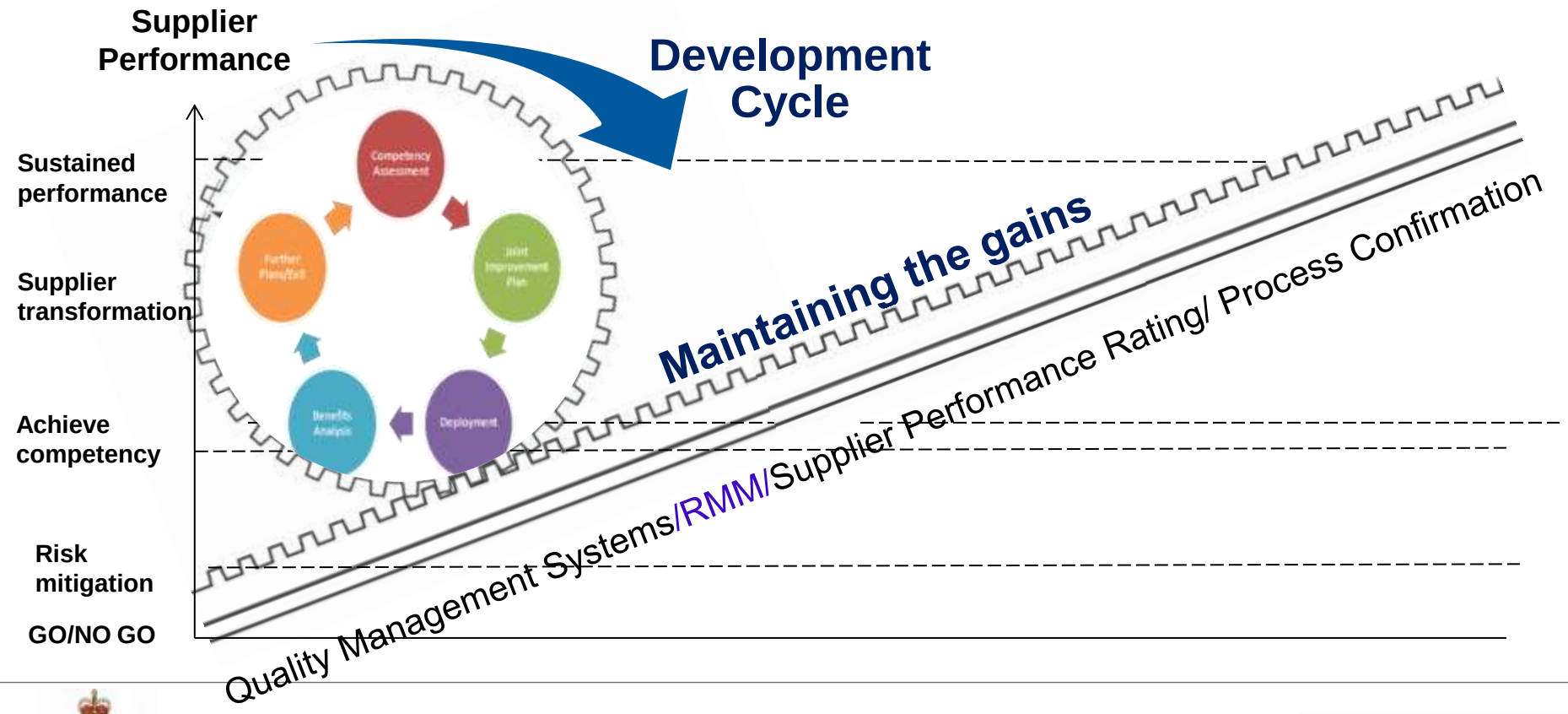
ASPIRATIONS FOR TEAM 26

- The successful delivery of the Type 26 programme is reliant on the skills and commitment of everyone in the Supply Chain
- Engender a ‘partnering’ approach from the outset
- Aspire to build a common Team 26 identity between all companies involved
- Create an environment where we can have open transparent communications and can communicate equally
- Enable early recognition of issues and develop collaborative relationships between supplier companies – **Through Competency Assessments & SC21 RMM workshops**
- Potentially 46 companies identified for SC21 RMM workshops – 3 months from contract placement.
- Establish information sharing channels
- Set the global naval industry benchmark
- Unite behind our common goals, share best practice and support each other to meet our commitments

T26 Supplier Development Journey

ITT → DDA → DMS → DELIVER → BUILD → SUPPORT



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Competency Assessment
What We Do

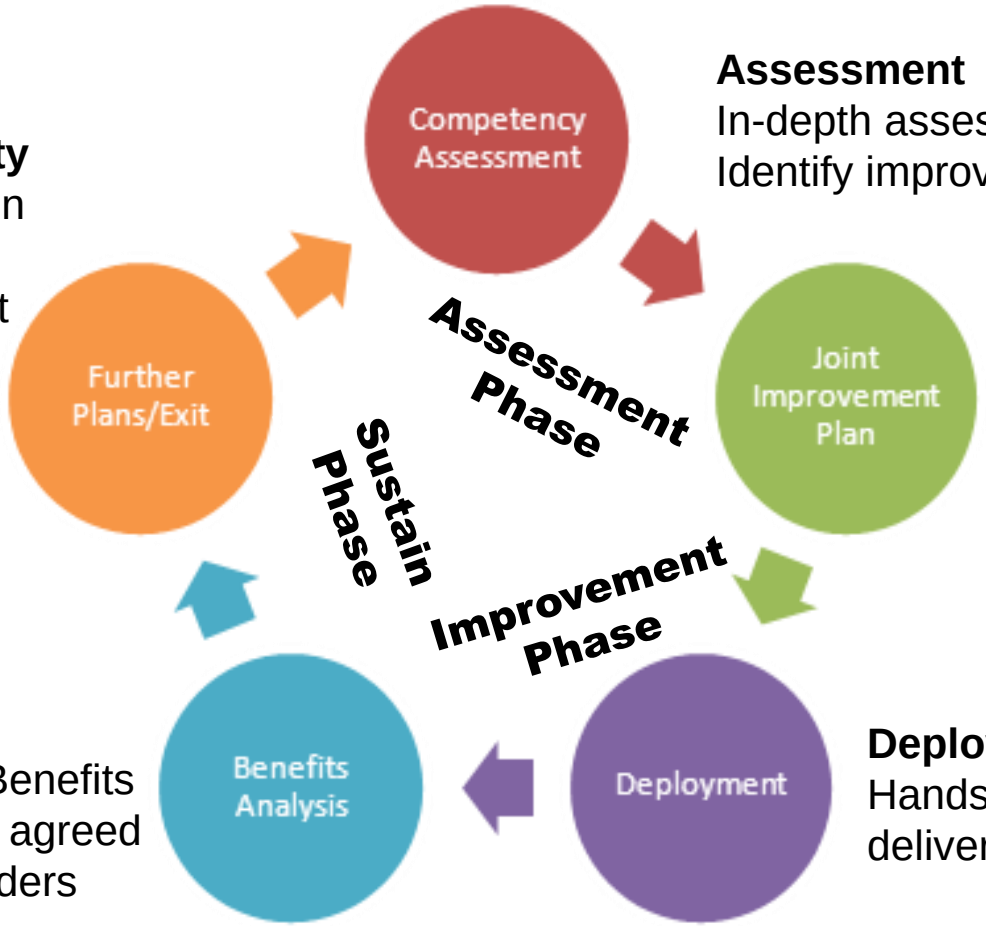
Assessment
In-depth assessment of supplier to Identify improvement priorities

Joint Improvement Plans
Gaps highlighted and improvement plans agreed

Deployment
Hands on practical support to deliver improvement plans

Benefits
Soft & Hard Benefits captured and agreed with stakeholders

Further Plans/Sustainability
Process confirmation
Re-assessment, further improvement process embed



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Assessment Criteria's

Management	Operations	Quality	Skills, Training & Development
Company Strategy	Process Design	Quality Management System	Skills, Training and Development Policy & Strategy
Strategy Deployment	Organisation Capacity and Control	Quality Culture	Skills & Competence
Leadership	Layout & Flow	Quality Improvement	Evaluation & Deployment
Empowerment & Feedback	5S Workplace Organisation	Supplier Approval & Maintenance	Training Methodologies
Metrics	Visual Management	Receipt Verification	Benefits
Risk Management	Control of WIP	Supplier Improvement	
Customer Relationship Management	Standardised Work	Quality Planning	
New Part Introduction	Set Ups	Key Features	
Programme Management	Total Productive Maintenance	Measurement System Analysis	
Supplier Management	Continuous Improvement	Non Conformance Process	
Cost Modelling	7 Wastes	Customer Escapes	
	Problem Solving		
	Production Teams		
	Error Proofing		
	Lean Value Stream		

Counterfeit Parts
Company Counterfeit Policy
Purchasing
Test & Verification
Control of Counterfeit Materiel

Additional Assessment models if required:

- Sub Tier assessment
- Non Conformance Assessment

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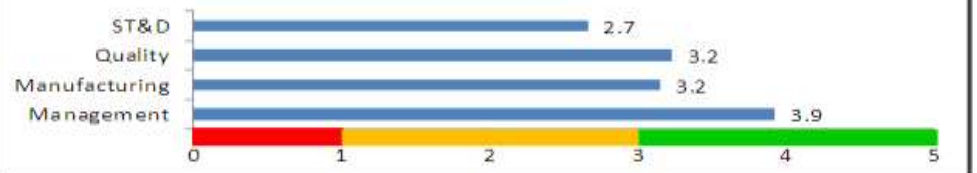
Assessment Report

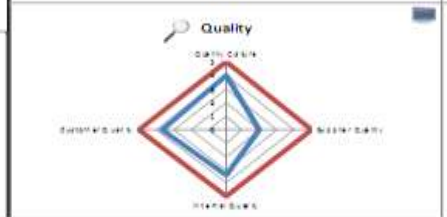
BAE SYSTEMS Assessment summary ACME RR Engineering Ltd

Overall assessment results

Supplier:	ACME RR Engineering Ltd	**Main business activity:** Rocket propulsion system, marine propulsion systems, automotive propulsion systems, engine overhauls	
Key contact:	W Coyote		
Date of assessment:	1st April 2015		
Location/Site	Dundee	**Main BAE products:** Marine propulsion systems	
Assessment reason	New supplier	**Key customers:** BAE Systems, Boeing, Airbus	
BAE team:	M Farrell		
	S McClafferty	**Key tier 2:** D & R Trotter, A Daly Enterprises	
Employess: 50	ISO9001	SC21	



Assessment detail



SWOT Analysis

Strengths

Overall management process is fairly robust especially Customer Relationship Management

Weaknesses

Inflexible workforce - training should be provided to allow individuals to carry out 2 - 3 different jobs.
Production Control: greater Performance to Plan development required

Opportunities

5S Workplace Organisation - opportunity for greater deployment
7 Wastes - opportunity for cost savings within the organization with correct implementation

Threats

Lack of Continuous Improvement Initiatives
Suppliers have no means of preventing non-conforming material release
No in-house trainers
No assessment / evaluation of training on completion
Weak PFMEA / Risk Management processes

Key gaps and opportunities

Key Gap	Action	Owner	Action type
Workforce inflexibility	HR to develop training plans	HR Head	Continuous Improvement
Performance to Plan development	Op Manager to further develop	Op Head	Continuous Improvement
Implement Continuous Improvement initiatives	All engineers to identify areas initially	All	Continuous Improvement
Supplier NC material handling	Quality to develop process with suppliers	Quality Head	Continuous Improvement
In-house trainers	HR to identify individuals initially	HR Head	Continuous Improvement
Training evaluation	HR to develop survey media for evaluation	HR Head	Continuous Improvement
PFMEA implemetation	Engineering to liaise with supplier initially to determine PFMEA requirements i.e training etc	Engineering Head	Risk Mitigation

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Joint Improvement Plan

- Joint Improvement plan with supplier
- **Sign off by BAE and supplier stakeholders**
- Estimated; activity, timelines and benefits

BAE Naval Ships	Humber Elec	Joint Improvement Plan

Supplier	Humber Elec	**Site**	
Project Sponsor		**BAE Project Sponsor**	
Project Champion		**BAE Project Lead**	

1. What are the Gap's/Opportunities Identified from the Competency Assessment

2. What will this project deliver

3. What KPI's will be used to measure the projects benefits

4. Who are the key stakeholders

5. What Assumptions have been made

6. What is in Scope

7. What is out of Scope

8. Key Risks

	Risk	Mitigation	Owner
1			
2			
3			
4			

9. Project Milestone Summary

	Activity	Owner	Date Due	Actual
1				
2				
3				
4				
5				
7				
8				
9				

10. Benefits

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Week 15	Week 16	Week 17	Week 18	Week 19	Week 20	

Project Start Review Sign Off

BAE Project Sponsor		**Project Sponsor**	
Project Champion		**BAE Project Manager**	

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What Benefits we will bring

- Intelligence provided on competency of Type 26 supply chain
- Better informed supplier selection
- Embedded change management culture in supplier
- Implement Joint Improvement Plans that will;
  - Identify and mitigate risks
  - Reduce rework,
  - Improve delivery
  - Improve efficiency
  - Improve lead times
  - Eliminate process waste

Summary

- **Supplier Engagement Scoring Process**.
  - 88 Suppliers on the Supplier Engagement Scoring Process over 3 Programmes.

  - **T26** Suppliers on or due to go onto the Supplier Engagement Scoring Process.
    - 35 Suppliers on the Supplier Engagement Scoring Process.
    - 8 Supplier due to start in Q3 / Q4 2017

- **SC21 Program Activity 2017**
  - ✓ **SC21 Journey / Awards**
    - 2 Suppliers on the through SC21 Journey (Pipex & SCA)
    - 1 Supplier (Pipex) successfully awarder Bronze award March 2017
    - 13 Suppliers to be targeted for SC21
  - **RMM's**
    - 2 held
    - 3 being scheduled
    - Further workshops being scheduled in line with T26 contracts for lessons learned
  - **ManEx**
    - 1 completed
  - **BusEx**
    - 1 being scheduled for Q3 2017
  - **CSIP**
    - 4 in Place

Thank you

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