



UK Naval Engineering Science and Technology (UKNEST) Forum

ANNUAL REPORT 2009

1. Review of the Year

2009 has seen significant progress in the major marine programmes. Significant elements of the Queen Elizabeth Class Aircraft Carriers are now under construction at multiple sites including Appledore, Govan and Rosyth with progress on the civil engineering required at Rosyth to accommodate the final assembly. Type 45 Destroyers are undergoing sea trials with the Royal Navy and HMS Astute left Barrow in the Autumn to commence her trials programme.

The Naval Design Partnership has become an established organisation featuring a number of UKNEST companies that is focussing on the conceptual design for the three variants of the Future Surface Combatant. The first of these warships, designated the Type 26 Combat Ship, will be designed with “exportability” as a key driver. In addition, the Successor programme continues to develop.

2009 saw the signing of a “Terms of Business Agreement” (TOBA) between MoD and BAE System Surface Ships, an entity that was formed following the purchase of the VT ship-building business by BVT. This Agreement is based upon a long-term commitment of a stable ship-building programme linked to cost saving measures. A similar relationship continues to be negotiated between MoD and Babcock Marine.

The Surface Ship Support Project (SSSP) has successfully established an alliance agreement between MoD, BAE System Surface Ships and Babcock Marine. Two pilot “Class Output Management” (COM) contracts have been awarded to the Industrial allies for T22 and Hunt Class vessels. A rigorous programme is in place to move all other in-service warships into the SSS Alliance framework over the next 2 years.

The Department for Business Innovation & Skills has continued to manage the Maritime Industries Leadership Council (MILC) programme. A draft UK Marine Industries Strategic Framework document has been produced for publication in March 2010. UKNEST was recognised as the focal point for the Naval sector and several of our companies provided significant input to the creation and final content of this document.



Internally, one of the most significant factors for UKNEST has been the evolution of a thriving FutureNEST forum centred upon the graduates within the member companies. These graduates have established an effective inter-company network aimed at developing a number of themes including a more effective use of the UKNEST web-site.

2. Working Group Reports

2.1 Training, Education & Development (TED)

The TED Working Group has continued to develop and deliver its campaign to encourage more graduates and undergraduates in both maritime and general engineering disciplines to be aware of the opportunities in the UK maritime defence industry. The website www.nextgenerationnavaldefence.com which went live in October 2008 has received over 6500 hits. The website was revamped this year to reflect the progress within the major warship and submarine programmes. It was also used to offer undergraduate placements in summer 2009. A small but encouraging start was made with 12 applications being received. Further publicity this year will seek to increase both awareness and response.

A blog facility has just been added to the website.

A number of UKNEST companies have committed greater HR support to ensuring the success of both the placement and graduate recruitment schemes, seeing it as adding to the pool of talent from which they can select. This forum is also investigating the potential for sea-time training (with the blessing of the Royal Navy), a more formalised secondment scheme between UKNEST companies to provide a breadth of experience not currently available (and recognised as beneficial to the development of future leaders), a welcome pack to cover all UKNEST companies and a cross-company mentoring scheme.

In parallel, campus marketing material and posters, to lead undergraduates to the website, have been distributed to a large number of UK Universities. Further copies can be obtained from UKNEST. We have also re-advertised in the well established graduate careers brochure Target Jobs and Prospects (circulation 25,000 copies).

We have made contact with and fed into the Maritime Industries Leadership Council (MILC) working group on knowledge and skills with whom we have many similar aims.

We have engaged with a group of young(er) engineers across the UKNEST membership and they have now established a self-sustaining group called FutureNEST. This comprises 10 or so people, largely in their initial professional development phase as professional engineers, who have become engaged in a number of key working group initiatives. They are currently (for the TED working group):

- Cataloguing cross-company training courses that could be shared or developed to better serve UKNEST needs
- Providing blog material for the nextgenerationnavaldefence.com website
- Reviewing the content and appeal of both the nextgenerationnavaldefence.com and uknest.org websites.

In 2010 the TED working group will continue to promote the above activities and seek to expand the website to cover school leavers and non-graduates. Our aim is:

- To encourage engineering undergraduates in all disciplines to seek work placements in the UK maritime defence industry
- To encourage young engineering graduates in all disciplines to enter the UK maritime defence industry
- To contribute to local and national efforts in schools to promote engineering as a career and raise awareness of the maritime defence sector

2.2 Science & Technology

2.2.1 Major achievements 2009

- **Maritime Industries Leadership Council (MILC) – Innovation and Technology Group (ITG)**

We have developed a working relationship with the MILC ITG in order to maximise our efforts and avoid duplication. The MILC ITG has a strong stakeholder community covering EPSRC, TSB, DBIS, RDA's, Marine Industry (including UKNEST members). Our focus will be pure defence related research and technology.

Under the auspices of the MILC ITG a workshop was held in London to develop strategic road maps for Marine related Science and Technology. This workshop informed some of the Innovation and Technology inputs to the development of the UK Marine Industries strategies.

A further workshop to refine the roadmaps is scheduled for early spring 2010.

- **Maritime Industries Leadership Council UK Industry Strategy**

Marine Industries Leadership Council (MILC) meeting was held in July 2009 in which a project group was established to develop a Strategic framework for the UK Marine Industry. Strategic Framework is nearing completion and the document identifies key strategic issues for this sector and is the basis for future detailed development of the individual chapters of the strategy.

- **Engineering and Physical Sciences Research Council**

Following the initiatives started in previous years to increase the profile of Marine participation in EPSRC funded research, a successful submission was made by a consortium led by UCL (Paul Wrobel). The team which includes 5 universities, supported by over 15 UK industry partners (providing cash/benefit in kind, including a number of UKNEST members).

The research into Low Carbon Shipping developed a Systems Approach with the following key areas:

- Ship Operation & Human Factors
- Modelling
- Regulation, Policy & Incentivisation
- Technology
- Ship Economics
- Shipping, Ports & Logistics

UKNEST S&T working group acted as a catalyst for the formation of the consortium which responded to the research call.

2.2.2 Forward Agenda

- **Strategy**

There will be continued involvement from an S&T perspective into the development of a UK strategy for Marine Industries.

- **Review MoD R&T**

With significant changes likely in both funding and approach to R&T within the MoD, we need to increase our engagement and understanding.

3. Management & Administration

IMarEST continues to provide the secretariat for UKNEST and the post of Executive Coordinator (Dr Ben Dobson) has continued to facilitate the implementation of the Working Group initiatives.

Steering Group

The Steering Group, under the Chairmanship of John Coles, met three times during the year at Babcock Marine (Rosyth), MoD (Abbeywood) and QinetiQ (Haslar/Porstdown). These meetings, rotating around Member's Facilities will continue every four months through 2010.

Co-ordination Group

A small Co-ordination Group, again under the Chairmanship of John Coles, meets in Bath between Steering Group meetings to develop and prioritise an on-going agenda.

4. Promotional Activity

The nextgeneration website has been revamped and new material was generated for both Target Jobs and Prospects.

5. Membership

The Members for 2009 were:

Aveva Solutions
Babcock Marine
BAE Systems Submarine Solutions
BMT Defence Services
BVT Surface Fleet that became BAE Systems Surface Ships
Converteam
DSTL
IMarEST
Lloyd's Register
Ministry of Defence
QinetiQ
RINA
Rolls-Royce
Royal Navy
SEA
Thales Naval
WS Atkins

6. Finance

The Annual Membership fee for 2009 was £6000. After running costs (IMarEST Secretariat, Executive Coordinator, Working Group commitments and Meeting expenses) the surplus available for future initiatives in 2010 is of the order of £75k.

7. 2010 Agenda

A summary of the key activities is:

• **TED**

The major activities for 2010 will be centred upon:

- providing support to the MILC Knowledge & Skills Working Group
- development of both the HR Working Group and FutureNEST
- updating and convergence of the websites.

• **Maritime Industries Leadership Council (MILC)**

The current programme for the development of an overarching UK Marine Industries Strategy indicates that significant support will be required from the Industrial parties throughout 2010. However, it is anticipated that this programme will be subject to change as a result of the General Election.