



UK Naval Engineering Science and Technology (UKNEST) Forum

ANNUAL REPORT 2008

1. Review of the Year

2008 has continued to see further consolidation across the Naval Defence Industry that included the creation of BVT Surface Fleet that brought together the warship building and through life support operations of BAE Systems and VT Group including the FSL Joint Venture. In addition, Babcock International Group PLC acquired Weir Strachan & Henshaw.

Whilst 2008 saw Government commitment to build the new Aircraft Carriers, it was followed by an announcement that several Naval programmes would be delayed as a result of near-term budget pressures. However, both the Carrier programme and the preliminary studies for the next generation of submarines continue to gather pace and offer significant business opportunities in the Sector.

The Department for Business, Enterprise & Regulatory Department for Business, Enterprise & Regulatory Reform (DRERR) has launched the Maritime Industries Leadership Council (MILC) aimed at promoting a cohesive and collaborative strategy across the UK's maritime sector. UK NEST is engaged through the Technology & Innovation Work Strand.

For UKNEST, 2008 has seen substantial progress in the major initiatives associated with raising Graduate Awareness, Science & Technology and Leadership Development. The new Graduate Awareness website has received over 1500 "hits" in its first six months. Full details are provided in the following sections.

2. Working Group Reports

2.1 Training, Education & Development (TED)

The TED Working Group has progressed well with 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. Under the brand "NETWORK" (Naval Engineering Talent at WORK) a website has been produced (www.nextgenerationnavaldefence.com) which went live in October 2008. To date over 1400 hits have been made. A "talking heads" video section will be added early in 2009 allowing visitors to hear some current graduates in the industry talk about their experiences.



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

In January 2009 a press release will be circulated to generate media awareness of the NETWORK campaign.

An additional webpage on www.nextgenerationnavaldefence.com will launch in early February 2009 for undergraduate students to apply for the UKNEST internship scheme

Initial contact with the Regional Development Agencies (RDAs) had been disappointing in terms of seeking additional support and promotion for TED activities. However, it was agreed that further efforts will be made through the Scottish Enterprise Board and SWERDA.

In 2009 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 defense industry
- encourage young engineering graduates in all disciplines to enter the UK maritime defense industry
- contribute to local and national efforts in schools to promote engineering as a career and raise awareness of the maritime defense sector

2.2 Science & Technology

2.2.1 Major achievements 2008

- **Maritime Grand Challenge Seminar**

Following on from the Devonport seminar held late in 2007 identifying themes and opportunities for long term S&T investment in the Naval Sector. These have been pulled through into the proposals for the EPSRC (see below).

- **European Defence Agency**

UKNEST has been represented in the emerging research programme to establish the opportunities for UK participation in this programme. We established interest from UK Industry in 3 of the 5 “potential themes”, however a change in MoD policy direction has led to UKNEST bowing out.

- **Engineering and Physical Sciences Research Council**

We jointly established that of the accessible budget of ~£700m Naval is achieving far below other domains – in particular Aerospace. The reasons for our collective failure to attract funding were analysed, together with the means for success. Whilst



EPSRC are not going to ring-fence funding for the Naval sector it was agreed that there is significant potential for cooperation between NEST members and EPSRC. Areas of potential interest have been identified with candidate teams and leaders. Follow through is critically dependant on the commitment of UKNEST's members.

- **Maritime Industrial Strategy**

We submitted a revised and updated input to Research and Development (RAND) on the Sustainment of niche skills/technologies – examination of options for mitigation.

2.2.2 Forward Agenda

- **MoD R&T**

There are a series of new initiatives with which we need to fully engage e.g. Centre for Defence Enterprise (CDE) and Centres for Defence Technology (CDT's).

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

This is a new initiative at Ministerial level in the DBERR and includes a wider group of stakeholders e.g. RDA's, Research Councils and Trade Unions. Recognising that there is significant common ground (but that MILC has a slightly wider remit) UKNEST & MILC have agreed to maximise our combined efforts and avoid overlap so as to ensure that we punch our collective weight - as the Aerospace community does. At the same time both groups are keen to build on the tangible successes of UKNEST. MILC share our concern about the low levels of decreasing MoD Naval S&T and the Maritime Sector's minimal access to EPSRC funding. MILC see this as the top priority and we should therefore combine the efforts of NEST & MILC to mimic the Aerospace Technology Strategy Board – possibly using the auspices of the Society of British Aerospace Companies (SBAC). Initially NEST can sit on MILC, in slower time we can determine how to best work together.

- **“UKNEST goes abroad”**

It has been proposed that this initiative be deferred.

2.3 Leadership Development

During 2008 a short life working group was established to respond to a request from the head of the RCNC (Royal Corps of Naval Constructors) to explore options for how UK NEST could work with the RCNC to help develop future Engineering leaders in MoD as part of a broad base of initiatives around initial and continuing professional development.

The backdrop to this request being that the MoD, through the process of contractorisation, had lost the direct ability to give future leaders exposure to the broad range of career opportunities available to them in the past e.g. in dockyards or research centres.



A key recommendation from the working group is that both MoD and Industry can benefit from closer working to develop their respective Engineering teams through a range of shared academic and vocation initiatives. This recommendation will form the basis of the 2009 work in this area.

Targets for 2009 are to have a pilot initiative launched between MoD and BVT Surface Fleet by Easter and a review and roll out to other UK NEST member companies by the end of 2009. The pilot will focus on vocational exchanges for current MoD and BVT graduates but will use the principles to develop an operating framework for a broader range of Engineering resources.

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 QinetiQ (Winfrith), Rolls-Royce (Derby) and Converteam (Rugby). These meetings, rotating around Member's Facilities will continue every four months through 2009.

Co-ordination Group

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

4. Promotional Activity

The focus this year has been on the Graduate Awareness campaign launched through the web and supported by literature distributed throughout Industry and appropriate Academia. In addition, at the end of the year, the Placement campaign has been promoted with articles planned through the major Profession Institute publications and key Industry magazines.

5. Membership

The consolidation of the Industry has seen a reduction in the number of UKNEST members but BAES Integrated System Technologies (Insyte) has joined and other companies are being approached. The Members for 2008 were:

Aveva Solutions	Ministry of Defence
Babcock Marine	QinetiQ
BAE Systems Integrated System Technologies	RINA
BAE Systems Submarine Solutions	Rolls-Royce
BMT Defence Services	Royal Navy
BVT Surface Fleet	SEA
Converteam	Thales Naval
DSTL	Weir Strachan & Henshaw
IMarEST	WS Atkins
Lloyd's Register	

6. Finance

The Annual Membership fee for 2008 remained at the original level of £5000. For the next year it is intended, for the first time, to raise this to £6000. After running costs (IMarEST Secretariat, Executive Coordinator, Working Group commitments and Meeting expenses) this forecasts an available budget for new initiatives in 2009 of about £100k.

7. 2009 Agenda

In addition to the planned expansion of the existing Work-Stream activities, the agenda for 2009 will be centred on the following:

- UKNEST working with MILC and expanding from the current involvement with the Technology & Innovation Work-stream.
- Investigating the opportunities to integrate training across UK NEST companies (e.g. encouraging and advising academia to provide courses relevant to the sector, maximising existing training such as that provided by RN)
- A study to determine what skills and capabilities are emerging from the Graduate "Pipeline" and whether these will meet the Sector demands.
- Further research to establish the most critical areas of Science & Technology that will require investment to meet future programme requirements.
- A study to examine whether there would be benefit in creating a new Work-stream aimed at the Naval Defence Supply Network, with particular focus on the SME community.