Welcome to the summer 2015 SCAF newsletter. It’s getting hotter and the days are certainly getting longer. Since the last SCAF newsletter we have held the summer banquet and 2nd award ceremony. This was a well-attended event at the Bailbrook House Hotel, Bath on 9th July. Nearly thirty members and partners attended the event which included dinner and the presentation of the SCAF awards for the year September 2013 to September 2014 as you will see later in the newsletter. Please keep offering us those presentations and newsletter articles.

I attended the International Cost Estimating and Analysis Association (ICEAA) conference to represent SCAF in June. I presented a paper on macro-parametrics and my colleague Dr Mark Gilmour presented a paper comparing the maturity of the UK and USA cost engineering communities.

The ICEAA conference attendance was increased from last year with the event attracting 426 attendees with more US DOD and NASA staff present. With multiple presentations and training tracks there was not a moment of boredom all week. In my opinion, the hot topic at the conference was the psychology of estimating with the Best Paper Award going to Andy Prince for a paper on this topic, but it had a good airing in other papers also. I can also report that Andy Nicholls, who is the ICEAA UK director and a member of the SCAF committee received the ICEAA 2015 Association Service Award. Congratulations Andy and thanks for your support on both sides of the pond!

The conference organisers confirm that they have plans for a ICEAA conference in Europe next year and due to the high population of ICEAA members in the UK, specifically around Bristol, this is their preferred venue at the present time.
Your SCAF committee has signed a MOU with ICEAA so we have extended an offer to help with the organisation, please look for future announcements in the SCAF newsletter regarding this event.

The Aqua Book:

guidance on producing quality analysis for government

March 2015

The new HM Treasury Aqua Book - Guidance on producing quality analysis for government - has been published and is worthy of note here. There is a lot of high quality analysis conducted in the SCAF community and our workshops are testament to this. But the UK government has experienced some criticism resulting from difficulties with the analysis conducted for the Intercity West Coast franchise competition. The Aqua Book provides guidance for the development of quality analytical modelling across government. The aim is to extend best practice across the whole of government with focus on quality assurance, governance and accountability, culture, capacity, capability and control. The publication can be downloaded from the HM Treasury web site or google the title.

Following the signing of the MOU with the
Association of Cost Engineers (ACostE) I attended their council meeting on the 7 July 2015 and promoted the SCAF events. The ACostE has many more members than SCAF and a mixture of project controllers, cost engineers / forecasters / estimating and quantity surveyors.

The ACostE have their annual event at Cranfield University this year on 21 and 22 September with a full agenda of presentations and workshops.

In June, we visited Ribby Hall holiday village near Preston for the second year. The Spa hotel was excellent and the motel was moderately priced. This workshop was a great success again and if you missed the event there were some inspiring presentations and the question and answer session was very thought provoking.

The future programme for this year is shaping nicely commencing with our Annual Conference in September. This will be held at the QE II conference centre in London which is a new and more formal conference setting for SCAF. This is followed by a workshop on Investment Appraisals in Bristol in November. Enjoy the rest of the summer and put the dates in your diary now.

We look forward to seeing you all at the SCAF events throughout our 2015/16 society year.

Dale Shermon

SCAF Chairman

www.scaf.org.uk
SCAF Annual Conference

“Living with Austerity, Enabling Growth”

Tuesday 15th September 2015
The QEII Conference Centre, Westminster, London

The fiscal situation remains very challenging. With possibly further significant spending restraint planned up to 2018/19, the pressure is on - and will continue into the next Parliament. Uncertainty and austerity will continue to be the watchwords for public bodies during the next few years. Affordable government is the order of the day, while fostering the conditions for growth - with an emphasis on 'good growth' - particularly good jobs.

Innovators today recognise that the business case is the basic requirement to secure funding and key financial metrics are underpinned by a real and detailed understanding of cost. The very moment that funding is needed is often the time when the creator’s ‘baby’ needs the greatest attention – a tension that demands a rapid understanding of product and programme cost in particular. In this age of austerity, more than ever before, it is imperative that we aim to get more for less; now it’s important that we pause and help decision makers to achieve their project goals whilst staying within their budget. Our speakers for the Conference include:

- **Ron Finlayson**, *Strategy Director Defence*, QinetiQ – “The Technology Race: how can defence keep up?”
- **Dr Tim Sheldon**, *Head of Cost Assurance & Analysis Service*, DE&S, Ministry of Defence
- **Dr Linda Newnes**, *Head of Costing Research*, University of Bath
- **Jonathan Dranko**, HM Treasury – “Studies on Unit Costing within Government Departments”
- **Neil Davies**, *Former MoD Chief Economist and David Bangert*, *Managing Director*, Polaris Consulting – “Managing Defence Acquisition Growth”

**Registration and Costs**

Registration and coffee will be available from 09.15. The Conference will commence at 10.00. The costs for the workshop is £200.00 per delegate. A 10% discount is available for group booking of 4 or more delegates and a 15% discount is available for group bookings of 10 or more delegates. These costs include all refreshments, a buffet lunch and **FREE attendance (subject to availability) to all future SCAF organised events until August 2016**. Further details can be found on the SCAF website ([www.scaf.org.uk](http://www.scaf.org.uk)) or by contacting the Secretary, Neil Morrill by email at: ndmorrill@dstl.gov.uk or call 030 6770 3450

[www.scaf.org.uk](http://www.scaf.org.uk)
Letter from the Editor

By Arthur Griffiths, SCAF Newsletter Editor

The Summer Reception and Awards Banquet in July provided the perfect ending to the Society’s 2014/15 year (the new Society year starts in September). It was a lovely evening and enjoyed by all who attended.

This year we held a joint workshop with The Operational Research Society (Defence Special Interest Group), the workshop on Economic Analysis and the Strategic Defence and Security Review (SDSR) in February attracted a full-house and the participating teams presenting at the annual SCAF challenge surpassed everybody’s expectations. Feedback reports from the workshop in June and the summer reception are given later in the newsletter and, for the first time ever, we had to increase the room allocation in Preston to accommodate all the attendees.

We would like to take this opportunity to thank everyone who attended our workshops over the year and to their employing organisations for their continued support which is gratefully appreciated.

I must also apologise to Brian Tanner who continues to enthral us with his articles on his series of ‘Historical Trend Analysis for Naval Ships’. In the last newsletter I made the statement that Brian’s article on the QE Aircraft Carrier cost was the last in the series. However, I was reminded that there was one more to be added to the series (Offshore Patrol Vessels) and this is given later in this newsletter.

In the last newsletter I reported on seeing the USS Theodore Roosevelt which visited Portsmouth in March and was moored in the Solent for five days and how I was woken up every morning to the ‘Stars and Stripes’ piped through the ships loudspeakers every morning. The ship provided an excellent sight and I was reminded of these unusual sights when, in May this year I was invited to a House of Lords reception and, although it was a wonderful afternoon with good weather I missed seeing this floating advertisement for holiday rental accommodation which arrived the day after.

The programme for the Annual Conference in September 2015 is complete and planning for the November workshop is well underway. A list of dates for our future events is published later in the newsletter. I look forward to the Annual Conference in September and hope to see you all there.

Please forward articles, letters or any other ideas for inclusion in the newsletter to:

Arthur Griffiths
Editor, SCAF Newsletter
Email: editor@scaf.org.uk
Well this one took some beating. I thought that I had given some sound clues when I used the words ‘searching’ and ‘investigating’ and ‘buds’ but this seems to have confused many of you – so the success barrel has been reduced in size and my congratulations go to Brian Tanner whose name was drawn from a very small barrel of winners and correctly gave the answer as “The Giants Head at the Lost Gardens of Heligan in Cornwall”

This month’s picture on the front page is one of intrigue. It appeared overnight and prompted much debate within the townspeople. The question of “is it or isn’t it?” has been asked by the people for decades but there has been no confirmation or otherwise. Now fading the question is still unanswered. Where are we???

Please forward your answers to editor@scaf.org.uk. All the correct answers will be put into a barrel and the winner will be published in the next newsletter and provided with a small prize.

The EACE was established in March 1998. The group is a non-profit, voluntary organisation established to promote the function of Cost Engineering in Europe. It aims are to:

- Provide a forum for the exchange of experience, information and ideas relating to Cost Engineering activities.
- Stimulate and contribute to improvement in tools, databases and methodologies applied in the Cost Engineering process.
- Maintain cognisance of industry approaches to cost reduction trade-offs, including technology application, manufacturing process, etc.

The diversity of our members is one of our strengths as we bring together experienced professionals who can contribute and benefit from a free exchange of views and experience. We have a particular interest in the development of young people in our profession. Participation is drawn largely from the European Aerospace and Defence community but is not limited to this grouping. In recognition of the relevance and application of the Cost Engineering process in other high technology activities and the potential benefits and synergies, within other sectors, participation is encouraged from all sectors. The majority of the Working Group participants are engaged in all aspects of Cost and Project Management support including cost and resource estimating, scheduling, performance measurement, cost analysis, knowledge management, parametrics, risk, design to cost, value engineering, investment appraisal and supplier or subcontractor evaluation.

The Working Group meets yearly. The next workshop is due to be held early 2016. For further information please contact Dave Lewis, Chairman (EACE@hotmail.co.uk) or consider joining our Linkedin group. https://www.linkedin.com/grp/home?gid=3733058&sort=RECENT

www.scaf.org.uk
Having written articles on Historical Trend Analyses for frigates, aircraft carriers, and fleet auxiliaries, I thought I’d end the series with one on Offshore Patrol Vessels.

Firstly, what is an Offshore patrol Vessel (OPV)? Many years ago in the late 1970s when the Island Class OPV were entering service a paper was written by the then Admiralty Experimental Works at Haslar defining the OPV as a ship of 75m to 85m minimum length with a speed of 20 to 24 knots.

What was memorable was that the study initially perused wartime naval biographies noting that the degree of commentary on seakeeping depended on the class of frigate or destroyer. The ships’ characteristics were fed through a seakeeping computer programme, the results confirming the commentaries and led to the minimum size recommendation. The maximum speed was set by powering considerations, anything greater requiring a more sophisticated hull and significant increase in power, all of which would increase cost.

The term OPV can also be applied to larger ocean going vessels of the type in which case the ‘O’ stand for Ocean.

The armament of OPVs can vary greatly and for this Historical Trend Analysis they will be classified as follows:

**Type 1.** Armed with a simple manually controlled light gun, typically 20mm to 40mm

**Type 2.** Armed with a gun linked to a fire control system, typically 57mm to 76mm although some more sophisticated 40mm guns also fall into this category.

**Type 3.** Armed with a simple manually controlled light gun and capable of hangaring a helicopter.

**Type 4.** Armed with a gun linked to a fire control system and capable of hangaring a helicopter.

**Type 5.** An Ocean going OPV, which is a larger version of Type 4.

An admission is required at the outset. Data, i.e. press cuttings and the like, on the first generation of OPVs was collected whilst in the Ministry of Defence pricing and forecasting group, and was left behind on retirement. Much of the data was hard copy public domain information and recorded in a spreadsheet which was copied on retirement. However, whilst physical characteristics can in most cases be confirmed, in a few cases the cost data has no demonstrable provenance as nothing is recorded on the internet.

Firstly, what is the trend in OPV size? There are various types of OPV so how to analysis the data? For each type of OPV there are few data points and those that do exist are somewhat scattered, so I chose to analyse the data set as a family of OPVs with qualitative independent variables for the various types. The independent variables selected after some experimentation were: Hangar for helicopter; gun > 40mm; ocean going. So the default is the simple first generation **Type 1 OPV.**
Figure 1 is a graph showing displacement against Acceptance Date for the various types of OPV for which data was obtained. Figure 2 shows the various types of OPV and the resulting trend lines, the chosen analysis showing a geometric growth rate slightly in excess of 1% per annum, or 12% per decade, with a variation of ± 25%. 

Figure 1 Displacement v Acceptance Date

Figure 2 Displacement Trend Lines
And now to costs. These were normalised by the World Bank table of GDP deflators for most world nations and then converted into sterling using the 2014 average exchange rate. What was required for the analysis was weights – for specific costs – and dates – to fix the price base. Ideally the build or basic weight would give a true specific cost, but overall the only weight always available was Full Load Displacement. For dates, public domain information always has delivery dates but order dates quality varied so the year of order was used in the analysis.

Having defined OPV types at the outset the analysis found difficulty in categorising some OPVs while, due to the small data set, varying the category of one OPV significantly influenced the regression coefficients. After stepwise analyses it was found that just two variables: cost – shipbuild contract or project cost – and date gave good correlation.

In the course of the analysis some costs had to be considered as outliers and disregarded. Figure 3 is the plot of specific costs together with the regression lines:

The trend lines demonstrate a real cost growth of 2.3% per annum with a cost spread of +40%, -15% and 2.6% per annum with a cost spread of +50%, -25%.

Looking more closely at the outliers and Royal Navy OPVs. Figure 4 is a plot of the specific costs leading to the following observations:

a. Except for the Holland class OPV the outliers are the Irish Naval Service vessels built by Babcock Marine Appledore;

b. While there has been much comment about the £348M paid for the River Class Batch 3 currently under construction for the Royal Navy, the reason given being the cost of skills retention, the specific costs demonstrate a 2.75% per annum real cost growth.
The real cost growth is obviously influenced by the data. That for the Island Class and Castle Class came from the published Navy estimates and are also available at Hansard HC Deb 23 October 1989 vol 158 c358-61W. The River class were leased from BAE Systems in 2003 and purchased outright in 2012 for £39M. Production costs were estimated by assuming that the purchased cost reflected a 15% per annum declining balance depreciation. However, the resulting figure can be assumed to be the production cost of three vessels excluding or including the design cost. With design included the real cost growth is 2.4% which is similar to that from the overall analysis and the current construction of the Batch 3 River Class would be some one eighth greater than any projection.

Overall, OPVs come in several different types and the paucity of data has made analysis difficult. An overall analysis without quantitative factors for the various types provides a reasonable indication of the real cost growth. For any specific acquisition it may be that a near neighbour approach will offer the best comparator.
To celebrate the Society’s 31st Anniversary SCAF organised a combined Summer Reception with an Awards Banquet which was held at the Bailbrook Hotel, Bath. It provided members and their partners with a chance to meet up with friends and colleagues and gave us the opportunity to recognise and award members for their contributions to the Society over the year. Dale Shermon, Chairman welcomed everyone to the event on behalf of the Society and presented the Awards.

**Best Newsletter Article**

The first award of the evening recognised the number of excellent articles written by Brian Tanner, an Independent Consultant, who produced a series of articles on the use of Historical Trend Analysis to predict the estimated costs for future Naval Ships. This award was based on the consistently high quality of the subject and the ability of the author to attract many positive comments from our readers across the world.

**Best Quality Presentation**

The Committee here were looking at content, style, structure and overall presentation skills. The winner of the award was Andy Nolan, Chief of Project Estimation, Rolls-Royce for his paper on “The 7 +/- 2 uses for an estimation tool”. Commendations were also given to Matt Hemsley and Helen Holden from the National Audit Office for their presentation on “Helping the Nation Spend Wisely” and to Heiko Großmann (AltenBachConsult) for his talk on “Space Liner: Cost modelled with 4cost”. Andy was unable to attend the event and will be presented with his award at a later date.

**Best Technical Paper**

This award is given for the presentation giving the best technical content regarding techniques that can be utilised and adopted by the wider costing community. The winner of the award was John Moore a Senior Consultant with QinetiQ for his talk entitled “Utility-Based Methods for Acquisition Decisions”.

www.scaf.org.uk
Members Award

This Award was given in response to a members vote on who they thought was the best paper of the year. We were delighted to announce that this award was made to Andy Nolan, Chief of Project Estimation, Rolls-Royce for his presentation entitled “The 7 +/- 2 uses for an estimation tool” given at the SCAF workshop in February 2014. Andy was unable to attend and will be presented with his award at a later date.

The P G Pugh Award

This is the Society’s most prestigious award and was highly competed between a number of very innovative and thought provoking presentations given throughout the year. The winner of the award is Frank Murphy, from BAE Systems (Military Air and Information Systems) who spoke on “Value Engineering - is that all we need”. He focussed on Business and Solution Modelling and the three pillars of ‘Business Winning’, ‘Solution Modelling’ and ‘Commercial & Financial Modelling’. His ideas and enthusiasm showed throughout and he has been instrumental in demonstrating improvement in predictability and forecasting of future performance against KPIs to optimise business performance. His analysis to demonstrate that Value Engineering is an important element in managing cost, performance and value. But when used in isolation is unlikely to provide optimal solutions. Frank has since left BAE Systems and we wish him well in the future.

The Society also gave a commendation to Sanathanan Rajagopal in recognition for the research work into “Software Estimation: is the problem solved”. Sanathanan is conducting the study with the Ministry of Defence, Cost Assurance and Analysis Service in association with Cranfield University.
SCAF Service Award

The final Award of the evening was presented to Joe Harland in recognition for his services to the Society. He served as Chairman for 6 years, Deputy Chairman for 4 years and a further 5 years as Chair of the Software Special Interest Group. Joe was unable to attend the event and will be presented with his award at a later date.

SCAF 2015 Award Winners

Our thanks go to all our Award Winners and to everyone who attended and made this a night to remember.
The validation and verification (V&V) of a cost model will ensure that it is error free, will mathematically function correctly and will represent the real world in terms of its functionality. However, it will consistently produce validated and verified rubbish; if the data being entered is poor. Core to the generation of a credible and justified cost estimate is traceable, mature data. There is no amount of sophisticated analysis that will improve poor source data. We need cost and contextual historical data and also robust data regarding the future project, system or service that is to be estimated. So, where does this data come from? How do we gauge the maturity of the data we utilise? How do we use data and what can it tell us? What can we do in the absence of data? All this and more was considered in this workshop.

The first speaker of the day was Dr Tony Powell, Co-Founder and Managing Director of YorkMetrics. His presentation entitled “Content is king…but context is the kingdom” explored the nature, importance and value of context in data. He described a structured approach for managing information with application examples from aerospace and defence projects. He also illustrated how complexity is purely a level of intricacy that is not observed and highlighted implications on the way we make decisions and forecasts in the presence of uncertainty.

Ed Smith and Nigel Byrne from the Central Estimating Function at BAE Systems (Military Air & Information) spoke on an “Estimate Maturity Assessment Toolset” that was used to complement any type of cost estimating activity. It was designed to provide stakeholders with a simple, top level view of the maturity of the ‘Bases of Estimates’ of the majority cost elements of any designated costing activity, as well as providing an overall aggregate maturity score for the overall costing activity. This toolset has been adopted as part of BAE Systems Data Strategy in establishing a knowledge centre to inform future costing and pricing. This presentation showed exactly what was needed to capture context, data and application in a positive and reusable manner.

Just before lunch Andy Nolan, Chief of Project Estimation and Olimpia Vlad, an Industrial Placement Student at Rolls-Royce spoke on “Readiness Steadiness Go”. In 2012, Rolls-Royce wanted to objectively understand its cost estimating capability. The information would be used to define the development route over the following years. It would also form the benchmark for a measure of capability that could be measured routinely. In their inimitable and animated style Andy and Olimpia showed how the data had been gathered from the business, analysed and utilised. This was now being calibrated to help estimators understand the maturity of their estimates and its fitness for use.

“Project Maturity and Managing Uncertainty in Naval Shipbuilding” was the topic for Donald Hevern, Engineering Manager, Type 26 Global Combat Ship and Kenneth Andrew, BAE Systems Maritime. They discussed the Integrated Product and Process Development (IPPD) project that is delivering a step change in programme predictability and performance for Type 26 and wider BAE Systems Naval ships. A Key strand has

www.scaf.org.uk
been the measurement of product maturity in order to dashboard project status, manage trade-offs and deliver against reliable forecasts. An excellent presentation on a very complex programme.

**Dr Claire Taylor**, a Senior Consultant – Information Analyst with QinetiQ provided something different in terms of “Data mining on the ground contributes to safety in the air”. Her talk demonstrated how data mining and statistical analysis helped establish and consolidate with the engineering work of the Air Accident Investigation Branch. When British Airways Flight 38, a scheduled flight from Beijing Capital International Airport, crash-landed just short of runway 27L at London Heathrow Airport the Air Accidents Investigation Branch immediately initiated the investigation into the cause of the crash. The flight was uneventful and the engines were operating normally up until the final approach. The cause of the incident was therefore not immediately obvious and the team recognised from the outset that the investigation would pose a significant challenge. It was fascinating to see how the vast volume of avionics data was analysed to pinpoint areas of concern that was used to support the investigation.

“The Cost of Software Obsolescence Online Survey Results” was the topic for **Sanathanan Rajagopal** a DE&S Fellow and a Senior Analyst with the MoD’s Cost Assurance and Analysis Service. The aim of the research is to develop a framework to estimate the cost of Bespoke Defence Software Obsolescence Resolution at the early stage of the project life cycle. The survey had been divided into six sections and the responses from each were discussed in detail. In summary it was concluded that:

- There was a lack of dedicated resources to deal with Software Obsolescence.
- There was clear evidence that a reactive approach is the most applied Software Obsolescence mitigation strategy and majority of them plans for Software Obsolescence at in-service phase of the project life cycle.
- There was no standard, process or mechanism in place to monitor Software Obsolescence.
- There was inconsistency in defining Software Obsolescence.
- Software Obsolescence can trigger Hardware Obsolescence and vice-versa.
- There was inconsistency in what needs to be in a Software Obsolescence mitigation plan.
- There was limited evidence to suggest that the Software Project Teams proactively engage to identify Software Obsolescence.

Our final speaker of the workshop was **Terry Johns** who presented on “Risk Estimating: Guess work, Pressure or a valid process with control”. Terry’s presentation focussed very much on the ‘what’, ‘who’, ‘how’ and then underpinned many of the finding with case studies illustrating the consequences of improper analysis or even ‘lack of analysis and data interpretation’. We were all aware of commercial and project pressure but it was useful to see how information could be easily misinterpreted and to some degree ‘manipulated’. Terry’s final slides on the ‘can we fix it’ theme were very appropriate for everyone involved in cost and risk analysis tasks and went a long way to show ‘how not to do it’.

The plenary session was facilitated by **Dr Paul Baguley**, Research Fellow, Cranfield University who engaged the delegates and allowed an excellent summation of the day derived from the interaction.

Our thanks go to all the speakers and the attendees for an excellent workshop on a very topical subject. Copies of the available presentations are available on our website: [www.scaf.org.uk](http://www.scaf.org.uk)
SCAF Events in 2015/16


The fiscal situation remains very challenging whichever political party wins the election. Organisations today recognise that the business case is the basic requirement to secure funding and key financial metrics are underpinned by a real and detailed understanding of cost. The very moment that funding is needed is often the time when the creator’s ‘baby’ needs the greatest attention – a tension that demands a rapid understanding of product and programme cost in particular. In this age of austerity, more than ever before, it is imperative that we aim to get more for less; it is important that we help decision makers to achieve their project goals whilst staying within their budget. Please contact the Secretary if you are interested in attending this event.

17 Nov 2015  SCAF Workshop Theme: Investment Appraisal: What’s in it? The BAWA Centre, Filton, Bristol

The UK Ministry of Defence is proposing changes to the financial instructions relating to the development and application of Investment Appraisals for project approval. This workshop will discuss the effects of the changes and their implication for Industry in delivering whole life costs and value for money options. Please contact the Secretary if you are interested in presenting a paper at this event.

Feb 2016  SCAF Workshop – Royal Institution of Naval Architects, London – Theme to be agreed

Apr 2016  SCAF Workshop – Annual Cost Estimating Challenge, The BAWA Centre, Bristol

Jun 2016  SCAF Workshop – The Conference Centre, Ribby Hall, Preston – Theme to be agreed

2016  SCAF Summer Reception and Awards Dinner – Venue to be agreed

For further details on any of the above events please contact the SCAF Secretary, Neil Morrill by telephone on 02392 537 271 or by email: ndmorrill@dstl.gov.uk

www.scaf.org.uk
21-24 Jul 2015  

32nd International Symposium on Military Operational Research (32 ISMOR), Royal Holloway, University of London, Egham, Surrey.

Attendance at ISMOR offers a unique opportunity to spend four days exploring the application of analysis to practical issues in defence and security with a wide range of colleagues from across the world. As well as inspiring experienced practitioners with exposure to new approaches, innovative solutions and providing informal testing of ideas, it offers excellent development to early career analysts and an opportunity for the users of analysis to understand its potential. Further details and registration can be obtained from www.ismor.com

21-22 Sep 2015  

The Association of Cost Engineers Annual Conference 2015, Cranfield University, Bedfordshire.

2016  

EACE Workshop: We are advised that a European Aerospace Cost Engineering Working Group meeting will be arranged in 2016 and will be hosted by the European Space Agency’s ESTEC Centre at Noordwijk, The Netherlands. Further details will be published when available.

2016  

ICEAA Workshop: We are advised that a European Professional Development and Training Workshop run by the International Cost Estimating & Analysis Association (ICEAA) is being planned to be held in Bristol, UK during 2016. Further details will be published when available.
# SCAF Management Committee Meetings 2015/16

<table>
<thead>
<tr>
<th>Date</th>
<th>Venue</th>
<th>Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2015</td>
<td>QinettiQ, Bristol</td>
<td>2016 events programme</td>
</tr>
<tr>
<td>November 2015</td>
<td>BMT, Fareham</td>
<td>2016 workshops content &amp; SCAF challenge</td>
</tr>
<tr>
<td>December 2015</td>
<td>QinettiQ, Bristol</td>
<td>Finalise 2016 events programme and interim 2017 programme</td>
</tr>
<tr>
<td>January 2016</td>
<td>BMT, Fareham</td>
<td>Finalise challenge and financial budget for 2017</td>
</tr>
<tr>
<td>March 2016</td>
<td>QinettiQ, Bristol</td>
<td>Discuss awards nominations</td>
</tr>
<tr>
<td>May 2016</td>
<td>BMT, Fareham</td>
<td>Annual Conference, final details for awards dinner and committee nominations</td>
</tr>
<tr>
<td>July 2016</td>
<td>QinettiQ, Bristol</td>
<td>Annual Conference final details and November workshop interim programme</td>
</tr>
<tr>
<td>October 2016</td>
<td>QinettiQ, Bristol</td>
<td>2017 events programme and November workshop</td>
</tr>
<tr>
<td>November 2016</td>
<td>BMT, Fareham</td>
<td>Ideas for SCAF Challenge and February workshop</td>
</tr>
<tr>
<td>December 2016</td>
<td>QinettiQ, Bristol</td>
<td>Finalise 2017 events programme and interim 2018 programme</td>
</tr>
</tbody>
</table>

The committee would welcome any suggestions on particular topics that can be developed for debating at future workshops or for round table/panel discussion. We would also welcome any comments on changes or otherwise you might like to see to the workshop structure and content.

Please forward your comments to editor@scaf.org.uk where they can be put on the agenda for committee discussion and action.

Please also remember that the committee works for the members and will do their utmost to address any issues raised to the benefit of the Society.

---

**SCAF Corporate Membership**

Are you a company that sends 5 or more staff to any of our workshops? There are discounts available for block bookings with further flexibility offered for Corporate Membership. Further details can be obtained from the SCAF Treasurer, Dave Hedley email: dave.hedley@bmtrcl.com
For over 20 years the Society has sought to illuminate key issues in the analysis and forecasting of project costs—and to promote best practice within the cost forecasting community.

The Society provides a single point of contact for advice to those wishing to address key issues in the analysis and forecasting of costs and timescales of complex programmes.

Workshops and seminars are held at regular intervals throughout the year. A newsletter is published electronically 4 times a year.

Collaborative links with other societies has always been maintained and a library of relevant papers are available. A single annual payment at the Annual Conference entitles members to attend all the years’ programme of SCAF events at no further cost. The Summer Reception is also provided free to SCAF members and their guests.

SCAF is committed to providing Continuing Professional Development (CPD) through the provision of its skills workshops and its support to Professional Development courses.

The Society is self-funded and a Not-for-Profit organisation that continues to provide its members with exceptional value for money.

---

**SCAF 2014/15 Committee Members and Contact Details**

**Chairman:** Dale Shermon  
Chair@scraf.org.uk  
T: +44 (0) 1179 528 455  
M: +44 (0) 7785 522 847

**Treasurer:** Dave Hedley  
BMT Reliability Consultants Ltd  
Dave.hedley@bmrcl.com  
T: +44 (0) 1489 553 163

**Secretary:** Neil Morrill  
Dstl  
dnmorrill@dstl.gov.uk  
T: +44 (0) 2392 537 271

**Committee:**  
Paul Moseley  
MoD, CAAS  
descass-cet-hop-cf-sl@mod.uk  
T: +44 (0) 306 797 1023

Karen Sparks  
Atkins  
karen.sparks@atkinsglobal.com  
M: +44 (0) 7881 503 389

Dr Paul Baguley  
Cranfield University  
p_baguley@cranfield.ac.uk  
T: +44 (0) 1234 750 111 x 5658

Dr Paul Wood  
BMT HiQ Sigma  
paul.wood@hiqsigma.com  
T: +44 (0) 1225 820 980

Andy Nicholls  
PRICE Systems  
andy.nicholls@pricesystems.com  
M: +44 (0) 7500 866 822