This year ASEC will take place at Heythrop Park Resort, Enstone, Oxfordshire on 16 and 17 November 2021. The theme for ASEC 2021 is

“Creating Stability in Uncertain Times”

Within this, we intend to explore the following subthemes:

• Embracing Change and Transformation
• Building Resilient Organisations
• Developing Technical Skills for the Future
• Reflection on Best Practice in Unusual Circumstances

To keep up to date with the latest ASEC news visit the conference website.

CALL FOR CONTENT

The ASEC call for content guide is now available on the ASEC 2021 website.

The guide covers the ASEC 2021 Structure as well as the call for Papers, Tutorials and Posters. It also discusses the submission review process, the anatomy of how to write a good paper, deadlines and other information.
ASEC 2021 Updates

Call for Content Timelines

**Call for Papers**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 February 2021</td>
<td>Call for presentations issued</td>
</tr>
<tr>
<td>29 March 2021</td>
<td>Submission of abstracts</td>
</tr>
<tr>
<td>w/c 12 April 2021</td>
<td>Invitation to submit papers</td>
</tr>
<tr>
<td>10 May 2021</td>
<td>Submission deadline for six-page papers</td>
</tr>
<tr>
<td>18 June 2021</td>
<td>Review process complete</td>
</tr>
</tbody>
</table>

**Call for Tutorials**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>17 February 2021</td>
<td>Call for tutorials issued</td>
</tr>
<tr>
<td>29 March 2021</td>
<td>Submission of abstracts</td>
</tr>
<tr>
<td>w/c 12 April 2021</td>
<td>Acceptance of abstracts</td>
</tr>
<tr>
<td>10 May 2021</td>
<td>Submission of full tutorial proposals</td>
</tr>
<tr>
<td>w/c 24 May 2021</td>
<td>Final conference tutors will be selected and notified</td>
</tr>
<tr>
<td>18 June 2021</td>
<td>Submission of words advertising tutorials to the INCOSE UK Secretariat (these will be included in the ASEC 2021 promotional material)</td>
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**Call for Posters**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 February 2021</td>
<td>Call for posters issued</td>
</tr>
<tr>
<td>18 June 2021</td>
<td>Submission deadline</td>
</tr>
<tr>
<td>02 August 2021</td>
<td>The student posters are judged and a free student place awarded</td>
</tr>
<tr>
<td>09 August 2021</td>
<td>Final conference posters will be selected and notified by this date.</td>
</tr>
</tbody>
</table>

Endorsed Training Provider Scheme

Endorsed Training Provider Event

As announced in the previous issue of ePreview, the Endorsed Training Provider scheme is designed to allow organisations who provide professional Systems Engineering related training courses to apply and be assessed in order to obtain the status of “INCOSE UK Endorsed Training Provider”.

We are now pleased to announce that the first INCOSE UK Endorsed Training Provider event will take place between 16 and 18 March 2021.

This online event will be run for our newly registered Endorsed Training Providers - Burge Hughes Walsh Ltd and Scarecrow Consultants Ltd. Their courses are summarised below:

- Each course will run for 3 days with 8 - 15 delegates. The cost of the course, for each delegate, is £2,000 + VAT for non-members and £1,800 + VAT for members. The booking system with full course details will be opened shortly.

For more information, and to register your interest please email techserv@incoseuk.org.

3-day Systems Engineering Fundamentals Course

This live online 3-day course focuses on the concepts, principles and practices of Systems Engineering to give attendees both understanding and specific knowledge to apply Systems Engineering to the design of complex systems.

Three-quarters of the 3-day course will be devoted to processes and tools that will allow attendees to:

- Gather and specify Stakeholder Requirements
- Analyse the “problem” described by the Stakeholder Requirements to determine the System Requirements
- Design the system to meet requirements through the exploration of technological and architectural choices. Undertake detailed design to specify the robust optimum.
- Confirm the engineering activity and solution through verification and validation

Underpinning the “how to do” Systems Engineering content are two sessions that explain the rationale for Systems Engineering together with an examination of the Systems Thinking concepts that are the foundation of and the core competence of Systems Engineering. These sessions provide the necessary knowledge to understand the structure and logic of Systems Engineering.

Burge Hughes Walsh Limited (BHW) is an established consultancy and training provider with considerable experience in change management programmes incorporating elements of people, processes and systems.

We operate in the area of ‘Customer Satisfaction Improvement’ through process improvement, including Systems Thinking, Lean and Six Sigma. We support programmes through a commitment to transfer change management skills to the client’s people through ‘train-the-trainer’, facilitation skills development, the training of concepts, tools and appropriate improvement methodologies, project coaching and leadership development.

For more information on Burge Hughes Walsh visit their website.
Professional Development

Revised UK-SPEC fourth edition

For those INCOSE UK members who are working toward professional registration, the revised fourth edition of UK-SPEC was published on 31 August 2020 with the intention that it will be fully implemented by 31 December 2021.

The UK Standard for Professional Engineering Competence (UK-SPEC) sets out the competence and commitment required for registration as an Engineering Technician (EngTech), Incorporated Engineer (IEng) or Chartered Engineer (CEng). It also includes examples of activities that demonstrate the required competence and commitment.

The overall approach in redrafting UK-SPEC was to aim for greater clarity, making the requirements, i.e., the Standard itself, more obvious, while providing better examples of how applicants might provide evidence of having met the Standard.

The third and fourth versions of the UKSPEC are available to download from the INCOSE UK website along with a useful document which highlights the changes between them.

INCOSE UK will also republish their guidance for systems engineers in mapping their experience to the competences laid out in the UKSPEC. This will be available later in 2021.

IMPORTANT: If you intend to apply for professional registration during 2021 please note the following:

■ 01 May – 31 July 2021 – applications accepted based on either V3 and V4 of UKSPEC
■ 01 August 2021 onwards – applications accepted based on V4 of UKSPEC only

To support applicants in understanding these changes we will also be offering online sessions on the following dates:

12 May 2021 A/B competences Clinic
16 June 2021 Professional Registration Webinar (UK Spec V4)

Our regular INCOSE UK overview of professional registration covering how to apply and answering your questions on the process. Includes input from our assessor team and a recent INCOSE UK applicant.

Please contact profdev@incoseuk.org to register for any of these useful sessions.

A Model-Based Approach to Systems Engineering

This course is aimed at systems engineers and managers, software engineers and managers, quality personnel and anyone involved with business or enterprise modelling and will bring benefits such as:

- Improved Systems Engineering through use of MBSE.
- How to achieve improved communication, enhanced understanding and how to minimize complexity through use of modelling.
- How to demonstrate benefits of MBSE and their associated value to stakeholders within the business.
- How to implement MBSE into a business.
- Above all, improved confidence for you, your teams, your business and your clients.


Scarecrow Consultants are a tool-independent model-based systems engineering consultancy, formed in 2014 by Prof Jon Holt and Simon Perry with a mission to ‘promote the use and application of Model-Based Systems Engineering (MBSE) in businesses worldwide, by pioneering new and pragmatic techniques for MBSE in the real world’

All Scarecrow Consultants are true experts in the theory and real-life application of MBSE and are recognised at an international level.

For more information on Scarecrow Consultants visit their [website](https://www.scarecrowconsultants.com).

ENDORSED TRAINING PROVIDER

The Endorsed Training Provider scheme allows organisations who provide professional Systems Engineering related training courses to apply and be assessed in order to obtain the status of “INCOSE UK Endorsed Training Provider”. Successful applicants will be able to use this term, and an associated logo on publicity and marketing material.

As part of the assessment, training providers will be required to submit evidence based on a series of categories:

- Organisational Activity
- Organisational Capability
- Course Content – providing an overview of standard courses
- Course Content – providing an overview of the how the training provider creates and tailors courses for individual clients
- Training Competence
- Training Reviews

Please note that it is the training provider that is endorsed, not the detailed content of the actual courses.

All assessments will be carried out by suitably qualified and experienced Systems Engineering professionals, with a re-assessment required every three years, or whenever the scope of the provider’s initial assessment changes.

For more information please visit [our website](https://www.incoseuk.org).

Contact: profdev@incoseuk.org

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Please contact profdev@incoseuk.org to register for any of these useful sessions.

A session outlining the changes in the UKSPEC 4th edition and how this will affect applications for professional registration. The session will include an overview of the changes and will answer any questions relating to these in a Q&A.
### Online Sessions

In order to provide information and guidance, we have set up a series of interactive Professional Development Zoom sessions. These sessions are open to all and there is no requirement to be a member in order to attend. The following sessions are available to book.

#### 10 March 2021 - CPD Clinic

In this session we will be offering guidance to members on how to approach CPD and what to include. This session is an open forum for discussion and includes information relating to CPD for both professional registration and SEF Certification.

#### 14 April 2021 - UK Spec v4 Webinar (changes to competences)

A session outlining the changes in the UKSPEC 4th edition and how this will affect applications for professional registration. The session will include an overview of the changes and will answer any questions relating to these in a Q&A.

#### 15 September 2021 - Interview Preparation Clinic

A session exploring the professional registration interview. Find out what is involved and the best way to prepare for this. An open forum session with input from a recent candidate and the INCOSE UK assessment team.

#### 10 November 2021 - C/D/E Competences Clinic

In this session we will be focussing on the UKSPEC C,D & E competences and how systems engineers should look to map their experience to these when applying for professional registration. The session will be an open forum which includes input from the INCOSE UK assessment team.

#### 12 May 2021 - A/B Competences Clinic

In this session we will be focusing on the UKSPEC A&B competences and how systems engineers should look to map their experience to these when applying for professional registration. The session will be an open forum for discussion and will include input from the INCOSE UK assessment team.

#### 14 July 2021 - SEP Certification Clinic

Attend this session to gain a better understanding of INCOSE UK SEP Certification. The session will be an open forum for discussion and will cover an overview of the requirements to apply for each level and details of the application process. Input from a recent candidate and a Certification Application Reviewer will be included along with a Q&A.

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### Case Studies - Richard Beasley and Jon Symons

Both Richard Beasley and Jon Symons have recently transferred their CEng Registrations to INCOSE UK.

Richard has worked for Rolls-Royce (RR) since 1986 and became a senior management level specialist in Systems Engineering in 2013. Richard said his biggest achievement is getting it accepted that in RR engineering the goal is to make

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### Systems Engineering Professional Certification

If you are planning to apply for ASEP or CSEP please be aware of the following update on examinations. The INCOSE Certification Program is changing its testing provider from 1 April 2021. Going forward we will no longer be testing at Prometric computer test centres. Instead, we will be offering online testing, which you can do from a location of your choice, with your own computer. We will be using live, remote, video proctoring. The candidate testing experience will remain very similar, with 120 multiple-choice questions and immediate pass/fail results displayed on screen.

Please note:
- From the 1 March all exam candidates will take the exam using this new method.
- All candidates who were originally scheduled with Prometric will be allowed to test with Prometric until 31 March.
- All candidates with exam eligibility beyond 31 March may access the new online scheduling system from the beginning of March, and may take exams online starting 1 April.

All affected existing INCOSE UK candidates will receive an email with further information on the process going forward. If this affects you and you have not received an email, or have any questions please contact protev@incoseuk.org

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We would like to send congratulations to the following who have attained ASEP, CSEP and ESEP since the last ePreview. Members listed have given their consent to be published.

- Simon Tinling
- Jonathan Loughran

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**“Systems Engineering the way RR does engineering”**

Jon also works for Rolls-Royce and says “because I moved into a role where I wanted to learn more about Systems Engineering and to build up a network of like-minded individuals.” You can read both Case Studies in full on the INCOSE UK website.
On the 5 February 2021, Prof Jon Holt and Simon Perry, authors of the new “Advanced Applications in System Engineering - Implementing MBSE into Your Business - The Trinity Approach” sat and spoke to attendees in the first of a series of Meet The Author sessions designed to further discuss and explore the topics presented in publications.

The event, held online via Zoom, was well attended and informative.

The authors began by discussing the germ of the idea for The Trinity Approach and how the years of experience helping introduce Model Based Systems Engineering (MBSE) into organisations stood them in good stead to write the book.

During the discussion, and fielding questions from the attendees, Prof Jon Holt reiterated how the publication was not specifically about MBSE itself but focussing on how you could bring MBSE, and what level of MBSE if needed, into your company.

The next Meet the Author event is on 9 April 2021 where Paul Davies will chat about his book Don’t Panic! The Absolute Beginner’s Guide Managing Interfaces.

To book a place, please email events@incoseuk.org

INCOSE UK are delighted to announce the release of another addition to the Don’t Panic! book series - Don’t Panic! The Absolute Beginner’s Guide To Architecture and Architecting by Mike Wilkinson and Tim Rabbets.

The book focuses on Architecture in Systems Engineering. It aims to dispel the perception held by many that Architecture in Systems Engineering is elusive, abstract, complex and difficult to understand.

Architecture is all about fundamental structure and properties and is one of the most powerful system concepts. It lies at the heart of Systems Engineering. System architecting brings disciplined thinking to articulating and addressing the essentials of a system in terms of scope and order of architectural considerations.

Although this is an introductory book, it encourages rigour and draws on extensive and varied practical experience.

You can pre-order a copy of Don’t Panic! The Absolute Beginner’s Guide To Architecture and Architecting by visiting the INCOSE UK online store.

All these titles can be purchased the INCOSE UK Online Store
INCOSE UK News

Service Systems Engineering Working Group Update by John Davies, UKAB Chair

The core team has now restarted work and planning online meetings bi-monthly. Notes are stored on the Service Systems Engineering Working Group Wiki. The Group, [SSEWG], has been investigating how System Engineers, involved in the analysis, design, development and maintenance of a Service, (such as the NHS, carpools, Amazon), can take advantage of a model-based approach. In particular looking at how Stakeholders and their interactions are captured. During previous work have found this area of particular importance and now well covered in models. We will be asking the wider Working Group membership for their experiences in this area.

MBSE Interest and Working Group Summary by James Towers, MBSE Working & Interest Group

The MBSE Interest & working groups currently have over 300 register members and meet regularly throughout the year. Until the current COVID situation this has been face-to-face at host locations, however due to obvious restrictions the meetings have moved online and have proved to be very successful with great attendance and contribution. In 2020 topics covered included: “How to introduce MBSE into an organisation”, “Ontologies”, “Patterns”, “The cultural challenges of adopting MBSE”, “Machine Learning Applications for MBSE”, and “How to Integrate Soft Systems Methodology & MBSE”.

The MBSE Interest Group held its first virtual meeting of 2021 on Wednesday 27th January. The meeting was attended by 32 members from 23 separate organisation representing Academia, Aerospace, Defence, Automotive, Consumer Electronics, Rail and Retail and other sectors. The agenda included a status report on the efforts of the MBSE working group, followed by a guest presentation from Christian Simons (DE&S) who gave a presentation on his recent thesis titled ‘System Design Considerations for recyclability’. Both the working group update and Christian’s presentation instigated valuable discussion resulting in another worthwhile event.

The group currently plans to hold four more virtual meetings this year in March, May, July and October, although the potential exists for additional one-hour webinars, if suitable speakers can be arranged. Further details of the currently scheduled meetings are available on the INCOSE UK website.

The MBSE working group, which is constituted from a subset of interest group members, is continuing its work in the areas of: “MBSE Languages, Methodologies & Tools”, “MBSE & BIM”, “MBSE Competencies”, “MBSE Patterns” and “MBSE Value”, as well as a joint work-stream called “Architecture & MBSE” run in collaboration with the Architecture working group. Further details about these work-streams can be found on the groups wiki, which can be accessed via a link on the website. If you are interested in actively contributing to one of these work-streams, then please contact a member of the committee (details on website).

Railway Interest Group Webinar
Webinar “Network Rail’s Systems Integration for Delivery (Si4D) Framework” by Derek Price, Technical Head of Discipline (System Integration) for Network Rail

Auto Interest Group meeting and AGM
This meeting will be a virtual meeting

Endorsed Training Provider Event
Secure your place on one of the three day SE courses being offered as part of this event. For more info see page 3.

MBSE Interest Group Meeting
Topics to be confirmed and Work Streams status. This meeting will be a virtual meeting.

Meet The Author - Zoom Meeting
Meeting Paul Davies, the author of Don’t Panic! The Absolute Beginner’s Guide Managing Interfaces

INCOSE UK Joint Meeting
The first Joint Meeting of the UK Council, UKAB, Group Chairs and ECF Members will be a virtual event.

MBSE Interest Group Meeting
Topics to be confirmed and Work Streams status. This meeting will be a virtual meeting.

ASEC 2021, Heythrop Park Resort, Oxfordshire
The Annual Systems Engineering Conference is the UK’s premier Systems Engineering event, attracting a wide range of industry, academia and government professionals along with international presenters

ADVERTISE WITH INCOSE UK
INCOSE UK is a Professional Engineering Institute (PEI) focused on Systems Engineering.

With over 1,000 members coming from diverse backgrounds covering purchasers, system developers and academics and representatives including aerospace, automotive, defence, transportation, communication and telecommunications, INCOSE UK is the best place to get your message across.

Please contact advertise@incoseuk.org for more information