



Case Study: CEng

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As a graduate of the Loughborough University Systems Engineering Course, developed in partnership with BAE Systems and Fraser Nash, I feel that I have finally "come home" in transferring my CEng and membership from the IET to INCOSE UK.

I joined the BAE Systems Graduate Development Framework after leaving University in 2007, I was actually interviewed for my first role by former INCOSE UK President Alan Harding. I have performed a number of Systems Engineering roles during my 13 years with the Business working on Ground Station design for an Unmanned Air System, Information systems integration on F-35, supportability analysis on Eurofighter Typhoon and service design for international campaigns.

Since then I have finally found a niche as Support System Architect. I now spend my time using Enterprise Architecture and other Systems Engineering tools to design, qualify and mobilise service solutions for Military Aircraft. I am very pleased to have been asked to bring these skills to the Tempest Programme for a new role in 2021 where I will be responsible for the technical aspects of the Support Solution development for the UK's Future Combat Air System (FCAS).

Achieving my Chartered Engineer status several years ago was the proudest moment of my career to date. One of my fellow Loughborough classmates, also working at BAE Systems was interviewed on the same day. The fact that we were both successful is testament to the training we received on the Systems Engineering course and the experience we have gained from a supportive organisation.

Congratulations on transferring Chartered Engineer (CEng) title to INCOSE UK. What inspired you to move your registration?

As a Systems Engineer by training and also through experience, INCOSE UK is a natural home for me to continue my professional development. I have been a member for a couple of years now and the recognition of the organisation by the Engineering Council made it the perfect time to transfer my CEng and become a more active member of the Systems Engineering community.

How did you find the application process? Was it challenging to document all your work experience and did it take a long time?

As a transfer rather than a new applicant, the process is obviously slightly different. The focus is more on demonstrating the commitment to continuing professional development rather than detailed work experience. The Professional Development Review process which my company uses meant that much of this information was already available and having an

up-to-date development plan really made this process straightforward.

How easy was it to track down supporters and references in support of your application?

I am very lucky that there is a strong INCOSE UK presence within BAE Systems and I have long term working relationships with a number of active INCOSE UK members. I was able to provide two references who are known within INCOSE UK and who are well aware of my recent work experience to support my application. I don't believe that the process actually requires INCOSE UK members so anyone with the CEng certification should be able to support an application.

Tell us about your experience of the assessment process?

The assessment process was fairly straightforward, the initial steps with the forms and evidence was tracked through the website. Once all of this information had been uploaded and submitted the Secretariat provided regular communications on how the process would progress and where my application was up to. There are a couple of review stages and I was given feedback at each stage to let me know how my application had been received. Even with my successful application there were suggestions about how to improve my evidence against the UK-SPEC standard.

In what ways has registration benefited your career?

The UK-SPEC standard almost forces those who are looking to achieve Chartership to explore a variety of roles to gain the required experience. I believe that this range of experience has positioned me well to apply for new roles within my current Business and develop into Management positions. My organisation has recently demonstrated a strong commitment to supporting its Engineering employees pursuing Chartership by reimbursing membership of professional institutions and registration fees. Chartered Engineer status is now a pre-requisite for most of the Senior Engineering roles within the organisation. Achieving this standard will allow me to progress further within BAE Systems.

How does your employer benefit from your professional registration?

As I mentioned previously, in seeking to achieve Chartership I have had to explore roles which provide me with the necessary breadth of experience to address all the competencies. In reaching the required standard, I have now demonstrated that breadth of experience and a level of capability, which obviously makes me a more valuable asset to my company. Personally, I saw contributing to the development of the

Systems Engineering capability within my organisation as an excellent way of building up some of the key competencies, this also benefits my organisation, especially where there is a community of Engineers all looking to contribute in the same way.

rewarding and something that I absolutely plan to continue doing.

Is there any advice you would pass on to someone considering professional registration?

Do you participate in any other career-related activities, such as mentoring, volunteering or membership of other engineering groups?

I have previously acted as a STEM (Science, Technology, Engineering and Maths) Ambassador for BAE Systems, promoting the opportunities provided by STEM careers in local schools. More recently (after achieving my CEng) I have acted as a mentor for other people within the organisation looking to achieve Chartership, helping them with self-assessment and the actual application process. This is immensely

The actions that you need to go through to be ready to transfer your professional registration to INCOSE UK are useful to do at any stage of your working life. The act of collating the required information and refreshing your development plan (if it's not already 100% up to date) can provide renewed impetus to take the next step in your career or pursue that opportunity that you've been putting off. Personally speaking, going through the process has now set me up to launch into some of the INCOSE UK Working Groups and really get value from my membership.