



Case Study: CEng

Marcos Cardoso



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Marcos is an aerospace engineering professional with more than 15 years of experience in product development across the aerospace and defence industries. His career has been built on driving complex projects through the full product lifecycle - from early requirements definition and design, through software change processes, testing, certification, and into long-term product support.

Passionate about advancing technology in highly regulated environments, he combines deep technical expertise with collaborative leadership, ensuring successful outcomes in multidisciplinary and international teams.

In his current role, he provides technical leadership across systems architecture, integration planning and providing strategies, ensuring that complex technologies evolve into fully engineered, integrated and certifiable solutions that work safely and consistently in their intended environment.

Congratulations on gaining your Institute for Systems Engineering Chartered Engineer (CEng) title. What inspired you to become professionally registered?

After becoming a CSEP, the professional registration was a natural step to validate my expertise and commitment to the discipline. For me, obtaining a CEng was a way to formally recognise my expertise and responsibility in Systems Engineering throughout my career and represented a milestone in the identity of becoming a Systems Engineer capable of taking

responsibility for significant technical risk and judgement. My employer also encourages engineers to affiliate with professional bodies and pursue chartered recognition, which reinforced my decision to apply.

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

The process was reflective, a bit demanding, but incredibly valuable. For me documenting years of experience required reflection and discipline, but it also helped me see my career professional journey and the impact of my work more clearly. It took me time to structure evidence clearly, yet the framework helped me see the breadth of my contributions across projects throughout my career. It took me 3 months to build the evidence ready for submission and 9 months in the overall process until the confirmation of the professional registration by the Engineering Council. I would suggest for new applicants to have personal commitment and discipline and seek PRA advice early on the application to guide in capturing the required evidence.

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

For the references I looked to the strong professional relationships I've built from previous Systems Engineering projects. The people I approached were genuinely supportive and encouraging. All references had worked closely with me and had seen my engineering contributions, so they understood the significance of the application and were happy to contribute.

Tell us about your experience of the assessment process?

The interview felt like a technical conversation with peers who understood the realities of delivering complex engineered systems. Rather than trying to catch weaknesses, they were interested in how I made decisions, handled uncertainty, managed interfaces, and ensured safety and integrity across the life cycle. It covered not only technical knowledge but also judgement, leadership, and ethical responsibility.

In what ways has registration benefited your career?

I consider that CEng has reinforced my credibility as a technical leader. I also have the perspective that achieving CEng opened more opportunities for leadership roles, increased trust when engaging with stakeholders, and strengthened my ability to influence engineering direction within programmes.

How does your employer benefit from your professional registration?

I consider that my employer benefits from the assurance that critical engineering decisions are made by someone who has been independently assessed for competence and professional integrity. In my view, my CEng registration also supports organisational credibility, customer confidence, and strengthens governance around system safety within the company. It also allows me to mentor others toward registration, building capability across the project.

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

As part of my current role, I mentor early-career engineers, helping them develop their technical expertise and confidence in applying sound Systems Engineering practice. I also contribute to professional groups and internal knowledge-sharing initiatives, promoting best practice in MBSE, and systems thinking.

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

My advice is to approach professional registration as an opportunity for reflection of your professional journey. Engage with mentors and peers who know your work, their perspective will help you recognise strengths you may overlook. Above all, see CEng as an investment in your identity as a professional engineer. The process will clarify your professional journey, strengthen your credibility, and open doors you didn't realise were there.