

around the UK and overseas who work as one team to support, serve and protect the UK's frontline forces, *Quality World* speaks to Richard Walker, a Senior Quality Manager at Defence Equipment and Support (DE&S), a highly specialised part of the Ministry of Defence, to find out how quality is structured at the organisation.

Words: Dina Patel

DEFENCE DEFENCE



efence Equipment and Support (DE&S) is a bespoke trading entity and arm's length body of the UK's Ministry of Defence. The organisation manages a range of complex projects to deliver equipment and support to the UK's Armed Forces: the Royal Navy, British Army and the Royal Air Force. Headquartered in Bristol, with operations across the UK and overseas, DE&S employs around 11,500 civilian and military staff to deliver an equipment programme, spending £157 billion over a 10-year period. The organisation procures and supports equipment to enable the British Armed Forces to defend the welfare and security of the United Kingdom, support international peace keeping and provide humanitarian aid.

DE&S's programme of work covers technologically complex and challenging projects with its portfolio including warships, fighter jets, armoured vehicles, missiles, communications systems and battlefield infrastructure. The organisation's customers are the Ministry of Defence and the Armed Forces, and it is crucial that their requirements are translated into contracts and that equipment is delivered successfully into service with the Armed Forces.

Dina Patel speaks to Richard Walker, a Senior Quality Manager at DE&S, to find out why an efficient quality management system, good communication and an emphasis on culture are necessary for maintaining and improving operational effectiveness at DE&S.

QW: What does your role involve at DE&S?

Richard Walker: My role is focused on support for the Armed Forces' air platforms. The Air Support operating centre within DE&S is responsible for delivering a dynamic and diverse portfolio of equipment and services. This includes the support of the Airseeker platform, working closely with the United States Air Force and the procurement of the new Wedgetail platform

already in use by the Australian Air Force. Our business scope ranges from essential commodity items, through sophisticated synthetic training services and devices, up to multimillion-pound aircraft, providing vital capability and support to operations. My role is to take responsibility for the implementation and management of a sustainable and measurable ISO 9001:2015 certificated quality management system for the multifaceted delivery team.

This enables the business to measure performance when delivering our portfolio and support the safety management system through governance, assurance and improvement activity.

I also facilitate accountability for the management system within Air Support by setting clear targets and focus. My role also covers delivering a shift towards a more "just quality culture", adding value to the business by increasing productivity, quality, output and assurance for our customers.

QW: How is quality structured at the organisation?

RW: The organisation is large. We deliver lots of different things to different people. With around 11,500 employees, everyone has a responsibility in delivering quality. An annual management review is conducted with our senior leaders, which is informed by the quality management system. We also have quality specialists employed to enable governance, assurance and improvement. They are our subject matter experts who work within wider teams. There are also people we have trained who specialise in delivering quality for a particular aircraft. They act as our point of contact for anything quality-related. They have regular monthly quality assurance meetings for each aircraft and then they meet quarterly for quality review meetings. In these meetings, we look at all aspects of governance, assurance and improvement as well as the management intent and our customer's requirement.

QW: What challenges have you faced in your role at DE&S?

RW: Standardisation is one challenge I have faced. DE&S is made up of four units – Ships, Land, Air and Joint Enablers. Joint Enablers is a team of people and they look after the helicopters that are operated by the Army and the RAF. Historically, they've all worked discretely to deliver different outputs. Ships would deliver

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MY DAY SPEAKING TO THE CQI TEAM ABOUT GOVERNANCE

In August, I visited the CQI office in London to deliver a facilitated exercise, focusing on the importance of governance.

CQI staff were divided into teams and were asked to build a Lego model. One team had only the Lego pieces, another team had the Lego pieces and the picture of how the model should look, and another team had the Lego pieces, the picture of how the model should look and instructions. These three different levels resulted in varied levels of success.

We then came back together and discussed the importance of clear, accessible and understandable instructions/governance that are relevant to the persons completing any given task.

The CQI team engaged with the exercise and hopefully had fun and learned a lot. In the past, I have always delivered this to a more engineering-focused audience. This means they are cautious, precise, deliberate, questioning, organised and formal in their approach to the task. The CQI team is a mixture of differing personalities and professions, meaning there are some competitive, purposeful types working with patient, relaxed types. This delivered a different approach to the task, but similar final results. It was a fun and informative experience.



BICHARD WALKER

SENIOR QUALITY MANAGER AT DE&S TELLS QW WHAT WORLD QUALITY DAY MEANS TO HIM

"World Quality Day [14 November] is a great opportunity to engage with more people across our business. We have stands around our sites and promotional information. We will be informing people of the history of quality systems development, 100 years of the CQI, what the quality team can do for them and the training opportunities we can offer (Root Cause Analysis, Six Sigma, Audit, Continuous Improvement Facilitation and more). We always get fantastic engagement and spread the influence the QMS has on delivering a quality output to our customers."

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to the Navy, Land would deliver to the Army and Air would deliver to the RAF. As the needs of our customers change due to the evolving threats they face, we must transform and work closer together to deliver their requirements.

QW: How did you overcome these challenges?

RW: First, we need to understand the problem, the problem being duplication of effort, the configuration of guidance and tightening purse strings. Then containing and developing new ways of working to meet the ever changing challenges. We have taken advantage of DE&S's investment in IT solutions, which has allowed for the complete modernisation of our databases and management systems. This has streamlined processes, delivered huge efficiencies and eased access to key information.

QW: What are your current objectives?

RW: My current objective is working with the Head of QM, other senior quality managers and the Air Support delivery space. We're looking towards gaining certification to ISO 9001:2015 – Quality management systems. My focus is embedding the good work delivered through our transformation and modernisation activity into updated systems and ways of working within the delivery space.

QW: How do you deliver governance, assurance and improvement at DE&S?

RW: Our newly modernised business management system has been developed around the principles of governance, assurance and improvement. We have a clear and accessible governance structure of leadership, management intent, guidance and regulation. This, in turn, is assessed for risk and opportunity, quality escapes are captured and trended alongside activity to develop and deliver our robust assurance and improvement programme.

Before joining DE&S, I was fortunate to take on different roles during my career, providing me with experiences that have helped me in my current role. I have checked the quality of products in a food factory environment and I have been an engineer maintaining the quality and airworthiness of aircraft on an aircraft carrier against tight regulation. I worked with customers looking for prestige automobiles to purchase against clear needs and demands. I helped develop a consolidated quality management system for Home Office Policing to deliver government budget challenges. I also worked as a governing director of a school to ensure high-quality learning and achievement of "good" and "outstanding" Ofsted scoring. In addition to this, I also had the pleasure of working with a small Dutch manufacturing company to develop government tenders and an integrated internal management system.

The most crucial thing I have learned through my experience is the importance of good communication. This means communicating with the right people to understand the needs, limitations, skills and resources and deliver a clear benefit within these means. It's not about investing huge amounts to deliver limited benefit.

QW: What challenges did you face when you were working for the Home Office?

RW: They were similar to the challenges I face here at DE&S. There are 43 Home Office police forces that are all delivering diverse output to suit the customers in their area. Lincolnshire, for example, is very rural. They have a very rural police force, whereas the Metropolitan Police forces are delivering the same product to a completely different customer. Trying to standardise the service is therefore quite difficult.

QW: What kind of activities have you led to enable the business to deliver quality management?

RW: By utilising quality tools and principles gathered over the years, for example, Deming's principles, the 5-Whys problemsolving tool and Six Sigma, we have worked

HOW DE&S USES THE CQI'S COMPETENCY FRAMEWORK TO RECRUIT AND LEAD



DE&S, working with the MOD, has worked closely with the CQI for many years to align its skill set requirements with those of the CQI Competency Framework. "We currently develop our teams through a series of learning and development opportunities focused around the MOD Quality Licencing Scheme," explains Richard Walker. "This scheme is based around defence acquisition, in-service support and the GAI model. This is further developed through our QMS governance artefacts, such as quality and business plans, which mirror the GAI model."



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very closely as a team to deliver against our requirements. A key example of this is our newly developed audit tool. As previously mentioned, we have recently taken advantage of new IT systems across the enterprise. I am the quality lead of a complex management system in a heavily regulated environment, maintaining legacy aircraft to deliver in a modern world. I was presented with the challenge of widening the internal audit and improvement effort outside engineering practices. I did this by employing and developing a strong team of quality professionals, providing the right tools, time and support and tapping in to existing governance structures for all our business areas. The scope has become all-encompassing and is delivering an economy of scale for business improvement that could never be achieved previously. My next biggest challenge will be to share the lessons we have learnt developing and modifying our systems with other teams across the enterprise and with our suppliers.

QW: How does DE&S facilitate a culture of continual improvement?

RW: At DE&S, culture is very important. We are a diverse, inclusive workforce, covering many types of activity in many locations through procurement of equipment for the Ministry of Defence and support of in-service assets. We employ a blame-free culture to ensure everyone feels able to report any issues without undue repercussions. We have also built a partnered approach to improving quality with both our suppliers and customers. This sees us planning, delivering, analysing and reacting as a joint venture.

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Images: Royal Air Force