ACCREDITATION

CASE STUDY

NATS manages air traffic movements in the UK’s airspace to ensure the safety of aircraft and the travelling public, handling 2.2 million flights a year or 6,000 flights a day.

The company owns and operates critical parts of the country’s national transport infrastructure, including Air Traffic Control (ATC) centres and their associated control systems, radar, navigational and radio sites and communications networks. The ATC centres are a joint civil-military operation sharing many common systems.

NATS is jointly owned under a Public-Private Partnership (PPP) by seven UK airlines, airport operator Heathrow Airport Ltd (formally BAA) and NATS staff, with the remaining share resting with the Government. NATS employs around 4,000 people.

There are huge demands on the company to cope with managing among the most complex and congested airspace in the world, made more complex by the UK’s position as the gateway for air routes between Europe and North America.

Delivering the future

Successful delivery of projects is crucial to NATS’ business to enhance its services in a unique and challenging environment. Projects must be developed and implemented into a safety critical operation while NATS continues to deliver a 24/7 service.
The company has a £1 billion long-term investment plan to replace critical infrastructure and deliver new technology-based solutions. This means some 100 projects are in progress at any given time, involving over 500 people, an annual capital spend of £130 million and with a key project delivery occurring every two weeks.

Most major programmes require an integrated project team approach, reflecting the diverse ATC operations and stakeholders that need to be brought together under the umbrella of a single programme. Portfolio management is embedded to help plan and launch the right projects at the right time to deliver NATS’s future.

It wasn’t always this way. Faced with a legacy from its days as a public sector organisation in the 1990s, subject to restrictive public sector borrowing limits and starved of finance, its project management organisation was largely dysfunctional.

Significant change occurred as a result of partial privatisation, which led to a new and demanding capital investment plan with aggressive timescales. With this came the need for a vital improvement in project management capability to bring it in line with industry best practice.

In 2005 a new Programmes Division was created to provide clear accountabilities for delivering the projects, together with a project management improvement programme involving the whole company.

Central to this is the Improvement Roadmap, based on an equivalent of the international capability maturity model rating of 1 to 5. As well as improving capability in manageable steps it also reinforces and embeds the steady progression of people and processes and a suite of project management tools to help achieve effective project delivery.

Together with robust governance providing a controlled project environment and leadership from the NATS Executive, the entire company has risen to the challenge to lift project management to a new level.

In four years, project management maturity rose from an initial 1.4 rating to 4.0 and today the Programmes Division has 110 staff including Senior Programme Managers, Project Managers, Project Planners and Project Support Staff.

In recent years NATS has made a huge step-up in project management and is now seen by the global aviation industry as leading the way in technical innovation and delivery of business change and new solutions.

This is reflected in an impressive collection of awards:

**2010**: APM Project of the Year, the Chartered Management Institute’s Change Management Award and the Re-locate Best Relocation Strategy/Policy and Inspirational Team of the Year Award – all for the new ATC centre at Prestwick Airport, Scotland.

**2011**: APM Project Manager of the Year - NATS project manager Paul Arnold

**2013**: World IHS Jane’s Air Traffic Control Awards, Enabling Technology Award – NATS Programmes’ next generation air traffic control tools programme, iFACTS.

**2013**: Royal Institute of Navigation, The Duke of Edinburgh’s Navigation Award for Technical Achievement: iFACTS

“iFACTS has helped revolutionise the way NATS works, with the amount of ATC attributable delay reaching record lows. This is great news for our customers and it is fantastic to see that achievement has been recognised by the industry.”

Frank Wood, General Manager NATS Programmes Division

**Oct 2013**: IPMA achievement award winner, community service/development Project: Maths mentoring

**Nov 2013**: APM project of the year award finalist: Radar Replacement Programme

Members of the NATS team at the 2010 APM Project Management Awards
Right people to deliver the right processes

A key aim of the NATS Programmes Division is to ensure that continuous improvement in its leadership and project management capability is a habitual way of life.

Harnessing the industry-recognised professionalism, technical ability and strong safety culture of its people and mixing that with the demand for project management improvement has required a strong focus on and investment in developing leadership, teamwork and project management skills.

“Personal professional development and commitment is one of real the cornerstones of improving capability,” explained Frank Wood. “It gives people the real opportunities and structure to progress their careers in an exciting and challenging environment. The benefit for NATS is that it is constantly enhancing its project management capabilities and therefore improving and refreshing its delivery capability. We never stand still in our capability development.”

As part of the Improvement Roadmap, project staff have developed NATS’ own set of project management processes aligned to industry best practice, the APM Body of Knowledge and APM Competency Framework. This has ensured processes are not only relevant but are owned, valued and understood by the whole project community.

Frank Wood said: “At the outset, it was clear that there were existing pockets of excellence. We did not have to start from scratch but engage and merge the areas of excellence with others to develop a consistent standard approach. Once we achieved consistency, it was possible to measure our progress.

“I'm a firm believer that if you can measure you can manage! It gives you a firm basis for driving effective improvement and demonstrably measuring the level of success that’s being achieved. The result is the high value roadmap that we have today, which is owned by all our staff and has been externally recognised on a number of occasions.”

The best processes require competent people to apply them, which is why the NATS Programmes Division has developed a range of targeted training opportunities through a blend of internal and external courses and qualifications, e-learning, coaching, mentoring and opportunities to shadow senior managers.

Project staff are encouraged to take responsibility for owning and managing their own training and development needs. A bespoke competency assessment and development framework was developed with APM accredited training provider Provek, which supports NATS’ business objectives.

Based on the APM Body of Knowledge, it provides a tool for project staff at every level to assess their competencies against IPMA competency levels and identify and address their development needs as part of the regular performance review cycle.

At the heart of NATS professional development programme is the Programmes Ac@demy which arranges regular briefings staff from internal and external experts to relay experience and lessons learnt.
NATS Programmes professional development focuses on three key areas:

1 Industry and in-house skills training

2 Easy access to training and development through the on-line integrated talent management system (which incorporates online learning tools, course booking and recording development plans and performance reviews)

3 Leadership and regular open communication

As part of NATS’ drive to improve, it has a lessons learnt library on a searchable database of key lessons, giving project teams an effective way to share and learn from experience, success and mistakes.

Building on this, NATS has identified the top 10 lessons and ensured that they are automatically incorporated into the risk management database for all new projects as risks, ensuring that all projects are considering the lessons learnt as part of the natural launch process.

Commented Frank Wood: “As an organisation we have broken the mould and are learning from our key lessons!”

A strong emphasis is placed on project management staff attaining recognised project management qualifications; support and encouragement is actively given to those who wish to achieve them.

The majority of those in the Programmes Division hold qualifications such as APMP, Managing Successful Programmes and PRINCE. New project managers and planners at various levels in the project management hierarchy are required to have or commit to achieving APM qualifications as a requirement of the job. Attending and contributing to professional association events is also considered an important element of training and development.

Significant time and effort has been invested in enhancing the communication training for project managers to improve style and skills. Professional communications has undoubtedly proved highly effective in promoting effective interaction by fostering a positive climate of trust, openness and respect.

Personal story
Don Mackenzie joined NATS on the Direct Entry Graduate (DEG) scheme after leaving Robert Gordon University with a BEng Honours in Electronic and Electrical Engineering and Post Graduate Diploma in Personnel Management.

The DEG scheme involved classroom-based training on NATS engineering systems and project management, followed by a year of ‘on the job’ experience in both project management and systems engineering – a process he found extremely intensive and rewarding.

He was then appointed as a deputy project manager working on the delivery of voice communications systems into the ATC centre at Prestwick.

“My previous DEG training experiences at Prestwick proved invaluable for my new project management role as I had achieved good working relationships with my customers and had full understanding of their requirements and targeted benefits for achieving project success,” he said. “It also allowed me to feel confident in performing contract negotiations, stakeholder management and managing successful transition of systems into service.”

Following a number of key project delivery successes, Don was promoted to project manager and given a wide range of communications, navigational and surveillance ATC infrastructure projects to manage. One notable project involved the provision of ATC tools to enhance aircraft arrivals stack management at Heathrow, which was awarded Project of the Year by the Institute of Engineering and Technology in 2006.

He is currently a Senior Programme Manager, working on a major programme to redesign the airspace structure covering the whole of the UK. One of Don’s recent achievements includes the successful project management and delivery of the significant airspace changes (civil and military) in support of the 2012 Olympic and Paralympic games.

Experience supplemented with up-to-date training has helped him to maintain a very high standard of project management competency and led to Don obtaining Open University and APM Project management qualifications and becoming a Chartered Engineer Member of the Institute of Engineering and Technology.
**Client testimonial**

NATS and the MOD are the primary Area Radar Air Navigation Service Providers (ANSP) in the UK. Management of the UK airspace is unique in Europe as it is mandated to be managed by military and civil organisations in a joint and integrated manner.

In 2006 the MOD contracted NATS to be the sole provider of the UK MOD Area Radar technical platform used by military air traffic controllers. The contract has delivered a series of complex projects to integrate the military onto the same systems as used by their civilian colleagues with the result that military area radar controllers now sit alongside their civilian controllers in NATS Area Radar Operational Centres.

These projects have been delivered without disruption to the provision of the operational service, four years ahead of schedule, within contracted budgets and have exceeded customer expectations.

“NATS project delivery was key in the joint MOD and NATS contract delivery teams being awarded an Air Officer Commanding1 Group Commendation in the 2012 Queens Jubilee Birthday Honours list, the first time that an external supplier has been recognised in the Queen’s Birthday honours.”

**Wing Commander John Pickering**

Area Radar Capability and Support Integrated Project Team Leader

“Being APM accredited is not just about what it means to me, but what it means for the members of our Programmes Division. It provides them with confidence that our professional development programme is up there with the best, having been externally benchmarked by the APM. It helps them to recognise their personal competencies and development opportunities; this then enables a far more focused and structured personal development review and action plan that meets theirs and NATS’ needs. This is a win-win for NATS and its project management team.”

**Frank Wood,**

General Manager NATS Programmes Division
Association for Project Management and NATS

NATS is a corporate member of APM and the Major Projects Association. It has established strong links with APM requiring the company’s project managers to achieve APM qualifications.

The Programme Division processes and competency framework are both aligned to the *APM Body of Knowledge* and project staff have access to an electronic version of the publication. Skills are mapped against IPMA levels, to which APM qualifications are also linked.

NATS is represented on a range of APM Special Interest Groups, including Governance and Risk and the company regularly provides keynote speakers for conferences and other events.
**APM Corporate Accreditation**

APM Corporate Accreditation will help you stand out as an exemplar in the development of project management professionals. It provides assurances to your customers and suppliers and allows you to attract and retain the best project management talent in the country.

APM Corporate Accreditation recognises the commitment of organisations and professional development services to the defined APM Five Dimensions of Professionalism, each of which is supported by an APM standard:

**Breadth**
The APM Body of Knowledge defines the knowledge needed to manage any kind of project. It underpins many project management standards and methods including the National Occupational Standard in Project Management.

**Depth**
The APM Competence Framework provides a guide to project management competences. It is part of your professional toolkit; mapping levels of knowledge and experience to help you progress your skills and abilities.

**Achievement**
APM qualifications take your career in new and exciting directions. They are recognised across the profession and aligned with IPMA’s 4 level Certification Program.

**Commitment**
Continuing Professional Development helps develop your project management practice. A targeted development plan will enhance your project management career.

**Accountability**
The APM Code of Professional Conduct outlines the ethical practice expected of a professional. Becoming an APM member shows your commitment to the Code and sets you apart from others.