

MINISTRY OF DEFENCE

Driving the Successful Delivery of Major
Defence Projects: Effective Project Control
is a Key Factor in Successful Projects

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SUMMARY



1 For the last 20 years the annual Major Projects Report has highlighted the variable performance of the Ministry of Defence's (the Department's) highest value defence equipment procurement projects, many of which have suffered cost overruns and delays.¹ This performance has been a matter of concern for both the Department and Parliament, and the Department has introduced a large number of reforms designed to improve project performance. To help understand why sustained improvements in performance are proving so difficult for the Department and its industry partners to deliver, we analysed the complex cultural and systemic drivers which need to be managed if military capability is to be delivered faster, cheaper and better. The initial results of this work were published in March 2004.²

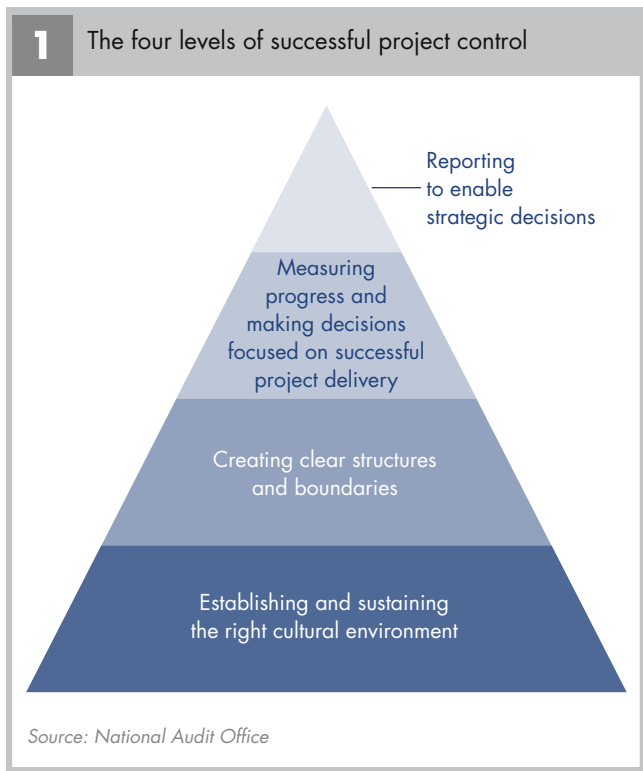
2 Working with the Department, we are undertaking a series of studies examining some of the drivers identified by our initial modelling in more detail. Each study will examine practical evidence of how well a specific driver is being managed in the defence environment and explore how that driver is addressed by overseas and commercial comparators. Each study will compare current defence performance to a theoretical "gold standard" developed from this comparator work, against which no individual organisation is likely to perform consistently well in all areas. The recommendations in this and subsequent reports are intended to bring improvements in defence acquisition performance to help ensure all defence projects routinely adopt practices closer to our gold standard.

3 This report, the first in the series, examines the effectiveness of project control on defence projects. For the purpose of our analysis we have defined project control as including how progress is tracked and decisions made on projects to ensure successful delivery, and the structures and processes which need to be put in place to underpin these activities. We chose project control as the first area for examination because it is a critical linking factor between a number of the key drivers of successful acquisition identified by our earlier work including management information, governance and assurance, risk and cost estimating, and ultimately budgeting and funding. The methodology for the study is described in Appendix 1 and more details about our case studies are given in Appendix 2.

4 Drawing on the evidence from our comparators and the best defence projects, we have developed gold standard good practice criteria for project control within four main levels. The report is structured around these four levels, which are illustrated as a pyramid in **Figure 1** and presented in full in **Figure 2**. All four levels of the project control pyramid must function as a coherent whole if projects are to progress towards successful conclusions. Traditionally much activity has been focused on the top three, more quantifiable and scientific, levels of the pyramid. However, the strongest message emerging from our analysis is that it is the "softer" factors about building and sustaining relationships (the bottom level of the pyramid) upon which success is predicated. Without this strong foundation even projects which apply all of the right project management processes are unlikely to succeed.

¹ Report by the Comptroller and Auditor General on the Major Projects Report 2004, HC 1159-1, Session 2003-2004, 10 November 2004.

² Driving successful delivery of major defence projects: drawing on wider practice in tracking the progress of major projects. A Briefing and Consultation Document by the National Audit Office, March 2004.



5 Overall, we found that some defence projects compare favourably with our gold standard with a number at the very forefront of good project control. However, there is a wide variety of performance against the gold standard across projects. The challenge for the Department and its industry partners will be to learn from its own good experiences and the success of others to help consistently deliver more successful project outcomes on all projects. Recognising this challenge, we are making the outcomes of this study available in two main formats. This report focuses on recommendations to help ensure all defence projects routinely adopt practices closer to our gold standard. The evidence included in the report is not exhaustive but provides an indication of current practices and the beneficial effects on projects where the changes we recommend have been applied. Given the richness of the evidence we have gathered, we are publishing it all on a website (www.naodefencevm.org) to enable those interested to explore the evidence underpinning our recommendations in more detail and to better understand the gold standard criteria we have developed.

2 Our gold standard for effective project control

Establishing and sustaining the right cultural environment

Good practice sub-criteria

Enablers

Open, trusting and honest relationships between client, prime contractor and supply chain

Explicit “no surprises/no blame” culture (defined as not penalising staff for bringing potential problems to light early) between all parties.

Regular and timely discussion of all matters that affect the project with no no-go areas.

Mutual benefits through shared ownership of end product or outcome between all parties.

Clarity of purpose and common understanding at all levels throughout all organisations.

Agreements between the parties to undertake a project as a partnership or alliance.

Measurement of client-contractor relationships

Regular independent assessments of client-contractor relationships as these develop during a project.

Supportive and open corporate environment

Explicit no surprises/no blame culture (defined as not penalising staff for bringing potential problems to light early) on the project and within the wider project-organisation.

Clear information requirements with clear purpose.

Clear boundaries of authority and action.

Clear link between corporate and project governance.

Creating clear structures and boundaries

Efficient organisational structures, responsibilities and lines of authority

Management boards, frequency and purpose of meetings, project controls and performance measures all agreed at the start.

Clear delegated authorities and decision-making/escalation criteria.

Flexible approach demonstrated by both client and contractors.

Project management, commercial, financial and technical skills available

Projects can select staff.

Organisation has a career development and skills training structure in place that covers each area of expertise.

Tenure in post for a large proportion of a phase and over key events.

Thorough review and understanding of project delivery plan, objectives, assumptions, risks and opportunities

Explicit review and agreement of work packages, costs, specification, risks and opportunities prior to contract signature and setting of performance, time and cost boundaries.

All stakeholders clearly informed and engaged in establishing structural foundations and boundaries.

Subject matter experts used in drawing up cost and risk models.

Set performance, time and cost boundaries when all risks are understood/formal investment approval gates

Performance, time and cost boundaries based on clear understanding of risks and grounded in realism.

Performance, time and cost boundaries and delivery plan independently reviewed before submission to investment board.

Clear information and evidence requirements for business case.

2 Our gold standard for effective project control *(continued)*

Creating clear structures and boundaries *(continued)*

Good practice sub-criteria

Enablers

Ability to make trade-offs/change management mechanism

Mechanisms in place (such as working groups) for making informed trade offs between time, performance and cost as project progresses and delegated authority to do so.

All stakeholders clearly informed and in agreement.

Mechanism to apply lessons learned as project progresses.

Measuring progress and making decisions focused on successful project delivery

Analysis of credible, timely and relevant metrics monitoring progress against the performance, time and cost baseline

Forward-looking analysis of information from techniques (such as Earned Value Management, milestones, planning/scheduling or risk management) and metrics (such as costs or in-service availability measures).

Verification/validation of data.

Arrangements for transparency and accuracy

Shared Data Environment or clear method for sharing documentation between all stakeholders.

Co-location of client and contractor teams/staff.

Arrangements for access to contractor/client's data.

Use of IT where practical (common software, email connection).

Contract as key component of project control

Recognition of contract as control tool during negotiation.

Commercial staff reside with project.

Contract is realistic, mutually beneficial and reflects ownership of risk.

Project-to-project peer reviews and Learning From Experience

Formal and informal mechanisms for exchange of ideas, problem-solving and sharing experience between projects for benefit of project staff.

Formal capture of lessons learned.

Reporting to enable strategic decisions

Consistent reporting system for all projects feeding into analysis for senior management

Reporting system based on principle of "generate once, use many times".

Clear purpose for reporting system (whether that is to track delivery, track against corporate targets or for forward planning).

Analysis of reports by dedicated staff.

Formalised, regular system of senior management review to give assurance of delivery

Clear information requirement, format and purpose for regular reviews.

Feedback mechanism.

Independent, non-advocate reviews

Clear purpose for independent input (advice for project staff or assurance for senior managers, or both).

Avoidance of duplication and over-burdening project staff.

Benefits are clear - not viewed as a hurdle to overcome.

Ongoing measurement of supplier performance to learn lessons

Collection of data and maintenance of historical database.

Senior level contact with contractors.

Analysis of trends and issues.

Contractors are clear as to confidentiality and use of data on their performance.