UNITED KINGDOM'S DEFENCE PROCUREMENT: A PERIOD OF SMART ENLIGHTENMENT OR HALTING CULTURE

Ph.D. Thesis

By

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The views expressed in this dissertation are those of the author, and not of The Ministry of Defence, London

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DEDICATION

This thesis is dedicated to my mother Mrs Edith O'Callaghan who throughout her life possessed a clear understanding of value for money, invested solely in goods that met her requirements and was frustrated by time wasting. She thought highly of British design and products particularly the product of the educational system. Her support is sorely missed.
The aim of this thesis is to map predominant cultures and examine their compatibility with the Smart Procurement Initiative. An initiative that was identified in the Strategic Defence Review¹ to address the limitations of UK's defence procurement process that had previously failed to deliver defence equipment to cost, time and specification. The introduction reviews those factors, which influenced procurement since World War II. The background to UK's current procurement process is then analysed to show how previous Government reviews of the process led to reforms and yet still the recurring problems of cost and time over runs to equipment programmes were exposed. External Geopolitical factors are then considered to see how they influenced the procurement process and associated cultures, as is Information Technology, which has had such a significant effect on both business and military affairs. The deliverables in any procurement process are new, replacement or additional capabilities and the major supplier is industry. The changing nature of the national and international defence industrial bases are therefore explored to identify their influence on the process. The SDR, which included the tenets of the Smart Procurement Initiative (SPI), is then scrutinised to establish the novelty and likely impact on the procurement process.

The focus is then turned to culture and the importance and principles of culture and culture change is addressed. This insight is followed by two surveys, one employing the internationally recognised Organizational Culture Inventory, which were used to determine what behaviours were expected of people working in the Equipment Capability Customer (EEC) within the Ministry of Defence and within the Defence Procurement Agency (DPA). The survey results provided a cultural baseline that indicates whether the prevailing organisational cultures within both EC and DPA would be supportive of or dysfunctional towards the SPI. The next aspect of the research was a series of in-depth interviews conducted in both organisations to explore the attitudes, behaviour, values and beliefs regarding the SPI. In addition, the interviews were to provide a clear understanding of SPI from the respondents' perspective. By identifying the prevailing organisational cultures through "triangulation"², the likelihood of those cultures supporting SPI is determined. Conclusions are then drawn and recommendations made.

²Jick T.D. "Mixing Qualitative and quantitative methods: triangulation in action." Administrative Scientific Quarterly, 24, 1979 Pages 602-611
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I would also like to thank the many people who freely gave of their time and knowledge to help me in this thesis. They are too numerous to list but are mostly to be found in the
organisations shown below. The co-operation of those organisations in providing access to their personnel, systems and conferences is gratefully acknowledged.

MOD-Ministry of Defence
DGA-Delegation Generale pour L’Armament, Paris
DOD-Department of Defence, Washington DC
FMV-Forsvarets Materiel Verk, Stockholm

A full list of all the published sources including books, articles and speeches that were consulted is contained in the bibliography. I am also grateful to all those who assisted in finding the material. In particular, I appreciated the help of the University College London libraries with books and articles and the library of the Ministry of Defence with official papers.

Finally, I wish to thank my family for their support and tolerance given this paper was written immediately on retirement after 37 years service.
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PART ONE

CHAPTER ONE

INTRODUCTION

“Frankly, gentlemen, in defence procurement, we have a real mess on our hands”3

World War II up to the end of the Cold War

During the period of economic growth and Cold War that followed World War II, the defence budgets of most nations increased in real terms, with additional expenditure by particular nations to fund active operations.4 These increases in defence budgets were smaller than, and only partially compensated for, the concurrent escalation in the unit costs of defence equipment.5 This period also saw years of relative stability and predictability for British defence with a key military focus on NATO and containment and the defence industry enjoying a strong national demand and international market. During this time military doctrine was based on a Soviet threat-driven culture as were equipment needs. For example, each evolution in the Soviet “T”-series tanks was countered either with improved armour or ammunition, or a new buy (between 1966-1998 Chieftain, Challenger 1 and then Challenger 2 were introduced and Centurion, first employed in Korea, was also kept in service). In addition, during that period doctrine was fundamentally defence orientated with the most demanding military task related to a Warsaw Pact massed armour attack. Moreover in that climate of a recognised nuclear threat, the voting population, comprising many with military service, believed in the retention of a deterrent orientated military capability and this was reflected in Government defence provision decisions post 1949.6 Notwithstanding this steady state, the search for greater value for money (VFM), a key Thatcher tenet was being implemented under the Levene reforms and in parallel, privatisation of the defence industry continued.

Post Cold War to SDR

The dismantling of the Berlin Wall and the subsequent collapse of Soviet communism and the Warsaw Pact created significant pressures upon Western Governments. Pressures that stemmed from a public perception that a major threat no longer existed and therefore a peace dividend, manifested in defence budget cuts, was required\(^6\). In response to this demand, the British Government conducted two major studies. Options for Change that reduced the armed forces by 64,000 with the Army losing 40 thousand\(^9\); and the Defence Cost Study that emphasised the,“Front Line First”, at the expense of the infrastructure, cutting £750 million a year in 1996/97 and more in subsequent years\(^10\). Thereafter, the succession of the Labour Party to power led to a fundamental re-examination of Britain’s defence requirements and the Strategic Defence Review (SDR)\(^11\) was conducted with the aim to build on strengths, remedy our weaknesses, and provide a framework for Defence for the 21 century\(^12\). Under SDR, the resultant size of our Regular forces did not decline significantly; indeed the Army was to be some 3,000 larger\(^13\): in concert with a vision of matching forces more cost effectively to revised commitments\(^14\). The need for effective high-capability equipment, possessing a decisive technological advantage in key battle winning areas, was also recognised.\(^15\) However, with a shrinking budget which had declined to 2.4% by the year 2000\(^16\), a more effective balance of investment process was required to ensure limited funds were better spent on matching commitments to both equipment and manpower.

Personnel Issues and their impact on the equipment budget

The defence budget in 1980 was divided with 41% attributable to personnel costs and 44% on defence equipment. By 1996 that ratio had changed to 39% and 44%\(^17\). With this level of investment there remained personnel shortages in many areas, which, with the high level of operational commitments

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\(^6\) Malcolm Chalmers, Paying For Defence, Pluto, London, 1985, Appendix A.
\(^7\) Defence Analytical Services Agency, “UK Defence Statistics 1998”. In 1985 approx. 5.2% of Gross Domestic Product was invested in defence, by 1997 this figure had reduced to 2.8%.
\(^8\) The Strategic Defence Review, The Stationary Office, London, July1998, Chapter 1, para11. The so-called ‘peace dividend from the end of the Cold War has already been taken. Since 1990, defence expenditure has fallen by some 23% in real terms and our forces have been cut by nearly a third.’
\(^9\) HMSO, Britain’s Army for the 90s, P4
\(^10\) HMSO, The Defence Cost Study, P8
\(^12\) Ibid. Introduction paras1-3
\(^13\) Ibid., Supporting Essay six, para36
\(^14\) Ibid., Chapter 6, para126
\(^15\) Ibid., Chapter 11, para27
\(^16\) Ibid., Chapter 10, para198
\(^17\) Defence Analytical Services Agency, “UK Defence Statistics 1997”
were creating excessive and unsustainable pressures on many of our people\textsuperscript{18}. By re-balancing force structure in accord with commitments there was to be a post SDR saving in manpower overall\textsuperscript{19}. The Navy was to reduce by 1,400; the Army increased by some 3,300; and the RAF remain similar. The Army was approximately 3,000 under manned at the time of SDR. The Royal Naval Reserve was increased by 350; the Royal Air Force Reserve by 270; and the Territorial Army reduced by approximately 16,000. The Civil Service Staff were to be further reduced by 1,400 posts over a few years.\textsuperscript{20} Addressing the many aspirations laid out in the SDR to address overstretch, undermanning, recruiting, and retention, will take time, trust, and money\textsuperscript{21} and of course a compliance by society to continue to follow the flag. Alas, society did not respond positively to the recruiting drives and deficits remain with the Amy still failing to meet old establishment figures let alone the SDR enhancement. Further initiatives may demand additional monies that are likely to come from the equipment budget.

The other issue impacting in this area is the demographic trends among young people of service age. Back in 1988 the prediction for the numbers available for military service up to the mid-1990s was seen as, "young workers will demand grown up wages\textsuperscript{22} and the Armed Forces will be forced to compete with the higher wage demands that other parts of the employment market are prepared to pay". The net effect will be "... privileged generation of youngsters who will enter the job market smiling in the knowledge that demand far exceeds supply\textsuperscript{23}". At the same time it was clear that the predicted significant drop in both 20-24 and 25-29 Age Groups would result in a significant retention problem for the early years of the next century.\textsuperscript{24} These social trends that have impacted on the Armed Forces in spite of constant counter-initiatives will create on going pressure to increase the proportion of funds allocated to pay and pensions possibly at the expense of equipment. This trend could also lead to further demands to achieve greater value for money in the equipment budget through: continuing use of competition and collaboration; and the relatively new to Ministry of Defence (MOD) Public Private Partnership initiative. Moreover, if remedial action is not taken soon to resolve these long running personnel problems it is likely that beliefs and values may significantly alter and fundamentally affect the military culture. It should be recognised that previous cuts have impacted on the culture which, would be pressurised still further if additional force reductions were sought to resolve the overall manpower shortfall.

\textsuperscript{18} Ibid., Chapter 1, para11
\textsuperscript{19} SDR, Supporting Essay 6, Future Military Capability.
\textsuperscript{20} SDR Supporting Essay 9, para78
\textsuperscript{21} SDR Supporting Essay 9.
\textsuperscript{22} John Penycate, "The Generation Game", The Listener, 8 December 1988, p29.
\textsuperscript{23} Ibid. p29.
\textsuperscript{24} HMSO, Social Trends 18, , London, 1998.
Jointery and its impact on defence

At the heart of the SDR was a series of initiatives across defence to co-ordinate the activities of the three services more closely\(^\text{25}\), seeking in the process a pooling of expertise to maximise their punch, and in parallel eliminating duplication and waste. It is worth briefly tracing the gradual evolution of MOD activity from a single Service towards a tri-Service culture. One writer has characterised the process of resource allocation within the MOD from 1946 until 1957 as “Defence by Bargaining” and from 1959 until the present as “Defence by Discussion.”\(^\text{26}\) The former was characterised by the Services bargaining for slices in the defence cake without a unifying strategic concept to keep them together. The latter marked a move away from pure Service domination by strengthening the centre, via the establishment of a policy staff supporting the first Chief of the Defence Staff (CDS), Lord Mountbatten. The 1964, Defence White Paper buttressed the process of “Defence by Discussion”. The Secretary of State’s powers were confirmed and the central staff answering to CDS was expanded.

The next step in diluting single Service predominance was in 1981 under John Nott who had become aware that the MOD was dominated by the three Services’ cultures\(^\text{27}\). He also extended further the process of “Defence by Discussion” and the theme of the political executive’s erosion of Service influence. He first abolished the single Service Ministers replacing them with functional Ministers: Ministers of State for the Armoured Forces and Defence Procurement. And to achieve his desired culture he further strengthened the position of CDS at the expense of the individual Service Chiefs. This trend continued, irrespective of party, when in 1983 Michael Heseltine introduced the Management Information System for Ministers (MINIS) and also another round of reorganisation ensued that saw the introduction of a unified Defence Staff and the formation of the Office of Management and Budget (OMB). In 1994, under Michael Portillo’s direction the Central Staff and OMB became formally unified under the “Centre” banner. However, the Services were never acquiescent during these reorganisations as was clearly manifested by Admiral Lord Hill-Norton, who went on to become CDS in 1973. He referred to the reasoning behind the reduction in surface units following the 1981 Defence White Paper as “demonstrable rubbish”\(^\text{28}\). With the introduction of Chief of Defence Logistics at the expense of the single Service Principle Administrative Officers and a new Customer focus in the Centre, the disestablishment of the single services continued and also impacts on the procurement arena. The question to be answered over time is how acquiescent have the

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\(^{25}\) SDR, Introduction, para 4


Services been in SDR and moreover can their influence be further diluted and replaced by a unified, omnipotent Centre culture?

Changing world order

The SDR set out the UK’s security priorities in a changing world. It also rehearsed the familiar argument that the end of the Cold war had transformed the geostrategic scene but, whilst the threat to national security had receded, the security environment was certainly not benign. Indeed the period since the collapse of the Warsaw Pact has seen an increase in world security problems. Regional risks, as posed by Saddam Hussein, still remain. Instability, including border disputes and ethnic tensions, is causing widespread suffering world-wide and could eventually recreate a major direct threat to the United Kingdom’s security. Currently, the possibility of such a threat developing is remote. However, the ability was retained to build up our force level in terms of both manpower and equipment, albeit over a protracted period, should a major threat re-emerge in Europe. Other causes of crisis continue to emerge and include: the proliferation of weapons of mass destruction (WMD); terrorism and drug related crime; environmental damage; and vulnerability to technical dislocation and attack. This wider globalisation of crisis has called for an international response, which in turn places a greater premium on the requirement for defence forces and their equipment to be interoperable. However, industrial and/or national interests also influence equipment interoperability decisions, as is manifested in Nato’s indecision on a replacement calibre for the 9mm small arms calibre that does not penetrate modern body armour.

But it is a mistake to attempt to predict the precise nature of future war, the more so since UK possess a relatively small force and the consequences of getting it precisely wrong would be disastrous. Rather there is a need to be able to respond to a widening spectrum of unpredictable contingencies because there is an increasingly blurred distinction between warfighting, peace support and humanitarian operations, as can be seen in Bosnia and Kosovo. Only forces equipped and trained for warfighting will have the range of specific capabilities – as well as the deterrent effect - to meet all

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29 SDR Chapter 2, Security priorities in a changing world.
30 SDR, Supporting Essay 6, para A30
32 SDR, Fact Sheet, Modern Forces for a Modern world.
33 SDR, Chapter 5, para 89
34 SDR, Chapter 1, para8.
35 SDR, Fact Sheet, modern Forces for the Modern time.
36 SDR Chapter 5, para77.
37 SDR Supporting Essay 3 ,paras 29-30
38 CGS’ Vision for the Army in the 21st Century, para11, Nov 98.
challenges. Moreover, UK cannot insure equally against every contingency and what it contributes to multi-national operations must take account of Allies’ capabilities.

The SDR also confirmed NATO as the predominant defence alliance and troops committed to the Western European Union (WEU) or the United Nations (UN) are double earmarked. Recent experience would indicate two continuing trends: firstly, future operations are likely to be humanitarian and conducted under UN auspices; secondly, the Atlantic link will provide our most likely coalition partner in such conflicts. Notwithstanding these basic premises the matter of France's proposal that a European Rapid Reaction Force possess an independent planning body does pose problems both nationally, for NATO and US partners in particular. Whatever that outcome UK should attempt to mould our culture more effectively with potential partners, especially US who will retain unique capabilities. In so doing, we can develop through greater, inter-dependent, research common beliefs in the value of technologies, which in turn should shape evolving doctrinal views. Views that gradually blend through closer co-operation and understanding gleaned through the confidence of operating alongside each other in conflict and multi-national discussions. With this sound foundation similar equipment needs and collaborative programmes should unfold providing benefits both of scale and shared development costs.

**Industrial Issues**

Within the Atlantic link, relations between the US and Britain never deteriorated to a defence trade war as no significant threat was posed to their relative industrial bases. Also, UK continued to make a major contribution to NATO and the UN and remained a strong ally to the US in both fora, again a relationship well illustrated by recent events in the Balkans and previously in the Gulf.

However, in the past decade the US defence industrial base has undergone a significant rationalisation. From fifteen large defence companies in 1990, four “industrial giants” have emerged. Further rationalisation was sought with the proposed purchase of Northrop Grumman by Lockheed Martin but this was abandoned because of US DoD’s concerns about vertical and horizontal integration. This activity was brought about in part by the US Government’s initiative to inform industry that there were not enough defence contracts to sustain them all and moreover that the US Government was prepared to subsidise payments towards merger costs. In contrast to the US unified and more efficient defence

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39 SDR, Chapter 5, para 78.
40 SDR, Chapter 5, para 80.
42 SDR, Chapter 2, para 37–39.
43 DCS Supporting Essay 10, para 34.
44 Boeing, Raytheon, Lockheed Martin and Northrop Grumman.
industrial base, within Europe rationalisation has progressed at a slower pace. Ongoing initiatives, such as the Western European Armaments Organisation (WEAO) and Organisme Conjoint de Cooperation en Matiere d’Armament (OCCAR) are being furthered with partners to rectify this situation but significant political, financial and industrial obstacles need to be overcome before an effective European body could compete with US industry. Furthermore, UK lacks a coherent national defence industrial policy unlike some potential partners; most notably France who still retains a significant public owned defence industry. As a result, many current pan-European initiatives involving UK have been driven by industry with tacit governmental approval; as can be seen in the Aerospace industry with BAe’s initiatives involving French and German and also Swedish partners. In addition, the on-going rationalisation is not restricted to two isolated industrial bases, one in Europe the other in US, as Trans- Atlantic links are also being forged to enhance the effectiveness of large companies to penetrate the world market, e.g. GEC acquiring Tracor and General Dynamics taking a stake in Steyer of Austria. The key outstanding issues regarding world-wide rationalisation are: the nature of the emerging relationship between Europe and US should UK continue to create even closer links with Europe and will a special relationship continue to exist between UK and US in these circumstances? All recent UK Governments and Labour is no exception, place great store in the special US link.

The 1980s and 1990s have witnessed a technological revolution, particularly in information technology (IT), electronics and simulation, which in turn has impacted on doctrinal thinking. Part of this technology was developed for military purposes the majority for civilian use but whatever the source of R&D funding most technology has dual use. In the specific defence research arena, significant technological steps have also been achieved in areas such as surveillance, stealth, missile technology and biological and chemical defence, albeit at considerable cost. As scientific discovery and technological advance continue apace so the military options available to potential aggressors also increase. The military advantage will rest with those who most effectively identify and exploit battle-winning technology. This places a premium on the ability to generate and identify opportunities; adapt them for military use; and integrate them rapidly into the arsenal. Avenues such as collaborative research, attracting greater reliance and inter- dependence than hitherto, are being explored both to reduce the level of investment in government R&D and in an attempt to identify winning technology for joint development. Much of the advanced technology naturally stems from significant US

47 SDR Supporting Essay 10 para 35.
48 SDR Chapter 2 para 19.
49 SDR Supporting Essay 3, para 10.
50 SDR Chapter 11, para 207.
51 SDR Supporting Essay 3, para 4.
investment in R&D and therefore every effort should continue to be made by HMG to maintain a strong relationship. In such an environment, the requirement for a more responsive and efficient procurement process becomes compelling.

New government initiatives
All the aforementioned factors have had varying degrees of influence on both the SDR and the SPI. The SPI being an initiative that was aimed at addressing the continuing serious failings in the MOD process for developing and purchasing major military systems, despite multiple efforts and a number of notable improvements along the way. According to the National Audit Office (NAO), in service dates for major projects slipped 41 months on average compared with initial estimates. Based on past performance, the current procurement system also takes an average of around 21 years to field new weapon systems by which time many are obsolescent. In addition, costs have averaged 10.7 per cent increase over approved levels of funding and yet reliability issues continue to plague new equipment programmes giving rise to even further delays and increased ownership costs.

The UK is not alone in its efforts to achieve a more effective procurement system as over the years most major nation states with highly capable forces have attempted to develop and enhance their acquisition processes. They too have similar goals in seeking to improve their overall procurement performance in terms of delivering equipment to time, specification and cost and in that process also to reduce associated governmental procurement and associated operating costs. US, France and Sweden are three such countries. The US government’s Acquisition Reform has tackled the issue on a much grander scale, as the world’s only remaining super power. France as the third largest defence exporter and a key player in most European initiatives, suffers from both budgetary and industrial difficulties and again has conducted reforms under President Chirac’s Defence Reforms. Finally, Sweden’s membership of the European Union (EU) in 1994, brought about by both political and economic pressures, introduced new challenges to her defence posture as her long term neutrality was threatened. As with the other two nation states Sweden too has introduced procurement reforms. Similar themes occur in their reforms such as IPTs but the culture differs, which in turn impacts on implementation.

52 SDR Supporting Essay 3 para10.
53 SDR Chapter 8, para151.
55 National Audit Office, Major Projects Report 1997 (Draft)
56 SDR Chapter 8, para154.
59 Quadrennial Defence Review, Department of Defense, May 1997
60 President of the Republic’s Defence Reforms dated 22 February 1996.
There has been little radicalism associated with the various procurement reforms; rather it has been an evolutionary process, which was probably to be expected of democratic governments. Funds are often allocated on an annual basis with no real long term commitment, and often these monies are further parcelled on the basis of specific functional areas like operating costs, logistics, and equipment, with little flexibility to transfer funds from one functional area to another. The vote system described then needs oversight to ensure that Taxpayers’ money has been spent effectively, a task that creates a supporting bureaucratic culture, which involves the interaction of another governmental departmental culture: that of the Treasury. In western cultures the role of the Forces is to defend the nation state and its foreign interests. The Forces are subordinated to the government and work under ministerial direction. Three cultures exist and work together in this mixed environment: politicians, civil servants and members of the armed forces. The harmony or disharmony associated with the interaction between these cultures has a marked effect on output. In the case of procurement processes there is an extended relationship which embraces the cultures of industry, the scientific community and recently the banking fraternity. Again the interaction of these cultures with the ministerial body also has a significant impact on output.

So the transition from one procurement process to the next in an effort to improve the effectiveness of an acquisition system is not straightforward. The proficiency of a business activity involves more than a transition from one process to another because it also involves harmonising different cultures and introducing a change culture. More often than not, any change to a process also involves some form of efficiency measure that demands short-term savings both in the terms of product and operating costs. The dichotomy appears to be that change culture and short-term gains are not synonymous and perhaps historically sufficient effort in terms of cost and time have not been sanctioned to ensure the change culture is allowed to develop and mature successfully.

AIM

The aim of this thesis is to map predominant cultures and examine their compatibility with SPI.

Limitation

The main limitations to this research were time and finance, which together conspired to prevent the analysis of other relevant cultures like the Defence Logistics Organisation, the Second Customers, Defence Evaluation and Research Agency and Defence industry, all of whom are inextricably involved in UK’s defence procurement.
CHAPTER TWO

GEOPOLITICAL FACTORS

Background

A New World order was established by the turn of the century, wherein the major political processes that drove world politics either had withered on the vine, as was the case with the Cold War, which had for all intense and purpose terminated by 1980, or else were overlaid by more powerful trends. These trends involved managed national economies becoming overlaid by the all-pervading power of the global, information driven market place.\(^{64}\)

From the chaos of the late 1980s it is now possible to establish some elements of the New World order into which we are moving. The international system, though not set in concrete, is showing signs of greater predictability than a few years ago. The crisis in Bosnia and Kosovo that began for Europe in 1991, though catastrophic to the indigenous populations, as yet has not triggered a wider process of ethnic and religious fragmentation in Europe. The worst excesses of nationalism as extolled by Malosovic have not proved contagious and remained contained within the nation states of the former Yugoslavia. Russia has not collapsed and it seems increasingly likely that against the odds a new form of Russian capitalism will develop. Moreover, further fragmentation of the Russian Federation has not materialised.

The Trans-Atlantic Alliance is still operating, though having to cope with new challenges such as an European Rapid Reaction Force and in that process experiencing new stresses and strains. But it is not liable to collapse in the foreseeable future; rather it is more likely that it will continue to evolve and grow into something significantly new, which might therefore dilute its previous role.

The international institutions of the developed world are also immersed in evolution and their roles are being rationalised by practice and a hierarchy is emerging between them. The process of Nato’s change, the operations of the United Nations world-wide and the economic response to crises such as the economic problems in Africa, South America, Russia and East Asia suggest that a compromise has been reached. The compromise was reached between the wishes of the major powers, with USA in the driving seat, and the institutional frameworks thereby allowing the major powers’ wishes to be fulfilled and at the same time legitimising them in the eyes of other less powerful nation states.

\(^{64}\) Michael Clarke, “Reviewing Defence and defending reviews”, Brassey’s Defence Yearbook 1998.
Likelihood of war

So what is the likelihood of war that will demand UK's commitment in the planning period out to 2020? Politics in Europe are so radically different now than at any other time in the modern history of the continent. As Mandelbaum has written, between major powers in Europe there is an effective and functioning common security structure already in existence. It does not prevent disorder and misery within the continent, but it will prevent major or general war. It is he says, "a remarkable diplomatic achievement and a dramatic change". The admission into NATO in 1999 of three new members from the former Warsaw Pact is seen as a welcomed first step in the enlargement process which will strengthen both the Alliance and European security. NATO's Partnering for Peace programme and its agreement with both Russia and the Ukraine are again seen as strengthening political and security relationships in Europe. Recent US discussions with China and Russia on their SDI seem almost incredible as memories of mutual destruction linger on.

Other institutions have a part to play in this process. The European Union (EU) has a critical function in strengthening economic prosperity and political stability through the Common Foreign and Security Policy. The EU has an important role also in fostering defence co-operation amongst members, in conflict prevention and particularly peacekeeping. Development of the European Security and Defence Identity within NATO will enable the Western European Union to carry out these roles more effectively. And the Government also places high importance on the role of the Organisation for Security and Co-operation in Europe which embraces 54 states and is uniquely placed to contribute to building confidence and preventing conflict in Europe.

There can be little doubt that further alienation of Russia could destabilise the European security order. And it could be argued that NATO's recent membership enlargement and perhaps further growth downstream appears to offer the catalyst for such a schism. However, in terms of both economic growth and her defence industry the likelihood of a new war machine evolving that could threaten this order is highly unlikely in the 2020 timescale. Indeed, if an isolationist stance was adopted by Russia it would be highly unlikely that the recently converted, capitalist orientated, population would be prepared to sacrifice other sectors of the economy merely to create the military might of yesteryear.

A similar situation prevails with the developed world in general. It is difficult to imagine a major war between the countries of the Organisation for Economic Cooperation and Development states. And no one other than these states could mount a credible threat to Britain, sufficient to warrant major

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66 SDR Chapter 2 paragraph 38.
mobilisation. The Government recognised this situation when stating that, "There is no longer a direct threat to Western Europe or the United Kingdom as we used to know it, and we face no significant military threat to any of our Overseas Territories".\textsuperscript{68} If there is no direct threat to our nation state then what are the likely events on the international stage that are liable to result in conflict and demand a military response from the United Kingdom?

Outside of Europe the Government has identified two specific areas of concern: the Gulf and Mediterranean where instability creates wider risks.\textsuperscript{69} In the Gulf where we have particularly important national interests and historic ties the oil supplies are seen as crucial to the world economy. Confrontation in the Gulf carries the risk of escalation and as the region borders on NATO, in some circumstances crises could involve the Alliance directly. The same is true in North Africa albeit that our direct interest in the region is limited. However, its proximity to the southern boundary of both the European Union and NATO gives us a continuing stake in its stability.

**Political order**

It would appear that international politics in this century would be characterised by general strategic stability at the macro level and significant, increasing instability at the micro level. The techno-driven global market is fulfilling Marxist prediction whereby the rich become richer and the poor poorer, both within and between countries. Environmental degradation, the centralisation of agriculture, all prevailing communications and sheer rural poverty drive millions in search of the holy, urban, grain. The resultant world is populated with one super power and many strong states that are weaker than they were and many poorer states bordering on collapse where ethnic tensions and fundamentalism within most regions become further sources of conflict.\textsuperscript{70} This would indicate that there would be extensive calls world wide in the early part of this century for both economic and military aid.

Moreover, we are no longer a major political player on the world stage neither do we have the economic might of even 50 years past and our position on the Security Council cannot be guaranteed ad infinitum. In this scenario, there is a likelihood that we will tend to want to employ the military as currency to buy continuing influence in the world. However, although British forces will probably be involved in a number of peace support, or other UN operations, there is likely to be a tendency to steer clear of the high intensity warfare aspects of them except under special circumstances; for instance where air superiority prevails, or where the US is involved. Where UK's direct interests are most

\textsuperscript{67} Ibid. Chapter 2 paragraph 39.
\textsuperscript{68} Ibid. Chapter 2 paragraph 23.
\textsuperscript{69} Ibid. Chapter 2 paragraph 40.
likely not at risk, as was the case in both Bosnia and Kosovo, there will also be a reticence by the population to support such operations or accept high battle casualties.

Future equipment needs.

The likelihood of war and the nature of conflict raises the issue of how should our forces be structured and what capabilities are required? Firstly, it is argued that, "only forces equipped and trained for warfighting will have the range of specific capabilities — as well as the deterrent effect — to be effective across the full range of peace support and humanitarian operations." Moreover, as it is impossible to insure against all contingencies greater reliance must be made on our Allies. The task of determining what the ideal capability investment should be in these circumstances is complex and will require an ECC led body to provide a judgement, which should be influenced by the aid of sophisticated Balance of Investment (BoI) tools. Significant reform had already taken place prior to SDR within the Customer representative ranks of the Deputy Chief of Defence Staff (Systems) [DCDS (S)] staff to take forward a, "System of Systems" or more holistic approach to capability and its management. However, the B of I tools remained relatively unsophisticated.

Another influence on future capability is continued involvement in international fora. Participation is required to keep abreast of both Allies' equipment programmes, in particular those of the US and collaborative opportunities that would specifically enhance interoperability. Currently, different MOD areas represent UK at bi-lateral, military, staff talks where the initial focus from an equipment perspective is the harmonisation of doctrine. UK is also engaged in equipment and procurement talks within FINABEL, NATO, the Eurogroup, the Western European Union, and Western European Armaments Group and the value gained differs significantly. There is a need to co-ordinate all the UK participants at these meetings to ensure a consistent national line across the piece. Alternatively, meetings can be combined to achieve a similar result. For example, the PE used to hold meetings with their French counterparts under the auspices of the Master General of Ordnance and Directors General Land and Information Systems bi-lateral talks. In parallel the Assistant Chief of Defence Staff (Land) also conducted joint staff talks under the aegis of the Anglo-French Army Equipment Commission. These two meetings have been combined and as a result much duplication of effort has been removed and the tendency to stray into other areas of discipline has declined. It was not unknown for the PE to commence collaborative discussions without a common military requirement, the Multi Roled Armoured Vehicles project being illustrative of this point.

71 SDR Chapter 5, paragraph 78.
72 Ibid. Chapter 5, paragraph 80.
One of the most demanding decisions will be to determine the correct balance between continued investment in legacy systems - mostly created for the Cold War - and future capability required to match world-wide commitments. A complimentary issue will be whether the influence of the single services will have significantly waned to allow an authentic joint decision to be made on future capability.

Information Technology and The Revolution in Military Affairs

Background

Whereas military advances in science and technology for military purposes have historically had applications in the civil market place the advances in the civil market place are increasingly having profound implications for our future military capability. In electronics, software and information technology generally, civil investment in research and development is ten times greater than defence investment. Moreover, the computing power of state of the art systems is doubling approximately every 18 months. The impact of this development is likely to be all pervasive as almost all weapons, platforms and communication systems will become reliant on this technology.

Some commentators have suggested that we are in the formative years of a, “Digital Age”, but whatever description is afforded to the phenomenon it will be imperative that the cultures within the MOD and industry appreciate the change and understand the need to grasp the technology. Information Technology is described by Robbins as," bringing a close interaction between science and human organisational culture. It is holistic, in that it affects pretty well all areas of human activity and heuristic in that it changes and evolves with use. Moreover, with technology advancing at a rapid rate it will be imperative that the SPI provides a culture that can promote rapid technological insertion thereby guarding against system obsolescence.

The Information Revolution

The Information Revolution was the catalyst for the RMA. It has increased our ability to collect vast quantities of precise data; to convert that data into intelligible information by removing extraneous," noise"; to transmit rapidly and accurately this quantity of information; to convert this information through responsive, flexible processing into near-complete situational awareness; and at the limit, to allow accurate predictions of the implications of decisions that may be made or actions that may be

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74 Ibid. Paragraph 7.
76 Ibid., Conclusions, page 82.
taken. This revolution and the changes to a post-industrial world also seem to imply significant changes not only to the means of warfare but to its objectives as well. Whatever shape the MOD's doctrinal focus adopts it will be imperative that they along with the customer and scientists evolve doctrine in concert with technology and keep abreast with current US thinking in the process.

The Information Revolution is also having an impact on all kinds of organisations as amorphous networks are increasingly replacing traditional hierarchies. While institutions are traditionally built around hierarchies and seek to act autonomously, multi-organisational networks consist of often small organisations; sub-elements of existing institutions, and even individuals that have been linked together-often on an ad hoc basis. The Information Revolution favours the growth of such networks by making it possible for dispersed actors to communicate, coordinate, and operate together across greater distances and on the basis of more timely and higher quality information than ever before possible. It could be argued that in this era it was not necessary to co-locate all key actors in a multidisciplinary group such as an Integrated Project Team. Rather greater benefit to the procurement process might be achieved by linking expertise over networks, as has been investigated through UK's Computer Integration of Requirements, Procurement and Logistic Support (CIRPLS) and the Computer Aided Logistic Support (CALS) initiatives. To facilitate the most effective procurement processes it will be essential that a wide area network be created to allow the rapid transfer of common data between all parties. The absence of which still causes duplication of effort, inaccuracy and distrust between the separate cultures. The presence in DPA of a BAe manager addressing these issues provides some comfort that industry wish to be proactive.

Impact on doctrine

If we are to prosecute warfare effectively with Allies, and with the US in particular, then we should operate in terms of broad military parity within multi-national operations and be able to counter enemies exploiting the available, advanced civil technology. Moreover the largest impact of technology on the conduct of these operations is likely to come not from the weapons alone but from the application of information technology to military command and control. The US Department of Defense has made a significant intellectual and financial investment in this area as manifested in their Army's Force XX1 initiative and as a result are now strong proponents of a new concept called “The Revolution in Military Affairs” (RMA). This concept, recognised in the SDR, sees a step change in military capability resulting from the synergistic combination of long range precision weapons with

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80 SDR Supporting Essay 3, paragraph 8.
81 Ibid., paragraph 9.
networks of advanced sensors and data processors. Increased situational awareness will be achieved through combining information from all sources and rapidly distributing it, through a combination of rapid processing and communication networks, to all who need it, thus permitting more effective and efficient use of forces. However, there are significant costs associated with digitising the Battlespace and it will be essential to alter the MOD Central Staff's culture to allow such an investment to be made at the expense of weapons and platforms. A situation that is akin to the introduction of tanks at the expense of the horse.

**Revolution in Military Affairs**

Historically, military commanders have not had the C3I capabilities to manage military forces to the limit of their potential effectiveness. They have had to rely on increases in the individual components of military power—i.e. mass, mobility, reach, and firepower—or the exploitation of an opponent's failings, to make up for these inadequacies. The associated costs were not only high in resources, but in organisational distortions and operational constraints. What was often referred to, as the "fog of war" is "in reality disorder - the inability to maintain unity of action due to short comings in the C3I systems". The post modern battlefield stands to be fundamentally altered by the Information Revolution at the strategic, operational and tactical levels, if such a distinction remains valid. The increasing breadth, depth and height of the battlespace and the inexorable improving accuracy and destructiveness of even conventional weapons have heightened the importance of C3I to the point where dominance in this domain alone may, if exploited properly, yield consistent war winning advantage. Here again those involved in the procurement process will have to understand this potentially significant advantage and take even more positive steps together with industry to ensure that programmes like BOWMAN (UK's tri-service future voice and data bearing tactical communications system) are sufficiently prioritised and resourced, thereby ensuring a timely entry into the rudimentary stages of the digitised era. Otherwise we are likely to become isolated from our most important allies.

It is certain that careful implementation of this RMA will be needed since military revolutions are, by nature of their dramatic introduction of operational and organisational changes, antithetical to the cultural norms of existing bureaucratic structures. For example, it has long been the conventional

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14 Arquilla and Ronfeldt, “Cyber war is coming" p.7.
wisdom that only catastrophic military defeat can move a military organisation to embrace innovation.\textsuperscript{85}

\textsuperscript{85} "Armies are more often ruined by dogmas springing from their former successes than by the skill of their opponents." JFC Fuller, "The Tactics of Penetration", The Journal of RUSI, November 1914, page 389.
CHAPTER THREE

DEFENCE INDUSTRY AND INDUSTRIAL POLICY

General

The UK defence industry is distinct from other industrial sectors in two key respects. Government is still its greatest customer and access to its technologies provides a vital element of our defence capability - in terms of security of supply and support for equipment in operations. Over and above its distinctness, the industry is also one of UK's most important sectors. It is responsible for the employment of 400,000 people in approximately 11,000 companies, and 10% of the UK's industrial manufacturing workforce. The industry also exports 30% of its output, and in 1997 won 23% of the world export market, standing second to America worldwide. It could therefore be argued that the political culture found within MOD will continue to make decisions based on wider political concerns including economic, as well as foreign and home policy issues. However, the political arguments surrounding these decisions are not often fully exposed and even if they were it is not guaranteed that they would be shared by all the other cultures found within the internal MOD procurement process.

In 1995 the Defence and Trade Industry Committees examined Aspects of Defence Procurement and Industry Policy prompted fundamentally by the increasingly dominant position of US defence manufacturers in a shrinking global market. The essentials of the problem follow. With the end of the Cold War defence budgets in many countries had been falling, including procurement and R&D budgets. The impact of this had been amplified by inflation for successive generations of equipment continuing to outstrip general price inflation. Faced with shrinking domestic markets, US manufacturers - with pressure from the US government - had reduced capacity and increased efficiency and competitiveness through an extensive series of mergers and had begun to adopt more aggressive export strategies. The combined impact of these measures was to make US products cheaper than others and therefore attractive to other governments; who in turn were facing the dilemma of having to choose between buying US products for financial imperatives or domestic products to protect strategically important technologies and for "industrial" reasons. Finally, there was increasing concern in the UK about its ability to continue to supply certain key strategically

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86 HC Deb, 3 December 1997, c284; Defence Industry debate
87 Presentation by Head of Defence Export Services at 1998 DESO Symposium, Queen Elizabeth Hall, 3 March 1998
89 Professor David Kirkpatrick noted in his article “Rising costs, falling budgets and their implications for defence policy”, that equipment costs were rising at around 10% per year, Institute of Economic Affairs, December 1997, Blackwell Publishers, page 10.
important products. There is now a belief within MOD that UK industry is unable to provide cost effectively certain technologies like satellites and cruise missiles. There is a danger, should the UK industrial record of not meeting time, cost and specification contractual conditions prevail, that greater dependency will be placed on US suppliers particularly if their COTS products are desirable and can be made readily available.

In December 1997 the governments of France, Germany and UK called for restructuring plans from their aerospace and defence electronics industries, signalling a more determined drive to reorganise the defence industries in Europe to compete on more favourable terms with the US. The four Airbus partners (BAe, Aerospatiale, DASA and CASA) responded to this challenge by presenting a joint report on 27 March 1997. This indicated that the companies have reached broad agreement that the target structure should be a single, integrated European and Defence Company that was welcomed by the Government.

Procurement Policy

Against this background, it is worth looking at UK’s procurement policy as it is this that has both driven procurement decisions and influenced UK’s industrial base. Competition remained fundamental to obtaining value for money, and where competition was not practical MOD sought to let contracts with agreed prices at the outset under the NAPNOC arrangements. Although there was no preferential, “Buy British “ policy, in practise in recent years UK companies had won some 90%, by value, of contracts placed by MOD.

In considering equipment procurements, MOD’s assessment criteria include factors relating to the defence industry base, under four headings:

• Value for money in the longer term, including the cost implications of the creation of a monopoly.
• Security of supply, especially when non-NATO countries are involved, and taking account of likelihood of supply in crisis; and
• Preservation of industrial capabilities, including a capability:
  • to meet operational requirements;
  • to support existing and future weapon systems and provide support to operations and to regenerate critical equipment;
  • to contribute to collaboration;

91 SDR, supporting Essay 10 para 35
93 ibid., paras 15-20
• to avoid the creation of a monopoly, or over-dependency on a company or country;
• to promote defence exports
• The benefits to MOD of possible defence exports, including potentially lower unit prices for MOD's order and the survival of some companies for strategic or competition reasons.

Concerning the assessment criteria, it has long been a concern of industry that long term industrial implications have not been given sufficient weight and moreover, that a wider range of industrial and economic factors should be addressed early in the selection process. It is clear that industry would wish to see such change because it is to their advantage to increase their influence. Whether the risk adverse culture of MOD would wish to make fundamental decisions, which are influenced even more greatly by industrial issues, earlier in the process is a mute point.

A new factor in the decision making process has been greater participation by the Department of Trade and Industry (DTI) who are now informed and consulted on any programme involving more than £5M of development or £15M of production. It should not be forgotten that in this activity each Department has distinct roles and cultures: while MOD is the customer; DTI sponsors UK producers selling to MOD and occasionally there are clashes of interest.

In 1995 the Defence Committee drew particular attention to the adversarial nature of the relationships between MOD and industry and the high costs frequently incurred in MOD's competition process. At that time, a recently published White Paper on Government Procurement had already advocated relationships with suppliers combining competition with co-operation with the benefits shared in partnering arrangements. It is disappointing that implementation did not occur but perhaps the move of the PE to Abbey Wood compounded the problem. The issues of co-operation and competition are inter-linked. Firstly, any policy that becomes dogma and possesses an associated lack of flexibility is hardly beneficial to a bureaucratic process and that was the position with the hands off project management policy of the MOD. With two cultures working at arms length and often in different directions it is likely that misunderstandings will occur and if the situation prevails adversity can soon prevail. The insistence on competition in all procurement cases can also add costs to a programme, particularly when a case for single tender action is strong. Common education to both sides of the industrial/MOD divide coupled with partnering should afford a closer set of beliefs and values and greater harmony.

Collaboration

94 Ibid., introduction, paras 9-10
95 Ibid. para 11.
Collaboration in research, specification and development and production is a course open to most
governments that can: reduce the overall cost of Defence; improve interoperability; and create a more
closer cultural understanding, inter-dependence and commitment between partners and to alliances.
As a balance, it should be noted that the costs of collaborative projects are to be found in the areas of
delays, compromise of equipment requirement, ability to withdraw from a project and problems with
work share. However, defence equipment collaboration can reduce overall costs through the sharing
of development costs and lower unit production costs can be achieved through longer production runs,
this in turn allows forces the opportunity to purchase equipment that would otherwise be unaffordable
e.g. EFA and TRACER. However as Professor Hartley has commented, "What is interesting about the
cost saving argument is that whilst it is used by governments, there is little publicly available
information on the magnitude of the cost savings from collaboration". There is a case that once
policy is put in place after a reasonable time a policy such as collaboration should be analysed to
confirm its worthiness to be part of the culture.

The tangible military, economic and industrial benefits offered by collaboration have made it
"essential that the UK remains at the forefront of developments in this area of joint endeavour." The
critical components of successful collaboration are the opportunities for efficiency from tapping into
what each partner does best, and from establishing a common equipment requirement. In their 1995
joint report and subsequently in their 1998 report the Defence and Trade and Industrial Committees
drew attention to juste-retour in government sponsored collaborations- where industry from each
participating country is allocated a predetermined share of the work, rather than contracts being
awarded according to purely commercial considerations. Normally the work share is predicated on
national off-take, although the down side to this policy is that off-take often changes with time, as was
the case in both TRIGAT missile programmes. As a result, the Committees saw no justification for
retaining juste-retour. But a body needs to be enforced to prevent the continuum of this concept.

As for common equipment needs, many past collaborations have proved expensive and difficult to
manage because individual countries have required variations in the equipment to suit their individual
requirements more closely e.g. MRAV, the multi - roleled armoured vehicle programme will only
provide command and armoured personnel carrier variants. However, there are numerous NATO and
Western European Armaments Group (WEAG) fora that provide an opportunity to align better
equipment needs, and the European Union has also had its own initiative to formulate a strategy in this


97 British Defence, Financial and Industrial Considerations for Weapons Procurement and Collaboration in the 1980s and

98 Quoted in, "European Armaments Collaboration: Policy, Problems and Prospects", R Matthew, p150

99 SDR Supporting Essay 10 para 37.

100 Ibid. para 37.

101 Aspects of defence procurement and industrial policy, Session 1997-98, Introduction para 13

102 Ibid., para 13.
The objectives of the WEAG include securing more efficient use of resources through increased harmonisation of defence equipment requirements. Since 1993 WEAG have been examining the scope for setting up a European Armaments Agency (EAA). In April 1997 WEAG set up the Western European Armaments Organisation (WEAO) as a precursor to such an agency although to date it has confined its activity to co-ordinating R&D programmes and only recently has started to develop principles, procedures and regulations for the prospective EAA. In November 1997 defence ministers of the 13 WEAG countries meeting in Erfurt called upon their national armaments directors (CDP in UK) to develop steps towards forming an EAA.

Almost in parallel there has been a Franco-German initiative to set up a bi-lateral agency and the UK government thought it essential that UK be a full participant. The UK along with Italy subsequently joined, and in November 1996 ministers of the four countries established the OCCAR. There is considerable logic in keeping the numbers around the table small particularly during the formative stages of a complex organisation like WEAO and in some respects the OCCAR initiative can be viewed in this light. Indeed, in October 1997 the German national armaments director said that WEAO and OCCAR were complementary and were pursuing the same aims. This logic is difficult to refute as the four key European industrial players were in the process of setting the Organisations’ future beliefs and values and moreover were shaping the very culture of future European defence procurement. As stated in the SDR, “We remain fully committed to the pursuit of common OCCAR objectives - which include the extension of membership to other states and the establishment of a ‘legal personality’ - with our current partners.” The task of harmonising beliefs that will have such a significant impact on the European defence industry should not be underestimated.

As regards to collaboration with the US, there seems to be a growing impetus to build on the strategic relationship that remains so very important to both governments. This relationship has been manifested in operations such as the Gulf, Bosnia and Kosovo and in equipment through MOD’s full partnership in the US Joint Strike Fighter and TRACER programmes. Both of these programmes are providing significant economies of scale and access to technologies not available in Europe. As a result of the military operating so regularly together mutual respect has grown, particularly post the Vietnam era. Moreover, through continued bilateral staff talks a shared view of future doctrine and the impact of technology on the battlefield have evolved. In terms of shared research and demonstration, an excellent illustration is the US Digitization programme, the foundation of their RMA in which they have invested heavily. UK is the antithesis having only invested limited sums. And yet the US have afforded UK special access to their programme and frankly shared the fruits of

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103 EU Commission Communication, “Implementing an EU strategy on Defence-Related Industries” COM (97) 583.
104 At the WEU Symposium on European Cooperation on the Procurement of Defence Equipment, Munich, October 1997.
their endeavours. This was a pragmatic gesture rather than just largesse as it was essential as their programme unfolded to share the developing culture or end up being isolated in the future battlespace.

**Strategic requirements**

During the Gulf war Belgium's unwillingness to provide UK with 155mm artillery shells caused serious concern regarding the security of supply in peace but more importantly in times of crisis and war. However, written evidence provided to the House of Commons Defence Committee by the MOD\(^\text{106}\) stated that, "The criteria used to assess the desirability of retaining defence industrial capability can be assessed as defence based rather than encompassing wider industrial or economic objectives. The key to retaining access to strategically important technologies and manufacturing capabilities in an era of continuing rationalisation and collaboration is to ensure mutual interdependence."\(^\text{107}\) The security of supply aspects of the proposed five nation agreement for industrial restructuring (On the 20 April 1998, Defence Ministers of the UK, France, Germany, Italy and Spain agreed) is clearly a step in the right interdependency direction.

It was also believed that from a military perspective, no doubt flavoured by a demand for more interoperability and in part through the experience of ownership of non-interoperable systems, that a list of items whose procurement in the UK was absolutely critical would be very short.\(^\text{108}\)

**Developments in the US and Europe**

Over the period 1987-1997, defence expenditure of NATO countries has fallen by 27% including a fall of 33% in their procurement expenditure.\(^\text{109}\) Defence manufacturers, most notably in the US (where DOD expenditure fell by 33% over the same period\(^\text{110}\) ), have responded to this reduction in a number of ways and with mixed success. They have diversified into other aspects of defence and non-defence sectors. They have also reduced the size of their operations and the number of people employed. Or they have sought the economies of scale by merging with other defence firms.

Where in 1990 there were 15 major US defence and aerospace companies, there are now four - Boeing, Raytheon, Lockheed Martin and Northrop-Grumman, with the latter still vulnerable to a takeover as attempted by Lockheed Martin. Perhaps the most telling data to expose the difference between US and European industry is that six European countries possess three times as many defence firms as

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\(^{105}\) SDR Supporting Essay 10, para38.

\(^{106}\) Defence and Trade and Industry Committees Report, Session 1997-98, Ev p39, para 19

\(^{107}\) Ibid., para22.

\(^{108}\) Ibid., Q168

\(^{109}\) SIPRI yearbook 1997, Oxford, Oxford Press, Table 6A.1

\(^{110}\) Ibid.
the US and the two largest US firms have turnovers greater than all Western European defence firms put together. With such power, companies of that size are able to influence government decisions and call more forcibly for support, from the highest diplomatic levels. From a cultural dimension there is a concern that this new found power is able to place considerable pressure on the MOD, which in turn and in extremis could reverse the customer-supplier roles and jeopardise relationships.

In the US, an important trigger for rationalisation was given to industrial leaders by the US Defence Secretary in what became known as the, "last supper", where they were informed that there was not enough defence contracts to sustain them all. Government subsidies were offered to all participants to help the subsequent rationalisation programme. The US General Accounting Office received five applications for subsidy payments towards merger costs. The Pentagon estimated that its share of restructuring costs would be $755M, with subsequent savings of $3,300M to the DoD made possible from a more efficient industry.

In Europe the background differed, albeit the compelling theme of rationalisation remained paramount. Clearly the costs to Europe are likely to be relatively high; however, any European-wide scheme to help with such costs will be more complex. Firstly, there is the issue of the disparity between nations as in some countries, notably UK and Germany, the costs of re-structuring have already been met. Some states continue with nationalised industry and again the costs of privatisation are significant and here France is most notable. The Secretary of State told an UK defence industry conference in October 1997. "Europe's defence and aerospace industry must rationalise or die...we recognise that government has a role to play" through decisions, facilitating and/or "establishing a clear policy framework which allows industry to make sensible decisions on how to rationalise".

How difficult rationalisation will be without a unified European procurement, or an agreed set of military requirements and in the absence of an open European defence market are questions not easily answerable but do exist within the overall culture of the US.

One speaker at a WEU symposium put the lack of European progress in rationalisation in respect to the US across as follows, "As soon as the American competitors have restructured and harvested the fruits of synergy and mergers, they will concentrate on Europe and they will tear the industrial base in aerospace and defence apart." Lockheed Martin's Chief Executive told a conference in Germany that realigning the defence industry represented a third main post Cold War challenge, after the challenges of unifying a divided Europe and adjusting the West's security posture. He further recognised that European rationalisation of defence industries had to happen, but in the process "fortress Europe"

111 Defence News* Statistics 1998
112 Defence industry restructuring: cost and savings issues, 15.4.97, GAO/T-NSIAD-97-141
113 MOD Press Notice 133/97
must be avoided on policy as well as economic grounds, because it would jeopardise the kind of security and political co-operation which was so obviously in our mutual interest.¹¹⁵

My focus so far has been set mainly on prime contractors but there are concerns emanating from the US experience over the risk to competition amongst second and third-tier suppliers. One avenue for prime contractors to deliver an adequate dividend has been to become more vertically integrated whereby the prime contractors merge with firms from the lower levels.¹¹⁶ In order to compete, prime contractors need access to competitively priced supply chains and with mergers becoming the norm there is likelihood that the lower tiers will become even more vulnerable. It is doubtful as the watering hole inexorably dries up whether governments can stop the larger cats from drinking at the expense of the sub contractors as that too is a market force issue.

The macro issue remains whether UK can continue to play a significant governmental and industrial role within Europe throughout the rationalisation phase and at the same time retain a special relationship with US; a quandary that is not limited to defence related issues. However, in a market orientated economy it is apparent that further rationalisation is a matter for the defence industry to tackle. Whether and how it restructures are questions that only the industries concerned can determine and part of that activity will be to consider what links with US firms as well as in Europe and further afield will need to be established to generate business synergies.¹¹⁷

There has been a significant number of mergers and creating joint-venture companies over the past three years involving UK acquisitions in Europe and America, American acquisitions and joint ventures in Europe and both American and European acquisitions and joint ventures in UK. Those involving UK companies include:

- GEC acquiring Tracor, a US defences Electronics Company.
- BAe and Daimler Benz Aerospace acquiring and dividing up Siemens Defence Electronics.
- Alvis acquiring Hagglunds and then merging with GKN.
- BAe acquiring a 35% stake in Sweden’s fighter aircraft manufacturer SAAB.
- GEC and Italy’s Alenia Difesa agreeing to form a joint venture company to manufacture missiles, radar and communication systems.
- GKN-Westland and Italy’s Agusta, both already involved in manufacturing the EH101 helicopter and agreeing in principle to merge.

¹¹⁴ Herr Pillar, Daimler - Benz Aerospace; at WEU Symposium on European Cooperation on the procurement of defence equipment, Oct 1997
¹¹⁵ Speech at 1998 Wehrkunde Conference, Munich
• BAe and Dassault Aviation, already co-operating on the Future Offensive Air Systems project, attempting to establish a joint venture.

So the issue is not limited to the concept of MOD and defence industry working in partnership, which in itself will be novel to many. Rather, it is a world of mixed industrial and national cultures that will have to blend in harmony. A harmony that is likely to be interrupted further as take-overs continue and new cultures are introduced.

Government Initiatives

A further government initiative, related to the meeting of Defence Ministers held to consider the industrial submission on European Aerospace restructuring, involved the Industry Ministers of the five nations concerned. They too considered the submission in April 1998 and perhaps their most important contribution was to include Sweden into their ranks. There was considerable merit in extending the invitation further to include the six countries that together account for the bulk of the European defence industry, as it could encourage rationalisation on a scale comparable with US firms. This would allow the potential for industry to compete on a leveller playing field and increase its opportunities to co-operate with the US from a position of strength.

The Defence and Trade Industry Committees acknowledged in their 1997-98 session that, “the lower unit costs associated with vehicles compared with aircraft mean that it has been possible to recover the development costs from national orders alone, although this area is now ripe for change.” They went on to conclude that, in Europe the need to restructure is most pressing in the aerospace and defence electronics sectors as it was in these areas where the new American giants dominate. That said, currently the vehicular market is not bullish and as has been identified in the SDR platforms are likely to retain their operational edge for longer because the technologies on which they depend will probably advance less rapidly, and because they will be designed for through life product enhancements. Thus the B of I of the equipment budget is likely to alter from platforms in favour of the progressive update of in-service equipment.

Impact of economics on restructuring

One of the largest hurdles on the rationalisation course is that defence industries in different European counties have different levels of efficiency and different levels of public ownership. At one end of the
spectrum UK and Germany’s industry comprise mainly of private enterprise. Indeed the UK Government, is so open market minded, that it has recently increased the proportion of the shareholding in BAe and Rolls-Royce that may be foreign owned, from 29.5% to 49.5%, with individual foreign owners now able to take-up 15%.\(^{122}\) Italy and Spain have much in public ownership but are now actively engaged in privatisation initiatives, but France, cushioned in the past by protected state procurement orders\(^{123}\), has the largest element of public ownership and progress in their privatisation, over which they have blown hot and cold, remains relatively poor.

Some parts of UK Defence industry have undergone nationalisation and privatisation and in many cases both. At each stage of the process a degree of rationalisation occurred as the process in UK was subjected to the pressures of an open international market. Other European partners did not experience this degree of market pressure, although this perception is difficult to substantiate. Between 1980 and 1997 the number of jobs in UK’s defence industry dropped from 400k to 170k\(^{124}\). Whilst much of this loss can be attributed to a falling procurement budget, the Defence Manufacturer’s Association (DMA) suggested that about half the losses were due to industrial rationalisation.\(^{125}\) At the same meeting, a contrast was made with the French government owned Land Systems industry, which is roughly equivalent to that of the UK, noting that it employed approximately double the number of people.\(^{126}\) Based on this experience, the reluctance of the French government to privatise is at least understandable, even though European rationalisation becomes more complicated.

Normally, a firm’s rate of return on capital reflects their ownership status. Moreover, whilst government owned industries can be directed to restructure and merge, privately owned firms will have to persuade their shareholders that consistently good rates of return can be guaranteed if mergers with state owned companies proceed. The issue of creating a common culture and belief within the European defence industry therefore appears to be predicated on experiencing a common level of pain, a common industrial perspective of value for money and as importantly a common business strategy. In almost every respect, for industry to succeed they will have to lead and resolve the issue on an economic basis with the governments acting mostly in a facilitating role\(^{127}\).

Public ownership in France might not, in itself, be an insuperable obstacle to restructuring, as clearly governments understand commerce. The key concern focuses on whether the French government would want to exercise its ownership rights and interfere to an unacceptable degree in the

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\(^{121}\) SDR Supporting Essay Three: Impact of Technology paras 7-8
\(^{122}\) DTI Press Notice 98/196, 12 March 1998
\(^{124}\) House of Commons Library Research Paper 97/134, Table 2
\(^{125}\) Q42, Session 1997-98 Defence Committee’s Seventh Report.
\(^{126}\) Ibid, QQ 43 and 44.
\(^{127}\) SDR Supporting Essay 10, para 36.
commercially orientated decisions of a restructured industry. Hence any restructuring in the current climate is likely to see other governments insisting that France should not exercise its ownership rights.

Opening up defence markets

Although not formally stated, a number of governments operate policies designed to protect their indigenous industry at the expense of foreign suppliers. However, this is not out of kilter with EU’s open market policy as defence contracts are exempt, initially Article 223 of the Treaty of Rome provided this exemption but has been replaced by 296 TI of Amsterdam. The lack of trading in this area is well illustrated in the years 1988-92 when intra European defence trade amounted to only 3-4% of total defence expenditure in the community. Although reform of the Article has been rejected to date it appears to be an essential means of fully opening up the defence market in Europe. Again the issue of creating a level playing field across the piece may well achieve consensus amongst the leading and most affluent six nation states but the smaller industrial states will no doubt wish to retain some form of protectionist culture towards their industry.

In 1984 the US won 25% of the world defence market but a decade later were winning 56%. In an inquiry conducted in 1997, British industry, the DTI and MOD held a shared view of the benefits of avoiding a, “fortress Europe” approach that might jeopardise access to the US, which at that time provided UK industry with $2Bn a year in business. During that period US laws set requirements for the domestic content in all procurements (“Buy American” laws) and also provided tax exemptions for exports. However, the climate may be changing as a recent US General Accounting Office report noted that DoD had taken steps to ease restrictions on foreign suppliers. The steps taken included revising internal guidance on assessing foreign bids for contracts so that commercially available foreign equipment is given preference to that needing to be developed domestically. In addition, as part of the 1997 US Quadrennial Defence Review, working groups established technological areas in which US might collaborate with the UK, France and with Germany.

However, there are strong arguments to suggest that the US has remained a protected market. As across the EU countries as a whole, the value of US defence imports in 1995 was six times greater than exports to the US. A significant negative value when viewed in the context of the 1985 figures which were closer to a 4:1 ratio. Apparently UK does better than most of its allies with a reported ratio closer to 2:1. As can be imagined, the creation of a joint European culture espousing a, “Fortress

128 EU Commission communication COM(97) 583 Appendix
129 HC 209/210 para30
130 GAO report GAO/NSIAD-98-6: “European Initiatives to Integrate the Defence market”
Europe" is not so much in UK's interests as it might be for other nations. But as mentioned earlier, rationalisation does not fall into neat geographical or political compartments. Rather it is a global process influenced by industry's vision of a return on investment. A return that is often achieved through the exploitation of wider markets. A very difficult vigil will be required to ensure that future industrial partners conducting business on alien shores do not compromise national interests or policy.

Defence exports

The Government has taken various steps to reduce the likelihood of defence exports falling into the hands of potential enemies. Exports have been aligned to the Government's "ethical foreign policy. The Government helped co-ordinate the EU Code of Conduct on defence export and it has tabled options for new strategic export controls. The UK policy involves exports only being approved after weighting the advantages of exports against factors such as UK's international obligations and commitments, the equipment's possible use in internal repression or international aggression, or the risks to regional stability. As there is likelihood that more defence equipment will be provided by trans-national European or indeed wider co-operative enterprises and assembled from components from more than one country, it will be important that export policies of the countries involved are similar. However, there is a danger of any unilateral declaration impacting on all the nation states involved and also of UK's ethical stance being ignored and exploited by another nation or company. Again, the macro issue is how in a large international forum is consensus reached on a topic as complex and historically based as exports. Internally, the benefits to MOD and to the economy of exports (Exports average around £5Bn a year, and imports £1.5Bn) could create a wider clash of interests between the beliefs of differing Government Departments and industry.

Other Nations

There are two further areas that impact on the industrial scene. There are those nation states that are provided with some form of industrial support for wider national interests. Currently, America and many European governments and industries are forming alliances and joint ventures with the defence industries of Central and Eastern Europe. Many of these industries were left in a parlous state with the collapse of the Warsaw Pact. A situation further compounded by the migration of their scientists and industrial experts to more fruitful markets. There are particular collaborative opportunities with Poland, Czech Republic and Hungary who recently joined NATO and to some extent with the

132 EU Commission Communication COM (97) 583
133 White Paper on Strategic Export Controls, 1 July 1998, Cm3989
134 HC Deb 28 July 1997 c26w
135 Exports in 1997 were £5.2 Bn (HC Deb, 20 January 1998c478w)
136 Memorandum by the Defence Industries Council submitted to Defence Committee Session 1997-98.
Partnership for Peace countries seeking equipment inter-operability with NATO. However, reciprocity is often seen as a key quality in any effective long-term relationship. Although this desirable attribute is widely recognised there is a danger of paying lip service to it, as was the case when a Polish Company was competed in the TERRIER engineer tractor programme.

Another issue, linked to UK's inexorable search for value for money, is the ability of some countries to provide cheap produce because labour charges are significantly cheaper, R&D costs are low, or through government subsidy, or a combination of these factors. A brief insight into programmes involving South African (SA) and Israeli may help illustrate this point. The recent decision to purchase 155 artillery barrels from SA was based on two factors: one SA possessed the technology and secondly theirs was the most cost-effective package. The continued, long term, security of supply by Royal Ordnance, though considered, was not considered crucial. Israel on the other hand enjoys a special relationship with America that extends into defence co-operation. The passage of subsidised, technology between parties is advantageous to both the Israeli Defence Force and her defence industry. As a result, they can compete effectively in the open market and have been particularly impressive in mine and ammunition programmes.

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137 NATO has produced Target Force Goals that will drive new and aspiring NATO members to achieve interoperability.
CHAPTER FOUR

BACKGROUND TO UK'S CURRENT PROCUREMENT PROCESS

Background

It is worth briefly reviewing the background to the current UK process to determine whether current procurement activity can be traced to previous analysis and resultant initiatives. Rather than explore the total history of defence procurement this analysis is confined to the major initiatives that have been introduced post World War 2. Over the years a number of difficulties had been experienced in producing realistic initial estimates for major defence development projects and in the control of subsequent expenditure. However, they did not become a source of serious concern until the second half of the nineteen fifties. Then at a time when the Government was seeking to limit defence expenditure, a series of cases came to light of projects whose final costs were, or were likely to be, substantially higher than the estimates at which they were first approved. Some of these projects later attracted the attention of the Public Accounts Committee, and led to considerable public criticism in Parliament and the Press.

Hill, Strath and Zucherman

In 1958 Hill found the average ratio of final costs to initial estimates was about 2.8 and identified causes which included poor and changing requirements, inadequate project scoping and inflation. Strath and Zuckerman investigated Hill's conclusions further during 1959 and 1960. Their findings were fused and a system introduced, which covered the functions and responsibilities of the customer and the contracts, administrative, engineers and financial staffs. Risk reduction measures such as Project studies and Development Cost Plans (DCP) were introduced, as was a concept of closer management between project managers and contractors. Scrutiny was also to be conducted in-house, firstly by PMs and then by financial scrutineers before contract let. They also noted that, "some of the largest projects demanded management teams; for smaller projects an equally close association was desirable and could be obtained without formal organisation".

The effectiveness of this system depended upon the contractors' competence to prepare a realistic programme and cost estimate. It was also reliant on the practicability of doing so in the time required and within the constraints imposed by the degree of technical advance required. Also critical to the outcome was the contractor's ability subsequently to control work and costs against his plan. The effectiveness of the procurement process was also reliant on people and considerable store was placed on harmonious relationships both within the government and outside with industry.

139 Blue Steel, Blue Streak, and the TSR.2
140 Papers RDB/P (60) 4 dated 21 March 1960 and RDB/P (59) 91 dated 8 April 1960 of the Research and Development Board.
The Changing Environment

As the new procedures described previously were gradually introduced and improved, the defence environment was changing in a number of ways. The total Defence Estimates were declining as a proportion of the gross domestic product (GDP), and in 1966-67 the proportion had fallen to 5.4% compared with 6.1% in 1960-61.141 At the same time, the costs of development at constant prices had continued to increase as technology had advanced. This had led to a situation in which the production runs had tended to become shorter and unit prices higher.142 The increasing cost of development and production and the severe consequences on the re-equipment programme of serious errors in estimating had brought an increasing awareness of the importance of unit production prices. This trend had been given further emphasis by the greater refinement of the arrangements for the forward planning and budgeting of defence expenditure.143

The difficulties of both rising costs and the balance of payments resulted in the need for a fresh financial approach. One approach led to more vigorous attempts to ensure that as far as possible any equipment developed would be competitive in the export market, which would reap internal benefits.144 In addition, there had been a movement towards international collaboration in development as a means of reducing the burden of the development cost on each country and also widening the market for the resulting equipment.145

The Ministry of Aviation's organisation had also been changing from matrix management comprising technical divisions, phases of activity, and functional areas to the introduction of Project Directors. They had been given technical and financial authority within the limits of approved estimates of time and cost for the work to be carried out by the main weapons contractor and co-ordinating responsibility for the project as a whole. 146 The problems of estimating had been increasing due to the infrequency of equipment replacement and also in some cases by the special difficulties associated with international collaboration.147 In these circumstances, the solution was seen as setting the decision point on whether to proceed to full development at the stage when the uncertainties had been reduced to a suitable point.

It should not be surprising that many of these sixties themes were issues likely to impact on any government procurement process unless, where practicable, remedial action was taken. Control lay

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142 HMSO. Cmdn. 2835 of 1965, Chapter 7, para 102.
143 Downey, Chapter 3, para 17.
144 Ibid, para 18.
146 Downey Chapter 3, para 20.
147 Ibid, para 23.
outside of the project management and financial pressures on projects were often to be exerted by both external as well as internal bodies. International collaboration, which extolled the benefits of interoperability, a reduced logistic burden and the economies of scale, also added complexity both to the customers in identifying and agreeing needs and to project management in matching costs, time and specification. Collaboration, which satisfied political goals, was often achieved at the expense of the economy of scale. The advantage of export sales in a gradually reducing and competitive export market were to shrink as contractors' profit margins reduced. The remorseless increase in the cost of technology was to be further compounded by an imperative to introduce advanced battle-winning technology more rapidly 148.

However, the wolf closest to the sledge in 1966 was the need to introduce an effective cost estimating process, which would support a more effective project definition phase. For although the principles of the Zuckerman Report had been endorsed; in practise project studies were not being carried out in sufficient depth and the costs of some projects still continued to be substantially above that originally estimated and approved. 149

**Downey**

Whether by design or otherwise the first issue addressed by the Downey Report introduced sound initiatives to change the culture. It was recognised that procurement was no longer a matter for amateurs and professional expertise was required to tackle the task. To reverse the amateur trend a formal education was identified which had the added long-term benefit of preparing future higher management. Moreover, the whole concept of project management was elevated in status and a procurement Corps mentality introduced. The concept of a gradual build up of a project team comprising a mixture of expertise was also adopted. A procurement handbook was seen as necessary to satisfy the need for consistency in approach and as an asset that would assist in the educational process. The continuity of staff in post was considered essential not only to provide a more consistent approach but also to provide the benefit of developing and sustaining a new culture. Interestingly, the issue of the military staff remaining in post longer would be a topic that would also continue to raise its head.

Downey also advocated learning from experience: an ancient concept alas rarely followed. Instead, the corporate experience of past projects rests in project files, rendered almost inaccessible by archiving as well as by their voluminous and repetitive nature, and in the bound volumes of central committee

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148 SDR Introduction, para 10.
149 Foreword by the Rt. Hon Anthony Wedgwood Benn, MP, Minister of Technology to the Downey Report.
submissions and minutes.\textsuperscript{150} To make matters worse, early IT systems introduced were not interoperable so sharing when conducted was on a parochial basis. Another issue addressed covered the need for cost estimating expertise within the Ministry and recognised that they too could not conduct the task without a hands on approach with industry who held the basic data. The hand on and off saga was to continue up to the SDR.

The study did more than set out a critical series of strictly defined stages in the procurement process including a more thorough assessment of technical risk and cost before permitting entry into Full Development. Rather it highlighted that a flexible approach was key to success and it warned against rigidly applying procedures for all types and sizes of projects. In retrospect it can be argued that too much flexibility in any process is liable to inconsistency in implementation unless the work force is well educated in the process. The corollary being that too dogmatic an interpretation of the process could result in efficiency being forsaken. A balanced approach was offered but we will need to look further to see if it was crowned with success. Industry were generally supportive but expressed concern that the new procedures would lengthen the period of development and render collaboration with other countries more difficult.\textsuperscript{151}

The sharing of requirements documents was also proposed and it was to become common place to take the issue of user documents to a more logical conclusion whereby the contractors were allowed to comment on early drafts of the documents, thus providing a practicable interpretation of what was technically possible. A more contentious issue was the proposal of a management chart, which had much to commend it; as it should have provided a clear delineation of responsibilities. However, different cultures used and abused the system to varying degrees. In particular, the military in both PE and OR appeared almost to want to exchange or interfere in each other's roles. This aspect of juxtapositioning created a situation that was regularly exploited by industry that played one military party off against the other.

The Plowden Report had earlier commented that the Government should exercises financial and technical control, which duplicated industry's own control and hampered efficiency.\textsuperscript{152} However, Downey could not envisage a state of affairs on technically advanced projects where the advice of Ministry specialists and frequent discussions between such specialists and contractors' staff would not be required. He went on to propose that such discussions were not interference, but rather a pooling of knowledge and ideas on critical aspects of a complex task.\textsuperscript{153} The duplication by Government of

\textsuperscript{150} P G Pugh and D Faddy: The effects of development stage on estimates of project time, cost and performance- a summary. DS c (Land) Note for the Record 5/97, para 42.
\textsuperscript{151} Downey Foreword.
\textsuperscript{152} Report of the Committee of Enquiry into the Aircraft industry- HMSO Cmnd.2853, December 1965.
\textsuperscript{153} Downey Chapter 11, pars 283-284.
industrial activity clearly did occur as per Plowden’s observation but the theme of a necessary and closer working relationship was to re-occur regularly especially when tackling high risk issues.

Rayner Report\textsuperscript{154}

By October 1970 the Government announced their intention to rationalise the whole function of defence procurement and the overlapping aerospace responsibilities on a lasting basis.\textsuperscript{155} The main deficiencies of the procurement system at this time can be summarised as follows. It was acknowledged that Procurement was a specialised function, which could only be carried out efficiently by people with specialised skills. Yet although the logic was understood and existing procurement organisations had taken some account of this, the process failed to be even and sufficiently conscious and deliberate. This failure was attributed to the organisational pattern that was not suited to the task and neither had the correct skills in the right balance.\textsuperscript{156} It was further acknowledged that in spite of successive transfers of responsibility from one department to another since 1945 and of the many attempts to reorganise which all departments had made within the framework they inherited, the changes in organisation had contributed little to improvements in the procurement system.\textsuperscript{157}

Also recognised was a lack of responsible management at appropriate working levels. An issue addressed earlier by Fulton in his study who observed, “To function efficiently large organisations need a structure in which units and individual members have authority that is clearly defined and responsibilities for which they can be held accountable.”\textsuperscript{158} It was their judgement that there was insufficient conscious selection of people possessing procurement aptitudes in order that they may be trained for a procurement career; similarly there was not enough conscious selection of, “high fliers“ in the procurement area so that they may be developed for top management jobs within procurement.\textsuperscript{159}

He also recognised that any re-shaping of the procurement organisation would not be achieved overnight neither was there an ideal solution. The new organisational pattern he proposed was seen as offering the prospect of maturing over the years into a more efficient organisation, better fitted to the needs of the customer and working within available resources.\textsuperscript{160} His lasting impression was of a uniquely strong combination of ability, loyalty, and dedication, which, if freed from some of the shackles, which hamper initiative and dynamism, can provide the necessary leadership to bring about

\textsuperscript{154} Government Organisation for Defence Procurement and Civil Aerospace, HMSO Cmnd. 4641 dated April 1971.
\textsuperscript{155} The Reorganisation of Central government, HMSO Cmnd. 4506, dated October 1970. (Rayner Report).
\textsuperscript{156} Ibid. Introductory Note, para3.
\textsuperscript{157} Ibid. Section A, para 10.
\textsuperscript{158} Ibid. para 11.
\textsuperscript{159} Ibid. para 12.
\textsuperscript{160} Ibid. para3.
the required changes. Indeed, he found no signs of reluctance to make changes for the better, but only a healthy scepticism of change for change's sake and fear of change for the worse.\textsuperscript{161} The main deviation from Rayner's balanced philosophy in the current climate is the need to deliver almost an immediate dividend, particularly in terms of cost savings. As a result, additional and significant risk is introduced into the change process. It is interesting to note that he recognised that only some of the shackles could be removed as the difference between private and government enterprise was profit, which would always ensure a difference between the respective cultures.

His recommendations placed considerable store in accountability from the Controller to the basic level of management: the project team. Teams, which were to be brigaded on an environmental basis and contain all the relevant disciplines in accord with the size and progress of the programme. Compelling themes that were to be followed with varying degrees of success. Although the importance of the Controller in informing and influencing the Service Boards has had a particularly chequered history, Rayner recognised their importance by stating, "that it is essential to the successful operation of the procurement organisation that the Services should have confidence in it; it must therefore be seen to be close to the user and responsive to his needs."\textsuperscript{162} This report was also the first occasion on which the importance of whole life responsibility and the link with the Principal Administrative Officers organisations in that process was formally addressed. A logic, which eventually manifested itself in the creation of a tri-Service, Chief of Defence Logistics\textsuperscript{163} who, sits on a par with CDP in the whole life process. A further aspect of the Life Cycle theme that was advocated involved the use of Whole Life Costs as an aid to the decision making process and the importance of these costs to the Long Term Plan; again proposals that continue to be followed.\textsuperscript{164} The practise of closer working relationships between both industry and government were again extolled and in many projects successfully implemented.

The recurring issue of management of the defence research resource was to be plagued by the other recurring themes of R&D establishments: their status, tasking and control. All concerns which will be addressed later in the paper. The proposal to cross-fertilise staff within government bodies continued but for reasons of affordability the link with industry became tenuous. However, cultural schisms can result if high flyers are mobile and apparently gain less expertise and others remain static. The antithesis to this argument places greater store on outside influence because it can act as a healthy stimulus to any culture. Alas to many members of the PE the pre-dominance of the military in high office was seen as being out of balance and encouraging amateurism and this was not entirely

\textsuperscript{161} Ibid. Para 4.  
\textsuperscript{162} Ibid., Para 75.  
\textsuperscript{163} SDR Introduction by Secretary of State for Defence, para 16.  
\textsuperscript{164} Rayner Report, Para 97.
unjustified as senior officers were still being appointed as late as the mid-90s, with no procurement experience or skills.

In concluding his Report, Rayner noted that although the proposals over the years would involve a radical change in the way business was conducted, most of the proposals in it were based on developments already taking place. But before turning to the next external analysis of the process it is worth highlighting some of the key reforms that were introduced by Sir Peter Levene during his tenure as Chief of Defence Procurement which roughly corresponded to the intervening years.

Levene Reforms

In the 1980s the government determined to bring market forces to have greater impact on the defence market and by so doing achieve greater value for money. The catalyst for UK defence industry’s subsequent success in the world exports market was probably inspired by two key goals. The demise of cost plus contracts was to provide the potential to make products more financially competitive. Secondly, MOD instituted competition at every stage of the procurement cycle. It was competition that ultimately brought wider market forces to bear especially as the scope of competition extended beyond national boundaries. In 1983 only 37% of defence contracts were placed after competition or priced by reference to market forces but by 1991 the figures had risen to 67%. At a meeting of the Public Accounts Committee in November 1988 Levene stated that real savings of £400m had been made on an estimated original value of £2.5Bn on 17 major programmes let in the previous two years. Since the initiatives the MOD consistently let some 80% of its contracts competitively.

Where competition was not possible the MOD created a second initiative of No Acceptable Price No Contract (NAPNOC). Here the MOD was allowed to scrutinise all costs including those of the sub-contractor(s) to establish whether they were reasonable and only then let a contract. Another value for money orientated initiative was to buy off the shelf (OTS) as in so doing there were considerable savings to be made in development costs which had been paid by the producer.

A move was also advocated to pass the risk from the customer to the producer. An initiative, which has been coupled with the move to privatise the major contractors. When Mrs Thatcher came to power the arms industry was dominated by state owned firms, four of whom (British Aerospace, Rolls Royce, British Shipbuilders and Royal Ordnance) received substantial payments annually. By the time

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165 Rayner, Introductory note, para 7.
167 HMSO Ministry of Defence: procurement in the 1990s, page 16.
Mrs Thatcher resigned all of these were privatised. The principle method of passing the risk to the producer has been the appointment of a prime contractor.

The responsibility for the development of military equipment was also passed from the Procurement Executive to industry, with MOD project managers performing an oversight role. This places the responsibility for completing contracts on the contractors themselves, while MOD monitor progress. Cardinal points, laying down the broad performance criteria required rather than specifying the design down to the last detail, were introduced to encourage innovative thinking by contractors and increase the range of suppliers able to fulfil requirements. In an effort to avoid further cost over-runs it became MOD policy to make interim payments only when clearly defined milestones had been reached.

There can be no doubt that Levene’s initiatives, in obtaining value for money and encouraging competition, accrued considerable savings and a much tauter defence procurement system evolved. In terms of culture, there was a gradual move in the culture of industry from the complacency of nationalisation to the profit hungry orientation of stockholders. The inter-dependency of government and industrial effort to provide weapon systems was to be placed to one side and a more distanced approach to project management adopted. Perhaps this approach was the cause for the surprise that continued to accompany industrial failure?

Jordan, Lee, Cawsey Report (Jordan et al) - Learning from experience.

The Jordan et al Report was initiated against a background of continuing concern both within the Parliament and in Government that the record of major defence equipment purchases did not effectively demonstrate value for money. At the time of the Report the policy in the PE was to create a more commercial relationship with industry and the procurement process was based on Downey’s recommendations, which as discussed previously were of themselves redefined and extended from earlier practice. Yet, with all these initiatives concern about overruns of time and cost in major defence programmes had continued.

The Jordan et al solution, based on moving decision points to the right to the point of greater certainty, combined with keeping two alternatives alive up to PD stage, were recognised as sensible revisions to the process. However, as both FS and PD were internationally recognised procurement terms neither “Technical Survey” or “Project Validation” was adopted other than as principles to be applied. Project Validation was to include all the planning and analysis undertaken in PD plus whatever hardware

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170 Ibid. para 7.
development was necessary to meet the demonstration’s needs. Technology Surveys were intended to encourage a greater sense of realism in the early stages about achievable requirements. Julian Brazier MP, in commenting on the Report\textsuperscript{172} had one significant reservation to these proposals. He stated that, “the ethos should be risk assessment not risk avoidance”\textsuperscript{173}, as innovation was inseparable from some risk of failure and without some innovation all our equipment would be obsolete on entering service. The risk of equipment obsolescence on entering service remains\textsuperscript{174} as the saga of the SA 80 rifle adequately demonstrates. Ironically the most likely cause of this obsolescence is the acceptance of too much risk, which in turn leads to protracted timescales.

Brazier went on to propose that the PE should not, in examining options, be allowed to fix its own price tags. Rather, it should consult industry and then negotiate with Central Staffs as in any system of objective setting, cost targets should be a bargain between tasker, the customer, and tasked, the PE. Otherwise the PE would indeed meet its own objectives for time and cost but perhaps at the expense of improved performance.\textsuperscript{175} There is a danger in any culture, which adopts performance indicators (PIs), as did the PE, that in order to satisfy PI goals a less technically demanding solution is recommended often at the expense of user needs.

PE’s project managers were key to the success or otherwise of the procurement system but lacked any clear responsibility and authority and were not accountable. Few had terms of reference, levels of financial and other delegation were low, and unfortunately there was no sense of ownership detected that was consistent with an image of a person responsible for tens or hundreds of millions of pounds.\textsuperscript{176} Moreover, the project managers were frustrated at the delays the top heavy management structure within PE imposed and their own remoteness from major decisions. All these shortfalls were to be addressed with project managers at grade 5 level or above reporting directly to the relevant Systems Controller, removing the need for both Deputy Controllers and Director Generals: a step too far as it transpired although the hierarchy and de-layering would remain a change tool. However, Jordan et al saw a hands-off approach being adopted by Controllers, similar to that which existed with industry, coupled with a charter to provide the project managers’ operating boundaries which allowed them a greater management span.

In most respects these charters were introduced, however they rarely spelt out the trade-off responsibilities as this would remain a bone of contention between the user and PE communities. To describe the contents of the Charter as fully meeting the accountability, responsibility and authority

\textsuperscript{171} Ibid. para 11.
\textsuperscript{172} Crossing the Jordan, A Reply to Jordan, Lee and Cawsey Report, Julian Brazier MP, dated 6\textsuperscript{th} May 1988
\textsuperscript{173} Ibid. page 42.
\textsuperscript{174} SDR, Introduction by SoS for Defence, para 17.
\textsuperscript{175} Brazier. page 42.
\textsuperscript{176} Downey et al, Chapter 2, paras 45-46.
provided to industrial counterparts would be to exaggerate; in reality that too would be an issue that would continue to test parties in the procurement process.

Only with control and influence, it was argued, could the PE develop a stock of "project management professionals" from which to build effective teams to match the task.\textsuperscript{177} At that time, the perception was that the project management resource pool of professionals would not represent the creation of a new occupational group and they also felt it important that some call should be made on proven military resource. Again it is worthy of note that even though there were significant advantages to be gained by creating a new occupational group of professionals the strength of the disparate cultures prevented such a move.

The relationship of the Research Establishments to their UK customers, the UK industrial base and foreign customers is a vast topic in itself. Suffice to say at this stage that the Defence Staff did adopt a much closer relationship with the scientists (both Defence Staff and those from the Research Establishments) as a result of their higher tasking and prioritising profile. A relationship that did promote jealousy in the PE ranks as they had enjoyed a privileged, lead position with the Establishments until this time. As for the scientists, their nose was also put out of joint, as they could no longer plough their own furrow as the seed of a customer supplier ethos had been sown.

An organisation of the size and complexity of the PE was seen as requiring a more focused central structure to carry out central functions effectively. It was envisaged that this central function was not to impinge on the management of sea, land and air programmes. The need for central staff is not disputed but the SDR would suggest that many of the functions were not conducted effectively in the intervening years. Another initiative which strengthened the PE centre was the proposal that CDP should extend his scrutiny of project proposals to include consideration of technical issues along with his current responsibilities for contractual, commercial and management approach to be adopted.\textsuperscript{178} This concept was to delay projects, as CDPs remain important and busy men.

The paucity of project information ascribed to a lack of project records was also addressed. However, whatever the cause it would remain a problem within the cultures of the PE, the Central Staffs (who failed to audit battles effectively) and even at the centre of technical excellence, the DERA, where experimental records are still not on a common database or readily to hand. The cause for this weakness is perhaps that from an individual perspective the creation of project diaries adds little immediate value and without that level of detail it is difficult to identify corporately such issues as best practise. Although there had been a gradual central awareness of the lessons learned within the PE,

\textsuperscript{177} ibid. paras 55 and 56.
\textsuperscript{178} ibid. paras 69-71 and 4.1.
there was no fundamental change in attitude and management mechanisms to maintain an improvement on a continuing basis. A senior post under CDP was introduced and charged with a small team to oversee the art/science of project management and collate experience across the board and maintain the corporate memory and wisdom about how things ought to be done.

Implementation

Jordan made one observation that may be a key to progress, "The evidence from past experience was that analysis was not lacking. Where the MOD had failed in the past was in the consistent implementation of recommendations and in the learning of lessons from experience". Senior MOD staffs were seen as often fully committed to their daily chores without additional responsibilities and line managers were not well placed either, as they were involved in day to day decision making. With these limitations in mind it was recommended that there should be an added focus to drive through change and that an individual should be established at a very senior level. DCPD (Support) was created and adopted this responsibility. To provide internal confidence and external support it was argued that MOD should ensure that progress with implementation was measured against a set of indicators, which reflected clear objectives and timescales. It was considered no longer sufficient to enunciate a new policy, incorporate it in an instruction and then circulate it to the staff. The benefits of measuring progress cannot be decried but without change the level of success is likely to remain limited.

End of a Procurement Era?

The sound procurement advice first advocated by Downey, elaborated and finessed by Rayner and expanded by Jordan et al provided a firm foundation for the future; a foundation all the firmer due to the commercial expertise of Mr Levene and the sound practises he introduced. So if such a firm foundation was in place what was to cause mistakes to continue; costs, timescales and specifications not to be met; and antagonism to continue between all parties involved in defence acquisition? Was sufficient effort and funds placed in to the management of change or was the approach to take a short-term view and not appreciate the long-term gains? The SDR would confirm one way or another whether a positive attitude to change culture was adopted over the preceding decades or whether the

179 Ibid. para 80
180 Downey, para 87
181 Ibid. para 6.1
182 Ibid. Paras 88 and 6.2
disparate extant cultures ensured that time stood almost still in the progress towards a more effective business, management and organisational process.
CHAPTER 5

THE STRATEGIC DEFENCE REVIEW

Introduction

The SDR fulfilled the Government's manifesto to conduct "a strategic defence and security review to reassess our essential security and defence needs". A central element of the SDR was that it was to be "foreign policy and not Treasury led," and the new shape of the Armed Forces would be dictated by defence and security needs over a twenty-year timeframe, rather than by any overriding quest for financial savings. The Foreign and Commonwealth Office was therefore involved in the debate and the Department of Trade and Industry also played a part in addressing industrial and procurement issues.

Another aim of the SDR was to forge a national consensus on defence. In fulfilling that obligation both opposition parties and parliamentary defence committees were involved, as were Members of both Houses and spokesmen of all leading parties. Ministers all held luncheons with former defence ministers and retired civil servants and Service leaders. Moreover, the process of consultation also encompassed the wider defence community, defence experts, academics and the public. The consultation work also involved a wide Kirk's consideration of "Smart Procurement". The breadth of the consultation was to be applauded as rather than rely on current somewhat myopic in - house military, civil service and political cultures; a wider bailiwick was trawled which encompassed a myriad of beliefs, values and attitudes which together provided a richer tapestry for government consideration. Whether the distillation, weighting and priority of the various cultures' views were effective remains unknown.

The concept of "Smart Procurement" was deliberately taken forward under the auspices of the National Defence Industrial Council (NDIC), a joint government and industrial body, which is chaired by the Secretary of State. A combined industrial / government steering group was established in November 1997 with a supervisory role over a number of teams comprising MOD officials, representatives from industry and staff from the consulting firm McKinsey. It was sensible to bring industry into the thought process as they have a vested interest in and is one of the most critical observers of the defence procurement process.

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185 MOD PR Note dated 11 December 1997.
The general response of the defence community to the SDR was favourable.\textsuperscript{186} However, commentators have tended to disagree with Secretary of State’s view that the SDR was “the most radical restructuring of our armed forces for a generation”, seeing it more as “sensible” and “evolutionary”.\textsuperscript{187} They also welcomed the SDR’s relative openness in most areas, the lack of Service in fighting and the signs of successful co-operation between Servicemen and officials in its production. All of the Service Chiefs published statements personally endorsing the SDR whereas in the past their predecessors were noted for their silence regarding reviews such as Options for Change. So many beneficial management steps were employed in taking forward the SDR and in that process a greater harmony apparently existed between the Services and their Civil Service colleagues.

Some of the key SDR findings are addressed in earlier Chapters. The focus of this chapter will be to consider the revision of equipment procurement as envisaged in the SPI; to review government support for greater defence collaboration and rationalisation; and touch upon the future of DERA.

**Smart Procurement Initiative**

**Policy**

The SDR attributed significant importance to achieving; “faster, cheaper and better” defence procurement as, according to the Secretary of State for Defence, “too often in the past our new equipment has been too expensive and delivered too late.”\textsuperscript{188} This point was reinforced by the 2000 National Audit Office Report (NAO) on major programmes, which highlighted an average delay of 47 months, compared to the 43 months from 1998.\textsuperscript{189} The costs of the 25 major projects identified in the NAO report at the time of SDR had registered a 7.5 to 8.5 per cent overrun over original estimates in each of the last three years.\textsuperscript{190} As one observer noted this was hardly a revelation as, “The defence ministry’s capacity to waste money is legendary. Procurement is a dismal story of delays and extortion”.\textsuperscript{191} To put this view into context it should be noted that when the NAO reviewed procurement practises in 11 other countries in 1994 they concluded that, “relatively, and particularly in terms of the pursuit of competition, the Department was doing well.”\textsuperscript{192} The Government identified the following causes and effects:

\begin{itemize}
\item \textsuperscript{186} RP 98/91, The Strategic Defence White Paper, by Tom Dodds and Mark Oaks, p 13.
\item \textsuperscript{188} SDR, Introduction, para 17.
\item \textsuperscript{189} NAO Major Projects Report 1999
\item \textsuperscript{190} SDR, Essay 10, Fig 1.
\item \textsuperscript{191} Philip Stephens, “Short range target: Tony Blair’s defence review has taken the politics out of the issue but has missed the opportunity to think ten years ahead”, The Financial Times 25 May 1998.
\item \textsuperscript{192} NAO, MOD Defence Procurement in the 1990s, HC 390, 1993-94, para 6.
\end{itemize}
- Slippage due to technical difficulties, budgetary constraints leading to the postponement of expenditure, the redefinition of requirements and difficulties over collaborative programmes;
- Cost over-runs due to programme changes, amendment to equipment specification, poor estimating and inflation of prices for defence equipment in excess of inflation in the economy as a whole\textsuperscript{193}.

The SDR provided an opportunity to examine the procurement process from first principles, drawing on best practise from the private sector and the outcome of that examination is analysed in subsequent paragraphs.

Tiered purchasing

One of the Study's main conclusions proposed that the MOD should no longer operate the same acquisition process for all items purchased, but instead should use different means of procuring three separate categories of items, each valid at around £3bn, namely approximately one third of total equipment spending.\textsuperscript{194} The first category of "Tier" comprises low-tech and low cost civil and military items, which are readily available off-the-shelf. Tier 2 includes items, which do require some development work and an associated active MOD role, but are relatively low cost and low risk, such as components of a weapon or a upgrade to an existing weapon not involving major integration. Tier 3 addresses the most complex projects such as ships, armoured fighting vehicles, and aircraft, which also require the integration of Tiers 1 and 2 equipment and interaction with others. They are also high cost and risk projects with few potential contractors. The acquisition of all Tiers would retain certain common characteristics, such as a military requirement; a competition, a contract, testing and public accountability, but the savings would be made in the way procurement was managed.

The studies suggested that significantly different procurement processes are appropriate for the Tiers. For example, it proposed simple procedures for Tier 1 such as the use of credit cards or electronic bidding; whether there was a need for written contracts for smaller contracts; and the benefits of longer term supply arrangements.\textsuperscript{195} This concept was not novel rather it re-emphasised the Downey argument which, highlighted that flexibility was key to his new procurement cycle and warned against rigid procedures for all types and sizes of projects\textsuperscript{196}. That said, the segmented approach to procurement that is to be applied in both the DPA and CDL areas should provide a more flexible and often less costly route to achieve rapid introduction into service. This will be achieved either by removing some of the risk reduction steps associated with a Category A project or by removing the

\textsuperscript{193} SDR, Essay 10, para 4.
\textsuperscript{194} SDR Essay 10, para 12.
\textsuperscript{195} Ibid. para 13.
\textsuperscript{196} Downey, para 259
time consuming process of approval by EAC and instead seek approval at an appropriate lower level. If this system is to operate effectively it will require a significant change in attitude from Ministers in not seeking total visibility and moreover in the DPA and DLO to ensure that project visibility is not raised to the highest levels.

Through Life Systems Approach

The SDR also proposed the adoption of a through life systems approach\(^{197}\), although it should be argued that once again this is not totally novel. Not only is such an approach standard practise in both the commercial and in the domestic market, where the cost of ownership and disposal are critical factors in the decision process but it is also standard government procedure. In 1974, MOD guidelines were introduced directing a through life approach\(^ {198}\) which in turn was supported by the House of Commons Defence Committee in 1988\(^ {199}\) and by the National Audit Office in 1992.\(^ {200}\) Moreover, it is key to the investment appraisal method stipulated by HM Treasury for all public sector projects.\(^ {201}\) As pointed out by Dr Kirkpatrick\(^ {202}\) when referring to through life costing, “it is disappointing that the restatement of this principle implies that there remain some MOD branches which have not yet adopted it.”

However, before discounting this activity as past practise we need to expand the argument to see if there has been a policy or tendency to adopt a, “Systems” approach both to identify a unique capability and then to measure possible solutions to that capability in the wider context of our total defence capability\(^ {203}\). The main difficulty with this procurement approach is how does a project progress in this wider context. For some time a System of Systems approach had been adopted by the Systems area staff, whereby the case for a new capability had to be measured for value; firstly in the context of a particular capability and then across capabilities.

One area where this process has been lacking is producing different technical solutions to meeting the requirement. There had been somewhat of a mindset that a tank should replace a tank rather than ensure that the most effective and employable anti tank systems were considered in the round. Of course alternative solutions were identified but rarely was a convincing case made for their adoption because resources were not available to conduct the exercise. One of the key difficulties associated

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\(^{197}\) Ibid, para 7.
\(^{202}\) “The Challenges of Smart procurement”, Dr David Kirkpatrick, Boscombe Down, 4\(^{th}\) March 1999.
\(^{203}\) Ibid., para 7.
with adopting a more balanced analytical approach was the lack of an effective Balance of Investment mathematical model suite and without such instruments there is little effective, subjective measurement. Instead rather coarse models were employed and the results subjected to judgement by committee. Committees, which are often briefed almost entirely on a single service, orientated basis.

In addition, there was the question as to how a project should be delineated in the first instance and the digitised arena well illustrates this point. The Joint Battlespace Digitisation (JBD) project comprises a host of inter-related projects including BOWMAN. It would be the function of an integration authority to ensure the compatibility of individual projects with the overall JBD structure. However, the integration issue extends across the defence spectrum and is not limited to JBD equipment. For example, most platforms and weapon systems will be an integral part of JBD. Moreover, this is not an issue limited to UK capability alone as often they are required to be compatible with systems of allies. Arguably, the Equipment Capability area, DPA, and DLO will all require a broadly based integration authority to check all systems before seeking approval and subsequently before entering service. Such checks, though necessary, will take time and consume scarce resources. Until an adequate B of I model is produced there is a further likelihood that individual cultures, particularly those of the single Services and scientific scrutineers, will continue to play a key role in committee. However, in principle a coherent process for co-ordinating a new equipment requirement, linkage with the research programme, specification, acceptance and through-life management is a prerequisite for improved equipment acquisition.204

Revised front-end process and oversight mechanisms

Another key initiative sees fuller early planning of projects with appropriate trade-off between military requirements, time and costs, followed by more rapid, and hence cheaper, full development and production.205 To achieve this goal it is intended to introduce a revised and clarified risk-reduction process. This will involve increasing the proportion of spend at the front end; ensuring that performance, cost, time trade-offs are made at an appropriate point in the project life cycle when sufficient information is available; and introducing design to cost principles. As will be recalled from earlier Chapters, the need for substantial early investment is not novel, rather it has been a constant theme first postulated by Gibb/Zuckerman in 1961206, and repeatedly echoed by Downey in 1968.207

204 Ibid., para 7.
205 Ibid., para 8
and Jordan 20 years later\textsuperscript{208}. Despite the compelling arguments all three presented and the MOD's official endorsement of their proposals, the course was not followed.

\begin{center}
\textbf{DOWNEY AND THE NEW PROCESS}
\end{center}

\begin{center}
\begin{tabular}{|c|c|c|c|}
\hline
Recommended & Concept & Assessment & Demonstration & Production \\
Process \hline
Approximate & Concept & Feasibility & Project & Full Development & Production \\
Mapping \hline
Downey Cycle & Concept & Feasibility & Project & Full Development & Production \\
& & & Definition & Development & Production \\
\hline
\end{tabular}
\end{center}

Assessment includes feasibility and subsystem risk reduction activities from Project Definition. Demonstration ends when risk at a level acceptable to accept and project manager willing to transfer.

Fig. 1

Perhaps during the Cold War this could be put down to the need to rush equipment into development and production to meet a particular Soviet threat. In today's capability driven rather than threat driven environment the MOD can spend more time assessing a concept, exploring options and reducing risk by testing technology (typically up to 15\% of costs) before authorising development.\textsuperscript{209} However, it should be recognised that with the higher cost programmes such as aircraft and ships there will continue to be a reticence to spend large sums without committee approval. Notwithstanding these concerns, an up front investment should result in a manufacturing phase which, through better definition and effective risk reduction is more likely to run to planned time and cost. The differences between new and old processes are at Fig 1.

However, as it stands the streamlined approvals process for major projects sees only two mandatory approval points consisting: one at project initiation - the Initial Gate; the other prior to commencement of demonstration and the main investment - Main gate. Numerous studies have been conducted into why delays occurred under the old regime and often the approval points were in themselves causes for delay hence less approvals less delay. But that in itself is a tad simplistic because even the Downey model was not rigidly followed. Deviations from the Downey model were attributed to: extra phases between FS and PD; an extension of either FS and/or PD; cancellation; a major in-service update; exploratory development substituted for PD; and finally omissions of evaluation phase following

\textsuperscript{208} Jordan et al, "Learning from Experience", HMSO, London 1988
\textsuperscript{209} SDR Essay 10, para 15.

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Private Venture (PV) development or an off-the-shelf project\textsuperscript{210}. The list is not exhaustive but was based on an extensive examination of Land system project histories over the period 1975-95. It will require a significant change in values in all those involved to allow a more rigid course to be followed. Another interesting insight from the aforementioned examination was that the central committee scrutiny process appeared very effective in reducing risk by authorising timely corrective action or cancellation\textsuperscript{211}. Whether agreement was reached in committee, by written consent or in discussion with Ministers both internal and external bodies had confidence in that decision making process. Indeed, Ministers would task EAC to re-visit areas if they were still not persuaded by the EAC recommendations or arguments supporting those decisions. Again, it appears that the likelihood of success without regular top-level scrutiny could be impaired. Interestingly, the need to provide Ministers with visibility of all major or contentious projects does not totally strike a chord with greater hands-off approach.\textsuperscript{212} Although that goal will be partially guaranteed as the EAC will examine fewer projects and normally only those in excess of £400m\textsuperscript{213}.

Jordan also proposed that the final visit to EAC should occur after both stages of PD had been completed because at that stage he felt a point of greater certainty had been reached, in part by keeping two alternatives alive up to that point. The revised process sees approval from EAC taking place earlier and moreover, competition ceasing earlier as well but there are other changes that might militate against what appears a slightly riskier route when it is remembered that both processes saw 15% costs being expended at about the same early stage. The danger of this revised process and its predecessor is that people are reticent to approve and authorise spend of significant funds, which is the case in Category A projects, until they are absolutely convinced that a project should progress.

Incremental procurement

Procurement may also be incremental, that is, instead of waiting to introduce an item into service until optimum performance has been achieved, equipment can initially be accepted with less ambitious capability. Taking due account of rapid changes in technology, the equipment will then be upgraded incrementally, rather than waiting mid-life upgrades.\textsuperscript{214} There are two major benefits to such an approach. Firstly, it is probably the only way to provide some capability in a rapidly changing area like Battlespace management systems. Once in the hands of the user their thoughts mature and a better handle on future needs is created, which in turn should influence future increments. Secondly,

\textsuperscript{210} Director Science (Land), The Effect of Development Stage on Estimates of Project Time, Cost and Performance Note for the Record 5/97.

\textsuperscript{211} Ibid. para 40.

\textsuperscript{212} Ibid. Supporting Essay 10, para 16.

\textsuperscript{213} Ibid. para 21 and HC 138, para 350.

\textsuperscript{214} SDR Supporting Essay 10, para 8.
there is the scenario where the user is unsure of precisely what he wants over and above the first 10 years of service so increments can be introduced down stream. Against these benefits there are problems.

The underpinning proposal is to adopt a low risk approach, which much concurs with MOD and the Treasury’s views of meeting time, cost and performance parameters. A low risk option often will involve the purchase of OTS equipment from US, perhaps with only minor modifications. Low risk could therefore be predicted to be a particularly appealing feature to the staff of the DPA. If this behaviour happened to unfold it is likely that the customer, who would mostly seek the highest feasible risky course, will be at odds with the supplier, a concern held by Brazier. Some of the reasons why customers would seek the most advanced capability from the outset is the desire to minimise disruption to the front line, maintain high availability, and limit the training and maintenance burdens. The costs of an incremental approach are again difficult to judge. Once the prime contractor, probably with design authority responsibilities, has delivered the first level of capability it is extremely difficult to compete the next phase effectively at prime contractor level. Here lessons can be drawn from both the CVR (T) upgrade and the Tornado Mid Life Update programmes. The latter case, although not a true incremental approach, does illustrate with its costs escalating to almost 70% beyond original estimates how control can be lost applying today’s management techniques. In such circumstances, it is also difficult to guarantee cost effectiveness. Moreover, an incremental approach is likely to add to the approvals burden and make equipment management more complex. Naturally, people are reticent to approve and introduce a project where the total ownership costs cannot be defined.

Transition from a functional to a project based organisation focused around IPTs

Another feature of the new procurement policy was to achieve closer “Partnering” between government and industry, particularly in situations where competition is no longer available. This approach will influence the formation of Integrated Project Teams, which, unlike the current position where many functions are conducted separately, will be responsible for both procurement and through-life support. A vision put forward by Strath and Downey all those years earlier. Project teams, under long term and specially recruited leadership, will include representatives from all the bodies with an interest in the particular programme including contractors. Past practise had led to arms length relationship between the key stakeholders which, made it difficult to get the right balance between

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216 Brazier, para 42.
218 Ibid. para 8.
time, risk, cost, performance and through life support\textsuperscript{219}. In addition, a continued optimism in predicting cost, technical risk and time-scales remained as it had through previous generations.\textsuperscript{220}

In the SPI, Project leaders were given greater powers to take decisions but this again was not a novel concept.\textsuperscript{221} It was further hoped that the co-operation engendered by this team approach should, on US experience, lead to earlier problem solving and more efficient development and oversight of a project through its pre- and in-service life.\textsuperscript{222} This particular approach is again not entirely original in that most major programmes have to a degree adopted the IPTs concept. Both the Trident and Eurofighter project team went on a stage further and had a permanent OR and PAO representative as well as relevant expertise and leadership from the PE. The placing of industry in the team is still difficult to imagine not in terms of physical presence but rather, their attitude to payment, loyalty and openness. The so-called US experience along with that of France has little practical experience of industrial involvement.\textsuperscript{223} Clearly there will be cultural difficulties when first establishing a team but if the DPA continues with a cross discipline education and effectively create an acquisition stream then there is a greater likelihood of a common approach.

Ensuring that only the best people for the job are selected as leaders will require a truly objective and open competitive selection process with external candidates being added to the competition to stimulate the process. It would help if a voluntary system were in place so providing a feeling of individual involvement in the career management process. Without leaders of quality it is doubtful whether the IPT, like any other teaming concept, will succeed or that increased authority could be effectively applied.\textsuperscript{224} Moreover, success will also only be forthcoming if common standards are applied across the civil/military divide with no exception. Not surprisingly most of the current incumbents were found from the old Project Managers. Ironically, the success or otherwise of the modification of the approvals process will also be impacted by the performance of IPTLs who together with the customer have greater delegated powers and are to be held accountable for the results of their decisions.\textsuperscript{225} It will be particularly interesting to see if accountability is only notional or whether poor performance will result in dismissal.

\textsuperscript{219} Ibid. para 14.
\textsuperscript{220} Downey, paras 137-38
\textsuperscript{221} Downey Chapter 2, paras 45-46.
\textsuperscript{222} Ibid., para 14
\textsuperscript{223} US 1999 Department of Defence Procurement Conference, May 28, Norfolk, Virginia, Response by Mrs Eleanor Spector.
\textsuperscript{224} DCS Supporting Essay 10, para 14.
\textsuperscript{225} Ibid., para 16.
A specialist acquisition stream

As touched upon earlier, the establishment of a new specialist stream of acquisition personnel in the MOD is important to the outcome of these reforms. 226 A cadre comprising civil and military staff who will be specifically trained and spend much of their careers in the procurement field. It will encompass the ECC, DPA and DLO areas. Downey and Rayner had also predicted the need for a specialist project stream and emphasised that the military would have to spend longer in post to make a positive contribution. 227 228 Fundamental to the Acquisition stream will be the definition of a comprehensive set of competencies which once mastered will provide common professional and people skills and ongoing education to keep pace with developing processes and organisations 229. It will be interesting to see whether the present ratio of military to civil is maintained or whether on receipt of IPT military members from the ECC, Requirement Managers, further cuts from the military fulfilling project posts are sought. Moreover, it was disappointing to note the significant delay imposed on the implementation of the concept. I too had to wait an inordinate period to attend a Project Management course in the early 90s because at that time the priority afforded to education was also low as no courses were available for a significant period whilst contracts were being competed.

Improved commercial practises

The current set of incentives used by MOD were not effective in encouraging desired contractor behaviour, and hence failed to deliver either the absolute level of performance or the rate of improvement that is achievable 230. To address this situation, it was proposed that future contracts should be less inflationary: they should be firm prices not subject to variation for agreements under 5 year’s duration. Contracts over 5 years should have variation clauses based on general output indices, i.e. the general producer price index, rather than input indices, such as materials and labour. Historically, general inflation has been less than inflation in defence goods. In so doing, MOD will pass greater risk and incentive to control costs to the contractor. Again a theme from the past recognised by Downey. In addition, the past performance of contractors would be formally scrutinised in tender assessment. 231 Together with positive incentives, rigorous negative incentives can also be a powerful motivation tool, although those employed at the time of the SDR were deemed ineffective: milestone payments were often used as stage payments rather than as progress incentives; and liquidated damages were difficult to enforce and often ineffective. In going forward, MOD should

226 Ibid., para 26
227 Downey, paras38-40.
228 Rayner, para 61.
229 DCS, Chapter 10, para27.
231 SDR Chapter 10, para 8.
attempt to re-negotiate contracts and in the process better employ both positive and negative incentives, as a common approach to be applied to all new contracts.

All these steps were aimed at creating a new relationship between the MOD and its suppliers in which both sides could act to their strengths, under formal partnering arrangements where apposite, and which provided industry with the greatest incentive to perform. Through these measures it is believed that the customer/supplier relationship can best be improved to mutual advantage. It remains unclear as to whether this new relationship is expected to cater for difficult decisions over competition and export opportunities? Whether the profit culture will gel with that of the custodian of taxpayers’ money or that industry’s past performance and indeed that of government officials is capable of being moulded into a more harmonised relationship. What is absolutely clear is the need to alter what was described as a relationship wherein strengths were deployed against each other.

Organisational options

SDR also examined the position and role of the Procurement Executive, and whether it had a continuing role or the work was best conducted in the private sector. The review decided that future needs could best be met by turning the PE into an Agency, with effect from April 1999, and establishing a new central customer in MOD HQ. Changes to the PE are intended to cut operating costs by around 20% by 2001/02. Much of this savings target will be achieved by cutting the number of staff by 650. These savings could well create even further instability in the PE workforce, a body that was reduced substantially following co-location of PE branches in Abbey Wood and then after implementation of the Defence Cost Study. Further job cuts could also impact on morale and destabilise more the DPA at a time when experienced personnel are needed to implement many of the proposals.

Internally it was deemed necessary for the DPA to have a very close relationship with its military customers, capable of bringing together a wide range of interests using the “single project team” approach. Much of the closeness is likely to be achieved by the presence of RMs in the IPTs. The creation of ECC the centre customer, which better aligned the Systems area with the financial roles from DCDS (Programmes and Personnel) and 2nd PUS, has reduced the likelihood of challenging needs and costs and a single point of customer reference in the MOD has been achieved. As with the

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232 Ibid., para 8.
234 Ibid. para 17.
235 Ibid. para 19.
238 SDR, Chapter 8, para 157.
DPA- IPT concept Capability Working Groups (CWGs) were introduced by the customer to focus those responsible for different elements of military capability. Whether it is sensible to create total harmony between the customer and supplier is open to debate, as a degree of dynamic tension can be beneficial in keeping both parties alert rather than complacent. Neither is it totally clear that by putting customer representatives into IPTs and therefore under their control whether a true customer/supplier relationship will be established. This remains a concern, as CDP will, as both Chief Executive of the DPA and Accounting Officer, retain much of the influence he enjoyed when in the PE. The absence of dedicated military equipment expertise above three star either within the DPA or customer base will perpetuate the supplier, namely CDP, having a critical influence (on a par if not greater than the customer) on equipment decisions at both Ministerial, Finance, Policy and Management Group and Equipment Approval Committee levels.

Preferred ECC and DPA organisations

At the time of conducting the quantitative and qualitative surveys the following two organisations had been adopted by the ECC and DPA respectively. Brief notes are included below plus diagrams to provide an insight into these two MOD organisations and the functionality to be found at the various levels of the hierarchy.

ECC

The ECC staff combines strategic planning, financial programming and requirements specification. As a body the ECC reports to the Vice Chief of the Defence Staff and the 2nd Permanent Under Secretary. The ECC staff is uniquely and exclusively responsible for planning the MOD Equipment Programme. The ECC staff agrees an annual plan with DPA and DLO IPTs. These plans are then formalised in Customer Supplier Agreements. DCDS (EC) and the MOD Principle Finance Officer (PFO) are jointly responsible for the coherence of the Department's financial plan. Capability Managers (CMs) provide direction and target setting for Directors Equipment Capability (DECs). DECs construct Capability Area Plans (CAPs) based on MOD strategy, in which is identified the required capability and cash targets. They also work with DPA and DLO IPTs to deliver projects within the required performance, cost and time envelope.

The following notes should be considered in concert with the organisational diagram below:

1. Director General (Equipment), DG (E) provides advice on the equipment programme as a whole and provide the EAC secretariat. DG (E) also reports directly to the Principal Finance Officer for the exercise of the Accounting Officer's responsibilities.

2. Director Capability Resources and Scrutiny, (DCRS) is responsible for the construction of the Equipment Plan (EP) and the Applied Research Programme (ARP).
3. Director Equipment Plan (DEP) is responsible for the scrutiny of the requirements and programming support to the Capability Managers.

4. Director Equipment Secretariat is responsible for the Approvals process and Secretariat functions.

5. The Joint Capability Board is DCDS (EC)'s Executive Board and includes his DGs and CMs.

6. Research Co-ordinator (R Coord) co-ordinates activities across Director General (Research and Technology)'s DG(R&T)'s area. He is also budget manager and management planner for DCDS (EC).

7. D (S&T)/ ADR (EC) Provides higher level advice on ARP.

8. The Synthetic Environment Co-ordination Office (SECO) is responsible for the research, demonstration and defining the requirements for applications of SE across the totality of MOD.
DPA

The organisation of the DPA is outlined below. The Agency is tasked with procuring equipment to meet the technical requirement and securing best value for money. The Agency is responsible to the Minister for Defence Procurement who approves funding at the start of each project phase and turns to HM Treasury who authorise the release of funding at the start of each project phase. The Equipment Approvals Committee or a delegated authority scrutinise progress and advise Ministers on funding approvals.
1. The Executive Board collectively provides accountability, through the Chief Executive, for the Agency’s aggregate performance, and advises Peer and Support Groups.

2. Peer Groups are the ten informal groupings of Integrated Project Teams within the DPA to facilitate exchange of information and ideas for performance improvement. Peer Groups A- F cover projects that have not reached Main Gate. Peer Groups B and H cover projects that have passed Main Gate. Peer Groups C, D, E, I, G and J cover projects that are both pre and post Main Gate and IPTs that control Clusters of individual projects.

3. Support Groups provide administrative and technical assistance across the DPA and mentors for IPT members.

4. Key to SPI is the creation of IPTs responsible for the through life management of an equipment. The Department is creating some 139x project teams across the DPA and DLO. Of those 89 will be in the DPA responsible for managing projects from concept to entry into service.

5. DPA IPTs will bring together different functions at appropriate points in the project and membership will be drawn from the following key disciplines:

<table>
<thead>
<tr>
<th>IPT Leader (answerable to the Defence Equipment Customer)</th>
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</thead>
<tbody>
<tr>
<td>Requirements manager (RM)</td>
<td>Secretariat skills</td>
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<tr>
<td>Programme management</td>
<td>Project engineering and technological expertise</td>
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<tr>
<td>Equipment Users (Navy, Army and Air Force)</td>
<td>Financial management</td>
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<tr>
<td>Industrial Expertise</td>
<td>Commercial management</td>
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<tr>
<td>Integrated Logistics Support Management, including Equipment Support Functions</td>
<td>Associates (e.g. Department of Trade and Industry, Defence Export Sales Organisation, Specialist Procurement Services, Safety Specialists)</td>
</tr>
</tbody>
</table>

The relationship between the Integrated Project Team and the Central Customer will be governed by a Customer Supplier Agreement. The Agreement will specify the outputs required from the team for each project phase and will include the cost, performance and time parameters within which the team has authority to make trade-offs in managing the project.
DEFENCE PROCUREMENT AGENCY
Integrated Project Teams

Support Directors Responsible for One or Two Peer Groups

Executive Board

Support Groups

Air/Land Technology Group (ALTG)
Ordinance Safety Board (OSG)
Business Improvement Group (BIG)
DPA Secretariat (DPA Sec)
International Relations Group (IRG)
Private Finance
Senior Commercial Group
Sea Technology Group (STG)

Central Finance and Planning
ASPECT Planning Group
Facilities Management Group (FMG)
Britain's Defence Industrial Base

The SDR places a firm commitment to maintaining a strong UK defence industrial base but only touches upon the thorny issue of arms export by calling up the criteria laid down in July 1997 which prohibits the misuse of arms for aggression or internal repression\textsuperscript{239}. In a competitive export market where UK has made a significant contribution it is difficult to maintain a cutting edge when working within a foreign policy which lacks clear boundaries and appears more restrictive than that employed by other nations. In the process of acknowledging the strategic importance of a healthy defence industry, it also recognised the problems they faced post the Cold War. In parallel with a significant contraction of the global defence market throughout the 1990s there has been an increase in competition brought about by dissolution of the Cold War power blocs.

Two ways of alleviating these problems were identified. Firstly, more effort should be made to exploit defence technology and expertise in the civil market. The proposal to introduce a Defence Diversification Agency within the DERA was key to this initiative\textsuperscript{240}. Secondly, competitiveness could be improved through greater international restructuring and collaboration, which would result in greater economies of scale. The impetus for this trend has been the significant strides made by the US during their intense consolidation over the past 5 years. The resultant scenario postulated is that of a European industry unable to design and manufacture advanced platforms independently who therefore become mere sub-contractors to their US masters. The SDR underlined the Government's commitment to assisting the UK and European defence industry in achieving greater efficiency through restructuring by its continued involvement in international initiatives to aid this process.

There are some contradictions and potential pitfalls evident in the Government's defence policy. The Review commences with an emphasis on the importance of a "healthy and competitive industrial base" but then proceeds to highlight the requirement for greater international collaboration and industrial restructuring. As industrial re-structuring is synonymous with take-overs and mergers, this approach, particularly if it follows the US experience, would result in reduced competition. How effective competitive pressures will be maintained, should a pan-European Defence Company emerge is not made clear. I wonder if the MOD would be able to emulate the US DoD whose concerns regarding the merging of Lockheed Martin and Northrop Grumman and the accompanying vertical and horizontal integration led to the abandonment of the proposal? If the merging of BAe and GEC is a reflection on actual policy then it looks as though market forces will be the key criterion. Also further rationalisation of the defence industry and greater international collaboration will make the preservation of the strategic role of the industry more problematic and expensive. The Defence

\textsuperscript{239} SDR Chapter 8, para 163.
\textsuperscript{240} Ibid. Para 164.
Committee aired their concern by stating, “The key to retaining access to strategically important technologies and manufacturing capabilities, in an era of an increasingly rationalised industry and collaborative programmes, is to ensure mutual inter-dependence. The risks of dependency are high, however, and the Government must take a hard-nosed and critical look at our ability to keep open such access, and where there are doubts we must still be willing to fund the necessary capabilities single handed”. It is difficult in a post-nationalised, industrial era to contemplate returning in that direction and even if we did how wide should the strategic base be? Since 1998, UK have been progressing a policy of inter-dependency with US and Canadian partners to satisfy our biological protection vaccination needs and have also enjoyed a long lasting nuclear technological inter-dependency; it is doubtful in such a scenario whether any area is truly a national concern.

Although the SDR places great store in closer co-operation and harmonisation within the European defence industry, little mention is made regarding the very close ties between and ownership of many UK defence companies and US. The Conservative Government’s approach was essentially to follow a twin tracked route of sanctioning European collaboration while simultaneously retaining links to US technology and industry. The SDR does not clearly state how this balancing act will be performed in future. If it is not conducted there is a danger that what emerges from the process of European consolidation is not a strong European body that is better able to compete with US on an equal basis, but a “Fortress Europe” where preference is afforded to European equipment. The House of Commons Defence Committee aired their concerns by stating, “a careful balance is needed, with the UK government using its influence in Europe to avoid any undue European-preference policy emerging while also playing a full part in rationalising the defence equipment market in Europe.”

The future defence industrial relationship between Europe and the US will become a key issue because as the costs of developing new defence products escalate, then the trend towards global products, such as the Joint Strike Fighter (JSF), may become not only the only affordable option but also the norm. The UK’s recent stakeholder deposit of £2Bn to JSF would suggest that this course might be followed. Even if global products do not unfold, with their considerable R&D budget US equipment is often more advanced and therefore more competitive than Europe’s. Smart procurement places great store in speed into service and there is no quicker way of achieving that goal than to buy either off the shelf or a modified off the shelf system to match specific UK needs. Where then is the future of competition, which was deemed so critical to the achievement of VFM? In both the European and wider US collaborative scenarios a closer link between cultures is likely to unfold and within industry it is the norm for the dominant participant to impose its culture: BMW’s purchase of Rover and also

242 HC 675 1997-98, para 55.
their discarding of the company well illustrates this point. Taking the logic one step further, there are likely to be greater problems with foreign participation in IPTs, as values, beliefs and overall culture are unlikely to be shared, at least not in the short term. How a foreign industrial partner would be given access to all appropriate research, even though it may be exchanged on a government to government agreement, will also need to be thought through.

It is also proposed that by better harmonising the requirements of European Armed Forces efficiency in procurement would also be realised through collaboration. Clearly, there would be shared and therefore reduced development and production costs and resultant operational and logistical benefits. UK’s key role in OCCAR is seen as an important conduit to facilitate harmonisation and the long term collaborative programmes of Eurofighter and MRAV are further illustrations of UK’s commitment to Europe. Furthermore, the White Paper proposes that the Government will attempt to ensure that there are realistic European options for the replacement of Tornado and improved strategic air transports. However, this again illustrates a grey approach to the US dimension. Most opportunities for harmonising requirements are achieved through the auspices of the NATO Armaments Groups, albeit the norm is to focus down on a few chosen partners; or to rely on bi-lateral agreements with principle NATO partners where it is easier to share research. In the NATO groups US has a key role and in terms of research exchange US is our largest partner, much to the chagrin of both France and Germany. With our most likely coalition partners identified as the US it is likely that doctrinal harmony, almost a pre-requisite for requirement harmony, will be achieved with them rather than other partners. A much clearer understanding of European policy will need to unfold during implementation if requirement needs are not to become even more US focussed. Perhaps the ECC will need to employ a special office to ensure that collaborative opportunities match stated foreign and industrial policy.

DERA

In SDR DERA was seen as having a key role in any future procurement process. During the SDR five options for DERA’s future were studied. These included: retaining the status quo; franchising its capabilities to university/research sector and industry; limiting DERA to only those activities which could not be carried out by industry, i.e. partial privatisation; allowing DERA to expand into a wider range of non-defence activities; and seeking more private investment via public private partnership.

244 SDR Supporting Essay 10, paras 37-38.
245 SDR Chapter 8 para 168.
246 Ditto.
247 Professor Trevor Taylor “Implementing Smart Procurement: an Independent Commentary”, Cranfield University at RMCS, Shrivenham, 1999
248 SDR, Chapter 8, paras 163-165.
The preferred route was through the opportunities offered by a Public Private Partnership to strengthen the DERA's ability to continue to provide world class scientific research well into the next century.\textsuperscript{249}

It is worth touching upon the evolution of DERA and the current stage of development because of the importance of its role. Casting back in time, before the ink had dried on Jordan et al's recommendations another analysis was implemented, as part of the “Next Steps” initiative, on forming the Research Establishments into an agency. Brazier in his Reply to Jordan, raised three concerns with regards to any future agency.\textsuperscript{250} Ownership must remain in the MOD’s hands because if part of the agency were bought by a commercial interest it would cease to seem to be neutral in its critical role as the neutral referee getting value for money for the British taxpayer. The prime objectives of the establishments must be those given to them by the MOD recognising that there were scope for vastly enhancing services to the civil sector. Most important of all, the MOD must retain absolute power of veto over the customer base as otherwise advanced technology could fall into the wrong hands. All three points raised were to be addressed in forming the Defence Evaluation and Research Agency (DERA).

However, in its search for a more commercial enterprise, introduced by Mr, now Sir John Chisolm on his arrival as Chief Executive, DERA did cause a significant degradation in its relationship with industry. Industry believing that British research was being shared with foreign countries and companies at their expense. Moreover, DERA could be viewed as being in direct competition with British industry. For example, DERA negotiated a contract with the South African Government to assist them in their technical evaluation process. Although the situation never arose, DERA’s recommendation not to buy British, no matter what the reason, would have been a bitter pill for industry to swallow. Even the customer relationship became strained as DERA journeyed world-wide to explore potential new markets. These voyages were often either preceded by a naïve request to release hyper-sensitive research material or the request followed soon thereafter. However, once DERA saw that they were antagonising customers and industry alike, steps were taken to return to the basic functions described by Jordan.

As mentioned earlier, in the SDR little attention was paid to DERA other than to refer to a Public Private Partnership (PPP) geared to strengthening DERA's ability to provide world class scientific research\textsuperscript{251}. It could be argued that too much change was already affecting the procurement process and hence a lack of detailed analysis and proposals. On the other hand, a PPP initiative involving DERA could generate significant funds both to pay for some of the many aspirations in the SDR and to compensate for the significant savings made in the research budget. The future of DERA was

\textsuperscript{249} SDR, Chapter 8 para 164.
\textsuperscript{250} Julian Brazier, Crossing the Jordan, 6th May 1988, para 3.5
subsequently determined through a consultative exercise conducted by MOD which, established a preferred option called “Core Competence”.\(^{252}\)

Under the Core Competence model around three quarters of the current DERA organisation would be turned into a company, which was referred to as NewDERA. NewDERA would be floated on the Stock Market as soon as its potential was suitably developed, which is likely to be during the summer of 2001. For strategic reasons, particularly the maintenance of joint UK/US research, the MOD would also possess Retained DERA a core group of staff providing knowledge integration, conducting research at the level of defence systems, providing an in-house source of impartial advice and having responsibility for the integration and management of the research programme and international research collaboration. NewDERA would continue to be a major supplier of science and technology advice and research to MOD and, increasingly, other customers.

Reference was also made in the SDR to establishing a Defence Diversification Agency.\(^{253}\) This had been muted earlier in a consultative Green Paper, “Defence Diversification- Getting the Most out of Defence Technology”\(^{254}\). The Agency now performs a number of functions including focusing information on what is available, stimulating access to Government expertise and facilities, and encouraging collaboration between industry, academia and government. It also provides a confidential database of future defence needs to enable companies to consider how their technology could be applied to defence, or to target research and development to meet known future markets. The Agency will be managed by MOD Centre through the offices of Principle Finance Officer once the new DERA organisations are established. The Agency needs to build on past experience and draw on the National Defence Industry Technology Strategy if it is to succeed.

The new DERA organisations are likely to satisfy the demands of industry by protecting their intellectual property and introducing a new clarity to the relationship between NewDERA and MOD. An association, where the playing fields are levelled and NewDERA placed on the same footing as the rest of industry in competitions for technical support, advice, and research provision. This should remove much of the tension and distrust which exists between the two cultures as long as no honeymoon periods or special relationships are introduced by MOD.

The final nature of that partnership will unfold during implementation although it should be recognised that differing cultures will be involved in any partnership and success in both aligning cultures and business cannot be guaranteed as the history of the National Armoury shows. Moreover,

\(^{251}\) SDR Chapter 8, para 164.  
\(^{252}\) MOD’s Consultation Document of April 2000  
\(^{253}\) SDR, Supporting Essay 3, paras 26 and 27  
\(^{254}\) Green Paper, “Defence Diversification- getting the most out of Defence Technology”, (CM 3861) dated March 1998
as with the PE, DERA too has been exposed to a great deal of change during the past decade. How it will react to a further change in culture cannot be predicted but it is doubtful that it will be received with open arms.

Pace of Change

SPI involves new basic ways of thinking and conducting business, albeit very little is novel in concept. However my attitude should not be seen as dismissive as those elements selected for SPI have been cherry picked and re-packaged and have considerable merit. However, in order not to fall into the same malaise that accompanied previous, unsuccessful reforms the Government has to provide some momentum and sense of urgency and in so doing underscore the unsatisfactory nature of the existing system. The SPI is novel in that all MOD areas have made an investment in change management. Whether there has been an equitable distribution or appropriate level of funding is open to debate and only time will tell. However, without some investment there would have been a serious danger of history repeating itself with old brooms being employed, little time for re-education afforded, which when combined allow old habits and practise to remain or return. There is also some degree of haste normally associated with change with quick wins as well as long term returns expected. The savings already taken from operating costs in the MOD, DPA and DLO are perhaps indicative of this phenomenon. Here I strongly agree with Dick Evans, the ex-CEO of British Aerospace, who viewed his own successful, change culture, programme more as an evolutionary activity.

Whatever long term approach is adopted a considerable degree of change in culture is likely to be required if a synchronous, interlocking, business process that would enrich all the government organisations and industry involved in defence procurement and overcome current shortfalls and keep abreast of the changing world is to unfold. It is worth highlighting the scale of the task in hand. A task which will involve: MOD and industry partnering; the DPA fully adopting the Agency mantle; the huge rationalisation expected within the DLO; DERA adopting a PPP guise and competing in the market place, and the ECC and the front line Commands accepting both their new found and revised customer status. Indeed all participants are affected and care must be taken to ensure that a holistic overview is maintained throughout implementation to ensure a consistent, coherent and complete, rather than contradictory set of relationships is adopted within the overall culture. Moreover, new practises, processes and organisations are being introduced which again will impact on values, beliefs and attitudes. What is strange for a Review that recognised much change was involved in introducing the SPI was the lack of detail spelling out what was required of the change process, particularly when change was being introduced almost immediately.

257 Ibid. Chapter 1
CHAPTER 6

CHANGE CULTURE

Glossary

Before addressing change culture in any depth, it should be recognised from the outset that there are a myriad of books and opinions surrounding this topic. Therefore, to set the scene a short glossary of preferred definitions follow. Culture is the commonly held and relatively stable beliefs, values, attitudes and patterns of behaviour that exist within an organisation. A belief refers to the information that an individual has about an object, and it can also signify faith or trust, for example, "I believe that rationalisation is synonymous with work force reductions." There are two types of values - instrumental and moral. The former reflects a preference and the latter carry a sense of obligation. An attitude can be considered as a learned disposition to respond in a consistently favourable or unfavourable way to a given object or idea. Like beliefs and values, attitudes are learned and are dependent on past experience. The characteristic patterns of behaviour in the organisation, the rites, rituals and symbols, are manifestations of the beliefs, attitudes and values.

The factors, which impact on culture, are outlined at Figure 6.

Key characteristics of culture

One of the key characteristics of an organisational culture is that it is learnt and here both internal and external environments influence the learning process. In this instance, the total procurement organisation is embedded to varying degrees in external national and international social, political, legislative, economic, and technological systems. The internal environment comprises both the social and technical systems of the organisation and so, in part, the culture is influenced by these socio-technical systems. There are a number of mechanisms in place within the total MOD procurement process but the two key mechanisms, which influence procurement are the Long Term Costing (LTC) exercise and the approvals process which includes the involvement of the Equipment Approvals Committee and Ministers. It is not envisaged that either of these processes is halted as a

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261 NATO, WEU, EU Legislation et al.
result of the SDR, although some adjustment has been made to frequency, responsibilities and deliverables for approvals.\textsuperscript{262} Although the approval process has been held up as a factor in the delay to programmes it does, through the dossier and Committee activities bring all parties to the table, which will remain essential in justifying the expenditure of national funds. The co-location of both government and industrial parties in Integrated Project Teams will also allow a regular dialogue and therefore provide an opportunity to harmonise better disparate cultures.

Through the process of socialisation there evolves a common and largely unconscious understanding of appropriate behaviour and the signs and symbols of significance. This effect can be enhanced by creating a common operating environment like that found within Abbey Wood, which in turn can reduce the effect of sub-cultures. However, in collaborative ventures the issue becomes even more complex as national culture will further compound the issue as it does in multi-national organisations\textsuperscript{263}.

\textsuperscript{262} SDR Essay 10.
\textsuperscript{263} Hofstede G. A brief synopsis of this issue can be found in his article, "Motivation, leadership and organization: do American theories apply abroad? Organisational Dynamics." Summer 1980.
Assumptions also develop within an organisation, however, over time original assumptions can be lost, whilst the systems and behaviours continue. Parliamentary procedure abounds with archaic concepts and this is well illustrated by the Vote system and its lack of flexibility. There has been no initiative to alter this process although the introduction of resource accounting should provide a better financial culture into the Ministry.

As culture is both an input and an output it is likely to be self-perpetuating and highly resistant to change, particularly in a career based organisation with little turnover and standardised procedures for selection, induction and training. A state that exists in both the Civil Service and Armed Forces. By the adoption of clear guidelines it is quite common both to recruit and promote individuals with similar values and thereby ensure that a culture is created and perpetuated. With the recent implementation of an Acquisition stream, encompassing military and civilian staff involved in the procurement process, and a central selection process opportunities exist to create a more focussed, single culture with less chance of a selective mechanism intruding. As was recognised in the Australian Smart 2000 there was an added benefit in overhauling recruitment and personnel policies and that was to ensure that project management expertise is built up, retained and nurtured. As much of the training is to be conducted with industry further opportunities should be created to reduce cultural differences. Differences that were recognised by both parties as being adversarial caused by a lack of understanding and trust.

Culture is also historically based as the original culture influences successive generations because decisions effecting the future of the organisation are made within the context of the existing culture. That said, external analysis by consultants could result in more radical change as demonstrated by MOD’s acceptance of many of the findings of McKinsey & Company. The wider consultation with industry, the Services and McKinsey should also ensure that history alone did not prescribe the future culture that will surround defence procurement in the early decades of this Century. That said, those senior members of the MOD actively involved in shaping the future of defence procurement are the most steeped in yesterday’s culture and their preparedness to accept and drive through change is critical to the process.

Clearly common beliefs spring from issues of common concern, which can include the purpose, tasks, methods, nature of authority, and social relations of the organisation. These issues not only differ from one organisation to another but they also vary within an organisation: either on a functional /departmental basis or according to the level within the hierarchy. The resultant heterogeneous culture

264 Alan Williams et al “Changing Culture,”
265 Australian Government’s National Audit Office, Management of Major Equipment Acquisition Projects by the Department of Defence, 11 October 1999
266 SDR Essay 10.
comprises disparate sub-cultures that can create in isolation a common and strong purpose and identity. A situation that prevailed within the predominantly military orientated Systems and the three Principle Administrative Officers areas and to a lesser extent in the military element of the Procurement Executive. But sub-cultures could also detract from creating a common culture within multi-disciplinary groups as envisaged in the DPA and DLO both of whom are now structured on Integrated Project Teams. Different cultures also existed within the Ministry of Defence particularly within the Central Staff where bodies responsible for equipment definition, programming and budgets all with differing cultures played a part in the customer role. The creation of a single customer organisation, ECC, embracing both the programming and budgeting responsibilities could create a culture better able to make balance of investment decisions and provide more effective performance management throughout the life of a project.\textsuperscript{268}

Types of organisational culture

Types of culture vary reflecting differences in society, history and function. France, United Kingdom, United States and Sweden differ in their beliefs, attitudes and values. Organisations drawn from these societies are likely to vary accordingly. Again, it will be the introduction and continued membership of international institutions like OCCAR that can in the longer term achieve a more harmonious and common procurement culture. In a similar vein, the closer co-operation of NATO or WEU forces in identifying common capabilities should create a culture that will allow greater opportunity for collaboration on equipment programmes, which in turn should provide the military and financial benefits of commonality.

A Company that has suffered from a recession is scarred by the event and may be more risk averse than one that has not. The continued rationalisation of Defence industries both on a national basis (BAe and GEC Marconi) and multi-national basis (Pilkington and Thomson) has created both a culture of uncertainty of employment throughout the workforce and mixed national cultures in an era when a common response from the Defence industry is expected to the SPI. Organisations like the Defence Industrial Council\textsuperscript{269} and Defence Manufacturers Association although fully supportive of the philosophy face significant problems in delivering a common industrial response from organisations that differ from their customers by possessing a culture fundamentally driven by profit. Both the DPA and the DERA have only recently moved towards a customer orientated culture and clearly it will also take them time to remove all elements of a culture which was once influencing and sometimes in conflict with customer needs rather than responding to them.

\textsuperscript{268} SDR Essay 10.
The culture of the Armed Forces, which have very specific needs to conduct warfare, is very different to an engineering company, which is both product and profit orientated. Similarly, the culture of the Defence Logistics Organisation whose responsibilities include both spares acquisition and in-service maintenance of equipment differs from the Defence Procurement Agency striving to procure acceptable equipment to time, cost and specification. In practice, the culture of an organisation is likely to reflect a combination of these various factors. The culture of the civil service, is a reflection of its relation to British society, of its historical development and of the nature of its operations.

Changing Culture

A widely reported article by Schaffer and Thomas reinforces the view that culture change needs to be driven by a focus on business strategy and performance, as well as programmes specifically designed to change culture and values. However, it is recognised that culture change is inevitably a slow process and it has been estimated that it can take from 5 to 8 years to have any real impact on the culture of a large organisation. That said, many organisations representing most aspects of business can testify to the difficulties of achieving lasting change through a long-term change process. The Government has articulated a very clear strategy in their Smart Procurement initiative summed up in the catch phrase, “faster, cheaper and better”. Coupled with this has been the setting of challenging goals with regards to re-organisation: the DPA on 1 April 1999 and the DLO by 1 April 2000. As described in the SDR, in many respects the PE already met many of the technical requirements of an agency so the rebadging exercise should not be complex but the antithesis applies to the culture which, consistency has failed to change with direction given. This is also recognised in the SDR where a requirement for radical change in the PE and its relationship with the rest of the MOD and the Armed Forces is deemed essential if the desired improvements to procurement are to be delivered.

Contrary to the clarity associated with the timescale for both DLO and DPA creation there was no end date given in SDR to the creation of a central customer or the shape, ownership, or resulting cultures that may unfold in a PPP orientated DERA. Fortunately this state of limbo has changed and all but DERA have restructured and implemented a change management process. A process which is also expected to deliver financial savings from the Defence Logistics Organisation of £2.2 Bn in stock.

262 SDR, Supporting Essay 10, Note 1.
272 SDR, Chapter 8, para160.
273 Ibid. para 159.
holding over the next three years and from the Procurement Agency of some £2 Bn over ten years. There must be an element of doubt regarding the achievement of these ambitious and demanding goals particularly when the scale of MOD’s reform is so immense; involving as it does every element involved in the procurement process undergoing some degree of change in: roles, tasks, organisation, and culture.

Often, the argument that you cannot change culture overnight becomes an excuse for not changing culture at all. Even when they do change organisations become reluctant to apply specific performance indicators to the change process so preventing objective measurement of the policy. However, in this instance in the Strategic Defence Review the Treasury provided external impetus by not providing three years of assured funding for Defence without condition. In a letter of July 1998 the Treasury insisted that the procurement record must improve quickly in comparison with that exposed annually to the NAO. In the future, while established projects can slip by one month a year, new projects can fall behind by only 0.3 months a year. New projects can show a zero cost growth and only a 3 per cent fall in overall performance. Although it is difficult to quantify this latter point the message from the Treasury is both unambiguous and clear in its expectation of rapid change. Perhaps here too they are setting unrealistic targets, which may never be attained?

Moreover, in a rapid change process there is a danger that employees learn to accommodate the language and artefacts of the new culture without fundamentally altering their beliefs or values. In short, the new culture is only superficially different from the old and traditional patterns or ways of doing business soon reassert themselves. It is this experience that underlies Schaffer and Thompson’s rejection of programme driven change or Roger Pascal’s emphasis on the importance of conflict and revolutionary change in large organisations such as Ford. Moreover, the Government is aware that procurement reform has been tried before with little effect. The Smart Procurement ideal that 15 per cent of a project’s development should be spent before a firm commitment is made was accepted in the 1960s. MOD’s own guidelines prescribed a through life approach in 1974 and that approach was supported twice in later years by the House of Commons Defence Committee in 1985 and the National Audit Office in 1992. It is clearly disappointing that the culture at the time of SDR had failed to embrace their own guidelines and as importantly the common practise of considering whole life costs which were not only practised in industry but in our daily domestic

274 SDR Essay 11, para 23.
275 SDR essay 10, para 21 and HC 138, Para 350.
276 Allen Williams, Paul Dobson, Mike Walters, “Changing culture new organisational approaches.. 2nd Edition

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decision making practice. In such a scenario, it is perhaps understandable that impetus has been given to change albeit that inherent risk is attached.

The aim in any change culture activity is to create an environment where those old business ways that were inefficient are no longer acceptable and where the participants, both old and newly recruited, are compelled to develop new values and behaviours. Alas, some more radical devotees of change believe all past culture should be rejected not necessarily understanding the genesis, benefits or weaknesses of that culture. Unfortunately, it is the expectations not the new culture that are created overnight, but the dismantling of the old culture tends to start rapidly. However, as with the customs and culture of old regiments there is a danger on their amalgamation that what has taken centuries to create can be dismantled forever with a stroke of a pen. I talk with feeling, as the reduced orbat stemming from Options for Change saw the demise of all cavalry regiments with an Irish title and much of the associated Celtic culture. Turning back to procurement, much of the policy laid down by Downey and Jordan, Lee, Cawsey remains both pertinent and efficient and therefore should not be thrown out with the bath water.

There is a growing debate about the process by which culture change is best managed. There has been an assumption that culture change is best driven, "top down" where the charisma and drive of leadership will carry the day. However, this assumption has been challenged arguing that top down change programmes rarely produce significant or lasting change at lower levels. The key point made is that such change programmes do not involve junior staff in the identification and development of their objectives, and so do not succeed in building universal commitment and ownership. The solution for Beer et al is for senior management to direct a, "non-directive process", by creating a climate for change, defining core objectives and values, disseminating examples of success and failure, and providing support for all parts of the organisation to develop their own response. In practise the Smart procurement initiative like many other change processes has involved a combination of both approaches. The top down approach is manifested in the involvement and direction of Ministers and it is believed that their continued monitoring of performance will be key to a successful reform. The interviews conducted by McKinsey within the MOD and subsequently the internal discussions held within the MOD areas have shaped and added granularity to the key aspects of the change process. The definition of Capability Working Groups and their role and composition involved the participation of many parties throughout the hierarchy. Whether that activity has fully involved the lower echelons is a point worthy of later measurement. Too often in analysing the effectiveness of a change process it

282 W.G Downey, Ministry of Technology Report

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is the leaders who are interviewed and their response is naturally biased and unlikely to be fully in concert with that of the lower echelons.

Another management theory addresses the holistic nature of change. In this concept, it is proposed that cultural change cannot be conducted in splendid isolation, rather it has to be part of a set of mutually dependent activities focussed on improvement. Rummler and Brache\textsuperscript{286} both identified the need for a change programme that operates at various levels and addressed issues of mutual concern: organisational needs and goals, operational and management processes, and individual jobs and performance. Other writers like Hamden-Turner\textsuperscript{287}, have focussed explicitly on the links between organisational culture and corporate performance and in that activity reinforced the conclusion that the purpose of culture change is to provide a coherent set of attitudes and values to underwrite an overall programme of organisation change.

Within the MOD it could be argued that almost every stone in the procurement process is being turned concurrently. Whether the myriad of toads exposed all turn into princes will be very much a combination of drive, co-ordination, investment, care and overt monitoring of the total process from a holistic standpoint. It would be most unwise to enhance the acquisition aspect of the process if at the same time steps had not been taken to establish a more effective customer supplier relationship or methodology for determining equipment priorities. In many respects there is certain timeliness surrounding the totality of the activity, which needs to be centrally co-ordinated. This is beyond the full time implementation team envisaged in Smart procurement and will demand the planned ministerial lead\textsuperscript{288} that accompanied the whole of the SDR. This may overcome the past tendency to introduce policy into Government Departments with little or no downstream confirmation that the original hypothesis surrounding the policy was proven. For example, there is no formal report to confirm that the introduction of Integrated Logistics Support into all major projects has paid financial, as well as operational and logistic benefit and yet it has created significant additional project costs.

Organisational Culture

The concept of organisational culture has become assimilated into the mainstream of management thinking. It is one of a number of organisational variables that clearly need to be managed effectively in order to optimise their overall performance: alongside variables such as strategy formulation, organisational structure, process effectiveness and product development. It is recognised that at the time of SDR much work had been set in train to address and identify solutions to the accompanying

\textsuperscript{288} SDR Supporting Essay 10, para 25.
variables but little prominence was afforded to culture or its change\textsuperscript{289}. In the following Chapters prominence is given to culture and every effort is made to show the research methodology employed to determine the prevailing cultures post SDR and then establish the preparedness of those cultures to support or be dysfunctional towards SPI.

\textsuperscript{289} SDR Introduction by SoS para 11-12.
PART TWO
CHAPTER 7
RESEARCH

General outline

The methodology adopted for this contextual research was to establish the forms and natures of the MOD cultures associated with defence procurement and identify their impact on the SPI. The first task was to establish what organisational culture and sub-cultures existed within the DPA and Equipment Capability bases. The concept of organisational culture as a way of analysing and differentiating between effective and ineffective organisations was brought into international focus in the 1980s with the publication of "In search of Excellence and Corporate Cultures". By conducting a quantitative survey a precise measurement was to be gleaned of the nature of cultures and sub-cultures both in Abbey Wood and Main Building, Whitehall. This insight should also support the hypothesis that the SPI would either flourish or flounder depending on the prevalent cultures and any change culture activity in hand.

The second task was to conduct a qualitative survey employing in-depth interviews again in both locations. In this area of the research the aim was to explore the attitudes, behaviour, values and beliefs of two samples regarding the Smart Initiative. There have been a number of studies in organisational cultures that have combined quantitative and qualitative approaches in investigating cultural phenomena. By identifying the culture through "triangulation" the weaknesses inherent in any single method are offset and data generated are not only comparative but also sensitive to the more latent aspects of organisational culture.

Both MOD organisations were approached to seek their support of the research and presentations were given to gain their confidence in both the natures of the research and the techniques to be employed. Rear Admirals Reese Ward and Nigel Guild, both responsible for Smart Implementation in their respective areas of Equipment Capability and the DPA generously gave their support and in that process provided administrative and moral support. They also provided points of contact that proved to be invaluable by kindly arranging interviewees against matrixes, scheduling interview timetables, providing facilities and helping distribute and collect completed survey sheets.

292 Jick T.D. "Mixing Qualitative and quantitative methods: triangulation in action." Administrative Scientific Quarterly, 24, pages 602-611
Both organisations helped to conduct some form of PR campaign to ensure that early visibility was given to the research. Draft language was provided, which was refined in-house to meet their specific work force needs and was distributed over DAWN and CHOTS; their respective intra nets. However, despite all these positive steps the level of both survey responses was below that anticipated. In the case of the DPA, it became apparent that there was a clear case of over-exposure to surveys and this should be guarded against if the value of this excellent tool is not to be denigrated. In the case of the Equipment Capability staff they awaited my survey and then sent out their own in-house survey at the same time but separately; again not conducive to a high level of return for a foreign activity.

The nature of the techniques used, the significance of the response, the analysis and key findings are covered in subsequent Chapters.
CHAPTER 8
QUANTATIVE SURVEY

"Our culture is hamstringing the leadership"293

General outline

The organisational cultures found within the ECC area of the MOD and within DPA and both their predecessors has never been measured either collectively or separately. So a cultural baseline has never been established. Moreover, as culture change is a relatively slow and difficult process294, there are advantages in using a measurement tool that is available off-the-shelf, which would provide flexibility of choice regarding agencies to be employed in repeating the survey, which in turn would assist in determining progress. It is worth noting that of Levene's reforms of the 1980s, his desire to introduce competition took almost a decade before it became normal behaviour and part of the MOD culture295. Therefore, to conduct systematic comparisons296 most flexibly, a well recognised measurement tool was employed, a tool which many consultants use regularly and indeed has recently been employed in the measurement of some features of IPTs within DPA: the OCI. The OCI is a quantitative measurement tool and was preferred over qualitative tools, as they do not allow easy systematic comparison.

In addition to the advantage of its wide spread use, the OCI was also adopted because of its status as a world leading measurement tool. A study by Athena Xenikou and Professor Adrian Furnham297 revealed four major self-report measures of organisational culture measuring organisational behavioural norms or values and compared these different measures by correlation and factor analysis. Their findings indicated that the OCI questionnaire was the most reliable measure of culture with regard to internal consistency and test-retest. So Human Synergistics Inc., Plymouth, Michigan who hold the copyright and publish the OCI were approached. They in turn requested a synopsis and strongly referred me on to their European partners Human Synergistics International who provided helpful advice, financial assistance and managed the computer programme.

The Aim

293 David Evans, 'Tamished Brass: Naval Officers' Macho, Elitist Image Under Fire' Chicago Tribune (July 12, 1992),1.
295 Professor Ken Hamilton, Discussion with author, UCL, July 2000
The aim of this part of the study was to establish a cultural baseline that would indicate whether the prevailing organisational cultures within both EC and DPA would be supportive of or dysfunctional towards the SPI, change culture initiative.

METHOD

Respondents

The sample for this thesis consisted of respondents who were employees in ECC or within the DPA in Abbey Wood. Staff lists were less than complete in the DPA due to recent re-organisation and although the ECC was even more recently restructured they possessed a reasonably accurate staff complement, which was more helpful. From the outset there was a cost ceiling with regards to the survey, which limited the total number of questionnaires to 400. An identical questionnaire was used to survey both areas adopting the OCI format, a copy of which can be found at Annex A. An addendum to the questionnaire was designed to identifying the organisational / occupational / demographic items associated with each respondent; a copy of which can be found at Annex B. The data captured in the addendum was useful in comparing data recovered from people with different disciplines, backgrounds and areas of responsibility within MOD from both ECC and DPA.

The DPA population was stratified to ensure that respondents were a part of the core area to be found at Abbey Wood rather than in one of the smaller outstations and abroad. It was further stratified, as was the ECC area, by not including those below the position of Executive Officer and its military and scientific equivalents. This stratification was introduced in the light of limited funding to reduce the likelihood of inconsistent response, provide greater experience and education, and reduce the logistic burden. It is appreciated that a survey capturing the whole workforce would provide an even more comprehensive understanding and any future MOD funded survey would benefit from such a wider trawl.

The final DPA stratified population identified from staff lists of Abbey Wood was 2517 comprising 88% civilian and 12% military. Three hundred of the 400 available questionnaires were used for the DPA survey, as the ECC area was only one sixth of their size. In addition, 100 questionnaires were considered the minimum number that would generate statistically relevant data. Of the 300, 264 were sent to civilians and 36 to the military to reflect the overall distribution of civilians to military. Each member of the Agency was given a number with military and civilians being placed on two separate lists. Then using Excel and the Randbetween application 264 civilian random numbers were identified.
and 36 military random numbers were also identified. A correlation between the random numbers and the two annotated staff lists provided the distribution list for the survey questionnaires.

The ECC total population was 407 comprising 43% civilian and 57% military staff, which in itself is an interesting proportion as in the past the Operational Requirements staff, a key forebear, mainly comprised of military personnel. The new ECC organisation had only been in place four months at the time of the survey and some of the Requirement Managers (RMs) had yet to be established and sent to Abbey Wood. The survey was conducted using the remaining 100 questionnaires, which were sent to 43 civilians and 57 military. Again using Excel and Randbetween and two numbered staff lists a distribution list for the questionnaires was identified.

**Questionnaires**

Subjects had four weeks to complete their questionnaires, a period, which should have catered for those, absent on foreign visits and on holiday. A further week was provided to both areas but did not solicit a significant additional response even though all participants were prompted using in-house intranets. Interestingly, only one form was returned and it had a note attached stating, “have not been in post long enough to possess a culture”! The remaining questionnaires not completed and returned have to be attributable to a lack of interest, possibly through over exposure to questionnaires, or just being too busy.

**Procedure**

A small sample was used to see if they experienced difficulties filling in the form, which they did not. The respondents filled up their questionnaires at their place of work or during their spare time. Respondents were not required to identify themselves by name on the questionnaire and some even balked at a serial number, which was introduced only for administrative purposes to monitor progress. Throughout the process, a firm grasp was maintained on retaining confidentiality. A covering letter provided a brief insight into the study work and informed them that a synopsis of the findings would be provided down stream. The covering letter can be found at Annex C. In all, the questionnaires took some 30-40 minutes to complete. The response rate from DPA was a total return of 97 from 300 or 32% (84 civilians=31%, 13 military=36%). The survey return from ECC was 44 from 100 or 44% (11 civilians=25.58%, 33 military=57.89%). No questionnaires were incomplete or spoiled and no reports were received concerning the subject’s ability to understand the instructions or that dissimulation occurred. However, although some were not prepared to complete the questionnaires; in the same time scale some of the IPTs within the DPA were investing significant government funds in external consultants who were employing the OCI to measure their IPT’s culture as part of the breakthrough
process. It could be argued that part of the modern psyche is to believe that the greater the cost the better the results/product. An analysis of the data gathered from the returned questionnaires involved the use of a computer program the copyright of which is owned by Human Synergistics Inc.

Sample accuracy

The population mean can be estimated from the sample mean for each of the scores measured.

\[ m = \bar{x} \]

where

\[ m = \text{population mean} \]
\[ \bar{x} = \text{sample mean} \]

The standard error for each of the scores has been calculated using the following formulae:

\[ \bar{x} \pm \frac{s \sqrt{(N-n)}}{N(n-1)} \]

where:

\[ \bar{x} = \text{the sample mean} \]
\[ s = \text{sample standard deviation} \]
\[ N = \text{Population size (407)} \]
\[ n = \text{Sample size (44)} \]

In the example of the 44 ECC staff who responded, the set of raw Humanistic Encouraging scores provided a mean of 27.2 and a sample standard deviation of 5.22. This provides an estimate of the standard error of:

\[ 5.22 \sqrt{\frac{(407-44)}{407(44-1)}} = 0.752 \]

This indicates that the population average 27.2 is 95% likely to lie in the range +/- 1.96*0.752, 1.473

Therefore, we are 95% confident that the population mean for Humanistic Encouraging scores is between 25.727 and 28.673.
With a certain number of the scores measured the measured standard deviations were high in respect to the mean values. The small sample size in some of these scores has determined the high variation level. Although these scores may indicate inferences, for these scores, further, and larger sample sizes would be required before any statistical confident results could be derived.

Bias

One issue surrounding all surveys is bias, which can be introduced by both the author and respondents to varying degrees. I have a heritage of 34 years service in the Forces but my final 12 years were spent in mixed civil servant/military environments in both the Procurement Executive and Operational Requirements, the predecessors to the DPA and ECC areas, and were concerned with defence acquisition. The following points are recognised as areas where bias is likely to occur and the mitigation that was put in place:

<table>
<thead>
<tr>
<th>Bias issues</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection of respondents</td>
<td>A random sample was taken which was proportionally representational. It is recognised that some bias was introduced by stratifying the respondents to include only those of EO status and above.</td>
</tr>
<tr>
<td>Responses only from those who had time on their hands</td>
<td>It is difficult to determine whether this was the case or not but a number of senior managers and IPT members did complete returns.</td>
</tr>
<tr>
<td>People anticipating the desired response</td>
<td>OCI makes it extremely difficult to predict the outcome of completing the questionnaire as the questionnaire is not laid out in an obvious structure.</td>
</tr>
<tr>
<td>Mischievous answers</td>
<td>If a person goes to the trouble of answering a lengthy questionnaire, it is unlikely at this level of responsibility that they will be other than candid</td>
</tr>
<tr>
<td>Self fulfilling prophesies</td>
<td>Again the issue of complexity in the structure of the questionnaire would suggest that the risk from the prophets are reduced but not eliminated.</td>
</tr>
<tr>
<td>Bias in interpreting results</td>
<td>A well proven and logical statistical approach was adopted</td>
</tr>
</tbody>
</table>

88
OCI System

The OCI measures "what is expected" of members of an organisation - or, more technically, the normative beliefs and shared behavioural expectations in organisations. Normative beliefs are cognitions held by an individual regarding others' expectations for his or her behaviour as a member of a specific group or organisation.\(^{298}\) Shared behavioural expectations are those normative beliefs that are held in common by members of a group or organisation\(^ {299}\). Such expectations, standards, or norms specify the ways in which members of the organisation are expected to approach their work and interact with others\(^ {300}\). These behavioural prescriptions generally are viewed as an important component of group and organisational "culture" given that they reflect and are shaped by the basic assumptions and values held in common by members\(^ {301}\).

The Inventory, as manifested in the questionnaire, presents a list of statements that describe some of the behaviours and "personal styles" that might be expected or implicitly required of organisational members. Some of the cultural norms measured by the OCI are positive and supportive of constructive interpersonal relationships, effective problem solving, and personal growth; others are dysfunctional and can lead to unnecessary conflict, dissatisfaction, and symptoms of strain on the part of organisational members.

The Inventory focuses on 12 sets of thinking and behavioural styles that might be explicitly or implicitly required for people to "fit in" and "meet expectations" of the organisation or sub-unit\(^ {302}\). By responding to OCI questions such as "To what extent are people expected to point out flaws?" it is possible to generate a profile of individual normative beliefs. At the normative beliefs level, the strength of the norms for these styles is represented by a respondent's reports regarding the extent to which the behaviours associated with each style are expected. At the level of shared behavioural expectations, the strength of these norms is represented by members' reports of the extent to which the behaviours are required, based on aggregated responses, and also on the extent to which they agree about these expectations. Combining results allows the intensity or degree of consensus to be determined. A high intensity suggests that there is a strong culture and a well defined pattern of under-

\(^{298}\) Fishbein and Ajzen, 1975, "Belief, Attitude, and Intention in Behaviour: an Introduction to Theory and Research". Reading MA: Addison-Wesley
\(^{299}\) Homans G.C. The Human Group, New York, Harcourt, Brace & World, 1950;
\(^{300}\) Robert A Cooke and Janet L Szumal, Measuring normative Beliefs and Shared Behavioural Expectations in Organisations: The Reliability and Validity of the Organizational Culture Inventory, Psychological Reports, 1993, 72, 1299-1330
\(^{301}\) Homans, 1950; Siehl & Martin, 1984;
lying values and ways of seeing things\textsuperscript{303} and is one where all members agree that a specific set of behaviours is expected.

The types of culture measured by the OCI have been shown to have a direct bearing on the activities of members and the functioning of the organisation\textsuperscript{304}. They are also related to important outcomes such as member satisfaction, motivation, teamwork, the quality of products/services, and other criteria of organisational effectiveness such as performance. These expectations or cultural norms result from, and are reinforced by, managerial philosophies and styles, organisational structural variables, reward systems, and other factors that can be changed—at least to some extent—by those in leadership positions. The OCI has been adopted by numerous organisations and completed by more than three-quarters of a million individuals. The inventory has been used in these activities both to diagnose cultures and to monitor the impact of organisational development efforts. Thus, the Inventory is appropriate for use in measuring a cultural change programme such as the SPI.

\textbf{The OCI Conceptual framework}

It is worth dwelling on the framework of the OCI, as it will assist in the understanding of the findings of the Survey. The 12 cultural norms measured by the OCI are arranged on a circumplex, or circular graph as can be seen with this completed illustration of the circumplex. This type of layout\textsuperscript{305} is characterised by a circular ordering of styles in which the distance between them reflects their degree of similarity and correlation. As can be seen below, styles that are conceptually similar are placed close to one another on the circumplex; styles that are more distinct or independent of one another are placed further apart.

\textsuperscript{302} RA Cooke and JL Szumal Psychological Reports, 1993, 72, 1300.
\textsuperscript{304} Janet L Szumal, PhD. Organisational Culture Inventory Interpretation and Development Guide, page 3.
It is divided into 3 general clusters, each containing four of the cultural norms measured. The cultural norms contained within each cluster are similar to, or work with, one another.

At the macro level, the cultural norms at the top of the graph promote the satisfaction needs of members and behaviours that enable them to fulfil those needs (needs for achievement and satisfaction). Those towards the bottom promote security needs and require self-protection behaviours associated with those needs (acceptance and avoiding failure). The cultural norms on the right side promote expectations for people orientated behaviours; those on the left side are more task orientated.

The OCI measures 12 different cultural norms that are organised into three general clusters that distinguish between:

**Constructive cultures**, in which members are encouraged to interact with others and approach tasks in ways that will help them to meet their higher-order satisfaction needs (includes Achievement, Self-Actualizing, Humanistic-Encouraging, and Affiliative cultures).

**Passive/Defensive cultures**, in which members believe they must interact with people in defensive ways that will not threaten their own security (includes Approval, Conventional, Dependent, and Avoidance cultures).
**Aggressive/Defensive cultures**, in which members are expected to approach tasks in forceful ways to protect their status and security (includes Oppositional, Power, Competitive, and Perfectionistic norms)\(^{306}\).

To assist further in comprehending the findings and analysis of the Survey some further definitions of the 12 styles are provided in the pull out table at Annex D.

**The measures of raw scores and percentiles**

Each of the 12 styles is measured by eight items describing behaviours that might be expected of members of an organisation. On a scale ranging from 1 ("not at all") to 5 ("to a very great extent"), respondents are requested to indicate the extent to which the particular behaviour helps people to fit in and meet the expectations of the organisation. Scaled scores can range from 8 (if all items measuring a particular style are given a response of 1) to 40 (if all items measuring a particular score achieve a score of 5). Responses by members of the same organisation or sub-unit can then be averaged to generate an aggregated or composite cultural profile. The organisational scores are then compared to the aggregated scores given by members of 551 sub units, from within western society, that were previously measured (e.g., departments, divisions et al).

This comparison provides a more realistic percentile score, which in turn gives a clearer picture of the culture (similar to taking a test and evaluating performance, in part, by comparing how you ranked relative to everyone else who took the test). The bold centre ring represents the 50th percentile and represents scores that are average relative to the scores of other organisations and reflect moderate expectations for the behaviour in question. Scores falling below the 50th percentile are low relative to other organisations and reflect relatively weak expectations for the behaviour in question. Those above the 50th percentile are relatively high and reflect high expectations.

**Interpreting results**

Strengths and Styles

The OCI circumplex also identifies the “spikes,” or those cultural norms that are most extended from the centre of the circumplex. These are the cultural norms that describe how members within the organisation are currently expected and encouraged to think and behave (i.e., the direction of the culture). The interpretative comments regarding an organisation’s strength in each cultural norm is a measurement of the comparison conducted and reflected in the percentile score. High strength is equal to 80% and greater; average strength is around the 50%; and low strength 20% and lower. The most extended cultural norm in an organisation’s profile is called the primary style. This describes the way in which members are predominantly encouraged to think and behave. The second most extended cultural norm is called the secondary style. This cultural norm typically works with the primary style or is expected when the behaviours included under the primary style cannot be enacted. Sometimes primary and secondary styles are included in the same cluster (Constructive, Passive/Defensive, or Aggressive/Defensive); other times they are contained within different clusters. The cluster that best describes an organisation’s culture is the one that has the highest percentile score when the percentile scores of the four cultural norms included in the cluster are averaged together.

Tabular representations

Tables corresponding to the circumplex include an organisation’s percentile scores as well as their organisation’s unadjusted (or “raw”) scores for each of the 12 cultural norms measured by the OCI. In addition, the table presents the standard deviations of the responses around the raw scores. The standard deviations are important because they provide an indication of the intensity or the amount of agreement among respondents regarding the extent to which particular cultural norms are predominant within the organisation. The smaller the standard deviation, the greater the intensity of the culture and agreement among organisational members regarding a particular cultural norm. The interpretative comments regarding an organisation’s intensity (e.g., strong, average, weak) are based on comparisons to the distribution of standard deviations reported by over 700 other organisational units in which the OCI was administered.

In interpreting the current culture of an organisation, both direction and intensity should be considered. Direction tells you what is (and is not) expected; intensity tells you how widely shared these expectations are. Cultures with clear direction and strong intensity are usually the result of a high degree of consistency between the organisation’s mission, structure, human resource practices, managerial behaviours and styles, goal setting, job design, and other systems, practices, and processes. Cultures that lack a clear direction or have weak intensity are typically the result of inconsistency.
between the organisation’s mission, structure, human resource practices, managerial behaviours and styles, goal setting, job design, and/or other systems, practices, and processes.

Having a culture with clear direction and strong intensity is not necessarily a good or bad thing. For example, a culture with weak direction and/or weak intensity is easier to change than one with strong direction and strong intensity. Thus, whether having a culture with clear direction and high intensity is a good thing really depends on whether the “right” behaviours are currently expected and encouraged. The ideal profile defines one set of “right” behaviours gleaned from effective organisations.

A “typical ideal culture profile” based on the averaged scores of five different successful organisations is used as a benchmark and also compared throughout the analysis, the constituent scores from which can be found at Annex E. Respondents in this sample described how people are expected to behave in order for their organisation to be successful. The “ideal” profile is consistent with those generated for organisations within Anglo societies (USA, Canada, England, New Zealand and Australia).

The difference between the ideal culture and the current culture represents the culture gap. This score is a raw score (it is not transformed in any way), and is computed by subtracting the ideal percentile from the current percentile. For Constructive cultural norms, positive gap scores indicate that the organisation exceeds the ideal expectations (this is relatively rare), while negative gap scores indicate that the organisation would benefit by increasing the behaviours represented by the specific cultural norm. For Defensive styles, positive gap scores indicate that the organisation would benefit by decreasing the behaviours associated with the specific cultural norm, while negative gap scores indicate that the organisation already exceeds the ideal expectations for that cultural norm.

Perceptions

As part of the questionnaire answers were also sought regarding the organisation and how they felt about working there. This subsection provides a view of how well the organisation scored along each of the cultural outcome items of clarity, consistency, satisfaction and commitment to customer service, as compared to OCI’s “Historical Averages” (HA) for these measures: the HA represents the mean item-level scores of members of over 700 organisational units. The numerical difference between an organisation’s outcome item scores and the HA were then calculated. The Gap Bar chart presents these differences ranked from most positive (i.e., areas in which an organisation is doing better than the average organisation) to most negative (i.e., areas in which the organisation is not doing as well as the average organisation).
In addition, comparisons were conducted between organisations, the Historical Averages, and the Constructive Benchmarks for each of the cultural outcome items. From the HA sample of over 700, approximately 120 organisational units were identified as having predominantly Constructive cultures based on their OCI results. Specifically, the cultures of these 120 units were all relatively strong in terms of Constructive cultural norms (above the 60th percentile) and were all relatively weak in terms of Passive/Defensive and Aggressive/Defensive cultural norms (below the 50th percentile). The average responses to the OCI cultural outcome items by members of these units were then computed to establish OCI’s “Constructive Benchmarks” for these items.

Methodology employed

The aim of the analysis was to provide a snapshot of the culture of the DPA and ECC organisations in terms of 12 specific types of behavioural norms.

The first stage of the analysis was to sift and analyse relevant data on all sub groups within the three generic areas of ECC, DPA IPTs and DPA Support Groups. Due to their sample size the sub groups rarely provided information that was statistically significant but is included nevertheless because without the background it is difficult to place some of the aggregated findings into context and moreover inferences can be drawn. The DPA was sub divided in to two Groups because the major effort to change culture within the DPA has been focused on the IPTs, which are relatively new concepts. The Support Groups are equally key to success but were less novel in concept and as a result may well posses a unique DPA culture. The ECC was treated as a single group.

The intent was to identify the key cultural styles that prevailed within sub groups. However, often the sub groups were statistically insignificant, as they comprised relatively small numbers. To overcome that weakness sub group data was aggregated on the basis of the aforementioned three Groups. As sub-groups were based on either a pure military or civilian organisation and involved some instances of shared professional disciplines; opportunities were taken to conduct comparisons to see if common cultural norms prevailed across Group boundaries. To establish the overall culture within the MOD all three Groups’ culture was aggregated (and compared to the DMA industrial questionnaire response).

RESULTS

ECC CULTURE STYLE CONTRASTS
ECC Constructive styles

General

The ECC area is responsible for the identification of and investment in a balanced and cost effective Capability for the Armed Forces. Constructive cultural norms are evident in environments where quality is valued over quantity; creativity is valued over confrontation; co-operation is believed to lead to better results than competition; and effectiveness is expected to be judged at the system level rather than the component level. As will be recognised, these types of cultural norms are also consistent with and supportive of the objectives of empowerment, Total Quality Management, continuous improvement and learning organisations307.

Expectations for constructive behaviours are promoted by several factors including goal setting, motivation processes, and job design and continued revision at the individual level. The use of rewards, performance appraisal and sources of power at the management/unit level. And communication, respect for members, cultural artefacts, and employee involvement at the organisational level.

The ideal culture characterised by CEOs and top management often places great store in constructive cultures. However, it can be argued that this type of culture may not be ideal for all types of organisation. In particular, there is an element of doubt associated with those organisations which place great store in high reliability in their personnel such as that sought in the Armed Forces and in the Nuclear Industry and whether those bodies can afford too much freedom and autonomy. Using the OCI, five engineers holding positions of responsibility in the nuclear industry described the culture for their power plants that would both maximise effectiveness and minimise accidents308. The ideal culture was predominantly Constructive and the reason put forward by them all was that it was no longer enough for people just to follow orders and emergency procedures. Instead, they have to understand why things need to be done, be confident of their abilities and committed to the plans for handling crisis situations, and be able to work together effectively to make things happen. Interestingly this smacks of the antithesis of Tennyson’s observation and that now “ours is to reason why” rather than follow a course mechanistically and this is very much the ethos that is being instilled in the modern member of the Forces. Two factors have inspired this change in the field force: firstly, a more educated rank and file and secondly, over-commitment and an accompanying scarcity of resource. But perhaps military cultures change once a purely uniformed environment is forsaken? An

308 Janet L. Szumal, Ph.D., Organizational Cultural Inventory, Interpretation & Development Guide
observation that will be addressed in the following paragraphs. The sub groups identified for the ECC areas are:

**SubGroup Key**

Subgroup 1: Military within DCDS(EC) and his Personal Staff or within Capability Managers and Staff
Subgroup 2: Military within Directors Equipment Capability and Staff
Subgroup 3: Civilians within Directors Equipment Capability and Staff
Subgroup 4: Other Military in MOD Equipment Capability Staff
Subgroup 5: Other Civilian Post in Equipment Capability Area

**Achievement**

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Pct</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>85</td>
</tr>
<tr>
<td>2</td>
<td>77</td>
</tr>
<tr>
<td>3</td>
<td>57</td>
</tr>
<tr>
<td>4</td>
<td>88</td>
</tr>
<tr>
<td>5</td>
<td>85</td>
</tr>
</tbody>
</table>

Military

In the important area of Achievement where the culture expects things to be done well and members are valued who set their own goals and realise them, all the military areas performed around the ideal expectations (Ideal 83%; respondents 85%, 77% and 88%). This result is encouraging because EC members are expected to think and plan ahead as exemplified by the ten year Equipment Plan. They are also required to know their business and here I refer not only to knowledge of warfare but the application of technology and an understanding of value for money. They are also expected to explore alternatives for meeting a specific capability before taking action and this is epitomised in the “Systems” approach, which was recently formalised. In addition, due to their workload they were often allowed to operate in a partially autonomous environment where self-discipline and setting of personal goals were essential attributes.
The civilian counterparts other than those within the DEC also set store in this form of culture and were some 85% compared to the ideal of 83%. Working in mainly civilian orientated divisions and comprising well qualified programming and scrutiny staff this body saw benefit in “thinking and planning ahead”, “taking on challenging tasks” and were motivated by the “pursuit of excellence”. However, within the DEC the civilians were more conservative in most areas and scored only 57% compared to the ideal of 83% and revealed that they were less prepared to “take moderate risks”, “work for the sense of accomplishment” or “to achieve self-set goals”. Again this work force is well qualified academically and it is perhaps understandable that those civilians in the DEC who work mainly to military Directors rather than the civilian directors of yesteryear could feel a sense of isolation and lack of control over their own working regime. There was a significant difference in their attitude towards “working for a sense of accomplishment” compared to the mainly DGE staff, the latter achieving a raw score of 4.25 and the scientists only 3.0.

**Self-Actualizing Pet**

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Pet</th>
<th>Ideal</th>
<th>81%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subgroup 1</td>
<td>28.5</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Subgroup 2</td>
<td>23.8</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Subgroup 3</td>
<td>24.8</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Subgroup 4</td>
<td>25</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Subgroup 5</td>
<td>25</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

Subgroup 1: Military within DCDS(EC) and his Personal Staff or within Capability Managers and Staff
Subgroup 2: Military within Directors Equipment Capability and Staff
Subgroup 3: Civilians within Directors Equipment Capability and Staff
Subgroup 4: Other Military in MOD Equipment Capability Staff
Subgroup 5: Other Civilian Post in Equipment Capability Area

**Military**

Apart from those working directly to DCDS and the CMs who are therefore inextricably involved in future practise, process and goals the majority of respondents, namely those working in the DEC fell well short of the ideal. They did not identify a culture where there was a preference for openness, spontaneity or any from of conformity (Ideal 81%, DCDS and CM staff 80%, the balance 26% and 40%). This is perhaps understandable at this early stage in the transition as most of the staff is
focussed on mastering new responsibilities and working practise rather than seeking overt personal growth. Moreover, the military in an organisation are normally trained for their tours in advance of arrival and therefore the only training they would expect is initial orientation training on arrival. Moreover, as the majority of staff is relatively inexperienced with regard to the MOD and the procurement processes, their ability to be lateral in their thought process is relatively constrained certainly within the early part of their tour. In the DCDS and CM areas the quality of the military staff who are often personally selected is normally higher than that found in other EC areas. Personal staff, who are not directly involved in capability programmes, are often given greater latitude to think laterally both to brainstorm such issues as new working practise and wider balance of investment decisions.

Civilian

The percentile scores of both civilian bodies were also well down on the ideal (Ideal 81%, civilian bodies 36 and 40%), although as with their military counterparts all parties saw the "maintenance of personal integrity" as a key attribute. Those within the DECs "enjoyed their work" and "were encouraged to think in unique and independent ways", which might be expected in a mainly scientific body. Those in the DGE area were similarly encouraged to think but were less prepared to be "open in their dealings". Again it may well be that the shortfall here is ascribable to a change in responsibilities and organisation. However, bearing in mind the longer tenures in post and reliance for in-post training regimes there is certainly a need to ensure that professional development is not limited to on the job experience if individuals are to be appropriately motivated.

Humanistic-Encouraging

Subgroup 1: Military within DCDS(EC) and his Personal Staff or within Capability Managers and Staff
Subgroup 2: Military within Directors Equipment Capability and Staff
Subgroup 3: Civilians within Directors Equipment Capability and Staff
Subgroup 4: Other Military in MOD Equipment Capability Staff
Subgroup 5: Other Civilian Post in Equipment Capability Area

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Pct</th>
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<tr>
<td>Subgroup 1</td>
<td>29.1</td>
<td>83%</td>
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<tr>
<td>Subgroup 2</td>
<td>25.9</td>
<td></td>
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<td>27.3</td>
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<td>Subgroup 4</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Subgroup 5</td>
<td>28.8</td>
<td></td>
</tr>
</tbody>
</table>
Military

The Humanistic-encouraging results were well below the ideal (Ideal 83%, military groups 69%, 34% and 63%) the lowest score is attributable to the DECs who should be regarded as practitioners in the procurement process and therefore most involved in the civil/military interface. A humanistic-encouraging culture would normally lead to effective organisational performance by providing for the growth and active involvement of members who, in turn, report “high satisfaction with” and “commitment to the organisation”. The highest score was attributable to those involved in higher management issues, although interestingly they did not see “positive rewards” as a necessary incentive and no doubt along with their other military colleagues believe in the merit based reward scheme of confidential reports. Moreover, they were all only moderately interested in the “growth and development of others”. And again this might be explained but not excused as a service provided in the military environment as a matter of course to match a structured career system and therefore somewhat taken for granted. Other explanations for this overall shortfall include that a significant amount of time is spent working in isolation because the wide area of responsibility leads to a significant period of time spent out of office. Moreover, the desk officer is expected to lead as the expert in a capability and in attaining that status much work is done individually. These two factors and the recognised concern over long working hours throughout the area do little for a feeling of belonging and actually encourage an individualistic rather than social attitude. In addition, the military arrive with their own cultural baggage and with an average tour of less than 3 years there is a strong probability that insufficient time would be available to adopt fully an EC culture. Rather they remain wedded to the values, behaviour and attitudes found in strong military cultures. This allegiance is not confined to an overarching culture, as found say in the Navy, more likely they identify more strongly with a sub-culture based often on their particular occupation e.g. submariners. So instead of adopting a culture tuned to harmony with new found civil service colleagues, for most military they will remain culturally separated. This is in part understandable, as service people are required to conform to military cultures and see themselves as only transient members of MOD staff. Interestingly, those returning to the MOD, normally on adopting broader responsibilities, are more likely, through accumulated experience, to adopt a stronger association and preparedness to achieve synergy through teamwork with their civilian partners.

Civilian

Against the ideal of 83% the two civilian bodies in ECC fell well short with 47% and 61% but overall showed a more constructive approach than the military DEC staff. Similar to their military counterparts neither civil body placed merit in “positive rewards” relying on reports to gain
promotion. The DEC civilians placed their greatest store in “helping others to grow and develop” and perhaps that is understandable, when surrounded by a military staff dissimilarly orientated. Both civilian groups saw the “resolution of conflict constructively” as a high order item, which was well scored across the EC area. DGT’s staff also favoured “involving others in decisions affecting them”, which again was a common theme in the area and is perhaps indicative of a society based on consensus.

Subgroup 1: Military within DCDS(EC) and his Personal Staff or within Capability Managers and Staff
Subgroup 2: Military within Directors Equipment Capability and Staff
Subgroup 3: Civilians within Directors Equipment Capability and Staff
Subgroup 4: Other Military in MOD Equipment Capability Staff
Subgroup 5: Other Civilian Post in Equipment Capability Area

As can be seen from the data, there was a significant gap between the ideal, some 76%, and the military staff where the scores achieved ranged from 11% in the DECs, through 20% to 23%. It is difficult to explain this particular deficit, as many would commend the military as experts in the execution of Adair’s concept of successfully achieving goals by the maintenance of the aim and concurrently addressing the needs of the individual and team. Indeed, he first espoused this philosophy for success whilst teaching at the Royal Military College Sandhurst in the early 60s. Again past practise in the ECC world was somewhat monastic compared to pure military activity as individuals worked to achieve often self-imposed goals. Also, although the organisation was predominantly military, there were scientists under the Directors Science who were loosely affiliated to individual branches and assisted in the preparation of equipment submissions and running the Research programme. The other civilians were mainly administrative staff who became a rare commodity with
the advent of the paperless environment and again this encouraged an individualistic approach. With the formal integration of all EC staff particularly in the DECs there should be greater opportunity for a more team-orientated approach to be adopted. Some of the scrutineers of yesteryear are now also integrated in to the EC area and again this should encourage positive teamwork. The concept of Capability Working Groups will also encourage EC staff to work as teams. Perhaps most importantly is the critical need for all ECC staff to think more on a tri-service, Central Staff basis, where the case for creating or maintaining capability will only be successfully delivered if the submission is jointly created with DPA, 2nd Customers, DLO and industry and where colleagues in the ECC arena believe that it is an honest commitment. Then and only then will the full benefits of an Affiliative culture be realised.

Civilians

The civilian ECC staff also did not achieve the ideal and the deficit created was 33% and 48% compared with 76%. The DGE staff achieved the highest item scores particularly in the areas of “dealing pleasantly with others”, “co-operation”, and “thinking in terms of group satisfaction”. This may reflect the consensus theory espoused earlier and reflect on the closer working relationships that may exist, which may reflect on their need. It may also reflect on the reality that predominantly civilian oriented organisations will have a greater preponderance of people who have worked together for relatively long periods and therefore have a greater need to achieve an Affiliative stance. The average military tour in MOD and DPA is less than 3 years and yet of all the respondents some 44 civilians had spent longer than 15 years in post. The civilians within the DEC also placed a significantly higher value on an Affiliative culture than their military partners and here again time in post would be advantageous. The military position of designating either a two or three year tour does little for the individual in his quest to identify with his new working partners and to many this will be their first experience of working alongside civilians. The concept of creating an acquisition stream which includes all involved in the procurement process will go some way to engender a stronger feeling of partnership especially if the individual member of the Forces knows that he will return.

ECC Passive/Defensive Cluster

General

Organisations with a Passive/Defensive culture are recognisable because personal beliefs, ideas and judgement take a back seat to rules, procedures, and orders; all of which are followed without

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309 John Adair taught at RMA Sandhurst for twenty years commencing in the 1960s and during that time had the onerous responsibility of teaching me.
question\textsuperscript{310}. Moreover, such organisations rely on a high degree of structure, standardisation and control to ensure reliable and consistent output. They are further recognised as comprising people who seek security and therefore prefer to be directed and avoid responsibility. Many of the principles of Scientific Management (as prescribed by Frederick Taylor in the early 1900s) are also embraced in this culture: delineation of how each job is to be done and for how long; defining jobs as narrowly as possible and providing employees with close supervision\textsuperscript{311}. Passive and defensive cultures also tend to be associated with bureaucratically controlled, mechanistic organisations where the compliance with rules and regulations and ability to follow orders are rewarded. In addition, bureaucratic agencies have a tendency to shift decision making to others or rely on superiors to make decisions\textsuperscript{312}. Through centralised decision-making and an abundance of rules and procedures, members at the bottom of the hierarchy quickly learn that they are not trusted nor expected to think independently\textsuperscript{313}. Organisations with this predominant culture also perform poorly against “hard “ measures of organisational effectiveness\textsuperscript{314}. An experience already shared by both the EC and DPA in applying the European Foundation for Quality Management (EFQM) Excellence Model.

Approval

<table>
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</tr>
<tr>
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<td>26</td>
</tr>
<tr>
<td>Subgroup 4</td>
<td>63</td>
</tr>
<tr>
<td>Subgroup 5</td>
<td>8</td>
</tr>
</tbody>
</table>

Subgroup 1: Military within DCDS(EC) and his Personal Staff or within Capability Managers and Staff
Subgroup 2: Military within Directors Equipment Capability and Staff
Subgroup 3: Civilians within Directors Equipment Capability and Staff
Subgroup 4: Other Military in MOD Equipment Capability Staff
Subgroup 5: Other Civilian Post in Equipment Capability Area

\textsuperscript{311} Fredrick Taylor, Scientific Management, New York: Harper & Row, 1911
Approval cultures work against initiatives directed towards increasing employee involvement as members will maintain the façade of agreement in order to be accepted.

Military

The ideal score 36% was exceeded in two areas but not by DEC staff. DCDS and CM staff at 66% and the other military at 63% appeared to appreciate “doing things for others” and “going along with them” and were slightly inclined to “back up those with most authority”. However they were not alone in this respect and merely held these behaviours in higher esteem. It is not entirely unexpected to see the military adopting such a culture but if they continue to do so in this environment it will be difficult to guarantee a successful outcome to the SPI. The DEC met the ideal at 29% by relying more on the “adoption of an independent position” and not being overly concerned with “pleasing or being liked by all”.

Civilian

Both civilian bodies met the ideal comfortably gaining 26% and 8%. Civilians within the DEC at 26% were only moderately inclined towards this culture and placed “following fashion” on a lowly par with “backing up those in authority” and “switching priorities to please others”! DGE staff saw most behaviours within this field as low priorities and scored accordingly, achieving an overall score of 8%, which in theory is an ideal approach for a body to achieve a successful change initiative.

Conventional

![Table](image)

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Pet</th>
<th>Ideal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>22.8</td>
<td>18%</td>
</tr>
<tr>
<td>2</td>
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<td></td>
</tr>
<tr>
<td>3</td>
<td>20.3</td>
<td></td>
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<tr>
<td>4</td>
<td>24.3</td>
<td></td>
</tr>
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<td>5</td>
<td>19.9</td>
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</table>

As might be imagined, conventional culture can stifle innovation and prevent the adoption of change.

**Military**

The ideal of 18% was significantly exceeded by all the military groups within DCDS(EC)'s area from 41% in the DCDS/CM group, through 46% in the DECs to 55% in the other military staff. There was a common military goal throughout the area to “follow convention”, “fit in to the mould”, “conform”, and in that process “make a good impression”. I was surprised with this finding accepting that it would have been almost guaranteed some decades previously. With a more egalitarian attitude permeating through society and a national nomadic approach to careers a less traditional response was anticipated. That said, the military rarely experience the fruits of their labour and so might conveniently adopt the easiest path and in a society with much competition there could well be a continuing reticence to be too unconventional.

**Civilian**

The civilian respondents were much less reticent than their military counterparts and failed to be attracted by this culture by scoring only 15% and 18% against the ideal of 18%. Perhaps this is another reflection of a lack of regimentation and the preparedness of career civil servants, who are more likely to have to live with their own decisions, to conform less.

**Dependent**

<table>
<thead>
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<th>Subgroup</th>
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</thead>
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<tr>
<td>Subgroup 1</td>
<td>26%</td>
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<td>Subgroup 3</td>
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<td>12</td>
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<td>Subgroup 4</td>
<td>20.4</td>
<td>91</td>
</tr>
<tr>
<td>Subgroup 5</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>
In some cases, external controls on an organisation may create a scenario where dependent norms can be found at all levels of the organisation.

**Military**

Once again the military inclination to "respect and comply with authority" is well illustrated (Ideal is 26% and the military have scores of 41%, 46% and 55%). All three military groups place, "do what is expected of them" and "willingly obey orders" high on their behavioural norms; with only a chosen few believing that orders should be followed…" even when they are wrong. “This tendency not to challenge rather check with leaders at all stages does not engender a spirit of advancing rather advancement and this does not tie in well with the greater devolution of authority as is recognised in DECs and their apostles/ RMs in the DPA.

**Civilian**

The two civilian bodies were more independent in their stance, with only 12% and 8% against the ideal of 26%. In most respects the civilian DEC members had similar priorities to their military DEC partners but failed to have the same level of conviction. The other civilian respondents were only marginally convinced that superiors should not be challenged and were similarly inclined with accepting goals without questioning them. Rank structure continues to be one of the major differentials between civil and military society. In the military rank remains sacrosanct and even today it is not challenged greatly on the basis that war demands immediate reaction to orders. However, in the civil service it has been my observation that individuals have to earn respect and that direction is mainly accepted and followed when respect has been achieved. Moreover, in that process there is a preparedness to challenge a respected opinion. The only exception to this rule is the position and views of Ministers, which are rarely if ever challenged within the Ministry. Many of the capability shortfalls identified in Kosovo, were purchased on Ministerial direction, which had over- turned the advice offered by the Equipment Approvals Committee.
Avoidance

This type of culture is characterised by behaviour that avoids any possibility of being blamed for a mistake and is populated by members, who are unlikely to move in new directions, learn from mistakes or adapt to change.

Avoidance

The military once again show a preponderance to follow a passive/defensive culture achieving scores of 62%, 40% and 27% against an ideal score of only 21%. Here the behaviours moderately favoured include "pushing decisions upward"; "take few chances" and "never be the one blamed for problems". It should be recognised that the higher management and their immediate staff appear to most favour this culture, which may imply a reliance on the authority inherent in their or their leader's position as the way to influence the work force rather than leadership by example. Alternatively it might be a recognition that the EAC sits immediately above them and as superiors make most key decisions. From my own experience, one DCDS (Systems) failed to enter my offices, as a Section Head, or the offices of my staff throughout his three year tour and reserved speaking to the Division as an annual event although now such malpractice is history.

Civilians

However, the civilians within the DECs were similarly inclined and share the top four behavioural items with similar scores to their military counterparts in the DECs some 33% against 40%. Their equivalents outside the DECs were very ante this type of culture and in the whole area were only vaguely inclined to "push decisions upward". Moreover, they were rarely inclined to follow other items and indeed were the only body that satisfied the ideal, achieving only 10% against an ideal of 24%. One explanation for this relatively strong position is that although these staff members are not
actually responsible for the basic compilation of data and positions on capability they are responsible for high profile advice both to Ministers and senior staff. And although their advice is often based on consensus they nevertheless sign off the line to take.

ECC Aggressive /Defensive Cluster

General

The Aggressive / Defensive cluster includes cultural norms that mirror expectations for members to approach tasks in robust ways and in so doing protect their status and accompanying security of employment. Unfortunately, in this activity members also place priority on “doing what is best for themselves” rather than the “long term interests of their organisation”. Previous organisational success whether measured or otherwise fuel the arrogance and short term orientation of management and allow Aggressive / Defensive organisations to appear effective—at least temporarily. However, as illustrated by John Cotter and James Heskett’s study of 207 organisations, this type of value structure prevents organisations from effectively adapting to changes in their environment. Organisations that typically operate in such environments include the military where members are required to be able to move very quickly. However, the nature of fast paced, hard driving and lengthy working hours environments leads many organisations to believe that in order to be aggressive and competitive externally they have to be similarly orientated internally.

There is also a tendency for organisations that are in the process of down sizing or re-structuring to become even more Aggressive/ Defensive. Internal and external comparisons are often conducted during down sizing/ re-structuring, which in turn puts pressure on sub-units and individuals to demonstrate their relative importance to the process in order to defend their position and prospect. Not surprisingly this can lead to schisms in the work force, which can take a long time to heal. Because many organisations fail to take due heed of the cultural impact associated with down sizing and re-structuring strategies only short-term gains are mainly achieved. Decreases in loyalty, morale, and productivity are common as are increases in cynicism, absenteeism, and turn over. A flavour of the norms is given below as is the acceptance or otherwise of the two ECC communities of them.

Oppositional

313 Janet L Szumal, Organizational Culture Inventory, Interpretation and Development Guide, page 53.
The military in the DECs and within senior management and their staff well exceed the ideal (some 93% and 76% compared to the ideal of 47%). This is not unexpected given historical evidence of military behaviour. The higher management and their staff led the charge of "looking for mistakes" and were keen also to "point out flaws" and "question decisions of others". The DEC staff was similarly inclined but was not so forceful in their views. The other military within the ECC area had lower scores and different priorities perhaps because they tend to exist as minorities within mainly civil service oriented sub groups. However, although it is impossible to differentiate from the data between the various Service elements, there must remain a concern regarding continued subordination to tribalism. It, after all, often led to Oppositional stances being adopted between the Services, which in turn led to the maintenance of the status quo when it came to investment in long term capability.

How greatly these cultural divides will be removed by the Capability Management structure and orientation remains to be seen but apart from the odd transparent move like that of helicopters to CM (M) the organisation still smacks of the three single service cultures in the CM areas. Another concern must be the ability of the EC area to work with the DPA and even more importantly the Second Customer, who although often of the same background do not possess the authority and technical insight enjoyed by the Central Staff. The visibility of an above average Oppositional culture does provide some concern but with only an average intensity it is unlikely that it alone will prevail and indeed would suggest that change management could reduce its future strength and impact.
Civilian

The civilians in the DECs were to a moderate extent prepared to "point out flaws" and "question decisions" made by others but other than those two areas of behaviour they were less Oppositional in their approach than the military. To a much greater extent, DGE's staff was similarly inclined to the military when it came to being Oppositional. Perhaps this can be attributed to some extent to their old scrutiny function where it was a core function to "point out the flaws" surrounding equipment submission or a resource or programming decision.

Power

As might be imagined, uniformed bodies like the Forces have naturally adopted such culture, as the demands of conflict require the maintenance of unquestioned authority and control. The Civil Service with its hierarchical structure is similarly inclined but without the prospect of war the power culture is less overt. There is a propensity for power oriented norms to lie where the greatest power is held normally at the higher management levels with the more junior subordinates adopting a strong Dependant culture.320

Military

The very high Power culture of the military outside of the predominantly military ranks of the DEC and DCDS and CM's areas (95% against the ideal of 36%) might be attributable to their minority
status in a predominantly civil service culture and this is borne out in the high value they placed on “using the authority of their position” and “staying on the offensive”. However, in the more military orientated areas the higher level bodies (95%) also placed considerable store in “using the authority of their position” and “acting forcefully”. The DECs were less strongly inclined (80%) and perhaps this is because they have to operate and be more accommodating in the more civilian orientated society found not only within their own areas and the DPA but also within DERA and industry.

**Civilians**

As can be seen there is a significant difference in the strength of the culture in the two civilian bodies at 66% and 57% compared with the military although they are both much greater than the ideal. As stated earlier, this, in part, can be attributable to their hierarchical structure and perhaps there is also a tendency to fight fire with fire and call more greatly upon their status because they now work in a mixed and predominantly military environment. Those working within the DECs at 66% saw “acting forcefully” as a strong quality which perhaps was seen as necessary to maintain their own integrity; and those outside of the DECs at 57% were only moderately inclined to “use the authority of their position” or “play “politics” to gain influence”.

**Competitive**

| Subgroup 1 | 22.8 |
| Subgroup 2 | 20.5 |
| Subgroup 3 | 18.5 |
| Subgroup 4 | 21.7 |
| Subgroup 5 | 15.3 |

In a competitive culture work has a tendency to take precedence over all else and long working hours and lack of teamwork become the norm and impact on morale. It was my experience over nine years that the working hours of the staff within the old Operational Requirements areas were extremely long and this phenomenon was regularly brought to the attention of senior managers within MOD. Overtly they cared, inwardly little if anything was done to remedy the situation; indeed tasks were not reduced even when operating cost were reduced.

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Military

As can be seen from the figures below, the military once again score consistently high with 85%, 72% and 80% compared to an ideal of 46%. This when placed in the context of Affiliative scores is of concern as a greater “strength of commitment” appears to surround competition than does “co-operation within and between the groups”. The higher military management and their staff placed most store in “out-performing their peers” with a secondary pattern of “being a winner”. The latter being a status that the DECs held in highest esteem. It is difficult to understand why the troops should place store in these behaviours other than perhaps it is a reflection on their lack of a sense of team spirit which they would expect to enjoy outside the MOD and the slight feeling of working in isolation. In such an environment the only way to shine is to be competitive and shine amongst peer groups.

The remainder of the military to be found in DGE’s area was more orientated towards being “seen and noticed” rather than “being a winner”. This priority is in accord with the overall view that this sub-culture attempts to demonstrate a unique military flavour in a predominantly civilian oriented body.

 Civilians

Once again there are two distinct sub-cultures within the civilian population, which is not unexpected as the union between both bodies is relatively recent. The closest to the military position at 55% can be found in the DEC staff although their sense of wanting to be “winners” is only moderate. Even further down the competitive scale comes the DGE staff and at only 24% are well below the ideal: indeed the term laid back almost springs to mind but more appropriately a small competitive dimension is conducive to motivation. Apart from vaguely, “wishing to be seen”, they place little priority in this cultural style. The marked difference in competitive styles between the military and civilian staff is of concern as there is a danger of silos being formed, which is totally out of kilter with the desired effect of creating a more harmonious culture across the piece.

<table>
<thead>
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<th>Perfectionistic</th>
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<td>Subgroup 5</td>
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</table>
It is recognised that although some orientation towards a Perfectionist culture can be useful, too much emphasis can lead staff to lose sight of the goal, get immersed in detail and allow work to dominate their lives\(^{321}\).

Military

The military hierarchy and their staff were not over-committed to this culture indeed scoring only 40% were well down the perfectionist batting order but still out of touch with the ideal of only 24%. To a great extent they wished to “appear both competent and independent” and sought some solace in “endurance”. This may be attributable to their desire to lead by example and set workable standards hoping that the rest would follow. It could be that they have fewer demands on their time, which again is not totally out of the question as the military engine house of the EC area lies in the DECs, who in turn feed higher management with significant detail regarding capability. The DECs on the other hand placed greater store in the qualities of “persistence” and “endurance”, which remain essential ingredients if solutions are to be reached. Last but in this case the front, perfectionist, runners are the DGE military complement who to a great extent believed in “endurance” and “keeping on top of everything” perhaps in an effort to wave the military flag and gain respect in a fairly alien sub culture.

However, the situation regarding the military is not irretrievable and such organisations can respond rapidly to external demands if they re-direct their cultures to be more Constructive or supplement Aggressive/Defensive norms with those for Constructive behaviours. A recent study of the organisational culture of units in Desert Storm (1991)\(^{322}\) showed all units possessing Perfectionistic (expected to perform flawlessly) and Conventional (follow procedures without question) behaviours. However, the top performing units supplemented norms for defensive behaviour with those for constructive behaviours; specifically they were expected to communicate, to co-ordinate and co-operate with others.

\(^{321}\) Ibid. Page 64.
Civilian

Civilians within DGE’s area wanted to a great extent to appear both “competent” and “independent” and be “persistent” and this is reflected in their 59% position. Having adopted a more overtly supportive mantle of the DCDS (EC) area it is still necessary for this body also to proffer advice to Ministers, 2nd PUS and the Treasury and the desire for a degree of independence is therefore understandable. However, at the working level there is quite a difference between the military and civil sub cultures. Perhaps as the proverbial fish out of water in the MOD and also finding themselves separated from their wives, the military find some form of consolation in working long hours. In so doing they may believe that an advantage accrues over their civilian counterparts, who tend to work less demanding hours, as they are able to devote more time to individual issues. The danger in this dissimilar approach being that significant animosity can be created if one party is toiling for longer than another. It would make sense if all parties worked conventional working hours and commitments or staffing levels were tailored accordingly. The alternative approach would be to slow the whole Capability process down, which would be the antithesis of SPI.

322 Ibid. Section 6
ECC Comparison Sub Group Analysis

ECC Civilians

A visual representation is outlined below using the circumflex to show both summaries of the findings addressed in previous paragraphs and any commonality between the civilian sub group cultures to be found within the EC area. As can be seen they have a below average inclination towards the Passive / Defensive cultures, an average inclination towards the Aggressive / Defensive cultures, and an average inclination towards the Constructive cultures.

Civilians within Directors
Equipment Capability and Staff

N = 4

Nb. N = number of respondents

Other Civilian Post in Equipment
Capability Area

Current

N = 9

As can be seen from the circumflex showing a civilian director's involvement in specific cultures but not stronger in those belonging to other areas. However, whilst average inclination towards the Passive / Defensive cultures is relatively low compared to the Constructive cultures, the Constructive cultures show a relatively high inclination towards the Constructive cultures. This suggests that the high profile involvement of the director in the charge process and a positive style towards achieving outcomes, ODC's (EC) and the CM and their staff hold the key positions within the national and international norms and the ECC area.
As can be seen from the circumplexes above the military within the EC project a distinctive culture compared with their civilian colleagues. They too possess above average Aggressive/Defensive cultures but are stronger in their leaning than the civilians. They also possess a stronger, albeit average inclination towards the Passive / Defensive cultures. Moreover, the majority is less inclined towards the Constructive behavioural norms than their civilian counterparts and holds the Affiliative behavioural norms in relatively low regard compared to their civilian colleagues. Perhaps due to their high profile involvement in the change process and a greater awareness of an ideal culture, DCDS (EC) and the CM and their staff hold the highest percentile scores across the behavioural norms and the ECC area.
However, given the statistical significance associated with the sub-cultural level of response and the need to address culture change where possible on an area basis, the following paragraphs address aggregate scores and draw conclusions.

ECC Aggregated

Aggregate ECC, N = 44

Current and Ideal Culture and Gap Analysis

<table>
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<th>Constructive styles</th>
<th>Raw Score</th>
<th>Percentile</th>
<th>Strength</th>
<th>Standard Deviation</th>
<th>Intensity</th>
<th>Ideal</th>
<th>Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanistic-Encouraging</td>
<td>27.2</td>
<td>46%</td>
<td>Average</td>
<td>5.22</td>
<td>Average</td>
<td>83%</td>
<td>-37%</td>
</tr>
<tr>
<td>Affiliative</td>
<td>27.7</td>
<td>19%</td>
<td>Low</td>
<td>5.17</td>
<td>Average</td>
<td>76%</td>
<td>-57%</td>
</tr>
<tr>
<td>Achievement</td>
<td>30.7</td>
<td>79%</td>
<td>Above Average</td>
<td>3.91</td>
<td>Strong</td>
<td>83%</td>
<td>-4%</td>
</tr>
<tr>
<td>Self-Actualizing</td>
<td>24.6</td>
<td>35%</td>
<td>Below Average</td>
<td>4.31</td>
<td>Strong</td>
<td>81%</td>
<td>-46%</td>
</tr>
</tbody>
</table>

Passive/Defensive Styles

| Approval                    | 19.5      | 28%        | Below Average | 4.89           | Average   | 36%         | -8% -0|
| Conventional                | 22.4      | 37%        | Below Average | 5.75           | Average   | 18%         | 19% |
| Dependent                   | 24.0      | 37%        | Below Average | 5.52           | Average   | 26%         | 11% |
| Avoidance                   | 15.2      | 32%        | Below Average | 5.84           | Weak      | 21%         | 11% |

Aggressive/Defensive Styles

| Oppositional                | 18.8      | 73%        | Above Average | 4.31           | Average   | 47%         | 26% |
| Power                       | 22.5      | 79%        | Above Average | 5.90           | Average   | 36%         | 43% |
| Competitive                 | 19.5      | 64%        | Above Average | 6.28           | Average   | 46%         | 18% |
| Perfectionistic             | 24.6      | 64%        | Above Average | 4.53           | Strong    | 24%         | 40% |
Analysis

ECC primary styles

The primary styles (i.e. the cultural norm with the greatest percentile score) in the ECC organisations are Achievement and Power both scoring 79%. Of the four Constructive cultural norms Achievement is the most task orientated and focuses on setting and attaining challenging but realistic goals. Historically the setting of goals particularly those related to Programmes and Research was very much an internal activity disassociated in most respects from the PE/DPA work. These goals were set within the over-arching aim of providing a doctrinally coherent, affordable and balanced equipment programme. They covered such activity as generating Requirements documents, making submissions to EAC and managing a cost and operationally effective Applied Research programme. These goals had a slightly different slant and emphasis dependent upon the function of the sub group and as discussed earlier this is reflected in the identified sub cultural norms. The Programme and Research orientated goals were often generated from bottom-up and formally agreed by the hierarchy, which was pragmatic in the circumstances. Although the ECC area has only recently re-structured, it is encouraging that Achievement is such a strong culture at 79% and is close to the ideal of 83%. As the scientists within the DECs who were the weakest sub-group in this culture become more accustomed to their new operating environment, they too should feel more committed to both the setting of goals and in their attainment. As the whole concept of procurement becomes more interdependant between the ECC, DPA and DLO staffs it should be possible to link further their goals so both success and failure attain higher visibility and blame and credit can also be shared.

Although the Power culture was above average in strength it was only average in intensity which provides some opportunity to take remedial activity and this may be appropriate given the ideal percentile was 34% and the ECC's aggregate of 79% was significantly higher. However, as with any uniformed body and one like the Civil Service with its overt hierarchy the reliance on inherent authority to make the machine operate remains critical. It is difficult to shed this mantle for a service person that at the end of an MOD tour often returns to what is or can become an operational tour. However, there is a gradual watering down of the rank structure, which reflects societal change. As the power of aristocrats has changed over the last century so too is the unquestionable power of the military authority. Improved communications, greater standards of education of all ranks and closer working environments have been levellers in this process. So with time the reliance on Power as a behavioural norm may dwindle and perhaps a more Affiliative culture could unfold. It is perhaps understandable that a significant difference exists between the civil service and the military although the civil servants are also well above the ideal. As there has been a significant watering down of the
military to civilian ratio since re-organisation, with time there could well be a greater tendency to adopt a more common culture.

**ECC secondary style**

The secondary style in the organisation is Oppositional, which achieved an aggregate score of 73% against an ideal of 47%. In this instance, the score was above average and the intensity average so opportunities to weaken this behaviour exist. However, one of the biggest concerns remains the continued pre-eminence of the Single Services and their adoption of an Oppositional culture: two ingredients that unduly influenced past decisions. Every opportunity should be taken within MOD to ensure that the CM area does transition into a, “neutral” or purely “Purple” military environment where the status quo is no longer paramount. If they don’t, their Oppositional stance could lead to unnecessary conflict, poor group solving and watered down solutions to problems: the antitheses to what is envisaged as emanating from such bodies as the Joint Capability Board (JCB). The value of constructive comment is not in doubt but that is normally achieved when an Oppositional tendency is linked to an Humanistic culture and in this instance such a combination does not exist. None of the civilian sub groups were quite so committed to this cultural norm although DGE’s staff tended to favour this culture more than others perhaps due to their scrutiny role. Again opportunities to achieve a more balanced stance and lower cultural profile exist and future manifestations of an Oppositional culture could best be directed inwardly at any manifestation of this ancient and unattractive behaviour.

**ECC weakest style and largest cultural gap**

Their weakest style was Affiliative with an aggregated score of only 19% at an average intensity against the ideal of 76%. In addition to being the weakest style, this was also the largest cultural gap between the ideal and questionnaire results. It is ironic that in a military orientated body so little store was placed on positive interpersonal relationships and yet back with their troops this same quality would be important to the maintenance of morale and therefore the ability to execute the task. This is not an issue restricted to the sub unit or unit it is also germane to the Force whether it be in peace or war. As the ECC function is much more shared than in the past with formal relationships established between both the Customer from the Front Line and the supplier from the DPA or DLO the need to adopt better relationships is an imperative. The introduction of Capability Working Groups with differing levels of responsibility will also put greater pressure on the need for effective interpersonal relationships across the DECs and with their partners. A key issue effecting this behaviour is the relative length of tours for the military compared to their civilian counterparts. Unless this is addressed by either extending the military tours to 3 to 4 years or posting civilians earlier then there will always
be a mismatch and this in turn can influence internal as well as external relationships. Another mitigating factor will be the introduction of an Acquisition Stream, which in turn should foster a stronger feeling of affiliation between all participating parties, including those from government and industry.

**ECC Summary Perceptions**

As part of the questionnaire answers were also sought regarding the organisation and how they felt about working there. In the table the following abbreviations and their derivation are used. HA= "Historical Average", which is based on over 700 organisational units and CB= "Constructive Benchmark", which is based on 119 units taken from the 700 mentioned previously, which posses a predominately Constructive culture, as discussed earlier.
A summary of the findings is listed below.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>H1A</th>
<th>CB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clarity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>do you clearly know what is expected of you as a member of this organization?</td>
<td>3.9</td>
<td>0.7</td>
<td>3.9</td>
<td>4.1</td>
</tr>
<tr>
<td><strong>Consistency</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>do you receive inconsistent messages regarding what is expected?*</td>
<td>3.4</td>
<td>1.1</td>
<td>3.7</td>
<td>4.0</td>
</tr>
<tr>
<td>do you feel you comfortably “fit in” as a member of this organization?</td>
<td>3.7</td>
<td>1.0</td>
<td>3.8</td>
<td>4.0</td>
</tr>
<tr>
<td>does your job require you to think and behave differently than would otherwise be the case?*</td>
<td>3.3</td>
<td>1.2</td>
<td>3.8</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>are you satisfied being a member of this organization?</td>
<td>3.4</td>
<td>1.1</td>
<td>3.6</td>
<td>4.1</td>
</tr>
<tr>
<td>do you expect to be with this organization two years from now?</td>
<td>2.6</td>
<td>1.5</td>
<td>3.2</td>
<td>3.8</td>
</tr>
<tr>
<td>would you recommend this organization to someone like yourself as a good place to work?</td>
<td>3.1</td>
<td>1.1</td>
<td>3.6</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Commitment to customer service</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>would you personally go out of your way to make sure that a customer/client feels good about the service you've provided?</td>
<td>4.0</td>
<td>0.7</td>
<td>4.0</td>
<td>4.1</td>
</tr>
<tr>
<td>does the organization respond effectively to the changing needs of its customers/clients?</td>
<td>3.0</td>
<td>0.8</td>
<td>3.5</td>
<td>3.6</td>
</tr>
<tr>
<td>do you believe the organization will get repeat business from its present customers/clients?</td>
<td>4.3</td>
<td>0.8</td>
<td>4.0</td>
<td>4.3</td>
</tr>
<tr>
<td>does your organization have a reputation for superior customer service?</td>
<td>2.9</td>
<td>1.1</td>
<td>3.6</td>
<td>4.0</td>
</tr>
<tr>
<td>would you recommend this organization to potential customers/clients seeking the products or services it offers?</td>
<td>3.6</td>
<td>1.0</td>
<td>3.9</td>
<td>4.2</td>
</tr>
</tbody>
</table>

* The scores for these items are reversed to be consistent with the response format of the other items
Clarity

It is somewhat surprising that so early on in the transition that most people clearly feel content with what is expected of them. This is either a reflection on clear briefings, which is fairly typical of military on re-organisation or is a reflection on the shared ignorance reflective of a lack of experience. I favour the former, although again from my own experience it was saddening to see the poor transmission of information down the chain of command. After providing direction weekly, I visited desk officers soon after to find that they had not received the message and yet on operations this activity would be followed fastidiously. This observation contributes to my belief that not all the cultural military baggage travels to the MOO and indeed some find the relative informality found in Whitehall to be comfortable.

Consistency

The consistency of messages received is reasonable and accords with their perception of clarity of expectations of members although there is clearly room to improve further given the SDs identified of between 1.0 and 1.2. The concept of fitting in is reinforced but the SD of 1.0 again leaves room for improvement. There is a variation on perception dependent upon background; with the military feeling slightly more at home than their civilian counterparts. This might well be a reflection on the overall military control of the EC area and no doubt with time some of the newly arrived civilians to this environment will become accustomed to and influence the culture further. It was particularly surprising that the nature of the job did not make the majority think and behave significantly differently. For many of the civil servants the MOD could be their workplace for most of their career and for them I would not have expected a significantly different response. However, for the military a tour in the MOD is totally alien to operational duty even in a Headquarters and the thought process and subject matter is much different in the two environs. Perhaps being under the direction of military leaders partly reduces the impact of this existence but the modus operandi and working environment did not lead to a desire to return particularly with the younger officers.

Satisfaction

The average person appeared satisfied with being a member of the organisation but was not so committed as the constructive benchmark or the historical average. That said, as the SD was 1.1 there is clearly a need for further bonding activity. As an aside, the breakthrough process was nothing like so rigorous in the EC area as that that the DPA IPTs enjoyed. Moreover, it was surprising that the Centre, in recognising the common goals of all those involved in the acquisition process, did not afford equal resource to all elements involved in the change process after all it was the key overt measure that was aimed at altering culture. The longevity of tour was sure to expose the question of
different tour lengths. Needless to say, with so many in the Forces it is not surprising that fewer than the historical average or the benchmark expect to be in situ two years hence. I would not be content with the recommendation to friends to return as it exposes quite a discernible dip within the SD. Again this can be attributable to the military response who have a greater freedom of choice when it comes to alternative working environments and therefore choice.

Commitment to customer service

It is interesting to note the significant shift that has taken place in the regard for the Customer since Customers 1 and 2 were formally identified in the SPI. Prior to that date there was a dialogue with the end user but little respect was given to their view. Heretic though this may seem there was an arrogance possibly linked to a view that only the MOD knew all the facts, particularly what technology was on offer and who was offering it. The identification of customers and commitment to them is a critical message and one that if fully embraced should radically change the culture and as such should be reinforced at every opportunity. Some form of regular audit trail of the customers’ satisfaction should be part of the new culture not only in the DPA but also with EC members and their responsibility towards the fighting elements.
SUPPORT GROUPS CULTURE STYLE CONTRASTS

Support Groups are established within the DPA to provide infrastructure and administrative support to the Agency and centres of professional excellence, which are available to the MOD and the IPTs in particular.

Support Groups Constructive styles

It is in this area where the preparedness of members to interact with others and approach tasks in ways that will help them to meet their satisfaction needs for affiliation, esteem and self-actualisation are to be found.

The following sub-groups were identified in the questionnaire and have been adopted for the purpose of this analysis. It should be noted that although military were to be found in other areas of the DPA Support Group only those working within sub-group 5 responded.

SubGroup Key

Subgroup 1: Civilian within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group
Subgroup 2: Civilian within Personnel Group, International Relations Group, Facilities Management Group, or Aspect Project Group
Subgroup 3: Civilian within DPA Secretariat and Central Finance and Planning
Subgroup 4: Civilian within Private Finance Group, Commercial Services Group, Senior Commercial Group, Specialist Procurement Services, Future Business Group
Subgroup 5: Military within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group
Subgroup 6: Other Civilian Post within Support Groups

Civilian

Against an ideal percentile of 83% the majority of sub groups performed below standard at 64%, 50%, 42%, 13% although sub group 4 achieved a score of 78%, which was approaching the ideal. In some respects the new DPA philosophy sees the IPTs as the key deliverers and the Support Groups, as the name implies acting in a supportive role, especially to the IPTs. Prior to the reorganisation and before this distinction between groups all members of the PE felt, albeit to differing degrees, directly involved in the provision of equipment for the Forces. Project Management did not possess the full complement of expertise to deliver a programme and were reliant on Contracts and F&S staff, for example, to assist when required. The replacement of this matrix management approach was key to the SPI. However, there is a danger when making such a clear distinction between groups that those supporting have less control over their own work regime. Interestingly, those members of sub group 4 are the most likely within the overall Support Group bodies to be directly involved in project support activity. Indeed, in some areas they still retain unique skills not found in depth within IPTs such as those found within Specialist Procurement Services and Private Finance Group for example, hence they may well be able to be innovative rather than reactionary. With such a body it is not surprising that people were basically “risk averse” because in many respects they are not in the risk business but placed very great store in “thinking ahead and planning”. They were less concerned with “setting own goals” and “working to achieve them”.

Military

There was not a marked difference between the military and their civilian counterparts when it came to their priorities. The military were only slightly inclined to “set moderately difficult goals” and “work to achieve them” and were particularly taken by the need to “pursue a standard of excellence” and to a lesser degree “think ahead and plan”. This area within the DPA, which was predominantly military in the past, has been significantly pruned in size and the rank level has also reduced. How much this decline in military power has impacted on the culture is difficult to identify through this exercise but when compared to the ES fraternity these few military respondents are less attuned to an achievement culture, although there is no significant difference between them and their civilian counterparts.
Once again the theme is under-achievement against the ideal and mainly below average scores across the area ranging from the highest percentile at 57% to the lowest at just 5% against an ideal of 81%.

Why might such a poor return occur? Is it perhaps that these people are not expected to think laterally or “out of the box”; rather they are expected to tow a fairly strong party line, which is not totally out of keeping in a bureaucracy with a recognised hierarchical structure? Perhaps they feel that any effort on their behalf to increase performance will not be recognised; neither is an improvement to their job performance likely to be rewarded; moreover, there is very little difference in reward between high achievers and average performers. Rewards of varying type reinforce constructive norms324. In particular, the self-actualisation norm because there is little point in being positive and making a concerted effort if the rewards are negligible. Alas, as with most government agencies any form of monetary reward is not high on the agenda other than the reward of promotion with its inherent financial gain. They all placed considerable store in the maintenance of their personal integrity but were not prepared to resist conformity and again that is normal in an organisation where rank and status abound.

Military

The military scored similarly to other civilian groups in the area achieving 24% against the ideal of 81%. This is below average compared to the more military focused organisation of the EC. However, at this point it is worth noting that the career profiles of many officers working in the Technology Groups of the DPA would be less impressive than those found in the EC and perhaps the rest of the DPA. This in turn might indicate that if an officer acquits himself well in the EC he is more likely to achieve a high powered Confidential Report, from which stems early promotion, than his counterpart in the Support Area of the DPA. Currently, the military receive a standard military salary and are not permitted to share the humble financial reward or incentives that civilian peers can receive. Interestingly, these military hardly “enjoyed their work” but like their other military counterparts they felt strongly about “personal integrity” and emphasised the need for “quality over quantity”. It should not be forgotten that one of the key functions of this military body is to champion the ideals of safety, which is by nature a risk averse function in which, people place great store in precedent and reliability and accuracy of data.

Humanistic-Encouraging

| Subgroup 1: Civilian within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group |
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Pct Ideal 83%

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Percent AchieVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subgroup 1</td>
<td>26.9</td>
</tr>
<tr>
<td>Subgroup 2</td>
<td>25.8</td>
</tr>
<tr>
<td>Subgroup 3</td>
<td>29.7</td>
</tr>
<tr>
<td>Subgroup 4</td>
<td>29.5</td>
</tr>
<tr>
<td>Subgroup 5</td>
<td>24.8</td>
</tr>
<tr>
<td>Subgroup 6</td>
<td>25.3</td>
</tr>
</tbody>
</table>

| 43 | 33 | 70 | 68 | 25 | 30 |
Civilians

There was a concerted effort to demonstrate an “interest in others” and to “involve them in the decision making process” and these more than any other factors elevated some participants almost up to an ideal status (the ideal was 83% and groups ranged from 30-70%). In recognition of the relatively narrow reward schemes that are available, few felt able to give positive rewards to others. Even in the area of Confidential Reports clearly there was some concern that they could not achieve a spontaneous positive reaction. As the means to reward are poor it is likely that a common pattern will develop both with the civilian bodies and with the military bodies as can already be seen from a pair-wise comparison with the ECC area.

Military

The difference between the ideal and the military result was some 83% against 25% (the lowest score in this area). One of the key observations with this group was their highest priority norm “to resolve conflicts constructively” which, they saw as more important than being “supportive of others”. Perhaps they found that conflict was a higher profile issue than their relationships with colleagues. And that could be the case as the military strength in this area was in the process of being much diluted, which in turn can jaundice views and lead to the adoption of a more individualistic approach. Either way it demonstrates that micro cultures or distinct norms can exist and to change cultures the needs of all have to be addressed.

Affiliative

<table>
<thead>
<tr>
<th>Affiliative</th>
<th>Pct</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ideal 76%</td>
</tr>
<tr>
<td>Subgroup 1</td>
<td>47</td>
</tr>
<tr>
<td>Subgroup 2</td>
<td>15</td>
</tr>
<tr>
<td>Subgroup 3</td>
<td>82</td>
</tr>
<tr>
<td>Subgroup 4</td>
<td>48</td>
</tr>
<tr>
<td>Subgroup 5</td>
<td>11</td>
</tr>
<tr>
<td>Subgroup 6</td>
<td>20</td>
</tr>
</tbody>
</table>

Subgroup 1: Civilian within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group
Subgroup 2: Civilian within Personnel Group, International Relations Group, Facilities Management Group, or Aspect Project Group
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Subgroup 6: Other Civilian Post within Support Groups

Civilians

Against an ideal of 76% the percentiles ranged from 15%, 20%, 47%, 48% and 82%, which is a wide distribution. The extremes lie between civilians within DPA Secretariat and Central Finance and Planning at 82% who have strategic planning responsibilities and those found in subgroup 2 who are more interested in supporting the infrastructure and wider relations. The former to a very great extent felt that "group satisfaction", "treating people as more important than things", and being "warm and open" were all key cultural attributes. The personnel found in this area are more likely to be of a high calibre with sound promotion prospects because they are employed in close proximity to the Chief Executive and understand his thinking, which in turn provides a clear understanding of what the DPA stands for. The latter appeared to be reticent when it came to "enjoying the job", being "spontaneous" or being "open" and this more remote stance might stem from their displacement from the Central core of the DPA where they have less understanding of the wider tasks. In addition, there are strong criticisms surrounding IT support, the Personnel Group and Facilities management, which in turn would flavour their approach to Affiliative behaviour.

Military

Once again, it can be seen that the military do not place great store in an Affiliate culture achieving only an 11 percentile score against the ideal of 76%. This very low result may in part be attributable to the dominance of the military cultural package with which they are most familiar e.g. be it based on working in tanks, submarines or fast jets, over a new culture associated with the DPA for a temporary period. The preparedness of military staff to fit in and adopt another group's approach, which would have to be conducted in concert with new civilian colleagues and indeed other military from different backgrounds, cannot be guaranteed. Particularly when their tours in the DPA can be relatively short. However, it is peculiar that in the 21st Century that this particular body placed the item "treat people as more important than things" in the category of to a slight extent as they did the item, "think in terms of the group's satisfaction". Interestingly, some store was placed in the "co-operation with others" as it warranted a behavioural status of, "to a very great extent." All other items including, "use good human relations skills" only achieved a moderate behavioural status. Why should this be the case with this military group in particular? Historically, they had a powerful position as champions of
all health and safety issues and the Ordnance Board, for example, was a body with international acclaim and its Chairman a two star general. Over time and with the demise of nationalised industries, the requirement for such bodies diminished; particularly as technical expertise was also to be found in Project Management, IPTs, uniformed Trials Units and the defence industry. This tendency was recognised in the SPI and although the function was retained; the military numbers were reduced as was their status and ranks. This change in status could well have jaundiced those military remaining and flavoured their attitude to working within the DPA and their responses to the questionnaire.

Support Groups Passive /Defensive Styles

Approval

It is normal for Passive/Defensive cultures to be found within bureaucratically controlled mechanistic organisations. These organisations rely on rules, procedures, and centralisation of decision-making and job specialisation to maintain control over the way work is conducted. Moreover, these organisations also provide members with little incentive to improve productivity and service because the dominant assumption is that the customer base will be maintained regardless of whether productivity and service improve. A fact well illustrated by the history and consistency of NAO reports. Clearly, those who work best within the constraints of a passive/defensive culture tend to succeed.

An approval culture runs the gauntlet of being susceptible to the phenomenon whereby people fall into line with decisions but lack any personal commitment and this has been labelled the, “Abilene Paradox”. This approach can jeopardise initiatives like SPI because members will maintain the facade of agreement in order to be accepted but can continue down the paths of yesteryear. It could be argued that past initiatives might well have suffered because of such an attitude.

Approval

<table>
<thead>
<tr>
<th>Pet Ideal</th>
</tr>
</thead>
<tbody>
<tr>
<td>36%</td>
</tr>
</tbody>
</table>

326 Ibid., Page 40
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Civilian

Against an ideal of 36% the Secretariat once again least follows the trends, with a score of only 8%, and the only item which gains any degree of recognition as a positive attribute in their perception is to “make sure they are accepted by others”. Which is a reasonable approach for this body as they are greatly reliant on gaining acceptance from others, as the others tend to feed the data required for them to conduct their tasks. For the other civilian categories the priority issues were, “backing up those with most authority” and “do things for the approval of others” which are atypical behaviours in this type of organisation and this is reflected in the higher than ideal scores of 45, 53, and 81%.

Military

The military were similarly inclined to adopt this culture and as might be imagined they too saw “backing up those with most authority” as a key item in this area of their cultural itinerary. They also viewed “switching priorities to please others” and “doing things for the approval of others” as relevant practice. The tendency for this military body to adopt these items is perhaps more understandable when the normal practise is to get approval at the highest level for any decision related to safety.
Organisations with this type of culture tend also to be traditionalists, which is indicative of the majority of military, although it is believed that some of the more irrelevant traditions are now being exorcised from being acceptable behavioural norms\textsuperscript{327}.

<table>
<thead>
<tr>
<th>Subgroup 1: Civilian within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group</th>
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<tbody>
<tr>
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<tr>
<td>Subgroup 4: Civilian within Private Finance Group, Commercial Services Group, Senior Commercial Group, Specialist Procurement Services, Future Business Group</td>
</tr>
<tr>
<td>Subgroup 5: Military within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group</td>
</tr>
<tr>
<td>Subgroup 6: Other Civilian Post within Support Groups</td>
</tr>
</tbody>
</table>

Civilians

As can be seen, the majority of the civilians within the support group far exceed the ideal: 40, 69, 55 and 95% against an ideal of only 18%. However, the Secretariat once again is closest to the ideal at 18%. Clearly, there is a problem with any organisation with a culture reaching back over a significant period- a period during which rules and procedures have evolved and people naturally feel comfortable when adhering to them. Moreover, many of the rules were created specifically to address legal issues such as the use of audit trails and these are likely to remain in being with any democratic government. Degrees of latitude are always available but pure speculation is not an option, as it is in the commercial market place, when investing Government funds. What should be changed is the strict adherence to template solutions where every step to be taken is laid down in stone. Certainly when assisting in the preparation of CDPIs I found some members of the PE were most concerned that the

\textsuperscript{327} Ibid. Page 41
draft CDPIs failed to cover all topics and scenarios and that examples of how to conduct business were also missing. SPI is more likely to succeed if greater latitude is afforded to the IPTs and that philosophy is apparently being gradually inculcated.

It is hard to explain the different level of percentage between the Secretariat and the other civilians. Other than although they all agreed the same items and put store in, "always follow policies and practises", the Secretariat were much less inclined than their counterparts to follow any behavioural item too closely. Perhaps this too can be attributed to the quality of staff and that more lateral thought is generated by the more gifted?

Military

The military were also found to be beyond the ideal with some 50% against the 18%. However, it is part of the military psyche not only to follow rules but also to analyse problems, generate orders and give direction using standard procedures. It is therefore to be expected that their culture is conventional and it takes some stretch of the imagination to envisage this trait halting when, inter-dispersed between tours in the DPA military members will serve and have to adhere to a military ethos. They too believed in following policies and practises and were not prepared to "rock the boat" although they were keen to fit into the "mould". This stark image is not typical of the younger generation of Forces who come with a better education and more open mind and this can be seen with such radical steps as the acceptance of homosexuality in the Forces and greater roles for women. But it will take time for this new look military culture to become the norm.

Dependent

A dependant culture is characterised by organisations that are hierarchically controlled and non-participative. "Worker bees" are expected to do only what they are told and to clear decisions with superiors. Dependant cultures are normally found in the lower organisational levels in response to power-orientated norms being held by the leaders.

Dependent

328 Ibid. Page 42.
329 Ditto.
Subgroup 1: Civilian within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group
Subgroup 2: Civilian within Personnel Group, International Relations Group, Facilities Management Group, or Aspect Project Group
Subgroup 3: Civilian within DPA Secretariat and Central Finance and Planning
Subgroup 4: Civilian within Private Finance Group, Commercial Services Group, Senior Commercial Group, Specialist Procurement Services, Future Business Group
Subgroup 5: Military within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group
Subgroup 6: Other Civilian Post within Support Groups

Civilians

Against an ideal of 26% the civilians scored excessively at 34, 62, and 65%. However, this was not repeated in the Secretariat and PFG sub-groups who were within the ideal at 5 and 14% respectively. It could be argued that the move towards greater autonomy as envisaged in the IPTs is not necessarily to be found in or requested of the Support Groups. As long as professional heads exist it is likely that they will wish to scrutinise decisions from a professional standpoint and offer advice on a similar basis. The gradual erosion of management layers could reduce the intensity of this culture. However, there is significant value in experience and often this goes hand in hand with status. An ideal culture would allow experience to reside in approachable senior management, who in turn encouraged maximum autonomy and perhaps the two compliant sub groups are closest in practising such a concept.

Military

The military were the most excessive in their reliance on this culture achieving a score of 65% against the ideal of 26% and were particularly strong in their belief in doing “what is expected”, and “willingly obeying orders”. In a sub group that was previously working in a militarily orientated organisation it is not unexpected to find such traits and even with further dilution of the military within the Support Groups it is unlikely that this inclination will cease.
Avoidance

Avoidance

Subgroup 1: Civilian within Air/Land Technology Group, Sea Technology Group, Ordnance Safety Group
Subgroup 2: Civilian within Personnel Group, International Relations Group, Facilities Management Group, or Aspect Project Group
Subgroup 3: Civilian within DPA Secretariat and Central Finance and Planning
Subgroup 4: Civilian within Private Finance Group, Commercial Services Group, Senior Commercial Group, Specialist Procurement Services, Future Business Group
Subgroup 5: Military within Air/Land Technology Group, Sea Technology Group, Ordnance Safety Group
Subgroup 6: Other Civilian Post within Support Groups

Civilian

The heavy reliance on this form of behavioural norm comes shining through when the excessive scores of 60, 41, 38, 60 and 90% are considered along with the ideal of 21%. And the tendency to favour “pushing decisions upward” and “taking few chances” reinforced this view. In the past, there was a power distance between the higher and lower elements of the work force, which was manifested in a somewhat convoluted chain of communication even for the poor PM/IPT leader and only on rare occasions were the two elements brought together effectively. During the era of Controllers of the three Services, at least three Master Generals of Ordnance held rehearsed annual project reviews activity in order to meet the staff, measure progress and to formalise a way forward. This distance between the two bodies has definitely shrunk since that period and under the SPI, with the removal of further management levels, the work force should feel a closer affinity with higher management. However, this has yet to alter the culture effectively. Only with time will the devolution of responsibility manifest itself and the management feel comfortable with making their own decisions in the knowledge that they will receive the backing of the Chief Executive. In particular, it is not clear how this autonomy and associated culture change will be achieved to the required degree in the Support Groups who have not enjoyed such a rigorous culture change process as their IPT colleagues.
The military were the highest percentile within the Support Groups at 92% compared with the ideal of 21%. This strong behavioural norm is hard to reconcile as a military trait because on operations and in peace the military at all levels are expected to make their own decisions within a given directional framework. So this phenomenon is not entirely a military issue it is specifically related to the DPA function. In health and safety related work, risk is never ignored or enjoyed even by the most versatile and autonomous forces like the SAS. Moreover, precedent is often called up on in the health and safety regime, as the cost of trialing every aspect of a system can be unaffordable. Therefore, it is often the norm to refer to “higher authority” to confirm to the outside world that the decisions taken were acceptable to the “gurus” of a particular discipline; rather as you find in the medical profession when life threatening high profile issues are in hand. Why then are the military in this discipline more avoidance orientated than their civilian counterparts in the area? It is believed that the answer lies in the nature of the organisation which until recently was very much militarily biased and where senior officers most probably were engaged in greater minutia than their military counterparts in other areas. As a result, it is felt that the military kept their masters employed and expected them to make, or at least sign up to many of the decisions. The down sizing of this area should assist the achievement of greater autonomy.

Support Groups Aggressive/ Defensive Styles

This cluster is concerned with those cultural norms that reflect expectations of members to approach tasks in forceful ways and in that process to protect both their status and security. Within these cultures members are encouraged to appear competent, controlled and superior even if they lack the requisite skills, abilities or experience. Any digression from this positive approach is viewed as incompetence or weakness. Possibly the worst trait of this culture is that members become self-centred; a posture achieved at the expense of the organisation. Ultimately, this type of value structure prevents organisations from effectively adapting to change and this is well illustrated by James Heskett’s study of 207 organisations.

Oppositional

30 Ibid. Page 53.
Subgroup 1: Civilian within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group
Subgroup 2: Civilian within Personnel Group, International Relations Group, Facilities Management Group, or Asset Project Group
Subgroup 3: Civilian within DPA Secretariat and Central Finance and Planning
Subgroup 4: Civilian within Private Finance Group, Commercial Services Group, Senior Commercial Group, Specialist Procurement Services, Future Business Group
Subgroup 5: Military within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group
Subgroup 6: Other Civilian Post within Support Groups

Civilian

Against an ideal of 47% the behavioural norms of the sub groups were strong at 76, 73, 69 and 72%. That said, the Secretariat once again came close to the ideal at 40%. The respondents placed considerable store in “looking for mistakes” and “pointing out flaws” and in all cases were “reluctant to accept criticism”. The danger with this behaviour is that sometimes the confrontation can spill over and effect relationships with customers and in such a scenario the only situation where the customer is guaranteed to return is if a monopoly exists, as is currently the case with DPA.

Military

Once again the military element failed to approach the ideal and achieved a very similar score to the majority of its civilian counterparts with 65%. However, to its credit this body ranked as its lowest norm the “opposition to new ideas”. The danger with this form of behaviour is that with time, Oppositional norms encourage norms of avoidance, as members become increasingly frustrated with
the negativism that prevails. It could be argued that the culture of some of the scientific scrutiny area within MOD was seen as fundamentally Oppositional. This led to people preferring to work in isolation and avoiding these scrutinisers until the last moment, which also added to programme delay. It is clear that scientific scrutiny is required for any significant capability investment but it is unclear whether any effort has been made to change their culture. Similarly, the cultures found in both the old PE and Systems communities were riddled with negativism and to prevent any manifestation of this trait written submissions were often kept under wraps until the last minute and even then constructive criticism was rejected.

Power

| Subgroup 1: Civilian within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group |
| Subgroup 2: Civilian within Personnel Group, International Relations Group, Facilities Management Group, or Aspect Project Group |
| Subgroup 3: Civilian within DPA Secretariat and Central Finance and Planning |
| Subgroup 4: Civilian within Private Finance Group, Commercial Services Group, Senior Commercial Group, Specialist Procurement Services, Future Business Group |
| Subgroup 5: Military within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group |
| Subgroup 6: Other Civilian Post within Support Groups |

The majority of the civilian bodies failed to approach the norm with scores of 57, 64, 62 and 62% against the ideal of 36%. However, there was one exception and the Secretariat achieved a score of only 14% against the ideal and only moderately believed in the "maintenance of unquestioned authority", which turned out to be their key attribute. This unique position could be attributed to the fact that this body sits so close to the Chief Executive and so by the very nature of their position they don't have to rely on overt demonstrations of power to achieve their goals. The balance put greater
credibility in the “use of the authority of their position” and “playing ” politics” to gain influence”. In many respects the Government’s constant search for economies has created a workforce where there are few Indians and many chiefs. In such an environment, power becomes all-important and often the only aspect of power that is in the hands of the individual is knowledge. As long as this form of culture is pervasive then knowledge will not be readily shared and in efficiency will continue.

Military

As might be expected in a mainly uniformed orientated body, rank, whether warn or otherwise, is rarely far from the surface and so it could be expected that they, more than their civilian counterparts, would place extensive store in “using the authority of their position”. It is worth harping back to their function and recall that the people who sat in these technological bodies were viewed as an authority in their own right through the very nature of their work and for a considerable period their word was final. Again the dilution of the military power within this area of the Support Group should reduce this cultural bent particularly when cultural change initiatives mature.

Competitive

It is worth considering that an overly competitive culture can inhibit effectiveness by reducing cooperation, promoting unrealistic standards of performance and goals and can lead an organisation to appear fragmented and subject to “silo” effects.333

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Pct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideal</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>51</td>
</tr>
<tr>
<td>2</td>
<td>66</td>
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<tr>
<td>3</td>
<td>20</td>
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<tr>
<td>4</td>
<td>58</td>
</tr>
<tr>
<td>5</td>
<td>44</td>
</tr>
<tr>
<td>6</td>
<td>50</td>
</tr>
</tbody>
</table>

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| Subgroup 1: Civilian within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group |
| Subgroup 2: Civilian within Personnel Group, International Relations Group, Facilities Management Group, or Aspect Project Group |
| Subgroup 3: Civilian within DPA Secretariat and Central Finance and Planning |
| Subgroup 4: Civilian within Private Finance Group, Commercial Services Group, Senior Commercial Group, Specialist Procurement Services, Future Business Group |
| Subgroup 5: Military within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group |
| Subgroup 6: Other Civilian Post within Support Groups |

Civilian

In most respects there is a healthy but moderate level of competition throughout the sub groups, with scores ranging from 50, 51, 58 and 66%, with only the Secretariat falling significantly below the ideal of 46% at 20%. It is perhaps understandable with the unique and diverse skills that are found within these bodies that no major competitive edge exists and the level achieved can be regarded as motivating. The Secretariat’s lowly score is reflected in the low regard they had in being a “winner”, where others had a stronger inclination in that behavioural direction. Perhaps the difference in attitude is once again encapsulated in the proximity of this group to the centre of gravity of the DPA and hence the reticence and lesser need to demonstrate their prowess.

Military

The military are similarly inclined to their civilian colleagues with regard to competition. Again it is believed that the particular skills that they bring to the organisation are unique and so the only competition involved is the intrinsic competitive edge, which is instilled in members of the Armed Forces at inception- and maintained especially by the well motivated.

Perfectionistic

One of the dangers associated with Perfectionistic cultural norms is that they lead members to strive to accomplish goals that are unrealistic and unnecessarily difficult.\textsuperscript{334}

\textsuperscript{334} Ibid. Page 64
Once again the only major difference between the civilian groups is that to be found in the Secretariat who rated 7% against an ideal of 24%, whereas the remainder fell between 43-59%. "Persistence", "keeping on top of issues", and "appearing competent and independent" were qualities that were favoured to a moderate extent and were also respected by the Secretariat but to a lesser extent. As with any bureaucracy there is a degree of exposure regarding the fruits of work as approval is sought and the hierarchy kept abreast of development. In such an environment it is predictable that a Perfectionistic culture will exist. However, within DPA most civilians live within easy reach of their family and weekend commuting is the exception rather than the rule. This in turn flavours the behavioural pattern and few would expect to work protracted hours unless a military operation arises.

Subgroup 1: Civilian within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group
Subgroup 2: Civilian within Personnel Group, International Relations Group, Facilities Management Group, or Aspect Project Group
Subgroup 3: Civilian within DPA Secretariat and Central Finance and Planning
Subgroup 4: Civilian within Private Finance Group, Commercial Services Group, Senior Commercial Group, Specialist Procurement Services, Future Business Group
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Subgroup 6: Other Civilian Post within Support Groups

Civilian

Military

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Members of the Forces have instilled in them that they are expected to perform flawlessly in war otherwise they will be defeated. To varying degrees they maintain that attitude in the daily work place because it becomes second nature. The behaviour is further re-enforced, as many also believe that issues should be reconciled immediately even though demanding time constraints do not exist. Being separated from a family and working protracted hours are both normal occurrences to a service person. This approach is often carried on into staff appointments particularly if the individual has elected to commute weekly or less frequently and can be a cause of friction between the two fraternities particularly when they are working hypothetically alongside one another. I share the somewhat patronising view that anybody working extraordinary office hours is not up to the job. A view, which if implemented would have the benefit at a stroke of removing one source of acrimony and the case for divorce. A considerable number of the wives I met socially during my tenure in the MOD would bemoan the hours their husbands worked even though a “9-5” regime was in place.

Support Groups Sub Group comparison

Civilian within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group
N = 7

Civilian within Personnel Group, International Relations Group, Facilities Management Group, or Aspect Project Group
N = 10

Civilian within Private Finance Group, Commercial Services Group, Senior Commercial Group, Specialist Procurement Services, Future Business Group N = 6

Civilian within DPA Secretariat and Central Finance and Planning
N = 3

335 VCDS/ PUS address to the Central Staff, MOD, December 1998
As can be seen, the tendency is to possess an Aggressive/Defensive culture, with a secondary inclination towards the Passive/Defensive styles. There was an inconsistent attitude towards the value of Constructive styles with few individual styles achieving an average score. The DPA Secretariat and Central Finance and Planning possessed a distinct sub culture, which had a low reliance on Defensive styles.

Military

As can be seen below, the military were not that dissimilar from their civilian counterparts with regard to their preferred behavioural norms. The difference lies mainly in emphasis with a strong inclination towards the Aggressive/defensive styles. Almost an equally strong belief in the Passive/Defensive styles and a weak response to the Constructive styles, which is similar to the trend in the military within the ECC.
Given the level of response and the need to address culture change where possible on an area basis it is more significant statistically to look to the aggregate scores and draw conclusions.

### Aggregate Support Groups

\[ N = 36 \]
### Support Groups Current and Ideal Culture and Gap Analysis

#### Constructive

<table>
<thead>
<tr>
<th>Styles</th>
<th>Raw Score</th>
<th>Percentile</th>
<th>Strength</th>
<th>Standard Deviation</th>
<th>Intensity</th>
<th>Ideal Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanistic-Encouraging</td>
<td>27.0</td>
<td>44%</td>
<td>Average</td>
<td>6.33</td>
<td>Weak</td>
<td>83% 39%</td>
</tr>
<tr>
<td>Affiliative</td>
<td>29.1</td>
<td>31%</td>
<td>Below Average</td>
<td>6.35</td>
<td>Weak</td>
<td>76% 45%</td>
</tr>
<tr>
<td>Achievement</td>
<td>27.9</td>
<td>48%</td>
<td>Average</td>
<td>5.43</td>
<td>Average</td>
<td>83% 35%</td>
</tr>
<tr>
<td>Self-Actualizing</td>
<td>23.4</td>
<td>23%</td>
<td>Below Average</td>
<td>5.27</td>
<td>Average</td>
<td>81% 58%</td>
</tr>
</tbody>
</table>

#### Passive/Defensive

<table>
<thead>
<tr>
<th>Styles</th>
<th>Raw Score</th>
<th>Percentile</th>
<th>Strength</th>
<th>Standard Deviation</th>
<th>Intensity</th>
<th>Ideal Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval</td>
<td>21.3</td>
<td>47%</td>
<td>Average</td>
<td>6.47</td>
<td>Weak</td>
<td>36% 11%</td>
</tr>
<tr>
<td>Conventional</td>
<td>24.9</td>
<td>63%</td>
<td>Above</td>
<td>6.97</td>
<td>Weak</td>
<td>18% 45%</td>
</tr>
<tr>
<td>Dependent</td>
<td>24.1</td>
<td>38%</td>
<td>Below Average</td>
<td>7.17</td>
<td>Very</td>
<td>26% 12%</td>
</tr>
<tr>
<td>Avoidance</td>
<td>18.0</td>
<td>65%</td>
<td>Above</td>
<td>6.86</td>
<td>Weak</td>
<td>21% 44%</td>
</tr>
</tbody>
</table>

#### Aggressive/Defensive

<table>
<thead>
<tr>
<th>Styles</th>
<th>Raw Score</th>
<th>Percentile</th>
<th>Strength</th>
<th>Standard Deviation</th>
<th>Intensity</th>
<th>Ideal Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oppositional</td>
<td>18.4</td>
<td>69%</td>
<td>Above</td>
<td>3.37</td>
<td>Strong</td>
<td>47 22%</td>
</tr>
<tr>
<td>Power</td>
<td>20.0</td>
<td>57%</td>
<td>Average</td>
<td>5.21</td>
<td>Average</td>
<td>36 21%</td>
</tr>
<tr>
<td>Competitive</td>
<td>18.5</td>
<td>54%</td>
<td>Average</td>
<td>6.27</td>
<td>Average</td>
<td>46 8%</td>
</tr>
<tr>
<td>Perfectionistic</td>
<td>23.5</td>
<td>51%</td>
<td>Average</td>
<td>5.51</td>
<td>Weak</td>
<td>24 27%</td>
</tr>
</tbody>
</table>
The primary style

The primary style in the Support Group area was Oppositional scoring 69 %percentile, which is in itself above average and in this instances of a strong intensity. Moreover, this score was some 22% above the ideal. This result is disappointing as over time Oppositional norms encourage norms of avoidance, as members become increasingly frustrated with the negativism that prevails. Understandably, much of the investment in culture change has been focused on the IPTs at the expense of Support Groups and there is a danger that the Support Groups, one of whose primary functions is to support the IPTs, feel that they are second class citizens. This in turn can cause resentment and be de-motivating. It is worth noting that the majority of civilians ranked Oppositional as their strongest style and were marginally stronger in that inclination than their military counterparts.

The secondary style

The secondary style in the organisation is Avoidance, which achieved an aggregate score of 65% against an ideal of 21%. In this instance, the score was above average and the intensity weak and so opportunities to lessen this behaviour style exist and it will need to, as an Avoidance culture encourages the most security orientated behaviours, which in turn encourage the maintenance of the status quo rather than promoting change. Moreover, although reward schemes are common to all areas the higher profile activity of the IPTs is more likely to generate promotion recommendations than those achieved by their Support Group colleagues. To weaken and prevent any feeling of a second class citizenship greater effort should be made to change this body’s culture in step with that of the IPTs. Also in introducing greater individual involvement in career development it will be essential that migration is allowed to occur from the IPTs to Support Groups and vice versa.

The weakest style and largest cultural gap

Their weakest style was Self- Actualizing at 23% at an average intensity against the ideal of 81%. In addition to being the weakest style this was also the most significant cultural gap between the ideal and questionnaire results. The Support Groups tend to contain the most conservative sub groups in the DPA as in many respects it is their consistency of approach that provides the requisite stability associated with Government agencies. Commercial, Financial and International protocols will impact on the IPTs and cannot be ignored and any change to these conditions would be debated, agreed and conveyed to all by the responsible Support sub group. Hence it could be argued that opportunities to be creative are less here than in the IPTs and this in turn could impact on the quality of staff. However,

337 Ibid. Page 43.
any potential disparity could be balanced by greater investment in the Support Groups. An investment involving balancing quality across the DPA (theoretically IPTs were afforded the opportunity to select from the crème de la crème) by encouraging a regular change in roles between the two sectors, placing greater store and reward in lateral thinking, and placing even greater emphasis on individual development would be rewarded.

Support Group Summary Perceptions

<table>
<thead>
<tr>
<th>Clarity</th>
<th>Mean</th>
<th>SD</th>
<th>HA</th>
<th>CB</th>
</tr>
</thead>
<tbody>
<tr>
<td>do you clearly know what is expected of you as a member of this organization?</td>
<td>3.8</td>
<td>0.8</td>
<td>3.9</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Consistency

<table>
<thead>
<tr>
<th>Consistency</th>
<th>Mean</th>
<th>SD</th>
<th>HA</th>
<th>CB</th>
</tr>
</thead>
<tbody>
<tr>
<td>do you receive inconsistent messages regarding what is expected?*</td>
<td>3.4</td>
<td>0.9</td>
<td>3.4</td>
<td>4.0</td>
</tr>
<tr>
<td>do you feel you comfortably “fit in” as a member of this organization?</td>
<td>3.4</td>
<td>1.0</td>
<td>3.8</td>
<td>4.0</td>
</tr>
<tr>
<td>does your job require you to think and behave differently than would otherwise be the case?*</td>
<td>3.5</td>
<td>1.2</td>
<td>3.8</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Satisfaction

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>Mean</th>
<th>SD</th>
<th>HA</th>
<th>CB</th>
</tr>
</thead>
<tbody>
<tr>
<td>are you satisfied being a member of this organization?</td>
<td>3.2</td>
<td>1.2</td>
<td>3.6</td>
<td>4.1</td>
</tr>
<tr>
<td>do you expect to be with this organization two years from now?</td>
<td>3.0</td>
<td>1.6</td>
<td>3.2</td>
<td>3.8</td>
</tr>
<tr>
<td>would you recommend this organization to someone like yourself as a good place to work?</td>
<td>3.0</td>
<td>1.2</td>
<td>3.6</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Commitment to Customer Service

<table>
<thead>
<tr>
<th>Commitment to Customer Service</th>
<th>Mean</th>
<th>SD</th>
<th>HA</th>
<th>CB</th>
</tr>
</thead>
<tbody>
<tr>
<td>would you personally go out of your way to make sure that a customer/client feels good about the service you've provided?</td>
<td>4.0</td>
<td>0.9</td>
<td>4.0</td>
<td>4.1</td>
</tr>
<tr>
<td>does the organization respond effectively to the changing needs of its customers/clients?</td>
<td>3.0</td>
<td>0.9</td>
<td>3.5</td>
<td>3.6</td>
</tr>
<tr>
<td>do you believe the organization will get repeat business from its present customers/clients?</td>
<td>4.4</td>
<td>0.9</td>
<td>4.0</td>
<td>4.3</td>
</tr>
<tr>
<td>does your organization have a reputation for superior customer service?</td>
<td>2.7</td>
<td>1.2</td>
<td>3.6</td>
<td>4.0</td>
</tr>
<tr>
<td>would you recommend this organization to potential customers/clients seeking the products or services it offers?</td>
<td>3.5</td>
<td>1.2</td>
<td>3.9</td>
<td>4.2</td>
</tr>
</tbody>
</table>

* the scores for these items are reversed to be consistent with the response format of the other items

HA= Historic average; CB= Constructive benchmark
Clarity

At this relatively early stage in a change process it is normal for individuals to be appraised of their new job description and role definition and in that process their role and responsibilities are placed in the context of the new organisation. Therefore achieving a mean of 3.8, which is close to the historical average, which in turn is not that far removed from the benchmark is not unexpected. However, there is quite a disparity with a SD of 0.8 and in the future steps should be taken to reduce this gap.

Consistency

Clearly a consistent message is received as far as what is expected of them because the historical average was achieved. With time, opportunities exist to improve further and approach the benchmark, which is significantly higher, by adopting a more rigorous regime of progress reports and regular debriefings. It was my experience whilst working in this area that only poor progress was regularly brought to people’s attention and that is not an uncommon ploy in the MOD or any organisation where profit/loss and success are not linked.

“Fitting in” is also an important perception to any member of a newly structured and formed body particularly when culture change has been a key initiative. Although yet to achieve the historical average this is not a distant goal and with time and continued effort both it and the benchmark should be achieved. It is believed that the breakthrough process assisted in this success but further investment in team bonding along the lines of that enjoyed by the IPTs should achieve the desired End State.

For the majority the job did not require them to think or behave differently although for some military there was a disparity and understandably so as to some this would be their first experience of working in a predominantly civilian environment. There was quite a significant SD of 1.2 around the norm of 3.5, which was close to the historic average of 3.8. Perhaps the implementation of an acquisition stream would go some way to paving the way.

Satisfaction

There is clearly an air of dissatisfaction with membership when a body with a mean score of 3.2 with a SD of 1.2 is compared against an historical average of 3.6. A case exists for attempting to change the culture further by making it more people rather than task orientated and placing greater store in the Constructive styles in the process. There is a significant gap between the current mean and the constructive benchmark, which further adds gravitas to this proposition. The disparity in the longevity in post scores with the historical average and benchmark is mainly reflective upon the military tour
lengths and partially upon run out dates. Where there is a major dislocation is in the recommendation to those similarly inclined to join the Support Group and this is perhaps a strong reflection on today's unknown attainments combined with a heritage of publicly recognised under achievements.

Commitment to Customer Service

One of the strongest messages emanating from the Smart Initiative was the formal creation of Customers and the need to have due regard for their wishes: a maxim well recognised in the commercial arena. The scores reached would suggest that this message has been well hoisted on board although with a significant SD there remains room for improvement. It is perhaps a little premature to believe that the system is already responsive to the customers' needs, albeit PIs are in place for the customers to confirm IPT performance in this regard. It is not clear who would comment on the Support Group's customer attitudes, as they tend to be removed from the 1st and 2nd Customers. An internal DPA measurement system would help confirm the effectiveness and responsiveness of the Support Groups to the IPTs, who in some respects could be viewed as the key internal DPA customer.

As a government bureaucracy (even a slightly removed Agency), especially one with a belief in "self licking lollipops", they had considerable faith in repeat business, which was even greater than that found in the benchmark. I see this as worrying omen and one that may have been shared by their forebears. If the faith in almost a hand tied and dependant customer is too strong then the commitment to progress is challenged. It could be argued that a more autonomous agency would have to stand or fall on its performance but this has not been a yardstick applied in the past neither has it been a point of recent conjecture. There was no point in ducking the issue and yet some clearly felt that the Support Group had a reputation for superior customer service and this may well be a reflection on the post SPI period. On balance it will take time before past performance can be expunged from the wider corporate memories. The scoring here could be seen as a little exaggerated after such a short period of DPA existence and SPI running and perhaps the lower end of the SD is more appropriate. That said, there are those who do not come with the PE baggage and to them the new DPA ethos is well in keeping with that found in the more effective commercial enterprises. After all McKinsey mainly prescribed it and they also provide their template for success and thereby assist in the creation of commercial "winners."
DPA IPT CULTURE STYLE CONTRASTS

DPA IPT Constructive styles

The IPTs are the core of the DPA responsible for assisting EC in the definition of capability and delivering the required systems in concert with defence industry. The following index is used throughout the next area of data, which scrutinises the different responses from sub-groups within IPTs.

SubGroup Key
Subgroup 1: Civilian IPT Leader
Subgroup 2: Civilian IPT Programme Management or IPT Project Engineer
Subgroup 3: Civilian IPT Finance Officer
Subgroup 4: Civilian IPT Commercial Management
Subgroup 5: Other Civilian Post within DPA IPT
Subgroup 6: Military IPT Programme Management or IPT Project Engineer
Subgroup 7: Other Military Post within DPA IPT

Achievement

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Civilians

Interestingly, even the IPT leaders failed to attain the ideal of 83% achieving only 64%. This was not that different to the other civilian sub groups who achieved scores of 66, 60, 44 and 75%. The IPT leaders were strong on the “need to plan ahead” and “explore alternatives before acting” but were
more reticent "to take moderate risks" or "set moderately difficult tasks". One of the new
measurements of programme success is the achievement of both hard and stretch goals, which are set
by the IPT leader and agreed by the customer. This concept was introduced with SPI and it is believed
that IPT leaders may have been conservative in setting initial hard goals. Moreover, some of the
longer-term financial goals and potential savings identified in the stretch goals were particularly
challenging particularly when little time was available to alter planning assumptions or liaise with
industry. It could be viewed cynically that by the time most goals were to be reached the IPT leaders
would have been long gone from the post. "Thinking ahead and planning" was also the highest scoring
item in the itinerary for most civilians and for the financial officers, perhaps still with their scrutiny
hats on. There was a tendency to favour equally, "taking on challenging tasks".

Military

The military were less effective in their adoption of an achievement culture with scores of only 17 and
37% against the ideal of 83%. One explanation perhaps is that some officers would expect goals to be
set by a superior and in some respects very challenging goals are the norm: after all war is a
challenging environment and a degree of failure (casualties) is expected. However, they held the
"pursuance of excellence" and "thinking and planning ahead" in average esteem but were weaker in
the strength of their response than their civilian counterparts. A similar situation arose with the
military in the Support Groups and yet in the EC environment the military matched the ideal. The
quality of the majority of EC officers is higher than that found in the officers in the DPA (this was
certainly the case with regard to the Army majority, which were majors). Moreover, the work
conducted in the EC makes a greater call on military skills than the work in DPA and until recently the
preparation and education of officers for the DPA was not ideal. This resulted in a body, found
particularly from the younger officers that were not confident in the whole acquisition process.
Ironically few two and three star officers could demonstrate a track record in acquisition either. In
such an environment it is not so difficult to understand how they would be reluctant to embrace fully a
culture of achievement. It is here that the concept of an acquisition stream will pay dividend as will a
greater understanding of the functioning of IPTs.

Self-Actualising

This culture emphasises personal growth and development, self-expression, creativity and these
activities combine and result in an enjoyable working environment\textsuperscript{338}.

\textsuperscript{338} Ibid. Page 21
Self-Actualising

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![Bar chart with data]

Subgroup 1: Civilian IPT Leader
Subgroup 2: Civilian IPT Programme Management or IPT Project Engineer
Subgroup 3: Civilian IPT Finance Officer
Subgroup 4: Civilian IPT Commercial Management
Subgroup 5: Other Civilian Post within DPA IPT
Subgroup 6: Military IPT Programme Management or IPT Project Engineer
Subgroup 7: Other Military Post within DPA IPT

Civilian

There is clearly a low response to the ideal of 81% with scores ranging from 8, 14, and 23%. And this may be expected of an organisation where a structured career pattern is in place and where time and a reasonable effort are afforded equitable career prospects. The key items emphasised by all parties were the "maintenance of personal integrity" followed closely by a "concern regarding their own growth".

However, with a rigid hierarchy, which is indicative of most bureaucracies, the scope to be "lateral in thought" was considered restricted. Now efforts are in hand to allow individuals to be actively involved in their own career development as envisaged in the acquisition stream but this is a significant change in the culture, which normally expects management to be leading in career management. In addition, for some time the Civil Service, in their annual appraisal system, expects the topics of training and advancement to be discussed annually between the individual and reporting officer. The concept of "creativity" permeates the IPT concept and with practical experience of working in IPTs it is likely that greater store will be placed in this behavioural norm.

Military
The performance of the military was also well below the ideal with scores of 4 and 30% against 83%. They too were concerned with “personal integrity” and their second priority was “quality over quantity”. The military do benefit from a well-structured career but it is laid out with career gates, normally comprising exams, with the management responsible for plotting the course. That said, the education they receive, which is continuous throughout their careers, is considered better in all respects than that afforded to the civil service. However, until recently a closed annual reporting system was in being and so the individual was kept in the dark regarding career prospects. This has now changed; in part through the pressure exerted by the threat of litigation and in part by the pressure on the military to adopt a less unique culture. The topic of “creativity” has always been valued so long as it existed within certain acceptable boundaries! As might be imagined, the military were not inclined towards the item, “to resist conformity”, but then from first enlisting the individual is expected to subordinate individual needs to those of the team. However, this somewhat stark statement may well be being altered, as society gradually becomes more self-orientated.

Humanistic-Encouraging

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339 2nd PUS briefing to Senior MOD Officials on Accrual Accounting, Royal Military College Sandhurst, July 1998.
340 Government comments on CDS’ culture position paper, BBC’ Channel 4 Today programme, 5 January 2001
Subgroup 1: Civilian IPT Leader
Subgroup 2: Civilian IPT Programme Management or IPT Project Engineer
Subgroup 3: Civilian IPT Finance Officer
Subgroup 4: Civilian IPT Commercial Management
Subgroup 5: Other Civilian Post within DPA IPT
Subgroup 6: Military IPT Programme Management or IPT Project Engineer
Subgroup 7: Other Military Post within DPA IPT

Civilians

Once again the civilians’ scores were below average and also did not meet the ideal with 52, 38, 41 and 43% compared to 83%. They placed particular store in “the involvement of others in decision making” and “encouraging” and “being supportive of others”. As might be expected from the Commercial staff they put “resolving conflicts constructively”, as their key item. IPTs are partially reliant on synergy being achieved within their teams and also possessing individuals who are multi-skilled. Steps that afford both greater flexibility and accommodate staff reductions. The concepts of mentoring and learning from experience, which have been reinforced in SPI, are also techniques which will further the humanistic cause. Perhaps the openness expected in this culture was lacking in the past and this could be attributable to a tendency to believe in the concept of knowledge being power. The introduction of open plan offices helped to reduce this trait and the ethos of IPTs is reliant on openness both within the body of the DPA and also between customers and industry.

Military

The military faired worse than their civil colleagues in approaching the ideal with scores of 12 and 41%, which is not dissimilar to that achieved by the uniformed members of the Support groups. They too saw the highest value item as being “to resolve conflicts constructively”. Perhaps the military are not normally so “open” as in a purely military environment only that information that is necessary to achieve the task is shared with the team for security reasons. In addition, different management layers are responsible for addressing information and intelligence in different timescales; so a compartmentalised regime is encouraged. However, in an IPT there are many professional skills that are not military orientated and therefore it might be expected that those military members should adopt a more open approach if goals are to be achieved. The more philosophical issue is whether the military, which are normally transient DPA members, will be able to adopt the culture necessary for IPTs to succeed?

Affiliative
Affiliative cultures encourage honesty and commitment in both communications and actions.  

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<th>Subgroup 1: Civilian IPT Leader</th>
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Against the ideal of 76% the civilian bodies were below average achieving percentiles of 9, 14, 21, 29 and 55. It should be remembered that the IPTs are still in their formative years and so much of the response can be attributed to a cultural package of yesteryear. This is well illustrated by the IPT leaders themselves who attained a percentile of only 29% and to only a moderate extent thought in terms of the “group’s satisfaction”. On the other hand, they were greatly taken with the “need for cooperation” and to “deal with people in a friendly way” and these were two themes that were shared by the civilian IPT members. Prior to the formation of IPTs, the Project staff was organised on a functional basis and often was not co-located. In such an isolationist environment, created through matrix management, it is not surprising that innovative ideas were few, volunteers the exception, people worked to the expected standard and as a result customers were rarely satisfied.
The military scored well below average with scores of 11 and 19% against the 76% ideal. In this instance there is no historical evidence, as with their colleagues in the Technology groups, that there had been a diminution of status which may have flavoured their response. Perhaps the military are so rank conscious that they find it hard to put store in interpersonal relationships that are friendly and sensitive across the rank and file. But that argument can easily be dismantled when due consideration is given to the close working relationships, based on mutual trust, that are atypical of those that exist within the Forces when engaged on training and operations. A more comprehensible argument is to be found in the difference in attitudes that clearly exist between the two bodies. Perhaps the military’s inclination to take decisions in isolation and not involve their subordinates in the debate could be the reason why they place less store than their civilian colleagues in this more fully “open” culture. That said, all differences are relative and in this instance the military did place great store in “dealing with others in a friendly, pleasant way”; in “co-operation with others”; and being “tactful.”

DPA IPT Passive /Defensive

Approval

| Subgroup 1 | Civilian IPT Leader                  | 28.4 | 92 |
| Subgroup 2 | Civilian IPT Programme Management or IPT Project Engineer | 20.4 | 40 |
| Subgroup 3 | Civilian IPT Finance Officer         | 20.3 | 39 |
| Subgroup 4 | Civilian IPT Commercial Management  | 19.8 | 30 |
| Subgroup 5 | Other Civilian Post within DPA IPT   | 21.1 | 46 |
| Subgroup 6 | Military IPT Programme Management or IPT Project Engineer | 23.7 | 73 |
| Subgroup 7 | Other Military Post within DPA IPT   | 20.7 | 42 |

Subgroup 1: Civilian IPT Leader
Subgroup 2: Civilian IPT Programme Management or IPT Project Engineer
Subgroup 3: Civilian IPT Finance Officer
Subgroup 4: Civilian IPT Commercial Management
Subgroup 5: Other Civilian Post within DPA IPT
Subgroup 6: Military IPT Programme Management or IPT Project Engineer
Subgroup 7: Other Military Post within DPA IPT

Civilian

The ideal is only 36% but in this instance the IPT leaders in achieving 92% exceeded this goal. They placed considerable store in “backing up those in most authority” and as in theory they only answer to CDP within the DPA this was perhaps predictable. Their second priority was to “do things for the
approval of others” and again that might be reflective of the acquisition process where all major
decisions are made by higher authorities, like the EAC. However, what is lost in this far-reaching
question is the amount of autonomy that now rests on the IPT leaders’ shoulders and the decisions that
are now open to him without referral. Also illustrated by studying the IPT leaders’ response is the
“desire to go along with others” and “make sure that others accept them”. This is a reflection on the
committee like structure that has now been formally introduced between the IPT leader and the
customer. Again this response fails to address the added responsibilities now enjoyed by the IPT
leader and conducted mainly in -house, albeit with RM and DLO representatives in the teams.
Although less committed to this culture than the IPT leaders, nevertheless similar priorities were
afforded by the other sub groups with the one exception of the Finance Officers. They placed their
highest priority on “going along with others” and that too should not be alien, as they probably
continue to have responsibility for creating much of the written work on behalf of the teams.

Military

The military were less committed than their civilian colleagues to this culture but still exceeded the
ideal of 18% at 73% and 42%. They had slightly different priorities and scored less in them and their
top two were: the “switching of priorities to please others”, and “backing up those with most
authority”. Understandable the military have always sought approval from higher authorities because
it is demanded of them. If they wish to digress from orders then they must seek approval from the
initiator of the orders: in this case CDP or the senior reporting officer. In some respects, the IPT staffs
are not masters of their own destiny and rely heavily on the customer to approve goals, amendments
and achievements. Should the customers’ priorities change then they too must be responsive to
succeed. Whether these activities can all be conducted in a pleasant style has yet to be seen.

Conventional

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Subgroup 4: Civilian IPT Commercial Management
Subgroup 5: Other Civilian Post within DPA IPT
Subgroup 6: Military IPT Programme Management or IPT Project Engineer
Subgroup 7: Other Military Post within DPA IPT

Civilian
Apart from the Finance Officers all the civilian sub groups far exceeded the ideal of 18% with scores ranging from 29, 42, 52, 66 and 92%. The highest value is attributable to the IPT leaders, which is disappointing as theoretically they are supposed to be driving teams in a new direction where operating parameters are more flexible, novelty is encouraged, and some of the bureaucracy is dismantled. Perhaps their comments reflect that they are still in a state of flux and operate in an environment where old values dominate. They put most store in the items, “casting aside solutions that seem different or risky” and “conforming”. The majority of the other sub groups held as their key items: “make a good impression”, “always follow policies and practises”, “conform”, and “fit into the mould”; again messages which are not necessarily in concert with the SPI.

Military
The military too exceeded the ideal with percentiles of 48 and 85. Once again it is clear that the military ethos of adhering to procedures, following clear direction, and taking pride in and maintaining unique traditions will continue for the foreseeable future. Certainly from my own experience it became clear in my last years of service that more current societal related values were becoming accepted in the Forces and that is perhaps a reflection of a better educated population that benefits from extensive media coverage. However, as long as the military are required to fight wars there will remain a requirement to follow orders and work within set procedures and this cultural baggage will accompany the military wherever they go on operations. And when their travels entail working in an integrated civil/military work force, as is found in all IPTs, then a difference of cultures will exist and resentment may occur. The military’s highest scoring items were to “conform”, “fit into the mould” and “avoid confrontations”.

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Dependent

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Pct

Ideal

26%

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Subgroup 1: Civilian IPT Leader
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Civilian

One of the most novel aspects of DPA IPTs is the empowerment of IPT leaders. However, as can be seen from the IPT leaders' score of 81% against an ideal of 26% they were still very dependant orientated and this too was perhaps predictable. The two behavioural items they most favoured were "willingness to obey orders" and the "checking of decisions with superiors". It takes time for the custodians of new found responsibilities to become comfortable with increased bailiwicks. Similarly, those in higher authority are equally reticent to let go of old powers. Like so many aspects of change culture time is both the healing and creative factor. However, this over-dependence was less stark in the IPT staff. They scored 29, 39 and 42 and no doubt being somewhat shielded from the outside world by their leader felt better able to adopt the additional responsibilities afforded within the team. Even so all bodies ranked "do what is expected", as a moderately regarded behavioural norm and at the same time their highest priority and this might well indicate doing what is expected of them by the IPT leader. Rather than strict adherence to some centralised body’s direction like that once emanated from the 1-5 stars of yesteryear. At only 11%, the Finance Officers obviously felt less constrained by the external hierarchy than any other member of the team. Historically, these officers were less integrated in to Project teams and this was in part due to their answerability for financial
scrutiny both formally to the Department and informally to the Treasury. In theory they now sit firmly in the teams and expect support not direction from senior financial staff and perhaps are savouring this more independent status.

Military

The military were less sanguine than all but the IPT leaders in the “acceptance of responsibility” and “independence”. One of the weaknesses of the DPA organisation remains the military reporting system. Firstly, the XDs have responsibility for reporting to the Service Boards the progress of capability programmes. In that capacity, they can reach down into the IPTs to glean necessary data. Moreover, their view of another officer working in the DPA will be held in high esteem within the Service reporting chain. The danger being that although XDs are not directly involved in the delivery of capability they could be seen by the military IPT members as retaining control over their destinies and this should be guarded against. The other issue remains the comfort factor that the military place on receiving and carrying out orders: it is the norm. And as long as rank structures exist and there are civilian equivalent ranks then the military will have a tendency to salute, turn to the right and follow orders. The only issue to a service person is the relative degree of autonomy that exists within a given hierarchy and no doubt the same applies to civil servants.

Avoidance

Avoidance

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Subgroup 7: Other Military Post within DPA IPT

Civilian

As with the previous areas of the Passive /Defensive cultures the IPT leaders exceeded the ideal of 21% achieving an extraordinary 95%. Extraordinary in that those entangled in this type of culture are considered least likely to move in new directions such as that laid out in the SPI. The respondents favoured “never being the one blamed for problems” and “taking few chances” as their highest scoring behavioural items. The latter is a reflection on a conservative stance, which is not unreasonable at this stage; the other of preferring not to incur the wrath of the hierarchy which is disappointing as there is so much store placed in the performance of hand picked IPT leaders. The alternative argument that has been put forward being that all IPT leaders were chosen from the old DG/PD/PM pool and that this being the case a radical change in behaviour at this level should not be expected. An argument that on this evidence alone appears to have some credibility at this point in time. However, the Leaders were not isolated in their adopted culture as the remainder of the civilians scored 63, 69, 75 and 39% against the ideal of 21%. Their most high scoring behavioural items ranged from making “popular” rather than necessary decisions, through “pushing decisions upward”, and “taking few chances”. None of the cultural norms you would expect to associate with SPI

Military

The military groups were second only to the IPT Leaders scoring 84 and 85 % respectively against the ideal of 21%. A score similar to their counterparts in the Support Groups where the argument was made that these very military- orientated technical bodies had created a very unique sub culture. Although this argument may still stand it does not account for this cultural behaviour being shared. Another mildly contentious argument could be the relative lack of understanding and practise of the procurement process which is possessed by the military in IPTs, which in turn would make them more dependant and less innovative. The cause could also be attributable to a history of highly centralised decision making, where uncommonly formalised procedures were followed, and specialised expertise brought to bear. The military, possessing the least acquisition expertise, would be the most comfortable in such a regime.
DPA IPT Aggressive/Defensive Styles

Oppositional

General

Aggressive/defensive norms are built upon a value fabric in which management puts its own interests before those of its key customers, employees and suppliers. Interestingly, even in the mid-1980s, when I was first engaged in acquisition, it was still an anathema to recognise that the real customer who had to employ these weapons in battle would have an opinion let alone seek or respect it. During the Chieftain replacement programme the Commanders in Chief of United Kingdom Land Forces and British Army of the Rhine stated their choice regarding the next Main Battle Tank. This was surprising to some MOD warriors who felt that the Commanders were impertinent to offer a view given their lack of programme knowledge. Fortunately the SPI extols the virtues of a more holistic approach where total engagement of all parties is the norm. But how did the respondents reply on this occasion?

Oppositional

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Pet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subgroup 1: Civilian IPT Leader</td>
<td>21.4</td>
</tr>
<tr>
<td>Subgroup 2: Civilian IPT PM/PE</td>
<td>19.4</td>
</tr>
<tr>
<td>Subgroup 3: Civilian IPT Finance Officer</td>
<td>17</td>
</tr>
<tr>
<td>Subgroup 4: Civilian IPT CM</td>
<td>16.4</td>
</tr>
<tr>
<td>Subgroup 5: Other Civilian</td>
<td>19.3</td>
</tr>
<tr>
<td>Subgroup 6: Military PM/PE</td>
<td>18.2</td>
</tr>
<tr>
<td>Subgroup 7: Other Military</td>
<td>17</td>
</tr>
</tbody>
</table>

Subgroup 1: Civilian IPT Leader
Subgroup 2: Civilian IPT Programme Management or IPT Project Engineer
Subgroup 3: Civilian IPT Finance Officer
Subgroup 4: Civilian IPT Commercial Management
Subgroup 5: Other Civilian Post within DPA IPT
Subgroup 6: Military IPT Programme Management or IPT Project Engineer
Subgroup 7: Other Military Post within DPA IPT

342 Ibid., Page 53
Civilian

Against an ideal value of 47% the IPT leaders once again set the pace by scoring an excessive and high 91% and yet the characteristics of this culture, confrontation and a negative approach, were not prescribed in SPI. They rated “looking for mistakes” and “pointing out flaws” as important attributes, as did the other civilians but less strongly. However, there seems little benefit to continue in a critical and negative mode when IPT leaders will want to gain as much support for their case as is possible given their wider responsibilities and greater number of interfaces. There are of course the doldrums that can be encountered during any transitional phase of a change culture process, particularly if the period was associated with down-sizing. Those left clearly realise that they have to impress if they are to succeed and the performance of IPT leaders, for example, would be one way of gauging progress and in such a scenario the deflection of criticism would also pay dividends. It is noticeable that those IPT members with engineering and management backgrounds continue to demonstrate similar tendencies to their Leaders with scores of 78 and 85 and yet the two specialist areas of Finance and Contracts basically meet the ideal. Could it be that the latter two areas of expertise no longer feel challenged and sees instead support coming externally from those with similar professional skills?

Military

The military also favoured this type of culture with scores of 67 and 77 against the ideal of 47%. Moreover, they also saw benefit in looking for mistakes and pointing out flaws as moderate tendencies. Over the years, there has been a gradual decline both in the influence and numbers of service people working in procurement. Those in the upper echelons of the acquisition environment are careerists who see their future in that activity rather than as force commanders. Those in the lower echelons normally wish to keep their options open and therefore for both echelons to follow their chosen courses they may well “point out flaws” and “oppose contrary and new ideas” to maintain their image and position of influence. However, it should be recognised that Forces when deployed on operations cannot afford to be deflected from their work and once in action cannot permit, for a miscellany of reasons, their plan to be challenged. The danger associated with this cultural in a civil and peacetime context is that of conflict, which to some extent already exists and will be addressed later.
Civilian

The IPT leaders’ scores once again were far in excess of the ideal with 95% against 36% and this was reflected in their response, which saw emphasis being placed on “playing “politics” to gain influence” and the “maintenance of unquestioned authority”. Strange qualities to be demanded in a regime where the effectiveness of the team, not just the leader, would appear to be the most critical. The only two other key qualities identified by these subgroups were, the “use of the authority of their position” and “acting forcefully”, and as can be seen their responses varied in strength. Once again this may well be a reflection on what for many years past has been the norm but it is clearly an area where a more constructive approach would have benefit.

Military

One element of the military saw power as an essential ingredient to success with scores of 59% whilst the Project Management and Engineers adopted a potentially more balanced approach and achieved a percentile of only 31% that was close to the ideal of 36%. In both cases they placed greatest strength in “the authority of their position” and perhaps that is understandable as rank is worn and carries authority at all times in the Services. The danger of even the slightest reversion to a military regime in a mixed environment can cause disrespect, disregard and a collapse of morale. The least popular and effective members from my experience were those who wore their rank most “heavily”. It could be
argued that less friction was caused when, due to the Irish terrorist threat, uniforms were not worn and people were more reliant on their ability and performance to impress.

Competitive

General

A competitive culture has now become almost synonymous with the world-wide perception of a successful capitalist organisation. Mrs Thatcher instilled in the Nation State a belief in achieving value for money through competition, which continues to thrive in the MOD. Moreover, in the Forces competition has been used for generations to inculcate a spirit of team identity at whatever the desired level. On interviewing a Trooper in the Cavalry his first allegiance will be to the tank crew. His second to the Troop, third to the Squadron and finally the fourth to the Regiment: these are levels of command where competition can be conducted. His interest in Brigades, Divisions and Corps is negligible though at all these levels the commanders demand allegiance believing it pays an immeasurable dividend in the loss exchange ratio. So competition is a part of the wider culture, which can be used effectively and is linked somehow to success. However, as in personal relationships too much competition can result in fragmentation and failure.  

Competitive

| Subgroup 1: Civilian IPT Leader | 21.2 |
| Subgroup 2: Civilian IPT Programme Management or IPT Project Engineer | 19.2 |
| Subgroup 3: Civilian IPT Finance Officer | 17.0 |
| Subgroup 4: Civilian IPT Commercial Management | 17.8 |
| Subgroup 5: Other Civilian Post within DPA IPT | 16.7 |
| Subgroup 6: Military IPT Programme Management or IPT Project Engineer | 16.7 |
| Subgroup 7: Other Military Post within DPA IPT | 18.7 |

Subgroup 1: Civilian IPT Leader
Subgroup 2: Civilian IPT Programme Management or IPT Project Engineer
Subgroup 3: Civilian IPT Finance Officer
Subgroup 4: Civilian IPT Commercial Management
Subgroup 5: Other Civilian Post within DPA IPT
Subgroup 6: Military IPT Programme Management or IPT Project Engineer
Subgroup 7: Other Military Post within DPA IPT

343 Ibid. Page 55.
Civilian

Needless to say, the IPT Leaders can be found waving the competitive banner and being almost in the embryonic stage of the initiative no doubt there is merit in generating a culture that vies for success. The ideals of "never appearing to lose", and being "seen to be noticed" appear rather superficial qualities for an IPT leader to support. That said, it is difficult to judge whether or not at this time a 95% score against the ideal of 24% might be appropriate for the Leaders particularly as the early IPT waves involved them advancing whilst processes were still in their infancy. The strength of the other sub groups' belief in this norm is weaker, perhaps because they follow suits, although, "being a winner" and "being seen to be noticed" attract similar levels of support to the items found attractive by their Leaders.

Military

The military also scored around the ideal mark with scores of 36 and 56% against the ideal of 46%. There is nothing startling in this result as competition from their perspective is unlikely to be taken to extremes. The more junior officers, the majority, have sealed their fate during one or two extremely competitive years at the staff colleges. Service variations on this theme are gradually being eroded with the advent of tri-service education. So for this population the idea of serious competition may be galling. As for the maturer members, no doubt they too see little benefit in extreme competition and perhaps prefer to rely on the competitive pace that has been with them since accepting the Queen's shilling or is it now Her ten pence?

Perfectionistic

There should never be a scenario where hard work, perfectionism and persistence are not valued unless perhaps when they are taken to the extreme.

Perfectionistic

344 Ibid. page 64
civilian IPT leaders

The IPT leaders consistently set the pace and once again they surpass all other groups with a score of 95% against the ideal of 24%. Items, which they supported to a great extent, were “never make a mistake” and “keep on top of everything”. Perhaps the undue emphasis they place on performing flawlessly is attributable to the stage in the cultural change transition. An early stage when little opportunity exists for them to step down a gear; rather their every minute will be occupied ensuring that the correct course is being followed. Even though most of the IPT staff has been involved in the break through process there will still be a need for the IPT leader to show the way in what can still be regarded as uncharted waters. Interestingly, the remainder of the civilian sub groups was less committed to this cultural bent scoring less above the ideal than their leaders with the exception of the financial officers (61, 53 and 64% against the ideal of 24%). Their preferred items, which garnered some moderate to great support, included “persistence and endurance”, and “appearing competent” and “independent”. There is a tendency for those who experience downsizing to want to demonstrate their prowess and possibly more than they can achieve in order to survive. I don’t believe that survival is a significant issue in the civil service as job security is the norm. However, in a period of change new systems and processes are introduced and accompanying them are new opportunities and perhaps this too contributes to a relatively high score. The financial officers were less inclined to the perfectionist culture, with a score of only 18%, below the ideal of 24%. Perhaps the Financial Officers feel least effected by the change or do not have to prove their metal; either way they were only
moderately inclined to "persist and endure", and "keep on top of everything" and put little store in the other behavioural items.

Military

The military achieved a middle position between the IPT leaders and their civilian staff. They too placed considerable weight behind "keeping on top of everything", and "persistence and endurance", and decided that "precision was important even when it was not necessary". In any organisation which is required to react rapidly, as is required of the Forces on operations\textsuperscript{345}, it is normal to find a significant leaning towards a perfectionist culture as a flawless performance is the most likely to succeed and is therefore sought. However, this tendency is more likely to prevail on operations than in peace. In this instance, the scores of 70 and 62% illustrate an above average commitment to this behavioural norm.

DPA IPT Analysis

Comparison of Civilian IPT sub groups

\textsuperscript{345} Ibid. page 56.
The most striking element of the civilian IPT leaders is the very strong and distinctive sub culture of the IPT leaders. This is further illustrated in the current IPT culture profile below.

Civilian IPT Leader

N = 5

Civilian IPT

Programme

N = 29

Civilian IPT Finance

Officer

Management or IPT

N = 3

Project Engineer

Civilian IPT Commercial

Management

N = 8

Other Civilian Post within DPA IPT

N = 7

As only a sample of the respondents was used to calculate whether any observed differences were statistically significant (rather than due to chance or sampling error), the significance of the differences between the groups' raw scores (for each of the 12 cultural norms) and those of the rest of the sample was tested using Student's t-test.

169
The most striking element of the civilian IPT sub groups is the very strong and distinctive sub culture of the IPT leaders. This is further illustrated in the current IPT culture profile below:

### Constructive

<table>
<thead>
<tr>
<th>Styles</th>
<th>Raw Score</th>
<th>Percentile</th>
<th>Strength</th>
<th>Standard Deviation</th>
<th>Intensity</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanistic-Encouraging</td>
<td>27.8</td>
<td>52%</td>
<td>Average</td>
<td>4.49</td>
<td>Strong</td>
<td></td>
</tr>
<tr>
<td>Affiliative</td>
<td>28.9</td>
<td>29%</td>
<td>Below Average</td>
<td>2.13</td>
<td>Very Strong</td>
<td></td>
</tr>
<tr>
<td>Achievement</td>
<td>29.4</td>
<td>64%</td>
<td>Above Average</td>
<td>5.41</td>
<td>Average</td>
<td></td>
</tr>
<tr>
<td>Self-Actualising</td>
<td>22.0</td>
<td>14%</td>
<td>Low</td>
<td>4.24</td>
<td>Strong</td>
<td></td>
</tr>
</tbody>
</table>

### Passive/Defensive

<table>
<thead>
<tr>
<th>Styles</th>
<th>Raw Score</th>
<th>Percentile</th>
<th>Strength</th>
<th>Standard Deviation</th>
<th>Intensity</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval</td>
<td>26.4</td>
<td>92%</td>
<td>Very High</td>
<td>4.72</td>
<td>Strong</td>
<td>**</td>
</tr>
<tr>
<td>Conventional</td>
<td>29.2</td>
<td>92%</td>
<td>Very High</td>
<td>4.97</td>
<td>Average</td>
<td>*</td>
</tr>
<tr>
<td>Dependent</td>
<td>28.3</td>
<td>81%</td>
<td>High</td>
<td>6.83</td>
<td>Weak</td>
<td></td>
</tr>
<tr>
<td>Avoidance</td>
<td>23.2</td>
<td>95%</td>
<td>Very High</td>
<td>4.66</td>
<td>Average</td>
<td>**</td>
</tr>
</tbody>
</table>

### Aggressive/Defensive

<table>
<thead>
<tr>
<th>Styles</th>
<th>Raw Score</th>
<th>Percentile</th>
<th>Strength</th>
<th>Standard Deviation</th>
<th>Intensity</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oppositional</td>
<td>21.4</td>
<td>91%</td>
<td>Very High</td>
<td>1.52</td>
<td>Very Strong</td>
<td>**</td>
</tr>
<tr>
<td>Power</td>
<td>27.2</td>
<td>95%</td>
<td>Very High</td>
<td>5.63</td>
<td>Average</td>
<td>*</td>
</tr>
<tr>
<td>Competitive</td>
<td>21.2</td>
<td>77%</td>
<td>Above Average</td>
<td>5.17</td>
<td>Average</td>
<td></td>
</tr>
<tr>
<td>Perfectionistic</td>
<td>29.2</td>
<td>95%</td>
<td>Very High</td>
<td>3.63</td>
<td>Strong</td>
<td>**</td>
</tr>
</tbody>
</table>

**SIGNIFICANCE KEY:**

* Light Blue text indicates a significance of \( p < .05 \)
** Blue text indicates a significance of \( p < .01 \)
*** Red text indicates a significance of \( p < .001 \)

Nb.

(As only a sample of members were surveyed regarding the culture a statistical test was used to calculate whether any differences that were observed were statistically significant (rather than due to chance or sampling error). The significance of the difference between subgroup’s raw scores (for each of the 12 cultural norms) and those of the rest of the subgroups were tested using Student’s \( t \)-test.)
The key features found in the analysis were a high dependency on Passive and Aggressive / Defensive styles with much less regard for the Constructive styles. Two observations can be made at this stage. Firstly, the high Passive/Defensive leaning would suggest that there remains a dependency on superiors and rules and procedures. This is out of kilter with SPI archetypes of innovation and empowerment and could indicate a tendency to seek comfort in past practice. In some respects it is more worrying that so much store is placed in Aggressive / Defensive norms as there is a tendency in such organisations to value competition over co-operation and allow work to take precedence over all else. This point is reinforced by the lack of commitment to the more people orientated Constructive values, an approach, which is common across the IPT area. The other four sub cultures are similar in the prioritisation of values and their percentile scores are much closer to the ideal in almost all respects than their IPT leaders. At the commencement of an initiative, especially one where a key ingredient of its success appears to be the empowerment of IPT leaders and the strength of the leaders’ skills and personality, considerable responsibility rest on the leaders’ shoulders. They all had to identify hard and stretch targets, persuade their hierarchy and the customers that these targets were achievable and accepted in the process that the, “Buck stops with them”. In such circumstance, it is not surprising that they hold the strongest behavioural values although the gap between them and their teams and with the ideals should be recognised. Future activity should include further team building and achieving a more shared set of values; a set of values where the move towards Constructive styles across the IPTs plays a part.

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Comparison of Military IPT sub groups

<table>
<thead>
<tr>
<th>Military IPT Programme Management or IPT</th>
<th>Other Military Post within DPA IPT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Engineer</strong></td>
<td><strong>N = 6</strong></td>
</tr>
</tbody>
</table>

The military within the IPTs had similar circumplex profiles to their civilian counterparts and once again the lack of favour and the greatest gap surrounds Constructive norms; as is the dependence on both Aggressive and Passive /Defensive behaviours.

**Aggregate DPA IPT**

| N = 61 |

The primary style in the IPT Group area was Oppositional scoring 73 %percentile, which is in itself above average and in this instances of a strong intensity. Moreover, this score was some 20% above the ideal. This tendency to adopt the Oppositional style is of concern because the style is noted for providing an environment where unnecessary conflict and poor group problem solving.
### DPA IPT Analysis

#### Constructive

<table>
<thead>
<tr>
<th>Styles</th>
<th>Raw Score</th>
<th>Percentile</th>
<th>Strength</th>
<th>Standard Deviation</th>
<th>Intensity</th>
<th>Ideal</th>
<th>G</th>
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<tbody>
<tr>
<td>Humanistic-Encouraging</td>
<td>26.4</td>
<td>39%</td>
<td>Below Average</td>
<td>5.75</td>
<td>Average</td>
<td>83%</td>
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<tr>
<td>Affiliative</td>
<td>28.0</td>
<td>21%</td>
<td>Below Average</td>
<td>5.23</td>
<td>Average</td>
<td>76%</td>
<td>5</td>
</tr>
<tr>
<td>Achievement</td>
<td>28.8</td>
<td>58%</td>
<td>Average</td>
<td>4.27</td>
<td>Strong</td>
<td>83%</td>
<td>2</td>
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<tr>
<td>Self-Actualizing</td>
<td>22.8</td>
<td>19%</td>
<td>Low</td>
<td>4.56</td>
<td>Strong</td>
<td>81%</td>
<td>6</td>
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</tbody>
</table>

#### Passive/Defensive

<table>
<thead>
<tr>
<th>Styles</th>
<th>Raw Score</th>
<th>Percentile</th>
<th>Strength</th>
<th>Standard Deviation</th>
<th>Intensity</th>
<th>Ideal</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval</td>
<td>21.1</td>
<td>45%</td>
<td>Average</td>
<td>5.09</td>
<td>Average</td>
<td>36%</td>
<td>9</td>
</tr>
<tr>
<td>Conventional</td>
<td>24.1</td>
<td>53%</td>
<td>Average</td>
<td>6.67</td>
<td>Weak</td>
<td>18%</td>
<td>3</td>
</tr>
<tr>
<td>Dependent</td>
<td>24.1</td>
<td>39%</td>
<td>Below Average</td>
<td>6.19</td>
<td>Weak</td>
<td>26%</td>
<td>1</td>
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<tr>
<td>Avoidance</td>
<td>18.6</td>
<td>71%</td>
<td>Above Average</td>
<td>6.60</td>
<td>Weak</td>
<td>21%</td>
<td>5</td>
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</table>

#### Aggressive/Defensive

<table>
<thead>
<tr>
<th>Styles</th>
<th>Raw Score</th>
<th>Percentile</th>
<th>Strength</th>
<th>Standard Deviation</th>
<th>Intensity</th>
<th>Ideal</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oppositional</td>
<td>18.8</td>
<td>73%</td>
<td>Above Average</td>
<td>3.80</td>
<td>Strong</td>
<td>47%</td>
<td>2</td>
</tr>
<tr>
<td>Power</td>
<td>20.8</td>
<td>66%</td>
<td>Above Average</td>
<td>5.54</td>
<td>Average</td>
<td>36%</td>
<td>3</td>
</tr>
<tr>
<td>Competitive</td>
<td>18.6</td>
<td>56%</td>
<td>Average</td>
<td>5.33</td>
<td>Average</td>
<td>46%</td>
<td>1</td>
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<tr>
<td>Perfectionistic</td>
<td>24.5</td>
<td>64%</td>
<td>Above Average</td>
<td>5.10</td>
<td>Average</td>
<td>24%</td>
<td>4</td>
</tr>
</tbody>
</table>

**SIGNIFICANCE KEY:**

- * Light Blue text indicates a significance of \( p < .05 \)
- ** Blue text indicates a significance of \( p < .01 \)
- *** Red text indicates a significance of \( p < .001 \)

### IPT primary styles

The primary style in the IPT Group area was Oppositional scoring 73% percentile, which is in itself above average and in this instances of a strong intensity. Moreover, this score was some 26% above the ideal. This tendency to adopt the Oppositional style is of concern because the style is noted for providing an environment where unnecessary conflict and poor group problem solving.
These behaviours are most likely to be the antitheses of the idealistic IPT culture sought by the DPA. The conflict highlighted can involve customers and that again is not in accord with SPI ideals. Work will have to be set in train to reduce its hold, as this behavioural style is strong within the Group.

IPT secondary style

The secondary style in the IPT area is Avoidance, which achieved an aggregate score of 73% against an ideal of 21%. However, as there is only a weak inclination to this style, there remains room for improvement. An improvement that will be necessary as organisations that fully adopt this style tend to be unsure about their responsibilities and authority and often become uncommitted and push problems in the direction of other areas.348

IPT weakest style and largest cultural gap

The weakest style in the IPTs was Self-Actualizing at 19% with a low strength and high intensity against the ideal of 81%. In addition to being the weakest style this style possessed the most significant cultural gap at 62% between the ideal and questionnaire results. Self-Actualizing behaviour is important in and to a workforce, as it encourages lateral thought, and personal growth and development,349 which in turn has a high impact on innovative thought and morale.

347 Janet L. Szumal, OCI Interpretation & Development Guide, Page 64
348 Ibid. Page 39
349 Ibid. Page 17.
### Summary Perceptions

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>HA</th>
<th>CB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clarity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>do you clearly know what is expected of you as a member of this organization?</td>
<td>3.9</td>
<td>0.8</td>
<td>3.9</td>
<td>4.1</td>
</tr>
<tr>
<td><strong>Consistency</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>do you receive inconsistent messages regarding what is expected?*</td>
<td>3.4</td>
<td>1.1</td>
<td>3.4</td>
<td>4.0</td>
</tr>
<tr>
<td>do you feel you comfortably “fit in” as a member of this organization?</td>
<td>3.5</td>
<td>0.9</td>
<td>3.8</td>
<td>4.0</td>
</tr>
<tr>
<td>does your job require you to think and behave differently than would otherwise be the case?*</td>
<td>3.6</td>
<td>1.1</td>
<td>3.8</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>are you satisfied being a member of this organization?</td>
<td>3.1</td>
<td>1.0</td>
<td>3.6</td>
<td>4.0</td>
</tr>
<tr>
<td>do you expect to be with this organization two years from now?</td>
<td>3.0</td>
<td>1.6</td>
<td>3.2</td>
<td>3.8</td>
</tr>
<tr>
<td>would you recommend this organization to someone like yourself as a good place to work?</td>
<td>3.0</td>
<td>1.1</td>
<td>3.6</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Commitment to Customer Service</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>would you personally go out of your way to make sure that a customer/client feels good about the service you’ve provided?</td>
<td>3.9</td>
<td>0.9</td>
<td>4.0</td>
<td>4.1</td>
</tr>
<tr>
<td>Does the organization respond effectively to the changing needs of its customers/clients?</td>
<td>3.0</td>
<td>0.9</td>
<td>3.5</td>
<td>3.6</td>
</tr>
<tr>
<td>do you believe the organization will get repeat business from its present customers/clients?</td>
<td>4.3</td>
<td>0.9</td>
<td>4.0</td>
<td>4.3</td>
</tr>
<tr>
<td>does your organization have a reputation for superior customer service?</td>
<td>2.5</td>
<td>1.1</td>
<td>3.6</td>
<td>4.0</td>
</tr>
<tr>
<td>would you recommend this organization to potential customers/clients seeking the products or services it offers?</td>
<td>3.4</td>
<td>1.0</td>
<td>3.9</td>
<td>4.2</td>
</tr>
</tbody>
</table>

* the scores for these items are reversed to be consistent with the response format of the other items

A = Historical average; CB= Constructive Benchmark

### Role Clarity

With a score equal to the historical average and approaching the constructive benchmark the IPTs should be content that initial briefings covering role clarity have been clearly understood, which is a reasonable expectation so early on in such a high profile change process. The more demanding task
follows of maintaining role clarity as new members join in an environment of constant working pressure being exerted on the IPT. Initially, a brief honeymoon period occurred for all IPTs during which pressure was kept off them if only to allow breathing space to conduct the break through process. A process, that included an opportunity to clarifying roles and responsibilities.

Role Consistency

Again some comfort can be taken that a consistent message is received regarding expectations of the team and individuals: and a score achieved which equalled the historical average. This again is not unexpected in an effective change process when early on the focus is on team briefing and bonding. With a considerable amount of re-brigading the work force to form IPTs it is not surprising that some members still feel isolated: in the case of Requirements Managers all were new to the IPT environment. However, with a SD of 0.9 some members are already surpassing the benchmark. As mentioned earlier, in mixed military and civilian environments the military are almost sure to see their current task as demanding a different skill set to that required on operations. Moreover, for the civilians and military alike there are many new practices encouraged by the SPI, which also demand a change in mind set.
Satisfaction

With a heritage lacking in success it is not surprising that a degree of dissatisfaction exists regarding membership of an IPT. That said, the mean score was approaching the historical average and therefore showed at the top end of the distribution a healthy respect for the organisation. There is a certain degree of, "red herring" associated with expectations of corporate employment as the military persist in relatively short tours. However, with such a high SD some of the civil servants are clearly not too sure of their commitment. This may be a reflection on recent flux, which has included their relatively recent departure from London and the Home Counties for Bristol, which was followed in short succession by the uncertainty surrounding the SPI including such issues as voluntary retirement. And as with any situation involving change there will always be some that remain uncommitted or prepared to move. The degree of commitment to the organisation is reflected in the recommendation to others that the DPA is a healthy working environment. As can be seen, there is a firm respect for the workplace but not the level or strength of dedication found in the historical average or required of the benchmark. One way of countering this deficit would be to create an even more constructive and people orientated culture. A culture where programmes are introduced to promote more effective interpersonal relations; and selection procedures become more effective by taking into account the "fit" between the applicant and the job as well as the "fit" between the applicant and the organisation. As in some respects it could be argued that IPT selection was often a re-location exercise with little new or external blood introduced.

Commitment to Customer Service

As one of the most significant changes introduced by SPI was the formal introduction of Customers it is not surprising that IPTs see client satisfaction as critical; although for some the level of personal experience would still be limited and this is perhaps reflected in the SD. Moreover, to some IPT members it would also be premature to suggest that a culture exist where the customers' needs are constantly satisfied. With a customer base, which was only fully identified some one year after the introduction of the SPI it is not unexpected that expectations for customer satisfaction are not realised. And it should not be forgotten that instrumental in SPI was the PE's heritage of poor performance and so again it should not be remarkable that the reputation of the DPA remains partially tainted because memories are long lasting when recalling failure. It is refreshing to see that there is a degree of confidence that the Agency could attract new customers. Perhaps there was a certain degree of license surrounding this declaration, as it is most unlikely that the client frontier will expand: unless, as discussed earlier, the old chestnut of widening responsibility for all defence acquisition were introduced and the DPA and DLO functions were embraced by one procurement agency as in the USA.

350 Ibid. page 23.
Key Deductions

Military comparison across Groups

Other Military in MOD Equipment Capability Staff
N = 3

Military within Directors Equipment Capability and Staff
N = 24

Military within Air/Land Technology Group, Sea Technology Group, or Ordnance Safety Group
N = 4

Current Military within DCDS(EC) and his Personal Staff or within Capability Managers and Staff
N = 4

The primary styles in the ECC and MOD are more group decisional. This would suggest that military staffs do not in the military context modify their culture dependent upon

The ECC working environment comprises a higher proportion of military staffs. This is more militarily oriented than the DPA, which should allow a military culture to exist within the ECC more easily than the DPA without pressure for change. The primary style in the ECC is Power. This style is typical of an organization that relies on the authority inherent in officers’ positions and where members believe that the demands of the environment of subordinates. These are behavioral characteristics and an orientation, which are

In the DPA, across both Equipment and Support Lines there is a propensity within the military for an Avoidance culture. A lack of competition can lead troubled organizations, particularly if they make the major assumption that the customer base will be maintained indefinitely. This is the passive, defensive culture. It would be inappropriate to assume that the implementation of less reliance on regulations and greater empowerment will erode hierarchy in DPA. However, although the DPA is an agency there is no suggestion that minimal protection has been removed or that poor performance could lead to its demise. Therefore, it is not surprising that an Avoidance culture

178
The primary styles in the ECC and DPA military sub-groups differ significantly. This would suggest that military staffs do not travel with a standard military cultural baggage but rather modify their culture dependant upon the task and environment.

The ECC working environment comprises a higher proportion of military and is more militarily orientated than the DPA, which should allow a military culture to exist within the ECC more easily than the DPA without pressure for change. The primary style in the ECC is Power. This style is typical of an organisation structured on the basis of the authority inherent in members’ positions and where members believe in being responsive to the demands of superiors and taking charge of subordinates\textsuperscript{351}. These are behavioural norms that are demanded and exulted in training and on operations, which are the prime function and ultimate test of armed Forces.

In the DPA, across both the IPTs and Support Groups there is a propensity within the military for an Avoidance culture. A lack of competition can lead protected organisations, particularly if they make the major assumption that the customer base will be maintained immaterial of service, to rely on a Passive/ Defensive culture\textsuperscript{352}. It would be reasonable to assume that the implementation of less reliance on regulations and greater empowerment will reduce bureaucracy in DPA. However, although the DPA is an agency there is no suggestion that external protection has been removed or that poor performance could lead to its demise. Therefore, it is not surprising that an Avoidance culture

\textsuperscript{351} Ibid. Page 62.
continues across the DPA including the military members. Or that the Passive / Defensive culture has a weaker hold of the military within the ECC area than in the DPA. People in ECC were employed primarily for their military expertise although many possessed a technical qualification. When these qualities failed to achieve muster their tours were terminated. Also, day to day activity in the ECC area was not regulated neither were there comprehensive rules and guidance on how to conduct business. EAC procedures existed, as did various guidance books on how to produce requirement documents but individual desk officers still had much autonomy. This autonomy did not exist at Abbey Wood prior to the formation of the DPA hence the drive to inculcate an empowerment philosophy. Neither in theory were pure military skills required of the military DPA staff as they were mainly employed as project officers. It is my belief that some of the disharmony that existed before SPI was attributable to the military in the DPA conducting the tasks of the DCDS (Systems) staff and making military judgements when it was not their prerogative. The employment of RMs within the DPA should remove this friction as long as their roots in the EC area are firmly embedded and their function respected. Customer functions have also been clearly delineated and broadcast and again this should prevent any reversal to past poor practice.

More contentiously, with a shortage of officers Service- wide and the specialist role of the Agency it would be worthwhile revisiting the employment of service people in the DPA, other than those that are seconded from both the ECC and DLO. This way it would also be easier to create a common culture within the pure DPA staff as average tour lengths would increase and transition periods/ downtime, during which the military slowly absorbed local culture, would terminate: affording the potential benefit of increased productivity at reduced operating costs.

The shared and weakest attraction is to the Constructive culture, which has a strength of below average to average in most military sub groups. This is not totally unexpected of military bodies, as they are often categorised as "high reliability") organisations, that demand precise, practical and timely responses. Perhaps in an era of greater demands being placed on the Forces and better-educated troops at that, a more Constructive culture is required to compensate, encourage continuity in service and conduct more politically orientated tasks. Moreover, working within mixed organisations where co-operation is also required and innovation needed to conduct the task effectively it is surprising that greater emphasis was not placed on this form of culture. Of the two bodies, the military within the ECC area were more Constructive in their culture than their counterparts in the DPA and this could be a reflection on the way military resources were handled. In the ECC area the reporting system and career management including training were run for the military by the military. Although these functions were also conducted within the DPA the resources allocated were minimal and this often jaundiced opinion and engendered a feeling of isolation and career fouling. It was Donald.
Peterson, the former CEO of Ford, who said, “people are our second bottom line”\textsuperscript{354}. And again recent activity such as IIP has done much to change attitudes.

**Comparison of engineers/ scientists across Groups**

<table>
<thead>
<tr>
<th>Civilians within Directors Equipment</th>
<th>Civilian IPT Programme Management or IPT Project Engineer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capability and Staff</td>
<td></td>
</tr>
<tr>
<td>N = 4</td>
<td>N = 29</td>
</tr>
</tbody>
</table>

The Scientists/Engineers found in both the ECC and IPT Groups both demonstrate an above average inclination towards an Aggressive/ Defensive style, with their respective primary styles being Power and Oppositional. One of the factors creating this propensity is downsizing and in such a situation members feel obliged for security of tenure to demonstrate their worth, deflect criticism and appear to be working protracted hours. I don’t believe that this is anything more than a contributory factor. The real cause as far as the ECC area is concerned is that the scientific effort within the DEC is often conducted in isolation from military DEC members and is therefore distinguishable, and is focused on scientific evidence to justify an investment. Moreover, most scientists in the DECs were Grade 6 or 7 and as such were senior to the ECC desk officers, who therefore accepted the advice proffered and over time became dependent upon them. This relationship was only altered and then mostly by senior officers when those officers had an interest in scientific issues and/or wanted to understand better the scientific evidence placed before them. The scientists and engineers working in IPTs have dissimilar roles and work mainly on project management issues and engage their scientific expertise on project related topics. It could be argued that many scientists have an Oppositional culture, as they require firm evidence to support new concepts, defend their own work valiantly, and are hard to impress. This is manifested in the relationship between the MOD scientists involved in the delivery of capability and those in the scrutiny process. As almost each case requiring clearance is unique almost no precedent exists. Instead, differing levels of analysis are demanded dependent on program cost and the whole

\textsuperscript{353} Ibid. Page 15

activity is subjective. This often results in a protracted period of costly scientific activity, which is put in place to satisfy an individual ego as no regulations exist. Both bodies have a similar but lower than average level of commitment to the Constructive styles, which again is not untypical of people who respect and enjoy innovation. They have the lowest regard for Passive/Defensive norms and once again this might be because there is little formalised structure surrounding their work.

**Comparison Aggregate DPA IPTs and Support Groups**

The primary style of both the IPT and Support Groups is Oppositional and the secondary style is Avoidance. They also share the weakest style of Self: Actualizing, which provides the widest gap with the ideal. If you look to the two circumplexes it is very apparent that there is little to distinguish between the two groups in terms of percentile and strength and the intensity is also close. This would make any future change process easier to manage, as it could be common to both bodies.

**Aggregate ECS**

However, the measurements showed that there are some differences in the scores. In addition, there was a significant increase in the relative variance of styles which is not untypical where there is an over concentration of Passive and Aggressive/Defensive styles. This would suggest that further refinement of the model should be undertaken. However, it would probably be prudent to allow the change initiative to continue before changing course because change,
When comparing these findings with the ECC area again similar cultural trends can be seen. However, the ECC area is less Passive/Defensively orientated than the Agency and this could be attributable to a much greater degree of autonomy and empowerment shared by ECC members. Their commitment to the Aggressive/Defensive behavioural norms is similar to the DPA. The Constructive styles are also their weakest although they have a penchant for Achievement not enjoyed in the DPA.

Future change culture activity could focus on growing Constructive styles at the expense of Passive and Aggressive/Defensive norms across all areas. Indeed, there is an argument that would recommend to all involved in the acquisition process, immaterial of background, that they should attempt to achieve an even greater and effective affinity through a greater commonality in culture. By so doing the probability of friction is likely to reduce and efficiency improved and they after all are key elements of the SPI.

Sub group findings

On the whole the samples were relatively small and did not provide statistically significant data. From the analysis of sub-groups there were only a handful, after applying the Student t-test, where the styles were strong and therefore a sub culture may exist. These were: IPT leaders; other military outside the DCDS, CM and DEC areas within ECC area; and other civilian posts outside the DECs. IPT Leaders have established a novel sub culture, which may be apposite for a transitional period. However, downstream they should make a concerted effort to identify better with their teams and create a common culture throughout their ranks. Those few military working outside the main ECC areas of DCDS, CM and DECs could envisage a fairly unfamiliar workplace involving predominantly civilian staffs. Effort should be made to align their behavioural norms with parent sub groups and as the ECC area has only recently been reformed it is not surprising that there is a disconnect so early in the change process. The other civilian posts outside the DECs comprised of members in DGE's area, which has only recently been subsumed within ECC. There would be logic in conducting a wider survey in this area as their behavioural norms better matched the ideal and statistically significant data could be captured.1

However, the measurements showed that the percentile styles and ideals were rarely matched. In addition, there was a significant under identification with the Constructive cluster of styles which is not untypical where there is an over commitment to both Passive and Aggressive/Defensive styles. This would suggest that further refinement of the culture could be undertaken. However, it would probably be prudent to allow the change initiative to continue before changing course because change,
as discussed earlier, is not a short-term event. To alter a score from 1 to 5 is likely to take years rather than months to achieve.

For the purposes of this thesis the ideal style adopted was that found in the OCI, which had the benefit of being based on successful organisational cultures. It would be more helpful to any future analysis to capture also the MOD staffs' ideal culture profile and this can be conducted using another and complementary OCI process. In so doing, a clearer insight into the workforce and a greater involvement by them in the change process would be achieved. I would also continue to use the OCI ideal style to conduct a pair-wise comparison between measurements. It would be helpful to conduct another analysis in two years time thus allowing adequate time for culture change to occur.

The SD of the responses, which revealed the intensity of agreement among respondents regarding the extent to which particular norms are predominant within the sub groups, illustrates that at the Aggregate level only seven areas were deemed strong, ten were viewed as weak, one very weak, and eighteen average. This suggests that the conditions exist to introduce change as the strong intensities were not common to the three aggregated areas of IPTs, Support Groups and ECC.

MOD combined culture (EC and DPA)

No analysis would be complete without a brief glance at the combined culture if only to appreciate how the outside world may view the MOD.

Current Profile of All Respondents (N=141)

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The profile above reflects the behavioural norms that are common to all three aggregated groups. The greatest area of concern has to be that the current culture is lacking in strength in the Constructive cluster and too great a reliance is placed on the Defensive clusters. Overall, and perhaps not unexpectedly in a structured hierarchical body the strongest extensions are to be found in the Aggressive/Defensive cluster.

<table>
<thead>
<tr>
<th>Primary Style:</th>
<th>Secondary Style:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oppositional</strong></td>
<td><strong>Power</strong></td>
</tr>
<tr>
<td>• look for mistakes</td>
<td>• use the authority of their position</td>
</tr>
<tr>
<td>• point out flaws</td>
<td>• play &quot;politics&quot; to gain influence</td>
</tr>
<tr>
<td>• question decisions made by others</td>
<td>• act forceful</td>
</tr>
<tr>
<td>• oppose things indirectly</td>
<td>• be hard, tough</td>
</tr>
</tbody>
</table>

Overall, the largest gaps are in the Constructive cluster.

<table>
<thead>
<tr>
<th>Primary Gap:</th>
<th>Secondary Gap:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-Actualizing</strong></td>
<td><strong>Affiliative</strong></td>
</tr>
<tr>
<td>• resist conformity</td>
<td>• be open, warm</td>
</tr>
<tr>
<td>• be spontaneous</td>
<td>• motivate others with friendliness</td>
</tr>
<tr>
<td>• be open about self</td>
<td>• treat people as more important than things</td>
</tr>
<tr>
<td>• enjoy their work</td>
<td>• think in terms of the group's satisfaction</td>
</tr>
</tbody>
</table>
Cultural Outcomes Gap Analysis

The response across the MOD/DPA is represented in the following chart, which illustrates difference between the MOD aggregate and the Historical Average:

*These items are negatively worded in the OCI, and the scores are reversed for presentation purposes, in order to be consistent with the response format of the other items.

Again it is too early in the process to reflect accurately the changed cultural circumstances that now pertain. Is the culture really as close to the Historical Average as the responses reflect or is the scoring pregnant with expectation? I would suggest that in a system, which has only recently recognised a Customer and where the procurement services can be viewed as a monopoly, that the only responses with any degree of credibility are those associated with past performance and activity. The answers to the more modern concerns may be viewed as idealistic rather than based on experience although it should be recognised that this is not an unhealthy attitude.
Conclusion

In concluding this Chapter, I would suggest that there remains a significant gap between the sub cultures and aggregated cultures found within the MOD, DPA and ECC communities and the ideal. The ideal is the direction in which the MOD should be striving to implement an effective change culture process. The lack of regard for Constructive behavioural norms is of concern and should be addressed at the expense of Defensive behaviours. The Defensive behaviours if allowed to predominate are capable of creating dis-functionality regarding the implementation of SPI. There is not only room for improvement but also an ideal climate where weak cultures can be changed through a combination of continued education through experience. This change is unlikely to occur over night and funding should be maintained to assist the educational process. At this point it is worth turning to the results of the qualitative survey to establish whether the respondents support the basic tenets of SPI and whether their culture is receptive to the changes proposed.
CHAPTER 9
QUALITATIVE SURVEY

"If the connection between values and conduct is weak, this weakness will eventually undermine the project\textsuperscript{356}.

INTRODUCTION
General Outline

Qualitative research was adopted as an analytical tool as there was little pre-existing knowledge regarding culture and its impact on SPI, the issues were sensitive, and the maximum opportunity for exploration and hypothesis generation was required\textsuperscript{357}. Therefore it was difficult to test a hypothesis. Rather it was decided to develop a "grounded theory": a process of discovering theory from data that has been systematically gathered and analysed. This process of generating a theory from data meant that most hypotheses and concepts not only came from the data, but were systematically worked out in relation to the data during the course of research\textsuperscript{358}.

In addition, this approach was to provide a clear understanding of SPI from the perspective of respondents as it allowed topics of respondent and interviewer interest to be developed in depth and explored. A wide range of views were captured through a combination of purposive sampling to reflect the diversity of the wider population, in depth interviews and balanced questions: a list of questions that were agreed by the sponsors. The qualitative survey was also adopted in concert with the statistical survey to provide case illustration, to study associated issues not covered by the survey and to explore underlying or explanatory factors. In addition, the constant round of quantitative surveys conducted, particularly in the DPA, confirmed that an alternative approach should also be followed to ensure a robust level of response. Detailed below are the aim and objectives of the interviews, which was shared with the two sponsors.

Aim

The aim of the in-depth interviews of two samples drawn from the DPA and EC was to explore the attitudes, behaviour, values and beliefs regarding the SPI.

\textsuperscript{356} Evans And Price, Vertical Take-Off, Page 94
\textsuperscript{357} One Day Workshops for UCL by National Centre for Social Research 14-21 February 2000
\textsuperscript{358} Ditto.
Objectives

The objectives were to:

- Identify the attitude towards the SPI.
- Establish the values being adopted as a result of SPI.
- Determine the new behaviour adopted as a result of the SDI.
- Establish any sub cultural attitudes, values and behaviour.
- Identify change initiatives, which are harmonising effectively the cultures within the organisations.
- Provide an insight into other initiatives that could change cultures to develop better SPI.

RESEARCH METHOD

Purposive sampling

A total of sixty in-depth interviews were conducted with a target population took equally from the DPA and ECC. Thirty interviews being the minimum to provide a balanced insight. The diversity of cultures was predicted and based on experience and in part confirmed by the quantitative OCI measurement. Little data was readily available to confirm the educational or acquisition experience of staff in the DPA or ECC areas. The sample, as specified and used in the quota matrixes shown below included all sub cultures and within each, individual experience of defence procurement, education and position in the hierarchy was used to create a relevant number and disparity of views. The only change resulting from liaison was the DPA felt unable to adopt Industry as a distinct body as so few were actually working in the DPA. All these factors were used to conduct a purposive selection. DPA and ECC expertise in the form of the SPI Implementation representatives was then used to help match the matrixes. The interviews in the DPA and ECC were conducted with volunteers who had learned of the activity through their Intranets and quantitative survey covering letter. Clearly, the use of volunteers would induce some bias but to order people to attend, what transpired to be one hour out of office at least, would almost certainly have had a derogatory influence on the nature and usefulness of the interviews. As it happens a good cross section was achieved and their views it is hoped will prove useful. Although the matrixes were not matched 100% as can be seen below a close approximation was achieved. Quotas were monitored and when a shortfall occurred the nearest qualified respondents to those requested in the matrix were offered by the sponsor and agreed. There were no disagreements in this process.

359 Ditto.
DPA Quota Matrix (Two figures indicate initial application and take-up)

<table>
<thead>
<tr>
<th>DPA POSSIBLE SUB CULTURES</th>
<th>Military DLO/ILS and RM</th>
<th>Civilian IPT Programme Management or IPT Project Engineer</th>
<th>Civilian IPT or Support Group Finance Officer</th>
<th>Civilian IPT or Support Group Commercial management</th>
<th>Military and Civilian IPT Leaders and Ex Director Groups</th>
<th>Civilian s with Other Support Group Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACQUISITION EXPERIENCE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-3 years</td>
<td>2/4</td>
<td>1/0</td>
<td>1/1</td>
<td>1/0</td>
<td>0/1</td>
<td>1/2</td>
</tr>
<tr>
<td>4-10 years</td>
<td>2/1</td>
<td>2/4</td>
<td>2/3</td>
<td>2/0</td>
<td>2/1</td>
<td>3/2</td>
</tr>
<tr>
<td>11 years and over</td>
<td>1/0</td>
<td>2/1</td>
<td>2/1</td>
<td>2/5</td>
<td>3/3</td>
<td>1/1</td>
</tr>
<tr>
<td><strong>EDUCATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td></td>
<td></td>
<td>1/1</td>
<td>1/3</td>
<td></td>
<td>1/3</td>
</tr>
<tr>
<td>1st Degree</td>
<td>4/3</td>
<td>4/2</td>
<td>3/3</td>
<td>3/2</td>
<td>4/1</td>
<td>2/1</td>
</tr>
<tr>
<td>Masters and above</td>
<td>½</td>
<td>1/3</td>
<td>1/1</td>
<td>1/0</td>
<td>1/4</td>
<td>2/1</td>
</tr>
<tr>
<td><strong>HIERARCHICAL POSITION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to Major equivalent</td>
<td>2/4</td>
<td>2/2</td>
<td>2/3</td>
<td>2/3</td>
<td>2/0</td>
<td>2/3</td>
</tr>
<tr>
<td>Lt Col-Col equivalent</td>
<td>2/1</td>
<td>2/3</td>
<td>2/2</td>
<td>2/0</td>
<td>2/3</td>
<td>2/2</td>
</tr>
<tr>
<td>Brig and above</td>
<td>1/0</td>
<td>1/0</td>
<td>1/0</td>
<td>1/2</td>
<td>1/2</td>
<td>1/0</td>
</tr>
<tr>
<td><strong>AGE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 -25</td>
<td>0/1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1/0</td>
</tr>
<tr>
<td>31 - 40</td>
<td>3/2</td>
<td>3/3</td>
<td>3/3</td>
<td>3/2</td>
<td>3/1</td>
<td>2/1</td>
</tr>
<tr>
<td>41 AND ABOVE</td>
<td>2/3</td>
<td>2/1</td>
<td>2/2</td>
<td>2/3</td>
<td>2/4</td>
<td>2/4</td>
</tr>
</tbody>
</table>
### ECC POSSIBLE SUB CULTURES

<table>
<thead>
<tr>
<th>ACQUISITION EXPERIENCE</th>
<th>DG Equipment</th>
<th>CM (Strategic deployment)</th>
<th>CM (Strike)</th>
<th>CM (Manoeuvre)</th>
<th>CM (Information Superiority)</th>
<th>DG (Research &amp; Technology)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3 years</td>
<td>2/3</td>
<td>2/4</td>
<td>2/3</td>
<td>2/2</td>
<td>2/2</td>
<td>2/1</td>
</tr>
<tr>
<td>4-6 years</td>
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### Appointments

The Implementation representatives created appointments: John West for the ECC and Sandra Chasey for the DPA. Both were inextricably involved in the change process and were most helpful in
organising the programme, providing a private office within their areas and catering for all the administrative details. Very little change was made to the initial programmes other than some of the later DPA interviews had to be postponed due to my ill health. The formal taped interviews lasted for no less than 45 minutes although a 1 hour period was booked and for the majority the time did not appear to be a constraint and informal chats continued where possible. All discussions were taped to provide data and traceability, using 45-minute duration Sony tapes. Only one tape was damaged in the custody of the typists and in this instance notes taken were used to populate the database. As the topics were sensitive, discussions were conducted in private offices where confidentiality was guaranteed. Data gleaned was also treated with confidentiality and anonymity was respected.

Topic Guide

Introduction

A topic guide was used to conduct the in-depth interviews. As can be seen below it sets out the key topics and issues to be covered but did not constrain the respondent from addressing other pertinent issues. The guide assisted in the provision of consistency of issues addressed during interviews. To that end certain key questions were formulated in advance to further the consistency of addressing critical points. The guide was used to brief MOD sponsors and their staff as to what was being attempted and to seek approval.

Guide used

Can be found at Annex F.

Analytical Tools

The method adopted for analysing data was to adopt the Framework (matrix approach developed by the National Centre for Social Research\(^6\)). This approach allows within and between case investigation and a means of synthesising and condensing verbatim scripts. It also treats cases consistently and is systematic.

The framework consists of a number of thematic charts or matrices, which together are placed on a central chart at the interpretative stage. Each thematic chart is based upon a series of related themes/issues, which fell out of the common questions, and is organised around emergent interpretative themes. For example, the central chart would analyse key themes such as “values” and
thematic charts would identify differences in “agreements and disagreements”. The first step in creating the thematic charts was to type up all interviews. Subsequently, those interviews were read and analysed to see what themes were recurrent. Using those themes as a focal point, language was cut out from the interview hard copies to establish supporting evidence under each theme. The classification and interpretation of the qualitative data was used to identify the nature of phenomena; typologies were then created, followed by the exercise of finding associations between types and phenomena, providing in that process both explicit and implicit explanations. All these steps influenced the developing hypothesis.

QUALITATIVE SURVEY RESULTS

General

A more comprehensive insight into all interviews is to be found at Annex G. This document is included to provide a record and further insight into the prevailing views.

Level of Belief in SPI

General perception of SPI

The vast majority saw a need for SPI seeing “the public perception of the way that military equipment was being procured was quite bad”. The old process was wasteful of taxpayers money, and therefore SPI was a “welcome initiative and I think we’ve got a lot more to do in taking it forward”. To many it started off as “wallpaper, flannel, something that we were dreaming up or essentially political with a small “p””. Some two years post conceptualisation “a lot of people have come to regard it as a touchstone for very significant change in the way in which they do their business” and “they regard the world as now different”. Within DPA there was a unique reason for change as the “feedback we were getting on equipment was that it was not working properly” and as a result “We were always having to over maintain”. This manifested itself in “observations of disappointment” from the customers. SPI satisfied “an ambition to actually do better”. It was also seen as a combination of best practices within the DPA and “layered on top of that is a patina of what is being done in industry and in other procurement areas, particular in the US”.

360 Ditto
Involvement in SPI

McKinsey and internal advisors did make efforts to interview a number of ECC and DPA members in formulating their advice on SPI and AOR, although some perceived much of the consultation was conducted with management rather than the practitioners. Some felt deprived because they had now been involved in formulating SPI and thereby had no stakeholder commitment. Yet “ownership of any successful process should provide a sense of responsibility, commitment and pride, which are all respected values”. Others were content that primarily external consultants conducted the analysis because it needed an objective view and the “game keeper come poacher approach” simply would not have been effective. This view was supported by those at Abbey Wood who felt that some “people have been in so long that they have become institutionalised”.

Interestingly, within the ECC where less than 50% of the senior staff had previous experience in procurement, there was a commonly held view that it should be left to the expert consultants. It is worth noting that it is quite normal not to involve the workforce in determining strategic initiatives and instead leave the task firmly in the bailiwick of the Chief Executive, his Board members and consultants (both internal and external), although in this instance I don’t believe the PE Board was heavily involved. One sound reason for this being that the workforce, who made this observation, has a “day job” to get on with.

Novelty of SPI

Many of the interviewees started off answering this question with a response similar to “I don't believe any of them are novel” and only moved from this position after further discussion. Within the DPA there was a consensus that “there are things that we should have been doing years ago, and there's also things that were being done years ago, that they've just introduced”. Another protagonist opined “I don't think we are doing anything that is not accepted intelligent practice in other industries.” Even if these comments are correct when the practises are bundled together it is believed that “their total application to MOD is probably novel”.

Novelty was identified in the new process as “there’s the ambition that the DPA actually acts as a service provider for capability.” Beforehand “the culture was transparently single service and replacement equipment orientated”. There was also the identification of “a capability gap without solutionising and allowing many brains to come up with a solution as opposed to a few.” Then there were those who saw a new professionalism stemming from the Reform coupled with higher expectations from the process than hitherto. Also novel was “the concentration on leadership training and change training”. This was also seen as a “prevalence of soft skills over and above functional
engineering skills”. This phenomenon is not uncommon in organisational culture change but is unique in the annals of UK procurement history and could be key to SPI success.

Most believed in aspects of SPI

There was a general belief in the SPI philosophy that was articulated, as being “a more business-like”, dynamic, approach geared to seeking “ways of improving the way the MOD does business”. This approach should “deliver the equipment part of operational capability as effectively as possible” and in the process “spend taxpayers money in as responsible a way as possible”. Providing in the process an ability “to exploit and tap into technology in much faster timescales than the others”. Others believed that should we be able to “move through the bureaucracy whilst still maintaining public accountability, SPI will have done its business”.

There was also a shared belief in the “separation of equipment acquisition from capability management” and by so doing clarifying the roles, functions and responsibilities held both sides of the divide. In ECC many believed in the capability structure but had reservations about its current integrity, particularly its single service orientation. The strongest held belief was in IPTs and DECs. Specifically in the way in which, “they have given those teams real substance, a real belief in themselves”. And the, “way in which they have identified their leaders as really significant players,” in an environment which was “fostering collaborative working by the various components, customer one, customer two, suppliers”.

SPI also provides a “frame work to provide a more coherent capability”. The customers’ approach was likely to “make the DPA, think more professionally” about “what we are doing, and the standards, the approach”. Even the art of “better recognising the Customer” was seen as being more professional.

Negative aspects of SPI

There was a belief that “SPI hasn't gone far enough within the Department” and the scientific scrutineers, personnel branches and finance areas were not au fait with current thinking or practise. There was a concern about the commitment of DPA’s senior management particularly when their constant requests for information resulted in duplication of effort, which was a “big problem culturally because people see the top as being a dinosaur” and “not working in the Smart way.” The Support Groups search for a role and “lack of investment in their breakthrough process” caused frustration and a belief that they were second class citizens.” There was also a strongly held belief that “industry was not committed or deeply involved in SPI,” albeit their representative bodies were.
“Within the mantra of SPI, the focus on cost savings seems to be the driver rather than necessarily improving system performance”. There was absolutely no respect for a process where operating cost savings jeopardised projects as there was no scientific evidence underpinning the structure of organisations and teams and neither was there evidence that savings could be made against an initiative in its embryonic stage. “The way in which we have identified the £2 billion and claimed to have achieved this” was viewed as, “a little bit of smoke and mirrors”, which was likely to cause difficulty.

Meeting SPI objectives of faster, better and cheaper

“There was a cultural perfection whereby we tended to over specify, we tended to specify unachievable things” which consequently led to programme delays and escalating costs. The likelihood of this happening had reduced due to the tools available to the procurement body in particular those SE tools. There was a shared belief that “With the fewer approvals and hopefully if we’re talking to industry more and the customer, then faster should be the main objective that we achieve”. The wider and more structured dialogue coupled with CADMIS also “helps to remove the rework, the clarifications, that are necessary from when you start to develop your requirement to when you actually get it delivered.” The desire for rapid introduction of technology into service was seen as key to the maintenance of a battle winning capability.

Better is a very difficult quality to achieve because once you have produced the URD there is a danger when exceeding those requirements that “they’ll say no peg it back down to what we asked for and can you make it cheaper?” It was assumed that “better is related to performance”. And that performance remains “inextricably linked to investment”. In an environment where, “investment and savings are mutually opposing” the biggest challenge was seen as “actually delivering better performance”. It is doubtful whether a better product is introduced into service but “What we will get is better throughout the life of that equipment and if we believe in technology insertion then throughout the life of that equipment I believe strongly that the equipment overall will be better”.

There was an overarching view that the “emphasis and the centre of gravity is on the cost” and although there is “some degree of trading space between the three, inevitably the driver will still have his money in the safe”. One of the major concerns regarding cost was the reliance on COTS solutions, which rarely enter service unmodified and therefore suffer cost growth. There was a general concern that if “cheaper implies poorer quality” then that too could be a risk. However, there were others who believed that “if it comes with the same quality then you can say that if you get it cheaper then you have achieved something that is smart,” in fact what is achieved is better value for money, a preferred phrase for many, which clearly did not introduce the right spin.
One senior officer suggested that “We were always expecting high performance at low cost at very fast speed” however, a reputation grew for failing constantly. He challenged this view citing “UK’s current arsenal as possessing many world-leading systems and technology”. They do not all immediately spring to mind but there is a clear message that MOD should “not throw out the baby with the bath water”?

Key issues regarding beliefs

If it is accepted that beliefs underlie the formation of attitudes and values then consequently the target for culture change is the beliefs that individuals hold. The SPI philosophy was accepted prior to launching the initiative as participants shared, through experience and communications, the government and public perception that MOD procurement was in efficient and failing the Forces. Moreover, many of the remedies or tenets introduced were not novel but respected best practise. However, there was a disbelief in other activities associated with SPI including unequal resource allocation for change across MOD and the resultant potentially new class system e.g. IPTs and Support Groups. The sphere of influence of SPI within MOD was limited and this resulted in a disparity in approach between sub cultures, which again slowed progress; as had industry’s ineffectual practical response. Finally, there was a very strong disbelief that the efficiencies sought in operating costs were predicated on any analysis, scientific or otherwise and that much of the £2Bn project savings identified were also poorly identified or underwritten. As a result, it was believed that SPI was likely to be faster and better in terms of delivering capability through a combination of a new acquisition cycle, incremental acquisition and greater synergy and deliverables by government and industry alike. Cheapness was not a shared belief rather it was hoped that value for money should continue to influence all parties involved in defence procurement. It is perhaps worth drawing to the attention of SPI leaders the comments of Lord Blyth of Rowington, a former Head of Defence Sales and now Chairman of Boots who viewed “Big scale change in large organisations is definitely not for the faint hearted, or for those looking for quick fixes, or lacking deep pockets.”

Key Values adopted or retained in SPI

Strongly agreed aspects of SPI

The aspect with the greatest agreement was the philosophy, which on this occasion was referred to as “absolutely necessary”, if the, “Department and Taxpayers were to achieve better value for money.”

361 Williams, Dobson and Walters, “Changing Culture, New Organisational approaches”, Page 47
362 Sir Richard Evans and Colin Price, Vertical Take-Off, Foreword
ECC members saw this manifested as "trying to get SPI into our culture" which, in turn, was seen as introducing SPI into our "schemes and daily lives". Also in favour, was the ethos being injected into all teams of "go and search", and "try and do that" because they had become important motivators as was "the whole concept of trying to improve the way we do things". Within this theme there was general agreement with SPI values including: "being innovative", the "empowerment of DECs and IPTs", "close involvement with industry- better relationship with British industry", the "customer having greater control of financial affairs" and finally, "greater cohesion within the logistic organisation." Interestingly, the Customers "strongly agreed with the concept of an IPT leader" and with it the removal of many extraneous hands. ECC and DPA's internal organisations were seen as "devolving a certain level of accountability and also providing identifiable people who are accountable for their projects," whereas historically they were a part of a hierarchical and amorphous mass.

The "emphasis on team working" was also applauded, as was the ability of the system to bring "all disciplines to bear on the problem rather than trying to tackle it through stovepipes". This synergy had already been recorded thanks to, "a lot more openness and sometimes more friendly relations" which in turn it was hypothesised would lead to greater flexibility in the deliverance of capability. One of the strongest indicators that MOD was adopting a commercial vision was manifested in the "Belief in the basic concept as it supports user goals" and the adoption of customer supplier relationships.

A popular topic was the "focus on capability rather than equipment replacement" and providing capability management with balanced resources to fulfil the task. In addition, it was considered that the success of SPI would also be influenced by, "how deeply involved the politicians want to be in managing the process and the activity" because without their commitment the probability of success was reduced.

Disagreements with SPI

Over half of the ECC interviewees did not think it appropriate to make negative judgements at such an early stage, albeit many did not, "agree wholeheartedly with everything in SPI". Instead they like many others sought stability in the process to let it bed in. There was a strong disagreement with the split between DPA and DLO. To overcome this some wanted to "make it one organisation" believing it important as per SPI to "to reinforce the whole life aspects of the projects" and a "unified organisation would reinforce that." Within the DPA there was concern within the civilian ranks of employing military, which cost more and because of tour lengths were less knowledgeable of procurement issues. There was also a disagreement with the functioning of the Executive Board believing that "They do not seem to act or want to act corporately as they ought in a commercial sense". Within ECC many felt that, "the organisation that we have at the moment has got a lot of baggage from the old system's area" and yet others thought that the increased Central power embodied
in ECC would alienate the single services. There was also a view, "that platforms specific issues really aren't ECC business and we are pure capability". There was also disagreement on empowerment, specifically "the way in which we've reached it was simplistic and dangerously simplistic". It was dangerous because it "let us make some mistakes but also because it potentially allowed people to lose enthusiasm". The maintenance of enthusiasm in organisational culture change being critical to success\textsuperscript{363}

Some felt that "SPI ended up as a compromise of responsibilities because they were so many warring factions". From my observations there was no well-defined systems engineering divide at the time of DPA's creation because the Customers' future had not been finalised. That said, a workable process has been subsequently identified. It was also felt that a lack of thought went into SPI implementation within DPA. Thought in respect of the "the way people operate or the funding that was available or the expertise that's around". Even so the DPA were seen as the champions of change having led the charge and the 2\textsuperscript{nd} Customer as dragging heels and failing to adopt new culture. The lack of "coherence between equipment planning and short term planning" was also frustrating because there was no way of confirming commitment to capability beyond the 4-year point. Moreover, the ability to deliver a programme is vulnerable to operating cost cuts and will remain vulnerable for as long as capability, commitments and operating costs are not linked. There was strong disagreement "with the pressure that is put on people to produce hard and stretched targets" particularly when judgements were made by some inexperienced people and by others without industrial involvement. Finally, the links between capability planning and research were deemed to be inadequate especially as responsibility for incremental acquisition identification lay in the hands of ECC, whose imperative was to inject advanced technology, and yet their links to the CRP remained tenuous.

Key Value issues

Values like beliefs are also foundational because they embrace those qualities and principles that are agreed to and considered worthwhile by individuals and the organisation. The trick, which is often missed, is ensuring that old and new values become or remain part of the "living culture" as Jan Thornbury referred to it. Where there is disagreement between organisational and individual values it needs to be addressed because negative values can slowly erode confidence in the system and could significantly impact on SPI progress. One example being the apparent contradiction between reduced research investment and the belief in early investment in technology.

\textsuperscript{363} Jan Thornbury, "Living Culture", Random House, London 2000, Page 183
Attitudes to SPI

Likes

The concepts of “all the major stakeholders forming into teams” and “the recognition that there is more than one stakeholder” were liked, as was the advantages of teaming being publicly recognised because it provided the impetus and status necessary for these mostly autonomous bodies to succeed. In the DPA, “because we don’t have the same tiers and reporting chain, people feel that they belong more, and are more associated with the product lines”. The notion of working with industry was also appreciated albeit the practicalities of partnering in a competitive situation remained expensive and difficult to manage. The formal involvement of second customers into IPT and CWG activity, integration of DGE’s area into ECC, and RMs into IPTs were all liked for the beneficial synergy created. IPTs were liked because of “the cohesion, open structure, open plan offices and the ‘no blame’ culture” that resulted from the breakthrough process. In ECC a well-liked theme was “the organisation being more efficient and focused as compared to the lumbering organisation of yesteryear” but to retain this status there was a need “to continually train and educate people” a theme common to most organisations.

Also applauded was the inherent flexibility of SPI. One DEC said “What turns me on is the ability that I and the IPT team leader can sit down and say this is wrong I want to stop this” or “these are the priorities and so I can veer and haul within my programme”. Perhaps the aspect of SPI most liked was that “as a taxpayer at the end of the day I might see costs coming down and waste being reduced”. Within DPA they “liked having de-layered management and “being responsible directly to the customer” and recognised in that association that life was not any easier but that work was more enjoyable. Also much appreciated was “a fully empowered team working within discrete bounds and having limits”, which was “likely to be good for the people that are there”. These provided a feeling that people have really got as much power as can be given to them, and are being allowed to get on with it.

Dislikes

There was a large group who was positive and saw nothing to dislike in SPI. However, there was a strong dislike for the MOD mentality where “we do change in order to save operating cost and invariably we take the saving before the change has even been introduced”. Rather such savings should be identified in a “controlled, scientific way and understand what we are doing and how well we are doing before we start making more savings”. SPI had the potential to fall in to that trap unless
“we nurture and maintain the change and the normal way of doing that is to actually invest resource”. Antipathy was also associated with the “lack of a coherent processes”, as there was no “arrangement to veer and haul equipment programme money and internal operating cost money” for the mutual benefit of all interested parties. With IPT autonomy a type of “de-coupling process” had been initiated, which resulted in a feeling of “isolation”. This phenomenon appears linked to the demise of the Business Units and although anticipated, “what now seems to happen is that the level of demand on the IPTs, particularly in terms of returns (project as well as RAB orientated), has gone up exponentially” and has created new pressures. Disliked pressures that also include “the amount of responsibility that has been dumped on my shoulders”.

Many ECC interviewees disliked implementing SPI and creating a new organisation because by using mainly in-house resources there was a significant drain on their time, which in turn led to working extra hours merely to mark time on their core business. Sowing a seed on barren ground often proves unproductive. Saving against the Research budgets was disliked in part because it appeared to contradict the SPI vision of relatively high investment early in the project and also because it runs contrary to bringing, “more and more high technology pieces of equipment into service to give us the edge.” Moving on, one DEC opined that “I physically dislike the way that we are being scrutinised.” He along with many others places the cause for his resentment at the scientific scrutineers’ feet. Perhaps this dislike like all preceding dislikes can in part be attributable to “The danger in having too high a set of expectations”. That SPI at a stroke was going to solve a whole range of problem like, “Our inability to afford what we want in the timescales and so on”.

Key attitudinal issues

Like beliefs attitudes are learned and are influenced by experience. And as with values failure to consider existing attitudes may well result in dissatisfaction, minimal involvement and antagonism which can all impact upon the organisational performance. Some of these traits were apparent from the tone of the interviews.

New behaviour adopted as a result of SPI

Working practises

Under the banner of co-operation “The ideas of consistency, of concurrency, the idea of everyone having a shared view of the world, being able to contribute to it” were perhaps not entirely novel. However, it was suggested “that the cultural change and the acceptance of those new ideas was actually fairly easy because they were things we were already trying to bring about”, as recognised
best practice. Benefit was also associated with greater openness between the customers and suppliers, which increased harmony. The main advantage of delayering was seen as a much closer relationship between the DECs and IPTLs and their staff which should also improve productivity. Moreover, their involvement of all stakeholders was seen as removing the requirement to resolve “conflicts of interest at the eleventh hour”. The transition from requirements to capability management had not been entirely smooth because of such issues as a shortage of RMs and legacy systems and a lack of granularity in processes. The integration of DGE’s staff provide a change of course whereby “we have to continue to be critical but it's critically helpful”. Closer partnering with industry was seen as a change in DPA culture to a very much “hands and eyes on” approach and the requirement was most likely to be met by providing greater visibility rather than have people physically employed on industrial “shop floors”. Working hours had increased across the piece, albeit contrary to management’s direction as staff efficiency measures bit and this impacted on morale particularly because the direction was deemed weak.

Some placed considerable store in the DECs believing that the majority could “think, in ways outside old stovepipes” and achieve things that the old organisation wouldn't have done. Others feared that DECs had created alternative stovepipes, which were difficult to co-ordinate. The majority favoured DECs citing being in a position “of directing staff to look at sensible ways in which we can better deal with the money that we have got” and their new business also involved, “dealing and being asked by IPT team leaders for guidance, advice, direction”. Within IPTs openness was seen as making business a “a lot easier and slightly more fulfilling” because empowerment allows individuals “to carry out more without having to be given direction.” The devolution of responsibility brought with it “much more emphasise on accountability” whereby “you have got to be prepared to answer every single question on a project accurately otherwise you are called to book”, which was not mandated in the past. Some people felt that the processes employed had hardly changed and the only change involved the people they dealt with. The demise of the Business Units dissolved “a nice little system of networking” which was replaced to varying extents by a combination of Peer Groups and mentors.

Behavioural changes to either the customer/supplier or industry?

A large number of interviewees sympathised with the belief that “the most welcome improvement which SPI has brought about was the clarity of responsibilities between Customer One and the DPA. A development which allowed new identities to be adopted and new relationships to blossom and bear fruit”. The first customer survey noted “that we are far more customer orientated” but proved that “we were b.... hopeless!” Customer supplier agreements had done much to cement responsibilities and deliverables and build joint confidence, as had the presence of RMs in IPT ranks. Also matured is a clear understanding of “reporting to the Customer in the capability working group in terms of how
we’re going to deliver capability and also answering to him as far as the money required to fulfil his programme needs” are concerned. The customer has also “become a lot more financially aware of some of the things they are doing” and in that climate were “willing to trade cost against performance and be more flexible in that respect”. Two negative behaviours continued in the view of some DPA interviewees: the single service culture prevailed at the expense of Jointery and the ECC desk officers lacked an understanding of SPI and with it procurement in general.

There was a commonly held view that the change in behaviour was encapsulated in two but “not necessarily comfortable bed fellows”. The first, “a greater preparedness to work with the DPA so that we act a bit more as a team”. The second “a very healthy preparedness to be a rather more demanding customer”, and as such posses a greater propensity to come to agreements and stick to them. It was viewed as both a “more professional and healthier relationship” that was still in its infancy. This partial integration of staff plus closer co-operative work has resulted in a “less adversarial culture”, although “That's not to say there isn't still some healthy dynamic tension there”. There was some concern that “where the biggest culture change is yet to take place is at the very top of the organisation and the way that Ministers use the Chief of Defence Procurement as their major advisor” when it should be the customers to whom they turn for initial project advice. One DEC felt that the XDs had not found their “natural position in life yet.” He also didn’t believe that the IPTLs necessarily understand their relationship with their XDs who had been known to stray from their own project bailiwick, raise issues of a single service nature and pose customer orientated questions as did their PE predecessors.

Industrial relationships varied from being “conscious of their position in that market place.” To a more dramatic approach where “partnering agreements and codes of conduct have been agreed and signed” where “we didn’t have them before”. Certainly not to the extent of “how we would behave towards each other in terms of openness and trust and a way of working”. The weakest links felt that industry remained profit orientated and aloof in many respects, which was demonstrated in their noticeable reticence to adopt DPA appointments or commit themselves fully to SPI. Within the ECC there was a sympathetic view that “With industry I have found a need to continue education” not with the marketers peddling their wares but with people responsible for strategy formulation.

Tools put in place to improve productivity

There were advocates of CHOTS but it was not introduced to support SPI and had the remaining disadvantage that not all procurement players were on the net and therefore 'hard copy’ still ruled. The Capability Area Planning Information System (CAPMIS) is “the one tool that has so far come in”. Not only does it provide shared project and financial data it also removed another historical,
confrontational exercise. One cause for discontent with IT was, “the idea that you have delegated by putting new advice or data on the Web and therefore its everybody else's responsibility to go round and hunt for it,” as this impacted on productivity. That said, some people saw “the biggest breakthrough as being able to e-mail people in London.” Many respondents referred to ASPECT as a tool set that was supposed to assist PE and subsequently DPA members “to improve productivity” but it too suffered from limitations and was not designed specifically for SPI. People were less scathing about AMS albeit it was still in the development stage and described its limitations as “not user friendly to search.”

Although “CAPs are a powerful tool because you capture your finances, you research the gaps” the maintenance of the documents was proving manpower intensive and likely to result only in an annual effort. In addition, once all CAPs were considered systematically determining where the Bol should lie was still unsupported with effective modelling devices. The only other novel tool that was identified was first experienced during breakthrough and embraced all “forums that we've got to talk about what we're doing and how we can improve performance”, in other words brainstorming sessions.

Practical management steps taken to improve performance

Those who attended the ECC in-house induction course thought it was a useful and necessary starting point particularly in the absence of related SPI documents. Whether the ECC culture will be inculcated in RMs through induction courses or the auspices of the acquisition stream is as yet unknown. “The creation of a true team environment, where the commercial and financier is responsible to the IPTL” was seen as one of the key management steps devised to increase productivity. For ECC members the breakthrough programme was seen as useful “in getting to know people and trying to focus our mind on where we were going as a group”. However, it was viewed as very much “self-help in parallel with everything else”, which detracted from its value.” Perhaps the most telling comment identified the IPT breakthrough experience as better than the DECs, citing professional consultant support as the greatest differential. There is a real danger of this form of disparity creating another class society and yet the central SPI implementation team was supposed to engineer a holistic approach. Within the DPA, a minority suggested that they benefited from the continuance of “team building and soft skills that have been employed at various meetings post IPT breakthrough”, which they saw as necessary to maintain momentum and cater for turbulence. But many complained that continuance had never happened or just dried up.

One of the most difficult organisational chores was the integration of DGE’s staff into the predominantly military EC community and this was achieved by introducing his representatives into management boards at Executive and CM and providing further advice to the DECs. Management
plans were continued but capability focused and if bureaucratic jargon is dropped then they could be a
bonus that will provide clear direction, create closer ties within the workforce and act as a reference
point for the change culture process. DPA’s adherence to the European Foundation Quality Model
(EFQM) and specifically “their adoption of the business excellence model”, which came in as part of
their ISA9000 work, were applauded as they provided an external, objective measurement benchmark.
There was a general view that there was much greater emphasis placed on training, which was
attributable to a combination of IIP, EFQM and SPI. The annual reporting system also adds impetus to
fulfil all essential training needs.

Rewards schemes and their effectiveness as motivators

Only a small proportion thought that productivity could be increased with extant bonus schemes and
those that did mainly believed that whatever system you introduced “you have got to get the whole
team performing better, not just one individual or some individuals within a team”. CDP has an annual
award scheme for team excellence. It was emphasised that bonus schemes do not apply to military
staff as “the service personnel authorities are adamantly opposed to any form of assimilation of service
personnel” in to the scheme because it was seen as divisive between MOD and front line troops.
Within the concept of performance related pay the distinction between civil service performance
markings was seen as “negligible”.

The appraisal scheme was seen as providing an opportunity - if you get a good report- to “move on”,
which in turn was considered “probably the biggest motivator we have got for the staff”. The military
reporting system, which was to be standardised and open should do much to motivate people more
effectively. Others felt people were motivated by achievement and so if their projects and SPI were
successful they would be motivated. There were those who felt that the motivation to work harder was
inspired by a combination of “personal attitude and attitude of your boss in the form of team building
activities” and “towards working practices”. Other saw loyalty as both a motivator and a dying art
form. Then there was a vision that “it comes down to that pride in your own job (performance)” to
create motivation.

There were other areas, which were not perceived culturally as rewards and “training was definitely
one of them” particularly in the eyes of the civil servants whereas the military compete for places and
promotion is predicated in part on successful completion. . Recognition was possibly the most highly
prized reward as for many “all they want is the line managers to be more open with them and to
congratulate them when they have done a good job.” managers from the top down. I believe the point
being made is that there is a need to revert to basics and basic management specifically.
Impact of CWGs and IPTs

It should not be forgotten that both parties make an invaluable and synergistic contribution to capability because “if we aren't vigorous in thinking through what we should buy, the efficiency with which we buy it is perhaps not that important”.

A huge advantage is achieved by making, “the IPT leader accountable for his actions in a way that he wasn't before.” By bringing all the players together in one team it also gives the IPTL the tools to achieve the acquisition that probably they lacked before. Although, it should be recognised that there was “not enough industry in it as there should be.” Within the IPT “all team members are engaged, not only in their particular role and job, but in whole IPT issues” as they are almost autonomous bodies. However, mentoring is conducted between the Support Groups and IPT members and is required to keep junior staff informed and maintain their specific expertise. When accountability and grouping the resources are coupled under an IPTL, and he in turn can influence outcome by leadership then the total package probably gives a slightly more coherent point of contact to industry. In that “they feel they are dealing with one entity not a head that's going to lots of different places to receive approval”.

Where IPTs “have really tried to embrace the change you see some positive results in terms of the teams being quite well motivated”, which is all the more commendable because they were also “working harder” because “they are being asked to do more than they were before.”

It should not be forgotten that at the time of these interviews CWGs were “still in an embryonic stage” and hence attracted little comment. One person described the outcome of CWGs as “a better handle I should say, its getting better all the time, of customer two and the true users' needs as opposed to our perception of it.” ECC staff operating in the context of a CWG “are much more accountable to the Capability Working Group as a collection of people who are stakeholders in a particular capability than their predecessors were.” Others felt that a “CWG is like a shareholder meeting where issues are raised rather than resolved” but this could have been a reflection on their originality at that time. Others perceive CWGs more like a network at its core the ECC and its network comprising all stakeholders who communicate regularly and occasionally meet to determine an optimal capability.

CWGs and IPTs do add a very strong degree of reality and I suspect it really does temper and moderate some of the requirements and make them slightly more realistic and “must ultimately reduce therefore the overall risk to the programmes”.

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Behavioural key issues

Allen Williams et al\textsuperscript{364} felt that people’s behaviour is influenced by their beliefs about the reward and costs associated with a particular behaviour, the probability of success or failure, their own ability, the resources available and the expectations of others. They went on to hypothesise that if organisational culture change is to be linked to organisational performance then the beliefs that individuals hold about behaviour need to be changed. As can be seen behaviour has changed quite significantly across the procurement spectrum with new functions adopted, new relationships formed often between more autonomous bodies, and advisory rather than adversarial partnering anticipated. Whether all tools are in place to realise aspirations or whether the reward schemes are effective motivators remains in doubt and should be revisited for the sake of progressing SPI.

Change initiatives harmonising culture

Change in perception

Many ECC members were doubtful initially that SPI could succeed because of the massive change involved where elements were working out of phase. A period considered by the customer to have “kicked off in somewhat unseemly haste accompanied by a lot of gnashing of teeth and confusion” and which now needed stability to settle down. Whereas “already we're into more change” like the 10\% savings sought from ECC. Most felt that “This year it has been a bit of an educational process for us all.” However many echoed the view that the “most important thing is actually seeing practical realities and I have seen enough to say that I think it is a positive initiative that's going in the right direction”. There are “one or two aspects where it is proving harder to find the right solution” and examples given were acceptance and incremental acquisition but these were not seen as unreconcilable. There was “a common desire, a realisation that we're all here to provide military capability or equipment capability”, although industry’s contribution was disappointing. Disappointment also accompanied the fact that “broadly arbitrary cuts were being imposed upon the system” rather than objective assessments leading to more effective flexing of funds across capabilities, a status attributed to a lack of B of I tools.

Within the DPA they had become more adept at communicating change through various media rather than be reliant on IT. Many people also enjoyed the challenges of change and therefore tend to look “to the opportunity in it” and by taking up those opportunities they, “as an organisation have moved forward hugely and improved” providing examples of greater engagement of the customer and industry. Some of the softer achievements involved “the way in which people are working together
and understand each other, and just a better feeling of working towards the same goal”. Others went a stage further believing that IPTs created “a much stronger working environment within the team to embrace SPI, to adopt the best of it.” Others felt that over time “a lot more clarity and less uncertainty” had been added to SPI processes and gave as an example peer groups which were “starting to take shape”. On the negative side some considered IPTs as being “thoroughly over worked and uncomfortable with new found responsibilities”. That the “Executive Board couldn't let go as much as they are supposed to and they would still be dabbling with projects”. They also predicted IT failing to support the business process effectively. And a significant element of the MOD were seen as “manifestly not playing” or contributing to SPI and this resulted in their contribution being “actually negative, it is not really impassive”.

Impact of recruitment, selection of key people and any redundancy scheme on the change process

A combination of downsizing prior to Abbey Wood and the voluntary retirement scheme had led to the loss of “some dead wood” and the loss of “an awful lot of expertise” and a “lot of knowledge” from DPA. Others saw the early retirement scheme as part of a package to weed out the less committed and together with a more bullish recruiting policy motivate the workforce and allow new culture to flourish. The motivation coming from the theme that career progression was no longer dependant up on “dead men’s shoes”.

It was seen that recruitment and selection are two avenues, which can demonstrate a “culture that we don’t just appoint muggins when it is his turn” but the civil service was reticent to explore fully open competition and so worked to a recruitment policy “shrouded in mystery”. However, it did deliver a “cadre of people who were intellectually and technically competent and expected advancement” but unfortunately “initial responsibilities and their the wages did not actually meet their expectations” and they left. A major cause was efficiency measures, which often resulted in reduced administrative support and “more and more really mundane tasks put on people at desk level”. Apparently, IPTLs had the greatest degree of choice in who joined their teams and in such an environment it was difficult for the support teams to recruit effectively. A number of people had failed to notice much difference in the selection process noting “that it is the same sort of people who are now heading the IPT’s as were heading the previous projects”. This trait stemmed from “the same old personnel organisation who recruit in the same way” although it was recognised that they were “trying to introduce the acquisition stream slowly” and that some form of internal competition had taken place. Perhaps one of the most worrying aspects was the considerable turbulence experienced within the DPA that introduced further flux to the change process.

Williams, Dobson and Waters, Changing culture, Page 47
The ECC suffered from two problems. London was attractive to the people seeking influential appointments and power but other professions were becoming more attractive and drawing potential recruits. The forces were short of recruits and retention was appalling and the attraction of working in MOD with long working hours and the threat of separation were wearing thin. Moreover, the military selection processes were poor at responding to the change in quality- set required for capability as opposed to requirement management.

Move of MOD staff across areas

There were those who fully supported the philosophy of “having people develop the requirements that are actually part of the project team”. It seemed very difficult to others “that someone else would make a series of requirements and give it to someone else to actually meet them”. “He’s no longer a technical advisor or somebody that deals with the ILS. He’s seen as a key member of the team who is there to identify what the real requirements are and to explain the context in which the military equipment is going to be used.” Co-location “allowed the RMs to be much closer to the goal posts” and therefore better able to “understand the impact of some of the requirements and changes in requirements on the programmes”. Initially it was disliked by many of the DECs, who saw it as “losing a number of staff” but since it started to function effectively “it provides a fairly vital close link with what the IPTs are doing and how they are spending the money. However, other ECC respondents felt that their flexibility and depth of knowledge had been reduced due to the loss of staff.

DPA members were greatly appreciative of RMs citing their ability to “understand the customer view of what he wants and is empowered to talk about it, agree to trade off and work towards common goals”. In such circumstances, having a RM as “part of your team is really important” and “very good for morale”. The ability to “talk on a day by day basis” had led to a “much better understanding of what both parties were trying to do. You also “sense that you are getting it from the horse’s mouth”!

Both parties thought it essential that the RM complement should be fully resourced and moreover that RMs should be educated in their responsibilities prior to arrival.

New skills to fulfil new tasks

The most critical skill adopted was “how we communicate differently and more effectively with people both within our team and externally to contingents such as industry”. This skill was used for recruitment, team working and building, and leadership, which also involved skills “in coaching, mentoring, setting a clear vision and walking the talk.” Leadership skills came into their own in maintaining the momentum of change which varied from one IPT to the next. Greater emphasis was now placed on “understanding what you are trying to do” which involved “knowing the stakeholders
and how best to curry their support” which in part was achieved through “honing relationships”. An activity supported by employing the skills of “liaison and tact”. With the integration of DGE’s area into a once predominantly ECC area, “One of the greatest skills I’ve had to master now I am responsible directly to a military officer, are that his demands are different to a civilian managers demands”. They include differences in “Style of writing, attitude, and when moving from a scientific base to a non-scientific area explaining things in more simple terms”. It was comforting to know that “at the end of the day they are human after all”.

Most thought there were only a few new skills outside of the breakthrough process techniques and one of those was “smart requirements and the need for requirements capture”. New skills were also required for the much closer working relationship with industry that accompanies PFI/PPP programmes. There were also new skills to be mastered in financial management terms like “RAB and the new financial systems and processes”. This was attributable to “Everyone is looking at the balance sheet now”. There were other calls for “entrepreneurial skills and greater strategic thinking” to identify ways of using our staff and resources effectively, how we stretch targets and reduce costs”. Other novel skills to be mastered included “to understand fully capability across the piece as encapsulated in a system of systems approach.” Moreover, to achieve a firm grasp of systems engineering which demonstrably flavours the requirements capture activity. The maintenance of specialist and IT skills was also raised as was the need to understand how MOD functioned, which “is a cultural all on its own”.

Change in corporate image

Like many aspects of change within a large organisation the new status and function of DCDS (EC) and his Board will take time before it is fully recognised throughout MOD. However, within the Centre and the procurement fraternity it was believed that its image had changed to a much “more regarded and respected organisation” because “We have a lot of power from directing a very large budget” and are therefore seen as “essential to the whole procurement process”. Due to the openess that now exists between the procurement bodies it was considered that the Customer image of the ECC had changed for the better in the view of both DPA and DERA. Time and a further severance of single service links, particularly by CMs, will be required before the ECC is finally recognised as a joint organisation. A more holistic view saw the corporate image gradually changing in concert with in -house development of the ECC process, education of the rest of the Department and evolving relationships. Within the DPA it was felt that they had shed their old bureaucratic image and instead they were now on a convergent, modern and more dynamic path with the customer and industry. As a result they were seen “as a more state of the art organisation than maybe we were before,” which was “more focused”. Others saw change in image being caused by the “DPA being associated with very
stringent performance targets, so people think the government has at last got a grip of the procurement end of the business.” And de-layering and creating IPTs have also effected that rejuvenation.

The views concerning industry ranged from SPI being “perceived as not much more than a paper exercise, there’s a lot of wait and see there”. Whereas others believed that industry had a “much greater respect for us, as being more professional as an overall body”. Some romantics felt that MOD was no longer “the soft touch of yesteryear”, a view not shared after my brief respite in industry. Many felt that only concrete evidence of “faster, better, cheaper” would persuade the outside world including industry that it is a new and better way of working and finally accept the new, professional and effective image. There remain a number of DPA respondents that don’t see or anticipate much change in image not because change hasn’t occurred but that industry will continue to fail to deliver and frustrate the SPI.

Key change initiative issues

A strong organisational culture results when individuals come to agree with the organisational values and that is gradually happening by shared experience, involvement and gentle persuasion particularly at CEO and DCDS (EC)/IPTL and DEC level. The long-term benefits of a strong culture include greater commitment and effort, adoption of new behaviour and practise, co-operation, openness, proactive behaviour and initiative, which are recognisable trends that can strengthen culture. To change both the type and strength of the organisation MOD have attempted a combination of changing people, work places, beliefs, values, behaviour, structures, systems, technology and the corporate image again with varying degrees of success.

Other initiatives that could change culture to better develop SPI

It was felt that culture change could be better conducted through “more consultation, rather than just dumping things” and this could also provide “a little more forewarning and prepare the ground.” In addition, progress in culture change should be measured objectively. Senior management should be more actively involved in the change culture process and be more pro-active communicators. Another argument saw the DPA run as a business, because “if that is what it’s being run as, then you can’t define its limits within the normal government rules”. Instead, “you have got to apply business techniques to it, and if that means increasing people’s salary then so be it” because that might also stem the exodus. Although attracting or retaining successful graduates might necessitate a significant increase. One way of harmonising further the civilian and military cultures was to cease “attributing the full cost of servicemen to the DPA” as the cost differential was brought into sharp focus within IPTs and a period of efficiencies. In addition, although RAB was in the process of being introduced
and taught greater emphasis should be placed on adopting a personal responsibility to spend money effectively including the provision of motivators to ensure that they do. Even if this was limited to the cliché of celebrating success.

Team working could also be improved by ensuring that inter team lessons are learned. For example the generation of an IPT business plan is not complicated for an IPT of 200 but to a team of 20-30 it is a significant effort to generate it solely in -house. Some felt that common and time-consuming functions could also be reduced by being conducted centrally. Others felt that there were a “host of corporate DPA” and “most of us have no idea what they do” but if “people did understand the big picture” then they would profit. Others felt that “more has got to be done on the beliefs and values of the DPA to paint a clearer vision of where it's going”. The Executive Board has a greater role to play in “setting the environment and the vision of where they are wishing to take this organisation, and bring people along with it.” It was also thought that if DPA is to align better its culture with industry's then they should be given similar technologies to allow effective communications. Possession of the latest technology would also enhance efficiency. Considerable store was placed in the rapid introduction of the acquisition stream as that was seen as the panacea to education, selection, some harmonisation of cultures and SPI progress.

It was believed that one way of achieving greater “Jointery” was to create another form of matrix management where instead of dedicating people to DEC's they would move into “resource pools” and be available to address issues as they arise and this it was believed would better inculcate a joint culture. Another noted it is “difficult to flush out tribalism with the best will in the world.” The introduction of an effective Bol tool set could however significantly reduce the influence of single service culture on capability. One critical step proposed to identify an ideal procurement system was to allow the system to run without further attrition then using accurate representative modelling it should be possible to populate and refine the model and introduce greater efficiency. This objective measurement tool should remove some of the subjectivity that disrupts the harmony within and across cultures.

Key issues other initiatives to change culture

Culture is continually evolving to cope with external pressures and to reduce internal inefficiency. SPI cannot therefore be viewed as a solution but rather a state of mind that encourages innovative thought and all the proposals tabled could if adopted provide some benefit to the initiative.
Harmonise sub-cultures

It was generally accepted that there was a need to maintain some form of specialist streams whereby expertise in subjects such as finance and contracts were available to the IPTs. And a view is likely to remain that “there are allegiances to those functional heads from a professional point of view.” In the support groups in particular there was a definite belief “it is very important that people's background knowledge is retained and used”. So as with all organisations sub-cultures will continue to flourish not only on a functional basis but also on a teaming basis as the strength of IPT and DEC culture increases. Multi skilling could eradicate some functional concerns but many felt that this could lead to ownership of jacks of all trade.

A solution proposed was to focus all leadership on managing the interfaces between sub cultures more effectively. This could entail walking the corridors more regularly, dealing with topical issues, fighting the cause not the effect, ensuring an effective passage of information, and encouraging social events. Cross pollination of ideas should also be encouraged perhaps on a wider basis than peer grouping or CMs as this too would lesson the contrast between cultures. Cultural differences also existed between the military and the civil servants and two ways of reducing the difference were advocated. One the military should stay in post longer certainly within the DPA and secondly through the acquisition stream all parties should be educated on cultural issues like different reporting systems. The scientific scrutineers appeared to possess a unique culture, which could be viewed as disharmonious with some of the SPI ideals and management on both sides should formally address this issue.

It is expected that cultures and sub cultures will continue to prevail within the DPA and ECC and there is no reason for them to cause friction unless their interfaces are poorly managed. Effective management can be achieved on a pan MOD organisational basis through the Acquisition Implementation Team, at department level by CEO and DCDS (EC) and their respective Boards, at team level by Support Group Leader, IPTL and DECs, and at an individual level by ensuring the individual is content with direction, progress and quality of life. One key issue remains and that is when viewed holistically are the prevailing cultures focused and sufficiently strong to ensure that SPI differs from its predecessors and delivers equipment capability to time, cost and specification? An attempt at answering this question is contained within the Concluding Chapter.
Chapter 10
CONCLUSIONS

“Big scale change in large organisations is definitely not for the faint hearted, or for those looking for quick fixes, or lacking deep pockets\(^{365}\).”

Part One

The main objectives of the research were to identify the prevalent cultures in both the Equipment Capability Customer and the Defence Procurement Agency and establish whether they were supportive or dysfunctional towards the Smart Procurement Initiative. A government initiative aimed at delivering equipment capability faster, cheaper and better and thereby altering the procurement system, which historically was notorious for failing to deliver equipment to time, cost or specification. In order to achieve these goals a literature review was undertaken and a qualitative and quantitative survey conducted. The limitations of the research were time and cost and these restricted the scope of the analysis.

For the purposes of this document I have defined organisational culture as “the commonly held and relatively stable beliefs, values, attitudes and patterns of behaviour that exist within an organisation.\(^{366}\)” This definition allows culture to be measured, changed, related to performance and subjected to empirical investigation.

The following paragraphs provide a brief outline of the major conclusions drawn from the research.

- Since the WWII, the removal of a direct threat to the UK has led to a situation where the population is less supportive of defence and related expenditure. This coupled with a demographic trough resulted in reduced Force levels and defence budget and the prevalence of undermanning. In the same period world order became less stable and so equipment needs were subsumed into a balanced capability required to meet a widening spectrum of unpredictable contingencies. The management of fewer military resources aligned to a need to conduct joint operations saw a gradual but inexorable transfer of power from the single services to the Central Staff.

- With down sizing of military forces becoming an international phenomenon it was not surprising that the use of multi national forces would grow and that defence industries would suffer.

\(^{365}\) Sir Richard Evans and Colin Price, Vertical Take-Off, Foreword, written by Lord Blyth of Rowington, a former Head of Defence Sales and now Chairman of Boots

\(^{366}\) This definition is a hybrid created from those afforded by: Allen Williams, Paul Dobson, Mike Walters, “Changing culture new organisational approaches”, \(^{2}\text{nd}\) Edition; and, Margulies N and Raia AP, “Conceptual foundations of organisational development”. McGraw-Hill, 1978.

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Industrial rationalisation continues a pace both within and outwith Europe in a market place dominated by US conglomerates.

- Since the late 1950s there has been a succession of initiatives aimed at improving defence procurement that attempted in the process to change culture. Strath and Zucherman placed considerable store on harmonious relationships both within the government and outside with industry. Beliefs on how to conduct business were also changed from Downey's vision of IPTs led by a professional Corps of PMs, through to a new procurement cycle involving risk reduction activity. Rayner introduced the Procurement Executive and within that agency sought empowerment for PMs and extolled the benefits of a whole life approach. Levene saw the need to change culture to a commercially orientated one where best value for money was to be achieved through competition. Jordan, Lee and Cawsey envisaged a process wherein degrees of control commensurate with the complexity of the task and the sums being spent were required. They also saw the need for a technical survey that would look at technology on offer and anticipated over equipment's life. Structures have altered from Controller domination through to the disestablishment of Business Units and rationalisation achieved and focused on Abbey Wood. Desktop IT was introduced at the expense of administrators and LANs and WANs are now seen as essential. All these steps involved recognised methods for changing culture and yet the reputation remained tarnished as woefully poor examples of procurement were identified by NAO and broadcast by the media.

- Moving from internal to external factors the three, which have most impacted on defence procurement are geopolitical, technical and industrial. On the geopolitical side the threat of a war between developed states remains unlikely and instead the main sources of conflict are likely to arise in many of the poorer states, bordering on economic collapse, where ethnic tensions and fundamentalism prevail. In this scenario, there is a likelihood that the government will persist in employing the military as currency to buy continuing influence in the world. Working in multinational forces will perpetuate the need for interoperability, commonality and collaboration.

- The military requirement for leading edge technology continues. One of the key technologies is seen as IT, which has already had a profound effect on civil life and commercial activity and thereby attracted significant investment. IT is also seen as the catalyst for the Revolution in Military Affairs, wherein commanders through sophisticated IT driven C3I systems are able to make decisions within the enemy's decision cycle and focus troops and weapons rapidly. It will be imperative that the MOD as a body grasps the IT culture both to progress defence procurement and deliver a battle winning capability.
At the heart of defence policy is the legacy that sought best value for money through open competition and collaboration was also seen as delivering economies of scale as well as military advantage. There is a concerted effort within and between national defence industries to rationalise and thereby give challenge to US might. Rationalisation has been a market/industry driven activity, which has been supported by governments. UK’s dilemma appears to be whether she can continue to play a significant role during European rationalisation and concurrently enjoy a special relationship with US. Whatever the outcome all involved in procurement can expect to operate within multi national and other foreign cultural boundaries.

The Government’s manifesto proposed “a strategic defence and security review to reassess our essential security and defence needs” and two central tenets in the execution were that it was to be “foreign policy and not Treasury led” and forged by a national consensus on defence. The breadth of the consultation was respectably comprehensive with a wide range of expertise including defence industrialists involved, rather than rely on current somewhat myopic in-house military, civil service and political cultures. How these inputs were weighted and balanced remains a mystery although the review was seen by many as both sensible and evolutionary and importantly endorsed by the Service Chiefs, which was novel by recent standards.

The Secretary of Defence commenting in SDR recognised that “too often in the past our new equipment has been too expensive and delivered too late” and for others it was “another example of the defence ministry’s legendary capacity to waste money.” The outcome of SDR addressing mainly SPI, where procurement was tackled from first principles and commercial best practise employed, is outlined below.

Tiered purchasing. Downey highlighted flexibility as key to his new procurement cycle and warned against rigid procedures for all types and sizes of projects. Today for the system to operate effectively a significant change in attitude from Ministers will be required on total visibility and within the DPA and DLO project visibility should not be raised to the highest levels.

Through Life Systems Approach. Rayner first muted this in 1970 and it remains government policy. However, alternative solutions were not afforded similar priority to preferred solutions and there were no effective B o l tools. Moreover, projects often failed to attract adequate funds for training and logistic support. These failings could be overcome if ECC, DPA and DLO adopt a more open, joint and broad vision and ECC invest more effectively in adequate modelling tools.
Revised front-end process and oversight mechanisms. The need for substantial early investment has been a constant theme first postulated by Gibb/ Zuckerman in 1961 and repeatedly echoed by Downey and Jordan et al 20 years later. Because people are reticent to spend significant sums when there remains a risk of project abort there remains a probability that the attitude of under spend will remain. With only two approval points time is expected to be saved but main gate, where production funds are approved and when trade offs have been made, comes earlier in the revised cycle than in Downey’s and yet the same risks have to be managed with less visibility.

Incremental procurement. Jordan et al first muted the concept of incremental acquisition. The manifest advantages of the system have to be carefully balanced against investing in an unknown final quantity because prime contractors not liable to further competition are able to set incremental costs. Furthermore greater turbulence is created in the front line in incremental updates.

Transition from a functional to a project based organisation focused around IPTs. A vision put forward by Strath and supported by Downey, which included closer partnering by industry. This concept has numerous benefits not least the creation of a common team cultures where frustrated relationships of yesteryear are forgotten. The concept does however go against the principle of centralised management of input and resources and to degree the requirement for independent scrutiny. It is also an expensive way of managing resources and places more store in effective, empowered and accountable leadership.

A specialist acquisition stream. Interestingly, the acquisition stream and IPTLs are the only two areas that address the requirement that to improve the efficiency of the organisation you have to improve the management of the people. Downey and Rayner had also predicted the need for a specialist project stream and emphasised that the military would have to spend longer in post to make a positive contribution. Given the critical importance of the stream to culture change it is disappointing that it took an inordinate period before acquisition stream concepts matured.

Improved commercial practises. A number of common commercial enterprises, also identified by Downey and Levene, were proposed to incentivise contractors to meet targets. These included fixed price contracts for agreements under 5 year’s duration and contracts over 5 years should have variation clauses based on general output indices. Incentives and disincentives were to be increased and the past history of companies analysed as part of the
approval process. A number of questions remain. Can a profit culture gel with that of the
custodian of taxpayers' money or can tighter incentivised contracts deliver a more harmonised
relationship or will strengths continue to be deployed against each other?

- In isolation, the SPI proposals make sense, inasmuch as they represent best commercial practise
although they could be seen as the timeless nostrums that are applied to any study of defence
procurement. However, SPI failed to appreciate the limitations imposed by the prevailing culture
perhaps because no formal measurement of culture was conducted. Placed together however they
are a novel package that has been given added and new impetus through investment to strengthen
and change the culture.

- The SDR places a firm commitment to maintaining a strong UK defence industrial base but only
touches upon the thorny issue of arms export in an increasingly competitive marketplace. Defence
diversification and greater rationalisation within Europe were supported with a pledge of
government assistance to industry. How UK can maintain concurrently and progress a national,
European and UK/US relationship remains unclear but whatever course adopted the need for an
understanding of international organisational cultures is once again demanded.

- In SDR DERA was seen as having a key role in any future procurement process. This role has
been expanded recently to DERA being divided into two bodies. NewDERA will be floated on the
Stock Market summer 2001. For strategic reasons, particularly the maintenance of joint UK/US
research, the MOD would also possess Retained DERA. It will comprise a core group of staff
providing knowledge and an in-house source of impartial advice, conducting research and having
responsibility for the integration and management of the research programme and international
research collaboration. This divide is also likely to satisfy industry that may then see NewDERA
as an equal competitor for government contracts. DERA too has been exposed to a great deal of
change during the past decade. How it will react to a further culture change cannot be predicted
but whatever the outcome, other MOD partners will have to ensure that retained DERA is fully
integrated into the procurement and research process and allowed full access to the acquisition
club.

- To ensure SPI success it is essential that the government maintains control and momentum and
here the continuing functioning of the Acquisition Implementation Team is respected as its regular
reports to Ministers. As with many change programmes there is a degree of unhealthy haste to
achieve quick wins as well as being expected to deliver long term savings. Here I strongly agree
with Dick Evans, the ex-CEO of British Aerospace, who viewed his own successful, change culture, programme more as “an evolutionary activity”.

- All participants in defence procurement are actively involved in some form of change and to differing degrees are suffering from over exposure to change. It is therefore imperative that care be taken to ensure that a holistic overview is maintained throughout implementation to deliver a consistent, coherent and complete set of relationships within the overall culture. Moreover, new practises, processes and organisations are being introduced which again will impact on values, beliefs and attitudes. What is strange for a Review that recognised much change was involved in implementing SPI was the absence of detail regarding what was required of the change process.

Part Two

- Most large organisations like the Armed Forces and Civil Service have become well established over time and possess a mature culture, which is hard to change because it has persisted for so long. In commerce culture change is more the norm as they attempt to respond to external influences to remain competitive in the market place. Sub cultures also persist because they support real and necessary differences in working patterns and responsibilities. Differences at whatever level require careful management to prevent friction and segmentation. It was recognised in SDR that cultural problems did exist. It should be recognised that as the nature of many organisations are changing their leaders still need to continue to create alignment, inspire people to give of their best and improve performance and one avenue for achieving this strategy is culture change.

- Through the process of socialisation there evolves a common and largely unconscious understanding of appropriate behaviour. This process, which covers Committee activities, reviews and the employment of multi disciplinary/cultural groups provides further opportunities to harmonise disparate cultures on a local, national and international basis. Working in a common operating environment has a similar effect. Culture is also likely to be self-perpetuating through the recruitment and promotion of individuals with similar values. Culture is also historically based and therefore a culture change aided by external consultants is more likely to deliver radical change than an internal exercise. To drive through change requires leadership and direction from senior management and the dichotomy faced is that they are the most steeped in yesterday’s culture.

367 Jan Thornbury, Living Culture, Page 7
Common beliefs spring from issues of common concern and can differ within and between organisations. Societal variances also impact and create differences in organisational culture. Through the expansion and greater experience of NATO, WEU and OCCAR a more harmonious and common procurement and military organisational culture could develop.

Culture change needs to be driven by a focus on business strategy and performance, as well as programmes specifically designed to change culture and values. Internal and external impetus can assist in defining these parameters and were provided in SDR by the FCO, MOD and the Treasury. Such programmes are a slow process and are estimated to take from 5 to 8 years before there is a real impact on the culture of a large organisation and any lesser time spent creates a danger that the new culture is only superficially different from the old and traditional patterns or ways of doing business soon reassert themselves.

The aim in any change culture activity is to create an environment where inefficient business processes are removed and people are bound to develop new values and behaviours. Although opinions differ on the most effective way to manage change, there is a growing opinion that senior management should direct a, “non-directive process”, by creating a climate for change, defining core objectives and values, disseminating examples of success and failure, and providing support for all parts of the organisation to develop their own response. In many respects the MOD has followed a non-directive change process, which is in itself very novel for the MOD. However, a key ingredient lacking from the MOD’s approach was a sound understanding of the prevailing cultures.

Key quantitative ECC results are

From the results of the quantitative survey the following issues arise. The two primary styles in the ECC organisation are Achievement and Power both scoring 79%. People identifying with Achievement goals are renowned for thinking ahead and planning, not taking risks and knowing their business. With current responsibilities these appear ideal qualities for the task and are indeed close to the ideal score of 83%. Aggressive defensive cultures tend to emerge in very “fast paced” environments where people are required to act and think very quickly on a regular basis and all ECC members but particularly the military fall quite neatly in to this category. Power specifically sits comfortably as a norm with people who have relatively great authority inherent in their positions but it is not a quality recognised for respecting imposed

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370 Allen Williams, Paul Dobson, Mike Walters, “Changing culture new organisational approaches.”
change. An opportunity exists to take remedial action as the ideal percentile was exceeded by some 65%.

- The secondary style in the organisation is Oppositional, which achieved an aggregate score of 73% against an ideal of 47%. In this instance, the score was above average and the intensity weak so opportunities to reduce this behavioural trait exist. One of the biggest concerns remains the continued pre-eminence of the Single Services and their adoption of an Oppositional culture: two ingredients that unduly influenced past decisions. If they don't transition to a more purple orientation their Oppositional stance could lead to unnecessary conflict, poor group problem solving and watered down solutions to problems: the antitheses to what is envisaged as emanating from such bodies as the Joint Capability Board (JCB).

- The ECC's weakest style was Affiliative with an aggregated score of only 19% at an average intensity against the ideal of 76%. In addition to being the weakest style, this was also the largest cultural gap between the ideal and questionnaire results. It is ironic that in a military orientated body so little store was placed on positive interpersonal relationships and yet back with their troops this same quality is sacrosanct. Every effort is required to alter course if the co-operative stance required of the role is to mature and fortunately the strength of the culture allows this.

- Within the organisation there was a general and somewhat surprising perception that even at this embryonic stage people felt content with what is expected of them. This is either a reflection on clear briefings, which is fairly typical of the military on re-organisation or is a reflection on the shared ignorance reflective of a lack of experience. I favour the latter, as in many respects many of the processes were still in a formative stage and new responsibilities being learned. All aspects of consistency appeared satisfactory although there is clearly room to improve further given the SDs identified of between 1.0 and 1.2. Fitting in was scored higher by the military than the civilian body, which is probably due to their predominance.

- The average person appeared satisfied with being a member of the organisation but was not so committed as the constructive benchmark or the historical average. That said, as the SD was 1.1 there is clearly a need for further bonding activity. The longevity of tour was sure to expose the question of different tour lengths and as was to be expected the Forces dragged down the scores and few anticipated being in situ 2 years hence. There is a real issue regarding the recommendation to friends to take up a post in the MOD as it exposes quite a discernible dip within the SD. However, few people in my experience found the MOD a particularly enjoyable environment in which to work and those who had not shared the experience counted
themselves fortunate. It is interesting to note the significant shift that has taken place in regard to the customer now that Customer 1 is identified and perhaps it is not startling that the reputation is low in customer care as the whole concept is in its infancy.

- So the overall culture within the ECC is not strong and therefore receptive to change. With all the emphasis placed on co-operation, IIP et al it is of concern that the Constructive scores were so low where other less attractive traits thrived. I was unpleasantly surprised to find that junior officers felt little sense of belonging to the ECC. This does not mean that morale was low but other military environments were more appealing and at most were often only a few years away: a state apparent no doubt to their civilian peers.

Key Support Groups findings are:

- The primary style in the Support Groups was Oppositional scoring 69 %, which is both above average and of a strong intensity. Moreover, this score was some 22% above the ideal. This result is disappointing, as over time Oppositional norms encourage norms of avoidance, as members become increasingly frustrated with the negativism that prevails. Should an air of being second class within DPA prevail within the Support Groups then resentment and demotivation could occur.

- The secondary Support Group style is Avoidance, which achieved an aggregate score of 65% against an ideal of 21%. In this instance, the score was above average and the intensity weak and so opportunities to lessen this behaviour style exist. And a change is required as an Avoidance culture can encourage the most security-orientated behaviours, which in turn encourage the maintenance of the status quo rather than promoting change.

- Their weakest style was Self-Actualizing at 23% with an average intensity against the ideal of 81%. In addition to being the weakest style this was also the most significant cultural gap between the ideal and questionnaire results. The Support Groups tend to contain the most conservative sub groups in the DPA, as in many respects it is their consistency of approach that provides the requisite stability for an advisory and supportive, professional body. A redistribution of DPA assets conducted by (theoretically IPTs were afforded the opportunity to select from the crème de la crème) a regular exchange of roles between the two sectors would reap rewards.

372 Ibid. Page 43.
It was notable that Support Groups felt content with what was expected of them but many would not have altered course significantly post SPI. Clearly a consistent message is received as far as what is expected of them because the historical average was achieved. “Fitting in” is also an important perception to any member of a newly structured and formed body particularly when culture change has been a key initiative. Although they have yet to achieve the historical average this is not a distant goal.

There is clearly an air of dissatisfaction with membership of the Support Groups and a case exists for attempting to change the culture further by making it more people rather than task orientated. However, there is a major dislocation in the recommendation to those similarly inclined to join the Support Group and this is perhaps a strong reflection on today’s unknown attainments combined with a heritage of publicly recognised under achievements. As might be anticipated the commitment to the customer was well supported and no doubt it was recognised in that step that currently it is a fixed relationship and secondly that their past reputation was poor.

What was the overall cultural image that I took away? A body of people who currently don't share the limelight who would like to assist IPTs more and clearly have not been quite so influenced as others by SPI. There was little evidence of a strong culture and so they too have opportunities to develop further their Constructive styles. Cross posting of personnel between the two DPA Groups would help in the longer term to remove any perceived class differential, as would increased impetus being given to mentoring.

Key IPTL sub group findings:

As a small vignette I would like to reveal one sub group whose culture was relatively strong and statistically significant, namely that of the IPTLs. The key features of their culture being the high dependency on Passive and Aggressive/Defensive styles with much less regard for the Constructive styles. This position would appear to be out of kilter with the conventional IPTL image. However, the responsibility and pressures falling on the IPTL shoulders during these early stages has no doubt created a common purpose and impetus to deliver and this is likely to have influenced behaviour. Future activity should include further team building and achieving a more shared set of values; a set of values where the move towards Constructive styles across the IPTs plays a part and IPTLs lead by example.

Key DPA IPT Group findings are:
• The primary style in the IPT Group was Oppositional scoring 73 %, which is both above average and of a strong intensity. Moreover, this score was some 26% above the ideal. This tendency, which is shared with the Support Groups, has slightly greater repercussions if not altered as it introduces a potential air of conflict with customers and poor group solving.\textsuperscript{373} Behaviours that are the antitheses of a professed and idealistic IPT culture. These conflicts could involve customers and industry, which again is not in accord with SPI ideals. As this behavioural style is strong within the Group work will have to be set in train to reduce its hold.

• The secondary style in the IPT area was Avoidance, which achieved an aggregate score of 73% against an ideal of 21% and it too was similar to the Support Group culture. However, there is only a weak inclination to this style, which leaves room for improvement. An action that is necessary as organisations that fully adopt this style tend to be unsure about their responsibilities and authority and often become uncommitted and push problems in the direction of other areas.\textsuperscript{374}

• The weakest style in the IPTs was Self-Actualizing at 19% with a low strength and high intensity against the ideal of 81%. In addition to being the weakest style this possessed the most significant cultural gap at 62% between the ideal and questionnaire results. Self-Actualizing behaviour is important in and to a workforce as it encourages lateral thought, and personal growth and development,\textsuperscript{375} which in turn has a high impact on innovative thought and morale.

• With a score equal to the historical average and approaching the constructive benchmark the IPTs should be content that initial briefings covering role clarity have been clearly understood. Furthermore the consistency in their messages received was also impressive. With so much turbulence it is not surprising that a sense of belonging was weak or that people saw that they were required to think differently in an environment that was almost novel to all.

• With recent turbulence and a chequered history it is not surprising that people are not entirely satisfied regarding membership of an IPT. Similarly the strength of support for recruiting in to the Agency and their expectation for remaining in post should not disappoint. One way of countering this relative lack of commitment would be to create an even more constructive and people orientated culture. A culture where programmes are introduced to promote more

\textsuperscript{373} Janet L. Szumal, "OCI Interpretation & Development Guide, Page 61
\textsuperscript{374} Ibid. Page 37.
\textsuperscript{375} Ibid. Page 21.
effective interpersonal relations; and selection procedures become more effective by taking into account the “fit” between the applicant and the job as well as the “fit” between the applicant and the organisation.

- Similarly, the approach to customers could have been anticipated because of the desire to demonstrate a customer-orientated culture, as their reputation was for self-fulfilment. The belief that the customer base will remain intact presupposes that DPA will remain in the government sector, which could be challenged if DERA’s launch pays dividend.

- Other key findings are:
  
  - When considering the military culture across all groups the primary styles in the ECC and DPA military sub-groups differ significantly. This would imply that military staffs do not necessarily travel with a standard military cultural baggage but rather modify their culture dependant upon the task and environment. The function, environment, and modus operandi effect this diversity.

  - The Scientists/Engineers found in both the ECC and IPT Groups both demonstrate an above average inclination towards an Aggressive/Defensive style, with their respective primary styles being Power and Oppositional. A key factor, which induces this cultural inclination, is the significant downsizing the scientists have experienced across the MOD both recently and extending over the past decade. The other factor, which creates a different culture, is the disparity in roles. It could be argued that many scientists have an Oppositional culture, as they require firm evidence to support new concepts, defend their own work valiantly, and are hard to impress.

  - The primary style of both the IPT and Support Groups is Oppositional and the secondary style Avoidance. They also share the weakest style of Self-Actualizing, which provides the widest gap with the ideal. There is little to distinguish between the two groups in terms of percentile and strength and the intensity is also close. This would make any future change process easier to manage, as it could be common to both.

  - When comparing the IPT and Support Group findings with the ECC area again similar cultural trends can be seen. However, the ECC area is less Passive/Defensively orientated

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than the Agency and this could be attributable to a much greater degree of autonomy and empowerment shared by members. Their commitment to the Aggressive/Defensive behavioural norms is similar to the DPA. The Constructive styles are also their weakest although they have a penchant for Achievement not enjoyed in the DPA. Future change culture activity could focus on growing Constructive styles at the expense of Passive and Aggressive/Defensive norms across all Groups and this might assist Acquisition stream training and inspire a new generation to put increased store into quality, creativity, cooperation and effectiveness as judged at the system level.

- The SD of the responses, which revealed the intensity of agreement among respondents, illustrates that at the Aggregate level only seven areas were deemed strong, ten were viewed as weak, one very weak, and eighteen average. This suggests that to introduce further change would not be difficult particularly as the strong intensities were not common to the three aggregated areas of IPTs, Support Groups and ECC.

- The ideal style adopted was that offered by the OCI, albeit it was structured on a wide range of successful organisational cultures. It would be more helpful to any future analysis to capture also the MOD staffs’ ideal culture profile and this can be conducted using another and complementary OCI process. In so doing, a clearer insight into the workforce and a greater involvement by them in the change process would be achieved. There would be merit in also applying the OCI ideal style to conduct a pair-wise comparison between measurements. It would be helpful to allow at least two years to elapse before another survey is contemplated thus providing further time for culture change to occur.

- If it is accepted that beliefs underlie the formation of attitudes and values then consequently the target for culture change is the beliefs that individuals hold. From the qualitative survey conducted with ECC and DPA staff the following points are drawn.

- The key beliefs identified included:
  - SPI philosophy was almost universally accepted as participants shared the perception that MOD procurement was inefficient and failing the Forces.
  - Both the "separation of equipment acquisition from capability management" and the capability structure were accepted but the continued single service influence caused concern. SPI also delivered a "frame work to provide a more coherent capability".
  - The strongest belief was in IPTs and DECs. Specifically in the way in which, "they have given those teams real substance, a real belief in themselves".

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377 Williams, Dobson and Walters “Changing Culture, New Organisational approaches”, Page 78.
• There were also negative aspects of SPI in which interviewees believed that:
  • There was unequal resource allocation for culture change across MOD, which was divisive. A division, which also extended to other parts of MOD where SPI was neither understood nor practised. A limitation levelled also at industry.
  • There was a very strong disbelief that the efficiencies sought were predicated on any credible analysis, and that much of the £2Bn project savings identified were also poorly identified or underwritten. Hence although SPI was likely to be faster and better in terms of delivering capability “cheapness” was not a shared belief. Rather it was preferred that value for money should continue to influence all parties.
  • Values like beliefs are also foundational because they embrace those qualities and principles that are agreed to and considered worthwhile by individuals and the organisation. The trick, which is often missed, is ensuring that old and new values become or remain part of the living culture as Jan Thornbury referred to it. Where there is disagreement between organisational and individual values it needs to be addressed because negative values can slowly erode confidence in the system and could significantly impact on SPI progress.
  • The key values identified included:
    • Agreement with the SPI philosophy coupled with the ethos being injected into all teams of “go and search”, and “try and do that”. There was general agreement with “being innovative”, the “empowerment of DECs and IPTs”, “close involvement with industry-better relationship with British industry”, and the “customer having greater control of financial affairs” and “greater cohesion within the logistic organisation”.
    • ECC and DPA’s internal organisations were seen as “devolving a certain level of accountability and also providing identifiable people who are accountable for their projects.” The “emphasis on team working” was also applauded, as was the ability of the system to bring “all disciplines to bear on the problem rather than trying to tackle it through stovepipes”. Interestingly, the Customers “strongly agreed with the concept of an IPT leader” and with it the removal of many extraneous hands.
  • Many interviewees did not think it appropriate to make negative judgements at such an early stage, albeit many did not, “agree wholeheartedly with everything in SPI.” Disagreements with SPI included:
    • There was a strong disagreement with the split between DPA and DLO. To overcome this some wanted to “make it one organisation”. Within the DPA there was concern within the civilian ranks of employing the military, which cost more and because of tour lengths
were less knowledgeable. There was disagreement also with the XB’s functions and with them apparently not acting corporately.

- Within ECC many felt that, “the organisation that we have at the moment has got a lot of baggage from the old system’s area”. In most respects this was not a reflection on personality but rather an indictment of the single service presence.

- Beliefs like attitudes are learned and are influenced by experience. And as with values failure to consider existing attitudes may well result in dissatisfaction, minimal involvement and antagonism, which can all impact upon the organisational performance. Their likes included:

  - “All the major stakeholders forming into teams” and “the recognition that there is more than one stakeholder”. Similarly, the advantages of teaming being publicly recognised because it provided the impetus and status necessary for these mostly autonomous bodies to succeed.
  - The formal involvement of second customers into IPT and CWG activity, integration of DGE’s area into ECC, and RMs into IPTs were all liked for the beneficial synergy created. One DEC felt that “What turns me on is the ability that I and the IPT team leader can sit down and say this is wrong I want to stop this”.
  - The aspect of SPI most liked was that “as a taxpayer at the end of the day I might see costs coming down and waste being reduced”. Also much appreciated was “a fully empowered team working within discrete bounds and having limits”.

- Dislikes covered

  - MOD mentality where “we do change in order to save operating cost and invariably we take the saving before the change has even been introduced”. Antipathy was also associated with the “lack of a coherent processes”, as there was no “arrangement to veer and haul equipment programme money and internal operating cost money” for the mutual benefit of all interested parties.
  - With IPT autonomy a type of “de-coupling process” had occurred resulting in a feeling of “isolation”. This was linked to the demise of BUs that had created extra demands and new pressures. These new and often disliked pressures included “the amount of responsibility that has been dumped on my shoulders” with little guidance readily available. One DEC opined, “I physically dislike the way that we are being scrutinised.” He along with many others placed the cause at the scientific scrutineers’ feet.
• Allen Williams et al\textsuperscript{378} felt that if organisational culture change is linked to organisational performance then the beliefs that individuals hold about behaviour couldn’t be ignored. Some of the recognised behaviours were:

• New working practises included co-operation and “having a shared view of the world”. Greater openness between the customers and suppliers, which increased harmony. Delayering created a much closer relationship between the DECs and IPTLs. The integration of DGE’s staff provide a change of course whereby “we have to continue to be critical but it’s critically helpful”. Closer partnering with industry was seen as a very much “hands and eyes on” approach.

• Behaviours related to customer/suppliers or industry saw the clarity of responsibilities “allowing new identities to be adopted and new relationships to blossom and bear fruit”. Customer supplier agreements had done much to cement responsibilities and deliverables and build joint confidence, as had the presence of RMs in IPT ranks. The customer has also “become a lot more financially aware of some of the things IPTs are doing” and were “willing to trade cost against performance and be more flexible”. Some in DPA felt that ECC desk officers lacked an understanding of SPI and with it procurement in general. Industrial relationships varied from being “conscious of their position in that market place” to a more dramatic approach where “partnering agreements and codes of conduct have been agreed and signed” where “we didn't have them before”.

• Tools put in place introducing new behaviour included, the Capability Area Planning Information System (CAPMIS) described by ECC as “the one tool that has so far come in” providing shared project data and “removing another area of confrontation.” “CAPs are a powerful tool because you capture your finances, you research the gaps”. A tool first used by some during breakthrough was brainstorming which had added greater involvement to the decision making process.

• Practical management steps adopted included “the creation of a true team environment” although some felt that continuance team training had never happened. The integration of DGE’s staff into DCDS (EC)’s management boards and more focused management plans both helped to inculcate a sense of a common purpose.

• Rewards schemes were not generally viewed as effective motivators but rather divisive because of the military dimension. Bonus schemes and performance related pay were

\textsuperscript{378} Williams, Dobson and Waters, “Changing Culture, the Formation of Organisational Culture”, Page 47.
ineffectual. The appraisal/reporting schemes were seen as providing an opportunity - if you get a good report to "move on", which in turn was considered "probably the biggest motivator we have got for the staff". Motivation was created through achievement, attitudes, success, loyalty, and pride. Recognition was possibly the most highly prized reward as for many "all they want is the line managers to congratulate them when they have done a good job:"

- The creation of IPTs and CWGs has made an invaluable and synergistic contribution to capability because "if we aren't vigorous in thinking through what we should buy, the efficiency with which we buy it is perhaps not that important". By bringing all the players together in to one team it also "gives the IPTL the tools to achieve the acquisition that probably they lacked before", albeit industry was noted for its absence. The outcome of CWGs was "a better handle I should say, its getting better all the time, of customer two and the true users' needs as opposed to our perception of it."

- As can be seen behaviour has changed quite significantly across the procurement spectrum with new functions adopted, new relationships formed often between more autonomous bodies, and advisory rather than adversarial partnering anticipated. Whether all tools are in place to realise aspirations or whether the reward schemes are effective motivators remains in doubt and should be revisited for the sake of SPI.

- A strong organisational culture results when individuals come to agree with the organisational values and that is gradually happening by shared experience, involvement and gentle persuasion particularly at IPTL and DEC level. Other change initiatives include:

- The recruitment, selection of key people and redundancy schemes involved downsizing prior to Abbey Wood and the voluntary retirement scheme, led to the loss of "some dead wood" and "an awful lot of expertise and knowledge" from DPA. It was also seen that recruitment and selection are two avenues, which can demonstrate a "culture that we don't just appoint muggins when it is his turn". Although there was a certain reticent to explore fully open competition and a number of people failed to notice much difference in the selection process noting "that it is the same sort of people who are now heading the IPTs that were PMs". For ECC London was attractive to the people seeking influential appointments and power but other professions were becoming more attractive and drawing potential recruits.
The movement of MOD staff across areas was also likely to harmonise cultures and most supported the philosophy of “having people develop the requirements that are actually part of the project team”. The ability to “talk on a day by day basis” had led to a “much better understanding of what both parties were trying to do” and “a sense of getting it from the horse’s mouth”.

The most critical new skill adopted was “how we communicate differently and more effectively with people both within our team and externally”. Leadership skills came into their own in maintaining the momentum of change and they varied between teams. Greater emphasis was now placed on “understanding what you are trying to do” which involved “knowing the stakeholders and how best to curry their support”. One DGE member responsible directly to a military officer saw “his demands are different to a civilian managers demands”. It was comforting to know that “at the end of the day they are human after all”.

There was a perception that ECC’s corporate image had altered within the Centre and the procurement fraternity as they were a much “more regarded and respected organisation” because “We have a lot of power from directing a very large budget”. Within the DPA it was felt that they had shed their old bureaucratic image and instead they were now on a convergent, modern and more dynamic path with the customer and industry. They thought that Industry saw SPI as being “perceived as not much more than a paper exercise”. Whereas others believed that industry had a “much greater respect for us, as being more professional as an overall body”.

The long-term benefits of a strong culture include greater commitment and effort, adoption of new behaviour and practise, co-operation, openness, proactive behaviour and initiative that are new trends, which again are recognisable. To change both the type and strength of the organisation MOD have attempted a combination of changing people, places, beliefs, values, behaviour, structures, systems, technology and the corporate image again with varying degrees of success.

Culture is continually evolving to cope with external pressures and to reduce internal inefficiency. SPI cannot therefore be viewed as a solution but rather a state of mind that encourages innovative thought and all the following internal proposals have potential to benefit SPI.

- Senior management should be more actively involved in the change culture process and be more pro-active communicators.
- DPA should be given greater autonomy and be run as a cost-effective business.
• One way of harmonising further the civilian and military cultures was to cease attributing the full cost of servicemen to the DPA.

• Greater emphasis should be placed on adopting a personal responsibility to spend money effectively including the provision of motivators to ensure that procurement staffs do.

• Team working could also be improved by ensuring that lessons are shared more widely between teams.

• Some felt that functions should be conducted centrally which could also reduce common and time-consuming activity like ILP.

• Others felt that “more has got to be done on the beliefs and values of the DPA to paint a clearer vision of where it's going”.

• Considerable store was placed in the rapid introduction of the acquisition stream as that was seen as the panacea to education, selection, and some harmonisation of cultures and SPI progress.

• It was believed that one way of achieving greater “Jointery” was to create another form of matrix management where instead of dedicating people to DECs they would move into “resource pools” and be available to address issues as they arise.

• The introduction of an effective Bol tool set could significantly reduce the influence of single service culture on capability.

• A working procurement model would help efficiencies and improvements to be identified and justified.

• Progress in culture change should be measured objectively.

• There was a general acceptance that sub cultures did not detract from the organisational culture but rather added specific qualities and pressures to enhance the quality of output. It was apparent that other sub cultures beyond those professional and hierarchical orientated groups were also growing within IPT and DEC teams. Multi skilling could eradicate some functional concerns but many felt that this could lead to ownership of jacks of all trade.

• A solution to resolve sub culture disharmony was to focus all leadership on managing the interfaces between sub cultures more effectively. This could entail walking the corridors more regularly, dealing with topical issues, fighting the cause not the effect, ensuring an effective passage of information, and encouraging social events. Cross pollination of ideas should also be encouraged perhaps on a wider basis than peer grouping or CMs as this too would lessen the contrast between cultures. Cultural differences also existed between the military and the civil servants and two ways of reducing the difference were advocated. The military should stay in post longer particularly within the DPA and through the acquisition stream all parties should be
educated on cultural issues like different reporting systems. The scientific scrutineers appeared to possess a unique culture, which could be viewed as disharmonious with some of the SPI ideals and management on both sides should formally address this issue.

The overarching message is that the SPI is novel in bringing together a package of commercial and governmental best practises and an organisational culture change influencing both the type and strength of the culture. Both surveys identified opportunities to improve the organisational cultures, recognising that some useful traits were developing and yet old beliefs, values, attitudes and behaviour continued. Post re-organisation the culture strength is low, which is not unusual at a formative stage in the change process and this phenomenon provides the scope to refine the direction and speed of development.

One critical deficit is the ownership of an effective balance of investment tool set, which hinders the capability process. One criticism levied is against the inexorable demand for efficiencies and the unquantifiable impact that has on procurement. A correlation between operating costs and capital costs would assist in justifying further demands upon the System.

Continuous government scrutiny of the total acquisition process should be maintained to ensure that the SPI policy is being implemented and developed effectively. As part of this process measurement of the personal, professional, financial, technological, commercial and military benefits predicted should be objectively assessed together with the prevailing cultures.

Will SPI succeed, which after all was the question posed? The energy and resource expended in progressing SPI to date is unique in the annals of UK defence procurement. A clear strategy was laid down in SDR, processes introduced and organisational restructuring conducted. There is no strong dysfunctional organisational culture at this stage and with prudent investment over time a strong supportive culture could develop. However, the ECC and the DPA cannot deliver alone and other key partners in the acquisition process, most notably the Commanders in Chief, DLO, DERA and Defence Industry all need to continue or increase their support and thereby give further impetus to SPI. If all these events occur in a timely and synchronised fashion it is likely that equipment capability could be delivered faster, better and, shall we say, achieve best value for money.

RECOMMENDATIONS

It is recommended that the MOD consider the conclusions of this paper. In addition, that their continued vigil over SPI includes a further insight into developing culture.
Organizational Culture Inventory

Every organization has its own culture and set of expectations for its members. For example, some organizations are "competitive" and members feel that they must out-perform one another; other organizations are "cooperative" and members are more likely to feel they should work together as a team.

This inventory presents a list of 96 statements which describe some of the behaviors that might be expected or implicitly required of members of organizations. Please read each statement and indicate the extent to which the behavior described helps people to "fit in" and meet expectations in your organization.

When responding to the statements, you might find it helpful to consider the behaviors expected and rewarded by people in higher positions. Please keep in mind that all the statements refer to the way people within your organization are expected to deal with one another rather than with people external to the organization.

Instructions

Please think about what it takes for you and people like yourself (e.g., your co-workers, people in similar positions) to "fit in" and meet expectations in your organization. Selecting from the response options below, indicate the extent to which each of the behaviors listed on the following pages is expected.

To a very great extent
To a great extent
To a moderate extent
To a slight extent
Not at all

Please observe the following when marking your answers:

1. Use a No. 2 pencil, not ink or ballpoint pens.
2. Fill in your answer "bubble" completely as shown above.
3. Erase completely any answers you wish to change.
4. Do not mark any other part of the answer sheet.
5. Mark only one response per question.

Confidentiality

Your answers are confidential. They will be computer scored, combined with the responses of others, and summarized in group profiles to be used exclusively for organizational change and development purposes. No Individual responses will be reported.

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Research and development by Robert A. Cooke, Ph.D. and J. Clayton Lafferty, Ph.D.
### To what extent are people expected or implicitly required to...?

<table>
<thead>
<tr>
<th>To a very great extent</th>
<th>To a great extent</th>
<th>To a moderate extent</th>
<th>To a slight extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>look for mistakes</td>
<td>look for mistakes</td>
<td>look for mistakes</td>
<td>look for mistakes</td>
<td>look for mistakes</td>
</tr>
<tr>
<td>oppose things indirectly</td>
<td>oppose things indirectly</td>
<td>oppose things indirectly</td>
<td>oppose things indirectly</td>
<td>oppose things indirectly</td>
</tr>
<tr>
<td>encourage others</td>
<td>encourage others</td>
<td>encourage others</td>
<td>encourage others</td>
<td>encourage others</td>
</tr>
<tr>
<td>back up those with the most authority</td>
<td>back up those with the most authority</td>
<td>back up those with the most authority</td>
<td>back up those with the most authority</td>
<td>back up those with the most authority</td>
</tr>
<tr>
<td>switch priorities to please others</td>
<td>switch priorities to please others</td>
<td>switch priorities to please others</td>
<td>switch priorities to please others</td>
<td>switch priorities to please others</td>
</tr>
<tr>
<td>compete rather than cooperate</td>
<td>compete rather than cooperate</td>
<td>compete rather than cooperate</td>
<td>compete rather than cooperate</td>
<td>compete rather than cooperate</td>
</tr>
<tr>
<td>never appear to lose</td>
<td>never appear to lose</td>
<td>never appear to lose</td>
<td>never appear to lose</td>
<td>never appear to lose</td>
</tr>
<tr>
<td>set moderately difficult goals</td>
<td>set moderately difficult goals</td>
<td>set moderately difficult goals</td>
<td>set moderately difficult goals</td>
<td>set moderately difficult goals</td>
</tr>
<tr>
<td>pursue a standard of excellence</td>
<td>pursue a standard of excellence</td>
<td>pursue a standard of excellence</td>
<td>pursue a standard of excellence</td>
<td>pursue a standard of excellence</td>
</tr>
<tr>
<td>work for the sense of accomplishment</td>
<td>work for the sense of accomplishment</td>
<td>work for the sense of accomplishment</td>
<td>work for the sense of accomplishment</td>
<td>work for the sense of accomplishment</td>
</tr>
<tr>
<td>follow orders – even when they’re wrong</td>
<td>follow orders – even when they’re wrong</td>
<td>follow orders – even when they’re wrong</td>
<td>follow orders – even when they’re wrong</td>
<td>follow orders – even when they’re wrong</td>
</tr>
<tr>
<td>check decisions with superiors</td>
<td>check decisions with superiors</td>
<td>check decisions with superiors</td>
<td>check decisions with superiors</td>
<td>check decisions with superiors</td>
</tr>
<tr>
<td>question decisions made by others</td>
<td>question decisions made by others</td>
<td>question decisions made by others</td>
<td>question decisions made by others</td>
<td>question decisions made by others</td>
</tr>
<tr>
<td>remain aloof from the situation</td>
<td>remain aloof from the situation</td>
<td>remain aloof from the situation</td>
<td>remain aloof from the situation</td>
<td>remain aloof from the situation</td>
</tr>
<tr>
<td>refuse to accept criticism</td>
<td>refuse to accept criticism</td>
<td>refuse to accept criticism</td>
<td>refuse to accept criticism</td>
<td>refuse to accept criticism</td>
</tr>
<tr>
<td>help others think for themselves</td>
<td>help others think for themselves</td>
<td>help others think for themselves</td>
<td>help others think for themselves</td>
<td>help others think for themselves</td>
</tr>
<tr>
<td>be liked by everyone</td>
<td>be liked by everyone</td>
<td>be liked by everyone</td>
<td>be liked by everyone</td>
<td>be liked by everyone</td>
</tr>
<tr>
<td>out-perform their peers</td>
<td>out-perform their peers</td>
<td>out-perform their peers</td>
<td>out-perform their peers</td>
<td>out-perform their peers</td>
</tr>
<tr>
<td>be a “winner”</td>
<td>be a “winner”</td>
<td>be a “winner”</td>
<td>be a “winner”</td>
<td>be a “winner”</td>
</tr>
<tr>
<td>maintain an image of superiority</td>
<td>maintain an image of superiority</td>
<td>maintain an image of superiority</td>
<td>maintain an image of superiority</td>
<td>maintain an image of superiority</td>
</tr>
<tr>
<td>turn the job into a contest</td>
<td>turn the job into a contest</td>
<td>turn the job into a contest</td>
<td>turn the job into a contest</td>
<td>turn the job into a contest</td>
</tr>
<tr>
<td>think ahead and plan</td>
<td>think ahead and plan</td>
<td>think ahead and plan</td>
<td>think ahead and plan</td>
<td>think ahead and plan</td>
</tr>
<tr>
<td>take moderate risks</td>
<td>take moderate risks</td>
<td>take moderate risks</td>
<td>take moderate risks</td>
<td>take moderate risks</td>
</tr>
<tr>
<td>willingly obey orders</td>
<td>willingly obey orders</td>
<td>willingly obey orders</td>
<td>willingly obey orders</td>
<td>willingly obey orders</td>
</tr>
</tbody>
</table>

**Notes:**
- Some behaviors are listed in reverse order for clarity.
- The table includes a range of to what extent people are expected or implicitly required to exhibit certain behaviors.
To what extent are people expected or implicitly required to...?

<table>
<thead>
<tr>
<th>To a very great extent</th>
<th>To a great extent</th>
<th>To a moderate extent</th>
<th>To a slight extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>stay on the offensive</td>
<td>stay on the offensive</td>
<td>stay on the offensive</td>
<td>stay on the offensive</td>
</tr>
<tr>
<td>build up their power base</td>
<td>build up their power base</td>
<td>build up their power base</td>
<td>build up their power base</td>
</tr>
<tr>
<td>personally run everything</td>
<td>personally run everything</td>
<td>personally run everything</td>
<td>personally run everything</td>
</tr>
<tr>
<td>set unrealistically high goals</td>
<td>set unrealistically high goals</td>
<td>set unrealistically high goals</td>
<td>set unrealistically high goals</td>
</tr>
<tr>
<td>be precise – even when</td>
<td>be precise – even when</td>
<td>be precise – even when</td>
<td>be precise – even when</td>
</tr>
<tr>
<td>It's unnecessary</td>
<td>It's unnecessary</td>
<td>It's unnecessary</td>
<td>It's unnecessary</td>
</tr>
<tr>
<td>keep on top of everything</td>
<td>keep on top of everything</td>
<td>keep on top of everything</td>
<td>keep on top of everything</td>
</tr>
<tr>
<td>always follow policies and practices</td>
<td>always follow policies and practices</td>
<td>always follow policies and practices</td>
<td>always follow policies and practices</td>
</tr>
<tr>
<td>cast aside solutions that seem</td>
<td>cast aside solutions that seem</td>
<td>cast aside solutions that seem</td>
<td>cast aside solutions that seem</td>
</tr>
<tr>
<td>different or risky</td>
<td>different or risky</td>
<td>different or risky</td>
<td>different or risky</td>
</tr>
<tr>
<td>not get involved</td>
<td>not get involved</td>
<td>not get involved</td>
<td>not get involved</td>
</tr>
<tr>
<td>wait for others to act first</td>
<td>wait for others to act first</td>
<td>wait for others to act first</td>
<td>wait for others to act first</td>
</tr>
<tr>
<td>be spontaneous</td>
<td>be spontaneous</td>
<td>be spontaneous</td>
<td>be spontaneous</td>
</tr>
<tr>
<td>be tactful</td>
<td>be tactful</td>
<td>be tactful</td>
<td>be tactful</td>
</tr>
<tr>
<td>act forceful</td>
<td>act forceful</td>
<td>act forceful</td>
<td>act forceful</td>
</tr>
<tr>
<td>play “politics” to gain influence</td>
<td>play “politics” to gain influence</td>
<td>play “politics” to gain influence</td>
<td>play “politics” to gain influence</td>
</tr>
<tr>
<td>be hard, tough</td>
<td>be hard, tough</td>
<td>be hard, tough</td>
<td>be hard, tough</td>
</tr>
<tr>
<td>maintain unquestioned authority</td>
<td>maintain unquestioned authority</td>
<td>maintain unquestioned authority</td>
<td>maintain unquestioned authority</td>
</tr>
<tr>
<td>do things perfectly</td>
<td>do things perfectly</td>
<td>do things perfectly</td>
<td>do things perfectly</td>
</tr>
<tr>
<td>appear competent and independent</td>
<td>appear competent and independent</td>
<td>appear competent and independent</td>
<td>appear competent and independent</td>
</tr>
<tr>
<td>persist, endure</td>
<td>persist, endure</td>
<td>persist, endure</td>
<td>persist, endure</td>
</tr>
<tr>
<td>fit into the “mold”</td>
<td>fit into the “mold”</td>
<td>fit into the “mold”</td>
<td>fit into the “mold”</td>
</tr>
<tr>
<td>push decisions upward</td>
<td>push decisions upward</td>
<td>push decisions upward</td>
<td>push decisions upward</td>
</tr>
<tr>
<td>be open about self</td>
<td>be open about self</td>
<td>be open about self</td>
<td>be open about self</td>
</tr>
<tr>
<td>enjoy their work</td>
<td>enjoy their work</td>
<td>enjoy their work</td>
<td>enjoy their work</td>
</tr>
<tr>
<td>think in unique and independent ways</td>
<td>think in unique and independent ways</td>
<td>think in unique and independent ways</td>
<td>think in unique and independent ways</td>
</tr>
<tr>
<td>maintain their personal integrity</td>
<td>maintain their personal integrity</td>
<td>maintain their personal integrity</td>
<td>maintain their personal integrity</td>
</tr>
</tbody>
</table>

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| cooperate with others | cooperate with others | cooperate with others | cooperate with others |
| deal with others in a friendly, pleasant way | deal with others in a friendly, pleasant way | deal with others in a friendly, pleasant way | deal with others in a friendly, pleasant way |
| think in terms of the group's satisfaction | think in terms of the group's satisfaction | think in terms of the group's satisfaction | think in terms of the group's satisfaction |
| personally take care of every detail | personally take care of every detail | personally take care of every detail | personally take care of every detail |
| not “rock the boat” | not “rock the boat” | not “rock the boat” | not “rock the boat” |
| avoid confrontations | avoid confrontations | avoid confrontations | avoid confrontations |
| make a “good impression” | make a “good impression” | make a “good impression” | make a “good impression” |
| conform | conform | conform | conform |
| be non-committal | be non-committal | be non-committal | be non-committal |
| make “popular” rather than necessary decisions | make “popular” rather than necessary decisions | make “popular” rather than necessary decisions | make “popular” rather than necessary decisions |
| take few chances | take few chances | take few chances | take few chances |
| emphasize quality over quantity | emphasize quality over quantity | emphasize quality over quantity | emphasize quality over quantity |
| use good human relations skills | use good human relations skills | use good human relations skills | use good human relations skills |
| treat people as more important than things | treat people as more important than things | treat people as more important than things | treat people as more important than things |
| use the authority of their position | use the authority of their position | use the authority of their position | use the authority of their position |
| never make a mistake | never make a mistake | never make a mistake | never make a mistake |
| treat rules as more important than ideas | treat rules as more important than ideas | treat rules as more important than ideas | treat rules as more important than ideas |
| lay low when things get tough | lay low when things get tough | lay low when things get tough | lay low when things get tough |
| never be the one blamed for problems | never be the one blamed for problems | never be the one blamed for problems | never be the one blamed for problems |
| be concerned about their own growth | be concerned about their own growth | be concerned about their own growth | be concerned about their own growth |
| resist conformity | resist conformity | resist conformity | resist conformity |
| motivate others with friendliness | motivate others with friendliness | motivate others with friendliness | motivate others with friendliness |
| be open, warm | be open, warm | be open, warm | be open, warm |
The following questions focus on your organization and how you feel about working there.

To what extent...

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Slight extent</th>
<th>Moderate extent</th>
<th>Great extent</th>
<th>Very great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you clearly know what is expected of you as a member of this organization?</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Do you receive inconsistent messages regarding what is expected?</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Do you feel comfortable &quot;fit in&quot; as a member of this organization?</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Does your job require you to think and behave differently than would otherwise be the case?</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Would you personally go out of your way to make sure that a customer/ client feels good about the service you've provided?</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Are you satisfied being a member of this organization?</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

More questions on the next page - please continue.
It would be most appreciated if you would respond to the items below. The information you provide will be used to identify trends across groups in your organization (and to support our ongoing research effort). Your responses will be treated with the strictest confidentiality.

**EDUCATION** (mark highest level)
- High school
- Some college
- Associate's/Technical degree
- Bachelor's degree
- Some Graduate work
- Master's degree
- Doctoral degree
- Other
- Prefer not to respond

**YEARS WITH ORGANIZATION**
- Less than 6 months
- 6 months to 1 year
- 1 to 2 years
- 2 to 4 years
- 4 to 6 years
- 6 to 10 years
- 10 to 15 years
- More than 15 years
- Prefer not to respond

**PROFESSION/OCCUPATION**
- Accounting
- Advertising
- Administrative staff
- Assembly line
- Consulting
- Data processing
- Direct labor (not assembly line)
- Education
- Engineering
- Finance
- Law
- Management (general)
- Management information systems
- Marketing
- Medicine
- Nursing
- Personnel/Training
- Production
- Public relations
- Purchasing
- Research/Development
- Sales
- Secretarial/Clerical
- Skilled trade
- Social Work/Psychology
- Strategy/Policy
- Student
- Other
- Prefer not to respond

**AGE**
- Under 20
- 20 - 29
- 30 - 39
- 40 - 49
- 50 - 59
- 60 or over
- Prefer not to respond

**SEX**
- Female
- Male
- Prefer not to respond

**ETHNIC BACKGROUND**
- Asian
- Black or African American
- Hispanic
- White/Caucasian
- Other
- Prefer not to respond

**SALARY (Annual)**
- $18,000 or less
- $18,001 to $25,000
- $25,001 to $35,000
- $35,001 to $45,000
- $45,001 to $60,000
- $60,001 to $75,000
- $75,001 to $90,000
- $90,001 plus
- Prefer not to respond

**ADDITIONAL ORGANIZATIONAL/OCCUPATIONAL/DEMOGRAPHIC ITEMS**

*If you received a Survey Addendum requesting additional organizational, occupational or demographic information, please use the spaces below to record your responses.*
ADDENDUM ADDITIONAL ORGANISATIONAL/ OCCUPATIONAL/ DEMOGRAPHIC ITEMS (to be annotated against the appropriate question on page 4 of the questionnaire and only one primary function included)

Please note that this is the only area of the questionnaire, which is specifically related to the MOD and is therefore critical to the analysis and comparison. Kindly note that should your appointment be indexed by two digits E.g. Under Question A if you are a civilian IPT Leader then your number is 01, shade in the 0 on the left hand column and the 1 on the right hand column again using pencil.

QUESTION A (OCCUPATION WITHIN DPA IPTs)

01. Civilian IPT Leader
02. Civilian IPT ILS Management
03. Civilian IPT Programme Management or IPT Project Engineer
04. Civilian IPT Finance Officer
05. Civilian IPT Commercial Management
06. Other Civilian Post within DPA IPT
07. Military IPT Leader
08. Military IPT ILS Management
09. Military IPT Requirements Management
10. Military IPT Programme Management or IPT Project Engineer
11. Other Military Post within DPA IPT

QUESTION B (OCCUPATION WITHIN SUPPORT GROUPS)

01. Civilian within Air/ Land Technology Group, Sea Technology Group, or Ordnance Safety Group
02. Civilian within Procurement Development Group or Business Improvement Group
03. Civilian within Personnel Group, International Relations Group, Facilities Management Group, or Aspect Project Group
04. Civilian within DPA Secretariat and Central Finance and Planning Group
05. Civilian within Private Finance Group, Commercial Services Group, Senior Commercial Group, Specialist Procurement Services, Future Business Group
06. Civilian within Executive Director Groups
07. Other civilian Post within Support Groups
08. Military within Air/ Land Technology Group, Sea Technology Group, or Ordnance Safety Group.
09. Military within Procurement Development Group or Business Improvement Group

ANNEX B

10. Military within Personnel Group, International Relations Group, Facilities Management Group, or Aspect Project Group
11. Military within DPA Secretariat and Central Finance and Planning Group
12. Military within Private Finance Group, Commercial Services Group, Senior Commercial Group, Specialist Procurement Services, Future Business Group
13. Military within Executive Director Groups
14. Other military Posts within Support Groups

QUESTION C (OCCUPATION WITHIN MOD EQUIPMENT CAPABILITY STAFF)

01. Military within DCDS(EC) and his Personal Staff or within Capability Managers and Staff
02. Military within Directors Equipment Capability and Staff
03. Military within DG (E) 's Staff or Director Capability Resources and Scrutiny and Staff
04. Military within Director Equipment Plan and Staff or Director Equipment Secretariat and Staff
05. Military within Director Science & Technology/ Assistant Director Research(EC) and Staff, Synthetic Environments Co-ordination Office or Research Co-ordination
06. Other Military Post within Equipment Capability area.
07. Civilians within DCDS(EC) and his Personal Staff or within Capability Managers and Staff
08. Civilians within Directors Equipment Capability and Staff
09. Civilians within DG (E) 's Staff or Director Capability Resources and Scrutiny and Staff
10. Civilians within Director Equipment Plan and Staff or Director Equipment Secretariat and Staff
11. Civilians within Director Science & Technology/ Assistant Director Research(EC) and Staff, Synthetic Environments Co-ordination Office or Research Co-ordination
12. Other Civilian Post within Equipment Capability area
ANNEX C

COVERING LETTER TO PARTICIPANTS

Just a brief introduction to place in context my request of your valuable time to complete the attached questionnaire. I served in the Forces up to last year and spent the last 11 years in both the Customer base and PE. I am in my second year of a three-year PhD course at University College London. The subject of my doctorate is, “Defence Procurement, Smart enlightenment or halting culture”.

As you appreciate, the Strategic Defence Review recognised that defence procurement was characterised by equipment that failed to meet time, cost and performance parameters. In describing the scope of the Smart Procurement Initiative, put in place to overcome this concern, the Secretary of State stated, “We have to change the culture” which was part of “a massive agenda for change”. In following this initiative the MOD has benefited from both internal and external advice and support, and has also adopted many advanced change culture techniques. However, you will be aware that over the years numerous procurement initiatives were instigated but clearly failed to deliver and one possible cause of failure can be attributed to a lack of resource investment in the change culture process. This hypothesis is not novel but the measurement of culture has never been conducted to support the claim.

My aim, with your help, is to measure formally two key bodies in Defence Procurement: the Central Customer and Defence Procurement Agency. Two techniques will be employed: a quantitative survey measuring the cultures found within both bodies, and attached can be found a relevant questionnaire. Although an American document it is recognised as a world leading measurement technique employed universally by Consultants including McKinsey & Co, Governments, Commerce and Industry. As such, measurements can be repeated and progress identified. In the questionnaire is an addendum, which focuses on specific MOD data. Data analysis should illustrate any dysfunctional dimension of the separate organisational and group cultures. The second and complementary dimension of my analysis will be conducted down stream using a qualitative survey comprising in-depth interviews of two smaller samples focusing specifically on SPI.

I would suggest that by setting aside 35 minutes to complete the questionnaire, albeit in a period when much is asked of your valuable time, your contribution could benefit you, your parent groups and organisations, and the MOD. The validity of the data, which is dependent upon the level of response, will influence the degree of benefit gained. Please be as honest as possible when describing what is currently expected of you to fit in and meet the expectations within your area. The questionnaire will be scanned and combined with the answers of your colleagues but individual responses will be kept completely confidential. To ensure that the scanner can read your answers please observe the following:

- **Use a B or 2B pencil.**
  
  HB pencil is usually too light and ink will not be read at all by the scanner.

- **Fill in your answer bubble completely, leaving no gaps.**
  
  Please do not simply strike through with a line.
In seeking your assistance, Rear Admirals Rees Ward and Nigel Guild were approached and kindly established points of contact that will assist in data retrieval. Please return your completed form as a: Central Customer to John West in Main Building Room 2156 or as a member of the DPA to Sandra Chasey, BIGCST6, Maple # 276 at Abbey Wood. The relatively short window of opportunity afforded for your response, which is to be with Sandra or John by the end of June, sits on the critical path and impacts on the processing, analysis, and scripting of my findings which are to be shared.

In anticipation of your timely and helpful response I remain ever grateful,
DESCRIPTION OF CULTURAL NORMS

(11:00) An Achievement culture characterises organisations that do things well and value members who set and accomplish their own goals. Members of these organisations set challenging but realistic goals, establish plans to reach these goals, and pursue them with enthusiasm. Achievement organisations are effective; problems are solved appropriately, clients and customers are served well, and the orientation of members (as well as the organisation itself) is healthy.

(12:00) A Self-Actualising culture characterises organisations that value creativity, quality over quantity, and both task accomplishment and individual growth. Members of these organisations are encouraged to gain enjoyment from their work, develop themselves, and take on new and interesting activities. While self-actualising organisations can be somewhat difficult to understand and control, they tend to be innovative, offer high-quality products and/or services, and attract and develop outstanding employees.

(1:00) A Humanistic-Encouraging culture characterises organisations that are managed in a participative and person-centred way. Members are expected to be supportive, constructive and open to influence in their dealings with one another. A humanistic culture leads to effective organisational performance by providing for the growth and active involvement of members who, in turn, report high satisfaction with and commitment to the organisation.

(2:00) An Affiliative culture characterises organisations that place a high priority on constructive interpersonal relationships. Members are expected to be friendly, open, and sensitive to the satisfaction of their work group. An Affiliative culture can enhance organisational performance by promoting open communication, good co-operation, and the effective co-ordination of activities. Members are loyal to their work groups and feel they “fit in” comfortably.

(3:00) An Approval culture describes organisations in which conflicts are avoided and interpersonal relationships are pleasant—at least superficially. Members feel that they must agree with, gain the approval of, and be liked by others. Though possibly benign, this type of work environment can limit organisational effectiveness by minimising constructive “differing” and the expression of ideas and opinions.

(4:00) A Conventional culture is descriptive of organisations that are conservative, traditional, and bureaucratically controlled. Members are expected to conform, follow the rules, and make a good impression. Too conventional a culture can interfere with effectiveness by suppressing innovation and preventing the organisation from adapting to changes in its environment.

(5:00) A Dependent culture is descriptive of organisations that are hierarchically controlled and non-participative. Centralised decision making in such organisations leads members to do only what they’re told and to clear all decisions with superiors. Poor performance results from the lack of individual initiative, spontaneity, flexibility, and timely decision making.

(6:00) An Avoidance culture characterises organisations that fail to reward success but nevertheless punish mistakes. This negative reward system leads members to shift responsibilities to others and to avoid any possibility of being blamed for a mistake. The survival of this type of organisation is in question since members are unwilling to make decisions, take action, or accept risks.

(7:00) An Oppositional culture describes organisations in which confrontation prevails and negativism is rewarded. Members gain status and influence by being critical and thus are reinforced to oppose the ideas of others and to make safe (but ineffectual) decisions. While some questioning is functional, a highly Oppositional culture can lead to unnecessary conflict, poor group problem solving and “watered-down” solutions to problems.

(8:00) A Power culture is descriptive of non-participative organisations structured on the basis of the authority inherent in members’ positions. Members believe they will be rewarded for taking charge and controlling subordinates (and being responsive to the demands of superiors). Power-oriented organisations are less effective than their members might think; subordinates resist this type of control, hold back information, and reduce their contributions to the minimal acceptable level.

(9:00) A Competitive culture is one in which winning is valued and members are rewarded for out-performing one another. People in such organisations operate in a “win-lose” framework and believe they must work against (rather than with) their peers to be noticed. An overly competitive culture can inhibit effectiveness by reducing co-operation and promoting unrealistic standards of performance (either too high or too low).

(10:00) A Perfectionistic culture characterises organisations in which perfectionism, persistence, and hard work are valued. Members feel they must avoid all mistakes, keep track of everything, and work long hours to attain narrowly defined objectives. While some amount of this orientation might be useful, too much emphasis on perfectionism can lead members to lose sight of the goal, get lost in details, and develop symptoms of strain.
## QCI Norms

<table>
<thead>
<tr>
<th>OCI Norms</th>
<th>Ideal Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement</td>
<td>83%</td>
</tr>
<tr>
<td>Self-Actualizing</td>
<td>81%</td>
</tr>
<tr>
<td>Humanistic</td>
<td>83%</td>
</tr>
<tr>
<td>Affiliative</td>
<td>76%</td>
</tr>
<tr>
<td>Approval</td>
<td>36%</td>
</tr>
<tr>
<td>Conventional</td>
<td>18%</td>
</tr>
<tr>
<td>Dependant</td>
<td>26%</td>
</tr>
<tr>
<td>Avoidance</td>
<td>21%</td>
</tr>
<tr>
<td>Oppositional;</td>
<td>47%</td>
</tr>
<tr>
<td>Power</td>
<td>36%</td>
</tr>
<tr>
<td>Competitive</td>
<td>46%</td>
</tr>
<tr>
<td>Perfectionistic</td>
<td>24%</td>
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</table>
Introduction by interviewer

A brief study outline will include giving the aim: which is to analyse the impact of culture and sub cultures upon the Smart Procurement Initiative. They will be informed that a quantitative measurement will also be conducted using a questionnaire to establish today's culture as a benchmark. The benchmark is critical as S of S and Ministers are on record as saying that SPI demands a significant change in culture and yet no objective measurement of culture has been conducted. Returning to the interview it will be explained that all interviews will be recorded and typed up and subsequently analysed to determine common trends. The findings will be used to support a PhD thesis and will be shared with participating organisations. Confidentiality will be guaranteed and thanks extended for participation. The following terms were defined simplistically and placed on a card, which was drawn to the attention of all:

“Culture as shared beliefs, attitudes and values.”
“A shared belief refers to knowledge”
“Attitudes to liking or disliking”
“Values to agreement or disagreement”
and “Behaviour to the way in which we do something.”

Interview

A list of topics is detailed below to provide a framework for the interview. They provide a logical structure for the meeting and should ensure that there is some commonality in the areas covered. Although framed as questions they will provide prompts and will not be employed literally other than the first question in each area, which will prompt a change in focus.

Objective 1

To identify the level of belief in the Smart Procurement Initiative.

Q. What is your view of the SPI? Novel, repackaging, worthwhile
Q. How were you involved in developing the SPI process?
Q. What are the novel aspects of SPI? IPTs, empowerment, et al.
Q. What aspects of the SPI do you most believe in?
Q. Which, if any aspects, of SDR do you find negative?
Q. Do you believe that SPI objectives can be met?

Objective 2

To establish the key values being adopted or maintained as a result of SPI.
Q. What aspects of SPI do you strongly agree with?
Q. What if any aspect of SPI would you wish to see changed?

Objective 3
To determine the attitudes to SPI.

Q. What areas of SPI do you either like or dislike?

Objective 4
To determine the new behaviour adopted as a result of the SDI.

Q. How has SPI changed your working practise?
Q. How has your behaviour changed to either the customers or industry?
Q. What tools have been put in place to improve your productivity?
Q. What practical management steps have been taken to improve your performance?
Q. What reward scheme is in being to improve your desire to work harder and succeed?
Q. How great a change has been introduced through the creation of IPTs?

Objective 5
To identify change initiatives, which are harmonising effectively the cultures within the DPA.

Q. How has your understanding and belief in the SPI processes been changed?
Q. In what way has the recruitment, selection of key people and redundancy scheme added to the change process?
Q. What impact on your process has the move of other MOD staff into your area influenced practise?
Q. What new skills have you been required to adopt to fulfil new tasks?
Q. How has the corporate image of your organisation changed?
Objective 6

To provide an insight into other initiatives that could change culture to better develop SDI.

Q. Given the opportunity how would you change the culture of the organisation for the better?

Objective 7

To establish any sub cultural attitudes, values and behaviour. Much of this data will be derived from previous questions.

Q. If sub cultures exist within the organisation what way would you harmonise them?

Concluding the interview

Asking respondents if they have any questions and once again thanking them for their participation will conclude the interview.
1. Aspects of defence Procurement and Industry Policy, 1997-98, Ev p39,
more often ruined by dogmas springing from their former successes than by the skill of their opponents.”
4. “Arming America: How the US Buys Weapons” Division of Research, Harvard Business School, Boston,
1974
NATO, the history of command in warfare essentially consists of an endless quest for certainty....”
7. 2nd PUS briefing to Senior MOD Officials on Accrual Accounting, Royal Military College Sandhurst, July
1998.
9. Allen Williams, Paul Dobson, Mike Walters, “Changing culture new organisational approaches.. 2nd Edition,
Institute of Personnel and Development, London, 1993
10. Arquilla and Ronfeldt, “Cyber War is coming,”, Santa Monica, CA RAND 1993.
11. Aspects of Defence Procurement and Industrial Policy, Session1997-98
12. WEU Symposium on European Cooperation on the Procurement of Defence Equipment, Munich, October
1997
13. Athena Xenikou and Adrian Furnham, “A Correlation and Factor Analytic Study of Four Questionnaire
and Collaboration in the 1980s and 1990s”. Cambridge, 1994,
a proposal of a better Paradigm for the Future”. M. Phil Thesis, Cranfield University at the Royal College of
Science, August 1998.
Synergistics, 1989.
23. Cooke, Robert A. Organisational Culture Inventory Leader's Guide. Plymouth, MI: Human Synergistics,
1989.
Synergistics, 1987
25. David Evans, 'Tarnished Brass: Naval Officers' Macho, Elitist Image Under Fire' Chicago Tribune (July
12, 1992), 1.
26. David Kirkpatrick, "Rising costs, falling budgets and their implications for defence policy", Institute of
27. DCD(S/EC) Keynote address “Faster Cheaper Better: Making it Happen” RMCS Conference , 15 February
2000
28. Deborah Weber and Peter Sorenson, “Organizational Culture and TQM Implementation,” Training and
Development Journal, April 1994
33. Defence industry restructuring: cost and savings issues,15.4.97, GAO/T-NSIAD-97-141
34. Defence News’ Statistics 1998
37. DMCS Study No. 17/99.
43. DTI Press Notice 98/196, 12 March 1998
44. DTI Press Notice 98/305, 19 October 1998
45. Dunne P and Smith R, “Thatcherism and the UK Defence Industry”,
47. EU Commission Communication,” Implementing an EU strategy on Defence-Related Industries” COM (97) 583.
49. HC Deb, 20 January 1998 c478w
55. GAO report GAO/NSIAD- 98-6:“European Initiatives to Integrate the Defence market”
58. Government comments on CDS’ culture position paper, BBC Channel 4 Today programme, 5 January 2001
63. HC 209/210 para30
64. HC Deb , 16 Jun 1997, HMSO London June 1997
68. Herr Pillar, Daimler - Benz Aerospace; at WEU Symposium on European Cooperation on the procurement of defence equipment, Oct 1997
74. HMSO, Statement on the Defence Estimates 1991,
75. HMSO, The Defence Cost Study, P8
76. Hofstede G. A brief synopsis of this issue can be found in his article, “Motivation, Leadership and Organization: do American Theories Apply Abroad? Organisational Dynamics.” Summer 1980,
78. House of Commons Library Research Paper 97/134, Table 2
85. John Adair taught at RMA Sandhurst for twenty years commencing in the 1960s and during that time had the onerous responsibility of teaching me.
95. Memorandum by the Defence Industries Council submitted to Defence Committee Session 1997-98.
100.MOD Press Notice 133/97
101. MOD’s Consultation Document of April 2000
103.NAO, MOD Defence Procurement in the 1990s, HC 390, 1993-94,
104.NAO, Major Projects Report 1997 (Draft)
108.One Day Workshops for UCL by National Centre for Social Research 14- 21 February 2000
111.Papers RDB/P (60) 4 dated 21 March 1960 and RDB/P (59) 91 dated 8 April 1960 of the Research and Development Board.
114.Head of Defence Export Services’ Presentation at 1998 DESO Symposium, Queen Elizabeth Hall, 3 March 1998
115. President of the Republic’s Defence Reforms dated 22 February 1996.
116. Professor Ken Hamilton, Discussion with author, UCL, July 2000
117. Professor Trevor Taylor “Implementing Smart Procurement: an Independent Commentary”, Cranfield University at RMCS, Shrivenham, 1999
118. Q42, Session 1997-98 Defence Committee’s Seventh Report.
123. Reports from the Defence and Trade and Industry Committees, Session 1997-98
124. Reports from the Defence and Trade and Industry Committees, Session 1997-98
125. Robert A Cooke and Janet L Szumlal, Measuring normative Beliefs and Shared Behavioural Expectations in Organisations: The Reliability and Validity of the Organizational Culture Inventory, Psychological Reports, 1993, 72, 1299-1330
139. Speech at 1998 Wehrkunde Conference, Munich
150. VCDS/ PUS address to the Central Staff, MOD, December 1998
152. White Paper on Strategic Export Controls, 1 July 1998, Cm 3989
154. Australian Government’s National Audit Office, Management of Major Equipment Acquisition Projects by the Department of Defence, 11 October 1999


<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>AOR</td>
<td>Acquisition Organisation Review</td>
</tr>
<tr>
<td>ARP</td>
<td>Applied Research Programme</td>
</tr>
<tr>
<td>ASPECT</td>
<td>A Set of Procurement Executive Computer Tools</td>
</tr>
<tr>
<td>BEM</td>
<td>Business Excellence Model</td>
</tr>
<tr>
<td>BoI</td>
<td>Balance of Investment</td>
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<tr>
<td>BU</td>
<td>Business Unit</td>
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<tr>
<td>CALS</td>
<td>Continuous Acquisition Life-cycle Support</td>
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<tr>
<td>CAPS</td>
<td>Capability Area Plan</td>
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<tr>
<td>CRP</td>
<td>Corporate Research Plan</td>
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<td>CDL</td>
<td>Chief of Defence Logistics</td>
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<td>CDP</td>
<td>Chief of Defence Procurement</td>
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<tr>
<td>CDS</td>
<td>Chief of Defence Staff</td>
</tr>
<tr>
<td>CERN</td>
<td>Chief of Establishments, Research and Nuclear</td>
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<tr>
<td>CIRPLS</td>
<td>Computer Integration of Requirements, Procurement and Logistic Support</td>
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<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
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<tr>
<td>CM</td>
<td>Capability Manager</td>
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<tr>
<td>COTS</td>
<td>Commercial Off the Shelf</td>
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<tr>
<td>CI'S</td>
<td>Communication Information Systems</td>
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<tr>
<td>CWG</td>
<td>Capability Working Group</td>
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<td>DAWN</td>
<td>Delivery of Abbey Wood Network</td>
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<tr>
<td>DCS</td>
<td>Defence Cost Study</td>
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<tr>
<td>DCDS(EC)</td>
<td>Deputy Chief of Defence Staff( Equipment Capability)</td>
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<tr>
<td>DEC</td>
<td>Director Equipment Capability</td>
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<td>DEG</td>
<td>Defence Engineering Group</td>
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<td>DERA</td>
<td>Defence Evaluation and Research Agency</td>
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<tr>
<td>DLO</td>
<td>Defence Logistics Organisation</td>
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<td>DoD</td>
<td>Department of Defence</td>
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<td>DMA</td>
<td>Defence Manufacturers Association</td>
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<td>DPA</td>
<td>Defence Procurement Agency</td>
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<td>DRA</td>
<td>Defence Research Agency</td>
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<tr>
<td>DTI</td>
<td>Department Of Trade and Industry</td>
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<tr>
<td>EAC</td>
<td>Equipment Approvals Committee</td>
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<tr>
<td>EC/ECC</td>
<td>Equipment Capability/ Equipment Capability Customer</td>
</tr>
<tr>
<td>EDI</td>
<td>Electronic Data Interchange</td>
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<tr>
<td>IIP</td>
<td>Investors In People</td>
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<tr>
<td>ILS</td>
<td>Integrated Logistics Support</td>
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<tr>
<td>IPT</td>
<td>Integrated Project Team</td>
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<td>IPTL</td>
<td>Integrated Project Team Leader</td>
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<tr>
<td>IT</td>
<td>Information Technologies</td>
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<tr>
<td>JBD</td>
<td>Joint Battlespace Digitisation</td>
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<tr>
<td>LTC</td>
<td>Long Term Costing</td>
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<tr>
<td>MOD</td>
<td>Ministry Of Defence</td>
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<tr>
<td>MINIS</td>
<td>Management Information System for Ministers</td>
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<tr>
<td>NAO</td>
<td>National Audit Office</td>
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<tr>
<td>NATO</td>
<td>North Atlantic Treaty Organisation</td>
</tr>
<tr>
<td>OCI</td>
<td>Organizational Culture Inventory</td>
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OR  Operational Requirements
OMB  Office of Management and Budgets
OCCAR  Organisme Conjoint de Cooperation en Matiere d'Armament

NBC  Non-Biological and Chemical
PAR  Performance Appraisal Review
PE  Procurement Executive
PI  Performance Indicators
PRP  Performance Related Pay
PV  Private Venture
PD  Project Definition
RAB  Resources Account Budgeting
RAF  Royal Air Force
RMA  Revolution in Military Affairs
RN  Royal Navy
R&D  Research and Development
RM  Requirements Manager
SDR  Strategic Defence Review
SPI  Smart Procurement Initiatives
UN  United Nations
UCL  University College London
VFM  Value for Money
WEAO  Western European Armaments Organisation
WMD  Weapons of Mass Destruction
WEU  Western European Union